



International Network
on Regional Economics,
Mobility and Tourism

Tourism, territory and sustainability: a statistical insight at subnational levels

Toward a Set of UNWTO Guidelines

(Version 1)

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Foreword

The present document builds on statistical international standards (tourism and environment statistics as well as the corresponding macroeconomic accounting frameworks –Tourism Satellite Account –TSA- and the System of Environmental and Economic Accounting –SEEA-); it also provides guidelines in order to set up a particular type of statistical initiative: a Regional Tourism Information System (R-TIS) conceived for the purpose of linking tourism, territory and sustainability in the perspective of the UN 2030 Agenda for Sustainable Development and the setting up of Sustainable Development Goals (SDGs) indicators (three of which refer to tourism). Linking tourism (operationally defined in the tourism statistics international standards) and sustainable development (a policy oriented concept without any universally accepted operational definition for its measurement) is a complex and challenging task; this document provides a statistical insight in such connection between tourism as an economic sector that impacts the socio-economic and the environmental components of sustainability due to tourism infrastructure and the activity of visitors.

Such insight is in line with the work undertaken during these last two years by UNWTO and UN Statistics Division: the Measuring Sustainable Tourism (MST) initiative. As for the documents already available for such initiative, this document focuses on describing what should be measured and the relevant context and framework rather than considering how measurement should be undertaken and related issues of implementation. This is not to say that issues of implementation are unimportant, indeed they are significant. It is envisaged that, subject to progress on describing a statistical framework, complementary documents focused on implementation would be developed, again building on existing resources as relevant.

The central focus of this document is about the setting up of the recommended R-TIS as a necessary pre-requisite for comparing nationally and internationally main tourism destinations and cities where tourism is significant, as well as to rigorously measure territorial, environmental and other economic and social impacts of tourism activity.

In fact, such a system requires three sets of information:

- the statistical information obtainable as a disaggregation of operations carried out with a national coverage and in an official capacity mainly by National Statistical Offices and National Tourism Administrations on economic, environmental and socio-cultural dimensions of sustainability;
- official statistical operations carried out by regional bodies (such as Regional Statistical Offices, Regional Tourism Administrations, Regional public institutes and agencies for tourism development and management, and other official bodies).
- a third dataset not necessarily of official and/or of statistical nature (such as electricity consumption by households, credit card expenditure records, transport authorities control, business cycle indicators, early warning indicators, other indicators regarding tourism and sustainable development, etc.), considered to be relevant at regional and sub-regional levels not only for the measurement/monitoring of tourism (carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope or even by national bodies), for analytical purposes (such as analysis of the performance of certain subsectors and foresee their evolution, the perceptions of the demand of a certain destination, etc.) and for gathering data requirement for providing answers to policy questions related with tourism itself or in relation with sustainable development issues. The expansion of big data and open datasets will certainly spread the content of this third set of information.

It is recommended that the basic core of the proposed R-TIS refers to basic statistical data and indicators, most of them derived from official statistical surveys at the national level. In that regard, six main sources have been identified (Border survey - Domestic tourism household survey - Accommodation survey - Statistical business register - Structural business survey - Population census).

Such sources are available in practically all EU member countries as well as in non-European countries pertaining to the G.20 international community and should be supplemented, if available, with other national sources focusing on environmental and socio-cultural dimensions of sustainability.

Other countries without such an advanced level might find inspiring this document and might also request UNWTO for technical assistance in order to set up a planning work schedule for those subnational regions where tourism is particularly significant, to be in line with the recommended guidelines proposed. This is of particular interest for those countries that have decided to renew their national tourism information system as the first phase of a Project that also includes the subnational measurement as a second priority.

By so doing, UNWTO understands that tourism measurement at subnational levels might act as a catalyst for expanding national SDG's indicators at other spatial scales, in line with UN guidelines "to encourage all Member States to develop as soon as possible ambitious national responses to the overall implementation of this Agenda" and "to conduct regular and inclusive reviews of progress at the national and subnational levels which are country-led and country-driven"(UN, 2015, *Transforming our world: the 2030 Agenda for Sustainable Development*, paras. 78 and 79).

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Acknowledgements

The International Network on Regional Economics, Mobility and Tourism (INRouTe) is an initiative promoted by the World Tourism Organization (UNWTO) and formally established as a non-profit association by UNWTO Affiliate Member Instituto Movatur, a statistical consulting firm, two senior experts and formerly by the Cooperative Research Centre in Tourism CICtourGUNE. Currently IN2DESTINATION research and consultancy firm hosts INRouTe Technical Secretariat. Moreover, INRouTe counts with more than 60 international experts as individual members from all world regions whose profiles vary from tourism statistics experts of national and regional statistical official bodies, to academics, government representatives and consultants. This network is dedicated to advancing policy-oriented measurement and analysis of tourism in order to provide operational guidance to entities and practitioners involved with regional and sub-regional entities; it also works around a number of well-defined research areas (–tourism as an economic sector, –tourism and sustainable development, –tourism development and territorial cohesion and finally, –supporting tourism destination key stakeholders).

UNWTO, a United Nations specialized agency, is the leading international organization with the decisive and central role in promoting the development of responsible, sustainable and universally accessible tourism. It serves as a global forum for tourism policy issues and a practical source of tourism know-how. UNWTO counts with Affiliate Members based across more than 80 countries, representing more than 1million employees, 70% of them operate in more than one country and among the more than 400 Affiliate Members, over 100 are universities, research centres and training schools advancing on research in tourism.

During 2012/2016 INRouTe organized four international events seeking for a light level of consensus both on the overall target of such initiative (the methodological background for the conceptual design of the proposed R-TIS and the setting up of a system that should guarantee the production of a basic core of statistical data and indicators at sub-national levels on those research areas and topics considered particularly relevant (see Chapter 1, Box 2).

This document represents a significant advancement from the first document published by UNWTO /INRouTe in 2012 after the celebration of the First International Seminar held in Venice (“A Closer Look at Tourism: Sub-national Measurement and Analysis: Towards a Set of UNWTO Guidelines”). Such initiative had two main objectives:

- presenting the INRouTe project to our target audience: tourism practitioners – including tourism officials who commission surveys and research, and those who undertake such surveys – and different key stakeholders at regional and sub-regional levels –including governments, public institutes and agencies, universities, research centres, industry associations, trade bodies, and specialized firms, tourism destination managers, tourism development authorities, tourism businesses, etc.;
- we also conceived that the celebration of such a Seminar could help us determine whether the INRouTe network and other interested colleagues could agree with the proposed focus. This was done by presenting a first version of –*Towards a Set of UNWTO General Guidelines for the Measurement and Analysis of Tourism from a Sub-National Perspective* to the INRouTe First Seminar on Regional Tourism: setting the focus.

Since 2008 INRouTe has been organizing a series of international events, catalysts of progress, and the organizations making them possible deserve a warm thank you:

- International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, Málaga (Spain) 29-31st October 2008, organized in cooperation with UNWTO and the Regional Government of Andalusia (Spain).

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- MOVE2011 2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain) November 2011 in collaboration with UNWTO, the Ministry of Commerce, Industry and Tourism of Spain, Tourspain, IET, Government of the Basque Country, Basquetour and CICtourGUNE;
- INRouTe First International Seminar on Regional Tourism: Setting the Focus, Venice (Italy) 5-6th July 2012 organized in collaboration with UNWTO, CISET, Università Ca'Foscari Venezia, CICtourGUNE and Regione Veneto;
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- INRouTe II International Seminar on Regional Tourism: Moving towards a Regional TSA approach, Venice (Italy) 9-10th October 2014 in collaboration with UNWTO, CISET, Università Ca'Foscari Venezia, CICtourGUNE and Regione Veneto;
- MOVE 2015 4th International Conference on Sub-National Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA) 18-20th November 2015 organized in collaboration with Puerto Rico Tourism Company, UNWTO and IN2DESTINATION.

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List of abbreviations

EC – European Commission
EU – European Union
Eurostat – Statistical Office of the European Union
DMO – Destination Management Company
FDES – Framework for the Development of Environment Statistics
IMF – International Monetary Fund
INRouTe – International Network on Regional Economics, Mobility and Tourism
IRTS 2008 – International Recommendations on Tourism Statistics 2008 issued by UNWTO.
NSO – National Statistical Office
R-TIS – Regional Tourism Information System
R-TSA – Regional Tourism Satellite Account
RIN – Regional Inter-institutional Network
RTA – Regional Tourism Authority
SDG – Sustainable Development Goals
SEEA - System of Environment-Economic Accounts
SNA – System of National Accounts
TSA-R – Regionalized Tourism Satellite Account
TSA – National Tourism Satellite Account
TSA: RMF 2008 – Tourism Satellite Account: Recommended Methodological Framework 2008
UN – United Nations
UNSC – United Nations Statistics Commission
UNSD – United Nations Statistics Division
UNWTO – World Tourism Organization
WB – World Bank

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Overview

Foreword

This chapter is an overview for most key tourism stakeholders at regional and sub-regional levels, in order for them to have a basic understanding about the content and scope of this document. The target audience of this document refers to tourism practitioners -including tourism officials who commission surveys and research, and those who undertake such surveys- and different key stakeholders at regional and sub-regional levels –including governments, public institutes and agencies, universities, research centers, industry associations, trade bodies, consulting firms, tourism destination managers, tourism development authorities, tourism businesses, etc.

Given the statistical nature of the document, many readers might only read those sections of the document they are most interested in. Hence, the present chapter explains key concepts that are the backbone of the present publication at the same time that describes the content of each chapter and how they are interconnected for readers to be able to choose and deepen into the different concepts.

- 0.1. This document represents the first time that UNWTO addresses the measurement of tourism at subnational levels from a statistical perspective (meaning the use of concepts, definitions, classifications, accounting procedures and principles of recording, all of them necessary for gathering a set of basic statistical data and indicators for measuring tourism at subnational levels).
- 0.2. The setting up of a Regional Tourism Information System (R-TIS) is central to this objective given that it is meant for providing information for policy purposes and monitoring tourism development at subnational levels. Addressing its setting up process, stakeholders' collaboration needed and other elements are not statistical in nature. This is an example on how this document, mainly of statistical nature, also includes governance elements where judged necessary.
- 0.3. Measuring tourism at subnational levels necessarily requires paying special attention to the relation of tourism and sustainable development. Given that, it is precisely at such territorial levels where there is a need to avoid the negative impacts of tourism, not just on the environment, but also on the economic and socio-cultural dimension of sustainability.
- 0.4. The present document builds on UN statistical international standards- the *International Recommendations for Tourism Statistics (IRTS 2008)* and the *Framework for the Development of Environmental Statistics (FDES 2013)*, as well as the corresponding macroeconomic accounting frameworks – the *Tourism Satellite Account (TSA:RMF 2008)* and the *System of Environmental-Economic Accounting (SEEA_CF 2012)*-.

The main objective is to set up a particular type of statistical initiative: a Regional Tourism Information System (R-TIS) conceived as a strategic project for the purpose of linking tourism, territory and sustainability in the perspective of the UN 2030 Agenda for Sustainable Development.

- 0.5. In order to develop the basic set of variables of such a system it is required, first of all, adapting those concepts, definitions, classifications, accounting procedures and principles of recording included in the IRTS 2008 official document, and supplementing

them when necessary; additionally, it is also required to design a proper articulation of available tourism statistical data between the nation and the regions (see paras. 3.19 to 3.26)¹.

Such set of information should be seen as a first priority for the setting up of the proposed R-TIS; in a second step, an articulation of regional/sub-regional levels should be foreseen including geo-referenced data (and this is basically feasible in statistically developed countries).

Other statistical and non-statistical data will be required in order to provide support to key tourism stakeholders, for monitoring and comparability purposes (on tourism destinations within a given country as well as internationally) regarding some key areas of measurement and analysis.

- 0.6. For the R-TIS be operational, the following box include the most relevant conceptual “extensions” developed for drafting this document; all of them should be understood as supplementary to those included in the IRTS-2008 (such as “visitor”, “usual environment”, “tourism trip”, “purpose of the trip”, etc. – see Annex 17-).

Box 1. Conceptual extensions

CONCEPTS AND OPERATIONAL DEFINITIONS
- Significance (economic) (2.28 and 2.29)
- Tourism population (see Glossary)
- Travel party (6.21 to 6.27, Annex 18)
- Regional tourism (visitors and related expenditures) (6.16 , 6.39 to 6.41)
- Mobility and Tourism connections (propensity to travel, main and secondary purpose of the trip, travel behavior of visitors at destination, itineraries and other topics) (3.37, Chapter 2/C.2)
- Territorial planning and Tourism connections (Chapter 2/A)
- Carrying capacity (see Glossary)
- Regional Tourism Information System (1.1 to 1.5, see Glossary)
- Tourism destination (Chapter 2/C)
- Governance network (3.4, Annex 36)
CLASSIFICATIONS
- Classification of territorial entities (2.25 and 2.26)
ACCOUNTING PROCEDURES
- Statistical information (layers) (5.2, 5.3, 3.15, 3.22)
- Scalability (5.2, 5.3, 3.15, 3.22)
PRINCIPLES OF RECORDING
- Geo-referenced data bases (1.2, 3.22, 5.41 to 5.48)

- 0.7. The definitions provided for all these “extensions”, the explanatory paragraphs referred to them, as well as some other related terms included in the Glossary, should be considered as provisional for two main reasons:

- UNWTO Secretariat does not use uniformed definitions of concepts such as “sustainable tourism”, “tourism destination”, “tourism products” and “forms of tourism”; consequently, this document does not provide definitions about

¹ There are three elements that make the difference between statistical data and non-statistical data:

- The existence of a Frame or Universe (a list with the total population of the observation unit of reference – productive establishments, population, overnights, arrivals, etc,-)
- The selection of a random sample of such Frame using statistical techniques so that the data obtained can be representative of such Frame
- How the data obtained is upgraded to the total population of such Frame

“sustainable tourism” or “tourism destination”, and uses statistical definitions for the other terms unless explicitly indicated²;

- There is no international standard about what a Regional Statistical System should be; the only exception refers to European Union countries –see Annex 21-. In fact, the System of National Accounts 2008 official document includes just nine paragraphs when addressing Regional Accounts (SNA2008/ 18.E) and refers to Eurostat documents for further insight on this topic.

0.8. Due to this lack of a robust Regional Statistical System conceptual framework, the proposed design for the setting up of the R-TIS has no proper recommended UNWTO Compilation Guide as is the case for the National Tourism Statistical System (see *UNWTO IRTS 2008 Compilation Guide, Madrid 2012*). Consequently, this document is a first step in the process of taking tourism measurement at sub-national levels seriously.

Additional work will need to be done in the coming years in order to address key topics such as:

- Identifying other applications of an R-TIS –see chapter 4 /B4 “Operationalizing the measurement of tourism destinations for comparability purposes”;
- Studying how an R-TSA logic might relate to the design of the R-TIS;
- Checking the feasibility of the recommended operationalization of “travel party” and how such a concept might differ from “household” – see Annex 18-;
- Adoption of other R-TSA accounting principles to underpin the selection of areas of measurement focused at small spatial scales;
- Identifying main externalities caused by tourism and addressing its measurement –see para. 4.13-;
- Etc.

0.9. More precisely, the conceptual framework used for the design of the R-TIS, as well as recommended guidelines for the setting up of such a system, will become more robust as an increasing number of subnational entities decide to improve the measurement of tourism in line with the different type of recommendations proposed all along this document’s seven chapters. In order to foster such a process UNWTO will cooperate in launching case studies in the coming years.

Therefore, it is foreseen as a medium-long term initiative and consequently, the recommendations about the operationalization of those topics included in the previous box will quite probably need, most of them, to be redrafted in due time.

0.10. It is important to clarify that such recommendations are not conceived as international statistical standards; while standards may be desirable, they cannot be instituted without a body that should continually update them and ensure that they are being followed.

Nevertheless, standardization procedures represent procedures that, if practitioners voluntarily adopt them, it will improve (a) the consistency of the instruments to which they apply (surveys or other measuring tools); (b) the quality of such instruments; (c) the comparability of results; (d) the reliability of the data resulting from such instruments, and (e) the accuracy of the measurements.

² For instance, along the document the term “tourism product” should not be confused with “tourism characteristic consumption products” defined as those goods and services whose expenditure represents a significant share of total tourism expenditure (for a more precise quotation see *Regional Tourism: Glossary, “Tourism industries”*)

Chapter 1 Contextualizing UNWTO approach to sub-national tourism

- 0.11. The setting up of a R-TIS is not just a technical challenge associated to the creation of a database, it also entails providing guidance on how to define and develop measurement of those concepts that are crucial for tourism analysis and comparability. **Chapter 1** focuses on contextualizing UNWTO approach to the measurement of tourism at subnational levels.
- 0.12. This document proposes the design of the R-TIS including not only official and statistical data obtained at the national and regional level, but also a third dataset not necessarily of official and/or of statistical nature (such as electricity consumption by households, credit card expenditure records, transport authorities control, business cycle indicators, early warning indicators, other indicators regarding tourism and sustainable development, etc.). This third set is considered to be relevant at regional and sub-regional levels, not only for the measurement/monitoring of tourism (carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope or even by national bodies), but also for analytical purposes (such as analysis of the performance of certain subsectors and foresee their evolution, the perceptions of the demand of a certain destination, etc.) and for gathering data requirements for providing answers to policy questions related with tourism itself or in relation with sustainable development issues.
- 0.13. Given that the proposed system is an adaptation of the national System of Tourism Statistics referred in the international standard (IRTS 2008), such adaptation needs to take into account the need for including a consideration of both the territory and sustainability. At the regional and other sub-national levels there is strong evidence that tourism is not only a relevant economic driver but also a significant contributor to undesirable and irreversible environmental, economic and social changes.

In fact, in many tourism destinations, a divide between the tourism and the land planning authorities has resulted in a significant issue in terms of sustainable development (a policy oriented concept without any universally accepted operational definition for its measurement). Consequently, the development of new concepts, definitions and insights that connect tourism with territory are part of the challenge to strengthen the credibility of tourism at the different territorial levels.

- 0.14. The design of a R-TIS (see para. 1.23) has taken advantage of national case studies (Brazil, Ireland and New Zealand) as well as regional ones (Andalusia, Canary Islands, Comunidad de Madrid and Palma de Mallorca in Spain, as well as Wales in England). The national studies highlight that it is possible to structure an articulation between national/regional levels that generates a sufficient set of basic statistical data and indicators both for the demand and supply side of tourism. (This is the case for overnights/ establishments of tourism industries/ employment associated with such industries).
- 0.15. Finally, **Chapter 1** highlights the following recommendations:
- It is recommended that the basic core of the R-TIS refer to basic statistical data and indicators; most of them should be derived from official statistical surveys³ at the national level (six main sources have been identified in statistical developed countries although other regional official statistical data might be also included. While three of them are demand side surveys (border surveys,

³ See the definition in Glossary

domestic tourism household survey and population census), the other three are supply side surveys (Statistical business register, Structural business survey and Accommodation survey);

- Such sources should be supplemented, if available, with other national ones focusing on environmental and socio-cultural dimensions of sustainability;
- The setting up of the R-TIS requires a particular type of governance structure (see Annex 35): a regional inter-institutional network integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institutions;
- Other countries (particularly those that have decided to renew their national tourism information system) might find this document inspiring.

Chapter 2 Tourism and Territory: taking sub-national tourism seriously

- 0.16. Tourism is a geographical phenomenon, highly sensitive to location, that requires a planning process for its development; it also has an impact on the economy, the natural and built environment, the local population at the place visited and the visitors themselves.

Owing to this range of impacts and the wide spectrum of stakeholders involved, there is a need for a global approach to tourism development, management and monitoring. This approach is supported by the World Tourism Organization in order to formulate and implement national and local tourism policies and is also the focus of Chapter 2 in which the following three main topics are addressed:

- Tourism and territorial planning: identifying the mutual contents (see section B);
- The need for a classification of territorial entities (see section C);
- Fostering subnational analysis and measurement of visitors behaviour: learn about what visitors do once at destination (see section D).

- 0.17. UNWTO is convinced that such an approach can contribute to the objectives of the UN 2030 Agenda for Sustainable Development in the understanding that tourism measurement at subnational levels might act as a catalyst for expanding, in due time, Sustainable Development Goals indicators where tourism is explicitly mentioned⁴ at other spatial scales, in line with UN guidelines “to encourage all Member States to develop as soon as possible ambitious national responses to the overall implementation of this Agenda” and “to conduct regular and inclusive reviews of progress at the national and subnational levels which are country-led and country-driven” (UN, 2015, *Transforming our world: the 2030 Agenda for Sustainable Development*, paras. 78 and 79).

⁴ -Goal 8, on the promotion of “sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” includes as Target 8.9 “By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”.

-Goal 12 aimed to “ensure sustainable consumption and production patterns” includes as Target 12.b to “Develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products”.

-Goal 14 set to “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” includes as target 14.7 “by 2030 increase the economic benefits of SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism”.

- 0.18. As highlighted in **Chapter 2**, the mutual relationship between Territorial Planning and Tourism Planning requires a proper classification of territorial entities in order to be precise with the scale of measurement and analysis; such a classification does not exist in the UN statistical standards regarding the System of Environmental Economic Accounting Central Framework and related documents, nor in UN Recommendations for Tourism Statistics.

Nevertheless, the adaptation of IRTS 2008 to sub-national levels implies the need for a classification of territorial entities. Such classification is proposed in this document because the IRTS 2008 does not use precise criteria but rather suggests that in the case of considering a territory other than a nation, the concepts as well as all the corresponding definitions, classifications and relevant statistical data should be the same as those in the national case, with the only difference being the substitution of the term "country" with "place" (either a region, municipality or other sub-national geographic location).

- 0.19. The present document uses as reference the following hierarchical classification of territorial entities integrated by both administrative and analytical units at two basic subnational territorial levels:

REGIONAL

- Region
- Multi-regional (supra-national)
- Multi-regional (intra-national)
- Other administrative units
- Analytical units

LOCAL

- Municipality
- Multi-local
- Other administrative units
- Analytical units

The classification is proposed in order to operationalize the implementation of the conceptual framework proposed and more specifically, to allow for the setting up of the R-TIS; consequently, it should be adapted to any of such territorial levels in different countries, and other extensions could also be envisaged for tourism purposes.

The terms region, multi-regional and sub-regional used refers to subnational entities⁵. Consequently, such terms and classification used in this document should not be understood as the same terms used by UNWTO in its capacity of UN Specialized Agency for Tourism (where region and regional refers to a pluri-national or international framework).

- 0.20. Starting from the classification of those basic entities, it is feasible to establish combinations per each different type of analysis. For this purpose, the criteria to be used should be defined, such as market segments (responding to different forms of tourism, and different characteristics of visitors and trips), availability of tourism infrastructure and facilities, territory physical characteristics, territorial planning requirements, etc. One of the possible examples is "tourism spatial area" (identified as

⁵ In the document, the administrative unit corresponding to the first level of territorial disaggregation of a country in terms of its political and administrative organization; for instance, NUTS 2 level in the EU, provinces in Canada and China, states in Brazil and Mexico, etc.(see Glossary)

small spatial scales where tourism is significant) which might be applicable in its entirety to a certain regional and/or sub-regional administrative entity, but more often it is likely that it might not cover a single municipality, neither an entire region. Such term is often used by territorial planners in order to bring tourism content into focus.

Such term is also implicitly identified in the *System of Environmental-Economic Accounting 2012 /Applications and Extensions* document (see Chapter IV “Extensions of the SEEA)⁶.

Such units would qualify as analytical units and could generically be labeled as “small tourism destination areas” (STDA).

- 0.21. Any of those unit/s of the proposed classification (either at the regional or local level) where tourism is economically significant (according to the criteria proposed in the Glossary (see *Significance*), should be the focus of tourism measurement and could be labeled as a “tourism destination/s”.
- 0.22. **Chapter 2** also highlights some remarks on three topics that illustrate the complexity of such relationship between tourism and territory and how relevant might be for the target audience of this document:
- Understanding when a territorial entity becomes a tourism destination;
 - Exploring the connection between mobility and tourism as research areas particularly for the design and measurement of tourism itineraries as well as for selecting the criteria for defining types of tourism and types of visitors;
 - Looking for consistency between tourism destination and tourism statistics conceptual frameworks because in addition to the concepts of usual environment, visitor, tourism trip and tourism visit, special attention should be given to:
 - The new concept of “travel party” and its operationalization;
 - The enlargement of the list of “purpose of the trip” (and the association between purpose and activities carried on by visitors at destination);
 - About the use of “tourism products” as the criteria for market segmentation;
 - Operationalizing the measurement of travel behaviour of visitors at destination;
 - UNWTO experience using “type of tourism” definitions;
 - The new concept of “regional tourism” and “regional tourism expenditure”.

For more details, interested readers can find operational recommendations on these demand side topics in **Chapter 4** “Operationalizing the measurement of visitors (including related characteristics of visitors and trips) as well as travel behavior at destination”.

⁶ 4.1”The focus in this chapter is the potential of data from the accounts of the SEEA Central Framework to be extended and integrated with other information. The potential to connect SEEA accounts to a range of existing information sources can be of direct assistance in better understanding multi-faceted issues, such as sustainable development. It also recognises that responses to environmental pressures will usually rely on understanding connections between the environment, the economy and individuals. In this context the SEEA accounts do not provide a complete information set but can provide an important part of the information and SEEA is a framework that supports and encourages the integration of data”.

4.2 “There are two main approaches to considering extensions of the SEEA. The first approach involves a decomposition of existing SEEA accounts using additional information, for instance through linking to specific spatial areas, through further breakdown of the household sector, or through a focus on certain themes where there is an interaction between human activity and the environment, such as tourism or health..... The focus of this chapter is on the first approach”.

Chapter 3 The proposed Regional Tourism Information System (R-TIS): conceptual design and institutional background

- 0.23. **Chapter 3** presents the conceptual design of the proposed R-TIS built on the 2008 two international statistical standards on tourism statistics, as well as on different type of case studies identified in **Chapter 1** (see para. 1.23); for such design to be properly operationalized, this chapter addresses the setting up of a regional inter-institutional network integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institutions.
- 0.24. This complexity of actors, public bodies and authorities deserve special attention due to their implication and responsibility on the visitors' final satisfaction as they are involved in a wide and varied range of functions and investments (infrastructure provision and management of access and various services - such as public safety, preservation of natural and cultural resources, territorial planning, etc.). In addition, public authorities might condition the install of tourism enterprises located in their respective territories.
- 0.25. The International Recommendations for Tourism Statistics 2008 (IRTS 2008) as well as the Compilation Guidelines developed by the UNWTO for their application, should constitute the basic reference for the design of a Tourism Information System at both the national and subnational levels (as described in paras. 07 to 09). This has been precisely the starting point of the INRouTe initiative⁷, with a very clear message: the design of a proper Regional Tourism Information System (R-TIS) would be justified under two circumstances:
- the significance of tourism in a given region; and
 - the availability of a basic set of national statistical sources. This pre-condition highlights that the setting up of the R-TIS, as recommended in the document, is very data demanding.
- 0.26. In order to permit the measurement, analysis and comparability of regions (both intra-national and international), those three sets of information proposed to be included in the R-TIS (as described in para. 1.2) should address a list of topics for a reasonable number of areas (see para. 1.7, Box 2).

⁷ Regional Tourism is defined as following (see Glossary):

"In order to separate visitors who have their place of usual residence within the region of interest from those who come from other regions or countries, it is recommended that three subsets of visitors to or in this region be identified:

- Residents from countries other than the country of reference (inbound visitors to the country as a whole)
- Residents from another regions of the country of reference
- Residents in the region of interest

Such definitions are consistent with those addressed in IRTS 2008 under "forms of tourism" (see *Forms of Tourism*)

It should be noticed that inbound regional tourism would include the first two subsets while the third one includes both domestic and outbound regional tourism (those who travel for tourism purposes within the region of interest or those who travel outside such region but either remain in the country of reference or travel outside the country of reference, correspondingly)

Regional tourism is a particular type of form of tourism to be used at the subnational-regional level which comprises the activities of these three subsets of visitors and it might be the case that the identification of outbound regional tourism (in either of the two cases already mentioned) is not a priority in most regions; if that would be the case, the third subset will refer exclusively to domestic regional tourism.

If deemed appropriate and feasible, additional subsets could also be identified for analytical purposes (in terms of tourists or same-day visitors)".

It should be highlighted that such a list is not meant for gathering basic statistical data and indicators for all of those topics, but just to be used as reference by those regional authorities and tourism officials that have competences in the measurement and analysis of tourism in their region.

It would seem obvious that, depending on the level of development of the region concerned, different sets of information would be available and desirable. Besides being statistically founded, the goal of the generated dataset should be to have a tool for management purposes that comply with some technical requisites to be identified.

- 0.27. The adaptation of such conceptual framework to sub-national levels cannot totally respect the same variables and characteristics identified for the national level. And consequently it was decided that at subnational levels, in addition to measure tourism as an economic sector, it is also necessary to address the consequences of the flow of visitors on the sustainable development of the territory of reference, its potential impact on the territorial cohesion of the destination itself, and in other adjacent territories (see Glossary/Territorial cohesion), and the identification of a basic set of initiatives required for supporting destination key stakeholders in relation to tourism information and analysis.
- 0.28. It is recommended for those regions, where tourism is significant, to focus on an incremental approach that involves, first of all, the development of a limited set of statistical basic data and indicators at the national/regional levels (the term “articulation”-see para. 3.4- implies linking with statistical rigor national and regional data used to measure the same variables.); such possibility should be checked by a statistical insight regarding its feasibility. Such an articulation nation/regions will produce a conceptual and data framework for analyzing inter-regional tourism within a harmonized framework; and by so doing, will also contribute to international comparability between regions.

In a second step an articulation of regional / sub-regional levels should be foreseen (and this is basically feasible in statistically developed countries) including geo-referenced data (see also Chapter 6, section C).

- 0.29. With this background and clarifications, it is recommended as a first step in the set-up of a R-TIS to focus on tourists (overnight visitors) and on a limited number of the areas previously identified (for which there is more international experience than in the remainder areas where a more precise conceptual framework is needed). Nevertheless, in those destinations where same-day visitors or visitors arriving with cruises are relevant, the focus should give priority to these visitors.
- 0.30. As mentioned in Chapter 1 UNWTO STATS Unit will start asking by 2017, on a voluntary basis, for subnational statistical indicators (no more than 15) for a selected number of countries with a developed national statistical system: each of such countries will select one or more regions where tourism is particularly significant. For each of those regions (within a country) as identified in the classification of territorial entities used in this document (see Glossary), the following sub-regional breakdown would apply: other sub-regional administrative or analytical units, municipalities, multi-local (more than one municipality), other local administrative or analytical units. Such breakdown implies that some of such territorial entities could be labeled as tourism destinations. Such proposal has the potential of enlarging economic analysis as well as foster international and intra-national comparability.

Such an initiative should be understood as developing a sustainable network of countries that should identify the required data and determine the best way of collecting it on a regular basis; it should also include UNSD in order to allow for its expansion in due time, as a global initiative aligned with the UN 2030 Sustainable Development Agenda.

- 0.31. Chapter 3, section C deals with the content of the basic core of the proposed R-TIS (the statistical component), while section 0 focuses on some particular measurement issues about both statistical and non-statistical data (such as employment, tourism trip Origin/Destination matrix, prices and the use of administrative data) and provide a basic set of recommendations in order to move the supply side statistical agenda forwards (which might be a greater challenge than in the case of demand side – such recommendations will be addressed in Chapter 4-).
- 0.32. Finally, Chapter 3, section E refers to the UN recommended guidelines on regional statistical development, as well as on the design and setting up of a recommended institutional tool named as the Regional Inter-institutional Network; such a proposal is conceived as the key initiative to support the sustainability of the R-TIS project.

Chapter 4 Operationalizing the measurement of visitors (including related characteristics of visitors and trips) as well as travel behavior at destination.

- 0.33. As already mentioned in paragraph 0.25 “the International Recommendations for Tourism Statistics 2008 (IRTS 2008) as well as the Compilation Guidelines developed by the UNWTO for their application, should constitute the basic reference for the design and the setting up of a Tourism Information System at both the national and subnational levels”.

Chapter 4 refers to such Guide for all those topics that could also apply at subnational levels (for the operationalization of “visitor”, “tourism trip”, “usual environment”, “purpose of the trip”, etc.); other supplementary recommendations for some specific topics (as described in paras. 0.6 to 0.8) are also proposed in order to improve the present measurement of regional tourism demand:

- The new concept of “regional tourism” and “regional tourism expenditure”;
- The operationalization of the new concept of “travel party”;
- The enlargement of the list of “purpose of the trip” (and the association between purpose and activities carried on by visitors at destination);
- Considering the potential to improve the use of “tourism products” as the criteria for market segmentation;
- Operationalizing the measurement of travel behavior of visitors at destination;
- Selection of the appropriate tools for measuring tourism flows of the resident population when travelling for tourism purpose within the country of reference;
- Etc.

- 0.34. Sections B and C attempt to provide clarification regarding two topics that clearly highlight the fact that when the focus changes from the national to the sub-national level, the measurement instruments might be adapted or substituted:
- A first and major issue (see section B) is about grouping visitors according to some characteristics either of the visitor himself/herself, the trip undertaken, or some other type of components. In fact, setting up a cluster of characteristics of visitors useful for different key stakeholders might require both sets of characteristics as well as other analytical components that have not been identified in the IRTS 2008;

- A second issue (see section C) which has not usually deserved particular attention by tourism statisticians is that potential regional household surveys, accommodation surveys and other surveys should share with the corresponding national surveys not just a common methodological framework, but also a set of information items (as well as the basic elements of the methodological approach) that ideally should be obtained posing similar questions in their respective questionnaires.

More specifically, given that at the subnational level a key issue for analytical purposes is to deconstruct the arrivals universe in accordance with a set of characteristics of the trip and the visitor as well as other type of components (such as travel party size and composition, origin and destination of the trip, availability of travel mode/s, attractions visited, activities undertaken, etc.), the surveys providing such basic data and indicators should be as homogeneous as possible.

- 0.35. When using household and other demand side surveys for regional tourism measurement, tourism practitioners and researchers should be aware of experiences at the national level from National Statistical Offices and other government and non-government as agencies regarding household as well as passenger transportation surveys.

As described in paragraph 0.8, also in this area both the conceptual framework and the operationalization of main variables using surveys and other statistical tools “will quite probably need to be redrafted in due time”.

Chapter 5. Linking the R-TIS with the TSA as the foundation for a Regional TSA (R-TSA)

- 0.36. The following four paragraphs of the two international standards on tourism statistics, clearly refer to the harmonized set of recommendations regarding the fundamental elements of the conceptual framework supporting both the IRTS 2008 and the TSA:RMF 2008.
- 0.37. “Concepts, definitions, classifications and indicators presented in International Recommendations 2008 should be viewed as an important foundation of the system of tourism statistics. As such, they should be used as a reference for coordination, reconciliation and interpretation of the information in the area of tourism, although this information might extend beyond the still restricted domain these Recommendations touch upon”. (IRTS 2008, para. 1.36).
- 0.38. “The development of a system of tourism statistics is closely linked to the implementation of the second international recommendations approved by the United Nations Statistical Commission for use in the compilation of tourism satellite accounts, an approach that is briefly introduced in chapter 8. In fact, the Tourism Satellite Account provides the conceptual framework and the organizational structure for the reconciliation of most tourism statistics internally within the sector, as well as with other economic statistics. From this perspective, it should be seen as an instrument to assist countries in the identification of data gaps and to guide them during the revision of existing data sources, as well as in the development of new sources.” (IRTS, para. 1.37).
- 0.39. “Because the International Recommendations for Tourism Statistics 2008 already provides basic conceptual consistency with other statistical frameworks (IRTS 2008, para. 1.31) such as the System of National Accounts 2008 (SNA 2008) and the Balance of Payments and International Investment Position Manual (BPM6), the Tourism

Satellite Account: Recommended Methodological Framework 2008 (TSA: RMF 2008) builds upon this consistency and provides an additional resource to link tourism statistics to the standard tables of the SNA 2008. As this instrument requires consistency among the different data sources that are used and imposes more stringent conditions on them, in particular, reconciliation between the different data, it becomes possible to estimate internally consistent variables that more accurately represent the direct economic contribution of tourism and its interdependence with the rest of a national economy.” (TSA:RMF 2008, para. 1.13).

- 0.40. “This link between both International Recommendations for Tourism Statistics 2008 and the Tourism Satellite Account: Recommended Methodological Framework 2008 and the source data used in their compilation, provides the foundations for the establishment and maintenance of improved national systems of tourism statistics (see IRTS 2008, paras. 1.36 and 1.37)”. (TSA:RMF 2008, para. 1.14).
- 0.41. The adaptation of such international standards to the subnational level implies the respect to such integrated and harmonized link; because there is no international standard about what a Regional Statistical System should be, as explained earlier –in paras. 0.8 and 0.9-, the conceptual framework described in the document as well as the recommendations proposed “will quite probably need to be redrafted in due time”.
- 0.42. The term Regional Tourism Satellite Account (R-TSA) has been used by UNWTO in the last ten years referring to the regional adaptation of the TSA accounting framework, designed for the national level (see Chapter 5, section B); the document respects such term and explain the difference with TSA-R meaning the regionalization of a national TSA.
- 0.43. Nevertheless, given that most regional case studies presently available could be properly be labeled as “exercises”, it could be argued that other terms would be more appropriate for them; for instance, “Regional extended TSA exercise”. In fact, most of them do not build on the statistical rigor of a proper TSA (a very data demanding initiative) and therefore, it should be seen as useful exercises in order to foster economic analysis.
- 0.44. All along the document it is mentioned that in order to take regional tourism seriously, the first priority should be the setting up of a R-TIS; such recommendation imply that this initiative is a prerequisite for developing a Regional extended TSA exercise. Different sections of chapter 5 addresses and provide insight on the complexity of the necessary link between the R-TIS and the R-TSA.

This chapter also provide clarification on what a R-TSA really is and guidance about addressing such an objective; it also highlights how the R-TIS should support such initiative in a given region⁸.

In line with such focus, three issues are addressed in different sections:

⁸ Section C addresses the issue of linking national and Regional Tourism Information Systems and warns about its complexity. It might be appropriate to remember that IRTS 2008 suggest, as a first approach, “that national statistical offices, tourism authorities and/or other organizations with direct responsibility for tourism statistics promote the use of national instruments to collect tourism data at the regional and local levels using a common set of definitions, based on the present IRTS 2008, para. 8.29); if ” this first approach is not feasible or is not considered completely satisfactory, especially in those regions where tourism is particularly relevant, the regional tourism authorities might wish to complement national data with other data in order to design policies and foster economic analysis tailored specifically to their own regions. In this case it is recommended that these new data follow international and national statistical standards and recommendations”. (IRTS 2008, para. 8.31)

- Why promoting a regional TSA?;
 - Could a feasibility study help to evaluate the requirements needed?;
 - What can a region where tourism is significant really do when the feasibility study reveals that there are no data and resources enough to support the development of a proper R-TSA?
- 0.45. It should be possible that TSAs, and any extension to encompass environmental data, could be seen as flexible in the sense of applying accounting principles to the policy questions at hand and, from this point, the data requirements can be established. How these data are then found, whether via collections by official statisticians, via big data, or via modeling is a second step that will be tackled appropriately in different ways in different countries/regions.

Chapter 6. Measuring Tourism and Sustainable Development at subnational levels: setting the focus

- 0.46. The conceptual design developed for setting up the R-TIS (as explained in Chapter 3) is supported by the understanding that the central core of such a system should allow for scalability of particular sets of layers of information; such concepts should be properly understood⁹:
- **Scalability:** Refers to the integration of information across different spatial scales with the aim of developing information sets for particular type of analysis at a level suitable for public policy purposes as well as for key tourism stakeholders interest.
In this document, scalability is associated to the geo-reference of basic data and indicators at the sub-regional level.
 - **Statistical information (layers):** It is proposed that the articulation of a basic core of national / regional layers of statistical data derived from available national statistical sources on economic, environmental and socio-cultural dimensions of sustainability is the main priority in the setting up of a R-TIS.
- 0.47. The operationalization of such concepts allow to set up an integrated information system with three basic axes: activity of individuals (being tourism the main focus), territory (using different scale of analysis) and sustainability (including the three dimension: economic, environmental and sociocultural). Such a system implies the coherence of data used in terms of international statistical standards.
- 0.48. Because the design of such a system refers to the adaptation of the IRTS 2008 to subnational levels (which focuses on the behavior of those travellers that qualify as visitors and on the economic dimension of such activity), the following paragraphs should be understood as basic references regarding the measurement of tourism and sustainability:
- “The issue of tourism and sustainability is an increasingly important one and any measurement of tourism and its effect on an economy must take into account the social, economic and environmental impacts. Links with the latter component should be a high priority”. (IRTS 2008, para. 8.33).
- “Both approaches (macro-accounting and indicators) have their potential and challenges for measuring at different territorial levels the links between tourism and

⁹ For a more detailed definition see Glossary

the environment and thus are recommended as the first priority regarding tourism sustainability issues". (IRTS 2008, para. 8.39).

"The second approach is more empirical and might be more appealing to countries in which existing tourism regions and destinations would be interested in the design of concrete and geographically-oriented goals and policies in terms of developing a more environmentally-friendly tourism with which all stakeholders might be associated, including visitors". (IRTS 2008, para. 8.33).

"In this case, the focus would be to develop a set of indicators to highlight an interface between tourism and environmental issues that might identify phenomena or changes that require further analysis and possible action. Like other indicators, these indicators are only tools for evaluation and have to be interpreted in context to acquire their full meaning. They might need to be supplemented by other qualitative and scientific information, notably to explain driving forces behind indicator changes, which form the basis for an assessment". (IRTS 2008, para. 8.43).

- 0.49. The subnational approach as referred in the IRTS 2008 is not linked to the TSA (which focuses on tourism as an economic sector) but just to "indicators" and has been preferred not only by countries but also by International Organizations such as UNEP, UNWTO, European Energy Agency, European Commission and others. In most cases the approach for such link between tourism and sustainability has not been statistics oriented and have been developed before the new international standards on tourism statistics (IRTS 2008 and TSA:RMF 2008) were approved by the UN Statistical Commission. Nevertheless, it would seem obvious that the adaptation of such standard to subnational levels should imply not just the measurement of the consequences of the flow of visitors on the sustainable development of the territory of reference but also the identification of tourism as an economic sector and its proper statistical measurement (which is a clear recommendation of IRTS 2008).
- 0.50. At present, there is no agreed definition of sustainable tourism that might be directly amenable to measurement. At this time, it may be premature to spend significant resources to determine a singular definition; however, it is likely to be necessary to be able to describe the elements and perspectives relevant to sustainable tourism such that the work on developing the statistical framework is scoped appropriately. The description of sustainable tourism will reflect a combination of the user requirements and a general understanding of sustainable development as encompassing economic, environmental and social dimensions.
- 0.51. With such a focus, this document identifies three main priorities as strategic policy issues regarding the measurement and analysis of tourism at subnational levels:
- In order to bring credibility to regional tourism as a key driver of economic development there is a need for developing a proper conceptual design of a Regional Tourism Information System (R-TIS);
 - For comparability purposes (which is UNWTO responsibility as UN specialized agency for tourism) such R-TIS should have as its basic core official statistics;
 - Tourism activity impact environmental sustainability and consequently, those basic statistical data and indicators derived from such R-TIS should be applicable first of all to a regional level but also, in due time, to a regional/ sub-regional breakdown such as tourism destinations / cities.
- 0.52. The connection of such priorities should be based not only on the statistical framework of tourism statistics international standards (IRTS 2008 and TSA:RMF 2008) but also on other statistical standards related to environment statistics and the system of

environmental economic accounting (UNSD et al., 2014: SEEA_CF 2012). The link of all these UN international standards has been supported by a common approach labeled as a “systems approach”, meaning that in any particular thematic area the application of concepts, definitions, classifications, accounting procedures and principle of recording must be consistent with those of the System of National Accounts (SNA 2008).

- 0.53. The focus used in chapter 5 is consistent with the recommendations referred in the Framework for the Development of Environmental Statistics (FDES 2013) (see Annex 39) and identify ecosystem accounting as the natural connection with tourism at subnational levels (SEEA Experimental Ecosystem Accounting 2014).
- 0.54. More specifically, focusing on the identification of measures of economic activity for those industries and activities for which a clear link can be established between an ecosystem and the location of the production (which is precisely the case of tourism), would allow for considering integrating information on a range of other transactions that may take place in relation to the economic activity. Readers should be aware that all these UN statistical international standards and complementary documents on environmental accounting insist once and again on the need for developing integrated information systems; consequently, terms as “integrated data”, “multi-dimensional”, “cross-cutting issues”, etc. appear systematically all along this chapter.

For that to happen it is crucial that tourism datasets at subnational levels be geo-referenced including not just tourism data but also supplementary data in order to allow for linking measurement and analysis between tourism and ecosystems in specific territorial entities. Such geo-referenced databases would allow for scalability of the information needed in different sub-regional territorial levels.

In order to operationalize such connection between the three priorities already mentioned, this document refers to statistical concepts and definitions as in the 2008 standard and proposes new ones as explained in the paragraph 0.6. The following concepts have been particularly crucial¹⁰:

- Articulation of national/regional/sub-regional basic statistical data and indicators;
- Statistical information (layers);
- Territorial entities (hierarchical classification for a subnational breakdown);
- Scalability;
- Significance (economic importance);
- Statistical information (layers);
- Geo-referenced data bases;
- Tourism population;
- Regional tourism.

- 0.55. In addition to economic and environmental sustainability, the sociocultural dimension is crucial for tourism planning and management: poverty, employment, education, skills, crime, changes in host populations, living conditions, etc. are relevant issues for tourism key stakeholders. This document does not address detailed analysis regarding sub-regional levels on this third dimension of sustainable development although the conceptual framework developed for the design of the R-TIS certainly allow for its measurement.

¹⁰ All of them can be found in the Glossary

Chapter 1. Contextualizing UNWTO approach to sub-national tourism

A. Introduction

- 1.1. The present document builds on statistical international standards (tourism and environment statistics, as well as the corresponding macroeconomic accounting frameworks –TSA and SEEA-) and provides guidelines in order to set up a particular type of statistical initiative: a Regional Tourism Information System conceived for the purpose of linking tourism, territory and sustainability in the perspective of the UN 2030 Agenda for Sustainable Development. By so doing, UNWTO understands that tourism measurement at subnational levels might act as a catalyst for expanding Sustainable Development Goals’ indicators at other spatial scales, in line with UN guidelines “to encourage all Member States to develop as soon as possible ambitious national responses to the overall implementation of this Agenda” and “to conduct regular and inclusive reviews of progress at the national and subnational levels which are country-led and country-driven” (UN, 2015, *Transforming our world: the 2030 Agenda for Sustainable Development*, paras. 78 and 79).

Linking tourism (operationally defined in the tourism statistics international standards) and sustainable development (a policy oriented concept without any universally accepted operational definition for its measurement) is a complex and challenging task; this document provides a statistical insight in such connection between tourism as an economic sector that impact the socio-economic components of sustainability and the environmental impact due to tourism infrastructure and the activity of visitors.

More specifically, this document will contribute to the transformative agenda for official statistics by highlighting the need for integrated social, economic and environmental information and call for holistic and integrated approaches to sustainable development for decision-making at the national, subnational and local levels (UNSC, 2015). In fact, this is fully in line with UN Statistics Division calling for “integrated statistics to address multidimensional phenomena such as poverty, sustainable production and consumption, climate change and globalization” as UNSC considers them “indispensable for the new post-2015 development agenda” (UNSC, 2015).

Furthermore, the present document fully supports UNSC’s request that “traditional statistical processes will need to be redesigned to become more integrated and efficient and to yield data that is more timely, and better and differently disaggregated”; disaggregation meaning characteristics of the individual and household, economic activity, and spatial dimensions (e.g. by metropolitan areas, urban and rural, or districts). (*Transformative agenda for official statistics*, UN Statistical Commission forty-sixth session, E/CN.3/2015/5 paras. 10. /13. and 14.)

- 1.2. To properly understand the nature of such a system (the R-TIS), the following remarks are highlighted all along this document in order to provide proactive arguments to support such medium-long term initiative:
 - This initiative has been conceived and developed as the adaptation of 2008 international standards for tourism statistics (the International Recommendations for Tourism Statistics –IRTS 2008- and the Tourism Satellite Account: Recommended Conceptual Framework –TSA 2008-) to subnational levels;

- It is recommended that the basic core of such system refers to basic statistical data and indicators most of them derived from official statistical surveys at the national level (six main sources have been identified). Other regional official statistical data might be also included;
- Such national sources are available in practically all EU member countries as well as in non- European countries pertaining to the G.20 international community;
- The conceptual design of the R-TIS uses a set of concepts, operational definitions, accounting rules and principles of recording and classifications consistent with those of the System of National Accounts. Also other statistically supplementary concepts have been included (the INRouTe initiative has developed around 15 new concepts such as tourism population, significance -economic importance of tourism at territorial levels-, scalability, regional tourism, etc.) and it has moved away from the statistically vague term of destination, to a precise hierarchical classification of territorial entities;
- The setting up of the R-TIS requires also a particular type of governance structure: a regional inter-institutional network integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institutions;
- The R-TIS database is recommended to be geo-referenced (not only for rearrangement of data but also for mapping purposes) and prioritize an articulated set of basic data at the national/ regional levels;
- The initiative of setting up a R-TIS is recommended as a necessary pre-requisite for comparing nationally and internationally main tourism destinations and cities where tourism is significant, as well as to rigorously measure territorial, environmental and other economic and social impacts of tourism activity;
- This document might be inspiring for countries without such an advanced level statistical development. UNWTO will also be available to provide technical assistance in order to set up a planning work schedule for those regions where tourism is particularly significant, to be in line with the recommended guidelines proposed. This is of particular interest for those countries that have decided to renew their national tourism information system as the first phase of a project that also includes the subnational measurement as a second priority.

- 1.3. The conceptual design of the R-TIS should also be understood as the “umbrella” for implementing those guidelines proposed in this document in order to develop a robust set of basic statistical data and indicators for sub-national regions and other subnational territorial entities.

In this sense, it responds to UNWTO’s aspiration to support National Tourism Administrations as they work towards an improved formulation of national policies that take into account such territorial entities where tourism is significant. This perspective is crucial for a better understanding of the spatial distribution of domestic tourism (both in terms of flows and in terms of its economic contribution), an issue recurrently highlighted by several UNWTO Member States as being of the utmost importance for the national level.

- 1.4. The target audience of this document refers to tourism practitioners -including tourism officials who commission surveys and research, and those who undertake such surveys- and different key stakeholders at regional and sub-regional levels –including

governments, public institutes and agencies, universities, research centres, industry associations, trade bodies, consulting firms, tourism destination managers, tourism development authorities, tourism businesses, etc.

- 1.5. Focusing on some key areas of the measurement and analysis of tourism at the sub-national level (see Box 2), the development of an R-TIS would enable collecting a reasonable number of statistical information items for monitoring and comparability purposes (both internationally and intra-nationally).
- 1.6. The R-TIS should include not only official and statistical data obtained at the national and regional level, but also a third dataset not necessarily of official and/or of statistical nature (such as electricity consumption by households, credit card expenditure records, information obtain via transport authorities control, business cycle indicators, early warning indicators, other indicators regarding tourism and sustainable development, etc.), considered to be relevant at regional and sub-regional levels not only for the measurement/monitoring of tourism (carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope or even by national bodies), for analytical purposes (such as analysis of the performance of certain subsectors and foresee their evolution, the perceptions of the demand of a certain destination, etc.) and for gathering data”, requirement for providing answers to policy questions related with tourism itself or in relation with sustainable development issues.
- 1.7. During the period 2012-2016, the work carried on has focused on 4 areas and almost 20 topics as listed in Box2 A proposed set of general guidance and standardized procedures (also referred as recommendations) have been drafted for each of them and are included in this document¹¹.

Box 2. List of Areas and Topics

<p>Box 2. List of Areas and Topics</p> <p>A. Tourism as an economic sector</p> <ol style="list-style-type: none"> 2. Measuring demand 3. Measuring supply 4. Consumer and production prices 5. Measuring employment 6. Seasonality <p>B. Tourism and sustainable development</p> <ol style="list-style-type: none"> B.1. <i>Tourism and the environmental, social and cultural dimensions</i> 7. General background 8. The consumption of water 9. Tourism and rural economy development B.2. <i>Tourism and the economic dimension</i> 10. Overview of main instruments for its measurement 11. Regional TSA: setting the focus 12. Special events 13. Meetings Industry 14. Vacation Homes <p>C. Tourism and territorial cohesion</p> <ol style="list-style-type: none"> 15. Tourism itineraries 16. Defining a tourism destination <p>D. Supporting tourism destinations' key stakeholders</p> <ol style="list-style-type: none"> 17. Governance 18. Defining and measuring types of tourism: general background

¹¹ For a more complete view of main topics addressed in this document please see the Subject Index

- 1.8. Obviously, there are many other areas that could have been included if the required resources (both financial and human) would had been available; for instance, areas related to general infrastructure, accessibility, marketing and promotion of destinations, business capacity, destination commercialization and marketing, competitiveness, technological innovation, just to name a few of them.
- 1.9. In addition to such strategic objective other complementary ones have been identified all along this initiative:
- Empowering tourism entrepreneurs and other key stakeholders of the tourism sector;
 - Avoiding information overlapping between national and regional levels; and
 - Fostering the dissemination and use of data and analysis.
- 1.10. The setting up of a R-TIS is not just a technical challenge associated to the creation of a database using available data derived from national as well as regional sources: it goes well beyond that issue. It seems quite obvious that guidance on how to define and develop measurement related to tourism destinations, “tourism products”¹², types of tourism and types of visitors are crucial for tourism comparability.

In fact, this document also explains why the proposed design of the R-TIS (Regional Tourism Information System) should be extended beyond the regional level to allow for integrating data at sub-regional levels. Moreover, an operative articulation of a national / regional tourism statistics’ dataset is also a key objective and should be seen as a first priority, also including a supplementary articulation of regional /sub-regional basic statistical data and indicators.

- 1.11. Tourism is a relevant economic driver in most countries and might significantly impact the national sustainable development agenda. At the regional and other sub-national levels there is strong evidence (Gössling, Hall, Lane & Weaver, 2008) that tourism is also a significant contributor to undesirable and irreversible environmental, economic and social changes.
- 1.12. The credibility of the measurement of regional tourism requires setting up basic information as a prerequisite for measuring, analyzing and monitoring economic consequences. The basic core of such information should be statistically-founded. Yet other types of non-statistical or non-official data are also needed, for different purposes, by key stakeholders.

Out of all data, only statistical data allow for a robust type of comparability, both between regions in a given country as well as between regions of different countries. However, not all territorial entities have the same type and amount of statistical data. This is not a question of size (the smaller the unit, the lower is the amount of available data), but relates rather to the fact that national statistical sources do not usually include all levels of territorial administrative units and/or that the sample sizes involved in surveys do not allow for uniform reliability of data at different territorial scales (both regional and sub-regional).

¹² All along this document the term “tourism product” should not be confused with “tourism characteristic consumption products” defined as those goods and services whose expenditure represents a significant share of total tourism expenditure (for a more precise quotation see *Regional Tourism: Glossary, “Tourism industries”*)

B. The motivation and role of UNWTO in promoting this document

- 1.13. The rationale for better understanding and analyzing of tourism at different territorial levels lies in the fact that tourism is strongly territory-contingent, with flows of visitors occurring unevenly across countries, regions, municipalities, or any other territorial entity. Tourism and territory are narrowly intertwined not only because the natural or built territory is often the main tourism attraction (e.g. an exotic beach, a vibrant city), but also because the territory, and movements across it, largely condition tourism trips and itineraries, the nature of the supply that caters to visitor consumption, the capacity to modulate by means of policy and, consequently, the relationship to potential welfare.
- 1.14. There is an increasing understanding that tourism is a driving force for economic growth especially in those sub-national territories (both at the regional and local levels) where tourism has become a relevant activity vis-à-vis other sectors. Nevertheless, for many entities and professionals in tourism, as well as for a good number of governing bodies, tourism is seen as a disrupting force not contributing to sustainable development and territorial cohesion.
- 1.15. The UN-approved International Recommendations for Tourism Statistics 2008 (IRTS 2008) and Tourism Satellite Account: Recommended Methodological Framework 2008 (TSA: RMF 2008), developed under the leadership of UNWTO, support the conceptual framework for the measurement of tourism activity and its economic dimension at the national level. As such, they are also the cornerstones for designing measurement guidelines of tourism at sub-national regional and local levels. This is particularly the case for the regional adaptation of the proposed national system of tourism statistics and the Tourism Satellite Account (TSA):
- the IRTS 2008 notes that “increasingly, regional tourism authorities are interested in regional statistics and possibly some form of TSA at regional level as a means of providing useful indicators for tourism enterprises and organizations in identifying possible business opportunities, assessing the volume and intensity of tourism business and determining the extent to which private and public regional tourism networks and clusters are interconnected”;
 - the TSA: RMF 2008 notes that “there are various reasons for encouraging discussion on how the TSA can be adapted to the sub-national level”.
- 1.16. Thanks to the 2008 UN international standards on tourism statistics, countries around the world are able to compile basic statistical data and indicators which are comparable across countries and over time, and at the same time comparable to other economic statistics. The UNWTO Compendium of Tourism Statistics, comprehensively expanded from 2011 onwards, reflects the IRTS 2008 concepts, definitions and classifications to provide information for over 200 countries on inbound, domestic and outbound tourism, as well as on the number and types of tourism industries, the number of employees by tourism industries, and macroeconomic indicators related to international tourism.

In addition, UNWTO releases regular updates of its World Tourism Barometer, providing up-to-date statistics and short-term trends analysis, and its Tourism Highlights, presenting a concise overview of international tourism trends over the year, such as results by (sub)region and country of destination, top tourism destinations, outbound tourism by region and top spenders, and long-term forecasts.

- 1.17. UNWTO has been aware for a couple of years of the need to provide countries, particularly its Member States, with guidance in the area of adequately measuring and analyzing tourism at the sub-national level. This would be an important step beyond

the work currently carried out by UNWTO at the national level and is seen to be the way towards tailoring policy to those areas where tourism does or could contribute to generate national welfare.

Indeed, the sixth International Forum for Parliamentarians and Local Authorities (Cebu/Philippines, 22-24 October 2008), organized by UNWTO and the Philippines National Tourism Administration, formally requested UNWTO to –deliver guidelines on measuring tourism at the regional and local levels regarding basic statistics, the Tourism Satellite Account and the economic analysis of the contribution that tourism makes at those levels (see Annex 1).

UNWTO has been insistent (throughout the process of drafting the UN International Recommendations, from 2004 to 2008) on the notion that the development of a Tourism Information System (TIS) should be understood not as an end in itself but rather as an initiative that, aside from allowing a credible analysis of tourism activity and its economic consequences, should also support the institutional reinforcement of National Tourism Administrations (NTAs) in their responsibilities both at the national and sub-national levels.

1.18. The central reason for having underscored the development of the Regional Tourism Information System (R-TIS) as a strategic objective stems from a conviction—unless you measure tourism, you will never manage it properly or improve it. Two facts should be mentioned in this context:

- Strictly speaking, tourism officials alone cannot develop a R-TIS (both for reasons of lack of institutional legitimacy, as well as due to the lack, in the vast majority of cases, of the necessary infrastructure for such an endeavour, where the qualification and amount of required human resources constitute a principal limitation). Tourism officials require the cooperation of, at least, the statistical authorities and specialized private sector contributions. This is not merely an issue of the division of competencies or of complementarities between the relevant entities; it also relates to the fact that each entity has its own legitimacy and credibility vis-à-vis third parties and, especially, the users of the information generated;
- In order to make the effort sustainable over time (and not just in monetary terms), the measurement and analysis of tourism need to pay special attention to the inevitable nexus between the different layers of territorial aggregation: between national and (sub-national) regions, and between such regions and corresponding municipalities and tourism destinations, where tourism is significant. The term significant at the regional level implies the territorial scale under consideration, the number of establishments in the tourism industries – and, consequently, also the number of associated jobs- and the value added generated by them in relation to the economy in the corresponding territory- as well as the number of visitors.

1.19. The present document attempts to explain to a wide audience of tourism practitioners and subnational key stakeholders the importance of considering tourism at sub-national levels, as well as to provide guidelines for its proper measurement.

C. Singularity of this initiative

1.20. The distinctive features of this initiative (which in fact has been developed as a medium term project) vis-à-vis other projects or initiatives regarding tourism at sub-national levels, are its link to the aforementioned UN international recommendations of 2008

(i.e. the IRTS 2008 and the TSA: RMF 2008) and the cooperation agreement by UNWTO and INRouTe signed in July 2011.

The following paragraphs provide some more clarifications to better highlight the singularity of the initiative presented in this document.

- 1.21. Such initiative has developed a proper conceptual framework by adapting the UN 2008 international standards for the measurement and analysis of tourism at national level to sub-national levels. Such adaptation is not a mere question of semantics (changing the term nation “to region or tourism destination”, for example). It is a challenging issue that requires interdisciplinary research in order to overcome what Professor Jafar Jafari¹³ formulated as tourism’s detrimental tendency to isolate itself, as is the case for instance, in relation to sustainability: “In the name of sustainability, we now have many models of ‘sustainable tourism development’. These boosterism molds often suggest that this [sector] in and by itself can become sustainable. However, tourism cannot be isolated from the larger contexts which structure and explain it, as many do.”
- 1.22. Such adaptation has taken into account the need for including a consideration of both the territory and sustainability. In fact, in many tourism destinations, a divide between the tourism and the land planning authorities has resulted in a significant issue in terms of sustainable development. Consequently, the development of new concepts, definitions and insights that connect tourism with territory are part of the challenge to strengthen the credibility of tourism at the different territorial levels; and for such purpose a classification of territorial entities has been developed.
- 1.23. The design of a R-TIS has taken advantage of national case studies (Brazil, Ireland and New Zealand) as well as regional ones (Andalusia, Canary Islands, Comunidad de Madrid and Palma de Mallorca in Spain, as well as Wales in the UK). The national studies highlight that it is possible to structure an articulation between national/regional levels that generates a sufficient set of basic statistical data and indicators both for the demand and supply side of tourism. (This is the case for overnights/ establishments of tourism industries/ employment associated with such industries.) As already mentioned (see para. 1.2), the necessary information does exist in countries with a higher level of statistical development.

While the case of Andalusia (a very particular one in terms of its institutionalization, consolidated staff for more than 15 years, continuity of the work carried out during such a long period of time, etc.) has been used as the main reference for setting up the proposed R-TIS, the case of the Canary Island and Palma de Mallorca have been used as reference for expanding such a system to sub-regional levels.

Please see below Box 3 containing all the references to the different case studies highlighted in the present document.

¹³ Jafari, J., (2005). Bridging Out, Nesting Afield: Powering a new platform, *Journal of Tourism Studies*, 2005 Vol. 16 No. 2 pp. 1-5.

Box 3. References of Case Studies highlighted in the present document

National Case Studies

Brazil

1. Morita Sakowski, P.A. (2015). "Mensurando o emprego no setor turismo no Brasil: do nível Nacional ao Regional e Local", Instituto do Pesquisa Económica Aplicada (IPEA), Abril 2015, Brazil
2. Sakowski, P. (2012) "Measuring employment in the tourism industries in Brazil: from national to regional and local level, presented to the I INRouTe's International Seminar on Regional Tourism, Venice, 2012

Ireland

3. MacFeely, S. and Delaney, J. (2013). Linking registers with administrative data at unit record level to conduct structural and regional analyses of the tourism industries, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
4. MacFeely S., Delaney J. and O'Donoghue F. (2012), Using Business Registers to conduct a regional analysis of Enterprise Demography and Employment in the Tourism Industries: Learning from the Irish Experience (Document presented at the INRouTe 1st Seminar on Regional Tourism: setting the focus (Venice, Italy, 5-6 July 2012))
5. Wall, C., MacFeely, S. (2012), Ireland case study: Measuring & Analysing Regional Tourism, (Document presented at the INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, Italy, 5-6 July 2012).
6. MacFeely, S. (2009). Domestic Origin-Destination Matrices – An Irish Case Study, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.

New Zealand

7. Becken S. and Gnoth J., Tourist Consumption systems Among Overseas Visitors: Reporting on American, German and Australian Visitors to New Zealand, *Tourism Management* 25 (2004) pp. 375-385.
8. Burson, R. and Ellis, P. (2015). "Using electronic card transaction data to measure and monitor regional tourism in New Zealand, Ministry of Business, Innovation and Employment, 2015, New Zealand
9. Ministry of Economic Development of New Zealand, (2011). "Tourism Data Domain Plan", November 2011, New Zealand.
10. Statistics New Zealand, (2001). Review of the Statistical Needs of Local Government, Wellington, 30 November 2001.
11. Tourism Research Council, (2002). "Review of Core Tourism Statistics", Full Report, New Zealand December 2002

Regional Case Studies

Andalusia (Spain)

12. Aurióles, J., Gallego I, and Moniche, A. (2012). Measuring Special Events from the Regional Point of View, INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th, 2012.
13. SAETA (2014) New Utilities for Regional TSA Information system: Sustainable Tourism Indicator System for Andalusia as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
14. SAETA. (2000) "The elaboration of a Tourism Satellite Regional Account: The experience of Andalusia" 5th International Forum on Tourism Statistics, June 20th – 22nd Moffat Centre, Glasgow.
15. Junta de Andalucía, (2014). "Sustainable Tourism Development Indicator System for Andalusia, Consejería de Turismo y Comercio, Sevilla, 2014.

Canary Islands (Spain)

16. Hernández Martín R., González Yanes J.A. (2012) Designing and Analysing Micro-destinations. A Pilot Study in the Canary Islands (Document presented at the INRouTe 1st Seminar on Regional Tourism: setting the focus (Venice, Italy, 5-6 July 2012))
17. Hernández Martín, R., Gonzalez Yanes, J.A., and González Mora, Y.M. (2014) Analysing tourism performance and impacts at local destinations: evidence from the Canary Islands as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
18. Hernández Martín, R., Simancas Cruz, M.R., González Yanes, J.A., Rodríguez Rodríguez, Y., García Cruz, J.I., González Mora, Y.M. (2014) Identifying micro-destinations and providing statistical information: a pilot study in the Canary Islands, *Current Issues in Tourism*,

<http://dx.doi.org/10.1080/13683500.2014.916657>

Madrid

19. Cañada, A. (2009), Regional-TSA: potential and problems in developing sub-national TSA, ONS conference on Tourism Satellite Accounts: Inputs, Processes, and Actors, ONS, London, 21-22 Mayo 2009.
20. Cañada Martínez, A. (2011). Extending TSA framework for evaluating the regional impact of tourism segments: an application to the Madrid region, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
21. Cañada, A. (2013), Regional Tourism Satellite Account, UNWTO Statistics and TSA Issue Paper Series STSA/IP/2013/02, (Online), available: <http://statistics.unwto.org/en/content/papers>.

Palma de Mallorca (Spain)

22. Consorci Platja Palma, La Revalorización de la Platja de Palma: Plan de Acción Integral, 2011 European Commission, Investing in Europe’s future: Fifth report on economic, social and territorial cohesion (Luxembourg, 2010), pp xx-xxiii. http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm

Wales

1. Jones, C. (2005) “Tourism Satellite Accounts: The Regional Perspective”, Central Paper presented to Session 3, WTO conference The Tourism Satellite Account (TSA): Understanding Tourism and Designing Strategies Iguazu Falls, Argentina/Brazil/Paraguay, 3-6 October 2005
2. Jones, C. (2008), Tourism’s Economic contribution at Sub-national Level. The Regional TSA: Complements and Extensions,(Document presented at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, “Knowledge as Value Advantage for Tourism Destinations”, 29 - 31 October 2008, Málaga, Spain), (Online), available: <http://statistics.unwto.org/en/event/malaga>.
3. Jones, C. (2009), Assessing the Impact of Tourism in Regions: Towards a Holistic Analysis? Regional Association 2009 Conference, Belgium (Online), available: <http://www.regional-studies- assoc.ac.uk/events/2009/apr-leuven/papers/Jones.pdf>.
4. Jones, C. Munday, M. and A. Roberts (2003) Regional Tourism Satellite Accounts: A Useful Policy Tool? Urban Studies, 40 (13), pp. 2777-2794
5. Jones, C., Bryan, J., Munday, M. & Roberts, A. (2010), The Tourism Satellite Account for Wales 2007 (Online), available: <http://wales.gov.uk/docs/drah/publications/Tourism/100715tsajulyappeng.pdf>.
6. Jones, C. (2014). Constructing RTSAs: lessons from the UK 2000-2004, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.

- 1.24. All along this initiative a special commitment was looking for a light level of consensus (meaning that the guidelines now proposed by UNWTO in this document will not require formal UN approval) based on the work carried out by INRouTe partners, through international Conferences and Seminars, and last but not least, with the support of UNWTO.
- 1.25. Such consensus refers to UNWTO proposed guidelines on measurement and basic research, as well as on suggested standardization procedures basically on different aspects of surveys and on a limited number of measuring tools or recommended practices on specific items.
- 1.26. It is important to clarify that UNWTO Guidelines are not conceived as standards, which would imply requirements, certification and similar attributes. While standards may be desirable, they cannot be instituted without a body that should continually update them and ensure that they are being followed.
- 1.27. Nevertheless, standardization procedures represent procedures that, if practitioners voluntarily adopt them, it will improve (a) the consistency of the instruments to which they apply (surveys or other measuring tools); (b) the quality of such instruments; (c) the comparability of results; (d) the reliability of the data resulting from such instruments, and (e) the accuracy of the measurements.

D. Policy relevance and uses of this document

1.28. The following paragraphs provide some examples of some policy implications linked to the setting up of the recommended Regional Tourism Information System.

1. Provide leadership to NTAs

- As clearly explained by UNWTO in the White Paper (article 36) –see Annex 2 -, there are two areas that warrant special attention, both because they have not been included in UNWTO’s general activities to date and because they are currently in great demand by the member States;
- *Domestic tourism (at the national level)*, which in many developed countries is more meaningful for economic growth and job creation than inbound tourism, has an especially important role to play in times of crisis, and also helps to extend the benefits of tourism to rural or depressed areas in many countries;
- *Tourism governance*, including the various levels of public administration and their relations with the private sector and other parties, at national as well as local destinations. This area also covers matters pertaining to overall tourism policies and institutional and legislative aspects;
- Design subnational case studies that could provide evidence for a better understanding of national visitors tourism behavior at destination in order to assist national policy design for such form of tourism;
- Tourism Sub-National Governing Bodies should require to be consulted by Governing departments on territorial planning, when concerning initiatives that may impact the sub-national tourism space in relation with transport infrastructure and collective equipment.

2. Provide services to members and affiliates

- UNWTO Statistics and Tourism Statellite Account programme will start asking by 2017, on a voluntary basis, for subnational statistical indicators (no more than 15) for a selected number of countries with a developed national statistical system: each of such countries will select one or more regions where tourism is particularly significant. For each of those regions (within a country) as identified in the classification of territorial entities used in this document (see Glossary), the following sub-regional breakdown would apply: other sub-regional administrative or analytical units, municipalities, multi-local (more than one municipality), other local administrative or analytical units. Such breakdown implies that some of such territorial entities could be labeled as tourism destinations. Such proposal has the potential of enlarging economic analysis as well as foster international and intra-national comparability. Such an initiative (see also Chapter 3, section B) should be understood as developing a network of countries that should identify the required data and determine the best way of collecting it on a regular basis; it should also include United Nations Statistics Division (UNSD) in order to allow for its expansion in due time, as a global initiative aligned with the UN 2030 Sustainable Development Agenda.
- Provide guidance about the setting up of a regional inter-institutional network for the design of a R-TIS as recommended in this document; such network should be integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts. Such a network should be understood as the support for a proper governance structure decided by those stakeholders in order to guarantee the sustainability of such medium-long term initiative.

- Provide technical assistance in order to bring consistency between tourism destination's and tourism statistics' conceptual framework in line with the recommended principles in this document.

3. Extending UNWTO Program of Work

- Foster the application of these recommendations in order to take regional tourism seriously because tourism is unevenly distributed across the national territory; a better measurement and understanding of tourism activity in subnational territories will be instrumental for a more efficient design of national policies (particularly regarding national domestic tourism);
- Support case studies in relation with Regional TSA exercises and development of regional measurement of Tourism capital and Collective consumption aggregates for analytical purposes.

Chapter 2. Tourism and territory: taking sub-national tourism seriously

A. Introduction

- 2.1. Tourism is a geographical phenomenon, an economic activity highly sensitive to location, involving movement among locations and within locations, that requires a planning process for its development. It also has an impact on the economy, the natural and built environment, the local population at the place visited and the visitors themselves.
- 2.2. Tourism embodies many industries, and as a consequence a high level of coordination is needed. In a given territory, the relationship between tourism and territorial planning should involve, necessarily, at least the following set of topics:
- Reaching a consensus and prioritizing among key stakeholders the actions to be undertaken in various areas of economic activity in the tourism sector to boost its development in the medium / long term;
 - Identifying in relation to the principal existing tourism products (and eventually in the design of new products), those elements related to infrastructure and facilities planning (which would in principle be infrastructures that may influence the development of significantly more tourism in the territory);
 - Evaluating the advisability of establishing limits to the growth of tourism, most notably to various forms of accommodation for visitors (including vacation homes for tourism use);
 - Tourism development should be understood as a process respectful with territorial assets in order to reconcile the desire to develop a place in an economic sense and to preserve certain territorial characteristics;
 - Measuring the corresponding pressure on the territory and those territorial infrastructures that support this flow of visitors and overnight stays and determine the desirable level of visitors and overnights in the medium term;
 - Measuring the consumption of energy and water, the collection of waste associated with tourism and evaluating the impact of these on those natural resources that are considered most relevant to the territorial entity, in terms of environmental sustainability. Other factors if deemed relevant should also be measured, e.g. social and culture impact of tourism on the communities in destinations.
- 2.3. The assessment of the sustainability of a territorial entity where tourism already is or can potentially be significant¹⁴ should be done from a holistic perspective; considering large-scale impact factors (climate change, possible depletion of basic resources-including soil, and water, etc.) and others linked to the relationship between consumption by and activities of visitors in that territory.
- 2.4. Owing to this range of impacts and the wide spectrum of stakeholders involved, there is a need for a global approach to tourism development, management and monitoring. This approach is supported by the World Tourism Organization in order to formulate and implement national and local tourism policies and is also the focus of this chapter in which the following three main topics are addressed:
- Tourism and territorial planning: identifying the mutual contents (see section B);
 - The need for a classification of territorial entities (see section C);

¹⁴ In the first case such territory could be referred as a tourism destination while the second case would qualify as a potential tourism destination in a medium term process.

- Fostering subnational analysis and measurement of visitors behaviour: learn about what visitors do once at destination (see section D).

The proper treatment of each of them is crucial in order to take regional tourism seriously.

- 2.5. In operational terms, it should be highlighted that the need for equipping tourism destinations with basic infrastructures and services (e.g. utilities, transport...etc.) requires a holistic and a multi-sectorial vision of the territory, where territorial planning embodies tourism population needs without damaging the quality/volume of the supply of basic services for the host population. There is evidence of such governance being difficult in operational terms. The absence of data on tourism activity at sub-national level, often does not allow to accurately forecast a demand increase, and on many other occasions tourism is not considered when calculating the needs of basic services. Tourism activity is highly linked with services, infrastructures, and facilities that very often are not under the control of the tourism authorities, rather under other sections of the government. Hence, there can easily exist relevant deviations that block or make it impossible for an adequate measurement of needed investments for the development of a tourism activity that ensures sustainability. Therefore, governance and coordination is needed, it is necessary to identify aspects (or perhaps overall sectors) overlapping with other sides of the government and to collect multi-sectorial information on them.
- 2.6. Linking tourism and territory implies necessarily drawing attention to sustainability as illustrated in the previous paragraphs. Therefore, it would be right to say that looking at tourism at subnational levels would allow extending tourism basic statistical data and indicators in line with UN Agenda 2030.

The UN Agenda 2030 for Sustainable Development, along with its set of 17 Sustainable Development Goals (SDGs) and corresponding 169 targets, is intended to be a universal, integrated, and transformative path for sustainable human development. The SDGs are a plan of action for people, the planet and prosperity for all countries and require all stakeholders to act in collaborative partnerships. Tourism is explicitly mentioned in the SDGs in three targets:

- Goal 8, on the promotion of “sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” includes as Target 8.9 “By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”;
- Goal 12 aimed to “ensure sustainable consumption and production patterns” includes as Target 12.b to “Develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products”;
- Goal 14 set to “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” includes as target 14.7 “by 2030 increase the economic benefits of SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism”.

UNWTO is convinced that this document can contribute to the objectives of the 2030 Agenda for Sustainable Development in the understanding that tourism measurement at subnational levels might be useful to implement SDG’s indicators at other spatial scales.

- 2.7. For instance, it could be envisaged that tourism can be present at least in other Sustainable Development Goals (SDGs) apart from those three already mentioned; that could be the case of:
- End of poverty: tourism can certainly contribute;
 - Health and well-being: The presence of tourism population on the territory may steer a capacity increase of health and well-being facilities. Tourism could be a catalyst of system improvements;
 - Quality Education. Concerning tourism education and training;
 - Gender equality. The information system needs to be capable of assess gender participation in productive processes and within the tourism population;
 - Water and Sanitation for all. Tourism urbanized spaces need drinkable water and sanitation, which should impact on a well-being improvement for the host population;
 - Affordable, reliable, sustainable and modern energy for all. Within a sustainable development context, a position in favor of renewable and affordable energy is needed. Thus, energy consumption data by different sources and their relation to different forms of tourism activities is also needed;
 - Industry, innovation, infrastructure. This topic is integrated within the forecasts of information. However, tourism innovation information requires a better treatment;
 - Reduce Inequality. This objective implies the introduction of information concerning tourism contribution to inequality reduction within and among countries;
 - Inclusive, safe, resilient and sustainable cities and human settlements. Here, the challenge is breaking down the information related to tourism urban space.

B. Territorial Planning and Tourism

- 2.8. The identification and accurate assessment of tourism in the territorial planning has not always received due attention and is a particularly important issue for measurement in relation to sustainability. In addition to the small number of basic statistical data and indicators associated to tourism at sub-national levels in most regions where tourism is significant (or can potentially be in a medium term process), the lack of a conceptual framework of tourism as an economic activity might also be responsible for such divide between territorial planning departments and regional and sub-regional tourism authorities.
- 2.9. In any case, it is also pertinent to take into account that territorial analysis of tourism must have a specific focus. It implies that tourism processes do not have a universal validity, on the contrary, they need to be addressed on a case by case basis. Data, indicators, they should count with normalized definitions and meet solvency and consistency requirements pertinent to statistical operations, but analysis performed needs to count with a specific focus, adapted to territorial singularities of each given case.
- 2.10. Given the importance of territorial planning for tourism development, the concept of “tourism spatial areas” (identified as that part of the regional territory where tourism is significant) is frequently used by territorial planners; it may be that the concept is applicable in its entirety with a certain territorial subnational administrative entity, but more often it is likely that it might not cover a single municipality, neither an entire region.

- 2.11. It is therefore a concept that responds to the need of territorial planners to bring tourism into focus, as there is a whole set of elements related to the inflow and activity of the (actual or potential) visitors, which should be identified and also be measured properly. This is the case of:
- potentially tourism resources (such as landscape, protected areas, cultural and historical heritage, etc.);
 - transport networks, specially passenger and cargo with tourism impact (urban and rural) and its use;
 - Facilities and public utilities needed by host population;
 - Facilities and establishments that produce goods and services demanded by visitors.
- 2.12. It might be relevant to point out within the case of establishments that offer accommodation to visitors, that there could also be an additional supply of vacation homes used by tourists that compete with those establishments, e.g. buildings operated under a time sharing, housing property used by temporary residents of foreign nationality and possibly also other buildings used by visitors. (see Annex 30).

This refers to establishments explicitly mentioned as part of the category: "Accommodation for visitors" of ISIC Rev.4 category (see Annex 3), which includes the following types:

- 5510 Short term accommodation activities;
- 5520 Camping grounds, recreational vehicle parks and trailers parks;
- 6810 Real estate activities with own or leased property;
- 620 Real estate activities on a fee or contract basis.

On the one hand, this whole set of four types of complementary services can be a significant source of funding for local governments (especially in the short term). On the other hand, these services represent an intensive use of environmental resources. It might be reasonable to foresee that these may originate difficulties for proper consolidation of tourism destinations in the medium term, particularly in terms of environmental sustainability.

(For more details, interested readers should see later on in this chapter D.1 *Understanding how a territorial entity becomes a tourism destination*)

- 2.13. While infrastructure related to transport (airport, road and maritime) condition both passengers and goods accessibility, and their domestic travel, tourism development on its own right also requires other infrastructure and services (energy, both water and sanitation, and waste management).

It should be noted that these needs are not necessarily homogeneous in a "tourism spatial area", since the usual case implies the existence of different zones - coastal, inland, mountain, etc.- and a diverse concentration of tourism population in part(s) of its territory.

A "tourism spatial area" (identified as small spatial scales where tourism is significant) might be applicable in its entirety to a certain regional and/or sub-regional administrative entity, but more often it is likely that it might not cover a single municipality, neither an entire region. Such term is often used by territorial planners in order to bring tourism content into focus.

- 2.14. This relationship between tourism and adequate territorial infrastructure demands necessarily public intervention, and in particular, the desirability of a framework of governance between regional tourism administration and other administrations (which can also be national and local) with a say in other sectorial policies that directly or indirectly impact on that area.
- 2.15. Key tourism stakeholders promote and develop tourism plans. These tourism plans should include an analysis of the territory, and a sustainable development approach. However, in reality most of the tourism plans, are not as much focused on territorial planning as they are on promoting the territory.
- 2.16. Tourism planning needs to find a balance between its production objectives and minimizing the impacts and pressure on ecosystems, landscape and cultural identity and optimizing the use of territorial factors. The analysis should address resources with tourism potential, hosting capacity, and development of the production dimension within a context defined by the territorial borders and its planning forecasts (when these exist). The following Box tries to summarize such mutual relations between territorial planning and tourism planning and provides the background for a strategic environmental evaluation with the following targets:
- Assurance that the metabolic systems of the territory are not altered by the impact and pressure of the tourism activity;
 - Energy optimization of the tourism activity at a territorial scale;
 - Establishing mechanisms for preserving the landscape and cultural identity of the territory.

Box 4. Mutual relation between territorial planning and tourism planning

<p>Territorial planning should take into account the tourism activity in order to organize the infrastructure and facilities for basic services (utilities, transport, etc.). These basic services are useful to both the host community and visitors.</p> <p>For tourism activity planning it is needed a territorial planning tool protecting resources, regulating tourism usage, recognizing its specificities, and designing and measuring the use of infrastructure and facilities for basic services.</p> <p>This mutual relation between territorial planning and tourism planning should be specified in terms of overlapping elements. These elements should be integrated in a geo-referenced (GIS) information system with UTM coordinates, variables and indicators, with the aim of being able to obtain average values for that territorial reference.</p>	
<p><i>Tourism contents for territorial planning</i></p> <ul style="list-style-type: none"> ✓ Protection and regulation of tourism resources ✓ General measuring of typologies of forms of tourism and of desired capacity horizons. Strategy by destinations and segments. ✓ Tourism areas definition. Those where tourism usage is significantly present and establishes specificities in its regulation. ✓ Designing and measuring territorial networks, taking into account tourism flows. ✓ Standard definition for facilities for public services provision to tourism population. <p>As a starting point the following territorial categories and their corresponding variables are proposed:</p> <ul style="list-style-type: none"> ❖ Tourism attractiveness components within a territory: <ul style="list-style-type: none"> - Natural resources - Cultural resources - Landscape resources - Tourism Facilities 	<p><i>Territorial contents for tourism planning</i></p> <ul style="list-style-type: none"> ✓ Current and Potential Tourism resources identification ✓ Strategy by segments and destinations ✓ Territorial dimension of the design and programming of the product lines ✓ General measuring of tourism typologies and of desired capacity horizons ✓ Tourism areas definition compatible with territorial planning. Those where tourism usage is significantly present and establishes specificities in its regulation. ✓ Feasibility with the territory of the forecasted increase, taking into account current and planned territorial networks. <p>Tourism plans and territorial plans hold a reciprocal interdependence. Both need to take into account several elements from each other. The categories of territorial content required to be taken into account within a tourism plan are, on the one hand, the same three categories needed for the tourism contents of territorial planning and on the other hand, the following:</p> <ul style="list-style-type: none"> ❖ Socio-economic dimension:

<ul style="list-style-type: none"> ❖ Accommodation for visitors (see 2.5) ❖ Impact of tourism over territorial networks <ul style="list-style-type: none"> - Logistics networks: airports, ports, railways, motorways, and public transport. - Urban metabolism networks: water, energy and waste. 	<ul style="list-style-type: none"> - Tourism typologies - Synergetic and accumulative effects - Business structure - Economic structure linked to vacation homes - Employment ❖ Setting the limits and Evaluation of the tourism space ❖ Existing territorial brands and organisational structure (DMOs)
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2.17. As already mentioned, (see paras. 2.9 and 2.12), a “tourism spatial area” usually (as already mentioned, is a term frequently used by territorial planners) it is not a homogenous territory in terms of administrative units (such as region or municipality) for the purpose of analyzing the relationship between tourism and territory. For the purposes of tourism territorial and economic analysis, the breakdown of such analytical unit would require identifying “tourism zones”. This articulation between “tourism spatial area” / “tourism zones” can be very useful; one example is the work done by the National Institute of Statistics and Geography of Mexico on the occasion of the 2004 Economic Census (Durán, 2008).

2.18. It should be noted that addressing this breaking down into zones would almost certainly require more than one criterion because different needs may require different models. Consequently, any of the approaches that are considered suitable should be subject to pilot exercises before tackling its generalization to the whole “spatial area” of reference.

2.19. One possibility would be to define such “areas” based on municipalities that meet at least the following three conditions:

- The characteristics necessary to be considered as tourism destinations (see Glossary);
- Which also have a geographic continuity between them;
- A similar population structure regarding the tourist population (see the Glossary) and the types of establishments offering accommodation services.

Tourism population is a statistical term that forms part of Glossary. It is defined as a subset of visitors, and for the measurement and analytical purposes linked to concentration / diffusion of tourism activity indexes as well as for setting up tourism environmental indicators.

Equivalent Tourism Population figures should be included in different type of indicators measuring tourism impacts on the environment such as

- natural protected areas
- land
- needs for waste management facilities
 - water cycle
 - energy flows
 - etc.

Tourism Population should be estimated (see Glossary, *Full-time equivalent*) using overnights figures associated to inbound visitors (including those staying in vacation homes); consequently, Accommodation Surveys are crucial for such purpose. In the case of local tourism destinations, such estimate of Tourism Population figures should allow for a correction factor due to the fact that not all such overnights type of figures are available at the local level

For the concept of inbound visitors see *Regional Tourism* (see also Glossary); it should be highlighted that in the case of local tourism destinations, the definition of the “residents subset” of such inbound visitors must be adapted.

Another possibility, by far more complex, would be to define those areas based upon the identification of different types of behavioural patterns; this would require linking each of them with supply side indicators related to the corresponding tourism resources.

As mentioned later on (section C), it should be noted that if these types of tourism behavioral patterns are identified with the main purpose of the trip; those typologies will not be homogeneous as an overlap between them is unavoidable.

- 2.20. There is an increasing understanding that the unstoppable advance of the use of administrative records accessible for research purposes can change this situation soon. Regional tourism analysis should make (more) use of administrative records. “The promise of open data and statistics for sharing and integrating data from multiple sources is great. It is especially hopeful for combining data from different disciplines to explore the interaction of human activity and the environment. However, there are issues of harmonization and integration that are difficult and expensive to do.” (Thomas & Kugler, 2013, p. 2701).

“Clear valid data linkage requires commonality on two of three dimensions: spatial, temporal and topical. To compare or contrast two spatial areas requires data for the same time periods on comparable topics expressed in similar ways. To look at change in an area over time, there needs to be consistency in the spatial area and topical comparability. To link and analyze data from different sources and topical coverage, the temporal and spatial coverage need to be comparable” (Thomas & Kugler, 2013, p. 2701).

C. UNWTO Moving the Statistical Agenda Forward

- 2.21. In 2008, the United Nations endorsed a significant overhaul of the international standards that underpin the foundations of economic statistics: specifically, those instruments that constitute the basis of macroeconomic measurement (i.e. the System of National Accounts and the Balance of Payments) together with their corresponding classification systems (the classifications of economic activities and of products).¹⁵
- 2.22. In 2004 UNWTO decided to take advantage of this collective effort (led by the UN Statistics Division in close cooperation with other international agencies, notably IMF, OECD, Eurostat, WB, UN Regional Commissions, etc.). The aim was not so much to revise the conceptual framework of the Tourism Satellite Account (TSA) approved in 2000, but rather to revise the recommendations for tourism statistics dating back to 1993, whose conceptual framework was not consistent with that of the TSA.
- 2.23. The international consensus achieved during 2004-2008 resulted in a substantial modification to the basic core of what have come to be the set of concepts, definitions, classifications and data (understood to include not only basic data but also indicators and accounting aggregates) used for the measurement of tourism and the corresponding analysis.

Table 1 Partial reproduction of Annex 1 of UNWTO IRTS 2008

Topics	1993 RTS	IRTS 2008
1. Introduction of definition of tourism trips and visits	Trips and visits are not defined.	A trip is made up of visits to different places. The term “tourism visit” refers to a stay in a place visited during a tourism trip. The stay does not need to be overnight to qualify as a

¹⁵ System of National Accounts 2008 (SNA 2008). Balance of Payments and International Investment Position Manual (BPM6), sixth edition. 6Central Product Classification (CPC) Ver.2.

Topics	1993 RTS	IRTS 2008
		tourism visit. Nevertheless, the notion of stay supposes that there is a stop. Entering a geographical area without stopping there does not qualify as a visit to that area.
2. Travel party/group	Not mentioned	New observation unit/s
3. Revision of the classification of tourism related purposes of trips	Classification of tourism trips according to purpose: 1. Leisure, recreation and holidays 2. Visiting friends and relatives 3. Business and professional 4. Health treatment 5. Religion/pilgrimages 6. Other	Classification of tourism trips according to the main purpose: 1. Personal 1.1. Holidays, leisure and recreation 1.2. Visiting friends and relatives 1.3. Education and training 1.4. Health and medical care 1.5. Religion/pilgrimages 1.6. Shopping 1.7. Transit 1.8. Other 2. Business and professional
4. Revision of the classifications of products and productive activities	No product classification SICTA for activities, defined from ISIC using a sub-classification from the 4-digit ISIC, (Rev. 3) Loose relationship with the consumption by visitors	Tourism characteristic and tourism connected products are defined in terms of the 5-digit CPC, (Rev. 2) category to which they belong; goods can be included; strict relationship with acquisition by visitors. Establishments whose principal output is tourism characteristic (tourism industries) are defined on the basis of the 4-digit ISIC (Rev. 4) category to which they belong; no production of goods is included, only their retail trade as tourism industries must directly serve visitors.
5. Employment in the tourism industries	Not mentioned.	Special chap. 7

2.24. Among other consequences of this renewed approach, it is worth highlighting the following aspects:

- the foundations were laid down for the development of a more comprehensive set of internationally comparable tourism statistics;
- the concept of a “tourism sector” has been defined as a cluster of production units in different industries that provide consumption goods and services demanded by visitors. Such industries are called tourism industries;
- for the first time, guidelines were provided for the measurement of employment in the tourism sector thanks to the cooperation of the International Labour Organization (ILO) with UNWTO;
- a consensus was established in the International Recommendations for Tourism Statistics 2008 (IRTS 2008) calling for its adaptation to sub-national levels.

2.25. The last reference is particularly relevant and requires a more detailed clarification. Indeed, UNWTO has expressed on earlier occasions (such as the T.20 Tourism Minister’s Meeting in Korea on 11-13 October 2010) that it is important to start considering the measurement of tourism also from the sub-national perspective, for a number of reasons:

- Tourism activity is unevenly distributed across the national territory and consequently, the inputs for designing national policies require a rigorous understanding of tourism activity in such sub-national territory beyond being a fractal of national tourism;
- Policy that is oriented at the management of tourism destinations, and its relationships with the rest of the national economy, require a sub-national

measurement and analysis of tourism in these territories in order to be able to directly monitor progress;

- The articulation of national / sub-national initiatives require a consistent and coherent set of basic data and indicators as well as a shared conceptual framework about what tourism is and how to measure and analyse its contributions to overall sustainable development;
- The transposition of national data to regions hides particularities of tourism activity in these regions. For example, it does not allow for a proper identification of the (disaggregated) structure of tourism from both the demand (visitor activities) and supply side (the activities catering to visitors). Consequently, analysis and focused policy, is handicapped due to such constraints.

2.26. The adaptation of IRTS 2008 conceptual background to sub-national levels implies the need for a classification of territorial entities. This document will use as reference the following hierarchical classification of territorial entities integrated by both administrative and analytical units at two basic subnational territorial levels:

REGIONAL

- Region
- Multi-regional (supra-national)
- Multi-regional (intra-national)
- Other administrative units
- Analytical units

LOCAL

- Municipality
- Multi-local
- Other administrative units
- Analytical units

The classification is proposed in order to operationalize the implementation of the conceptual framework proposed and more specifically, to allow for the setting up of the R-TIS; consequently, it should be adapted to any of such territorial levels in different countries, and other extensions could also be envisaged for tourism purposes.

The terms region, multi-regional and sub-regional used refers to subnational entities¹⁶. Consequently, such terms and classification used in this document should not be understood as the same terms used by UNWTO in its capacity of UN Specialized Agency for Tourism (where region and regional refers to a pluri-national or international framework).

Starting from the classification of those basic entities, it is feasible to establish combinations per each different type of analysis. For this purpose, the criteria to be used should be defined, such as market segments (responding to different forms of tourism, and different characteristics of visitors and trips), availability of tourism infrastructure and facilities, territory physical characteristics, territorial planning requirements, etc. One of the possible examples is “tourism spatial area” (identified as small spatial scales where tourism is significant) which might be applicable in its

¹⁶ In the document, the administrative unit corresponding to the first level of territorial disaggregation of a country in terms of its political and administrative organization; for instance, NUTS 2 level in the EU, provinces in Canada and China, states in Brazil and Mexico, etc.(see Glossary)

entirety to a certain regional and/or sub-regional administrative entity, but more often it is likely that it might not cover a single municipality, neither an entire region. Such term is often used by territorial planners in order to bring tourism content into focus.

Such term is also implicitly identified in the System of Environmental-Economic Accounting 2012 /Applications and Extensions document (see Chapter IV "Extensions of the SEEA")¹⁷.

Such units would qualify as analytical units and could generically be labeled as "small tourism destination areas" (STDA) –see Chapter 6, section C.2.

- 2.27. Any of those unit/s of the proposed classification (either at the regional or local level) where tourism is economically significant (according to the criteria proposed in this Glossary (see *Significance*), should be the focus of tourism measurement and could be labeled as a "tourism destination/s".
- 2.28. The classification should be adapted to any country and other extensions could also be envisaged for tourism purposes (for more details, interested readers should see *Glossary/Territorial entities*).

Such classification is proposed because the IRTS 2008 does not use precise criteria but rather suggests that in the case of considering a territory other than a nation, the concepts as well as all the corresponding definitions, classifications and relevant statistical data should be the same as those in the national case, with the only difference being the substitution of the term "country" with "place" (either a region, municipality or other sub-national geographic location).

- 2.29. It should be expressly noted that the measurement of tourism at sub-national levels cannot be based on using the existing concepts for national level measurement. This transposition of terms is not so simple since there are many aspects of the measurement of tourism at the national level that are quite different when compared to cases of sub-national scope. For example:
- the connection between tourism and the mobility of the resident population has greater importance;
 - the concept of –tourism sector – is not always appropriate at subnational levels due to the fact that a cluster of a significant number of production units in different tourism industries might not be significant;
 - the identification of tourism industries at the regional level would justify the consideration of, for example, the producers of souvenirs as a tourism characteristic industry, while this would not necessarily be the case at the national level (in the case that the associated expenditure were marginal or scarcely significant);

¹⁷"The focus in this chapter is the potential of data from the accounts of the SEEA Central Framework to be extended and integrated with other information. The potential to connect SEEA accounts to a range of existing information sources can be of direct assistance in better understanding multi-faceted issues, such as sustainable development. It also recognises that responses to environmental pressures will usually rely on understanding connections between the environment, the economy and individuals. In this context the SEEA accounts do not provide a complete information set but can provide an important part of the information and SEEA is a framework that supports and encourages the integration of data" (4.1).

"There are two main approaches to considering extensions of the SEEA. The first approach involves a decomposition of existing SEEA accounts using additional information, for instance through linking to specific spatial areas, through further breakdown of the household sector, or through a focus on certain themes where there is an interaction between human activity and the environment, such as tourism or health..... The focus of this chapter is on the first approach" (4.2).

- the measurement of passenger transport is almost impossible to approach exclusively from the regional perspective (as it is normally necessary for the national information to be disaggregated using some kind of ad hoc indicators or parameters);
- while at the national level it would be possible to justify not prioritizing certain issues (like the measurement of the tourism contribution of special events, the Meetings Industry, the expenditure associated with the number and maintenance expenditure of vacation homes, the phenomenon of same-day visits, etc. (see Annex 30), these could be priority interests for certain regions;
- tourism as a service in terms of international trade only makes sense at the national level (as it is a subject that is directly related to the Balance of Payments).

2.30. As already mentioned (see para. 2.26), the adaptation of IRTS 2008 to sub-national levels implies the need for a classification of territorial entities; supplementary, the concept of “significance” must be defined in order to operationalize the measurement of a tourism destination which is a basic unit of analysis of tourism (see section D).

The concept of significance refers to the economic importance of tourism in any territorial entity; this concept, used in the IRTS 2008 (para. 5.10) as the criteria for defining a tourism characteristic product, should also be used in a sub-national approach in order to identify if and when a territorial entity can be labelled as a tourism destination.

In order to promote not just intra-national but also international comparability, the application of such concept of significance on its own is misleading; as official statisticians know very well, there is also the need for a supplementary set of concepts, definitions and classifications that should be internally consistent, so as to facilitate the link between the conceptual frameworks of the Tourism Satellite Account, the System of National Accounts and Labor Statistics.

2.31. For the operationalization of “significance”, it is recommended to use a limited number of indicators (both from the supply and demand side); each country should complement them and fix the threshold for its application in absolute terms, if deemed appropriate and feasible. Different key tourism stakeholders could also launch such proposal; in any case, the initiative should be subject to a formal requisite: the agreement of key stakeholders in such territory.

The present document proposes the following criteria in order to support intra-national and inter-national comparability:

- From the Supply side, the use of employment figures associated with part of the Accommodation for visitors industry: hotels as well as other activities such as motels, guesthouse, pensions, bed and breakfast, time share units, etc. Complementary criteria could be based in other accommodation services for visitors, number of establishments in the tourism industries, value added by the tourism industries, basic infrastructure and tourism equipment, etc.;
- From the Demand side, the use of overnight figures; complementary criteria could be number of visitors –including same-day visitors-.

(For more details regarding the application of both criteria, interested readers should Glossary/*Significance*).

- 2.32. In addition to the use of “significance” and the design of the classification of territorial entities, the conceptual design of the R-TIS has followed as much as possible the 2008 standards on tourism statistics (meaning that it has used a set of concepts, operational definitions, accounting rules and principles of recording and classifications consistent with those of the System of National Accounts); such an approach is labelled as a “systems approach”.

D. Tourism Destination

- 2.33. As already mentioned, a territorial entity where tourism is significant (either at the regional or local levels included in the proposed hierarchical classification could be labeled as a tourism destination. In the case that a tourism destination is associated with more than one “tourism product”¹⁸, such territorial entity should be split for analytical purposes in smaller units (“small tourism destination areas”). In any case, the physical space of a tourism destination must be clearly identified.

The need to measure more accurately the “activity” undertaken by visitors once at destination is an issue of enormous complexity that will be addressed from different perspectives. This will be the focus of the sections D.1 to D.2.

- 2.34. A first confirmation of such complexity is that it is not so uncommon that a tourism destination includes various “tourism products”. If this were the case, it would be useful to identify different segments of visitors (current and potential) for the purpose of designing policy measures in terms of marketing and products. It would be advisable to enable market analysis tools and instruments to determine effectiveness of the marketing budget spent.
- 2.35. Market analysis is highly relevant, specially deepening on patterns of behaviour and visitors’ expectations as well as the possibilities of attracting new segments. In this perspective, it has been shown that the tourism potential of a given region is not fully expressed in terms of arrivals, night spends and expenditure but also in terms of different forms of tourism flows (Alivernini, 2014).

(It is important to clearly understand the concept of regional tourism which adapts the different forms of tourism as in the IRTS 2008 to the sub-national level -see Glossary-)

- 2.36. Such discussion on taking the different types of forms of tourism into account is considered useful for the target audience of this document. These audience is form of tourism practitioners -including tourism officials who commission surveys and research, and those who undertake such surveys- and key stakeholders in relevant tourism destinations -including governments, public institutes and agencies, universities, research centres, industry associations, trade bodies and specialized firms-. The discussion would be primarily based on:

- what visitors really do while at destination and for that purpose should refer both to the demand and supply side information and to new information tools. That is to say that travel behaviour is of particular relevance;

¹⁸ All along this document the term “tourism product” should not be confused with “tourism characteristic consumption products” defined as those goods and services whose expenditure represents a significant share of total tourism expenditure (for a more precise quotation see *Regional Tourism: Glossary, “Tourism industries”*)

- consistency between statistical and marketing frameworks addressing the proper measurement of tourism for marketing type of analysis;
- the visitor identified as a particular type of consumer, requires to focus on consumption patterns and destination marketing.

2.37. The following two topics might illustrate the complexity of the discussion and how relevant this might be for the target audience of this document:

- Understanding how a territorial entity becomes a tourism destination;
- Exploring the connection between mobility and tourism as research areas particularly for the design and measurement of tourism itineraries as well as for selecting the criteria for defining types of tourism and types of visitors.

D.1. Understanding how a territorial entity becomes a tourism destination

2.38. This is a key topic because tourism destination is a relevant unit. As already explained (see para. 2.26), these units might refer to regional or local levels .

Any of those unit/s of the proposed classification where tourism is significant could be labelled as a tourism destination according to the criteria proposed in Glossary (see *Significance*).

2.39. It should be feasible to achieve some degree of consensus regarding some comparability framework among destinations. Ideally a statistical framework that enables the comparison between destinations. If that could be acceptable, destinations with similar products could benchmark against themselves, via demand and supply side information (where the most reasonable proxy for that purpose could be arrivals and overnight data, as well as hotel room capacity and occupation, employment linked to tourism industries and some other supplementary indicators).

2.40. A tourism destination implicitly presupposes the existence of a set of built or natural resources that serve visitors, a set of potential activities to be carried out by visitors (some of them for free), a number of establishments pertaining to the tourism industries, tourism stakeholders (public and private), etc. The concept of “tourism product” refers to a bundle of goods and services available for a visitor (a particular type of consumer) to acquire some of them while visiting such territory. Any destination has at least one tourism product.

2.41. The approach followed in this document is not the one recommended previously by UNWTO. In fact, in 2004 UNWTO published the *Guidebook for Indicators of Sustainable Development for Tourism Destinations* which contains the following definition of tourism destination: “a local tourism destination is a physical space in which a visitor spends at least an overnight. It includes types of tourism such as support services and attractions, and tourism resources within one day's return travel time. It has physical and administrative boundaries defining its management, and images and perceptions defining its market competitiveness. Local destinations incorporate various stakeholders often including a host community, and can nest and network to form larger destinations”.

2.42. Readers should be warned that the basic difference of the focus of this document and the focus of UNWTO 2004 *Guidebook for Indicators of Sustainable Development for Tourism Destinations* refers to:

- the nature of the basic data and indicators proposed (statistics vs. any type of information);
- the precise definition of tourism destination (based on a hierarchical classification of territorial entities vs. almost any kind of local tourism destination units); and also in
- the main purpose of the respective initiatives (robust measurement allowing for intranational /international comparability) vs. assisting destination management organization at the local authority level).

D.2. Tourism and Mobility as research areas

- 2.43. The second topic addresses the connection between mobility and tourism research particularly regarding the concepts of “itineraries” and “travel behaviour” because they are key in order to measure and understand what visitors do while at destination.

IRTS 2008 identifies “trip” and “visit” as units related to the displacements of visitors: such trips qualify as “round trip”. From an analytical perspective the concept of itinerary (closer to the mobility research community –see Glossary/ *tourism trip* and *tourism visit*-) allows for deeper understanding of the movement of visitors in space and time while at destination.

From a measurement perspective an itinerary can be defined as a systematization of an alignment of potential points of interest to be visited: in the case of tourism, such alignment is usually defined and structured for planning, promotion and commercial purposes.

The measurement of itineraries should incorporate, in addition to a reference to the corresponding administrative and analytical territorial entities and characteristics of visitor (obtained from local surveys) other set of information as well, such as:

- Geo-referenced information, which includes number of stops and points of interest visited (visited spots);
- length of time;
- distance covered.

- 2.44. The measurement and analysis of mobility and tourism have their own conceptual background, expertise and focus. Nevertheless, some guidelines referred in this document are built on the expertise in the area of mobility

Also, mobility research expertise in areas such as number plate recognition in road transportation, deriving transport data from cell phones, using Global Positioning System (GPS), sub-samples in household surveys, and possibly others, would be crucial for expanding the measurement and analysis of resident and non-resident visitors activity. Some of these areas could also involve surveying visitors in order to identify their itineraries, a description of trips, obtain special insight in short trips, etc.

- 2.45. It seems obvious that the development of new technologies related to the growing registry of different types of digital footprints left behind by tourism movements, will increase our information background about what visitors do while at destination. In fact, mobility research has already acquired a critical mass of knowledge about the design of new tools and empirical analysis about travel behaviour and consumption patterns in particular. It presupposes that researchers share a culture of reporting data in a format that allows other stakeholders to use the data for further analysis.

The adaptation of such areas of expertise and research to the case of tourism should give priority to the design of surveys focusing on activity-based travel behavior of visitors at destinations.

- 2.46. *Household surveys as a privileged source of statistical information.* Tourism research is beginning to have these sources on a periodic basis (the model case is that of Europe, where the European Parliament legally requires all member countries of the European Union to report quarterly statistics, for example, on domestic tourism) while mobility research has a long tradition in this respect. It could be appropriate to discuss whether it would be beneficial to pool efforts with regard to the conduct of high-powered surveys every 5/8 years. Certain countries have already been conducting Household Travel Surveys for some time. Although it would seem obvious that in the case of tourism, it would be necessary to have additional household surveys with greater periodicity. The articulation of the aforementioned surveys would constitute an issue that would have to be defined. On the other hand, there is growing evidence with respect to the enormous complexity of household surveys for the case of tourism, and especially so, with regard to the efficiency of the sample (many households do not undertake tourism trips), as well as the underestimation of the number of trips (especially those of short duration).
- 2.47. *Statistical and other types of errors.* Tourism and travel / mobility statisticians share the concern that in the case of the measurement of traveler flows, errors unrelated to sampling could be of capital importance when assessing the robustness of the data generated by the surveys. (see Chapter 4, section C.1).
- 2.48. *In-depth studies of outbound-tourism markets.* The strong orientation of Tourism Administrations (both national and sub-national) with respect to tourism promotion campaigns, explains that the necessary tourism information (both statistical and non-statistical) must make reference to the degree of satisfaction in destinations and to an entire set of characteristics associated with both the visitor and the trip. These types of studies necessarily do not tend to have a precise periodicity (due to their high cost as these are studies with large samples and due to the complexity of the questionnaires normally used).
- 2.49. *Linking survey data and administrative records.* In tourism there is an increasingly widespread culture with respect to the importance of using statistics based on administrative records (e.g. immigration authorities data) in terms of both integrating this data with survey data, as well as for completing the information of *National Systems of Tourism Statistics (STS)*.
- 2.50. *The development of tourism statistics at sub-national levels.* The experience of research studies on travel and mobility and the use of new technologies in a good many of them is especially valuable for the development of tourism statistics at sub-national levels.
- 2.51. *The local tourism destination as a framework of analysis.* One fairly obvious possibility of a joint venture between tourism and travel / mobility in sub-national domains is the case of local tourism destinations as the central focus of many research studies: besides measuring the trips to these territories there is also the need to measure the visits through them. From the perspective of tourism, aside from the need for a definition of a local tourism destination, there is also the need to have precise information on the corresponding routes carried out by visitors.
- 2.52. *International comparability.* With the adoption of the IRTS 2008, the international tourism community consolidated out an enormous effort to update the concepts,

definitions and classifications used over the past 15 years in order to obtain tourism statistics that are comparable and which make it possible to better identify and measure the tourism reality. This effort is something that the community of travel and mobility researchers could take advantage of as an element of reflection.

- 2.53. *On the possible institutional support by tourism administrations.* Tourism administrations (especially at the national level) are assuming leadership, in an increasingly determined manner, regarding the development of national STSs with a growing participation from National Statistical Offices with respect to boosting household and border surveys for the measurement of the different forms of tourism. Consequently, it is feasible to propose to National Tourism Administrations, and possibly to certain Regional Tourism Administrations in regions where tourism is especially significant, to provide institutional support to initiatives shared between statisticians and researchers of tourism and travel / mobility.
- 2.54. The collection of data on employment in the tourism industries should be integrated in the regular national statistical system. By its nature, employment in the tourism industries can be undertaken either in paid employment or self-employment. It is unlikely that a complete picture of employment in the tourism industries can be obtained from a single statistical source. In order to achieve a better coverage and get more detailed characteristics of persons employed, countries should, as far as possible, use the following major sources of data collection: (a) household-based sample surveys; (b) establishment-based sample surveys; and (c) administrative records.
- 2.55. Household labour force surveys are an important data source that can in principle cover the entire population of a country, all industries and all categories of workers, including the self-employed and casual workers. They can also capture economic activity in both formal and informal sectors, as well as informal employment.
- 2.56. Importantly, household labour force surveys collect data from individuals and thus provide information on persons who may be employed in more than one job (multiple-job holders) and different industries (tourism or non-tourism).

Chapter 3. The proposed Regional Tourism Information System (R-TIS): conceptual design and institutional background

A. Introduction

- 3.1. Chapter 3 presents the conceptual design of the proposed R-TIS built on the 2008 two international statistical standards on tourism statistics, as well as on different type of case studies identified in chapter 1 (see para. 1.23); for such design to be properly operationalize, this chapter address the setting up a regional inter-institutional network integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institutions.
- 3.2. This complexity of actors, public bodies and authorities deserve special attention due to their implication and responsibility on the visitors' final satisfaction as they are involved in a wide and varied range of functions and investments (infrastructure provision and management of access and various services - such as public safety, preservation of natural and cultural resources, territorial planning, etc). In addition, public authorities might condition the install of tourism enterprises located in their respective territories.
- 3.3. The International Recommendations for Tourism Statistics 2008 (IRTS 2008) as well as the Compilation Guidelines developed by the UNWTO for their application, should constitute the basic reference for the design of a Tourism Information System at both the national and subnational levels (as described in paras. 0.7 to 0.9). This has been precisely the starting point of the INRouTe initiative, with a very clear message: the design of a proper Regional Tourism Information System (R-TIS) would be justified under two circumstances:
- the significance of tourism in a given region¹⁹; and
 - the availability of a basic set of national statistical sources. This pre-condition highlights that the setting up of the R-TIS, as recommended in the document, is very data demanding.

¹⁹ Regional Tourism is defined as following (see Glossary):

"In order to separate visitors who have their place of usual residence within the region of interest from those who come from other regions or countries, it is recommended that three subsets of visitors to or in this region be identified:

- Residents from countries other than the country of reference (inbound visitors to the country as a whole)
- Residents from another regions of the country of reference
- Residents in the region of interest

Such definitions are consistent with those addressed in IRTS 2008 under "forms of tourism" (see *Forms of Tourism*)

It should be noticed that inbound regional tourism would include the first two subsets while the third one includes both domestic and outbound regional tourism (those who travel for tourism purposes within the region of interest or those who travel outside such region but either remain in the country of reference or travel outside the country of reference, correspondingly)

Regional tourism is a particular type of form of tourism to be used at the subnational-regional level which comprises the activities of these three subsets of visitors and it might be the case that the identification of outbound regional tourism (in either of the two cases already mentioned) is not a priority in most regions; if that would be the case, the third subset will refer exclusively to domestic regional tourism.

If deemed appropriate and feasible, additional subsets could also be identified for analytical purposes (in terms of tourists or same-day visitors)".

- 3.4. As will be explained in chapter 6, this document focuses on statistical international standards (tourism and environment statistics, as well as the corresponding macroeconomic accounting frameworks –TSA and SEEA-) and provides recommendations in order to set up a particular type of statistical initiative: a Regional Tourism Information System conceived for the purpose of linking tourism, territory and sustainability in the perspective of the UN 2030 Agenda for Sustainable Development. By so doing, UNWTO understands that tourism measurement at subnational levels might act as a catalyst for expanding SDG's indicators at other spatial scales, in line with UN guidelines "to encourage all Member States to develop as soon as possible ambitious national responses to the overall implementation of this Agenda" and "to conduct regular and inclusive reviews of progress at the national and subnational levels which are country-led and country-driven"(UN, 2015, *Transforming our world: the 2030 Agenda for Sustainable Development*, paras. 78 and 79).
- 3.5. Linking tourism (operationally defined in the UNWTO International Recommendations for Tourism Statistics: Compilation Guide ²⁰) and sustainable development (a policy oriented concept without any universally accepted operational definition for its measurement) is a complex and challenging task; this chapter provides a statistical insight in such a connection between tourism as an economic sector that impact the socio-economic components of sustainability and the environmental impact due to tourism infrastructure and the activity of visitors.
- 3.6. More specifically, this chapter highlights a first contribution from a tourism statistical background to the transformative agenda for official statistics regarding "the need for integrated social, economic and environmental information and call for holistic and integrated approaches to sustainable development for decision-making at the national, subnational and local levels" (UNSC, 2015). In fact, this is fully in line with UN Statistics Division calling for "integrated statistics to address multidimensional phenomena such as poverty, sustainable production and consumption, climate change and globalization" as UNSC considers them "indispensable for the new post-2015 development agenda" (UNSC, 2015).
- 3.7. Furthermore, the present document agrees with UNSC when saying: "traditional statistical processes will need to be redesigned to become more integrated and efficient and to yield data that is more timely, and better and differently disaggregated"; disaggregation meaning "including characteristics of the individual and household, economic activity, and spatial dimensions (e.g. by metropolitan areas, urban and rural, or districts)". (*Transformative agenda for official statistics*, UN Statistical Commission forty-sixth session, E/CN.3/2015/5 paras. 10. /13. and 14.).

B. The conceptual design of the proposed Regional Tourism Information System (R-TIS): Overview

- 3.8. Since the 2008 ratification of the UN international recommendations for tourism statistics, it became possible to define what a System of Tourism Statistics (STS) is and, equally important, how this connects to other sets of information that National Tourism Administrations consider relevant for the design of tourism policies (and which are not necessarily of a statistical nature). Such an expanded system is known as the Tourism Information System (TIS).

²⁰ International Recommendations for Tourism Statistics 2008 Compilation Guide, available at: http://statistics.unwto.org/content/irts2008_cg

- 3.9. The International Recommendations for Tourism Statistics 2008 (IRTS 2008) as well as the Compilation Guide developed by the UNWTO for their application, should constitute the basic reference for the design of a TIS at both the national and subnational levels.
- 3.10. In fact, such a system requires three sets of information:
- the statistical information obtainable as a disaggregation of operations carried out with a national coverage and in an official capacity mainly by National Statistical Offices and National Tourism Administrations on economic, environmental and socio-cultural dimensions of sustainability;
 - official statistical operations carried out by regional bodies (such as Regional Statistical Offices, Regional Tourism Administrations, Regional public institutes and agencies for tourism development and management, and other official bodies);
 - These operations are sought to be supplementary to the first set in order to avoid information overlapping between national and regional levels. Exceptionally, some countries might have institutionalized bottom-up methods of collection for national data purposes (basically for the National Statistical Offices);
 - a third dataset not necessarily of official and/or of statistical nature. This data set could include electricity consumption by households, credit card expenditure records, transport authorities control, business cycle indicators, early warning indicators, other indicators regarding tourism and sustainable development, etc. These are considered to be relevant at regional and sub-regional levels not only for the measurement/monitoring of tourism (carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope or even by national bodies), but also for analytical purposes (such as analysis of the performance of certain subsectors and foresee their evolution, the perceptions of the demand of a certain destination, etc.). Moreover, these data might be required in order to provide answers to policy questions related with tourism itself or in relation with sustainable development issues.

The expansion of big data²¹ and open datasets will certainly spread the content of this third set of information. Because these data do not meet statistical pre-requisites (such as representativeness in many cases), they cannot be published in UNWTO statistical publications, but they might be included in other UNWTO publications, as it is for the interest of DMOs and of the key stakeholders of regional tourism.

(For more details, interested readers should see Glossary/Regional Tourism Information System).

- 3.11. To properly understand the nature of a R-TIS, the following remarks are highlighted all along this document in order to provide proactive arguments to support such medium-long term initiative:
- This initiative has been conceived and developed as the adaptation of 2008 international standards for tourism statistics (the International Recommendations for Tourism Statistics –IRTS 2008- and the Tourism Satellite Account: Recommended Conceptual Framework –TSA 2008-) to subnational levels;

²¹ According to Laney (2001) and its 3V understanding of the term big data, it refers to large volume of data, its variety (both structured and unstructured) and its velocity. Moreover the timportance is given to the act of gathering and storing this big data for eventual analysis.

- It is recommended that the basic core of such system refers to basic statistical data and indicators; most of them should be derived from official statistical surveys at the national level; six main sources have been identified (Border survey - Domestic tourism household survey - Accommodation survey - Statistical business register - Structural business survey - Population census);
- Such sources are available in practically all EU member countries as well as in non-European countries pertaining to the G.20 international community and should be supplemented, if available, with other national sources focusing on environmental and socio-cultural dimensions of sustainability. Other regional official statistical data should be also included;
- Such set of information would allow for a proper articulation of national/regional basic set of data and indicators which should be seen as a first priority for the setting up of the R-TIS (see also paras. 3.12 to 3.19);
- The conceptual design of the R-TIS uses a set of concepts, operational definitions, accounting rules and principles of recording and classifications consistent with those of the System of National Accounts. Also other statistically supplementary concepts have been included (the INRouTe initiative has developed around 15 new concepts –see para. 2.31- such as tourism population, significance -economic importance of tourism at territorial levels-, scalability, regional tourism, etc.) and it has moved away from the statistically vague term of tourism destination, to a precise hierarchical classification of territorial entities (see para. 2.26). Nonetheless, the tourism destination term is being used in this document (see Glossary);
- The setting up of the R-TIS (as well as the potential design of a R-TSA) requires a medium or long term process. Its success depends greatly on the initiatives taken in order to set up the particular type of governance structure, which should be embodying a potentially complex network of stakeholders involved (see Annex 35);
- Other countries with a lower level of statistical development might find inspiring this document and might also request UNWTO for technical assistance in order to set up a planning work schedule for those regions where tourism is particularly significant, to be in line with the recommended guidelines proposed. Particularly those countries that have decided to renew their national tourism information system as the first phase of a Project that also includes the subnational measurement as a second priority;
- The R-TIS database is recommended to be geo-referenced (not only for rearrangement of data but also for mapping²² purposes) and prioritize an articulated set of basic data at the national/ regional levels;
- The initiative of setting up a R-TIS is recommended as a necessary pre-requisite for comparing nationally and internationally main tourism destinations and cities where tourism is significant, as well as to rigorously measure territorial, environmental and other economic and social impacts of tourism activity.

3.12. The rationale regarding the measurement of tourism at the subnational levels is explicitly mentioned in six paragraphs of the IRTS 2008 inserted in the following box:

²² Mapping is used as drawing a map where indicators can be visualized as a layer over the map

Box 5. IRTS 2008 “Measuring tourism at sub-national levels”

8.26. “Increasingly regional tourism authorities are interested in regional statistics and possibly some form of Tourism Satellite Account at regional level as a means of providing useful indicators for tourism enterprises and organizations in identifying possible business opportunities, assessing the volume and intensity of tourism business and determining the extent to which private and public regional tourism networks and clusters are interconnected.”

8.27. “This interest stems from the specific features of tourism across the regions of a country, as well as different needs of regional tourism authorities, including, among others:

- The need to highlight or emphasize the importance of specific features of regions as tourism destinations;
- The fact that characteristics and expenditure patterns of visitors can vary markedly across regions;
- The need to design policies to attract visitors (such as the type of demand that needs to be met) and make investments (such as the infrastructure that needs to be put in place) that are specific to regional objectives;
- The need to adapt classifications of tourism characteristic products and of tourism industries by adding more details where relevant, while preserving the overall structure of the classification;
- The need to be able to make comparisons of tourism, in terms of visitor numbers, characteristics and expenditure, across regions and between the regional and national levels;
- The desire to foster areas of analysis such as identification of seasonality patterns, recognition of main types of tourism, segmentation of tourism demand, early warning indicators about potential decline of a tourism destination, etc.”

8.28. “Nevertheless, there are some statistical limitations in producing regional data, especially in the absence of a national collection framework for tourism statistics: defining survey frames for tourism sample surveys conducted at the sub-national level is particularly difficult due to the lack of control at the corresponding administrative borders. In addition, regional estimates of tourism might not be compatible with those for other regions, therefore undermining the credibility of tourism estimates both for the regions and for the country as a whole.”

8.29. “Consequently, it is recommended that, as a first approach, National Statistical Offices, tourism authorities and/or other organizations with direct responsibility for tourism statistics promote the use of national instruments to collect tourism data at the regional and local levels using a common set of definitions, based on the IRTS 2008, that would permit national tourism statistics to be –built up|| from data at the regional and local levels.”

8.30. “There are often differences in the density of population, transportation accessibility, cultural behaviours, proximity to administrative borders, etc., within a given country. Thus, it is crucial that the operational definition of usual environment be reviewed and discussed among regional and national entities. It is recommended that a consensus be forged around a common definition that satisfies previous recommendations (see IRTS 2008 Chapter 2/Section E –Measuring flows of visitors||/Subsection E.1. –The usual environment: suggested criteria||) and takes into account these regional differences.”

8.31. “If this first approach is not feasible or is not considered completely satisfactory, especially in those regions where tourism is particularly relevant, the regional tourism authorities might wish to complement national data with other data in order to design policies and foster economic analysis tailored specifically to their own regions. In this case it is recommended that these new data follow international and national statistical standards and recommendations.”

- 3.13. Thanks to the IRTS 2008 conceptual framework, countries around the world are able to compile statistical tourism data and indicators that are comparable across countries and over time, and at the same time also comparable to other (economic) statistics. The UNWTO *Compendium of Tourism Statistics*, comprehensively expanded from 2011 onwards, reflects the IRTS 2008 concepts, definitions and classifications to provide information for over 200 countries on inbound, domestic and outbound tourism, as well as on the number and types of tourism industries, the number of employees by each of such industries, etc.
- 3.14. The adaptation of the IRTS 2008 conceptual framework to sub-national levels, as well as the request for such data published in the *Compendium*, cannot respect all those variables and characteristics as at the national level, due to two main reasons:
- as explained earlier (see para. 0.6), there are a number of conceptual extensions requested in order to adapt the IRTS 2008 to subnational levels; most of the new proposed terms are not related to the measurement of tourism as an economic sector- which is the focus of the UNWTO *Compendium*-;

- besides the measurement of tourism as an economic sector, it is also necessary to address the consequences of the flow of visitors on the sustainable development of the territory of reference as well as its potential impact on the territorial cohesion of the destination itself, and in other adjacent territories (see Glossary /Territorial cohesion).

The proper understanding of the complexity of such adaptation greatly explains the singularity of the initiative presented in this document.

- 3.15. In addition to these three areas of particular interest (tourism as an economic sector, the consequences of tourism on the sustainable development of the territory of reference and the territorial cohesion that tourism should preserve or promote), a fourth one should be added: the identification of a basic set of initiatives required for supporting destinations key stakeholders in relation to tourism information and analysis.
- 3.16. All the above-mentioned references (particularly paras. 3.2 and 3.3) should allow for setting up a framework for the measurement and analysis of tourism from a sub-national perspective aligned with the list of research areas and topics reproduced in Box 2 of para. 1.7). The list of topics is presented to be used as reference by those regional authorities and tourism officials that have competences in the measurement and analysis of tourism in their region.²³
- 3.17. Ideally, available information should respond to the following purposes:
- To highlight the importance of tourism at the regional level and foster the credibility of its measurement;
 - To provide a basis for a more detailed analysis of issues identified as especially relevant for key tourism destinations;
 - To warn about vulnerability of tourism destinations regarding the different components of sustainable development;
 - To promote a consistent coverage and quality of a basic set of data in order to allow intra-national and international comparability between regions; and
 - To make sure that such information is provided regularly.
- 3.18. The goal of the generated dataset should be having a tool for management purposes that comply with some technical requisites and being statistically founded:
- It should guarantee the characteristics of collectability, simplicity and efficiency. Besides using up to now available data sources, implementing technical innovations and methods should allow incorporating new data sources;
 - In addition to being easy to understand, it should be credible. The goal must be to provide credible information to tourism managers as well as to other key tourism stakeholders;
 - The available (or desirable) periodicity for each kind of basic data and indicators should be specified, since the temporal length of the data is a determining factor of the data's use and usefulness;

²³ Because such list refers to four main groupings, being "Tourism and sustainable development" one of them, readers should be warned that the basic difference of the focus of this document and the focus of UNWTO 2004 *Guidebook for Indicators of Sustainable Development for Tourism Destinations* refers to:

(a) the nature of the basic data and indicators proposed (statistics vs. any type of information);
(b) the precise definition of tourism destination (based on a hierarchical classification of territorial entities vs. almost any kind of local tourism destination units); and also in
(c) the main purpose of the respective initiatives (robust measurement allowing for intranational /international comparability) vs. assisting destination management organization at the local authority level).

- The development of quantitative indicators should be prioritized because, when compared to qualitative ones, they are more objective and allow a better comparison of cases. However, they are often conditioned by lack of data; in such cases, oftentimes qualitative estimates are the only available solution;
 - Duplication of data for each information item should be avoided; and for that to happen, basic national tourism surveys should be properly designed and stratified in order to provide efficient estimates by regions;
 - The important data / indicators of the database should be geo-referenced due to relevance of “scalability” for the measurement and analysis of tourism at subnational levels.
- 3.19. It is recommended for those regions where tourism is significant, to focus on an incremental approach that involves, first of all, the development of a limited set of statistical basic data and indicators at the national/regional levels. The term “articulation” implies linking, with statistical rigor, available national and regional data used to measure the same variables on economic, environmental and socio-cultural dimensions of sustainability –see para. 3.4-. Such possibility should be checked by a statistical insight regarding its feasibility. Such an articulation nation-region will allow for interregional tourism analysis within a harmonized framework; and by so doing, will also contribute to international comparability between regions. (para. 5.12 of UNWTO and INRouTe, 2012).
- 3.20. In a second step an articulation of regional / sub-regional levels should be foreseen (and this is basically feasible in statistically developed countries) including geo-referenced data (see also Chapter 6, section C).
- 3.21. With this background and clarifications, it is recommended as a first step in the set-up of a R-TIS to focus on tourists (overnight visitors)²⁴ and on a limited number of the research areas (for which there is more international experience than in the remainder areas where a more precise conceptual framework is needed).
- 3.22. The following basic statistical data and indicators, each with different periodicity (Monthly-**M**- / Quarterly-**Q**- / Annual -**A**-), should allow for intra-national and international comparability and might be released regularly in statistical developed countries (see para. 1.28/2)²⁵.

A. Tourism as an economic sector:

A.1 Demand

For each of the following set of tourists (residents from other countries, residents from another part of the country of reference, residents in the region of reference):

- number of tourists (Q)
- number of tourists classified by key characteristics of the trip (Q)
- numbers of overnights (inbound tourists should further be classified by main countries of residence) (M)
- average length of stay of tourists (M)

²⁴ Nevertheless, in those destinations where same-day visitors or visitors arriving with cruises are relevant, the focus should give priority to these visitors.

²⁵ Although each of such data and indicators might be obtained on a monthly basis, the proposed periodicity for each of them might be reasonable regarding both efforts: its compilation and the use of them for analysis (once a year could be an option).

A.2 Supply:

A.2.1 Tourism industries - number of enterprises/establishments (classified according to size. i.e. numbers of employees) for –Accommodation as well as for –Other tourism industries (A)

A.2.2 Accommodation for visitors- number of bed places by type of accommodation, including vacation homes (A)

A.2.3 Employment in tourism industries

- number of jobs for –Accommodation- as well as for –Other tourism industries (M)

B. Tourism and sustainable development:

B.1. Tourism and environmental sustainability

B.1.1 Urban drinking water consumption due to tourism –m3- (M)

B.1.2 Tourist pressure – visitor load

- ratio of tourism population to total resident population (Q)

B.2. Tourism and its impact on the social and cultural dimensions of the resident population:

B.2.1 Job creation

- rate of change in the ratio of tourism related jobs to total jobs (A)

B.3. Tourism economic contribution and impact:

B.3.1 Economic performance

- daily average expenditure by tourists (A)

- corresponding average wages and salary income (A)

- rate of change in the number of tourists (M)

B.3.2 Business demography

- birth rate of enterprises/establishments (A)

- rate of change in overall income of establishments (A)

3.23. Leaving aside the comparability purpose, this list also implies that instead of one composite indicator to monitor “sustainable tourism”, this document proposes a set of indicators linked to the different dimensions of sustainability.

3.24. The list of 15 basic statistical data and indicators above (3.22) is considered to be the minimum required input for modelling exercises. Data modelling techniques are used extensively to derive synthetic estimates when the cost of obtaining small area statistics is too great to obtain them from a survey. The Australian Bureau of Tourism Research has been one of the pioneers in modelling inbound tourism data derived from national surveys; the first data referred to 1997 International Visitor Survey and the modeling approach provided estimates of expenditure by international visitors at the State/Territory and regional level. The model used survey data on total trip expenditure in a randomly selected region. In very general terms, this modelling approach allocates foreign visitor expenditure to regions on the basis of where each night was spent and relative costs in the region (Bureau of Tourism Research Australia, Occasional Paper No.32 “Tourism Expenditure by International Visitors in Regional Australia, 1998”).

3.25. Both A. *Tourism as an economic sector* and B. *Tourism and sustainable development* sets of information would allow to advance both in a descriptive type of economic analysis of tourism and in more powerful analysis using instruments such as the regional TSA, social accounting matrices, general computable equilibrium models, etc. Even for statistical developed countries, only a limited number of them could provide at present these sets of information at the regional level.

- 3.26. As mentioned in Chapter 1 (para. 1.28/2) UNWTO Statistics and TSA programme will start asking by 2017, on a voluntary basis, for subnational statistical indicators (no more than 15) for a selected number of countries with a developed national statistical system: each country will select one or more regions where tourism is particularly significant. For each of those regions (within a country) as identified in the classification of territorial entities used in this document (see Glossary), the following sub-regional breakdown would apply: other sub-regional administrative or analytical units, municipalities, multi-local (more than one municipality), other local administrative or analytical units. The sub-national breakdown implies that some of those territorial entities could be labeled as tourism destinations. This initiative has the potential of enlarging economic analysis as well as foster international and intra-national comparability.

This initiative should be understood as developing a sustainable network of countries that should identify the required data and determine the best way of collecting it on a regular basis; it should also include UNSD in order to allow for its expansion in due time, as a global initiative aligned with the UN 2030 Sustainable Development Agenda.

- 3.27. The conceptual design developed for setting up the R-TIS as proposed in this document and explained earlier in this section B of this chapter is supported by the understanding that the central core of such a system should allow for rearrangement of data and scalability of particular sets of layers of information; such concepts should be properly understood:

- **Scalability:** Refers to the integration of information across different spatial scales with the aim of developing information sets for particular type of analysis at a level suitable for public policy purposes as well as for key tourism stakeholders interest;
- Indicators, aggregates and totals may serve many purposes depending on the scale at which they are applied, on the audience to be reached, and on the quality of the underlying data;
- Scalability is specially relevant in the case of INRouTe's proposed set up of a R-TIS, given that a set of statistical data should be generated by articulating different type of information layers (see Statistical information-layers-). Moreover, in the particular case of INRouTe's Project, scalability is associated to the geo-reference of basic data and indicators at the sub-national level, rearrangement implies using own classification categories for each territorial level in order to use such information for analysis purposes;
- In the particular case of linking tourism and environmental sustainability, scalability should require the use of GIS at the level of cadastral units in order to integrate in such scale resident population, visitors, accommodation establishments and use-activity of visitors, as the main set of data; supplementary data such as other establishment in other tourism industries, tourism natural and build resources, etc, should also be geo-referenced in due time;
- **Statistical information (layers):** It is proposed that the articulation of a basic core of national / regional layers of statistical data derived from national statistical sources on economic, environmental and socio-cultural dimensions of sustainability is the main priority in the setting up of a R-TIS. In due time, a second type of layers are also suggested by extending such link to sub-national levels such as other sub-regional administrative or analytical units, municipalities, multi-local (more than one municipality), other local administrative or analytical units. For such purpose it might be necessary to develop sub-national statistics for any of such dimensions.

- 3.28. The operationalization of the described three sets of information (see para 3.10) allows to set up an integrated information system with three basic dimensions: activity of individuals (being tourism the main focus), territory (using different scale of analysis) and sustainability (including the three dimension: economic, environmental and sociocultural); Chapter 6 will focus on measuring tourism and sustainability at subnational levels in line with the conceptual design of the R-TIS as explained in this section.

C. The basic core of R-TIS and data coherence

- 3.29. This section refers to the first two sets of R-TIS data derived from official national and potentially also regional statistics (see para. 3.10); both of them constitute the basic core of such an information system.
- 3.30. Statistical data derived from different statistical procedures, administrative sources or obtained using different methodologies cannot usually be directly integrated into a system of information. Instead, it requires the use of additional statistical techniques (adjustments, confrontations, reconciliations, validations, etc.) that are common practices for National Statistical Offices. NTAs and RTAs should also do so when in charge of the statistical production if tourism statistics are to be viewed as an information system.

Some examples are: cross-checking of data referring to the same variables but obtained from different sources, consistency verification between demand-side and supply-side data referring to one or more products (as is the case of accommodation services), validation regarding the representativeness and reliability of data, etc. An examination of the coherence of basic data is a prerequisite for mapping and visualizing tourism activity, which in turn is fundamental for lobbying purposes (e.g. about the relevance of regional tourism, the existence of data establishing tourism as an economic sector, etc.), and for the sake of regional analysis and policy design.

Coherence is defined in the Glossary as the adequacy of statistics to be combined in different ways and for various uses.

When originating from different sources, and in particular from statistics surveys using different methodology, statistics are often not completely identical, but show differences in results due to different approaches, classifications and methodological standards. There are several areas where the assessment of coherence is regularly conducted: between provisional and final statistics, between annual and short-term statistics, between survey statistics and national accounts, between statistics from the same socio-economic domain, and between survey statistics and national accounts.

The concept of coherence is closely related to the concept of comparability between statistical domains. Both coherence and comparability refer to a data set with respect to another. The difference between the two is that comparability refers to comparisons between statistics based on usually unrelated statistical populations and coherence refers to comparisons between statistics for the same or largely similar populations.

- 3.31. UNWTO has stressed that the verification of coherence leads to identifying and explaining differences and doubts that may be found in the data, and also to justifying and documenting any statistical adjustments used—the ultimate objective being that of avoiding any misunderstandings on the part of the user when interpreting the significance of the data.

- 3.32. As part of its work on providing compilation guidance to countries willing to implement the International Recommendations for Tourism Statistics 2008 (IRTS 2008), UNWTO has devoted special attention to providing guidelines on coherence of tourism statistics in two very concrete topics:
- within the set of data obtained from the demand side (paras. 3.33 to 3.38); and
 - between demand-side statistics and GIS-based data collection (paras. 3.39 to 3.44).
- 3.33. A case of special interest at the sub-national level is presented by the identification of flows of visitors. Besides the particular case of origin-destination matrices that can be obtained from household surveys, the following paragraphs apply to a more general context²⁶.
- 3.34. “Interregional origin/destination flows constitute a set of data (normally represented in a matrix) that makes it possible to understand, in general, the distribution of trips made by members of households residing in one region (origin) to other places in the country of reference (destination) and to estimate the average length of those trips. This information is vital for establishing the propensity to travel of residents of regions of origin, the demographic and behavioural factors associated with the tourists generated in these regions, their average daily expenditure, and relating this to other relevant parameters for tourism analysis. It should be noted that an origin / destination association is incomplete in the sense that travel from one region to another may require crossing the territory of other areas”.
- 3.35. “The data gathered, as well as the corresponding estimate of overnight stays, should be checked against data obtained from accommodation surveys and from other administrative records available, like those of traffic management bodies, motorway concession holders, or even credit and debit cards. This internal reconciliation between sources is crucial for ensuring the credibility of data supporting origin / destination matrices”.
- 3.36. “In order to estimate itineraries it is necessary to identify the origin and final destination of the trip, as well as the parts (visits) that constitute it. Consequently, and in order to enable comparability, all the surveys used for this should approximate these itineraries in a similar manner. Given that in order to obtain these matrices it is indispensable to ask a set of questions, UNWTO suggests that a model module be designed to record trips for tourism purposes in both household surveys at the origin of the visitors and in visitor surveys at the destination (as is done by many Tourism Information Centres)”.
- 3.37. Household surveys are the preferred source for this type of information, but it is essential to ensure that the survey design and sample size are fit for this purpose. This is pointed out in the IRTS 2008, stating that for sub-national analysis of domestic tourism, it is also essential to characterize trips according to the place of usual residence of the visitor, his/her personal characteristics and the main destination of the trip. This information, usually collected through household surveys, is often represented in matrices showing the number and duration of trips by origin and destination”.

²⁶ Those paragraphs belong to: UNWTO “Developing Tourism Statistics at the Sub-national Level: the Measurement of Flows of Trips and Visitors” (Document presented by UNWTO at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, 29 - 31 October 2008, Málaga, Spain).

- 3.38. The second topic that deserves particular attention regarding coherence of data in a R-TIS refers to the increasing evidence provided by Global Positioning System (GPS) units of a significant, structural underestimation in the number of trips obtained from household surveys where respondents keep a diary of their trip. It should be noted that these diaries are also used to record the route of each of the trips, and therefore it is important to understand exactly what the GPS system consists of.

Although these systems cannot totally substitute statistical surveys, they may give an indication –in particular at sub-national levels- about the size of flows which might improve the data received from statistical surveys and for evaluating their plausibility.

- 3.39. “GPS-based data collection methods are potentially more accurate and less of a burden on respondents when compared to paper diary methods, while exact locations of trip destinations and travel times can be recorded. Moreover, additional characteristics such as exact routes can be recorded. The GPS is a satellite-based positioning system. When a GPS data logger receives signals from at least three satellites (or four satellites when time is also measured), the position of a GPS receiver can be determined, accurate to within approximately 10 meters. The location on the earth at which a GPS receiver is situated is saved in location coordinates. In addition to location coordinates, GPS data loggers record the times at which they were situated at these locations. As a consequence, the accuracy of the GPS-based travel data depends much less on the respondents’ memory and the effort they are willing to make in retrieving addresses and taking notes when compared with paper diary methods. These improvements in accuracy are confirmed by various studies comparing travel behavior data recorded using GPS devices, data recorded by respondents in paper diaries and data obtained by means of telephone surveys”²⁷.
- 3.40. Because raw GPS data, due to data confidentiality reasons, are not directly usable (traces are not segmented, there are missing segments, there is no information either on transport means or on trip purposes), increasing research has been carried out on developing post-processing methods to filter GPS records for use in analysis and model estimation.
- 3.41. “Travel behaviour characteristics like travel times and distances can be derived almost directly from GPS logs because a GPS logger records exact positions and exact times. However, for deriving modal choice and destination types visited additional data like Geographic Information Systems (GIS) data and respondent characteristics and smart algorithms are needed. Due to the fact that deriving modal choice and destination types visited is relatively complicated, different research projects to date have explored and experimented with possibilities for deriving these characteristics, but they all leave room for improvement”²⁸.
- 3.42. As explained in Chapter 2, section D.2, it seems clear that there exist connections between tourism and travel / mobility (as areas of statistical analysis and measurement) and therefore it would be feasible to identify some initiatives of mutual interest to practitioners in these fields. In short, it would make sense to reflect:

²⁷ UNWTO “Developing Tourism Statistics at the Sub-national Level: the Measurement of Flows of Trips and Visitors” (Document presented by UNWTO at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, 29 - 31 October 2008, Málaga, Spain).

²⁸ 18 *Deriving and Validating Trip Destinations and Modes for Multi-Day GPS-Based Travel Surveys: A Large-Scale Application in the Netherlands*, Wendy Bohte and Kees Maat

- on the one hand, the possible complementarity in terms of the information needed and of the corresponding sources of information (the case of household surveys would be the most obvious example); and,
- on the other hand, the contributions for tourism of the more extensive research tradition in mobility with regard to traffic flows (where the recent efforts have focused on establishing the foundations of a set of data and indicators that is sufficiently robust to meet the needs of the public authorities responsible for tourism, i.e. the IRTS 2008).

The following two paragraphs contain some initial comments that could orient this search for coordination of potential initiatives between the two disciplines.²⁹

- 3.43. *Observation units and associated characteristics.* While in mobility research it is assumed that all movements are carried out by the resident population, tourism activity by non-residents could distort the proper measurement of those flows

(provided that these are significant in the specific scope of investigation). It is obvious that in certain countries the use of infrastructure elements, their maintenance and even their design is affected by the phenomenon of tourism.

The difference between the tourism population and the resident population at specific times of the year is enormous in many countries (France and Spain are notable examples). For example at a subnational level, in the archipelago of the Balearic Islands, the resident population is approximately 1 million persons and the arrival of nonresidents for tourism purposes annually reaches a figure of nearly 12 million, with over 60% of this flow being concentrated in the months from June to September.

Moreover, research on mobility can find references of interest in IRTS 2008, as it is also critical for tourism to identify the main purpose and main destination of the trip as well as the principal activities undertaken while on a trip (there is a list of examples of activities associated with each of the 9 purposes identified).

- 3.44. *Measurement of visitor activity.* The use of GPS devices in research on mobility is making it necessary to develop post-processing data software. Beyond the implications for the purpose of avoiding the overburdening of respondents and correcting underestimations of trips in household surveys, these experiments can be of enormous interest for the tourism community in a very specific aspect of the measurement of visitor activity: tourism statisticians cannot directly ask respondents whether they are tourists or same-day-visitors, or ask them directly how many tourism trips they carried out during the period of reference. That is to say, the main variables of the study (trip and visitor) are necessarily variables derived from some related characteristics: subjects are asked about the number of trips taken, their duration and their main purpose, etc., and with this information it is possible to derive whether the traveler in question qualifies as a visitor or not.

²⁹ Such paragraphs are an adaption of chapter D of "Developing tourism statistics at the sub-national level: the measurement of flows of trips and visitors" (Document presented by UNWTO at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, 29 - 31 October 2008, Málaga, Spain).

D. Setting up a R-TIS as a medium-term process: statistical insight on selected topics

D.1. Employment

- 3.45. The collection of data on employment in the tourism industries should be part of the regular national statistical system. By its nature, employment in the tourism industries can be undertaken either in paid employment or self-employment. It is unlikely that a complete picture of employment in the tourism industries can be obtained from a single statistical source. In order to achieve a better coverage and get more detailed characteristics of persons employed, countries should, as far as possible, use the following major sources of data collection: (a) household-based sample surveys; (b) establishment-based sample surveys; and (c) administrative records.
- 3.46. *Household labour force surveys* are an important data source that can in principle cover the entire population of a country, all industries and all categories of workers, including the self-employed and casual workers. They can also capture economic activity in both formal and informal sectors, as well as informal employment.
- 3.47. Importantly, household labour force surveys collect data from individuals and thus provide information on persons who may be employed in more than one job (multiple-job holders) and different industries (tourism or non-tourism).
- 3.48. *Establishment-based sample surveys* are another important data source for jobs and persons employed. When the interest is in specific industries, which is the case with tourism industries, establishment surveys, given an adequate sampling frame, can provide an in-depth picture of target industries. It should be noted though that informal establishments are not covered by conventional establishment surveys. Reliable and detailed information on topics related to jobs and employment (for example, earnings, remuneration and labour costs) can be obtained in establishment surveys, especially when they can draw upon payrolls and other available records.
- 3.49. Statistics based on *administrative records* (such as social security files, tax reports, employment reports, etc.) are increasingly used. They are often based on continuous operations and can, therefore, be a useful source of flow statistics and other longitudinal data. However, they can also have various shortcomings, such as limited coverage (the exclusion of informal establishments) and content, inflexible concepts and definitions, incompleteness, inconsistencies and restricted access due to legal or administrative constraints.
- 3.50. In order to use basic statistical data and indicators to measure tourism related employment, a very important issue (that affects credibility of such measurement) is how to deal with the fact that the total output of each of the tourism industries usually exceeds consumption by visitors, as some of the outputs of most of these industries is purchased by other travellers. That's to say that in order to avoid overestimating the production demanded by tourists and same-day visitors, it should be estimated what proportion of total supply of each of the tourism industries is purchased by visitors. This is a TSA issue and the way to proceed is by means of the "tourism share", explained in the *2008 Tourism Satellite Account: Recommended Methodological Framework* document.
- 3.51. Nevertheless, unless the specialization ratio is 100 per cent (i.e. all the output of an establishment goes to satisfy tourism consumption -which is practically never the case-), the tourism ratio of employment would theoretically differ from the tourism ratio of

output, as the labour intensity differs from one type of production to the other between and within establishments. Because establishments usually cannot provide separate employment figures for the different types of production, the usual option is to assume that the proportion of employment in the different types of production in an establishment that can be attributed to tourism demand is the same as the tourism ratio of either the output or the value added of the different types of production. Such hypothesis is based on a kind of “heroic assumptions”.

- 3.52. The use of “tourism shares” is a relevant methodological issue when related with the measurement of employment; in fact, there is a need to review the application of this methodology, as it does not account for the differences in the intensity of use of labor in the different production functions associated to the output of different products with a same unit of production: for instance, in hotels that have also a restaurant, is the required employment input necessary to produce one monetary unit of value added identical in its (main) accommodation activity and in its (secondary) food serving activity?. If this is not the case, then it is necessary to use a more sophisticated procedure to relate employment and value added. This difficulty is due to the fact that productive activities are not pure processes of production, that is that the information that was available statistically could not allow to separate the process consisting of producing the main output from that consisting of producing secondary outputs, because the factors of production were in part common.
- 3.53. A second and very different issue that affects credibility of tourism related employment figures is the phenomenon of seasonality in most tourism industries and consequently, the measurement of the number of persons working less than the standard working time of a full-year full-time worker might be relevant in most countries; therefore, they should be converted into full time equivalents, with regard to the working time of a full-time full-year employee.
- 3.54. As tourism related employment may be measured in different ways (as a count of the persons employed in tourism industries in any of their jobs, as a count of the persons employed in tourism industries in their main job, and as a count of the jobs in tourism industries), figures obtained in either of such measurements should be presented as full-time equivalent figures; by so doing, such full-time equivalent figures will improve the comparability of employment estimates.
- 3.55. It should be highlighted that each measure serves different purposes, and countries may adopt one or more of them depending on the intended use and focus. If the intent is to determine the number of people who depend to some extent for their livelihoods by working in the tourism industries, then a count of persons with a job (main or other) in these industries would be appropriate. The measure based on employment in the main job would serve to gauge those with significant attachment to the tourism industries, for instance. If the intent is to make a comparison between tourism and non-tourism industries or between the tourism industries and the economy overall, then a count of jobs in the tourism industries would be more appropriate.
- 3.56. Full-time equivalent figures (or FTEs) are made up of three parts: number of hours worked, a standard working time and a total number of employees:
 - What do we mean by *working time*? Increasingly “total number of hours worked” by more and more workers challenge the statistical mantra that they should be preferred to “total number of paid workers”. For some heavily unionized or regulated occupations the number of hours actually worked may be close or the same as paid hours worked but for most of workers in the tourism sector this is simply not true;

- The concept of *standard working time* adds an additional complexity to the number of hours worked because it should address the fact that a standard working day differ not only in the different tourism industries but more importantly by occupation;
- Finally, the *annual average* to measure employment is an issue especially in those industries where seasonality is relevant (as is the case of tourism industries).

- 3.57. Due to all these complexities in the measurement of employment, the need for metadata is crucial and countries already providing such figures to the *UNWTO Compendium of Tourism Statistics* are requested to explain how this conversion to FTEs is handled.
- 3.58. Consequently, bringing credibility to the measurement and analysis of employment in the tourism industries requires abandon the generic definition of “tourism related employment”; instead different rigorous definitions are needed depending on the purpose of the focus chosen.

A key concept in tourism economics is the concept of *tourism sector*, defined as “the cluster of production units in different industries that provide consumption goods and services demanded by visitors. Such industries are called *tourism industries*.” Because only part of the production of such industries is attributable to visitors consumption, not all the employment of all those tourism industries can be labeled as “tourism employment”; instead the terms *tourism sector employment* and *employment attributable to tourism* are more precise in relation with the use of employment data for two main and different purposes. While the first of them is the appropriate concept regarding human resource planning purposes (and is measured with basic statistics and indicators), *employment attributable to tourism* is an estimate of how much of the employment in each of the tourism industries is directly related to tourism consumption (which is an accounting issue related to the macroeconomic TSA framework addressed by the use of “tourism shares”).

Finally, *tourism sector full-time equivalent employment* would be the most appropriate figure for international comparability because seasonality is unequal all along the globe.

D.2. The relevance of tourism trip Origin/Destination matrix and the need for modeled data

- 3.59. Chapter 4, section C.2, will refer to this topic as a particular area of experience of mobility researchers related to household and personal based surveys. This is considered of special usefulness in order to better specify the complexity and scope of producing a national Origin / Destination matrix breaking it down by regional territorial entities. This document recommends such approach (see paras. 4.95 to 4.99).

It is here stressed that the reference made to O/D matrix is clearly linked to national domestic tourism and to the national breakdown performed in terms of subnational territorial entities: under this premise the present section is presented.

- 3.60. A different case is the one referring to flows of residents from countries other than the country of reference (inbound visitors to the country as a whole) to each of the regions; under this assumption it might be appropriate to link national personal surveys to non-residents (border surveys in particular) with regional surveys to guests of accommodation establishments.

This particular case will be referred in Chapter 4, section C.

- 3.61. The household survey has been identified by UNWTO as the most appropriate tool in order to estimate Domestic Tourism at the national level. Moreover, it is worth stressing the relevance of combining short-term surveys and other pluri-annual surveys (possibly every five years). The latter will have a structural focus, and in case that its sampling design would be suitably regionalized, it will support a relevant number of registries in order to support an estimate of flows of trips and travellers linked to domestic tourism (also to their principal characteristics). Additionally, it will allow counting with a basic set of relevant parameters of tourism behavior of resident population, and intra-national comparability.

However, it is possible that in the pluri-annual survey the total number of those primary data would not be enough to generate, with the desired statistical robustness, an O/D matrix of those flows of the resident population, neither the set of parameters useful for analysis as mention in the next paragraph. If that would be the case, it may seem obvious that direct observation of those information items of the national survey should be complemented with a modeling process and possibly even with broader sampling for specific territorial entities (in order to better estimate flows towards them), or with supplementary sampling generated at the regional levels by/or for those that would be interested (this option should allow a more rigorous estimate of some key parameters, such as average length of stay and the average expenditure per visitor).

- 3.62. “Interregional origin/destination flows constitute a set of data (normally represented in a matrix) that makes it possible to understand, in general, the distribution of trips made by members of households residing in one region (origin) to other places in the country of reference (destination) and to estimate the average length of those trips. This information is vital for establishing the propensity to travel of residents of regions of origin, the demographic and behavioural factors associated with the tourists generated in these regions, their average daily expenditure, and relating this to other relevant parameters for tourism analysis. It should be noted that an origin / destination association is incomplete in the sense that travel from one region to another may require crossing the territory of other areas” (INRouTe and UNWTO 2012, para 6.7).

Please note that there is no beforehand assurance of the effective sample size that would be enough in order to generate the O/D matrix with primary data.

- 3.63. UNWTO has also stressed “the data gathered, as well as the corresponding estimate of overnight stays, should be checked against data obtained from accommodation surveys and from other administrative records available, like those of traffic management bodies, motorway concession holders, or even credit and debit cards. This internal reconciliation between sources is crucial for ensuring the credibility of data supporting origin / destination matrices” (INRouTe and UNWTO 2012, para 6.8).

- 3.64. In any case, the previous comments nuances that in order to comply with IRTS 2008 (para 3.31), with the perspective of the sub-national analysis of the “domestic” component of regional tourism, “it is also essential to characterize trips according to the place of usual residence of the visitor, his/her personal characteristics and the main destination of the trip. This information, usually collected through household surveys, is often represented in matrices showing the number and duration of trips by origin and destination”; however, in practice it is significantly costly and difficult to justify that a national Domestic Tourism household survey could offer all needed information for the sub-national perspective. It is neither reasonable to expect that each region (despite how relevant tourism might be) would count with its own Household survey (at least not as a permanent enquiry).

- 3.65. Attempting that national household surveys could count with a sample size large enough to allow for robust estimates of diverse variables/parameters for subnational levels might be overambitious. This forces a reflection on the opportunity and convenience of addressing a supplementary sampling in those regions where tourism is specially significant. This concept refers to “sampling growth with the same or different selection system than the main sample, applying it simultaneously or with a different periodicity. The supplementary sampling can be used for direct estimates or model assisted” (Saralegui, 2006).

In the specific case of basic sources for the analysis of tourism, those supplementary sampling should focus on estimates assisted or based on models and use them specifically for structural surveys of annual periodicity or more, particularly in the case of demand analysis and visitor behavior analysis (Saralegui, 2006).

If excursionist flow estimates are taken as an example, it would seem rather obvious that no matter how large the household survey sample size is (national or regional), it will always be necessary to count with some type of additional source concerning the movements of cross border flows. Mostly due to the fact that the data set coming from even large household survey samples draws a small number of observations (Saralegui, 2006).

(For more details, interested readers should see Saralegui, 2006 pp.217 and 218).

- 3.66. Moreover, providing that household surveys are expensive and entail several issues in order to guarantee robustness, their modeling objectives not only should be clearly specified (so that the number and phrasing of questions would allow to guarantee those objectives), but it should also be taken into account how to address correction and weighting of survey data (that would specifically include corrections for non-reported data as well as corrections for non-response).
- 3.67. It could be useful at this point to remember that a model is a simplified representation of a part of the real world, which focuses on certain elements considered important from a particular point of view (please see Chapter 4, section C.1). Models are useful tools in offering a “common ground” for discussing policy with a certain level of objectivity and are the basis for forecasting future travel demand.
- 3.68. In this context, some specific warnings using supplementary household surveys for modeling purposes might seem particularly appropriate:
- When asking for visitor’s usual residence, the question should ask for the municipality within the country of residence (so that he/she could be assigned to one of the regional subsets of visitors –see definition of “Regional Tourism” in Glossary)-;
 - Identify clearly the type of accommodation used during the stay using a precise classification of accommodation used by visitors (own/rental lodging should be identified as well as friends and relatives’ homes);
 - Different type of means of transportation (if several, at least request number of days of use for the main two of them);
 - Travel behaviour information should not be sought in general terms (i.e. average values) but with reference to a concrete temporal point of references (e.g. a pre-assigned travel day);
 - It is not recommended to examine the various activities in isolation, but rather to take the complete activity pattern while at destination as the basis for analysis (including the identification of main itineraries –see the definition in the Glossary, and see Chapter 4, section C).

D.3. Prices

- 3.69. *The 2008 International Recommendations for Tourism Statistics (IRTS 2008)* refers to prices in two chapters: in relation with the measurement of tourism expenditure and when addressing the supply perspective (chapters 4 and 6 respectively). But only once (para. 4.36 (e)) the term “price indexes” is mentioned.

“In order to estimate tourism expenditure, some countries might find it useful to make frequent measurement of flows of visitors and their characteristics (for instance on a monthly basis), but only to survey their expenditure less frequently (for instance, every two or five years). Tourism expenditure could then be estimated for a current period using modelled spending of visitors while on trips on the basis of these detailed observations and extrapolating the values using relevant volume (that of flows of visitors) and price indexes”

Such paragraph refers to the fact that price and volume measurement is related to the decomposition of transaction values in current prices into their price and volume components. In principle, the price components should include changes arising solely from price changes, while other changes (relating to quantity, quality and composition changes) should be included in the volume components. This is also referred to as measurement in price of the previous years, implying the analysis of economic transactions valued at certain fixed prices.

This section D.3 will highlight the relevance of considering tourist price indexes for a more rigorous analysis of tourism particularly as a demand side phenomenon:

- UNWTO has addressed the construction of tourist demand price indexes in 1984 (World Tourism Organization, “Guidelines for constructing a tourist price index”, 1984, Madrid) and in 2002 (See Perez Mira, J (2002) Price indexes and tourism consumption in the framework of the Tourism Satellite Account” , Enzo Paci Papers on Measuring the Economic Significance of Tourism (volume 2). World Tourism Organization, Madrid);
- Also the Statistical Office of the European Union (EUROSTAT) presented in 1992 (EUROSTAT, “Tourist prices, rates and costs”, Document S3/92/38/EN, Joint EC/EFTA Meeting of the Working Group on “Statistics on Tourism”, 27-28 October, 1992, Luxembourg) a document exploring the building of demand and supply side price indexes. Interesting enough, it was mentioned that “as far it is known, tourism price indexes from the supply side are not calculated by countries, and International Organizations have not dealt with them” (pg 7);
- Although the Tourism Satellite Account has opened the floor for developing supply and demand side tourist price indexes (in order to correct consumption and production cost aggregates), it is not evident that at the national level, these initiatives deserves priority; in any case, it would seem logical to start with demand side indexes based on national Consumer Price Index (CPI) and learn from the complexity that such initiative entails;
- Nevertheless, at the subnational levels, supply side price indexes might be particularly relevant because “destination competitiveness is, in a sense, tourism’s Holy Grial”(Ritchie and Crouch, 2000);
- Focusing on demand side tourist price indexes, some of the conclusions of the second document (Perez Mira, 2002) presented by UNWTO in 2002 are relevant because they highlight the complex task of setting up such indexes at the national level (complexity that would for sure be amplified at a regional level);
- “Based on the analysis that has been carried out, all signs would seem to suggest that a single index of a general nature – for all three forms of tourism-could be constructed; nevertheless, each form of tourism has its own special features. That

is, the travel party is not the same, the products consumed are not necessarily the same and the weighting structure will for sure not be same neither. Therefore, it is necessary to consider a price index for each form of tourism.” (Perez Mira, 2002);

- Such document (Perez Mira, 2002) used Spain official CPI Index (designed by the National Statistical Office); more specifically, it used elementary indexes of tourism related consumption products (accommodation, food and services and other tourism services) and corrected the weighting structure of Spain provinces(based on the consumption level of resident population) by using tourism coefficients derived from the household tourism survey.

3.70. Such statistical re-elaboration of Spain’s CPI indexes for tourism identified some main difficulties that quite probably would also be present in other similar type of exercise for other countries:

- Weighting system of CPIs is based on national household budget surveys which collect data on the basis of place of residence. This gives rise to a serious problem in monitoring the real prices actually paid by consumers when there is a geographic dislocation between the place of consumption and the place of residence. This is clearly the case for goods, which by definition are tourism related in the measure in which consumption takes place outside the usual environment;
- CPIs include a weighting structure based on the content of the consumer’s shopping basket. Determining the content of the visitor’s shopping basket involves setting aside the consideration of the nature of the goods employed in the product classifications on which these indices are based, making it necessary to address the problem of establishing which products and which quantities correspond to tourism consumption (domestic, outbound and inbound);
- If the portion of total consumption carried out by residents in their capacity of visitors is taken into account, the weighting structure can be seen to change substantially in favour of specific products, to the detriment of all other products.

3.71. From a different perspective, Eurostat also warns in *section 6.5.5. Accommodation and food service activities* (Eurostat, “Handbook on price and volume measures in national accounts”, Luxembourg, 2001) about some major issues to be considered when compiling price data of accommodation services for visitors, food and beverage serving services as well as other tourism related services (see Annexes 31 and 32):

- “Quality”

The wide coverage of this product heading means that very different qualities of products are included - youth hostels and five star hotels, take-away kebab stalls and Michelin-rated restaurants. Proper price and volume measurement would imply that the greatest possible product detail is obtained in the data, so that separate prices and values are collected, and any aggregate data are constructed using appropriately weighted subsets. For example, in hotel services, separate collection of data for different ratings of hotels enhances the measurement of price and volume movements”.

- “Group bookings and discounts”

One common feature of the hotel trade is that there can be considerable discounts available for block bookings, for example when a tour operator purchases a block of rooms for a season. Changes in these discounts should be viewed as a price effect and recorded in the price index.”

- “Household and Business consumption”

Whilst the product consumed is unlikely to differ for household and business consumption (business people and private persons can stay in the same hotels and eat

in the same restaurants), it is possible that the weighting structure will be rather different, with private persons consuming a greater proportion of the cheaper products. Of course, the discounting of rooms for tour operators could mean that some private persons can afford higher quality rooms than they would be able to afford at the regular hotel price. “

“Besides these national issues, such document also highlights two regional issues to be considered:

- The nature of these activities might differ between metropolitan, urban and rural areas, and for touristic regions;
- Price development of such services might be different for the different regions due to the particular significance of tourism in some of them”.

D.4. About the use of administrative data

- 3.72. The following three paragraphs are reproduced from United Nations, *Handbook of Statistical Organization: The Operation and Organization of a Statistical Agency, third edition, Studies and Methods Series F No 88, New York 2003.*

“A statistical agency should not automatically initiate a new survey in response to every demand for information. Rather, it should systematically attempt to react to new demands by exploring how they might be satisfied using regularly collected data or, failing that, by examining whether the administrative records already in the hands of the Government can address the new request, at least to some degree. Whether or not, or rather to what extent administrative records can be used to replace or to supplement statistical survey information, is a very complex issue and the answer also depends very much on specific national situations. Statisticians tend to be wary of the quality of administrative information, in terms of concepts and coverage” (423).

“Nevertheless, the attractive feature of administrative records is that they are to be collected or have been collected anyway. It is probably true in many countries that some administrative records, such as tax records, have a very good coverage of parts of the population, and that the rate of response is substantially better than that achieved by a statistical agency. Moreover, there is always the possibility of improving on the information yielded by those records by supplementing them with data obtained from a much smaller sample of respondents” (424).

“If these advantages are recognized, it follows that some part of the statistical agency, preferably one that is set up alongside the field organization, should have staff charged with the following responsibilities:

- Keeping abreast of administratively collected data held by other parts of the Government;
- Evaluating each new request to determine the extent to which it can be met without resorting to a new or expanded survey;
- Negotiating with the custodians of the relevant information to determine how it can be shared within the legal framework imposed on government information activities” (425).

- 3.73. Statistics based on *administrative records* are increasingly used also in the case of tourism statistics being the case of New Zealand an outstanding example: Statistics New Zealand and the National Tourism Administration (at present integrated in the Ministry of Business, Innovation & Employment-MBIE-) started by 2007 using electronic card transaction data of one bank in order to estimate correlations of such

data with overnight figures for both domestic and international visitors by Regional Tourism Organizations. Also by 2007 Lincoln University developed a yield research A major step in the process was the preparation of the Tourism Data Domain Plan in 2011 with the purpose of “to achieve clarity and agreement from stakeholders about the main priorities for tourism statistics, and provide the strategy for addressing these priorities over the next five to eight years”. “This Plan will inform changes to the collection, analysis and dissemination of data on tourism. It will ensure that the data being collected is relevant, useful and meets future needs.”

Between the different recommendations proposed, the development of regional indicators of tourism from alternative data sources was included (see R.Burson and P.Ellis, “Using electronic card transaction data to measure and monitor regional tourism in New Zealand”, MBIE, New Zealand (2015)) and one consequence by 2014 was the cessation of the Domestic Travel Survey carried on by Statistics New Zealand.

D.5. Recommended guidelines to move the supply side statistical agenda forward

- 3.74. As explained in the previous paragraphs, it is hardly feasible to comprehensively gauge and analyse employment in tourism industries on the basis of only one statistical source; instead, the integration of data from different sources is a preferable solution because this method yields more comprehensive information, provides a better overview and a more consistent picture, and results in a more accurate analysis.

It was also mentioned that the collection of data on employment in the tourism industries should be integrated in the regular national statistical system, which means that such dataset is closely related to official supply side data

Tourism statistics infrastructure relies basically on demand side surveys and consequently there is not so much insight on the potential and shortcomings of supply side statistical tools such as establishment-based sample surveys and administrative records

- 3.75. There is an entire set of characteristics of tourism activity that might explain, in some cases, the limited usefulness of national sources, even in cases where their samples are regionalized or where microdata from the corresponding sources is provided; the heterogeneous nature of tourism industries in different regions, the disparity in the size of the corresponding establishments, the levels of disaggregation of the classification of economic activities used by national surveys, are relevant examples.

As already mentioned “it is recommended that the basic core of the Regional Tourism Information System refers to basic statistical data and indicators derived from six official statistical surveys at the national level which allows for articulating a set of national/sub-national basic tourism statistics and indicators which constitutes the basic core of the R-TIS proposed in this document”; while three of them are demand side surveys (border surveys, domestic tourism household survey and population census), the other three are supply side surveys:

- Statistical business register;
- Structural business survey;
- Accommodation survey.

These three statistical sources exist in statistical developed countries; other countries with a lower level of statistical development might find inspiring this document in order to set up a planning work schedule.

- 3.76. The *statistical business register* integrates physical and monetary information of enterprises (and other type of formal productive entities) and the corresponding establishments; it provides a descriptive type of analysis of all economic activities in terms of employment, incomes, etc., at the national level.
- 3.77. This register is built up from statistical surveys data as well as administrative records and is the frame for developing most supply side economic surveys such as the *annual structural business surveys*.

In most statistically developed countries, the sample used by these annual surveys differentiates two set of enterprises: those with more than a fixed threshold of employment (for instance, more than 20 employees) –all of them are investigated-, while only part of them are in the case of having a lower level of employment.

Due to the fact that most tourism enterprises are small and medium sized, these surveys might underestimate employment figures regarding tourism as well as monetary figures of those tourism industries, particularly so in those subnational territorial entities where tourism is significant.

- 3.78. *Accommodation surveys* instead are addressed to local units providing accommodation services to visitors (establishments); usually they do not discriminate the total frame of such units; consequently, the sample is not a random sample but a complete/censal one.

The following recommendations are in line with the measurement and analysis that the R-TIS dataset should allow for regional and sub-regional levels.

- 3.79. A *first recommendation* is that regional tourism entities and other key stakeholders consider the opportunity to approach the National Statistical Office in order to evaluate the representativeness of tourism sector official supply side data (being the number of establishments, persons, jobs and earnings, the most relevant ones) and if appropriate, consider a cooperative network for setting up initiatives to articulate such basic set of statistical data and indicators at the national / regional level; in due time, such set could be expanded to the regional / sub-regional levels.
- 3.80. A *second recommendation* refers to statistically measure seasonality and use statistical tools to eliminate such component of main data series in order to improve a more robust analysis of tourism.

“Seasonality is one of the most important features of tourism demand and has important impacts on many aspects of the tourism industry. Accurate forecasts of seasonal tourism demand are crucial for the formulation of effective marketing strategies and tourism policies for both the private and public sectors” (S.Shen, G.Li and H. Song, “Effect of seasonality treatment on the forecasting performance of tourism demand models”, *Tourism Economics*, 2009, 15 (4), 693-708).

The use and efficiency of labour are highly uneven across both space and time, even within small regions. Tourism trips and visits can be extremely seasonal and labour use similarly so. Thus, the accuracy of employment statistics for core tourism industries reported by general/national surveys (such as Labour Force Surveys) is open to question. This issue is of central importance.

If, due to seasonality (see Glossary) a “tourism job” is not comparable with those in other sectors or other locations, then one aim of the development of a TSA –that is, to report on employment effects-, may be compromised. Reliance on secondary indicators (such as income from employment and self-employment) to model labour use may be adequate for the derivation of multipliers, but even this approach requires the consistent reporting of such figures by operators.

3.81. National Statistical Offices (NSO) and other national bodies of a significant number of countries release seasonal adjusted series in order to detect trends in the original data of those variables (such as employment and consumer prices) that have a clear seasonal pattern, in order to allow for a more rigorous short term analysis of what monthly or quarterly data really express.

3.82. But regarding tourism, seasonality is not only present in employment figures but obviously in demand side units (such as arrivals and overnights) which have also a highly seasonal nature and therefore, should be published both in its original form and seasonally adjusted; the difference between adjusted and non adjusted data might be relevant (see for instance the case of Austria in P.Laimer and J. Ostertag, “Measuring seasonality in Tourism Statistics”, 5 UNWTO International Conference on Tourism Statistics, Tourism: An Engine for Employment Creation”, Bali, Indonesia, 30 March-2 April 2009).

At the subnational level, particularly in main tourism destinations, it is recommended that demand side data be published in both formats; the potential cooperation of NSO should be explored as well as other bodies or Universities familiar with conventional statistical software used for that purpose.

3.83. UNWTO’s Affiliate Members Programme has developed a Prototype Methodology for Seasonality taking Punta del Este 365 as a seminal case study for reducing seasonality in main tourism destinations by developing new tourism products.

3.84. *A third recommendation* refers to UNWTO and ILO efforts to improve and enlarge labour statistics; both organizations agreed in 2006 to cooperate for adapting to tourism industries the conceptual background developed by ILO in order to measure employment in line with the International Classification of Occupations (ISCO-08).

In fact, the UNWTO Statistics Committee meeting in 25-26 March 2010 discussed a joint ILO/UNWTO document entitled *Proposal to Develop a Tourism View of the International Standard Classification of Occupations* which called for linking employment and supply side statistics.

“For occupations related to tourism it is not so easy to define and specify occupations that produce related goods or services and/or that require specific skills and knowledge. Many tourism characteristic products are also provided to consumers that are not visitors; also the skills and knowledge required to produce such products may vary greatly from one product to another.

In order to define the concept of tourism occupations it is therefore especially important to clearly identify the purpose of doing so. We understand the key purposes might be the following:

- To measure the total number employed in producing tourism characteristics products, name the occupations, and measure the numbers and characteristics of those employed in these occupations;

- To measure total employment in occupations that produces tourism characteristics products, regardless of whether or not employing establishments belongs to a tourism characteristic industry;
- To identify and measure skill shortages and training requirements that need to be addressed to facilitate development of tourism”.

The development of case studies at subnational levels (mainly at the regional level) might be of interest both to regional as well as to national bodies. An example could be the *ILO/UNWTO best practice in measuring employment conducted in 2013*.

E. Setting-up the R-TIS Institutional background

E.1. UN recommended principles

- 3.85. A Regional Tourism Information System (R-TIS) is a statistics project. Therefore existing international standards and guidelines, such as IRTS 2008, TSA RMF 2008, and UN guidelines on regional³⁰ statistical development should be used as reference.
- 3.86. By its very nature statistics are compiled to answer questions and, at times, to allow questions to be formulated with sufficient precision: this explains why statistics is of special interest to Governments. In the particular case of regional and local governments, the UN Handbook of Statistical Organization (UN 2003) is an exception to official UN statistical documents due to the fact that the subnational perspective is referred in different chapters.
- 3.87. Chapter III of such Handbook refers to “Users and their needs” and the following paragraphs are of particular interest from the perspective of this document.
- 3.88. “Problems relating to the interaction between statistical agencies and regional authorities are similar to those relating to interaction with ministries; the latter cut across subject areas, while the former cut across geography. This is a simplification of the problem of assessing and satisfying the information needs of other levels of Government. A more detailed examination of the problem reveals questions concerning problems of access to officials who work for different levels of Government; issues related to central versus regional politics; and constitutional issues that may pose formidable barriers to communication and access”. (para. 185 within UN2003).
- 3.89. “Often, those responsible for regional Government will ask for a small-scale version of what is done at the national level. Thus, if the national agency compiles national accounts, a consumer price index or other information, it is likely that all of these, limited to the scope of the region but as comprehensive as possible, will be required to satisfy regional authorities”. (para. 186 within UN2003).
- 3.90. “More realistically, the needs of regional and local authorities will be subordinate to those of the government apparatus. Thus, all of them, irrespective of size, will be interested in the number of people (or families or households) who live under their jurisdiction; the demographic and income characteristics of this population; employment status; housing conditions; and possibly health and education attributes. Such information makes planning at a local level possible”. (para. 187 within UN2003).

³⁰ Please note that the term “Regional” in the context of this document refers to sub-national levels, not to world regions.

- 3.91. "In most countries with a federal constitution, each state (province, autonomous region) has a Government with certain well-defined interests, as well as a residual set of concerns that, by consensus, are left to the federal level: for example, foreign trade and payments can be managed only at the national level". (para. 188 within UN2003).
- 3.92. "The problem posed to the central statistical agency is how, without compromising reliability or thoroughness, to meet the requirements for information for geographical areas that are substantially smaller than the nation. Different countries respond to this challenge in various ways. For example, in some countries the national statistics is essentially the sum of the statistics estimated by the offices of each of its politically defined regions, except in matters explicitly of federal concern. In other countries, an understanding is reached whereby the national statistical agency agrees to supply local offices with core statistics of equal merit for each subject area, to be supplemented with information collected by each local statistical agency" (para. 189 within UN2003).
- 3.93. "Part of the dialogue between central statistical agencies and regional and local Governments assesses what useful statistical information can be squeezed out of existing administrative records, as well as ways to persuade the collectors of administrative records to take into account possible regional requirements. In those situations where there is access to these records, their coverage is usually adequate for small areas. The outcome of this dialogue, if successful, is a mixture of national and regional statistical estimates with local area information derived from administrative records" (para. 191 within UN2003).
- 3.94. The UN Handbook also mentions that "the chief statistician should keep lines of communication open to local and regional bodies at all times and bestow authority upon someone in whom he or she has total confidence. Few situations can escalate as rapidly as a centre-periphery misunderstanding, with mutual recriminations arising from a failure to communicate openly". (para. 194 within UN 2003).
- 3.95. "In general, allowing representatives from peripheral bodies to see a statistical agency from the inside is the best possible way of demonstrating its inherent limitations. Thus, it might be advisable for the central agency to accommodate trainees from the regional organizations. Where no group ethos of statisticians exists, one might institute surrogate measures to develop one. In the end, the creation of a national community of statisticians bound by common professional interests (e.g., through a professional association that recognizes professional standing irrespective of level of Government), may turn out to be a more potent device to preserve harmony between the center and the regions than the introduction of purely organizational measures". (para. 195).
- 3.96. The UN 2003 Handbook also mentions the need for articulating a policy "with a number of necessary elements:
- Statistics that are compiled nationally but accompanied by regional break-downs;
 - Ways to ensure the reliability of regional statistics;
 - Conditions of access to the regional database;
 - Support for regional agencies that wish to supplement their own databases with resources available at the national level;
 - Consultation on geographic classifications" (para. 193 within UN 2003).
- 3.97. This last element is of great importance when searching for interregional comparability as well as international comparability (which is an objective for the UNWTO); the proposed hierarchical classification of territorial entities proposed in this document (see para. 2.26) is in line with such indication.

Once again it should be remembered that IRTS 2008 (see Chapter 3, Box 5) only includes eleven paragraphs on measuring tourism at subnational levels; nevertheless, some very clear recommended guidelines were mentioned about how to make progress in this area. In none of them the term “region” is mentioned.

- 3.98. Because measurement requires definitions, this document proposes a hierarchical classification of territorial entities in which the region is defined as well as other regional and local level units (see Glossary/Territorial entities): such classification (or any other of similar type) should be adapted by countries and allow for comparability (either at inter or intra-national levels).
- 3.99. UNWTO has also proposed the criteria to define operationally the concept of the usual environment (see UNWTO IRTS 2008 Compilation Guide Chapter 2 /B. Operationalizing the basic concepts in tourism statistics) warning that such definition should be homogenous for all regions in a given country; this is a responsibility and prerogative of the National Statistical Offices.
- 3.100. In line with the proposed design of a R-TIS including, as the basic core of such a system an articulated set of national/regional basic statistical data and indicators, a final principle to be recommended refers to the need of a governance structure (see Annex 35) in line with the following two basic guidelines:
- Regional Tourism Administrations can and should move forward in the measurement and analysis of tourism activity in their region taking into account its own regional tourism reality and applying, as far as possible, the general guidelines mentioned in the present document and using the most appropriate observational instruments. For their part, National Tourism Administrations and National Statistical Institutes should provide information, documentation, and if needed, data files of those national sources that could be of use in this respect; and
 - These national bodies should be able to obtain benefits for their own statistical and work and analysis from initiatives on the part of regions (mainly those where tourism activity is especially notable), which could be used as indicators or as supporting material in the corresponding estimates or analyses of national scope. Consequently, those regions that have taken initiatives in this area should have a stable communication platform to liaise with other regions and with the above-mentioned national bodies, to report on these initiatives.

E.2. Designing and Operating a Regional Inter-institutional Network (RIN)

- 3.101. One of the challenges of the setting up of a Regional Tourism Information System (R-TIS) is for regional authorities and key tourism stakeholders to be aware that it must be understood as a medium/long-term project. Consequently, sustainability of such project requires the creation of an institutional tool: this document recommends a Regional Inter-institutional Network (RIN) with a governance structure and a working agenda designed and agreed by authorities and stakeholders. Such agenda should identify common initiatives for both regional and sub-regional levels, as well as others proper for each of them.

(For more details, interested readers on adapting such initiative to local levels, should be aware that Espinosa Uresandi, N. and Alzua Sorzabal, A. (2014) includes such guidelines in the case of large cities identified as tourism destinations; Additionally, the present document embodies Annex 4 Extending the Regional Inter-institutional Network (RIN) to sub-regional entities).

Associated to such challenges is that effective decision-making needs to build upon and influence decisions taken locally and to draw on the skills and resources of a diversity of people and institutions at many levels. It must build partnerships –networks of institutions, individuals and processes- that enable associated partners to pool information, knowledge, a collective vision and capacities to develop agreed objectives.

Because such an institutional tool should also provide both legitimacy and credibility for regional tourism and assist to the sustainability of such R-TIS, its design should consider four basic elements:

- Objectives (the strategic one and other complementary objectives);
- Programmes;
- Activities associated to each programme;
- Technological infrastructure and other resources.

The following sub-sections will provide guidance on each of these elements.

E.2.1 Objectives of selected programmes

- 3.102. Basically all this document is about the conceptual design of a recommended Regional Tourism Information System and its setting up as a precondition for taking regional tourism seriously; such design should also allow to extend R-TIS to particular sub-regional levels where tourism is significant (being tourism destinations and cities the specific territorial entities for which such extension should set its priority).

The setting up of a R-TIS is a medium/long-term project by its own and as already explained, is considered to be the strategic project regarding the measurement and analysis of tourism at subnational levels proposed by UNWTO.

But such an endeavour is not just a statistical sounded project; includes also three other complementary objectives:

- Empowering tourism entrepreneurs and other key regional stakeholders of the tourism sector;
- Avoiding information overlapping between national and regional levels; and
- Fostering the dissemination and use of data and analysis.

- 3.103. In order to properly achieve them, the following programmes are viewed as especially relevant to be carried on along the first years; for each of them it would be necessary that associated partners of the Regional Tourism Inter-Institutional Network explicitly identify the expected outcomes.

- *Networking regional tourism*

UNWTO has been aware for a couple of years of the need to provide countries, particularly its Member States, with guidelines in the area of adequately measuring and analyzing tourism at the sub-national level. This will be an important step beyond the work currently carried out by UNWTO at the national level and is seen to be the way towards tailoring policy to those areas where tourism does or could contribute to generate national welfare.

It also becomes an opportunity for National Tourism Authorities to reinforce their leadership of the sector. Designing a robust articulation of national / sub-national tourism policies creates the need to 1) define the concepts pertaining to “sub-national levels” and 2) operationalize the measurement of these concepts. Both issues are crucial in understanding why we need to take sub-national tourism seriously.

Consequently, lobbying regional tourism should also consider advocacy forums among tourism industries planners and policy makers and other stakeholders on the use of tourism information and the importance of increasing budget allocation for statistical activities.

- *Identification of available and necessary information for the setting up of the R-TIS*
In all of the International Conferences co-organized so far by INRouTe (MOVE 2009, 2011, 2013 and 2015) as well in the International Seminars held in Venice 2012 and 2014, it has been pointed out the particular need at the sub-national level to identify the information required by key practitioners and stakeholders and discuss how could it be gathered besides using conventional national statistical sources available (mainly produced by Central Statistical Offices and National Tourism Administrations).

This is, very precisely, the challenge regarding the third set of information of the R-TIS because such information should address different types of issues such as the potential development of tourism products, respond to the changing patterns of tourism demand, etc; such information is usually disregarded from an official statistical perspective.

- *Foster the cooperation of key tourism stakeholders and relevant practitioners*
The structural weakness of many regional tourism administrations would justify by itself the need for such cooperation framework. Also the support to main local tourism destination should include the creation of a critical mass of information and knowledge; for such purpose tourism practitioners -including tourism officials who commission surveys and research, and those who undertake such surveys- and different key stakeholders in relevant tourism destinations -including public institutes and agencies, universities, research centres, industry associations, trade bodies and specialized firms- should be invited to become part of the RIN.

- *Training*
UNWTO is quite aware that the great majority of National Tourism Administration do not have the appropriate size or the required skill for properly foster tourism as an economic driver of the national economy; this is far more evident at the sub-national levels. Moreover, a high rotation of the technical staff associated to statistics and research in regional tourism administrations is a problematic issue.

These situations short-cut the necessary sustainability of many initiatives related with tourism development also at the sub-national levels; consequently, training the present staff and developing the appropriate training materials are crucial to partially mitigate such challenges.

In addition, also tourism practitioners and key tourism stakeholders might urge the need for proper training initiatives as a prerequisite for the effectiveness of the necessary cooperation of all of them.

- 3.104. The content and nature of the proposed programmes will be modified along the years but all of them are considered as critical for the setting up of the RIN. Other additional programmes might be considered in a later stage.

E.2.2 Implementation of activities included in each of the programmes

3.105. A limited number of activities (each of them should include the expected result/s or output/s) considered as particularly relevant are suggested in order to implement each of the four programmes identified in the previous chapter.

- *Networking regional tourism.*

The following activities are considered particularly appropriate:

- Setting a research agenda that could be shared by all the members of the RIN;
- Design of an information dashboard addressed to main practitioners and stakeholders;
- Organization of Seminars as well as appropriate participation on a selected number of topics.

- *Identification of available and necessary information for the setting up of the R-TIS.*

Prior to any decision regarding launching surveys for collecting data, the RIN might consider the opportunity to start documenting existing data sources (surveys, statistical use of administrative records, as well as any other type of statistical operation); such an initiative (see Annex 5 for a suggested framework and see Annex 6 as a practical example) should also contribute to develop basic pillars of the statistical culture through which any user, wanting to identify how data are produced and obtained, is informed about the significance and reliability of tables of available data sets.

In addition to such data that allow for setting up the Regional Tourism Information System, it has been mentioned that the RIN should be active in the development of the third component of the R-TIS (see Glossary / R-TIS).

INRouTe has identified some case studies that might be of interest for different type of regions:

- The experience of the Cote d'Azur (France) in these 30 years highlights interesting issues regarding the setting up of a Regional Tourism Information System such as the adequacy of conventional statistics surveys (household surveys in particular) for gathering the data needed for tourism analysis and management (see Annex 7);
- Articulating a comprehensive set of basic data and indicators in order to allow for periodical input-output estimates of tourism impact on a regional economy (as the case of Asturias-Spain) can also be used for designing Regional Strategic Developments Plans understanding that tourism is a key economic driver (see Annex 8);
- Completion of the information sought at the regional level implies to investigate available sources and what type of caution or gaps arise when identifying existing data sets for each of the areas of interest. The experience of the *Osservatorio del Distretto Turistico delle Province di Venezia, Rovigo, Treviso e Vicenza* highlights the relevance of such insights regarding the production structure of the tourism industries as well as the labour market in the Veneto Region (see Annex 9);
- Gathering information about tourism behaviour (including itineraries) using new technologies (instead of launching new surveys). The experience of CICTourGUNE in relation to the Dynamic Pricing Monitor within the *Basque Tourism Observatory* is particularly relevant (see Annex 10);

- *Foster the cooperation of key tourism stakeholders and relevant practitioners*

Regional inter-institutional network for the setting up of a Regional Tourism Information System: such network should be integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institution/s.

Consequently, such a network should be understood as the support for a proper governance structure decided by those stakeholders in order to guarantee the sustainability of such medium-long term initiative.

INRouTe has identified some case studies that might be of interest for different types of regions:

- The guidelines provided to the Baltic Sea Region countries by *the EU/ Baltic Tourism Heritage Information System (BASTIS)* project, could be used as a useful material in order to focus on how to set up such cooperation network (see Annex 11);
- Also *the Tourism Observatory in Costa Dorada / Tarragona*, identifies governance as a key topic when setting up a Regional Inter-Institutional Network (see Annex 12).

- *Training*

The Regional Inter-institutional Network should prepare a reasonable number of informative documents addressed to user groups regarding stored information and analysis conducted on a regular basis, especially in relation to its associated partners. It should also manage the acquired knowledge and facilitate the technical training via in person courses and seminars, as well as online training.

E.2.3 Assessing the effectiveness of programmes implementation

- 3.106. In principle, assessing effectiveness of programmes implementation defined by the RIN will include at least three main dimensions:
- the territory of reference;
 - the present or potential significance of tourism;
 - key stakeholders of the tourism sector.
- 3.107. In order to assess effectiveness of the four programmes suggested as the first phase of the functioning of the RIN (and eventually, also some particular activities included in any of them), it should be highlighted the challenging issue of fragmentation of tourism as an economic sector (a “cluster of production units in different industries that provide consumption goods and services demanded by visitors”). Such fragmentation is indeed complex enough due to the fact that only part of the production of such industries is tourism related.
- 3.108. Other elements of tourism, as a demand side phenomenon, adds more complexity such as the existence of three different forms of tourism (inbound, domestic and outbound) each of them with its own singularity, as well as the variety of types of tourism and tourism products.
- 3.109. Therefore, tourism as an economic sector is complex and fragmented (especially at the sub-national levels due to the need of considering the link and relationships between tourism and territory); also national policies affecting tourism appear to be very

complex and of many different kinds. The combination of both seems to hamper a coherent tourism approach, especially if the interaction between different groups of policies (intended or not intended for tourism) is analyzed and their effectiveness in relation to the overall goals is assessed.

- 3.110. Effectiveness of such programs should be assessed principally ex-ante and ex-post and refer both to quantitative measurement (using appropriate indicators) and qualitative valuation (by answering questions that the Tourism Regional Inter-Institutional Network associated partners might pose).
- 3.111. In a main tourism destination, it would be reasonable to assume that a kind of Tourism Unit / Administration exists. In this case, the objective for correctly assessing effectiveness of existing programmes (by means of both quantitative and qualitative data) could reasonably be a useful initiative for such authorities. The following steps are suggested to be followed for such purpose.

For example it should explain that, before planning the activity, it is necessary to clearly define the objectives and the expected results, in order to select consistent indicators for the evaluation and to compare the results really obtained (objectives, expected results and indicators should be aligned and they should respect a logic process). We believe that in this step the RIN, thanks to its Regional Tourism Information System, should support decision-makers in understanding what the real objectives are (a gap to be filled, a strengths to be improved, etc.); what are the best activity to be implemented; if the activity is really able to achieve the expected results or if it is better to adopt another alternative; if this activity is consistent with the other initiatives taken by the decision-makers (conflicting activities can be the cause of ineffectiveness).

It should secondly explain that it is necessary to monitor both short-term effects (outputs) and long-term effects (outcomes). The RIN can support decision-makers in defining the period of time to be covered, in selecting the most suitable indicators both for outputs and for outcomes and in implementing the best tools to monitor them (all data necessary for the evaluation could be part of the R-TIS third set of information).

Finally, It should be remember that a correct assessment of effectiveness requires to verify the causal relationship between the effects and the activity, in other words if the effects have been really produced by the activity and not by other factors.

- 3.112. If the situation in a territory is that no such tourism sector exists and/or no critical mass of resources exists (basically human resources assigned to tourism development and management at destination), assessment tools and practice cannot be implemented. Instead, it could be useful to look for a qualitative approach only (posing questions and analyzing answers provided by main tourism stakeholders in such territory, using methodologies such as Scenario Monitoring, etc.)
- 3.113. The following initiative could be of interest for different types of regions. Designed by Ciset, such initiative refers to a comprehensive assessment framework (including the main steps to be followed for correctly assessing effectiveness, how to monitor expected outputs and outcomes of activities and programmes, verification of the casual relationship between effects and activities implemented, appropriate indicators to measure assessment of the main activities usually carried out by regional bodies, etc.). A concrete example (applied to a tourism marketing activity organized every year by the Veneto Region) could be illustrative (see Annex 13).

E.2.4 Technological infrastructure and other resources

- 3.114. For the RIN to address its strategic objective, its programmes and activities, it is required to design the corresponding technological medium integrated in an online platform, which should count with diverse services and applications, among which are the following:
- the front office of the platform would be a web page constructed with a collaborative ambition;
 - as part of the back office of the platform, it would be relevant to count with a user management module where key stakeholders are included as a separate set of users;
 - Given that the RIN needs to keep escalating its on work, upgrading continuously, this requires collaborative modules;
 - a forum module, where users, mainly stakeholders, can participate with their opinions on specific topics;
 - the core of the back office will be formed by the data warehouse and its different datamarts;
 - a module that allows for online training (webinars and other similar functions);
 - a visualization module, facilitating the comprehension of the statistical information provided.

In sum, the tool needs to count with all the required modules that eventually allow securing that the RIN achieves its strategic goal over time.

- 3.115. Besides such infrastructure, the RIN should account, as a minimum, for a regional coordinator as well as a technical manager; in fact, it is relevant to define a clear management structure and objectives and a research agenda.
- 3.116. Apart from being part of such technological infrastructure, the data base supporting R-TIS basic statistical data and indicators (as explained in different chapters of this document) should be geo-referenced in order to allow for “scalability” at different territorial levels as well as for improving tourism analysis at such levels.
- 3.117. It should be kept in mind that available infrastructure does not guarantee a proper dissemination of the basic outcome of the work carried on by the regional inter-institutional platform. In fact, the manner in which statistics are disseminated is equally important because it is through this process that statistics are converted into information. First and foremost, statistics must be presented in a professional manner and accessible to all under equal conditions; best dissemination practices are those which inform and explain without advocating a particular position.
- 3.118. Another challenging topic when setting up a R-TIS concerns the development of new information useful for key tourism stakeholders. Leaving aside the use of surveys, it seems that administrative records produced by different bodies (both official and private) such as traffic authorities, government bodies such as fiscal authorities, employment and social security departments, credit cards companies, attraction sites, mobile phone companies, etc., could be particularly useful. Nevertheless, not always the procedures allowing for the creation of useful set of data with the appropriate coverage and quality are implemented by such bodies: therefore, the existence of potential relevant information does not necessarily mean that its access by users is guaranteed.
- 3.119. It would be necessary to find a kind of industrialization process among stakeholders involved to be applied to such information sets in order to create those basic data and indicators that could complement those other obtained by surveys. This

complementary information is certainly related with the third component of a R-TIS but it could also be the case of the other ones too -official statistical data- if such industrialization process would be properly applied.

3.120. This document includes some case studies that might be of interest for different type of regions:

- the experience of CICTourGUNE with the Basque Tourism Observatory might be particularly useful; this observatory addresses the elements mentioned in the present document related to joining the diffusion of statistical data with a third set of data non statistical but valuable in any case to provide information on the performance of the offer side of part of tourism industry in the Basque Country. Moreover, it incorporates visualization techniques that significantly facilitate comprehending and making a greater use of the data available, as well as allowing users to create their own reports. This is, users can play as much a passive or an active role when consuming regional tourism data (see Annex 14);
- also very useful are the experience of the NIT (Institute for Tourism Research in Northern Europe) with BASTIS, the Baltic Sea Heritage Tourism Services. Its content is now focussing on the national level, but the technology and structure could very easily be adapted for the regional level. BASTIS also encompasses the abovementioned tool requirements. As it is using the free software of Wikipedia it is at the same time very cost-effective and user-friendly. Its philosophy particularly focuses on a collaborative multi-editor approach and the contextualization of data from different sources (see Annex 15).

Chapter 4. Operationalizing the measurement of visitors (including related characteristics of visitors and trips) as well as travel behaviour at destination

A. Introduction

- 4.1. At the national level, consumption by visitors linked to inbound and domestic tourism is very different:
- The economic relevance of expenditure by international visitors is considered similar to exports of the destination country, being added *in total* to the national production system contributing to the Balance of Payment travel account;
 - Domestic tourism consumption on the contrary, is part of resident's final demand and its effects have to be considered only for those additional activities undertaken by residents in their capacity of visitors (in other words, excluding the consumption that they should have done anyway as residents in the country of reference).
- 4.2. The adaptation of the conceptual framework of the IRTS2008 to sub-national levels requires for the inclusion of the territory and travel behaviour as well as other topics that have not been addressed or not properly defined in such international standard.
- 4.3. In fact, the development of new concepts, definitions and insights that connect tourism with territory are part of the challenge to strengthen the credibility of tourism when measuring and analysing tourism at different sub-national levels (regional and sub-regional).
- 4.4. In addition to the concepts of visitor, tourism trip, purpose of the trip, forms of tourism and tourism consumption are the key statistical units to measure and analyze tourism from the demand side (see Annex 17), the subnational focus implies to give special attention to other concepts and issues all of them closely related to the objective of bringing consistency between tourism destination and tourism statistics conceptual frameworks, such as:
- The new concept of "regional tourism" and "regional tourism expenditure";
 - The operationalization of the new concept of "travel party";
 - The enlargement of the list of "purpose of the trip" (and the association between purpose and activities carried on by visitors at destination);
 - Considering the potential to improve the use of "tourism products" as the criteria for market segmentation;
 - Operationalizing the measurement of travel behavior of visitors at destination;
 - Selection of the appropriate tools for measuring tourism flows of the resident population when travelling for tourism purpose within the country of reference;
 - The need for model data.

This chapter will address these topics and provide useful recommendations in order to improve the actual measurement of regional tourism demand³¹.

³¹ Needless to say that there are other topics, which might be relevant and are not mentioned in this document (such as same day visitors, the use of private accommodation by visitor, etc.). In due time, some of them should also be included in a revised version of this document.

B. A. From traditional concepts to new supplementary ones

- 4.5. Tourism has been a particular privileged world-wide research area in terms of its statistical development: in fact, there are no other research areas that have gained the UN Statistical Commission support to change approved international standards in such a short time period. Only 15 years after the approval of the first standard -1993 Tourism Recommendations- two new documents (about the set up of a Tourism Statistical System and a macroeconomic framework to measure tourism contribution to national economies –the Tourism Satellite Account-) have boosted the recognition of tourism as a key economic driver.
- 4.6. Being a demand side phenomenon, tourism has also seen recognized its status as a particular type of economic sector; this means that tourism combines a demand approach where the public side outweighs the private side, and a supply approach mainly represented by the private side. This combination is still one major challenge for measurement and analysis at the national level but also explains the complexity of the corresponding adaptation at the subnational regional/local levels.
- 4.7. Chapter 3 referred to the statistical insight of the proposed conceptual design and set up of a Regional Tourism Information System where deliberately no particular mention to the demand side has been included; instead it was considered that a proper chapter should be devoted to the demand side for very different reasons:
- Most research and knowledge in tourism as a research area is associated to the demand perspective; consequently, the conceptual background developed at the national level should be taken as reference when adapting such framework to the subnational levels;
 - There is clear evidence at the national level that domestic tourism is not just more important in terms of its economic contribution than inbound tourism, but also that its measurement is far more complex. Learning from such complexity is crucial for setting up regional surveys if deemed appropriate;
 - UNWTO is aware that because tourism is unevenly distributed across the national territory, a better understanding of tourism activity in subnational territories will be instrumental for a more efficient design of national policies. Thus, the subnational measurement and analysis of tourism in these destinations where tourism is significant, becomes a relevant issue.

B.1. Basic concepts and definitions

- 4.8. The following paragraphs are based in *IRTS 2008 UNWTO Compilation Guide* chapter 2 /Statistical units. All of them refer to the basic concepts described in the IRTS 2008: visitor / tourism trip/ tourism visit/forms of tourism, and tourism consumption of goods and services.
- 4.9. A **visitor** is a traveller taking a tourism trip. Visitors are a subset of travellers and making a distinction between visitors and travellers is crucial for the compilation of tourism data.

The fact of being a visitor is a transient situation and refers to the relationship between an individual and the territorial entity that he/she visits. For a territorial entity to be considered as visited by a traveller so that he/she could be considered as a visitor, requires his/her stay in that territory to have a minimum duration and this stay to

involve some kind of activity, even if it does not involve any economic dimension (for instance stopping to visit a free landmark): driving through a territory without stopping is not considered as a visit in tourism statistics.

- 4.10. *IRTS 2008* (para. 2.9) defines a **tourism trip** as a trip taken by a visitor to a main destination outside his/her usual environment, for less than a year, for any main purpose other than to be employed by a resident entity in the country or place visited. A trip is a concept to be associated with a visitor or a travel group or party; nevertheless, a trip taken by such a group or party of n persons corresponds to n trips.
- 4.11. A domestic or an outbound tourism trip refers to the travel of a visitor from the time of leaving his/her usual residence until he/she returns; it thus refers to a roundtrip. An inbound tourism trip refers to the travel of a visitor from the time arriving in a country to the time of leaving. A tourism trip is characterized by its main destination, among other characteristics (for example, main purpose) (*IRTS 2008*, para 2.30).
- 4.12. A trip can be viewed and measured from two different perspectives: from the perspective of the visitor or from the perspective of the place/s visited; the meaning of the term “trip” is slightly different in each case:
- Viewed from the perspective of the visitor, and this is the perspective when measuring tourism using a household survey for example, the term trip refers to a round trip, and includes the whole displacement undertaken by a traveller since leaving his/her place of origin (normally, the usual residence, or any other place within his/her usual environment, visiting other places and staying there, and then back to his/her usual environment considered globally as his/her point of departure). A round trip, viewed that way, includes usually visits to different places with stops of varying durations;
 - From the perspective of the place visited or a sub-national regional entity, INRouTe considers that the term “trip” refers to two possible situations:
 - a proper trip (associated to residents in the region of reference);
 - part of a round-trip (associated to residents of another regions of the country of reference).(In both cases see Glossary / *Regional Tourism and Tourism Trip*).
- 4.13. It should be recalled that observing tourism trips is not the same as observing visitors, as an individual might make more than one trip during the observation period. Quite frequently, tourism statistics uses the term “visitor” instead of “tourism trip” or “tourism visit”. *IRTS 2008* recommends that these concepts be clearly defined and differentiated both in the statistical operations and data dissemination.
- 4.14. A round-trip might be composed of one or more visits to different places, seen as different destinations, or as a unique (aggregated) destination. The term tourism visit refers to a stop in a place visited during a tourism trip: there might be as many visits as stops. The stop does not need to be overnight to qualify as a tourism visit. Entering a geographical area without stopping there does not qualify as a visit to that area.
- The *IRTS2008* recommends that countries define the minimum duration of stops to be considered as tourism visits.
- 4.15. These kinds of trips (**multi-destination trip**) might be quantitatively important enough so as to cause that statistics on number of visits to destinations cannot be aggregated to provide statistics on numbers of visits, or trips, at the national level.

- 4.16. IRTS 2008 defines three basic **forms of tourism** (domestic, inbound and outbound) in terms of the activity of visitors and their country of residence; this document recommends the extension of the basic forms defined in the international standard to the new concept of **regional tourism**:

Glossary definition of regional tourism:

In order to separate visitors who have their place of usual residence within the region of interest from those who come from other regions or countries, it is recommended that three subsets of visitors to or in this region be identified:

- Residents from countries other than the country of reference (inbound visitors to the country as a whole)
- Residents from another regions of the country of reference
- Residents in the region of interest

Such definitions are consistent with those addressed in IRTS 2008 under “forms of tourism” (see *Forms of Tourism*)

It should be noticed that inbound regional tourism would include the first two subsets while the third one includes both domestic and outbound regional tourism (those who travel for tourism purposes within the region of interest or those who travel outside such region but either remain in the country of reference or travel outside the country of reference, correspondingly)

Regional tourism is a particular type of form of tourism to be used at the subnational-regional level which comprises the activities of these three subsets of visitors and it might be the case that the identification of outbound regional tourism (in either of the two cases already mentioned) is not a priority in most regions; if that would be the case, the third subset will refer exclusively to domestic regional tourism.

If deemed appropriate and feasible, additional subsets could also be identified for analytical purposes (in terms of tourists or same-day visitors).

- 4.17. Finally, IRTS 2008 includes a concrete **list of consumption goods and services typically acquired by visitors** for international comparability purposes: each and every single one of them are coded in the UN Central Product Classification, Version 2 and have the corresponding explanatory notes. Consequently, visitors do not acquire any tourism products but just goods and services provided by establishments mainly linked to the tourism industries. (see Annex 31).

Supplementary, within Annex32 a concrete list of industries –meaning all those establishments providing those goods and services- is included.

B.2. Supplementary concepts

- 4.18. Regarding how countries have in practiced implemented tourism statistics, they have traditionally been far away from the general development of economic statistics: the use of proper classifications of economic activities and products, as well as the isolation from National Accounts and Balance of Payment frameworks are the most appropriate examples. But at the same time, a relevant number of countries have carried on a tremendous progress developing basic data and indicators using new surveys and applying proper statistical procedures to administrative records in order to derive statistical information.
- 4.19. Indeed, official tourism statistics have made significant progress in terms of alignment with the established (economic) measurement frameworks. Some examples of the main differences between the 2008 International Recommendations for Tourism Statistics and the 1993 Recommendations are quite eloquent about both issues and portray very well this positive evolution (see Table 1 included in chapter 2, para. 2.22).

- 4.20. In this Sub-section, special attention will be given to the following concepts all of them closely related with the objective of adding consistency between tourism destinations and tourism statistics conceptual frameworks; some of them refer to IRTS 2008 while others are part of the work carried on by INRouTe since 2012:
- The concepts of “travel party and travel group”;
 - The enlargement of the list of “purposes of the trips” (and the association between purpose and activities carried on by visitors at destination);
 - About the use of “tourism product” as the criteria for market segmentation;
 - The new concept of “regional tourism expenditure”.

Travel party and travel group

- 4.21. Visitors are at the center of the observation of tourism. Nevertheless, visitors do not always travel alone. A ***travel party*** is defined in the *IRTS 2008* (paras. 3.2. to 3.5) as visitors travelling together on a trip and whose expenditures are pooled. A typical travel party is made of members of a family travelling together.
- 4.22. A travel party may be made of friends or other persons related by any type of link. Travel parties share most of their expenses. As a consequence, for the most part of expenditure, it is not possible to identify individual expenditures corresponding independently to each of the members of the travel party in particular for what relates to transportation, accommodation, food serving services that usually constitute the bulk of tourism expenditure.

The expenditure of persons travelling together in a travel party for the items shared will be estimated as the average expenditure of the travel party (a simple average (the same for all products) or a more complex one (different formula according to the products consumed) for the products on which expenditure is shared, that might also take into consideration the age structure of its membership) plus their individual expenditure (*IRTS 2008* para. 4.36. and Box 4.2.).

- 4.23. The official definition of travel party needs to be described for operational and measurement purposes; the link between “visitor” and “household” should be clarified; The *IRTS 2008* Compilation guide explains and recommends how to measure a travel party (Chapter 2, B.3.4).
- 4.24. It should be kept in mind that the individual (named as “visitor”) is the central observation unit all along the conceptual framework of tourism statistics: more precisely (*IRTS 2008* para. 2.25).
- The usual environment, the basic core of such framework (defined as “the geographical area –though not necessarily a contiguous one- within which an individual conducts his/her regular life routine”) refers only to individuals
 - “The usual environment of an individual includes the place of usual residence of the household to which he/she belongs, his/her own place of work or study and any other place that he/she visits regularly and frequently.”

While the fact of being a visitor is a transient situation (and refers to the relationship between a traveller and a country /place that he/she visits), the household is by far a more stable unit; this stability is a prerequisite for those units (institutional units) used in national accounts for setting up sectorial accounts (such as for the household sector).

- 4.25. A travel party might coincide with the household if, and only if, all the members (and only them) travel together. Increasing change in travel patterns also justifies the opportunity to be more precise when analyzing tourism behavior of those visitors travelling or intending to travel together but not being part of the same household (see Annex 20).
- 4.26. Because household surveys are basic for measuring national domestic and outbound tourism, the concepts of household and visitor have a complex relationship because both are identified simultaneously in such surveys; this complexity affects the measurement of trips and their characteristics as these are associated with a visitor or a travel party

More specifically, UNWTO has warned that the measurement of national domestic and outbound tourism – in terms of number of visitors, trips undertaken, characteristics of visitors and trips, as well as the estimate of daily average expenditure by visitor- should rely on household surveys that have the proper design and sample size to provide such data with the required statistical robustness. Therefore, there might be cases (when studying for instance the propensity to travel and the average stay of trips of the resident population) that these attributes of the trip could be attached, for analytical purposes, both to the household and its members (as visitors).

- 4.27. The travel party can be identified in any type of surveys addressed to visitors. Consequently, there is a need to operationalize the link between household and travel parties in different type of surveys (and this is a must particularly at sub-national levels due to the relevance of national household surveys as potential provider of regional estimates of key tourism characteristics).

For so doing, the following recommendations are proposed:

- When using household surveys (see also next section C.1), the objective would be to identify:
 - number of tourism trips taken a) by the household –in this case, the travel party and household coincide -, b) other tourism trips taken by members of the household;
 - characteristics of each household member as well as those characteristics of all or some of the trips undertaken.
- When surveying visitors at destination, the objective would be to identify:
 - Number of persons pertaining to the travel party and the qualification of such party as a) a household- in this case, all the members have the same postal address and the travel party and household coincide-, b) part of a household (not all members of the household are part of the travel party) or c) combination of persons pertaining to different households;
 - Place of usual residence of the household(s);
 - Characteristics of the round trip and of the visit to the destination.

In both cases a “reference person” should be selected in order to properly report on behalf of all the persons pertaining to the travel party.

It is recommended to use as a first operational definition of the travel party “all or part of the members of the same household travelling together in a tourism trip”. There might be also other possible grouping of visitors that might have “pooled expenditures” (such as a combination of individuals pertaining to different households travelling together in a tourism trip) but their identification in a survey would be in most cases highly inefficient (IRTS 2008).

(For more details, interested readers should see Annex 18 about the operational definition of “travel party”)

Travel group

- 4.28. This concept is also proposed in the IRTS 2008. A travel group is made of visitors (individuals) or travel parties travelling together on a tour organized for them by a third party (usually, a specialized business): examples are people travelling on the same package tour or youngsters traveling as a group and part of the same organized summer camp: each individual of the group participates in the common expenses which cover a pre-established set of services: usually transportation, accommodation, and others. However, they maintain total individual control on other expenses. The share of common expenses corresponding to each person in the travel group is totally defined and frequently corresponds to the amount paid by each member to belong to the travel group. Not all travel using a package implies that the person traveling belongs necessarily to a travel group: there are packages elaborated on demand and on which persons travel alone (or within travel parties).
- 4.29. In addition to travel party and travel group as new observation units proposed in the IRTS 2008, there is an increasing interest to also identify different group of visitors in terms of different personal characteristics (such as age, different type of disabilities, etc.).

Purpose of the trip and activities carried on by visitors at destination

- 4.30. IRTS 2008 recommendations are very clear regarding the mutual link between both concepts:
- “Each tourism trip has one and only one main purpose though a visitor can also undertake secondary activities while on his/her trip” (IRTS 2008, 3.16);
 - “The main purpose of a trip is defined as the purpose in the absence of which the trip would not have taken place” (IRTS 2008);
 - Countries might find it useful to expand the list of tourism trips according to the main purpose: “in this case, a hierarchical structure is recommended, one in which subcategories to those proposed (9) are developed” (IRTS 2008);
 - “Besides the activities associated with the main purpose of the trip, visitors may undertake additional activities considered as secondary, the identification of which may be relevant for planning, promotion and other analytical purposes”. Surveying visitor trips should allow for identifying the main purpose and such double set of activities (main and secondary ones) (IRTS 2008).
- 4.31. Marketing destinations for tourism is clearly associated with the objective of studying links between purpose of visit and activities undertaken. Consequently, marketing design policies could benefit from recording data on those main and secondary activities undertaken by visitors while at destination.
- 4.32. The classification of tourism trips according to the main purpose includes eight characteristics associated to “Personal” and one to “Business and professional” purposes; the focus of such aggregated classification –included in the IRTS 2008- is the national level. Consequently, not all the categories are equally relevant in all possible territorial entities. In fact, this is also becoming ever more relevant in many small (island) states, for example.

- 4.33. The main purpose of the trip as contextualized in the IRTS 2008, has opened the door for different practitioners and researchers to give special attention to the revised conceptual background for tourism measurement. It should be highlighted that what is really new in the IRTS 2008 regarding such concept are the following remarks:
- The classification of the main category “Personal” has been enlarged to include “Education and training”, “Shopping” and “Transit”;
 - Each of these categories has been associated with a list of examples of main activities undertaken while on the trip. Such association is only for illustrative purposes;
 - The content of “Business and professional” purpose has been clarified and improved vis-à-vis the 1993 Recommendations for Tourism Statistics.

Evidence in all countries around the world identifies “Holidays, leisure and recreation” by far as the most important purpose, especially for international visitors. Consequently, such category would justify an additional level of classification. “In this case, a hierarchical structure is recommended, one in which sub-categories are developed”. Such sub-categories should also include examples of associated activities.

Tourism product³²

- 4.34. From a measurement perspective (which is the case of this document), the following definition is proposed: a tourist product is a supply side concept branded for attracting visitors to a specific territorial entity, that can be identified by them once at destination. This document also provides recommendations for the operationalization of the measurement of destinations for comparability purposes.(see chapter 4, section C.4).

Such products can neither be defined in a standard way, nor can a proper typology be set up; additionally, only part of their components can be measured although this is not usually done.

Such products include remunerated components (services -such as lodging, eating and transportation, as well as potential activities to be undertaken) and components provided for free (climate, nature, landscape, enjoyable “atmosphere”, etc.); the later ones, tied to non-reproducible resources, while price-less, influence greatly the consumption pattern of visitors.

- 4.35. Rarely such products can be homogenous basically because being a composite offering of services, each destination will have its proper singularity due to a different integration / participation of different stakeholders and tourism industries, as well as, for instance, the lack of normalization of establishments providing accommodation to visitors (not just due to a question of lexicon –not the same classification label means the same in different nations- but also because of the type of complementary services provided).
- 4.36. Consequently, in terms of comparability, which is a basic objective for UNWTO, only those remunerated components mentioned in IRTS 2008 (see *Chapter 4. A Coverage of tourism expenditure*) could be measured. In order for such comparisons to be credible, there is the need for an accepted set of concepts, definitions and classifications to be used.

³²All along this document it has been highlighted that the term “tourism product” should not be confused with “tourism characteristic consumption products” defined as those goods and services whose expenditure represents a significant share of total tourism expenditure (for a more precise quotation see *Glossary / “Tourism industries”*)

- 4.37. Usually these products are associated to what is often called a “market segment”. The overall number of arrivals or overnights in a given territory and their declared main purpose of the trip (a demand side concept) is the usual criteria to associate trips with a market segments.

Obviously, a single tourism product can be associated to different type of visitors and hence with different market segments because a tourism product, irrespective of the definition used, includes a bundle of goods and services available to such travelers when visiting a tourism destination.

It might be added that a visitor can also be linked to different tourism products offered at the destination without considering its main purpose of the trip.

- 4.38. Using a supply side concept of tourism product for a demand side purpose (identifying market segments) is not a reasonable practice unless the following assumptions apply:
- there is a one to one relationship between a tourism product and a market segment and also;
 - a one to one relationship between goods and services provided embedded in the product and the activities (either main or secondary) undertaken by visitors while at destination.

The application of both assumptions, although not necessarily a strict type of relationship, is far from evident; also the number and type of resources available in each of such territorial entities adds more difficulties for the purpose of comparing tourism products.

Regional Tourism Expenditure

- 4.39. All of the aspects mentioned below are included in IRTS 2008 and should be taken into account when designing a questionnaire (or a section of it) aiming at estimating expenditure related to regional inbound tourism. Given that the level of expenditure may differ depending on the subject being an inbound visitor or a resident visitor living in other regions, it will be necessary to identify the number and type of questions according to these different visitor types. Moreover, whether these questions are asked before the trip or during the trip must be define beforehand.
- 4.40. The issue of the timing of tourism expenditure is relevant, as often items such as transportation, accommodation, etc., are booked and paid for before being “consumed”. The corresponding payment might also happen after consumption when paying by credit card or by a special loan drawn for this specific purpose.
- 4.41. Following the rules of the System of National Accounts 2008, final consumption by households (individuals) is deemed to occur at the moment of the transfer of ownership of goods or that of the delivery of services, and not the time of its payment. Tourism expenditure follows the same rules. Consumption expenditure on transport services occurs when being transported, on accommodation services, when staying in the place of accommodation, on travel agency services, when the information is provided and the travel services are booked, etc.

The acquisition of all goods and services during a tourism trip is, in principle, part of tourism expenditure.

Moreover, all services delivered before the trip and clearly related to the trip, (for example, inoculations, passport services, medical control, travel agency services, travel insurance, transportation services from the usual environment to the place visited, etc.) are included in tourism expenditure. All goods acquired before the trip that are intended to be used on the trip (specific clothes, medicines, small items to take along to use or give away, or purchase of camping gear, luggage, etc.) or brought along as gifts, should also be included.

(For more details, interested readers in the operationalization of such a concept should see Glossary / Regional Tourism Expenditure).

C. Selecting the appropriate measurement tools

4.42. As stated by officials of Ireland Central Statistical Office³³, “tourism statistics are difficult and costly to compile at a national level. At a regional level these difficulties and costs escalate and may be so prohibitive as to prevent their compilation altogether. Realistically, the traditional methods of compiling tourism statistics (from survey data) cannot provide robust, detailed, small area or regional tourism information and thus alternative approaches to compiling sub-national statistics and deriving indicators must be considered. In particular, administrative datasets relating to the tourism supply side or large commercial datasets arising from tourists’ electronic fingerprints should be explored and exploited”.

4.43. A challenging topic when measuring tourism is that some key concepts are not directly observed: for instance, the two very basic concepts of usual environment and visitor. The main reason is that when surveying travelers or households, the interviewees do not know what the term usual environment means and he/she may have a guess of what a visitor is but is not familiar with the proper definitions (and this is relevant because a visitor is a subset of travelers and a clear distinction should be made for both subset of flows).

This is also the case of the concepts of travel party and travel group.

4.44. All the concepts associated to the IRTS 2008 and the corresponding UNWTO IRTS 2008 Compilation Guide have clear operational definitions and all of them have already been operationalized in different types of surveys throughout the years (except the case of travel party because of its very recent formulation). The only exception is the usual environment for which UNWTO has proposed instead four criteria that should be kept in mind when defining it:

- frequency of the trip (except for displacements to vacation homes);
- duration of the trip;
- the crossing of administrative borders;
- distance from the place of usual residence.

4.45. The following paragraphs attempt to provide clarification regarding two topics that clearly highlight the fact that when the focus changes from the national to the sub-national level, the measurement instruments might be adapted or substituted.

³³MacFeely, S., Delaney, J. and O’Donoghue, F. (2013) Using business registers to conduct a regional analysis of enterprise demography and employment in the tourism industries: learning from the Irish experience. *Tourism Economics*.19 (6) pp.1293 – 1316(24).

- 4.46. A first and major issue is about grouping visitors according to some characteristics either of the visitor himself/herself, the trip undertaken, or some other type of components (e.g. activities undertaken, expenditure, etc). In fact, setting up a cluster of characteristics of visitors useful for different key stakeholders might require both sets of characteristics as well as other analytical components that have not been identified in the IRTS 2008.
- 4.47. The case of activities undertaken by visitors while on the trip (its identification, measurement and analysis) is crucial because they imply expenditures, selection of activities and different preferences for the time devoted to them, the evaluation of the tourism experience, etc. Consequently, the marketing perspective has been brought for the first time to the attention of tourism statisticians, given that marketing strategies are nurtured and would be enriched if gaining depth if this information is achieved.
- 4.48. But the identification of such activities is a challenging issue precisely because activity is a complex variable item. The Federal Cooperative Highway Research Program (NCHR) Report 571: Standardization of Personal Travel Surveys provides advice on how to deal with this issue. "Until now, most travel surveys did not adequately account for activities undertaken by the respondent. However, with the increasing use of activity-based and time-use surveys (and it is possible that time-use diaries will become the primary data collection instrument in the context of travel and travel behavior), activity has become a very important item. It is widely acknowledged that the demand for travel is derived, hence the collecting data on the types of activities undertaken gives insight into the types of trips the respondent makes".

Because of the importance of travel and travel-related activities, these have been separated into different categories and sub-categories in the understanding that "standardization of the activities to be included in designs that provide an activity list would also be useful and has been requested by some professionals involved in transportation surveys. The grouping of activities into common trip purpose-related categories would also be a useful element of this aspect of standardization".

(It is interesting to highlight the different approach of tourism practitioners and mobility researchers irrespective of the common interest in linking purpose of the trip and activities undertaken by visitors at destination.)

- 4.49. A second issue which has not usually deserved particular attention by tourism statisticians is that household and border surveys are the main surveys for the measurement and analysis of tourism at the national level. There exists substantial methodological documentation trying to allow for comparability among countries, establishing a series of recommendations aiming at producing homogeneous information sets in different countries. UNWTO has conducted a significant effort for the sake of comparability at the international level and supportive technical documents on both inbound and household surveys.
- 4.50. These types of surveys allow for a high degree of knowledge about domestic, outbound and inbound tourism at the national level, and in some occasions they offer disaggregated information at the regional level. In fact, they could gather, for instance, an origin/destination trip matrix (providing that the sampling process would have taken this into account, and the corresponding sample size would be suitable) among main issuing countries and the incoming country of reference – in the case of border surveys – and among regions of the country of reference – in the case of household

surveys, as well as a great volume of basic data and indicators regarding the main trip characteristics, such as the motivation for taking it, the transport mode, the type of accommodation, the associated expenses, etc.

- 4.51. From a statistics perspective, it is not trivial to insist that potential regional household surveys, accommodation surveys and other surveys should share with the corresponding national surveys not just a common methodological framework, but also a set of information items that ideally should be obtained posing similar questions in their respective questionnaires.³⁴

More specifically, given that at the subnational level a key issue is to deconstruct the arrivals universe in accordance with a set of characteristics of the trip and the visitor as well as other type of components (such as travel party size and composition, origin and destination of the trip, availability of travel mode/s, attractions visited, activities undertaken, etc.), the surveys providing such basic data and indicators should be as homogeneous as possible.

- 4.52. As explained in Chapter 3, all these basic statistical data and indicators should be georeferenced so that the R-TIS data base could allow for measuring and analysing tourism impacts on different type of visitors and territorial entities (see Glossary / Scalability)

In the past, geocoding typically occurred as a survey post-processing step. More recently, survey responses rely on GISs to geocode origins and destinations in real-time; in these efforts, interviewers are able to determine whether the geographic information obtained should be complemented with additional details (see para. 3.44).

C.1. Household surveys applied to regional tourism: learning from national experience

- 4.53. Three different type of topics will be presented in the following paragraphs:
- first of all, paragraphs 4.70 to 4.79 refer to UNWTO's recommendations regarding the use of such surveys at the national level: some comments will be provided for adapting these to sub-national territorial entities if deemed appropriate;
 - Second, paragraphs 4.80 to 4.83 is a proposal built on the work supported by the Inter-american Development Bank (IDB) in the southern part of America's (the regional entity called ConoSur, including Argentina, Brazil, Chile, Paraguay and Uruguay) and more particularly, in the design of Brazil's Strategic Plan for the development of tourism statistics (PET 2016-2021). Such proposal refers to the articulation of a quinquennial /annual set of household surveys for estimating both domestic and outbound tourism;
 - paragraph 4.68 rises the attention on a topic that is not usually highlighted particularly in these type of surveys: non-sampling errors.

In any case, it should be highlighted as already mentioned, that household surveys applied to tourism is not so straightforward as applied to other social phenomena. In fact, when designing such national surveys there are two issues that highlight such complexity: the unequal distribution of tourism over the national territory and the high degree of heterogeneity of the population in terms of tourism behavior.

³⁴ Although a supply side survey, accommodation surveys are mentioned here because guests data (its total number as well as associated personal or trip characteristics) are key demand side data

- 4.54. In the case of measuring domestic tourism at the national level, household surveys (technically speaking, Household Income/Expenditure Surveys) should be in principle the preferred option. In addition to UNWTO initiatives regarding the use of Household Surveys for measuring domestic tourism (WTO, 2003) the United Nations Statistics Division as well as other International Organizations have published different manuals and documents on such surveys.
- 4.55. The most recent contribution has been *UNWTO IRTS 2008 Compilation Guide*, where clear guidance is provided regarding the measurement of the main characteristics of the trip to be observed in such survey design for the national level:
- *duration*: in terms of overnights away from the usual environment; if there is no overnight, then the number of hours of absence -classified in relevant groupings- might be used;
 - *destination*: the main destination of a trip being defined as the place visited that is central to the decision to take the trip (*IRTS 2008*, paras. 2.31).
- 4.56. The main destination of a tourism trip is defined as the place visited that is central to the decision to take the trip. However, if no such place can be identified by the visitor, the main destination is defined as the place where he/she spent most of his/her time during the trip. Again, if no such place can be identified by the visitor, then the main destination is defined as the place that is farthest from the place of usual residence.
- iii. *places visited during the trip*: such trip must necessarily be a round-trip. The identification of such places should include the corresponding characteristics: length of stay in each of them (in terms of overnights, or hours of stay if no overnight), and type of accommodation used if relevant.
- 4.57. These places can be defined in terms of a classification of territorial entities (see Glossary). The types of accommodation to be determined (see *IRTS 2008* paras. 3.35. to 3.38) should at least separate market accommodation from non-market accommodation, as well as be consistent with the classification used for the characterization of inbound tourism, and that of the supply of accommodation services.
- 4.58. In its *IRTS 2008 Compilation Guide*, UNWTO presents a prototype of questionnaire to measure flows and expenditure associated to inbound tourism: irrespective that many of the questions posed could also be included in a household survey, question 23 is particularly relevant from a sub-national perspective. It refers to “overnight stays in the places visited” included in a national survey (analysis of the answer to this question allows for identification of the different visits of a round trip and, consequently, could assist in further initiatives to split national information between the different regions).
- 4.59. The places and points of interest visited would also be a key information to be analyzed and according to which visitor behavior within destinations could be deconstructed. Itineraries within destinations, not only understood as movements among different municipalities, but also as the different routes, paths or ways that visitors take in the visited destination, are essential for the design of regional/local tourism initiatives. Gaining knowledge over the exact points visited, both by tourists and excursionists, and the time invested in each of them, is of great interest. Mostly due to this, the characteristics of such routes and the visited spots are basic characteristics regarding tourism behavior.
- iv. *main mode of transport used*: defined as the one used to travel the largest distance, (*IRTS 2008* para. 3.32.). Secondary modes of transport might also be identified.

- 4.60. The used mode of transport would be another of the characteristics of the trip about which it would be necessary to obtain additional information, besides the one offered by national or regional surveys. In these surveys, main mode of transport is considered as the one used for the longest distance. Therefore, other modes of transport used in the trip's destination are left behind (either by not gathering information about them, or by disregarding it). This would occur in the case of urban means of transport, or other modes of high relevance within destinations (such as bicycle routes or themed trains) that could even signify one of the main attractions of the destination.
- v. *main purpose of the trip*: its classification should adjust to the international recommendations (*IRTS 2008* paras. 3.10. to 3.20.,).
- 4.61. Such characteristic offers a first approach to what makes tourism movements happen (work, studies, leisure, ...) but once at the destination, the visitor performs numerous activities that are at their disposal, some of which they even ignore before reaching the destination. All of those activities (the main and other secondary activities) if registered, would allow for the deconstruction of the universe of arrival figures closer to what the visitor really does once at destination.
- 4.62. In addition to these five main characteristics of the trips undertaken by visitors, the UNWTO *IRTS2008* Compilation Guide mentions expenditure as another relevant characteristic in order to analyze visitors' behavior.

In fact, it would seem that the average expenditure by a travel party (significantly more than the case of the visitor – as an individual) should be one of the basic parameters when deconstructing the visitor's flow that access a given tourism destination. This document suggests the use of expenditure dairies as the appropriate tool for such purpose.

- 4.63. Although most countries implement household surveys using either traditional face to face interviews or telephone assisted technologies, new approaches are under way such as the case of German *Reisenanalyse* being a survey which is a privately organized multi-client study using a mix of household type and online interviews

Moreover, Eurostat suggests using mobile positioning data in line with the research carried out during 2012-2014. As mentioned in Demunter (2014) "Mobile positioning data can be used to potentially strengthen current tourism demand surveys through mixed-mode data collection". In such scenario the number and duration of trips could be based on mobile positioning data while main characteristics of the visitor as well as other characteristics of the trip would relay on demand surveys. The sample size of the demand survey could be decreased considerably since the survey would not need to support breakdown by destination, thereby reducing the cost and burden of data collection".

- 4.64. Because household surveys are expensive and tourism is a complex phenomenon, the time framework for such surveys applied to tourism requires some analysis. The decision taken by Brazil, and supported by the rest of ConoSur countries, is to stop with non-regular annual surveys³⁵, and build on an articulated set of quinquennial household surveys, in order to provide robust estimates of key tourism indicators and a reasonable number of records so as to allow for setting up and Origin / Destination matrix, and conduct less ambitious –and cheaper–annual surveys, in order to allow for annual estimate of main aggregates of domestic and outbound tourism.

³⁵ meaning that although so intended, not every year surveys are conducted

- 4.65. Such an approach implies three basic understandings:
- the design of both type of surveys (quinquennial and annual) and the corresponding samples require the technical cooperation of the National Statistical Office due to the experience of the Brazilian's NSO and the legitimacy of such institution as custodian of Brazil's Statistical System;
 - quinquennial household surveys should allow for building different type of typologies of visitors in order to improve the analysis of such subset of regional inbound visitors;
 - annual surveys should be designed as a sub-sample of the quinquennial survey.
- 4.66. Other complementary remarks of such an innovative approach must also be highlighted:
- The annual survey could perhaps be conducted exclusively online or over the phone. In this case, a possible bias should be taken into account, as not all households may have access to Internet /telephone. However, the high cost of personal interviews is difficult to be justified;
 - These annual surveys would have as a main purpose estimating flows and eventually correct basic typologies obtained from the quinquennial survey;
 - Ideally modelling emerging from the structural survey results and from the accommodation survey could be attempted. This modeling would be aiming at estimating each of the two components of inbound tourism at regional levels which include, in addition to non-residents flows, those residents in Brazil traveling for a tourism purpose to other regions.
- 4.67. There are many other aspects and topics that could be mentioned regarding the use of household surveys for tourism purposes; one is related to the fact that asking about tourism is not easy (because the interviewed has never heard about the usual environment concept) and non-sampling errors might be particularly relevant. In fact, such type of errors occurs mainly in the operational field work and might be particularly common in tourism statistics due to the transient situation of being a visitor. Although not measured, they can affect the credibility of survey data and be particularly relevant in those territorial entities for which only a limited number of records are available.

The distinction between sampling and non-sampling errors occur in any type of survey irrespective of it being a demand or supply side survey. It is a good opportunity to clarify what they really are particularly in connection with a common request of most regional and sub-regional authorities: the enlargement of national surveys sample in order to provide better estimates of subnational data. This remark is closely linked to para. 6.3.1 to 6.3.5. of Allnut Report (2004).

- 4.68. Within the design, planning and result reports of most statistical operations and statistical surveys (also referred as sampling surveys) only **sampling errors** are mentioned, those generated by representing the target universe just with one sample or part of it (which makes sense because only those surveys using a fraction of a statistical frame can qualify as a statistical survey). There are different methods to calculate these errors, that need to be applied always ex-post when results have already been obtained. However, the error estimate is not worked out, and its mention comes from a mere theoretical approximation not reflecting the actual data, and instead of contributing to transparency, it can mislead users:
- Working out the confidence interval and the sampling error can only be conducted if the selection of respondents has been at random, i.e. if all members of the population have had the same probability to be chosen. For instance, within demographic surveys, if the selection of individuals would be conducted

under the right technical statistical conditions, there would be no need to check it against an age-gender structure known from other population projections, as it is usually done. The expected structure, evidently with a certain error, should be close to such a known structure. And if it not close, any other data should be questioned as its interpretation might not be reliable;

- Therefore, the following considerations only make sense if the actual sampling is random and it has been conducted properly and accurately over the reference population units;
- Ex-ante error level calculations, made through a statistical formula linking size of the target population, size of the sample, confidence interval and resulting on an error level, are only useful to provide an approximation of the capacity that a given sample size has to provide more or less reliable results;
- Within the results of a survey there is no sampling error level, each estimated figure has a different error level to be calculated once the work has been concluded. This is, each cell of the data matrix of each statistical table has a different error level, which has a direct relation, among other factors, with the size of the part of the sample intervening in the estimate of the figure of a given cell, cross checking the states, or one, two or more characteristics of the classification;
- Within sampling designing there are different methods for selecting the sampling units, ranging from purely random to stratified, direct sampling and sampling at different stages. The choice between one or other is conditioned by the possibilities of accessing the universe, of selecting the sample, by the need to represent defined segments that would not be proportionally within the sample, and over all by budgetary reasons. These different sampling methods can impact the error level, but the key impacting factor is the sampling size, hence, the budget. When estimating the characteristics of a large size population, the larger the sample size smaller the error level, but from at a certain point increasing the sample size is highly costly and it barely corresponds to a reduction of the sampling error level;
- It should be highlighted the singularity of surveys at country borders or access points to foreign visitors, given that the universe to be described, the flow of visitors, it is unknown ex-ante, it is rather part of the estimation to be conducted with the surveys and the different guidelines via administrative records.

When evaluating the quality of survey results, emphasis with more or less rigor tends to be made on *sampling errors*. However, many times, *non sampling errors* are forgotten, and this can provoke even larger errors (see Glossary / *Errors* (statistical and non-statistical)).

C.2. Household surveys applied to regional tourism: learning from passenger transportation surveys

- 4.69. The precise meaning of the term “mobility” is particularly relevant vis a vis “Tourism”.
- 4.70. When it comes to measure national domestic tourism and the mobility of resident population, household surveys are the basic tools as previously mentioned (see para. 4.26). Therefore, the use of households as statistical units in tourism has a long tradition.

It seems that there is no agreed or standard definition of “mobility”. The international transportation research community usually refers the term mobility to “mobility surveys”; that is, as a particular type of survey.

This document uses the term “mobility” as follows: “In transportation literature, mobility is an area of research that refers to the measurement and analysis of travel behavior (mainly road travel) of the resident population. For that purpose, mobility surveys are mostly addressed to households; data of households and their components (individuals), vehicles used and trips undertaken are the key elements for such analysis but also for a multitude of planning, policy or infrastructures options” (De Dios Ortuzar and Willumsen, 2011)

From a tourism research perspective particularly at the sub-national level, long distance/scale mobility surveys are the most relevant ones.

- 4.71. Because it is a demand side phenomenon, the definition of tourism requires clarifying first what a visitor really is and some key characteristics of the visitors themselves as well as of the trip undertaken. For such purpose, some basic concepts are explicitly mentioned:
- Economy of reference and country of residence;
 - Place of usual residence;
 - Citizenship and nationality;
 - Usual environment of an individual;
 - Tourism and being employed by a resident entity in the place visited;
 - Tourism trip (and the main characteristics of such trips: main purpose, duration, and others);
 - Tourism visits (as parts of a tourism trip).

As stated in IRTS 2008, those concepts allow for the official definition of a visitor as a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purposes) other than being employed by a resident entity in the country or place visited. These trips taken by visitors qualify as tourism trips. Tourism refers to the activity of visitors.

A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor) if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise.

- 4.72. Consequently, tourism is defined as a subset of travel and visitors as a subset of travellers. These distinctions are crucial for the compilation of data on flows of visitors (either overnight visitors –tourists- or sameday visitors –excursionists-) at the national as well as at subnational levels.
- 4.73. The connection between transport research and tourism research refers to travel demand³⁶; it is not a matter of the supply side not being of interest (specifically transport infrastructure and mobile units are the basic elements without which there will be no movements for any purpose). Instead, it appears logical that the shared interest in both research areas should lay, for the time being, in the exchange of knowledge and experiences related to demand measurement and analysis of passenger transportation. In both of them, trip generation and travel behaviour are basic and common grounds searching for synergies.

³⁶The following paragraphs are based in chapters 3 and 4 of Juan de Dios Ortuzar and Willumsen (2011).

- 4.74. Precisely because travel demand is the nexus between mobility and tourism as research areas, it should then be evident that people travel in order to satisfy a need undertaking an activity at particular locations: consequently, it is the distribution of activities over space which makes for transport demand.
- 4.75. Taking this approach, it is advisable to consider the difference between the classification of territorial entities proposed in this document and the boundaries of the common study areas of mobility research: while in mobility research administrative type units are primarily used, in tourism research is precisely the opposite. In the case of mobility, the focus is on analytical units as well as in administrative ones given the preponderance of studies on transport planning.
- 4.76. This section highlights some synergies between both research areas that might be extremely useful for tourism practitioners and other relevant key stakeholders, such as:
- to learn from the experience in designing mobility household surveys and how to use such type of data with others obtained from individual type surveys for modeling purposes;
 - to find the way to rise the interest of transport planners and researchers in tourism as a particular type of trips carried on by visitors (understood as a particular type of travellers);
 - to share the experience in measuring long-howl tourism trips;
 - etc.

(For more details, interested reader might also find of interest Chapter 2, section D.2).

- 4.77. Within mobility research it is common to use as a category for categorizing trips whether they are “home-based” or “non-home based”. In the case of tourism, those categories are not enough, as visitors can be at their secondary dwelling or at a vacation home, both are non-home based but radically different. In the case of the sub-national perspective this might be relevant, particularly in those areas where the stock of second homes is important.
- 4.78. The empirical measurement of travel behavior of visitors is a basic input for tourism planning; because planning (particularly territorial planning –see Chapter 2-) is vital to the tourism sector and the development of tourism products are conceptualized to be a component of general tourism planning (see UNWTO “Handbook on Tourism Product Development, Madrid 2011 pg 106); this document recommends that tourism research and analysis at the sub-national level should take these references seriously. In fact, the empirical measurement of travel behavior of visitors should be one of the main inputs for such contribution.
- 4.79. For that purpose, the starting point entails specifying and representing the travel pattern: the Origin Destination (O-D) matrix includes the total number of trips from one origin (O_i) to a destination (D_j) in each of the territorial entities considered, during a particular time period. Such matrix may be disaggregated by type of visitors and purpose of the trip.
- 4.80. In general, O-D matrix is derived from household surveys and consequently the observation unit used is the household and those characteristics that are considered of special interest for the measurement focus (mainly four: income level, car ownership and household size and structure). Other type of surveys is also possible and would supplement household survey data (such as roadside interviews) and therefore other O-D pairs would be obtained. Ideally both types of data should be available for the same base year when household survey data is collected.

In any case, even the combination of both type of surveys will fail to produce matrices where all cells have been sampled. Modelling is required to generate fuller matrices.

(For more details, interested readers should see in Chapter 3, section D.2.)

- 4.81. In the first case (household surveys) the reference is to household-based model where data source would be population census, and their respective strata will also be based on census variables of the already mentioned four characteristics.
- 4.82. In the case of person-category model, observation units are persons (considered individually -and not as members of a household- and refer to population in the territorial area of origin according to different categories.) because the analysis of the purpose of the trip corresponds to individuals.
- 4.83. When defining such categories, it is relevant to remember that it requires the detailed analysis of trip characteristics (to find variables that define similar categories). This alternative focus, as opposed to household-based model counts with some advantages beyond the cost related ones (given that the sample size required is significantly smaller than that required to estimate household -based models). Precisely De Dios Ortuzar and Willumsen (2011) point out two advantages (see section 4.3.3 “The Person-category approach”):
 - “Demographic changes can be more easily accounted for in a person-category model as, for example, certain key demographic variables (such as age) are virtually impossible to define at household level;
 - Persons categories are easier to forecast than household categories as the latter require forecasts about household formation and family size: these tasks are altogether avoided in the case of persons.

Next section C.3 will suggest some guidance based on the previous paragraphs.

C.3. Other demand side surveys applied to regional tourism

- 4.84. As in other subnational áreas, in the particular case of regional tourism (see Glossary), the basic focus refers to the measurement of inbound tourism which includes both residents from countries other than the country of reference (inbound visitors to the country as a whole) and residents from another regions of the country of reference; its size, identification of its typologies or basic tourism segments, activities undertaken while at destination, expenditure, etc. are usually the relevant topics for key tourism stakeholders.

At the regional level such measurement could be more feasible than at sub-regional levels due to the existence of available human resources and expertise in dealing with statistical type of surveys, unless investment in this sense is implemented.

- 4.85. Depending on the relevance of resident population in a given region in terms of travelling for tourism purposes in such region, such “domestic tourism flows” could be measured using household surveys adapting the national experience to the given region.
- 4.86. As already mentioned (see para. 4.26), national household and border surveys do not usually have the proper sample size so as to provide a robust inference for regional figures. In such cases (bearing the exception of islands or regions with a very limited number of port of entries with a feasible way to measure flows of visitors) the

statistical measurement of regional tourism demand should rely on interviewing visitors staying in accommodation establishments (particularly for those type of establishments for which the universe is known). Unless regional tourism authorities have the required technical staff and financial resources to implement a proper border survey.

- 4.87. Regional tourism includes both overnight and same-day visitors (which might be a relevant flow); part of them can stay in owned or rented second homes, staying with friends and relatives, sharing part of private accommodations, and in commercial accommodation establishments of different types. The measurement of such flow should include at least, those visitors staying in the last type of accommodation.
- 4.88. Such guest surveys should be similar to those used at the national level with a particular attention to the activities carried on by visitors while at destination and the corresponding expenditure.
- 4.89. An important issue to be verified is whether surveys conducted to visitors while at destination are statistically based (meaning, leaving aside other issues, that the sample used is a random sample). An example of this issue is basing the characterization of visitors to a given destination only upon surveying guests at accommodation establishments. This destination might count with significant excursionists or tourists at second homes, etc. Hence, this characterization would be partial.
- 4.90. Some form of exogenous information needs to be used to overcome the underestimation and the bias resulting when considering visitors staying at those types of accommodation establishments as the only possible use of visitors for accommodation while at destination as mentioned earlier.
- 4.91. Although being a supply side survey (which provides basic demand side data related to the number of guest paying for accommodation services while at destination), the reference to national accommodation surveys is a good example to rise the attention about the policy implication of a recommended principle mentioned in this document: regional surveys “are sought to be supplementary to the statistical information obtainable as a disaggregation of operations carried out with a national coverage and in an official capacity mainly by National Statistical Offices and National Tourism Administrations, in order to avoid information overlapping between national and regional levels.” (see Chapter 5 and also Glossary/Regional Tourism Information System).

In fact, it is not unusual to find regional tourism authorities arguing about three main statistical issues for setting up an own accommodation survey:

- the coverage of the frame or list of such establishments is not complete;
- dissemination of monthly data is not timeliness and finally;
- the work carried on by field staff could be improved.

- 4.92. Particularly in the case of accommodation surveys, attention should be paid to the methodology used by National Statistical Offices (which are in most cases responsible for running such surveys), and to the questionnaire and the way sample data are upgraded.

Regarding the first bullet point above, if such situation could be seen as the usual case in most regions where tourism is significant, there could be a strong argument for regional authorities to find the way for cooperation with NSOs to update regularly the units to be included in such frame. The partial completeness of such frame will affect

the credibility of number of bed rooms available as well as overnight figures particularly for those sub-regional entities such as main tourism destinations and cities where tourism is significant.

Timeliness of accommodation data might be an issue for regional and sub-regional authorities and not so much for National Statistical Offices. There is increasing experience at the national level in those countries with well developed statistical infrastructure of good practices in relation with collecting information in accommodation establishments using either through the internet (using a web application), fax, email or telephone.

- 4.93. Out of all possible methods, the most effective method, without a doubt is the use of internet using automatic uploading of requested information via an XML file (Extensible Markup Language) generated from ERP systems of hotel management (Enterprise Resource System); Ideally, XML data files should be shared at a national and regional level, which would imply that being files with a set structure, the content and its configuration would be the result of a consensus among national and regional authorities.
- 4.94. Regarding the third issue, reducing non-sampling errors derived from work carried on by field staff might not be a feasible task in all circumstances.
- 4.95. Regarding measuring visitor expenditure at destination, a challenging issue that deserves particular attention is when out of the tourism trip this is surveyed. Given that, at the moment of the interview, the visitor can only inform of what has happened up to the moment of the survey. In the case in which information on expenditure is also collected, biases might be important, as many persons often leave the purchases of souvenirs or things to bring back home to the very last moment before departure. Also the effect of unexpected events, either in the country of origin or the country visited (ranging from natural disaster, bad weather, political turmoil as well as personal reasons) might oblige the visitor to take decisions different from those anticipated.

In any case, if considered feasible, the use of travel expenditure diaries could be an option.

- 4.96. Besides the use of national surveys for a primary description of tourism at the regional level (border, household and market accommodation surveys), the previous sections have also highlighted the need for some type of adaptation required in the case of the last two types of surveys if designed at regional as well as sub-regional levels. If those adaptations/improvements have been implemented these new regional surveys should provide with more robust basic data and indicators on similar questions addressed in national surveys (due to a greater number of records available for some characteristics of trips –such as the main set of activities carried out by visitors or the average expenditure by visitor at destination- as well as the reduction of recall bias).
- 4.97. A particular issue that might be of interest is to highlight that at subnational levels the measurement of regional inbound visitors (either non-national visitors or national visitors residing in a different region) refers to “open areas” identified as any territorial entity which does not have any control mechanism for entry (such as border controls, entrance fees, etc.).

“Considering an “open area”, whatever its size is, there are two main types of survey to carry out: accommodation establishments type and surveys at popular tourist places. A third option is represented by surveys on means of transport but these are subject to

many problems concerning the definition of the target population and the design of the sampling plan” (Eurostat Methodological manual on the design and implementation of surveys on inbound tourism / Part IV Inbound visitors to an open area, Luxembourg 2000).

- 4.98. In any case, other tools might be more appropriate for measuring something that is central to key tourism stakeholders for marketing purposes and destination management: identifying what visitors really do at destination (his/her activities, itineraries undertaken, associated time employed, expenditures, etc.).
- 4.99. In fact, the conceptual framework for the measurement of tourism (IRTS 2008 paras. 3.6 and 3.9) identifies a set of basic characteristics of visitors and trips; these characteristics jointly with other type of them (mainly travel party size and composition, origin and destination of the trip, availability of travel mode/s, attractions visited and activities undertaken) should allow for the identification of travel patterns of visitors.

From the focus of this document, no overall travel picture of individuals or travel parties should be a priority but instead just behavior of visitors at destination; consequently, such focus is less ambitious than the one used in mobility research (which is based on household surveys instead than on individual surveys and looks for a more descriptive type of analysis as previously mentioned -see previous section C.2).

- 4.100. Clustering types of visitors according to specific bundle of characteristics should be useful for a number of topics, particularly at the sub-regional level:
- About focusing on the environmental consequences of a given pattern of behavior (in terms of greenhouse gases, energy used, ecological damage, etc.);
 - Monitor the effectiveness of initiatives designed to promote sustainable behavior when travelling;
 - How visitors from different countries of residence show different travel patterns across both space and time;
 - How communication strategies by destinations should be adapted to different markets;
 - Etc.
- 4.101. In the case of tourism, a travel and/or activity pattern survey addressed to individuals should be more robust than those derived from household surveys seeking to address overall travel patterns instead of concrete behavior evidence at destination.
- 4.102. Some important issues involved in the design of such surveys are:
- The appropriate statistics universe or frame to derive statistical samples and allow for grossing up of sample data;
 - Whether to seek local travel / activity diary surveys;
 - How to obtain data about changes in behavior over time (e.g. via panel surveys, retrospective questions...);
 - What level of detail to seek on the selected activities;
 - What mode of data collection to use: self-completion questionnaire, interview or some combination;
 - How to check or verify the relevance of non-sampling errors (which in the case of tourism could be very relevant due to the fact that relevant variables are not directly observed);
 - Etc.

- 4.103. Other potential data sources could be:
- Attitudinal questionnaires, individual interviews and focus groups. Such data can provide snapshots of the distribution of opinions and attitudes within a target population, and assist to understand behavior;
 - Objective monitoring of travel behavior and its consequences. This type of data can be particularly useful when the aim is to monitor general trends or to evaluate policy initiatives in relevant tourism destinations;
 - Including a particular module on household surveys in order to have a proxy of tourist staying with friend and relatives.

C.4. Operationalizing the measurement of tourism destinations for comparability purposes

- 4.104. UNWTO has recently published a *Handbook on Tourism Product Development*,³⁷ in which some topics are defined differently as in this document.

In the referred document, a tourism destination has the following attributes:

- *“comprises many products within the overall destination;*
- *involves many stakeholders with differing objectives and requirements;*
- *is both a physical entity and a socio-cultural one;*
- *is a mental concept for potential tourists;*
- *is subject to the influence of current events, natural disasters, terrorism, health scares etc.;*
- *is subject to historical, real and fictitious events;*
- *is evaluated subjectively in terms of what represents value-for-money e.g. based on reality compared with expectations; and*
- *differs in size, physical attractions, infrastructure, benefits offered to visitors and degree of dependence on tourism – in fact no two tourism destinations can be treated the same, each offering its own unique and authentic attributes. (section 1.2 The Tourism Destination and its Characteristics)”.*

- 4.105. The focus of UNWTO in this document seeks instead for operationalizing the measurement of tourism destinations for comparability purposes within a given country (intra-national) as well as for international comparability; a quite different type of approach.

- 4.106. Focusing on those territorial entities that qualify as tourism destinations because of (1.) the significance of tourism flows (the demand side criterion), as well as (2.) the turnover of those establishments pertaining to the tourism sector that provide goods and services to visitors (the supply side criterion), is a major step in potential extensions of the conceptual framework developed so far because these territorial entities:

- presuppose the existence of a tourism sector and market in such territories which is the case of tourism destinations, but not exclusively;
- suggest that thresholds on the minimum volumes of supply and demand for a destination to qualify as tourism destination be elaborated;
- allow for comparability (intra-national and international comparisons) between specific components of such markets in similar types of destinations;
- provide sub-national authorities and other key stakeholders with an operational concept to be applied in order to qualify a territory as a tourism destination;

³⁷ UNWTO & ETC. (2011). *Handbook on Tourism Product Development*, Madrid.

- the concept and implementation of territorial entities also provides advice for potential tourism developments involving a significant amount of investments.
- 4.107. Those tourism destinations that satisfy both the demand and supply criterion already mentioned, share a common set of components that should be defined and listed in order to support for comparability purposes: this document recommends that as a first step, comparability should be limited to main tourism destinations because the critical mass of key components of supply and demand in such territorial entities allows one to focus on the relationship between economic analysis and destination management at sub-national level.
- 4.108. The following paragraphs provide a list of relevant components that should be considered for comparability purposes.

Resources

- 4.109. In order to become tourist attractions, resources (natural, cultural or built resources) need to be translated into products by the action of the local and non-local stakeholders; this has already been the case in main destinations. Both for already existing tourism destinations as well as for potential tourism destinations in a medium term process, such resources should be listed, documented and ideally geo-referenced in a proper data base.

Each “tourism product” combines goods and services. Any tourism destination has one or more tourism products.

Stakeholders

- 4.110. These includes tourism practitioners -including tourism officials who commission surveys and research, and those who undertake such surveys- and different key stakeholders at regional and sub-regional levels -including governments, public institutes and agencies, universities, research centres, industry associations, trade bodies, and specialized firms, tourism destination managers, tourism development authorities, tourism businesses, etc.
- 4.111. Both public and private side of the tourism sector are crucial for the satisfaction of visitors. Private agents need to competitively and sustainably match demand and supply. Public bodies encapsulate a varied set of functions and investments (endowment and management of infrastructures to access diverse services, safety, preserving natural and cultural resources, planning and territorial ordination, etc) which influence the perception of the destination attractiveness. Moreover, within their competences, public administrations directly condition the pace and activity of firms that produce the goods and services located in destinations demanded by visitors (they condition this pace and activity via their better or worse bureaucratic agility to resolve business procedures, their legal capacity to adapt the sector regulations to the new demands in ever more changing contexts, etc.).

Establishments producing goods and services demanded by visitors

- 4.112. Such production units pertain to any of the tourism industries (see Glossary/ Tourism industries) although only part of the production of such establishments is related with tourism demand.

Tourism flows

- 4.113. The measurement of the flows of visitors and all associated variables (both related to the visitor and to the trip) is highly sensitive to the definition of usual environment. Such flows refer to the different forms of tourism (see Glossary).

Territory

- 4.114. The integrated set of infrastructures and equipment, resources, stakeholders and productive establishments are located in a territory that must be precisely defined in order to be properly measured (in terms of physical and monetary components such as number of resident and non-resident population, infrastructure, economic activity, etc.).

- 4.115. The following paragraphs will focus on some key components of tourism destinations and a minimum set of basic data and indicators needed for its measurement

It is suggested to generate, for comparability purposes, a limited number of basic statistical data and indicators (no more than 15 -see paras. 1.28/2 and 3.22- for a particular type of tourism destinations: those selected by countries that might wish to volunteer, from 2017 onwards, to cooperate with UNWTO on the initiative proposed in the Chapter 1.

- 4.116. If applicable, the concept of significance implies the existence of a tourism sector and a tourism market in such a territory. In order for the supply and demand sides to be measured, the conceptual framework of IRTS 2008 is especially adequate for one main reasons: there is a formal international agreement about the concepts, definitions and classifications to be used for the measurement of the tourism sector (as a cluster of production units in different industries that provide goods and services demanded by visitors) and flows of visitors associated to the three forms of tourism (inbound, domestic and outbound).

- 4.117. This document focuses in the identification and measurement of some components of such sector and market, as well as the corresponding territory. Because the measurement and analysis of travel patterns of visitors is a clear priority for marketing research and management at sub-national levels, the following ones are particularly important:

- Tourism products;
- Activities undertaken by visitors;
- Tourism population;
- Characterization of visitors and trips;
- Regional tourism expenditure.

- 4.118. Consequently, the definition used for **tourism product** is proper for such purpose: a tourism product (nothing to do with tourism consumption characteristic products – see Glossary/Tourism industries) is branded for attracting visitors to a specific subnational area, and can be identified by a visitor before reaching the destination. If it is the trigger of the main purpose of the visit, then there are other products that can be supplementary and known off before and during the visit once at the destination. Such products can neither be defined in a standard way, nor can a proper typology be set up; only part of their components can be measured although this is not usually done.

- 4.119. In such products there are embedded at-a-cost components (services -such as lodging, eating, transportation, as well as potential activities to be undertaken-) and components provided for free (climate, nature, landscape, enjoyable “atmosphere”, etc.); these last ones, related with non-reproducible resources, although price-less, influence greatly the consumption of visitors.

Tourism product is a supply side concept usually associated to market segments.

Although the consumption of a tourism product is more than just paying for goods and services, at least basic data and indicators associated with their corresponding tourism sector performance could allow for comparability (such as overnights, establishments, and employment).

- 4.120. It should be highlighted that comparison based on a demand side concept such as market segments will lack of statistical rigor according to the reasoning presented in Chapter 4/A.2.

- 4.121. **Activities undertaken by visitors** has been proposed in Chapter 4 in order to request respondents of surveys about round trips; this question should be further adapted if applied at destination level. For instance, identification of attractions visited, tourism experience, about the degree and frame of trip planning –such information would render distribution channels much more effective-, more precise level of expenditure and its main components, etc.

Such activities can be derived using a questionnaire but it is also possible to identify them related to movements at the destination either following signposted **itineraries** or moving around: gathering such information would allow for more targeted types of visitors and design of new or improved tourist products.

- 4.122. It seems obvious that the development of new technologies related to the growing registry of different types of digital footprints left behind by tourism-led mobility patterns, will increase our knowledge about what visitors do while at destination. In fact, mobility research has already acquired a critical mass of knowledge about the design of new tools and empirical analysis about travel behavior and consumption patterns in particular (which presupposes that researchers share a culture of reporting data in a format that allows other stakeholders to use the data for further analysis).

The adaptation of such tools and research to the case of tourism should give priority to the design of surveys focusing on activity-based travel behavior of visitors at destination, the use of Google Map technology, GPS and pop-up questions related to such behavior, explore the potential of open data, etc.

In any case, basic data and indicators about itineraries are not standardized as is the case of the kind of information pertaining to tourism products and the characterization of visitors and trip. Consequently, this document does not provide any particular recommendation on a minimum set of associated data to be obtained.

- 4.123. The concept of **tourism population** is a statistical concept that is not defined in the 2008 International Recommendations for Tourism Statistics official document. The measurement of such concept requires the use of full-time equivalent procedures.

Equivalent tourist population figures should be included in different type of indicators measuring tourism impacts on the environment such as:

- ecosystems

- needs for waste management facilities
 - water cycle
 - energy flows
 - etc.

As an indicator of population density and tourism specialization, such figures can also foster comparability between tourism destinations.

- 4.124. Regarding **characterization of visitors and trips**, it should be kept in mind that the universe of arrivals or overnights is used as a proxy to the number of visitors; consequently, surveys addressed to visitors at destination should take advantage of looking for a statistical sound research on both characteristics of visitors and trips. Such universe allows to split survey data according to different type of characteristics both of the visitor (either tourists or excursionists –same-day visitors-), and the trip (such as the main purpose and main destination, organization of the trip, length of stay, etc.) as well as other type of components (mainly travel party size and composition, origin and destinations of trips, availability of travel mode/s, attractions visited, activities undertaken, etc.). Clustering different characteristics and other components allow for setting up different types of visitors for analytical purposes. A practical example can be found in Ciset 2014 “Italian and Domestic Tourism Expenditure in the Veneto Regions. A milestone for the Veneto Region TSA Compilation”.

Besides the traditional data used for measuring the market from the demand side (arrivals and overnights figures), this document understands that in statistically developed countries there is a set of basic data and indicators that could be used for enlarging the traditional scope of measuring demand and supply. (see Chapter 5 about the completeness of a R-TIS of the following publication³⁸: INRouTe and UNWTO (2012)).

- 4.125. Some of these data highlight the possibility to derive from the respective national databases (particularly border, household and accommodation surveys) a more ambitious analysis about typologies of visitors than just the breakdown of arrival figures by main purpose of the trip. Nevertheless, supplementary information about what visitors really do at destination (in particular, those topics related with travel behavior patterns) should be envisaged. Also the emotional drivers of visitors when arriving at destination and the evaluation of their experiences while at the destination constitute an important set of data for destination management (basically in terms of qualitative type of data).
- 4.126. As will be mentioned in Chapter 4, the questionnaire to be used for the measurement of **regional tourism expenditure** requires three basic sets of ventilation:
- according to the two possible perspectives to view the trip (from the perspective of the visitor or from the perspective of the regional or local entity visited);
 - if the visitor is a resident or non-resident in the region of reference; in some destinations it might be relevant to breakdown the first category into nationals/foreigners;
 - when the expenditure took place (pre-trip or during the trip). While pre-trip payments might include accommodation, transportation tickets, package tour as well as other services, payments during the trip might include a more comprehensive list of goods and services.

³⁸ A copy of this publication is available here: <http://www.e-unwto.org/doi/pdf/10.18111/9789284414963>

- 4.127. In due time the measurement and analysis of these five components of the tourism sector and market in a tourism destination should be extended and also include additional concepts and challenging topics such as:
- Vulnerability: meaning either the degree of diversification of markets and types of visitors, or the degree of dependence to tour operators / foreign direct investments /accessibility to destination by low cost air companies or other factors that could affect sustainability of the tourism destination;
 - Tourism and new technologies: both in relation with tourism data collection and in relation with definition of “new” terms in official statistics such as online intermediaries, online purchases / reservation, etc.;
 - Main externalities caused by tourism and its measurement: for instance, related to the use of resources (such as water, land, etc.), inflationary pressure affecting mainly the resident population, real estate and vacation homes developments with a marginal and highly seasonal type of occupancy rate throughout the year;
 - Etc.

Chapter 5. Linking the R-TIS with the TSA as the foundation for a regional TSA (R-TSA)

A. Introduction

- 5.1. All along the document it is mentioned that in order to take regional tourism seriously, the first priority should be the setting up of a R-TIS; such recommendation imply that this initiative is a prerequisite for developing a Regional extended TSA exercise. Different sections of chapter 5 addresses and provide insight on the complexity of the necessary link between the R-TIS and the R-TSA.
- 5.2. It should be possible that TSAs, and any extension to encompass environmental data, could be seen as flexible in the sense of applying accounting principles to the policy questions at hand and, from this point, the data requirements can be established. How these data are then found, whether via collections by official statisticians, via big data, or via modeling is a second step that will be tackled appropriately in different ways in different countries/regions.
- 5.3. This chapter also provides clarification on what a R-TSA really is and guidance about addressing such an objective; it also highlights how the R-TIS should support such initiative in a given region³⁹.

In line with such focus, three issues are addressed in different sections:

- Why promoting a regional TSA?
- Could a feasibility study help to evaluate the requirements needed ?
- What can a region where tourism is significant really do when the feasibility study reveals that there are no data and resources enough to support the development of a proper R-TSA?

- 5.4. Regarding the issue of why promoting a regional TSA?, the following four answers are the most relevant ones.

- The first answer might seem quite obvious: **tourism is essentially territorial**, since it involves specific territorial areas inside the country and it firstly and directly impacts on the regional community in terms of employment, income and socio-cultural and environmental effects. The sub-national level is then the suitable dimension for tourism planning and decision-making, since it is just at this level that many relevant questions arise, such as: Is tourism strategic for the region? What is the impact of tourism expenditure? What are the characteristics and the dynamics of the tourism labour market? What is the level of investments for tourism?, etc.

Such questions are of increasing interest for regional authorities, both in regions where tourism is already developed and in regions where tourism is in the early phase of the life-cycle, because of the prospects of income and employment that tourism can bring.

- The second reason that justifies the importance of a R-TSA is the **specificity that characterises every region** and that makes it desirable for them to develop their own measurement and analysis of tourism's contribution to the regional economy.

³⁹Section C addresses the issue of linking national and Regional Tourism Information Systems.

In this sense a simple regionalization of national sources and analysis could not be sufficient, because the role of some tourism components changes according to territorial scales; also because regional statistical data obtained to support a R-TSA development might be, *ceteris paribus*, of better quality than that derived from nation-wide surveys in terms of describing the structure of the tourism sector and demand.

According to this consideration, sub-national tourism cannot be considered as a mere disaggregation of national tourism, since analysis translates in a thematic singularity and technical complexity when it comes to measuring sub-national tourism. This is evident if we think that some themes such as the relevance of the inbound and the “domestic” component of Regional Tourism or of specific typologies of tourism (business tourism, cruise tourism, etc.) may not be so relevant at national level but be of priority interest in some specific regions. Another evidence is represented by tourism flows generated by residents: from a national perspective these flows are classified as domestic tourism, while at sub-national level residents from other regions are also part of regional inbound tourism for the region of reference. The same reasoning is true for excursionism too, whose analysis makes sense just at sub-national level since this phenomenon directly impacts on regional supply and community.(see Glossary/Regional Tourism).

Specificity refers not only to tourism demand but also to tourism supply, which from a sub-national perspective may include specific activities and products that are not considered at national level: this is the case for some industrial activities producing “souvenirs” and typical products, that, while at national level their involvement in tourism might be absolutely marginal, in the regional economy their production are supported by tourists’ expenditure.

The specificity and uniqueness of every region not only stress the potential for the regional authorities to develop their own R-TSA, but it also emphasises the differences among regional experiences and the difficulty to give unique and standardised interpretation. In this sense this chapter tries to stimulate a clarification of some important aspects (for example by exploring experimental approach to TSA “other aggregates”), also by citing the experience of some regions that have already experimented the development of their R-TSA.

- The third answer to why promoting a TSA? is the need to provide regional stakeholders with useful information and indicators for raising awareness of tourism importance in the region, identifying possible business opportunities, attracting investments, etc.

Promoting an extension of TSA to sub-national level can reinforce the role of credible tourism economic analysis and effective modelling for destination management. In this sense the R-TSA and in particular the process that brings to the final R-TSA play a crucial role, by encouraging an effective accounting for tourism at regional level and supporting the development of tourism strategy for destination management. It is just at the regional level that an in-depth analysis of tourism contributes to many strategic issues, such as conservation vs use of natural and cultural resources, contribution to sustainable development, alternative use of resources, etc.

However, stakeholders' dissatisfaction due to a perceived inadequate tourism information system is common: for example information is frequently not available or not updated; data are difficult to be found or correctly interpreted; the nature and organisation of information are not consistent with stakeholders' needs and a long etc.

Then, the availability of comprehensive information required by the process that builds up the R-TSA can encourage a more concrete and valuable dialogue between technicians - with their statistical/analytical background - and decision- and policy-makers and private companies. Indeed a dialogue between these and other relevant stakeholders (see para. 1.4) is important for favouring harmonization, coordination and a better understanding of tourism statistics, sharing common languages and identifying information needed by private and public stakeholders, so that statistics and R-TSA can be a real support for decision-making process.

- Finally, the fourth reason is related to the important contribution that tourism gives to other disciplines, since its interconnection with many other economic sectors such as transports, agriculture or other activities and issues, such as culture, sustainable development, etc. It is then evident that a deep understanding of tourism characteristics and dynamics at the destination level, in particular in terms of economic impacts, is functional for better defining the size and nature of the linkages with the other regional activities and sectors developed in the region. Considering, for example, transport infrastructure and services, tourism analysis could generate growing awareness and understanding of the significance of tourist flows according to the typologies of transports (airplane, train, bus, etc.) and then support strategies for improving services and income (see Chapter 2, section B).

5.5. *A second issue* that cannot be ignored is the evidence that the **process behind the development of a R-TSA is extremely demanding of information** and a body of detailed statistics is needed to complete all TSA's elements.

As explained in Chapter 3, a proper R-TIS (Regional Tourism Information System) is justified under two circumstances: the significance of tourism in the region and the availability of a basic set of national statistic sources.

As a consequence, before a region decides to set up a R-TSA, a feasibility study should be required, in order to verify the availability of basic statistical data and indicators derived from national and regional sources, the existence of an appropriate statistical infrastructure and of a professional team and the availability of resources for developing supplementary data.(see Chapter 3, section B).

Of particular interest is the development of the professional team that can be conceived as an inter-institutional and multi-disciplinary network. As emphasised in Chapter 4, such a team is vital not only for setting up a R-TIS, but also because it stimulates the creation of the necessary knowledge and expertise on tourism economic analysis though the cooperation and integration of a pool of experts – practitioners and researchers - in different disciplines: statistics, geography, economy, etc.

Since many regional statistics are very often produced by the National Statistical Offices, as a regionalisation of national data, it is recommended that official statisticians should be involved in the development of the R-TSA in order to promote the use of national instruments to collect tourism data at regional level using a common set of

concepts, definitions, classifications, accounting rules, etc.; in a second phase, the regional authority can then decide to supplement national statistics with other sources specifically tailored to their own territorial specificities.

- 5.6. Attention has to be paid also to which kinds of information are more appropriate to be included in the information system supporting the design of a proper R-TSA. Since a body of detailed statistics is needed, a well structured R-TISTourism Information System should include three sets of information as already mentioned (see para. 3.10) Since these sets of information are based on several sources, that in some cases are interrelated, it is recommended to avoid overlapping between entities and between national and regional levels.
- 5.7. *The last and fourth issue* is about the question What can the region do when the feasibility study reveals that there are no data and resources enough to support the development of a proper R-TSA?

The answer suggested is to invite the region not to give up and to find alternative solutions. Although it might not be possible to set up a proper R-TSA, it is however recommended to promote a descriptive analysis that identifies the main characteristics of regional tourism from the supply and demand side. This recommendation, in order to be translated in operational terms, implies the setting up of a complex governance structure as already explained (see para. 3.11 and Annex 35).

It is suggested to identify information gaps (in order to start the set up of a more appropriate regional tourism information system, supporting in the future the development of a proper R-TSA), and develop statistical Supply/Demand checking – using national and regional data- regarding overnights/ occupation of establishments providing accommodation for visitors/ number of arrivals/number of visitors/employees in the tourism sector/ average expenditure/ etc.

Finally, other initiatives could be envisaged in line with some of them for which UNWTO has either elaborated useful material that should be adapted to be used at sub-national levels (this is the case of measuring the Meetings Industry and its tourism connection, as well as the measurement of vacation homes); a third example could be about the opportunity for expanding the third component of the proposed R-TIS with data useful for key stakeholders although non necessary being official nor statistical data (the case of measuring special events is definitively one example) (see Annex 30). All these questions and issues will be addressed in this chapter.

B. The Regional TSA in perspective: UNWTO initiatives during 2002-2013

- 5.8. IRTS2008 and TSA:RMF2008 clearly mention the adaptation of the statistical framework for basic statistics and indicators (see para. 3.12) and the development of the TSA (see Annex 20).
- 5.9. Regarding the TSA:RMF 2008, it should be remembered that the first time UNWTO referred to a regional TSA was in 2002: “*The Tourism Satellite Account (TSA) from the Regional Point of View: Reflections for Debate*” signed by José Quevedo –UNWTO consultant and first President of Spain’s National Statistical Office- appeared in volume 2 of the Enzo Paci Papers on Measuring the Economic Significance of Tourism (a series of eight annual reading documents prepared by UNWTO Statistical Unit).

UNWTO used such document in order to promote an international consultation process about the opportunity to extend the TSA conceptual framework to subnational levels; main milestones of such process were the following international Seminars and Conferences supported by Visit Scotland, the Comité Regional du Tourisme Riviera Cote d'Azur and, finally the Direction du Tourisme of France, respectively:

- Glasgow 2003 (February 10-11)
- Antibes 2004 (February 18)
- Paris 2005 (April 21-22)

- 5.10. As an outcome of such process, a discussion paper (dated in September 2005) was drafted by the UNWTO Department of Statistics and Economic Measurement of Tourism and presented with the title "*Adapting the national Tourism Satellite Account project to subnational levels*" to the WTO conference "The Tourism Satellite Account (TSA): Understanding Tourism and Designing Strategies", Iguazu Falls, Argentina/Brazil/Paraguay, 3-6 October 2005. Session 3 of the conference was devoted to "Tourism Satellite Accounts: The Regional Perspective" and the central paper was drafted by Calvin Jones and received requested comments by Mara Manente; also other comments were presented.

The above mentioned UNWTO document was drafted in the perspective of "an international consultation on updating the conceptual framework of tourism statistics (those approved in 1993, as well as TSA:RMF 2000); a consultation that UNWTO opened up in the first quarter of 2006. Such process was part of the international community's efforts to clarify the conceptual relations and bridge some of the existing gaps between the TSA, the Balance of Payments and the System of National Accounts. In the Introduction of the 2005 document, UNWTO explicitly mentioned the basic initiatives of the TSA project at a national scale and how the extension of the TSA conceptual framework to adapt such tool at subnational levels should take place: "this document sets out an initial proposal for its regional adaptation, in which precedence would be given to promoting the economic analysis of tourism as a first step in assessing the consistency of the regional system of tourism statistics and identifying the need for new sources and analyzing key factors that may influence the results".

- 5.11. Also the introductory chapter of that document (pages 2 and 3) summarizes UNWTO's position on the two possible ways to adapt the National TSA (TSA): regionalization of the TSA (identified as TSA-R) and development of a regional TSA (identified as R-TSA). These were the main arguments presented for both approaches" be compatible with each other:

- tourism is essentially territorial: the development of tourism in the regions is of increasing interest to the regional authorities, and to Regional Tourism Administrations (RTAs) in particular, because of the prospects of employment in the various tourism industries;
- information on tourism activity at regional level cannot be obtained by relying solely on the regionalization of national sources: even supposing, in the best of instances, that they had the necessary sample sizes for gathering the relevant data, the specific features of tourism in regions where it is an important industry make it desirable for them to have their own sources;
- consequently, if those regions have the necessary administrative skills and resources, they should, logically, progress in the measurement and analysis of tourism's economic contribution;
- more specifically, more and more RTAs realize the desirability of preparing regional TSAs as a means of approaching the tourism sector from the supply side and, hence, providing useful indicators for tourism enterprises and organizations in identifying possible business opportunities, assessing the volume and intensity

- of tourism business and determining the extent to which private and public regional tourism networks and clusters are interconnected;
- in any event, the paucity of information of all kinds that typifies regional systems of tourism statistics (even to the point where there is often no table of macro-magnitudes that may be taken as a benchmark for calculating the economic contribution of tourism) means that serious consideration should be given, as a first step, to the possibility of using estimation techniques for the main variables of the economic contribution of tourism. This initial exercise will serve not only to determine the need for future information in the form of statistical operations to further the progress towards an R-TSA but also to raise awareness of tourism and, in so doing, generate the necessary political interest in and financial commitment to strengthening the tourism information system;
- lastly, and needless to say perhaps, where countries do not have an TSA project, it would be inadvisable for a region with substantial tourism activity not to initiate the process of formulating its own R-TSA project.

5.12. Three years after the Iguazú Conference, the United Nations Statistical Committee approved in its 2008 session the new standards of tourism statistics presented by UNWTO; since then, the following initiatives launched or supported by UNWTO have paved the way to promote INRouTe and assume that the work carried on “will form the basis for future UNWTO guidelines on the measurement and analysis of tourism from the sub-national perspective. This perspective is crucial for a better understanding of the spatial distribution of domestic tourism (both in terms of flows and in terms of economic contributions), an issue recurrently highlighted by several UNWTO Member States as being of utmost importance” (INRouTe/UNWTO 2012, Abstract).

The following initiatives have been the most relevant ones:

- Philippines/Cebú 2008- Sixth International Tourism Forum for Parliamentarians and Local Authorities;
- Spain/Malaga, 2008 - UNWTO International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, “Knowledge as Value Advantage for Tourism Destinations”;
- Spain Donostia/San Sebastián- MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism;
- UNWTO/INRouTe Cooperation Agreement 2011;
- Spain/Bilbao - MOVE2011 2ndInternational Conference on the Measurement and Economic Analysis of Regional Tourism;
- Italy/Venice, 2012-INROUTE first Seminar on “Regional Tourism: setting the focus”;
- Colombia/ Medellín - MOVE2013 American Chapter 2ndInternational Conference on the Measurement and Economic Analysis of Regional Tourism;
- Italy/Venice, 2014 - INROUTE second Seminar on Regional Tourism: Moving towards a Regional TSA approach;
- UNWTO Statistics Committee sessions.

All of them have contributed to the production of a significant number of national initiatives related with the measurement of tourism at subnational levels as well as R-TSA exercises being the Flanders-Brussels TSA projects the last of them.

C. Complexity of the regional measurement of tourism

5.13. As previously stated (see INRouTe/UNWTO 2012, para. 3.5), “there are many aspects of the measurement of tourism at the national level that are quite different when compared to cases of sub-national scope”: this is true both for demand and supply. That

is to say that the scope of sub-national tourism is not a mere disaggregation of national tourism; it also has its own thematic singularity and technical complexity when it comes to its measurement.

5.14. **Regarding regional demand**, in addition to the main issues addressed in Chapter 3, section D.2, the following ones are particularly relevant as well:

- Tourism trips undertaken by the resident population has greater importance because the measurement and analysis of national domestic tourism can only be improved from a sub-national perspective (and this implies setting a link between tourism and territory), and requires also to learn from the experience of mobility researchers (see Chapter 2, section D.2);
- In fact when considering the adaptation of national TSAs to subnational levels, it becomes evident that the use of data derived from national household surveys used for measuring domestic tourism are not so robust (in statistical terms) as assumed; a main reason could be that the use of such surveys are more short term oriented and lack of a proper sample size so as to derive the main indicators needed for setting up an estimate of the economic contribution of such form of tourism;
- Demand side surveys at the national level have not always been designed to provide regional estimates. In the case of domestic tourism surveys, the possibility or not to generate an Origin/Destination matrix of intraregional flows of trips/visitors makes the difference (see Chapter 3). The IRTS2008 states “for sub-national analysis of domestic tourism, it is also essential to characterize trips according to the place of usual residence of the visitor, his/her personal characteristics and the main destination of the trip. This information, usually collected through household surveys, is often represented in matrices showing the number and duration of trips by origin and destination”.

5.15. **Regarding regional supply**, in addition to the topics addressed in Chapter 3, section D.2, the following issues should be sufficient to raise the need for setting up an agenda for improving its measurement:

- the concept of “tourism sector” (see Glossary/Tourism Sector) is not always appropriate at sub-national levels due to the fact that a cluster of existing number of production units in different tourism industries might not be significant at such territorial level (for the criteria used to determine “significance”, see also Glossary/Significance);
- the identification of tourism industries at the regional level might justify, in some cases, the consideration of, for example, the producers of souvenirs, jewelry and handicraft as tourism related activities, while this would not necessarily be the case at the national level (in the case that the associated expenditure were marginal or scarcely significant);
- also vacation homes (or more precisely, accommodation services associated with all types of vacation home ownership), as a peculiar type of tourism industry, might deserve special attention in some regions (see Libreros (2010) and Cañada, (2010));
- the measurement of passenger transport is almost impossible to approach exclusively from the regional perspective (as it is normally necessary for the national information to be disaggregated using some kind of ad hoc indicators or parameters); also interregional trade in tourism characteristics products (both goods and services) should be mentioned as very problematic because it is not so easy to measure what one region produces and which part of it is consumed by visitors in another region;
- while at the national level it would be possible to justify not prioritizing certain issues (like the measurement of the tourism contribution of special events, the

Meetings Industry and its tourism connection, the expenditure associated with the maintenance of vacation homes, the phenomenon of same-day visits, linking tourism expenditure to the main purpose of the trip, etc.), these could be of priority interests for certain regions where tourism is significant.

5.16. There are many other examples but when looking to the structure of tourism industries, these two particular issues should deserve special attention:

- one of them refers to the challenging issue of setting up an articulated set of data at national and regional levels based on particular national surveys such as Business Registers or Annual Industrial Surveys due to the use of different statistical units (enterprise and establishment). For a better understanding of such complexity, see Annex 21.

Certainly the effort carried on in Poland tempting to develop a harmonized approach for setting R-TSA in all 16 regions (in terms of NUTS 2), illustrate that such articulation is a challenging issue and might deserve a project by its own (see “Methodology of the regional tourism satellite account for Poland –concepts and feasibility study”, EwaDziedzic and Teresa Skalska –see Dziedzic,E and Skalka,T,2014-). Also MacFeely S., Delaney J. and O’Donoghue F (see MacFeely et al. 2012) have carried on a detailed project applied to Ireland

- the other issue has been highlighted by Calvin Jones (Jones, 2005) (when discussing about regionalizing the national TSA), and refers to the irrelevance of using “national averages” for regional measurement in regions where tourism is significant.

“Perhaps, however, a strength of the R-TSA approach is also its most striking limitation: standardization of structure across regions. This will impact upon usefulness and accuracy. For example, as Statistics New Zealand points out ‘tourism activity’ may comprise whale watching in one of its regions, skiing in another. It may be difficult to construct a classification and survey system that is flexible enough to deal with these difficulties. More importantly, unless there is a full set of regional Input-Output Tables upon which to base the R-TSA it is likely that national ratios for important aspects such as industry production functions, or imports of products (here including inter-regional imports of course) must be adopted, or adapted (via the use of indirect measures). This may lead to significant (and invisible) error in regions where the industrial structure or activity varies significantly from the national ‘average’ – surely the case for many touristic regions. Meanwhile, the institutional platform for a R-TSA would have to be carefully considered. Regional stakeholders may feel aggrieved at a lack of involvement in TSA development, particularly if they feel results are not tailored to their needs. There may also be a tension if the timescale of national development is slow. Consider the UK: London, for example, might have used TSA results to inform its bid for the 2012 Summer Olympics, and the city has adequate resource to develop such a tool; yet the statistical and accounting expertise exists largely within the national statistical agency, which is largely uninvolved in TSA development at national, let alone regional level.” (Jones, 2005).

D. Clarifying the adaptation of the TSA to subnational levels

5.17. UNWTO has summarized as early as 2005, the two possible methodological approaches to do so (see WTO 2005, paras. 3.1 and 3.3):

- “*the interregional approach*, which would be common to all the regions of the national territory and based on and intimately linked to the System of National Accounts. It is an approach that relies on the existence of a TSA and the availability in each region of uniform tourism information for each of the tables and aggregates

to be regionalized. An example of this approach is the regionalization of a TSA (**identified as TSA-R**) in Australia, Canada, Norway and others;

- *the regional approach*, which would entail the presentation of a given region, in which tourism is particularly significant, provided there is sufficient information for so doing. The TSAs of Scotland, Wales, Andalusia, Madrid Flanders, and others would be examples of this second approach, **identified as R-TSA**.

For either of these approaches, the first thing to note is that no conceptual framework exists at regional level equivalent to the System of National Accounts. The SNA93 does not define a specific framework for regional accounting; nor are the general statistical systems of most countries designed for this purpose. When mentioning regional accounts, they refer to a table or macro-magnitudes but never to a set of associated accounts developed to a similar degree”.

- 5.18. Researchers and practitioners working all these years on regional tourism measurement have accepted that the first option could be identified with the use of “top-down” accounting approach while the second option would be associated with a “bottom up” approach. Such terminology might be mainly associated to European national accountants when referring to regional accounts: the term “methods” refers to the particular type of data collection used by EU Member States in order to estimate regional accounts and aggregates. In fact the Eurostat Manual on Regional Account Methods (see Eurostat 2012) refers to “Methods of regionalization” in two different, although complementary ways: data requirements for regional accounts and compiling practices (labeled as “bottom up / top down/ mixed methods”).

It seems that the translation of this wording to TSA development at subnational levels is not really appropriate.

- 5.19. More precise is the terminology used by Cañada (2013) referring to methodological approaches (avoiding the term “methods”): “regionalization” (of a national TSA) and “regional estimation” (of a TSA for a specific region, “just as one would calculate a national-level TSA”) (Cañada. 2013 para 1.2). It seems obvious that setting up a R-TSA requires, as a minimum, both the regionalization of a national TSA if available, as well as supplementary regional surveys and modeled data: this will be the content of section 5 focused on the second approach already mentioned.

- 5.20. This section will refer exclusively to the first methodological approach (regionalization of TSA) which builds on:

- the expertise and institutional competences of National Statistical Offices;
- the same data sources as those used for the National Accounts as a whole;
- allocation methods used for regionalizing national data in National Accounts will probably be the same or a very similar one;
- quite probably the publication of the commodity breakdown of supply and demand and the disaggregation of the GDP and employment by industry will not be so detailed as in the TSA;
- conceptually there are no significant differences with the TSA except for the need to define the different forms of tourism at the regional level (see Glossary/ Regional Tourism);

INRouTe has not much to say on this regard but learn about how such approach can contribute to set up of R-TSAs; an alternative, which implies a much more expensive and time demanding approach but provides also a more powerful instrument to foster regional tourism measurement, policy design and analysis.

- 5.21. The following paragraphs (Jones. 2005: 5) provide a summary of major benefits and statistical constraints of the regionalization of TSA approach:
“TSA-R has a number of benefits. Firstly, it should produce results that are regionally comparable and consistent within the nation. Secondly, it may be undertaken at relatively low cost particularly if there are good quality demand and supply surveys that can be regionalized – and the full use of such resources should be optimized. There are also institutional implications to a centralized approach. It will involve the national statistical agencies, ensuring a considered approach to the conceptual difficulties, and the proper use of concepts and methods. TSA-R may also be more easily integrated into national series of variables – for example timely indicators of gross value added – which will aid the production of up-to-date results. Finally, and importantly, a TSA-R project, which starts from the national TSA results should be quickly credible and believable in the eyes of politicians and officials within central government.
- 5.22. The TSA-R approach relies very heavily on nationally constructed business and consumption surveys. Hence a full regional stratification of business inquiry, household and tourism surveys is a key requirement. Surveys of business are not always stratified to ensure an adequate return for each industry for each region, and this will be a significant difficulty in TSA construction. Similar problems may arise with surveys of tourists, particularly if international entry/exit points are used for surveys and these are regionally concentrated. There are significant methodological (not to mention conceptual) difficulties involved in allocating tourism consumption arising from a multi-region trip. Moreover, where tourism is concentrated in non-industrial or less populous regions, survey sample sizes may seriously hinder reliability and accuracy, unless TSA requirements are explicitly part of the survey design (this is rare at the moment). It is important that in addition to statistical and sampling issues, conceptual and methodological approach for national surveys is adequate to regional applications”.
- 5.23. As pointed by Peter Laimer (2012, para. 1.2), “the development of R-TSAs follows in principle the same steps and methodological requirements as those for national TSAs. Nevertheless, the statistical challenge is to regionalize the national TSA, and to guarantee consistency with the national TSA as with the Regional National Accounts. Apart from statistical obstacles, the characteristics of tourism demand and supply differ according to the individual regions”
- 5.24. It might also be worth mentioning some comments and suggestions provided by UNWTO (see WTO 2005) reproduced below:
“For the “top-down” TSA-R approach to be feasible in a country with an TSA, it is essential to have access to a set of homogeneous tourism-related regional indicators so that the national aggregates may be regionalized”. (para 7.1 within WTO 2005).
“The fact that a country does not have Regional Economic Accounts is no impediment to regionalizing the TSA on the basis of those indicators. It would, however, be wise to qualify the estimation as experimental and to spell out the most significant limitations of the exercise. A consequence of this exercise will surely be that regions with appreciable tourism activity will be encouraged to consider the desirability of promoting an R-TSA project”. (para. 7.2 within WTO 2005).
“To ensure that it has the desired legitimacy, the TSA should be regionalized by the same technical unit that prepared the TSA (usually the National Accounts Department of the corresponding NSO)” (para. 7.4 within WTO 2005), in cooperation with key tourism stakeholders representative institutions.

“For its part, the credibility of the results of an exercise of this kind depends on the fulfillment of two requirements:

- that nationally constructed business and consumption surveys be based on full regional stratification samples; and
- that the indicators and statistics used are representative of each of the regions”.

5.25. However, because of the very nature of tourism (which involves a number of industries) and its relation with the territory, the existence of homogeneous indicators cannot always be guaranteed in advance”. (para. 7.5 within WTO 2005).

“Since all these circumstances do not normally coincide, the work associated with the TSA-R should follow a pre-agreed plan to ensure that the results achieved, in addition to having the credibility expected by the institutions belonging to the aforementioned cooperation network, are available on a database that may be accessed by them.” (para. 7.6 within WTO 2005).

5.26. Tourism practitioners (including tourism officials who commission surveys and research, and those who undertake such surveys) are usually not aware of the great complexity and technical expertise required for what national accountants call reconciliation process particularly in setting up Table 6 in TSA: reconciliation between supply and demand is something that quite probably national accountants are the only ones that could deal with.

5.27. The regionalization of the TSA requires also a reconciliation process in order to guarantee internal consistency between TSA and all regionalized accounts (see Kosovo, 2010 and Van Ho et al. 2008).

5.28. UNWTO has suggested that a TSA-R project should include, if not all at least some of the actions outlined in the following table.

Table 2 Actions to be included in a TSA-R approach Source: Adapted from WTO 2005 Chapter 7, pp.24

Action proposed	Objective
(i) Constitution of the Regional Inter-Institutional Network for R-TIS	Responsibility for and permanent monitoring of the process
(ii) Formation of a Technical Committee and of regional executing units	Technical supervision of the process and formation of regional technical teams
(iii) Assessment, from a regional and global perspective, of the tourism statistics and national accounts available and analysis of their quality and consistency	Updated inventory of statistical resources available at national level
(iv) Formulation of a Joint Programme of Statistical Research on Tourism with a view to regionalization	A requirement of the process. Harmonization of methodologies and definition based on the prospective needs of the TSA for information on tourism supply and demand
(v) Analysis of the terms of reference of the programme defined in (iv) above and incorporation of the relevant adjustments. Development of the final programme.	Exchange of technical views and search for consensus
(vi) Familiarization of the national and regional technical teams with the terms of reference of the Programme defined in (iv) above with a view to its orderly execution	Guidelines for the orderly execution of the new Statistical Research Programme
(vii) Determination of characteristics and application of specific modules on intraregional/national tourism trends and seasonality	Specific module applicable at regional level

Action proposed	Objective
(viii) Specification of characteristics and application of specific modules on trends in regional/national tourism employment full- and part- time jobs, productivity, etc.	Specific module applicable at regional level
(ix) Specification of characteristics and application of specific modules for determining expenditure associated with domestic tourism	Specific module applicable at regional level
(x) Training at regional level in statistics and the tourism satellite account	Application to the Regional Inter-Institutional Network for R-TIS
(xi) Analysis of the quality of the statistical information collected and construction of regional databases	Upgrading of the statistical information collected
(xii) Centralization of regional information and construction of a national database. Specification of regional indicators	Use of the statistical information collected and definition of a preliminary set of indicators
(xiii) Decision on a set of basic regional indicators for the estimation of regional tourism accounts. Analysis for consistency and quality. Participation of bodies responsible for regional statistical research and of executing units.	Agreed specification of indicators for use in the regional disaggregation of the TSA. Interregional/national implications
(xiv) Preparation of a set of specific regional and national indicators on investments associated with the tourism sector	Gathering data on the subject in question, hitherto virtually non-existent
(xv) Decentralization of information: construction of tourism satellite accounts at regional level	Estimation of preliminary accounts

E. Setting up a Regional Tourism Information System (R-TIS) as a prerequisite for developing a Regional extended TSA exercise

E.1. Cautionary remarks about the term “system” in official UN and UNWTO documents

- 5.29. The System of National Accounts (SNA2008) is a standard accounting system that summarizes the transactions within the economy and the rest of the world. More specifically, the system of national accounts represents an integrated set of standard concepts, definitions and classifications applicable to the most important macrodata of economic statistics.
- 5.30. SNA 2008 gives great flexibility in the design of functionally oriented satellite accounts, as the objective of such accounts is to focus on specific aspects of an economic domain, escaping from some constraints of its central framework. As a consequence, for a specific domain, various designs of satellites accounts are possible, focusing on different aspects considered of more particular interest, and this is the case of tourism.
- 5.31. The Tourism Satellite Account is an example of an extensive form of such flexibility allowed by the present National Account System (SNA 2008): as the term “satellite” indicates, TSA is linked to, but distinct from, the central statistical system.
- 5.32. The UN Handbook of Statistical Organization, Third Edition (New York 2003), identifies the concept of a National Statistical System (NSS) with three basic components: the institution/s that support it (the central statistical agency and eventually, regional statistical offices), the coordination tools (a set of concepts, definitions, classifications, basic data and indicators), and other institutional arrangements (being governance a significant issue).

- 5.33. For a national System of Tourism Statistics (STS) be a proper sub-system of the NSS, a medium/long-term perspective is required; both the official documents of the two international standards on tourism statistics (IRTS 2008 and the TSA:RMF 2008) as well as UNWTO IRTS 2008 Compilation Guide provide clear guidance on how such process should be articulated.
- 5.34. The basic message although not even explicitly mentioned is that the focus of such medium/long-term process should follow a “systems approach”. In statistics, applying a systems approach to organize information in any particular thematic areas means the application of concepts, definitions, classifications, accounting rules and principles of recording consistent with those of the System of National Accounts.
- 5.35. In the case of tourism, such approach has been followed in the 2008 international standards on tourism statistics; because this document follows a statistical founded initiative to adapt such standards, the conceptual design of the R-TIS uses also such an approach.
- 5.36. “The STS is defined as a set of components of a statistical nature which are structurally mutually connected and comprising:
- the statistical sources themselves;
 - the corresponding data derived from them (i.e. statistics drawn from surveys, administrative records; statistics of a synthetic nature – like the TSA - etc.);
 - the specific tools, methodological references and instruments used at some stages of the process (as is the case of concepts, definitions, classifications, databases, etc.); as well as
 - The instrumental and organizational resources used in all these processes.” (UNWTO IRTS CG 2008 para. 1.8).
- 5.37. The development of a national STS is closely linked with the implementation of a Tourism Satellite Account (TSA). “A TSA provides the conceptual framework and the organizational structure for the integrating of most tourism statistics with each other and with the other economic statistics (mainly National Accounts and Balance of Payments data). In order for the TSA to be such an integrated framework, the same conditions as those required for the System of National Accounts (SNA 2008) should apply: tourism statistics should be coherent (the same concepts, definitions and classification should apply to all related components) and consistent (measurements related with each component should be commensurable so as to be integrated within a unique analytical framework”. (UNWTO IRTS 2008 Compilation Guide para. 1.4).

In fact, this link between both the IRTS 2008 and the TSA 2008 and the source of data used in their compilation provides the foundation for the establishment and maintenance of improved national systems of tourism statistics.

- 5.38. As stated in the TSA:RMF 2008 para. 1.17, the TSA should be considered from two different perspectives:
- As a statistical tool that complements those concepts, definitions, aggregates and classifications already presented in the International Recommendations for Tourism Statistics 2008 and articulates them into analytical tables which provide elements for comparing estimates between regions, countries or groups of countries;
 - As the framework gives guidance for countries in the further development of their system of tourism statistics, the main objective being the completion of the Tourism Satellite Account, which could be viewed as a synthesis of such a system.

- 5.39. It should be clearly mentioned that tables 8 (Tourism gross fixed capital formation of tourism industries and other industries) and 9 (Tourism collective consumption, by products and levels of government) of TSA lack of a robust approach, given that TSA is no accounting system.

As stated in the TSA:RMF 2008 official document:

- “the estimation of a tourism gross fixed capital formation aggregate is suggested in order to guide further statistical development and research in those countries where tourism is especially relevant, but no specific aggregate will be used for international comparisons” (TSA:RMF 2008, para. 4.107);
- “the estimate of tourism collective consumption is proposed as a useful statistical exercise only and will not be used for international comparisons” (TSA:RMF 2008, para. 4.112).

(For more details, interested reader should see Annex 33)

Because the TSA is not a proper accounting system (by comparison to the central statistical system associated to the National Account framework), tourism statistics cannot be labeled at present as a proper statistical system. This understanding is in line with IRTS 2008 para. 1.36: The IRTS 2008 highlight that the concepts, definitions, classifications and indicators presented “should be viewed as an important foundation of the system of tourism statistics. As such, they should be used as a reference for coordination, reconciliation and interpretation of the information in the area of tourism, although this information might extend beyond the still restricted domain these Recommendations touch upon”.

E.2. Linking national and regional tourism information systems

- 5.40. UNWTO has provided guidance on how to expand national STS in order to provide with the information required by key tourism stakeholders: although being the basic core of national Tourism Information Systems (TIS), official statistics data should be supplemented with other data and indicators. The following paragraphs (included in UNWTO (2011b), paras. 17. and 18.) provide some examples of this new type of data.

The national STS, i.e. basic tourism statistics and indicators as well as TSA aggregates, “should be the foundation for a reliable and accurate national Tourism Information System (TIS). The TIS might also include supplementary statistics, non-statistical information, and additional types of indicators. This new set of information should be designed for national purposes only. Special attention should be given to the following set of indicators:

- **‘early warning’ indicators** could be derived from sources such as credit card records as well as air traffic slot allocation data. Both types of data are administrative information (as arrivals figures are) and some countries have already experience in deriving these indicators which have proved of great interest for analysis....;
- **short-term performance indicators of tourism industries’ turnover and employment** could be derived from administrative records produced by official sources such as fiscal sources and social security schemes....; and
- **business cycle indicators** could be derived from business tendency surveys. This type of qualitative information (based on answers of staff personnel in some key tourism industries such as accommodation or travel agencies) is widely used in most countries for non-service sectors. ...”.

- 5.41. Because of all cautionary remarks about the use of the term “system” previously mentioned (using official UN and UNWTO documents and being the focus the national level), it is obvious that the conceptual design of a Regional Tourism Information System (R-TIS) as defined in this document cannot be understood as a proper “system”, nor should the concept “regional statistical system” be used.

Nevertheless, such design follows a “systems approach” because this document follows a statistical approach to adapt 2008 International Standards on tourism statistics to subnational levels.

- 5.42. Consequently, the conceptual design of R-TIS respects the recommendation in IRTS 2008, and it might be appropriate to remember that these recommendations suggest, as a first approach, “that national statistical offices, tourism authorities and/or other organizations with direct responsibility for tourism statistics promote the use of national instruments to collect tourism data at the regional and local levels using a common set of definitions, based on the present IRTS 2008, para. 8.29); if “this first approach is not feasible or is not considered completely satisfactory, especially in those regions where tourism is particularly relevant, the regional tourism authorities might wish to complement national data with other data in order to design policies and foster economic analysis tailored specifically to their own regions. In this case it is recommended that these new data follow international and national statistical standards and recommendations”. (IRTS 2008, para. 8.31).

- 5.43. As stated in chapter 3, the proposed basic set of statistical data and indicators- no more than 15- to be obtained from R-TIS for comparability purposes (both internationally and intra-nationally) should be considered as a minimal requirement for analytical purposes. For instance:

- The information selected is considered to be the minimum required input for modelling exercises. (Data modelling techniques are used extensively to derive synthetic estimates when the cost of obtaining small area statistics is too great to obtain them from a survey.) To the extent that this is the case, the initial information set would be complemented by indicators obtained from such exercises, always taking note of the effects on comparability (e.g. indicators of job creation, pollution generated by tourism industries, same-day visitors, average daily expenditure referring to different sub-sets of visitors, etc.); (Additionally, please see Annex 22);
- Both sets of information (statistical data –basic data and indicators- and synthetic estimates) and other indicators would make it possible to advance in both the macroeconomic analysis of tourism and in the design of instruments such as the regional TSA, social accounting matrices, general computable equilibrium models, etc.” (para. 4.18 of UNWTO/INRouTe (2012) “A closer look at Tourism”).

- 5.44. It should also be mentioned that the six sources identified (Border survey - Domestic tourism household survey - Accommodation survey - Statistical business register - Structural business survey - Population census) enable setting up an articulation between national level data and regional level data. This should be understood as a priority objective in terms of the measurement of regional tourism and the development of a Regional Tourism Information System (R-TIS). Such an articulation nation-region will produce a conceptual and data framework for analyzing interregional tourism within a harmonized framework; and in so doing, will also contribute to international comparability between regions. (para. 5.12 of UNWTO “A closer look at Tourism”).

- 5.45. Also a cautionary remark seems quite appropriate about the temptation to think that setting up a R-TIS requires necessarily that national surveys could expand their sample size for specific regions where tourism is particularly significant: before so doing, This document suggests to evaluate if this extra cost could be justified in terms of the complementary amount of records to be obtained (see para. 5.14).
- 5.46. An additional remark seems also fitting in the context of this chapter: it refers to the statistical relevance of the number of basic data and indicators that should be included in the R-TIS regarding “*Tourism and sustainability*”. This is not a trivial remark because usually the measurement of tourism in a sustainability perspective refers to the same indicators that those measuring tourism as an economic sector (notably arrivals and overnights figures). The Sustainable Tourism Indicator System for Andalucía is a best practice example of properly addressing the complexity of a set of indicators for such purpose (see following Box).

Box 6. New Utilities for Regional TSA Information System: Sustainable Tourism Indicator System for Andalucía

Partial reproduction of the publication Gallego, I and Moniche, A. (2014) *New Utilities for Regional TSA Information system: Sustainable Tourism Indicator System for Andalucía* as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.

In the case of Andalucía, the elaboration of a R-TSA has been favoured by the following facts:

- The importance of tourism in the regional economy
- Decentralisation in terms of tourism policy in Spanish regions
- A well developed regional statistical system: the regional Statistical Institute (IECA) has produced Regional Accounts since the year 1975 with updates every 5 years.

The first experience on R-TSA in Andalucía was the pilot experience for the year 1995; since then, such exercises are updated every five years. Such a process has been a major input for identifying main gaps of statistical information and methodological differences between demand and supply statistics previously used, as well for reshaping the evolution of the system of tourism statistics.

In fact, as important as the R-TSA publication every five years, is the required process of elaboration and the methodological requirements imposed by the production of a TSA. First of all, the satellite methodology implies being part of the total system of the economy of reference and in addition, the fulfillment of UNWTO requirements for the TSA has configured the Statistical System for Tourism in the region of Andalucía. Therefore, the elaboration of R-TSA since 2000 has helped Andalucía to produce, not only a high volume of statistical information for tourism, but also to focus on the quality of these statistics in order to obtain a better understanding of tourism activity and its components (demand and supply) and the connections between them.

In the case of Andalucía the experience acquired during the production of subsequent R-TSA exercises has eased the process of creating a complete system of tourism statistics, providing not just the information and the interrelation with economic accounts but favouring the development of the System of Sustainable Tourism Indicators dynamic and interrelated not only with the economic accounts but with the environment, the cultural sector, the territory and with the destination as a whole.

Chapter 6. Measuring tourism and sustainable development at sub-national levels: setting the focus

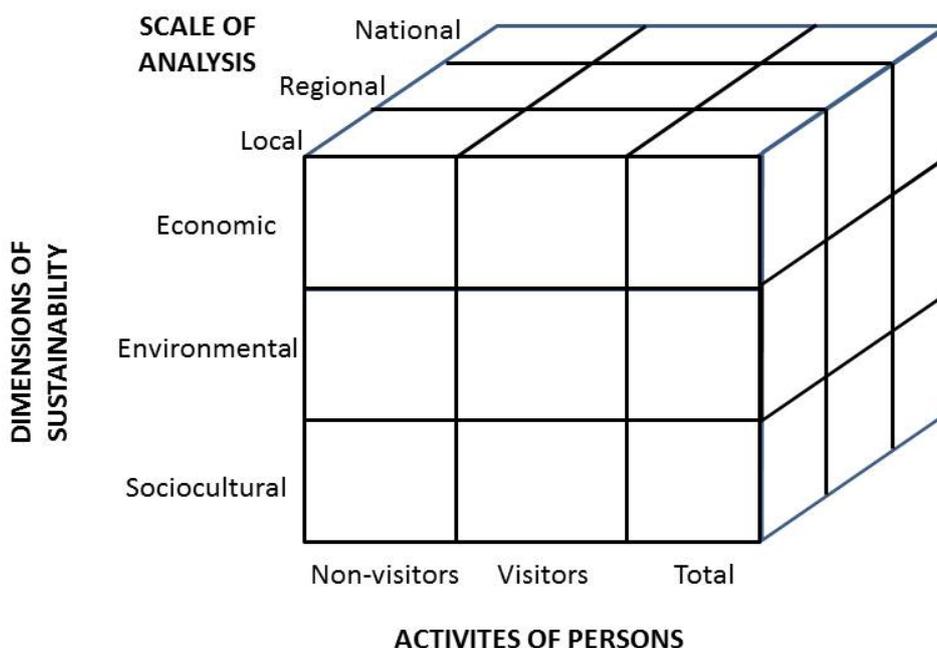
A. Introduction

- 6.1. This chapter identifies some issues of particular relevance to the measurement of tourism in relation to sustainability that have not always received the attention required. This might have been due probably to the fact that the concept of sustainability is a "policy concept"; therefore there is no agreed definition of sustainable tourism that might be directly amenable to measurement. At this time, it may be premature to spend significant resources to determine a singular definition; however, it is likely to be necessary to be able to describe the elements and perspectives relevant to sustainable tourism such that the work on developing the statistical framework is scoped appropriately. The description of sustainable tourism will reflect a combination of the user requirements and a general understanding of sustainable development as encompassing economic, environmental and social dimensions.
- 6.2. The conceptual design developed for setting up the R-TIS as proposed in this document (see Chapter 3) is supported by the understanding that the central core of such a system should allow for scalability of particular sets of layers of information; such concepts should be properly understood (see para. 3.27):
- **Scalability:** Refers to the integration of information across different spatial scales with the aim of developing information sets for particular type of analysis at a level suitable for public policy purposes as well as for key tourism stakeholders interest.
Indicators, aggregates and totals may serve many purposes depending on the scale at which they are applied, on the audience to be reached, and on the quality of the underlying data.
Scalability might be associated to rearrangement of data meaning the procedure to reorganize information sets produced in a research area in order to be used in others; this is the case of INRouTe's proposed set up of a R-TIS in which the set of statistical data should be generated by articulating different type of information layers (see Statistical information-layers-)
In this document, , scalability is associated to the geo-reference of basic data and indicators at the sub-regional level; re-arrangement implies using own classification categories in order to use such information for analysis purposes.
In the particular case of linking tourism and environmental sustainability, scalability should require the use of GIS at the level of cadastral units in order to integrate in such scale resident population, visitors, accommodation establishments and use-activity of visitors, as the main set of data; supplementary data such as other establishment in other tourism industries, tourism natural and build resources, etc, should also be geo-referenced in due time
 - **Statistical information (layers):** It is proposed that the articulation of a basic core of national / regional layers of statistical data derived from available national statistical sources on economic, environmental and socio-cultural dimensions of sustainability is the main priority in the setting up of a R-TIS. In due time, a second type of layers are also suggested by extending such link to sub-national levels such as other sub-regional administrative or analytical units, municipalities, multi-local (more than one municipality), other local administrative or analytical units. for such purpose it might be necessary to

develop sub-national statistics for any of such dimensions. The term “articulation” implies linking with statistical rigor national and regional data used to measure the same variables.

- 6.3. The operationalization of such concepts allows to set up an integrated information system with three basic axes: activity of individuals (being tourism the main focus), territory (using different scale of analysis) and sustainability (including the three dimension: economic, environmental and sociocultural). Such a system implies the coherence of data used in terms of international statistical standards.

Figure 1. Integration of tourism statistics in a broader context. Source: Hernández Martín, R. (2015)



- 6.4. From a statistical perspective, tourism statistics should look for the integration in a broader measurement framework; this document has a statistical focus and refers to the subnational dimension but not all the three dimensions of sustainability are equally addressed:
- Tourism statistics international standards (IRTS 2008 and the TSA: RMF 2008) refer basically to the economic dimension and this document has been conceived as a guidance reference to adapt such standards to subnational levels;
 - Being statistical standards, the 2008 documents share a systems approach (see Glossary) with others such as the System of Environmental and Economic Accounting (SEEA_CF 2012) and complementary documents (SEEA Experimental Ecosystem Accounting, SEEA Applications and Extensions, and the Framework for the Development of Environmental Statistics –FDES 2013);
 - There is no such integrated approach between 2008 tourism standards and environmental statistics standard (the Framework for the Development of Environmental Statistics –FDES- 2013). Nevertheless, FDES2013 document suggests some initiatives where the INRouTe project might contribute for a closer approach between these standards taking advantage of the new paradigm arising from the SEEA: space is related to assets that provide services (see Annex 16 on SEEA data for tourism);

- There is no attempt in this document to consider any similar link between tourism statistics and socio-cultural statistics; the only references are the use of Population Census and employment data for setting up of a R-TIS and the potential of two shared characteristics of culture (the fact that both are territorial based activities and labor intensive sectors) that could set up a common statistical agenda between UNWTO and UNESCO in due time.
- 6.5. From a different but related perspective, the United Nations has adopted the 2030 Agenda for Sustainable Development; its 17 Sustainable Development Goals (SDGs) and corresponding 169 targets, will apply to all countries. Tourism is explicitly mentioned in the SDGs in three targets:
- Goal 8, on the promotion of “sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”, includes as Target 8.9 “By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”;
 - Goal 12 aimed to “ensure sustainable consumption and production patterns” includes as Target 12.b to “Develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products”;
 - Goal 14 set to “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” includes as target 14.7 “by 2030 increase the economic benefits of SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism”.
- 6.6. As already mentioned, UNWTO is convinced that this document can contribute to the objectives of the 2030 Agenda for Sustainable Development in the understanding that tourism measurement at subnational levels might be useful to apply it in due time (see para. 2.6).
- 6.7. For that to happen, the recommendations included in this document in order to set up a R-TIS should allow to integrate tourism statistics developed at those spatial scales used by the Ecosystem Accounting framework.
- 6.8. The following paragraphs provide recommendations about how tourism statistics should look for the integration in a broader measurement framework regarding the three economic and environmental dimensions of sustainability.

A.1. The economic dimension

- 6.9. The relationship between tourism and sustainable development in terms of its statistical measurement was introduced for the first time in the IRTS 2008 document in sub-chapter 8/D; as can be checked in box 7, all along the 12 paragraphs, the scope of its measurement at national and subnational levels imply a very different focus.

In 2006/2007, when the final phase of drafting the IRTS document to be presented to the UN Statistical Commission meeting in 2008 was taking place, UNWTO was not active in the world-wide discussion (officially launched by the UN Statistical Commission by 2005) for a consolidated approach after the experience of successive updates of the *Handbook of National Accounting: Integrated Environmental and Economic Accounting* (United Nations, 1993).

The Statistical Commission determined that the revision of the IEEA should first proceed as a proper area of work with the development of a Central Framework covering those issues on which there had been general international agreement (in fact, the new System of Environmental and Economic Accounting (SEEA) Central Framework document was approved by 2012), and then proceed with the development of material covering those issues on which agreement was not likely to be reached within the timeframes available and on which on-going research and discussion would be required. (SEEA_CF 1.16).

- 6.10. Such second area of work became focused on accounting for the environment from the perspective of ecosystems. While SEEA Experimental Ecosystem Accounting is not a statistical standard, it provides a consistent and coherent synthesis of current knowledge regarding an accounting approach to the measurement of ecosystems within a model that complements the SEEA Central Framework 2012 document (SEEA_CF 2012).

Also during the revision process, a need emerged for material covering potential extensions and applications of SEEA-based data sets, which would fulfil the aim of promoting and supporting the widespread adoption of the SEEA among official statisticians, researchers and policymakers. To this end, SEEA 2012 Applications and Extensions was developed.

- 6.11. The SEEA Central Framework document is also supported by publications that further elaborate the conceptual framework of the SEEA for specific resources or activities. These include, at present, the SEEA-Water and others such as the SEEA-Energy and the SEEA-Agriculture, Forestry and Fisheries are expected during 2017.

SEEA-CF 2012 and its complementary materials urges for the update of IRTS 2008 paras. 8.33 to 8.45 (reproduced in Box 7) in order to properly clarify the differences between the macroeconomic and national approach for Tourism and Sustainable Development (identified with the Tourism Satellite Account) and the subnational approach (also referred in IRTS 2008 as “empirical approach” identified with “indicators”).

Box 7. IRTS 2008 sub-chapter 8/D “Tourism and sustainability”

D. Tourism and sustainability

8.33. The issue of tourism and sustainability is an increasingly important one and any measurement of tourism and its effect on an economy must take into account the social, economic and environmental impacts. Links with the latter component should be a high priority.

8.34. Nature in its pristine form (mountains, beaches, tropical forests, deserts, etc.) or transformed by humans (landscapes, cultural heritage, etc.) is an important attraction for some visitors.

8.35. But tourism also contributes to irreversible damage to the environment, through pressure on fragile ecosystems, through construction of resorts or roads that destroy the natural sites and heritage, through the pressure that is exerted on land, water and air and through diverse processes of all kinds generating pollution, discharge of residuals, erosion, deforestation, etc.

8.36. This damage may also affect the feasibility of new tourism development in given locations or the profitability of present tourism investments and, consequently, affect job creation and employment.

8.37. In the last 10 years, the growing awareness about the negative impacts associated with certain tourism practices, along with the general acceptance of the principle of sustainable development, has led the world community to reassess tourism activity in the light of its long-term economic, social and environmental sustainability.

8.38. In recent years, beyond the measurement of the economic contribution of tourism in terms of Tourism Satellite Account aggregates and other complementary and/or alternative modelling exercises,

an increasing number of initiatives have appeared at subnational levels in order to generate indicators for analysing, monitoring or evaluating the environmental implications of tourism development in specific areas.

8.39. Both approaches (macro-accounting and indicators) have their potential and challenges for measuring at different territorial levels the links between tourism and the environment and thus are recommended as the first priority regarding tourism sustainability issues.

8.40. The existence of both the Tourism Satellite Account and the system of environmental and economic accounts (SEEA) allows a country where both international recommendations are being developed to estimate the links between tourism and the environment at the level of the national economy. This could be done in two ways: (a) Incorporating tourism as a specific set of industries and of consumers within the hybrid flow accounts of the environmental accounts; (b) "Greening" the tourism GDP that is derived from the Tourism Satellite Account, taking into consideration the cost of the degradation of the environment and the use of the natural capital by tourism; expenditures that prevent degradation could also be taken into consideration as a further adjustment.

8.41. The core of this macro-approach at national level consists in establishing a more complex type of input/output matrix in which not only the "usual" inputs are considered, but also environment inputs are established in quantity, and output also includes waste, greenhouse gas emissions and other environmentally significant by products. Consumption of fixed capital would also include estimation of the degradation of the environmental assets. As the core of the Tourism Satellite Account is a representation of tourism industries and tourism consumption within a supply and use framework, it could be adapted into this type of analysis, provided both the Tourism Satellite Account and environmental accounts are compiled at a sufficient level of detail to allow some type of mutual integration. Nevertheless, leaving aside conceptual issues, there is increasing evidence that developing each type of account is not a straightforward exercise.

8.42. The second approach is more empirical and might be more appealing to countries in which existing tourism regions and destinations would be interested in the design of concrete and geographically-oriented goals and policies in terms of developing a more environmentally-friendly tourism with which all stakeholders might be associated, including visitors.

8.43. In this case, the focus would be to develop a set of indicators to highlight an interface between tourism and environmental issues that might identify phenomena or changes that require further analysis and possible action. Like other indicators, these indicators are only tools for evaluation and have to be interpreted in context to acquire their full meaning. They might need to be supplemented by other qualitative and scientific information, notably to explain driving forces behind indicator changes, which form the basis for an assessment.

8.44. These indicators might be used as a central instrument for improved planning and management, bringing managers the information they need when it is required and in a form that will empower better decisions.

8.45. It is recommended that linking tourism and sustainability be considered a priority.

- 6.12. To date, the first approach barely counts with a sufficient number of case studies that would enable the setting up of a methodological design to standardize how such a link between TSA and SEEA could be set-up. It may be expressly noted the pioneering exercise conducted by Statistics Canada during 2007/2008 (Jackson, Kotsovos & Morissette, 2008), and more recently the one included for Italy in the *SEEA Application and Extensions document*.

In any case, it is a national and macroeconomic approach that takes into account the entire country and on which the UNWTO has taken up the challenge of moving towards that goal. For both reasons, such an approach is beyond the scope of this document.

(Interested reader should see UNWTO Measuring Sustainable Tourism (MST), <http://statistics.unwto.org/mst>).

- 6.13. The subnational approach as referred in the IRTS 2008 is not linked to the TSA (which focuses on tourism as an economic sector) but just to “indicators” and has been preferred not only by countries but also by International Organizations such as UNEP, UNWTO, European Energy Agency, European Commission and others. In most cases the approach for such link between tourism and sustainability has not been statistics oriented and have been developed before the new international standards on tourism statistics (IRTS 2008 and TSA:RMF 2008) were approved by the UN Statistical Commission. Nevertheless, it would seem obvious that the adaptation of such standard to subnational levels should imply not just the measurement of the consequences of the flow of visitors on the sustainable development of the territory of reference but also the identification of tourism as an economic sector and its proper statistical measurement (which is a clear recommendation of IRTS 2008).
- 6.14. Moving from the generic concept of “indicators” to the rigorous measurement of tourism at subnational levels, requires understanding two types of connected initiatives:
- First it will be necessary to measure and analyse the volume of tourism activity in a given territory (which means taking into account the importance of tourism flows as well as the goods and services demanded by visitors). Formulated so, we would be giving priority to tourism destinations as the preferred observation unit (a territorial entity identified as an analytical unit);
 - For that purpose, it would be necessary to count with basic statistical data and indicators of the tourism sector in such destination (both from the demand and supply side –including employment and number of establishments of tourism industries-) likely to bring a structural approach to this sector (i.e., what are the magnitudes and basic parameters to address a rigorous economic analysis of the sector); that is, the objective should be allow for a descriptive structural analysis, with the desirable rigor and completeness to be developed for a multiannual period of reference (not necessarily to be carried out annually);
 - Secondly, the sustainability analysis (i.e., how tourism affects the overall sustainable development of such territorial entity) involves measuring both the resident and the tourism population and analysing how tourism activity does or not approach those objectives to ensure that their impact in terms of sustainability are zero or negative; that is, the objective would be to conduct a regular assessment of the corresponding impacts and contributions over those three components of sustainable development aforementioned.
- 6.15. Surely it is no coincidence that the limited experience available to address the measurement of impact / contribution of tourism to the sustainable development has not been particularly successful. At least three major reasons could be identified:
- Most of the experiences are initiated before the approval by UN in 2008 of the new international standards on tourism statistics that have proved to bring a solid conceptual framework to the measurement and economic analysis of tourism;
 - There has been no clear international leadership fostering the need for international comparability at least on the most researched dimension of sustainability: environmental;
 - The isolation of tourism statistics background from general economic and social statistics development: concepts like “tourism sector”, “tourism related employment”, “tourism population” and many others are not yet familiar within the tourism community (in particular, practitioners and researchers) but are key concepts in order to develop sustainability type of indicators .

- 6.16. As already mentioned (see Chapter 1, section C) one of the singularities of the INRouTe initiative vis-à-vis other projects or initiatives regarding tourism at sub-national levels is its statistical foundation by adapting the 2008 UN international standards on tourism statistics as well as the cooperation agreement with UNWTO. Such approach allows for a robust conceptual design of a R-TIS and its set up (for the provision of a set of basic statistical data and indicators –being its basic core the link of tourism and sustainable development-) in the perspective of measuring and analysing tourism in a standardized way in order to allow for comparability (both intra-national and international) of those regions where tourism is significant.

This approach jointly with the existence of a regional inter-institutional network for the setting up of a R-TIS (see Chapter 3, section E.2), should allow for a supplementary objective such as facilitating the incorporation of sustainability criteria in decision-making and management of tourist destinations by the corresponding key tourism stakeholders. In fact, the recommended design of the inter-institutional network points to such initiative as a key objective.

A.2. The environmental dimension

- 6.17. There are different types of arguments that underline the strong relationship between tourism and environmental sustainability and consequently, the need for a closer link regarding the measurement of both areas. For instance:
- Resources in and impacts on tourism and environment, respectively, tend to be highly concentrated in the territory. Tourism and environment cannot be understood without reference to the territory. They have both local, regional, national and global implications;
 - Tourism very often takes place in sensitive environmental zones, particularly coastal zones and natural protected areas;
 - Tourism development should be understood as a process respectful with territorial assets in order to make compatible territorial preservation and development;
 - The analytical and policy interests of tourism and environmental managers may not always be the same. Therefore, a way of using information from each of them and then being able to rearrange it is needed. Tourism managers may be interested in the impacts of a destination while environmental authorities may be interested for example in impacts taking place on a coastal basin due to more than one destination and also by non-visitors;
 - Tourism is both a factor in environmental negative impacts and a strong ally of environmental protection, given that it uses environmental resources and services in order to provide its own services;
 - Both tourism and environmental statistics have been influenced by the dominance of mainstream economic statistics: administrative borders, despite being misleading, are mostly used and the economic approach dominates. For example, there are not sound statistics on biodiversity or water consumption worldwide that can be used and integrated with tourism statistics;
 - Mobility of people is a key, but neglected, issue for both tourism and environmental statistics;
 - Environment and tourism statistical alliance can improve existing methodologies by putting the focus on the geographical scale and avoiding administrative limits (by also using analytical units);
 - Rearrangeability and scalability of information displayed in layers is the way of improving decision-making in transversal topics such as tourism and environment (see para. 3.27);

- The origin of tourism studies in many countries is related to national park management. This is an example of the sharing methods of tourism and environmental fields.

(For more details, interested readers should see Chapter 2, section D.2 as research areas” as well as Chapter 4, section C.2).

- 6.18. With such a focus, this document identifies three main priorities as strategic policy issues regarding the measurement and analysis of tourism at subnational levels:
- In order to bring credibility to regional tourism as a key driver of economic development there is a need for developing a proper conceptual design of a Regional Tourism Information System (R-TIS);
 - For comparability purposes (which is UNWTO responsibility as UN specialized agency for tourism) such R-TIS should have as its basic core official statistics;
 - Tourism activity impact environmental sustainability and consequently, those basic statistical data and indicators derived from such R-TIS should be applicable first of all to a regional level but also, in due time, to a regional/ sub-regional breakdown such as tourism destinations / cities.
- 6.19. The connection of such priorities should be based not only on the statistical framework of tourism statistics international standards (IRTS 2008 and TSA:RMF 2008) but also on other statistical standards related to environment statistics and the system of environmental economic accounting (UNSD et al., 2014: SEEA_CF 2012). The link of all these UN international standards has been supported by a common approach labeled as a “systems approach”, meaning that in any particular thematic area the application of concepts, definitions, classifications, accounting procedures and principle of recording must be consistent with those of the System of National Accounts (SNA 2008).
- 6.20. For that to happen it is crucial that tourism datasets at subnational levels be geo-referenced including not just tourism data but also supplementary data in order to allow for linking measurement and analysis between tourism and ecosystems in specific territorial entities. Such geo-referenced databases would allow for scalability of the information needed in different sub-regional territorial levels. 9 In order to operationalize such connection between the three priorities already mentioned, this document refer to statistical concepts and definitions as in the 2008 standard and proposes new ones as explained in the Overview /para. 0.6).The following concepts have been particularly crucial⁴⁰:
- Articulation of national / regional/ sub-regional basic statistical data and indicators;
 - Statistical information (layers);
 - Territorial entities (hierarchical classification for a subnational breakdown);
 - Scalability;
 - Significance (economic importance);
 - Statistical information (layers);
 - Geo-referenced data bases;
 - Tourism population;
 - Regional tourism.
- 6.21. Regarding the Economic Environmental Accounting project launched by the UN since the beginning of this century, readers should be advised that in addition to the *SEEA_CF 2012* international standard, other complementary documents have been disseminated

⁴⁰ All of them can be found in the Glossary

in the last years: that is the case of *SEEA 2012 Applications and Extensions*, *SEEA Experimental Ecosystem Accounting 2014*, “*Framework for the Development of Environmental Statistics –FDES 2013-*” and “*SEEA Experimental Ecosystem Accounting: Technical Guidance*”. All along this chapter different paragraphs of these documents are quoted although in some cases only partially.

- 6.22. Tourism is explicitly mentioned in *SEEA Applications and Extensions* document as an example of SEEA extensions: such a case “involves a decomposition of existing SEEA accounts using additional information, for instance through linking to specific spatial areas, through further breakdown of the household sector, or through a focus on certain themes where there is an interaction between human activity and the environment, such as tourism....” (EC, OECD, UN & WB (2014) *SEEA Applications and Extensions* para. 4.2.).
- 6.23. The link of TSA to the SEEA (both are satellite accounting systems of SNA 2008) can be made by explicitly identifying tourism as a set of industries and of consumers within environmental combined physical and monetary flow accounts of the SEEA_CF (EC, OECD, UN & WB (2014) *SEEA Applications and Extensions* para. 4.4.). In fact, this approach was outlined in IRTS 2008 para. 8.40.
- 6.24. The link to the SEEA can then be made by focusing on (i) the residuals generated as a result of tourism consumption (either by the visitors themselves or by the enterprises supplying goods and services to visitors; and (ii) the natural inputs used in the production of tourism products. Important connections may also be possible by linking measures of tourism activity to measures of ecosystem condition and extent. For example, activity to improve the attractiveness of an area to tourists may lead to improvements in ecosystem condition. Alternatively, increasing tourism activity may increase environmental pressures and reduce ecosystem condition. Measures of ecosystem condition and extent are not well developed. Initial efforts in this area are summarized in *SEEA Experimental Ecosystem Accounting*. (EC, OECD, UN & WB (2014) *SEEA Applications and Extensions* para. 4.51.).

This new impetus arising from the international effort of setting up the *System of Environmental Economic Accounting Central Framework (SEEA_CF 2012)* and supplementary initiatives as previously mentioned urges UNWTO to update IRTS 2008 sub-chapter 8/D “*Tourism and sustainability*” (see

- 6.25. Box 5). There are at least three reasons for such an initiative:
- TSA and SEEA extended approach might allow for the provision of new macroeconomic indicators besides those derived from TSA exercises; both type of indicators apply to a national context and would enrich Sustainable Development Goals (SDGs) indicators framework. In this case we would be moving from statistics international standards to an extended experimental accounting approach focusing on tourism and environmental sustainability;
 - Some indicators might be applied at “finer levels of geographical detail” (SEEA_CF 2012 section 6.3.3/Data by geographical area); by so doing it would be feasible to derive modeled data useful for measurement and analytical purposes at subnational levels;
 - Such an effort will require also a methodological background which presumably will enrich tourism statistic standards 2008 conceptual design; if that would be the case, INRouTe would be benefited by that and will also need to update different recommendations as suggested in this document (see chapter Explanatory Notes / Foreword);
 - Linking tourism measurement of ecosystem provision of services for “tourism and recreational purposes” would allow for new indicators focusing on the environmental pressures due to the development of tourism at different subnational territorial levels. Subnational basic statistical data as well as the list of those indicators proposed in this document (see Chapter 3) for comparability purposes (see para. 3.18) could be used if properly geo-referenced, for identifying tourism in ecosystem accounting related data.

By so doing, the SEEA Experimental Ecosystem Accounting framework would benefit of UNWTO/INRouTe support for subnational tourism measurement in line with the recommendations provided in this document; some of them are imbedded in the following paragraphs and will be further developed in the following sections of this chapter.

- 6.26. Linking tourism (operationally defined in the tourism statistics international standards) and sustainable development (a policy oriented concept without any universally accepted operational definition for its measurement) is a complex and challenging task; in fact the work presented in this document provides some background that could be helpful in clarifying the difference between tourism as an economic sector that impact the socio-economic components of sustainability and the environmental impact due to tourism infrastructure and the activity of visitors.
- 6.27. INRouTe’s first effort has been the design of a conceptual framework for the measurement of tourism as a sector of economic activity at subnational levels (see para. 1.1); consequently, there is a need to set up a classification of territorial entities to be adapted by each country according to the significance of tourism in different parts of the national territory.

This perspective of tourism, not only as a phenomenon of demand, but necessarily implying that a given territory may or may not qualify as a destination depending on the existing level of supply and demand, it is a necessary requirement for public authorities to count with sound information and hence tourism development planning at subnational levels. On the one hand, because the very sustainability of the tourism sector is something particularly relevant in the mature tourism destinations (given the relentless growth of tourist flows) and, on the other hand, because tourist development in a given territory often negatively affects its own environmental sustainability.

- 6.28. In any case, all these UN statistical international standards and complementary documents on environmental accounting insist once and again on the need for developing integrated information systems; consequently, terms as “integrated data”, “multi-dimensional”, “cross-cutting issues”, etc. appear systematically all along this chapter.
- 6.29. Such insistence goes inline with the focus of this document; adapting the UN 2008 international standards for the measurement and analysis of tourism at national level to sub-national levels, has proved to be not just a mere question of semantics (changing the term –nation to –region or –tourism destination, for example). It is a challenging issue that requires interdisciplinary research in order to overcome what Professor Jafar Jafari⁴¹ formulated as tourism’s detrimental tendency to isolate itself, as is the case for instance, in relation to sustainability: “In the name of sustainability, we now have many models of ‘sustainable tourism development’. These boosterism molds often suggest that this [sector] in and by itself can become sustainable. However, tourism cannot be isolated from the larger contexts which structure and explain it, as many do”.
- 6.30. The focus of the work presented in this document is consistent with the recommendations referred in *the Framework for the Development of Environment Statistics (FDES) 2013*. As already explained, this new international statistical standard updates the FDES 1984 and in such revision it was taken into account “the increasing prominence of environmental sustainability and sustainable development issues and concepts. Existing environment statistics and indicator frameworks were analyzed, including major developments in the field of environmental-economic accounting and selected thematic developments pertinent to environment statistics” (UNSD, 2015: FDES 2013, para. 1.7).
- 6.31. These clear policy positions on sustainable development, taken after the publication of the FDES in 1984, have had direct relevance to the area of environment statistics. It is vitally important to take them into consideration in this revision as the concept of sustainable development has played a defining role in helping to coalesce thinking, around goals that are well-defined and representative, regarding the state of the environment.
- “This concept of sustainable development has underscored the point that it is important to conserve the environment while ensuring the economic and social well-being of the world’s human population. Adequate response to these initiatives has contributed significantly to defining the statistical needs in this area. Any conceptual approaches that ensue for describing the environment must respond to them, making possible a better understanding of the sustainability of the environment as well as serving the function of assessment and decision support”.(As part of Annex B/B.8 FDES 2013).
- 6.32. It should be highlighted that FDES 2013 warns that “environmental indicators have the purpose of defining objectives, assessing present and future direction with respect to goals and values, evaluating specific programmes, demonstrating progress, measuring changes in a specific condition or situation over time, determining impact of programmes and conveying messages”. This recommendation makes a clear difference

⁴¹ Jafari, J., Bridging Out, Nesting Afield: Powering a new platform, *The Journal of Tourism Studies*, 16 (2), James Cook University, Australia, December 2005.

http://www.jcu.edu.au/business/public/groups/everyone/documents/journal_article/jcudev_012899.pdf

between B.1 *Tourism and environmental sustainability* related indicators and those related with the other two components of sustainable development (B.2 and B.3). *Tourism and its impacts on the social and cultural dimensions of the resident population* and B.3 *Tourism economic contribution and impact*). (see para. 3.15).

- 6.33. Finally, although non a statistical document, *UNWTO Guide for Local Authorities on Developing Sustainable Tourism (1998)* drew attention in sections 6 and 7 on a similar approach as the one presented in the precedent paragraphs.

Section 6 “Maintaining the sustainability of Tourism” states that “with good planning, development and management of tourism, negative impacts of tourism can be minimized, but tourism development must be continuously monitored, and actions taken if problems arise in order to ensure that tourism remains sustainable”. Attention is provided on the following basic topics:

- Managing environmental impacts: describes positive and negative potential impacts (the list of these last ones is significantly larger and detailed);
- Managing socio-economic impacts: refers to tourism as an economic sector and the list of positive impacts is significantly larger and detailed than negative type of such impacts;
- Use of environmental indicators: refers to UNWTO indicators initiative that finally became the “*Indicators of Sustainable Tourism for Tourism Destinations: A Guidebook*” which includes environmental as well as other type of indicators;
- Maintaining the tourism product and tourism markets: the attention is focused on “upholding the sustainability of tourism also requires preserving the quality and sometimes enhancing the tourism product of tourist attractions, facilities, services and related infrastructure”.

Section 7 “Managing the tourism sector” states that “Effective management of the tourism sector by local authorities, in co-operation with the private sector and NGOs, is essential. Tourism management has several functions including policy and planning, co-ordination with other government agencies, establishing and administering standard for tourist facilities and series, marketing, education and training, maintaining the vitality of the tourism sector, monitoring and responding to crisis situations when they arise”.

One of the main topics identified in former section is the setting up of a “Tourism management Information System [...] according to the statistical standards recommended by UNWTO”; also “Maintaining the vitality of the Tourism Sector” is highlighted as another relevant topic.

Nevertheless, the socio-cultural dimension will be considered more specifically at a later stage as mentioned in paragraph 6.34. Consequently, this document builds not just on statistical international standards (tourism and environment statistics) but also on previous UNWTO non-statistical recommended guidance documents.

A.3. The Socio-cultural dimension

- 6.34. In addition to economic and environmental sustainability, the sociocultural dimension is crucial for tourism planning and management: poverty, employment, wages, identity, education, skills, crime, changes in host populations, living conditions, characteristics of tourism employees’ households, etc. are relevant issues for tourism key stakeholders.

Data on these issues can be obtained from public records (being cadastral records particularly relevant), population censuses, social security, social services, and should be integrated with economic and environmental statistics.

This document does not address detailed analysis regarding sub-regional levels on this third dimension of sustainable development although the conceptual framework developed for the design of the R-TIS certainly allow for its measurement (see Annex 39).

B. Tourism and the environmental dimension: the sub-regional perspective

6.35. This section provides recommended guidelines in order to set up a particular type of statistical initiative such as the extended Regional Tourism Information System to sub-regional levels. As previously mentioned (see paras. 3.11 and 3.23), the design for an operative articulation of a national / regional tourism statistics' dataset is a key objective. Moreover it should be seen as a first priority regarding the more comprehensive objective of developing a R-TIS including a supplementary articulation

of regional /sub-regional basic statistical data and indicators. Even more so, in those countries with a developed statistical system where some regions have a very significant dependence on tourism.

6.36. The database hosting both datasets (national/regional tourism data and supplementary regional/sub-regional tourism data) should be geo-referenced and might be by its own a medium/long term project, given that its objective also embodies specific topics such as:

- Analyze relationships between tourism and the territory;
- Provide relevant information for territorial and tourism planning;
- Support investment projects;
- Set up of an improved management and monitoring background by public authorities responsible for tourism development;
- Provide insight for marketing design strategies;
- Foster economic analysis of regional tourism adapting the TSA framework;
- Allow for a multidisciplinary approach regarding tourism environmental sustainability agenda;
- Consolidate a Regional inter-institutional network for the setting up of a Regional Tourism Information System: such network should be integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institution;
- Such a network should be understood as the support for a proper governance structure decided by those stakeholders in order to guarantee the sustainability of such medium-long term initiative;
- Contribute to develop ecosystem accounting initiatives;
- Etc.

6.37. The recommended conceptual design of the R-TIS recommends the use of the following six sources (all of them national sources) to provide most of those basic statistical data and indicators that would be the core of R-TIS:

- Border survey;

- Domestic tourism household survey;
- Accommodation survey;
- Statistical business register;
- Structural business survey;
- Population census.

6.38. A Regional Tourism Information System should also include a third dataset and indicators not necessarily of official and/or statistical nature (such as electricity consumption by households, credit card expenditure records, transport authorities control, business cycle indicators, early warning indicators, etc.), considered to be relevant not only for the measurement/monitoring of tourism (carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope or even by national bodies), but also for analytical purposes (such as analysis of the performance of certain subsectors and foresee their evolution, the perceptions of the demand of a certain destination, etc.).

Such dataset should also include information on sub-regional levels because some of these statistical surveys allow for such breakdown including the municipal level; in a later stage the regional /sub-regional dataset should be completed with available regional official statistical surveys.

6.39. In fact, it is recommended that for sub-regional territorial entities, the main issues to focus on could be, in a first instance:

- Define a minimum set of statistical information both from the demand and supply side (principally concerning accommodation services for visitors, numbers of establishments and the corresponding associated employment) completed by a broader set of administrative information (generated basically by the municipality or tourism destination) that could identify some characteristics of tourism activity considered to be of special interest for most if not all key stakeholders (such as vacation homes, same-day visitors, impact of special events, identifying visitors behavior at destination, etc.);
- Check if such territorial entities have or not the necessary resources to filter such data with the appropriate statistical insight (see Chapter 3) and to properly use such administrative records for analysis and the design of policies;
- It is recommended to consider the opportunity to launch demand side surveys in order to supplement national/regional data regarding the following key variables: main characteristics of visitors and trips, average daily expenditure by visitors and satisfaction during their stay. Such surveys would allow for geo-referencing such demand data using as a proxy the name of the accommodation establishment/s used by visitors.

6.40. Such approach should follow the recommended guidelines (see Chapter 4, section B) to create a regional inter-institutional network for the setting up of a Regional Tourism Information System (R-TIS): such network should be integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers.

The proposed network might request the cooperation of any type of national or subnational institution not just for launching such initiative but also to allow for potential cooperation efforts in order to progressively complete the R-TIS data set (for instance, by complementing accommodation for visitors establishments lists, available attractions, infrastructure and collective equipment related to tourism), extend such dataset to those territorial entities where tourism is particularly significant and

provide technical assistance to those sub-regional entities in order to include or use sub-regional geo-referenced data so that all data would have the same formal structure.

- 6.41. It is recommended that the set up of a R-TIS should focus, as a first step, on no more than 15 information items; because part of such data are also available for some territorial entities at the sub-regional level, the proper articulation of region/sub-regions should be developed and consequently, all or part of the proposed 15 indicators could also be associated to them.

Such objective will require to identify the physical space of such entities and define such units according to a Classification of Territorial Entities (see Glossary).

- 6.42. UNWTO STATS Unit will start asking by 2017, on a voluntary basis, for subnational statistical indicators (no more than 15) for a selected number of countries with a developed national statistical system: each of such countries will select one or more regions where tourism is particularly significant. For each of those regions (within a country) as identified in the classification of territorial entities used in this document (see Glossary), the following sub-regional breakdown would apply: other sub-regional administrative or analytical units, municipalities, multi-local (more than one municipality), other local administrative or analytical units. Such breakdown implies

that some of such territorial entities could be labeled as tourism destinations. Such proposal has the potential of enlarging economic analysis as well as foster international and intra-national comparability.

Such an initiative should be understood as developing a sustainable network of countries that should identify the required data and determine the best way of collecting it on a regular basis; it should also include UNSD in order to allow for its expansion in due time, as a global initiative aligned with the UN 2030 Sustainable Development Agenda.

C. Adapting the Regional-Tourism Information System (R-TIS) to Sub-Regional Extensions

- 6.43. To properly understand the nature of such a system (the R-TIS), the following remarks are highlighted all along this document in order to provide proactive arguments to support such medium-long term initiative:
- This initiative has been conceived and developed as the adaptation of 2008 international standards for tourism statistics (the International Recommendations for Tourism Statistics –IRTS 2008- and the Tourism Satellite Account: Recommended Conceptual Framework –TSA 2008-) to subnational levels;
 - It is recommended that the basic core of such system refer to basic statistical data and indicators; most of them should be derived from official statistical surveys at the national level (six main sources have been identified). Other regional official statistical data might be also included;
 - Such national sources are available in practically all EU member countries as well as in non- European countries pertaining to the G.20 international community;
 - The conceptual design of the R-TIS uses a set of concepts, operational definitions, accounting rules and principles of recording and classifications consistent with those of the System of National Accounts. Also other statistically supplementary concepts have been included (the INRouTe initiative has developed around 15 new concepts such as tourism population, significance -economic importance of tourism at territorial levels-, scalability, regional tourism, etc.) and it has moved

away from the statistically vague term of destination, to a precise hierarchical classification of territorial entities;

- The setting up of the R-TIS requires also a particular type of governance structure: a regional inter-institutional network integrated by key tourism stakeholders (both at the regional and sub-regional levels) and supported technically by a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institutions;
- The R-TIS database is recommended to be geo-referenced (not only for rearrangement of data but also for mapping purposes) and prioritize an articulated set of basic data at the national/ regional levels;
- The initiative of setting up a R-TIS is recommended as a necessary pre-requisite for comparing nationally and internationally main tourism destinations and cities where tourism is significant, as well as to rigorously measure territorial, environmental and other economic and social impacts of tourism activity;
- Other countries without such an advanced level of statistical development might find inspiring this document and might also request UNWTO for technical assistance in order to set up a planning work schedule for those regions where tourism is particularly significant, to be in line with the recommended guidelines

proposed. This is of particular interest for those countries that have decided to renew their national tourism information system as the first phase of a Project that also includes the subnational measurement as a second priority.

C.1. Basic and supplementary information

6.44. At the sub-regional level (and particularly at the city level), it should be highlighted that even for those territorial entities where tourism is significant, it may not always be appropriate to adapt the conceptual design of the R-TIS due to organizational and financial arguments that such initiative would require. In other words, it seems more feasible and appropriate that the Regional Tourism Information System should also include sub-regional basic statistical data and indicators from national and regional statistical surveys if available.

6.45. Nevertheless, it might be the case that sub-regional tourism authorities require for policy design as well as for management purposes, supplementary information obtained from ad hoc statistical surveys or other type of information (non official and/or non statistical) derived from administrative records. In this case, the following paragraphs included in the DCMS Allnutt report (2004) are still pertinent:

“Those requiring local statistics need –and should pay for- supplementary local surveys that should follow nationally set standards.

Usual residence based sampling frames are not appropriate for surveys measuring tourism in a locality. If adequate lists of accommodation providers are developed they could provide a sampling frame for local surveys to supplement national domestic tourism and inbound tourism surveys with the sample formed by those staying in sampled accommodation on sampled nights.

Such surveys would not cover the visitor nights spent in friends and relatives' homes. To cover these, one would need to include relevant questions in household surveys conducted in the locality –or if there were no such surveys purposely conduct a

household survey. Pilots would be needed to investigate whether adequate data could be collected from the host or contact would be needed to be made through the host with the visitors” (DCMS Allnutt report, 2004, paras. 6.3.1 to 6.3.5.).

- 6.46. Therefore, irrespective of what type of sub-regional territorial entity, it is recommended to develop a feasibility study to properly evaluate whatever possibilities of improving and expanding basic statistics and indicators would be more appropriate.
- 6.47. It is recommended that in order to supplement sub-regional basic data and indicators already available (both statistical or not), tourism destinations and municipal authorities might consider if it could be appropriate to carry on different type of surveys; ideally, such surveys should address the measurement of different topics not usually identified in official statistical demand side surveys such as tourism behavior, activities carried on while at destinations, itineraries undertaken, etc.

More specifically, such indicators (providing mainly physical type of information) can be both statistical or derived from some particular type of administrative records. In both cases data should be associated with a time series in order to allow for statistical type of analysis in relation with some basic tourism aggregates. Some examples of such indicators could be:

- Population and housing census (focusing on second homes and rented houses in particular);
- Consumption of water and electricity;
- Big data type of information (examples below).

Regarding big data, it needs to be underlined that the exploitation of such data bases is in the interest of nations/countries but perhaps even more of sub-national territories that have more issues for statistic estimation. Within that line of thought, the research advances made particularly at sub-regional levels could be in the form of case studies that could be replicated in other territorial entities.

Two data bases that have already been explored in connection to tourism are the use of credit card information and cell phone tracking, inferring from them residents' mobility in general and visitors' mobility in particular.

Regarding credit card information exploitation, it represents partial information but highly of interest. It is partial for the following reasons:

- It is unknown whether its use is of a tourism nature or not;
- There is expenditure impossible to be broken-down by activities and by geographical levels as they are performed jointly (e.g. tourism package bought in the point of origin).

However, this information can help checking against different estimates conducted as at least the following can be known:

- Entities, number of credit cards, and expenditure;
- Their “place of residence”;
- Where they were used at the highest possible level of disaggregation;
- Expenditure:
 - total and average
 - per different sectors and activities.

Concerning cell phone usage, the first element to be highlighted is that in developed economies more than 90% of the population count with a cell phone, in 2015 one-quarter of the global population used smartphones and this is expected to grow to one-

third by 2018⁴², which allows for an approach that can be checked against the available demographic statistics.

This alternative can offer relevant information at least to contrast the number of incoming and internal trips and some of their basic characteristics. Moreover, if this where of interest at the state or country level, it could be considered key for tourism estimation at sub-national levels with the desired geographical disaggregation. It could even be useful to monitor the flow of visits within a given territorial entity currently under research.

From an operational standpoint, according to Williams et al. (2015) “every time a person makes a voice call, sends a text message or goes online from their mobile phone, a call detail record (CDR) is generated which records time and day, duration and type of communication, and an identifier of the cellular tower that handled the request. The approximate spatiotemporal trajectory of a mobile phone and its user can be reconstructed by linking the CDRs associated with that phone with the locations (latitude and longitude) of the cellular towers that handled the calls.” (2015, pp.2.). In principle it would entail exploiting the records (CDR) and GIS data of mobile phones. Information that could be obtained would be:

- number of trips;
- the precise geographic location.

6.48. Such information could be potentially linked with other supplementary data obtained by appropriate surveys, such as:

- Place of residence of the device, and infer the place of residence of the traveler;
- Visited places;
- Trips made within its usual environment, recurring and motivated in its activity and also issuing trips of residents;
- Incoming tourism trips with overnight;
- Number of overnights;
- Access points;
- Incoming trips without overnights (excursionists).

6.49. Nevertheless, the nature of such potential supplementary data is not just demand side data but also supply side one. Due to the nature of data obtained from statistical surveys, the territorial entities for which such data might be available are administrative entities and have, almost in all countries, the municipality as their lower level of ventilation.

6.50. Because tourism is a transient situation, sometimes even a seasonal phenomenon, municipalities might need to invest in sufficient basic collective equipment and infrastructure to cope with peaks.

In such situations, which is the case of a good number of tourism destinations, there is progressive evidence and consensus that more detailed breakdown of territorial units might prove to be useful for measuring tourism behavior at destination, setting up different typologies of visitors and analyzing the economic and social territorial impacts.

6.51. Such units, whatever they could be labeled (“small areas” or “small territorial units”) would qualify as analytical units and could be labeled generically as “small tourism

⁴² Source: eMarketer 2015

destination area" (STDA); next sub-section *Analytical territorial units for sub-regional measurement and analysis of tourism* will focus particularly on tourism destinations using a case study supported by the regional statistical department of Spain's Canary Islands Region, which uses a proper terminology of territorial entities.

C.2. Analytical territorial units for sub-regional measurement and analysis

- 6.52. INRouTe's proposed hierarchical classification of territorial entities include administrative and analytical units (see Glossary), because such units might qualify as a tourism destination (which is a basic unit for tourism measurement and analysis at subnational levels,). The following paragraphs will focus on tourism destinations linked to statistically developed countries.
- 6.53. These paragraphs will also refer to a new area of statistical development called "neighbourhood statistics" based on analytical units instead of administrative units with the purpose of highlight the potential for adapting such approach in those regions where tourism is significant in order to allow for improved analysis of tourism and economic as well as territorial impacts at sub-regional levels; such approach has a great potential for tourism destinations in order to better understand tourism behavior, economic impact and analysis, as well as to serve for improving management and monitoring in such territorial entities.
- 6.54. Analytical units usually refer to considerations of size and shape of territorial entities in order to allow for comparability of particular social research; in fact, the rise of "neighbourhood statistics" in England, Wales, Scotland and some areas of Canada (the city of Calgary and the island of Montreal) and USA and its use for "improving the way in which policies can be developed and monitored at the small area level" points to the need for analytical units due to the fact that "it now seems clear that global "off the shelf" measures derived from censuses and other surveys provide truncated information about the context of small territorial areas and therefore offer only limited potential for studying neighbourhoods and health" (Gauvin et al., 2007)
- 6.55. Besides health (which has been a particular research area requiring small units information for public health purposes), data on neighbourhoods (also referred as small areas or small territorial units) cover a wide range of topics, including population, social conditions, housing, crime, education, etc.; data are all of them geo-referenced (Flowedew, Manley and Sabel, 2008).
- 6.56. Data zone construction requires that data be geo-referenced and implies the use of GIS software supplemented with ad hoc programs for aggregation purposes.
- 6.57. The aim of this new area of statistical work is to define small territorial units with the required homogeneity for any of such particular research areas being zone definition (a fundamental procedure in geographical information science involving comparisons of several spatially distributed variables in addition to consideration of size and shape) the key challenge.
- 6.58. There are a number of criteria that have to be considered in the construction of a zonal coverage being population size, compactness of shape, homogeneity of the population in terms of social and economic variables, and elements of the physical and social environment that might affect how meaningful the zones would be to local people, the most common ones used in the construction of such zones (Flowedew, Feng and

Manley, 2007). All of such small territorial units are not administrative units but analytical ones built on using statistical data and criteria.

- 6.59. Population and Housing census –a decennial statistical initiative- are the key reference for neighbourhood statistics supplemented with other administrative type of statistics; in fact, the computerization of administrative and other records over the last few years has resulted in an increasing amount of data being potentially available at the local level.
- 6.60. Because zonal construction should care about its stability over time, of all the criteria already mentioned, homogeneity of the population deserves special attention regarding such design. Homogeneity is mainly operationalized with a socio-economic definition and is measured using some type of statistical procedure (Townsend, Philimore & Beattie, 1988) based on Census data (household type data as well as other personal data).
- 6.61. As mentioned (see para. 1.23), INRouTe refers to the project *Tourism micro-destination in the Canary Islands* (see Annex 38) as a case study for providing guidance on extending the R-TIS to sub-regional levels; based on it and in order to illustrate the analytical potential of developing “small tourism destination areas” (STDA) as an analytical type of territorial entity (see para. 2.5), the following four topics have been identified in this project as all of them seem particularly relevant in line with measuring tourism and sustainable development at sub-regional levels:
- Tourism is unevenly distributed in most regional territories;
 - Defining territorial boundaries for setting up a small tourism destination area (STDA) zone design;
 - The concept of homogeneity applied to such STDA;
 - Linking sub-regional tourism and experimental ecosystem accounting (see Annex 39).

References

- Alivernini, A. (2014). *Another brick in the wall: Tourism expenditure in Italian regions as a basis for Regional TSAs* as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
- Allnutt D. (2003) Tourism Statistics Improvement Initiative: Review of Tourism Statistics: Draft report for the consideration by the Steering Committee, DCMS: www.culture.gov.uk
- Aurioles, J. (2002), La elaboración de la cuenta satélite regional del turismo, Junta de Andalucía.
- Aurioles, J., Gallego I, and Moniche, A. (2012). *Measuring Special Events from the Regional Point of View*, INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th, 2012
- Barber-Dueck, C. & Kotsovos, D. (2003), The Provincial and Territorial Tourism Satellite Accounts for Canada 1998 (Online), available: <http://www.statcan.ca/>.
- Bureau of Tourism Research Australia. (1998). *Occasional Paper No.32 Tourism Expenditure by International Visitors in Regional Australia*.
- Burson, R. and Ellis, P. (2015). *Using electronic card transaction data to measure and monitor regional tourism in New Zealand*, Ministry of Business, Innovation and Employment, 2015, New Zealand
- Cañada, A. (2009), Regional-TSA: potential and problems in developing sub-national TSA, ONS conference on Tourism Satellite Accounts: Inputs, Processes, and Actors, ONS, London, 21-22 Mayo 2009.
- Cañada Martínez, A. (2011). Extending TSA framework for evaluating the regional impact of tourism segments: an application to the Madrid region, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Cañada, A. (2013), Regional Tourism Satellite Account, UNWTO Statistics and TSA Issue Paper Series STSA/IP/2013/02, (Online), available: <http://statistics.unwto.org/en/content/papers>.
- Canadian Tourism Human Resource Council (2009) *Who Is working for you? A demographic profile of Tourism Sector employees*, Canada
- Commission of the European Communities Organization for Economic Cooperation and Development, World Tourism Organization, United Nations (2008), *Tourism Satellite Account: Recommended Methodological Framework 2008* (Luxembourg, Madrid, New York, Paris) Available at: <http://unstats.un.org/unsd/tradeserv/tourism/manual.html>.
- Commission of the European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations and World Bank (2008), *System of National Accounts 2008*, Available at: <http://unstats.un.org/unsd/nationalaccount/sna2008.asp>.
- Consorti Platja Palma. (2011). *La Revalorización de la Platja de Palma: Plan de Acción Integral*, 2011

- DCMS. (2004). National Statistics Quality Review Series Report No.33 *Review of Tourism Statistics* [Allnut Report], Department for Culture, Media and Sport, London, United Kingdom, www.culture.gov.uk
- Durán, C. (2008). Sistemas de información geográfica: casos de uso para el análisis del turismo en el ámbito local. Paper presented to Session 2 Tourism and Territory, *International Conference of Tourism; Knowledge, value advantage, tourist destination*, Málaga 29-31 October, 2008.
- Duran, C. (2013), Governance for the Tourism Sector and its Measurement, UNWTO Statistics and TSA Issue Paper Series STSA/IP/2013/01 (Online), available: <http://statistics.unwto.org/en/content/papers>.
- Dziedzic, E. and Skalska, T. (2014) "Methodology of the regional tourism satellite account for Poland – concepts and feasibility study", as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
- EC, IMF, OECD, UN & WB. (2009). System of National Accounts 2008 (SNA 2008), New York, UN.
- EC, OECD, UN & WB. (2014). *System of Environmental-Economic Accounting 2012: Applications and Extensions SEEA_AE 2012*, New York, UN.
- EC, OECD, UN & WB. (2015). *System of Environmental-Economic Accounting 2014: Experimental Ecosystem Accounting: Technical Guidance 2014*, New York, UN.
- Espinosa Uresandi, N. and Alzua Sorzabal, A. (2014). Global Benchmarking for City Tourism Measurement. UNWTO AM reports Volume 10, Madrid: UNWTO.
- Eurostat, (1992). "Tourist prices, rates and costs", Document S3/92/38/EN, Joint EC/EFTA Meeting of the Working Group on "Statistics on Tourism", 27-28 October, 1992, Luxembourg
- Eurostat. (2012). "Manual on Regional Account Methods", December 2012
- FDES 1984 UNSD. (1985). *Framework for the Development of Environmental Statistics –FDES 1984*, New York, 1985.
- FDES 2013 UNSD. (2014). *Framework for the Development of Environmental Statistics –FDES 2013*, New York, 2014.
- Flowedew R., Manley D.J. and Sabel, C.E. (2008). Neighbourhood effects on health: Does it matter where you draw the boundaries?, *Elsevier Social Science & Medicine*, 66 (2008) 1241-1255
- Flowerdew R., Feng, Z. and Manley D.J. (2007). Constructing data zones for Scottish Neighbourhood Statistics, *Computer, Environment and Urban Systems* 31 (2007) 76-90
- Frechtling, D. (2008). Measurement and analysis of tourism economic contributions for subnational regions through the Tourism Satellite Account, (Document presented at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, "Knowledge as Value Advantage for Tourism Destinations", 29 - 31 October 2008, Málaga, Spain) (Online), available: <http://statistics.unwto.org/en/event/malaga>.

- Frechtling, D. (2011), Exploring the Full Economic Impact of Tourism for Policy Making, (Document presented at the 3rdT.20 Ministers Meeting, France, October 2011) (Online), available: http://t20.unwto.org/sites/all/files/pdf/unwto_paper_t20_france.pdf.
- Frechtling, D. (2013), The Economic Impact of Tourism: Overview and Examples of Macroeconomic Analysis, UNWTO Statistics and TSA Issue Paper Series STSA/IP/2013/03 (Online), available: <http://statistics.unwto.org/en/content/papers>.
- Frent, C. (2014), The Economic Benefits of Tourism in Iceland: New developments for the Icelandic Tourism Satellite Account: Tourism Gross Fixed Capital Formation and Tourism Collective Consumption, (Document published by the Icelandic Tourism Research Centre, Akureyri, Iceland, December 2014) (Online), available: <http://www.rmfi.is/static/research/files/cristi-frent-economic-benefits-of-tourism-in-iceland.pdf>
- Gauvin L., Robitaille E., Riva M., McLaren L., Dassa C., and Potvin L. (2007). Conceptualizing and operationalizing neighbourhoods: the conundrum of identifying territorial units. *Canadian Journal of Public Health*, 2007 Jul-Aug;98 Suppl 1:S18-26.
- Gössling, S., Hall, M., Lane, B. and Weaver, D. (2008). The Helsingborg Statement on Sustainable Tourism, *Journal of Sustainable Tourism*, 16(1), 122-124.
- Hernández Martín, R. (2015). Measuring tourism and environmental sustainability at subnational levels. Reflections and perspectives.
- Hernández Martín R., González Yanes J.A. (2012) *Designing and Analysing Micro-destinations. A Pilot Study in the Canary Islands* (Document presented at the INRouTe 1st Seminar on Regional Tourism: setting the focus (Venice, Italy, 5-6 July 2012))
- Hernández Martín, R., Gonzalez Yanes, J.A., and González Mora, Y.M. (2014) *Analysing tourism performance and impacts at local destinations: evidence from the Canary Islands* as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
- Hernández Martín, R., Simancas Cruz, M.R., González Yanes, J.A., Rodríguez Rodríguez, Y., García Cruz, J.I., González Mora, Y.M. (2014) Identifying micro-destinations and providing statistical information: a pilot study in the Canary Islands, *Current Issues in Tourism*, <http://dx.doi.org/10.1080/13683500.2014.916657>
- INRouTe and UNWTO. (2012). *A Closer Look at Tourism: Sub-national Measurement and Analysis – Towards a Set of UNWTO Guidelines*, UNWTO, Madrid. Available at: <http://www.e-unwto.org/content/m62755/>. [Last accessed: 21/04/2014]
- Instituto de Estadística - C. Madrid (2011), Cuenta Satélite del Turismo de la Comunidad de Madrid: metodología y primeras estimaciones (Online), available: <http://www.madrid.org/iestadis/fijas/estructu/economicas/contabilidad/descarga/csatturme.pdf>.
- Jackson, C., Kotsovos, D. and Morissette, C. (2008). *Linking the Canadian Tourism Satellite Account and the Canadian System of Environmental and Resource Accounts to measure the environmental impact of tourism in Canada; An exploratory study for two pilot industries*. Statistics Canada , September 2008.

- Jafari, J. (2005). Bridging Out, Nesting Afield: Powering a new platform, *The Journal of Tourism Studies*, 16 (2), pp.1-5., James Cook University, Australia, December 2005. http://www.jcu.edu.au/business/public/groups/everyone/documents/journal_article/jcudev_012899.pdf
- Jones, C. (2005) "Tourism Satellite Accounts: The Regional Perspective", Central Paper presented to Session 3, WTO conference The Tourism Satellite Account (TSA): Understanding Tourism and Designing Strategies Iguazu Falls, Argentina/Brazil/Paraguay, 3-6 October 2005
- Kotsovo, D. (2010) "Measuring production in tourism industries: reconciliation between supply and demand in TSA table 6", Paper presented to the Workshop on Tourism Statistics, UNWTO Madrid March 22-24 March, 2010
- Laimer P. and Ostertag, J. (2009). "Measuring seasonality in Tourism Statistics", 5 UNWTO International Conference on Tourism Statistics, Tourism: An Engine for Employment Creation", Bali, Indonesia, 30 March-2 April 2009
- Laimer, P. and Sonntag, U. (2014) The German and the Austrian travel habits as proceedings of Nara Tourism Statistics Week 13th Global Forum on Tourism Statistics. Nara, Japan, November 17th and 18th, 2014.
- Laney, D. (2001). 3D Data Management: Controlling Data Volume, Velocity and Variety. *Application Delivery Strategies META group*. Stanford: META Group Inc.
- Libreros, M. and Cañada, A. (2010), Vacation home ownership in a globalized World, Working paper, UNWTO, Madrid.
- MacFeely S., Delaney J. and O'Donoghue F. (2012) *Using Business Registers to conduct a regional analysis of Enterprise Demography and Employment in the Tourism Industries: Learning from the Irish Experience* (Document presented at the INRouTe 1st Seminar on Regional Tourism: setting the focus (Venice, Italy, 5-6 July 2012))
- Manente, M. (2005) "Tourism Satellite Accounts: The Regional Perspective", Requested Comments to Central Paper presented to Session 3, WTO conference The Tourism Satellite Account (TSA): Understanding Tourism and Designing Strategies Iguazu Falls, Argentina/Brazil/Paraguay, 3-6 October 2005
- Manente, M. (2014) *Italian and domestic tourism expenditure in the Veneto Region. A milestone for the RV-TSA compilation* as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
- Ministry of Economic Development of New Zealand, (2011). "Tourism Data Domain Plan", November 2011, New Zealand.
- Miyagawa, K. (2011). Compilation of Japanese Inter-prefectural Input-Output table for Tourism Analysis, MOVE2011 -2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th - 29th, 2011.
- National Cooperative Highway Research Program (NCHRP), Report 571, Standardized Procedures for Personal Travel Surveys, Transportation Research Board (Washington D.C, United States, 2008).

- Ortúzar, J.d.D. and Willumsen, L.G. (2001) *Modelling Transport* (4th Ed). Wiley.
- Perez Mira, J. (2002) Price indices and tourism consumption in the framework of the Tourism Satellite Account", Enzo Paci Papers on Measuring the Economic Significance of Tourism (volume 2). World Tourism Organization, Madrid.
- Ritchie, J.R.B. and Crouch, G.I. (2000). "The competitive destination: A sustainability perspective", *Tourism Measurement* 21 (2000) 1-7.
- SAETA (2014) *New Utilities for Regional TSA Information system: Sustainable Tourism Indicator System for Andalusia* as proceedings of the II INRouTe International Seminar on Regional Tourism: Moving Towards a Regional TSA Approach. Venice, October 9th and 10th, 2014.
- SAETA. (2000) "The elaboration of a Tourism Satellite Regional Account: The experience of Andalusia" 5th International Forum on Tourism Statistics, June 20th – 22nd Moffat Centre, Glasgow.
- Sakowski, P. (2012) "Measuring employment in the tourism industries in Brazil: from national to regional and local level, presented to the I INRouTe's International Seminar on Regional Tourism, Venice, 2012.
- Shen, S., Li, G. and Song, H. (2009). "Effect of seasonality treatment on the forecasting performance of tourism demand models", *Tourism Economics*, 2009, 15 (4), 693-708.
- Sonntag, U. (2011). BASTIS – The Baltic Sea Heritage Tourism Information System. An innovative approach to supply tourism stakeholders with relevant information for their marketing decisions, MOVE2011 – 2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Spurr, R. (2005) "Tourism Satellite Accounts: The Regional Perspective", Comments to Central Paper presented to Session 3, WTO conference The Tourism Satellite Account (TSA): Understanding Tourism and Designing Strategies Iguazu Falls, Argentina/Brazil/Paraguay, 3-6 October 2005
- Statistics Canada (1998) *Quality Guidelines*, December 1998 (Third ed.) and December 2009 (Fifth ed.)
- Statistics Canada, (1998) "Feasibility Study: The Provincial Tourism Satellite Accounts", Paper prepared for the Canadian Tourism Commission, December 21, 1998
- Thomas, W. & Kugler, T. (2013). Pulling It All Together: Developing the Spatiotemporal Layers to Support Location-based Integration, Proceedings 59th ISI World Statistics Congress, 25-30 August 2013, Hong Kong (Session STS078) p.2701.
- Townsend P., Philimore P. and Beattie A. (1988), *Health and deprivation: Inequality and the North*, London: Croom Helm.
- UN, EC, Food & Agriculture Organization of UN, IMF, OECD & WB. (2014). *System of Environmental-Economic Accounting 2012-Central Framework (SEEA_CF 2012)*. New York, UN.
- UN, (2003). "Handbook of Statistical Organization: The Operation and Organization of a Statistical Agency", third edition, Studies and Methods Series F No 88, New York 2003.

- UN. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. Accessible at http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- UN and UNWTO (2008). *International Recommendations for Tourism Statistics 2008 (IRTS 2008)*, (New York, Madrid, 2008). <http://unstats.un.org/unsd/tradeserv/tourism/manual.html>
- UNSC. (2015). *Transformative agenda for official statistics*, UN Statistical Commission forty-sixth session, E/CN.3/2015/5. Accessible at <http://unstats.un.org/unsd/statcom/46th-session/documents>
- UNSD. (2014c). CPC Ver. 2 Explanatory notes. On http://unstats.un.org/unsd/cr/registry/docs/CPCv2_explanatory_notes.pdf. Viewed 30th May 2014.
- UNWTO. (1998). *Guide for Local Authorities on Developing Sustainable Tourism*, Madrid.
- UNWTO. (2004). *Indicators of Sustainable Tourism for Tourism Destinations: A Guidebook*, Madrid.
- UNWTO. (2008), *Developing Tourism Statistics at The Sub-National Level: The Measurement of Flows of Trips and Visitors* (Document presented at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, “Knowledge as Value Advantage for Tourism Destinations”, 29 - 31 October 2008, Malaga, Spain), (Online), available: <http://statistics.unwto.org/en/event/malaga>.
- UNWTO. (2008), *International Recommendations for Tourism Statistics 2008 – Compilation Guide*, 2014
- UNWTO. (2008). *International Recommendations for Tourism Statistics IRTS*, Madrid.
- UNWTO. (2008). *Tourism Satellite Accounts: Recommended Methodological Framework 2008 (TSA:RMF 2008)*, Madrid.
- UNWTO. (2010). *Positioning Tourism in Economic Policy: Evidence and Some Proposals* (Document presented at the 2nd T.20 Ministers Meeting, Republic of Korea, 11-13 October 2010). http://dtxtg4w60xqpw.cloudfront.net/sites/all/files/docpdf/t20_1.pdf.
- UNWTO. (2011). *Report on the Progress of the Reform of the Organization (White Paper)*, Madrid, October 2011.
- UNWTO (2011b) *The System of Tourism Statistics (STS) as the foundation for a Tourism Information System (TIS): Basic References*. Madrid October 2011
- UNWTO (2014), *AM Reports, UNWTO Prototype Methodology on Seasonality*, Punta del Este 365, UNWTO, Madrid.
- UNWTO. (2011), *Report on the Progress of the Reform of the Organization (White Paper)*, Madrid, October 2011.
- UNWTO & ETC. (2011). *Handbook on Tourism Product Development*, Madrid.
- UNWTO & INRouTe. (2015). *Subnational Tourism: Basic Glossary. A Closer Look at Tourism: Subnational Measurement Analysis. (Provisional version)*.

- Wall, C., MacFeely, S. (2012), Ireland case study: Measuring & Analysing Regional Tourism, (Document presented at the INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, Italy, 5-6 July 2012).
- Weekers, K. (2012), TSA. Flemish and Brussels-Capital Region 2008, Research Centre of the Government of Flanders (Online), available: <http://www.toerismevlaanderen.be>.
- Williams, N.E., Thomas, T.A., Dunbar, W., eagle, N. and Dobra, A. (2015). Measures of Human Mobility Using Mobile Phone Records Enhanced with GIS Data, *PLOS One* 10(7), 1-16.
- World Tourism Organization. (1984). "Guidelines for constructing a tourist price index", 1984, Madrid.
- World Tourism Organization. (WTO) (2003). Enzo Paci Papers on Measuring the Economic Significance of Tourism, volume 3, Madrid.
- World Tourism Organization. (WTO) (2005), Adapting the National Tourism Satellite Account (TSA) Project to subnational levels: A discussion paper, UNWTO, Madrid.
- Zhang, J. and Orsted, C. (2006) "Regional Tourism Satellite Account: Data, methodologies and impact analysis", Paper presented to the International Forum on Tourism Statistics, 14-16 November 2006, Cáceres, Spain

Bibliography

- Ahas, R., Armoogum, J. Esko, S., Ilves, M., Karus, E., Madre, J.L., Nurmi, O., Potier, F., Schmücker, D., Sonntag, U. And Tiru, M. (2014) Feasibility Study on the Use of Mobile Positioning Data for tourism statistics. Eurostat 30 June 2014. Consolidated report Eurostat Contract No 30501.2012.001-2012.452. Available at http://epp.eurostat.ec.europa.eu/portal/page/portal/tourism/documents/MP_Consolidated%20report.pdf
- Aisa Rived, R., González Alvarez, M.A. and Larramona Ballarín, G. (2011). Tourism employment in Aragon: present and future perspectives, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Al Ansari, M., Al Seleemi, F., and Al Amrah, M. (2014). Measuring multi-destination visits: Saudi Arabia Case Study, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.
- Albarracín, D. and Gutiérrez, E. (2009). El trabajo, comunidad, cooperación e integración estadística en relación con las PYMES turísticas, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Alivernini A. (2011). Evaluating Tourism Expenditures between Northern and Southern Italy (1998-2008), MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Alivernini, A. (2014). Another brick in the wall: Tourism expenditure in Italian Regions as a basis for Regional TSAs, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.
- Amestoy Lara, R., Barrón Marroquín, G. and De Jesús Marquínez, I. (2011). New technologies in the marketing of tourist destinations: tools to measure the economic profitability, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Andersson, T.D. and Lundberg, E. (2013). Commensurability and sustainability: Triple impact assessment of a tourist event, *Tourism Management* 37 (2013) 99-109, 2013 Elsevier Ltd.
- Anton Clavé S. (2012). *Lessons on Tourism: The Challenge of Reinventing destinations*/ Planeta.
- Aranburu Calafel, K. and Aranzabal Basaras, P. (2011). Measuring the Economic Contribution of Tourism at a Local Destination, The case of Navarra and Pamplona, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Aranda Palmero, A. and Castellanos Quintana, V. (2012). *An approach to the use of GPS in tourism surveys to define itineraries*, INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th, 2012.
- Aranda Palmero, A., Castellanos Quintana, V. and Lapuente, C. (2011). A new way of analyzing tourist flows: combining traditional questionnaire and GPS tracks information, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.

- Artal Tur, A., Navarro Azorín, J.M. and Ramos Parreño, J.M. (2014). Estimating the economic impact of cruise tourism by using Regional Input-Output Tables: case study of the port of Cartagena, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.
- Athiyaman, A. and Go, F. (2013). Real time experience tracking and human behaviour tracking: Macro and Micro approaches to measuring tourist behaviour, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Becken S. and Gnoth J., Tourist Consumption systems Among Overseas Visitors: Reporting on American, German and Australian Visitors to New Zealand, *Tourism Management* 25 (2004) pp. 375-385.
- Bohte W. and Maat K., Deriving and Validating Trip Destinations and Modes for Multi-Day GPS-Based Travel Surveys: A Large-Scale Application in the Netherlands, – paper presented to ISCTSC, Annecy, France, 25 – 31 May, 2008
- Bonell P. Lee-Gosselin M., Zmud J. and Madre J.L, Transport Survey Methods: Keeping Up with a Clarifying World, 2009
- Commission of the European Communities, International Monetary Fund, Organization for Economic Cooperation and Development, United Nations and World Bank. System of National Accounts, 2008 (Brussels/Luxembourg, New York, Paris, Washington, D.C., 2008). <http://unstats.un.org/unsd/nationalaccount/sna.asp>
- Conference of Peripheral Maritime Regions of Europe (CPMR), General Assembly 2010, Final Declaration, 30 September – 1 October 2010, Aberdeen, United Kingdom
- Congia, M.C. and Staffieri, S. (2011). The contribution of the tourism industry to the European labour market in the last years, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Consorci Platja Palma, La Revalorización de la Platja de Palma: Plan de Acción Integral, 2011 European Commission, Investing in Europe's future: Fifth report on economic, social and territorial cohesion (Luxembourg, 2010), pp xx-xxiii. http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm
- Cooper,C. (2014). “Maturing Destinations: Networks, Knowledge and Innovation”, RSA Network Meeting, February 2014.
- Dávila Pagán, N. (2015). Tourism in Puerto Rico: an Alternative for Sustainable Economic Development, MOVE2015 4th International Conference on Sub-national Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA), November 18th – 20th, 2015.
- Dávila, Rodríguez, M.A. and Gretzel, U. (2015). Puerto Rican residents' attitudes toward tourism development and destination marketing, MOVE2015 4th International Conference on Sub-national Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA), November 18th – 20th, 2015.

- Dybedal, P. (2009). Data collection on tourism flows – from fragmentation to harmonization, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Dybedal, P. and Landa Mata, I. (2011). New knowledge on geographical structures and transport issues in incoming coach round trip tourism in Norway, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Economic Commission for Europe, Conference of European Statisticians, Group of Experts on National Accounts (April 2010), Vacation Home Ownership in a Globalized World (Note by the United Nations World Tourism Organization)
- European Commission. (2010). Annex A. Chapter 13: Regional Accounts, (Online), available: [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SPLIT_COM:2010:0774\(63\):FIN:EN:PDF](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SPLIT_COM:2010:0774(63):FIN:EN:PDF).
- EC. (2011). European Commission, Investing in Europe’s future: Fifth report on economic, social and territorial cohesion (Luxembourg, 2010), pp xx-xxiii. http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/index_en.cfm
- Espinosa, N. and Alzua, Aurkene. (2014). UNWTO AM Reports, Volume Ten - Global Benchmarking for City Tourism Measurement, UNWTO, Madrid
- European Parliament, The Fragmentation of EU Tourism Policy, Policy Department/Structural and Cohesion Policies, October 2007
- EUROSTAT (2007). Regions in the European Union. Nomenclature of territorial units for statistics – NUTS 2006/EU-27 (Luxembourg, 2007). http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction
- EUROSTAT, (2002). “Handbook on price and volume measures in national accounts”, Luxembourg, 2001
- Ferry, V. and Lollo, G. (2011). Internal tourism mobility in Italy: a regional analysis, MOVE2011 – 2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Frechtling, D.C. (2012). *Extending the Measurement of the Economic Impact of Tourism Beyond a Regional Tourism Satellite Account*, INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th, 2012.
- Frechtling, D.C. (2012). *Proposed Standards for a Regional Tourism Satellite Account*, INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th, 2012.
- Gallego Galán, I. and Moniche Bermejo, A. (2011). Turismo de Ciudad un producto de éxito, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- García Ramos, A. and García de la Torre, J. (2009). Differential Aspects in the Measurement of Flows at the National and Sub-National level: Concepts, Methodologies, and Technologies Applicable, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.

- Goni, E., Tusell, F. and Aramendi, J. (2011). Improving time and spatial resolution of tourism statistics through imputation, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- González Casimiro, P., Moral Zuazo, M.P., Alzua Sorzabal, A. and Aranburu Amiano, I. (2009). A new way of approaching tourism SMEs, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Guardia, T. and Muro, J. (2009). La medición y el análisis del turismo interno: la relevancia de una matriz origen-destino, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Hara, T. Moskal, P.D. and Saarinen, C. (2013). Preliminary analyses of a Cutting Edge Knowledge Distribution Method of MOOC to Teach Tourism as an Industry, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Heerschap, N., Ortega, S., Priem, A., and Offermans, M. (2014). “Innovation of tourism statistics through the use of new big data sources”, Statistics Netherlands, 27 March 2014
- Helsingborg Statement on Sustainable Tourism 2007, September in Journal of Sustainable Tourism vol 16, n^o1, 2008
- Household Travel Survey Pre- and Post-9/11 - Data Documentation/Appendix E: Abbreviations, Travel Concepts and Glossary of Terms, U.S. Department of Transportation, (Washington D.C, United States).
- Jones, C. (2008), Tourism’s Economic contribution at Sub-national Level. The Regional TSA: Complements and Extensions, (Document presented at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, “Knowledge as Value Advantage for Tourism Destinations”, 29 - 31 October 2008, Málaga, Spain), (Online), available: <http://statistics.unwto.org/en/event/malaga>.
- Jones, C. (2008). Assessing the impact of major sporting event: the role of environmental accounting, *Tourism Economics*, 2008, 14 (2), 343-360
- Jones, C. (2009), Assessing the Impact of Tourism in Regions: Towards a Holistic Analysis? Regional Association 2009 Conference, Belgium (Online), available: <http://www.regional-studies-assoc.ac.uk/events/2009/apr-leuven/papers/Jones.pdf>.
- Jones, C. Munday, M. and A. Roberts (2003) Regional Tourism Satellite Accounts: A Useful Policy Tool? *Urban Studies*, 40 (13), pp. 2777–2794
- Jones, C., Bryan, J., Munday, M. & Roberts, A. (2010), The Tourism Satellite Account for Wales 2007 (Online), available: <http://wales.gov.uk/docs/drah/publications/Tourism/100715tsajulyappeng.pdf>.
- Jones, C. (2014). Constructing RTSAs: lessons from the UK 2000-2004, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.

- Junta de Andalucía, (2014). " Sustainable Tourism Development Indicator System for Andalusia, Consejería de Turismo y Comercio, Sevilla, 2014.
- Kamiyama, H., Sakuramoto, Y., Yuhara, H. And Hara, T. (2011). Introduction of Regional Tourism Economic Survey, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Kamiyama, H., Suzumura, E., Yuhara, H. And Hara, T. (2011). Development and utilization of Sub-National Statistics on Tourists in Japan, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Khait, T. and Ostrovsky, L. (2011). Tourism Satellite Account – reconciliation and synergetic use of survey and administrative data, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Kuhnimhof, T. (2011). Scenarios for Mobility in the Year 2030 in Germany – Implication for Long Distance Travel and Tourism, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Kuhnimhof, T. and Last, J. (2009). Path to Better Long-Distance Travel Data in Europe – The Potential of Combining Established Household Survey Instruments and Methodological Innovations, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Laimer, P. (2012) "Regional Tourism Satellite Accounts in Austria: sufficient information for regional tourism policy?", 11 Global Forum on Tourism Statistics, 14-16 November 2012, Reykjavik, Iceland.
- Laimer, P. and Weis, J. (2012). Visualization of Regional Tourism Data by i.maps, The Austrian experiences, INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th, 2012.
- Leiper, N. (1999). "A conceptual analysis of tourism-supported employment which reduces the incidence of exaggerated, misleading statistics about jobs", *Tourism Management* 20 (1999) 605-613.
- MacFeely, S. (2009). Domestic Origin-Destination Matrices – An Irish Case Study, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- MacFeely, S. and Delaney, J. (2013). Linking registers with administrative data at unit record level to conduct structural and regional analyses of the tourism industries, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Madrid Flores, F. (2009). Aplicaciones de la gobernanza en las PYMES para una mayor toma de decisiones en la industria turística. El sistema Datatur México, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.

- Manente, M. (2008). Destination Management And Economic Background. Defining And Monitoring Local Tourist Destinations, International Conference of Tourism: Knowledge as value advantage of tourism destinations Measurement and Economic Analysis of Regional Tourism, Malaga, 29-31 October 2008.
- Manente, M. (2009). Analysing and Understanding Domestic Tourism within a Destination Perspective, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Manente, M. (2014). Italian and domestic tourism expenditure in the Veneto Region. A milestone for the RV-TSA compilation, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.
- Manente, M. and Minghetti, V. (eds). (2000). Visitor and Mobility Management in Tourism Destinations. Spatial Behaviour, Accesibility and Information, Ciset Series, Libreria Editrice Ca-foscarina, Venice, 2000.
- Maresca, S. (2014). Open problems and new possibilities for the development of regional TSA in Italy, INRouTe 2nd International Seminar on Regional Tourism: Moving towards a Regional TSA approach, October 9th and 10th 2014, Venice, Italy.
- Márquez Godoy, J.I. and López Zapata, L. (2013). Tourism Observatory from Medellin to Antioquia, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Martínez Vicente, S., Martínez Valderrama, J., Ibáñez Puerta, J., Chopra, A. and Micossi, V. (2011). SOSTUR – Improving Sustainable Destination Management through Dynamic Simulation Models, MOVE2011 – 2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- McHone, W.W. and Rungeling, B. (2000) Practical Issues in Measuring the Impact of a Cultural Tourist Event in a Major Tourist Destination, *Journal of Travel Research*, Vol.38, February 2000, 299-302, 2000 Sage Publications, Inc.
- Medina López, A., Cámara Sánchez, A., Monrobel Alcántara, J.R. (2011). A multisectorial model for the assessment of tourism as a key sector in the community of Madrid, MOVE2011 – 2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Monfort-Mir, V.M. and Camisón Zornoza, C. (2009). Innovación en la empresa turística, MOVE2009 1st International Conference on the Measurement and Economic Analysis of Regional Tourism, Donostia-San Sebastián (Spain), October 27th & 28th 2009.
- Morita Sakowski, P.A. (2015). “Mensurando o emprego no setor turismo no Brasil: do nível Nacional ao Regional e Local”, Instituto do Pesquisa Económica Aplicada (IPEA), Abril 2015, Brazil
- MPI (2013a) *Profile of the Meeting Industry in the UK*. Meeting Professionals International Foundation <http://www.mpiweb.org/UKAIS/ReportSummary> [accessed 5th March 2014]
- MPI (2013b) *The Economic Impact of the UK Meeting & Event Industry*. Meeting Professionals International Foundation. <http://www.mpiweb.org/UKAIS/ReportFinal> [accessed 5th March 2014].

- Munday, M., Roberts, A., Roche, N., Armstrong, M., Brown, A., Hargreaves, J., Hyder, K. and Pilgrim-Morrison, S. (2015). The Contribution of Recreational Sea Angling to the Tourism Economy in England, MOVE2015 4th International Conference on Sub-national Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA), November 18th – 20th, 2015.
- Parroco, A.M., Vaccina, F., De Cantis, S. And Ferrante, M. (2015). Multi-destination trip behaviours : methodological issues and the research design of a survey on incoming tourism in Sicily, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Patuelli, R., Mussoni, M. and Candela, G. (2011). The Effects of World Heritage Sites on Domestic Tourism : A Spatial Interaction Model for Italy, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Pawlowska, E., Martínez Roget, F., and Pereira López, X. (2011). Economic impact of iternational academic tourism in Galicia, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Pena Boquete, Y. and Pérez Ducal, D. (2011). Temporary employment in Tourism Activities : Regional differences in Spain, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Pinot de Libreros, M., Rojas Pulido, J.A. and Mora Martínez, C.A. (2013). Measurement of Domestic Tourism in Colombia: Experience and Challenges, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Requejo Liberal, J. (2012).“ *Tools for Understanding and Managing Tourism in the Formal Economy*” INRouTe 1st Seminar on Regional Tourism: setting the focus, Venice, July 5th and 6th,2012.
- Rincón Velandia, G. (2013). Santander Tourism Information System - SITUR Santander Colombia, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Rincón Velandia, G. (2015). Measurement of Visitor Flows at Regional Level: Exeprience in Santander for Colombia, MOVE2015 4th International Conference on Sub-national Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA), November 18th – 20th, 2015.
- Rincón Velandia, G. and Garcés Portilla, D. (2013). Profile, characterization and estimation of expenditure of the flows of visitors to Santander, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Rivera, R. (2015). A Dynamic Linear Model to Forecast Number of Nonresident Hotel Registrations in Puerto Rico Using Google Trends Search Query Data, MOVE2015 4th International Conference on Sub-national Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA), November 18th – 20th, 2015.

- Romagosa, F., Priestly, G.K. and Llurdés, J.C. (2011). "El Turismo en el marco de una estrategia de planificación sostenible general en Cataluña", *Boletín de la Asociación de Geógrafos Españoles* número 57 (2011) 267-293
- Ros Santasusana, J. (2012) "Collaboration and consensus policies between administrations and the private sector". In: Anton Clavé, S. (Ed.) 10 Lessons on Tourism. The challenge of reinventing destinations. Editorial Planeta. Barcelona.
- Schiff, A. and Becken, S. (2011). "Demand elasticity estimates for New Zealand tourism", *Tourism Management*, 32 (2011) 564-575.
- Scuttari, A. and Castlunger, L. (2011). The Hidden Side of Tourism Uncovered: Combining Traffic and Tourism Data to Estimate Same-day Trips and Hidden Tourism in South Tyrol, MOVE2011 -2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Shani, A., Rivera, M.A. & Hara, T. (2009). Assessing the Viability of Repeat Visitors to Cultural Events: Evidence from the Zora! Festival, *Journal of Convention and Event Tourism*, 10(2), 89-104.
- Smith, E. and White, S. (2011). What insights can Google Trends provide about tourism in specific destinations, MOVE2011 -2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Statistics New Zealand, (2001). Review of the Statistical Needs of Local Government, Wellington, 30 November 2001.
- Stienmetz, J.L. and Fesenmaier, D.R. (2013). Assessing the Economic Value of Tourism Attractions Using a Network Approach, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.
- Stienmetz, J.L. and Fesenmaier, D.R. (2015). Measuring Intra-Regional Tourist Behaviour: Towards Understanding Visitor Expenditure Dynamics, MOVE2015 4th International Conference on Sub-national Measurement and Economic Analysis of Tourism: Towards a Set of UNWTO Guidelines, Puerto Rico (USA), November 18th – 20th, 2015.
- Terrier, C., Armand, L., Antczak, M., Khiati, A., Sylvander, M., Tardieu, F., and Lévy B., (2005). Réalisation Cartographie et Décision "Mobilité touristique et population présente. Les bases de l'économie présente des départements", Minister du Tourisme, www.statistiques.tourisme.gouv.fr
- The Travel Survey Methods Committee, The on-line Travel Survey Manual: A Dynamic Document for Transportation Professionals, provided by the Members and Friends of the Transportation Research Board's Travel Survey Methods Committee (ABJ40), (Washington D.C, United States)
- Torres-Delgado, A. and López Palomeque, F. (2014). "Measuring sustainable tourism at the municipal level", *Annals of Tourism Research*, 49 (2014) 122-137.
- Tourism Research Council, (2002). "Review of Core Tourism Statistics", Full Report, New Zealand December 2002

- United Nations Economic Commission for Europe, (2011). Canberra Group Handbook on Household Income Statistics, second edition 2011, United Nations New York and Geneva 2011
- Universitat Autònoma de Barcelona. Test to implement tourist indicators in EDEN destinations, Evaluation Report, European Commission – DG Enterprise and Industry/Tourism Unit (Tender nº ENTR/2009/58), September 2010
- UNWTO and ILO (2014), Measuring Employment in the Tourism Industries-Guide with Best Practices, UNWTO, Madrid.
- UNWTO. (2003). New Statistical Initiatives in the Field of Tourism, Report to OECD Statistics Directorate (Madrid, 2003) <http://statistics.unwto.org/sites/all/files/docpdf/oecd.pdf>
- Valdés, L., Baños, J. and Del Valle, E.A. (2011). Application of an Input-Output Analysis for the Estimation of the Regional Economic Impact of Tourism: the Experience in Asturias, MOVE2011 –2nd International Conference on the Measurement and Economic Analysis of Regional Tourism, Bilbao (Spain), October 27th – 29th, 2011.
- Van Ho, T., et al.(2008), Development of Regional Tourism Satellite Account: A case study from Australia, (Document presented at the International Conference on Measuring Tourism Economic Contribution at Sub-National Levels, “Knowledge as Value Advantage for Tourism Destinations”, 29 - 31 October 2008, Málaga, Spain) (Online), available: <http://statistics.unwto.org/en/event/malaga>.
- VisitDenmark 2012 The Economic Contribution of Meeting Activity in Denmark, May 2012
- World Tourism Organization (WTO) (2000). General Guidelines for Developing the Tourism Satellite Account (TSA). Measuring Total Tourism Demand, Madrid 2000.
- World Tourism Organization (2014), AM Reports, Volume seven- Global Report on the Meetings Industry, UNWTO, Madrid
- Zimowski, M., R. Tourangeau, R. Ghadialy, and S. Pedlow. (1997a). Non-Response in Household Travel Surveys, prepared for Federal highway Administration <http://tmip.fhwa.dot.gov/clearinghouse/docs/surveys/nonresponse/glossary.stm>
- Zuñiga Collazos, A., Escobar Moreno, N.R. and Castillo Palacio, M. (2013). Evaluation of the Determinants Factors of Innovation in Colombian Tourist Product, MOVE2013 – 3rd International Conference on the Measurement and Economic Analysis of Regional Tourism American Chapter, Medellin (Colombia), November 6th & 7th, 2013.

Glossary

Presentation

This Glossary embodies around 160 terms addressed to the target population of this document which refers to tourism practitioners - tourism officials who commission surveys and research, and those who undertake such surveys- and different key stakeholders at regional and sub-regional levels –including governments, public institutes and agencies, universities, research centres, industry associations, trade bodies and specialized firms.

Tourism statisticians and practitioners might be interested in a more complete list such as UNWTO Statistical Glossary which includes terms related specifically to tourism statistics and general statistical terms identified in the SDMX project common vocabulary and other international statistical initiatives.

Because this document has as a basic aim the adaptation of the UN 2008 international recommendations on tourism statistics, almost half of the terms included are reproduced from or linked to terms referred in UNWTO Statistical Glossary and other UNWTO/STATS documents: all of them are identified as /A

The rest of them could be either identified as /B if extracted from other international organizations or national statistical documents, or /C in the case that they are INRouTe proposed terms

The Glossary also includes explanatory notes (identified as /E.N.) when deemed appropriate.

This version has benefitted from the suggestions and comments received during the 2015 world-wide consultation; when these have addressed clarifications or editorial amendments to the 2008 IRTS and TSA: RMF documents they have not been included as such changes would correspond, eventually, to the UNWTO Statistics Committee; such body is competent to evaluate the opportunity to propose such modifications in the corresponding documents.

Each term is identified with a capital letter meaning the source used as follows:

- A: International Recommendations for Tourism Statistics (IRTS 2008) as well as other UNWTO/STATS documents:
- UNWTO IRTS 2008 Compilation Guide
 - Tourism Satellite Account –TSA:RMF 2008
 - Measuring Domestic Tourism and the use of Household Surveys (jointly with ILO),
 - other Technical Papers
- B: Other international organizations or national statistical documents:
- System of Environmental and Economic Accounting (SEEA_CF 2012) and complementary publications
 - Dirk Belau and Debbie Budlender, An introduction to labour statistics in tourism, ILO Working Paper 223, Geneva 2006
 - National Cooperative Highway Research Program (NCHRP) Report 571/USA
 - Canadian Tourism Human Resource Council, Who’s working for you? A demographic profile of tourism sector employees, 2009
 - Other documents: Statistical Data and Metadata exchange (SDMX), Statistics Canada Quality Guidelines (1998 and 2009 editions) and OCDE Statistical Glossary
 - European Union Commission and Eurostat statistical documents
- C: INRouTe proposals

These three subsets of terms (both their number or definitions) might be modified as the result of the present 2016 world-wide consultation process.

More specifically, regarding those terms identified as INRouTe proposals, it should be highlighted that as mentioned in the chapter **Overview**, “this document is a first step in the process to take tourism measurement at subnational levels seriously. Therefore, such process is foreseen as a medium term initiative and consequently, the recommendations about the operationalization of those topics will quite probably need to be redrafted in due time”

List of Terms

Activities (and main purpose of the trip)/A Each tourism trip has one and only one main purpose: each main purpose of a tourism trip (see also *Purpose of a tourism trip (main and secondary purposes)*) is associated with a group of main activities undertaken during the trip as follows:

1. *Personal*. This category includes all purposes of tourism trips that are not classified as business and professional (see 2. *Business and professional* below):

- 1.1. *Holidays, leisure and recreation*. This category includes, for example, sightseeing, visiting natural or man-made sites, attending sporting or cultural events, practicing a sport activity as a non-professional; using beaches, attending summer camps for youngsters, visiting establishments specialized in well-being (for example, wellness hotels), seeking for gastronomy or culinary experiences, etc.
- 1.2. *Visiting friends and relatives*. This category includes, for example, attending weddings, funerals or any other family event; short-term caring for the sick or old, etc.; it excludes on the job training
- 1.3. *Education and training*. This category includes, for example, taking short-term courses; following particular programmes of study (formal or informal) or acquiring specific skills through formal courses, university sabbatical leaves, etc.
- 1.4. *Health and medical care*. This category includes, for example, receiving services from hospitals, clinics, convalescent homes and, more generally, health and social institutions, etc. This category includes only short-term treatments because long-term treatments requiring stays of one year or more are not part of tourism.
- 1.5. *Religion/pilgrimage*. This category includes, for example, attending religious meetings and events, pilgrimages, etc.
- 1.6. *Shopping*. This category includes, for example, purchasing consumer goods for own personal use or as gifts except for resale or for use in a future productive process, (in which case the purpose would be business and professional), etc.
- 1.7. *Transit*. This category consists of stopping at a place without any specific purpose other than being en route to another destination.
- 1.8. *Other*. This category includes, for example, volunteer work (not included elsewhere), investigative work and migration possibilities; undertaking any other temporary non-remunerated activities not included elsewhere, etc.

2. *Business and professional*. This category includes the activities of the self-employed and employees as long as they do not correspond to an implicit or explicit employer-employee relationship with a resident producer in the country or place visited, those of investors, businessmen, etc. It also includes, for example, attending meetings, conferences or congresses, trade fairs and exhibitions; giving lectures, concerts, shows and plays, participation in foreign government mission except when stationed on a duty in the country visited, working as a guide, participation in a professional sports activity, on the job training; etc.

Related terms:

Activity of visitor

Purpose of a tourism trip (main and secondary purpose)

Tourism flows

Visitor

Visit

Activity (principal)/A The principal activity of a producer unit is the activity whose value added exceeds that of any other activity carried out within the same unit.

Related terms:

Tourism industries

Activity of visitors/A As explained in IRTS 2008 -paras. 4.14 and 4.15-, as well as in TSA: RMF 2008 -paras. 2.3 and 2.5-, the notion of activity encompasses all that visitors do for a trip or while on a trip both in physical and monetary terms. It is not restricted to what could be considered as typical tourism activities, such as sightseeing, sunbathing, visiting sites, etc. Travelling for the purpose of conducting business, for education and training, etc. can also be part of tourism if the conditions that have set up to define tourism are met.

Related terms:

Visitor

Activities(and main purpose of the trip)

Activity of visitors (at destination)/B Activity of visitors at destination is a complex variable; most tourism or travel surveys do not adequately account for activities undertaken by the respondent. However, with the increasing use of activity-based and time-use surveys (and it is possible that time-use diaries will become the primary data collection instrument in the context of travel and travel behaviour), activity has become a very important item. It is widely acknowledged that most travel or tourism variables are derived variables (such as activity) meaning that collecting data on activities undertaken gives insight for identifying different typologies of visitors and tourism. Therefore, an appropriate coding of purpose of the trip and categories of activities undertaken is of great importance when surveying visitors and other travellers.

Related terms:

Activity of visitors

Product (tourism)

Visitor

Administrative data use/A -see E.N.-) Administrative records are data collected for the purpose of carrying out various governmental programs, for example, income tax collection. As such, the records are collected with a specific decision-taking purpose in mind, and so the identity of the unit corresponding to a given record is crucial. In contrast, in the case of statistical records, on the basis of which no action concerning an individual is intended or even allowed, the identity of individuals is of no interest once the database has been created.

Related terms:

Regional Tourism Information System

Birth rate (enterprise/establishment)/B The birth rate of a given reference period (usually one calendar year) is the number of enterprise births as a percentage of the population of active enterprises. This birth rate may vary depending on the birth concept that is used.

At subnational levels, birth rates should refer to establishments instead.

Births do not include entries into the population due to mergers, break-ups, split-off or restructuring of a set of enterprises.

Related terms:

Business demography

Birth of enterprises

Establishment

Business demography/B

Business demography covers events, like births and other creations of units, deaths and other cessations of units, and their ratio to the business population. It covers follow-up of units in time, thus gaining information on their survival or discontinuity. It also covers development in time according to certain characteristics like size, thus gaining information on the growth of units, or a cohort of units, by type of activity.

The demography of enterprises can be assessed by studying enterprise births and enterprise deaths and by examining the change in the number of enterprises by type of activity, i.e. by examining the flows and stocks to get a complete picture of the enterprise dynamism.

Related terms:

Birth rate

Business register/B

Business registers are lists of enterprises and other units, as required by the registers Regulation or recorded on voluntary basis, whose activities contribute to the Gross Domestic Product of the Member State. For instance, all Member States of the European Union maintain Business Registers for statistical purposes; national Business Registers are the central repository for information on businesses.

Related terms:

Administrative data use

Enterprises

Business statistics

See *Structural business statistics*

Business visitor/A

A *business visitor* is a *visitor* whose main purpose for a tourism trip corresponds to the *business and professional* category.

Related terms:

Activities (and main purpose of the trip)

Purpose of a tourism trip (main and secondary purposes)

Carrying capacity/C – see E.N.-

Carrying capacity is a concept that refers to the maximum number of visitors a destination can sustain at any one time without damage to itself. It can be characterized by three dimensions—environmental, economic and social. Each dimension depends on both the characteristics of the destination and the characteristics of visitors and their behavior while at destination

This document does not include explicit guidelines for determining carrying capacity.

Related terms:

Tourism destinations

Tourism flows

- CATI/B** Computer-assisted Telephone Interviewing (CATI) systems are similar to Computer-Assisted Personal Interviewing (CAPI) systems in that the questionnaire items are displayed online and the interviewer enters the respondent's answers with the keyboard or mouse. In addition, WAPI (Web Assisted Personal Interviews) is becoming more important; in several cases a combined method is used (CATI and WAPI)
- Related terms:**
Survey
- Census/A** A survey conducted on the full set of observation objects belonging to a given population or universe.
- A census is the complete enumeration of a population or groups at a point in time with respect to well-defined characteristics: for example, Population, Production, etc. In some connection the term is associated with the data collected rather than the extent of the collection so that the term sample census has a distinct meaning. The partial enumeration resulting from a failure to cover the whole population, as distinct from a designed sample enquiry, may be referred to as an "incomplete census".
- Related terms:**
Survey
- Classifications (of products and industries)/A** The typology of tourism characteristics consumption products and tourism industries are grouped in 12 categories (see *Tourism industries*). Categories 1 to 10 comprise the core for international comparison and are described in terms of International Standard Industrial Product Classification of all Economic Activities (ISIC) and the Central Product Classification (CPC)—both are UN classifications. The two other categories are country specific, with category 11 covering tourism characteristic goods and the corresponding retail trade activities and category 12 referring to tourism characteristic services and activities.
- Related terms:**
ISIC, Rev. 4
CPC, Ver. 2
Tourism industries
Enterprises
- Coding (complex variables)/B** Refers to how to code the responses to certain types of questions that involve categories that may vary from survey to survey, depending on the level of detail required for a specific survey. Codes should be set up in such a way as to allow varying levels of aggregation, depending on the needs of any particular survey. In general, this can be done by setting up multi-digit codes, where appropriate, in which the first one or two digits represent the coarsest level of aggregation that would be used, the next digit would provide greater disaggregation, and a further digit (if applicable) could provide even further disaggregation.
- This would follow along the lines used in ISIC and CPC international classifications of economic activities and products.

Standardized categories could be proposed for complex variables such as means of travel, activity, internet and cell phone use, type of accommodation establishment, etc.

Related terms:

Activity of visitors

Activities (and main purpose of the trip)

Coherence/A

Coherence is defined as the adequacy of statistics to be combined in different ways and for various uses.

When originating from different sources, and in particular from statistics surveys using different methodology, statistics are often not completely identical, but show differences in results due to different approaches, classifications and methodological standards. There are several areas where the assessment of coherence is regularly conducted: between provisional and final statistics, between annual and short-term statistics, between survey statistics and national accounts, between statistics from the same socio-economic domain, and between survey statistics and national accounts.

The concept of coherence is closely related to the concept of comparability between statistical domains. Both coherence and comparability refer to a data set with respect to another. The difference between the two is that comparability refers to comparisons between statistics based on usually unrelated statistical populations and coherence refers to comparisons between statistics for the same or largely similar populations.

Related terms:

Survey

Data documentation

Data confrontation

Comparability

**Comparability/C –see
E.N.-**

The term comparability used in statistics refers to comparisons of statistical basic data and indicators derived from different data sets (e.g. regions).

In this Glossary, comparability refers both to international and intra-national territorial entities; for both purposes-especially for intra-national comparability of tourism destinations- a continuous lobbying for the implementation of a common set of concepts, definitions and classifications is a necessary condition

Related terms:

Coherence

Regional Tourism Information System

**Country of
residence/A**

The country of residence of a household is determined according to the centre of predominant economic interest of its members. If a person resides (or intends to reside) for more than one year in a given country and has there his/her centre of economic interest (for example, where the predominant amount of time is spent), he/she is considered as a resident of this country.

Related terms:

Residence
Dwellings
Household

Coverage/A

Coverage is the completeness of the information for the target population that would be derived if all of the frame units were to be surveyed. Coverage errors are discrepancies in statistics for the target population versus those for the frame population. These errors are a function of both the frame under-coverage (or over-coverage) of the target population and of coverage errors occurring during survey operations resulting in differences in the survey estimate for those actually covered from those for which an estimate was required. Coverage errors can have both spatial and time dimensions.

Related terms:

Frame
Survey

CPC, Ver.2/A

The Central Product Classification, version 2, covering all goods and services, is a system of categories that are both exhaustive and mutually exclusive. This means that if a product does not fit into one CPC category, it must automatically fit into another. The CPC classifies products based on the physical properties and the intrinsic nature of the products as well as on the principle of industrial origin.

It is intended to serve as an international standard for assembling and tabulating all kinds of data requiring product detail, including industrial production, national accounts, service industries, domestic and foreign commodity trade, international trade in services, balance of payments, consumption and price statistics. Other basic aims are to provide a framework for international comparison and promote harmonization of various types of statistics dealing with goods and services.

Related terms:

ISIC, Rev. 4
Tourism industries

Data analysis/A -see E.N.-

The process of transforming raw data into usable information.

Related terms:

Descriptive analysis

Data confrontation/A

The process of comparing data that has generally been derived from different surveys or other sources, especially those of different frequencies, in order to assess and possibly improve their coherency, and identify the reasons for any differences.

Such data may not be coherent for a number of reasons including the use of different data item definitions, classifications, scope, reference period, etc.

Related terms:

Survey
Coherence
Data reconciliation

Data documentation/A

Data documentation should refer to what official statisticians name as “metadata” which are a particular type of data and other documentation that describe the contents and the quality of the statistical data and related processes.

Statistical metadata can be classified in various ways, but there is a clear high-level distinction between the metadata needed to search for and display data (Structural metadata) and the metadata that give more information on definitions, methodologies, processes and quality (Reference metadata).

Reference metadata should include all of the following: a) "conceptual" metadata, describing the concepts used and their practical implementation, allowing users to understand what the statistics are measuring and, thus, their fitness for use; b) "methodological" metadata, describing methods used for the generation of the data (e.g. sampling, collection methods, editing processes); c) "quality" metadata, describing the different quality dimensions of the resulting statistics (e.g. timeliness, accuracy).

This document includes guidelines for documenting tourism statistics at the subnational levels; such guidelines are an adaptation of UNWTO *Tourism Statistics Metadata Project: General Guidelines for documenting tourism statistics*, ver.2 May 2005.

Related terms:

Regional Tourism Information System

Data modelling/A - see E.N.-

Techniques used extensively to derive synthetic estimates when the cost of obtaining small area statistics from a survey is too great. Synthetic estimates are achieved through the development and use of sophisticated statistical modelling and estimation techniques, which integrate data from two or more sources.

Related terms:

Regional Tourism Information System

Data quality (evaluation)/A

Data quality evaluation is a process used to determine whether final products meet the original objectives of the statistical activity, in particular in terms of that data's accuracy, timeliness, reliability, comparability, coherence and accessibility and some other items. It allows users to better interpret survey results and the Agency to improve the quality of its surveys.

There are two broad methods of evaluating data quality.

Certification or *validation* is the process whereby data are analyzed before official release with a view to avoiding gross errors and eliminating poor quality data. This process frequently coincides with an interpretative analysis of the data and usually involves time constraints and deadlines, and therefore only methods that yield rapid results can be used.

Sources of error studies generally provide quantitative information on the specific sources of errors in the data. While timeliness is important, the results of these studies often are only available after the official release of the data. (See *Errors (statistical)*).

	<p>Related terms: <i>Errors (statistical and non-statistical)</i> <i>Data reconciliation</i> <i>Data confrontation</i></p>
Data reconciliation/A	<p>The process of adjusting data derived from two different sources to remove, or at least reduce, the impact of differences identified.</p> <p>Editing and reconciliation may involve fixing errors or adopting alternative sources and methods that are aimed at improving the process of reviewing or understanding data.</p> <p>Related terms: <i>Survey</i> <i>Data confrontation</i></p>
Destination	<p><i>See Tourism destination</i></p>
Destination (main and secondary destinations) of a trip/A	<p>The main destination of a tourism trip is defined as the place visited that is central to the decision to take the trip (see also <i>Purpose of a tourism trip - main and secondary purposes</i>, and <i>Visit</i>). This definition is consistent with that of the main purpose of a trip. However, if the visitor can identify no such place, the main destination is defined as the place where he/she spent most of his/her time during the trip. Again, if the visitor can identify no such place, then the main destination is defined as the place that is the farthest away from his/her place of usual residence: each trip should be associated its main destination.</p> <p>Related terms: <i>Trips</i> <i>Purpose of a tourism trip</i> <i>Destination management</i> <i>Itinerary</i></p>
Destination management/C	<p>Destination management aims at organising, coordinating and integrating in a long-term way all the components that make a successful destination with a clear focus on the needs of visitors, residents and businesses and with the purpose of making the destination able to compete with similar type of destinations in the tourism market.</p> <p>The setting up of a Regional Tourism Information System (R-TIS) as designed in this document should have as main purpose to serve as a robust tool for destination management purposes</p> <p>Related terms: <i>Tourism destinations</i> <i>Territorial entities</i></p>
Domestic tourism (national)/A	<p>Comprises the activities of a resident visitor within the country of reference, either as part of a domestic tourism trip or part of an outbound tourism trip.</p> <p>Related terms: <i>Forms of tourism</i> <i>Regional Tourism</i> <i>Visitors</i> <i>Trip</i></p>

Dwellings/A	<p>Each household has a principal dwelling (sometimes also designated as main or primary home), usually defined with reference to time spent there, whose location defines the country of residence and place of usual residence of this household and of all its members. All other dwellings (owned or leased by the household) are considered secondary dwellings.</p> <p>Related terms: <i>Vacation home</i> <i>Household</i> <i>Country of residence</i></p>
Economic analysis (tourism)/A	<p>Tourism generates directly and indirectly an increase in economic activity in the places visited (and beyond), mainly due to demand for goods and services that need to be produced and provided.</p> <p>In the economic analysis of tourism, one may distinguish between tourism's 'economic contribution' which refers to the direct effect of tourism and is measurable by means of the Tourism Satellite Account, and tourism's 'economic impact' which is a much broader concept encapsulating the direct and secondary indirect effects of tourism and which must be estimated by applying models.</p> <p>Related terms: <i>Economic contribution</i> <i>Economic consequences</i> <i>Economic impact</i> <i>Tourism demand</i> <i>Tourism supply</i></p>
Economic consequences (tourism) /A	<p>The comprehensive term including all economic effects, both positive (benefits) and negative (costs), both direct and secondary, produced by visitors, their consumption expenditures and the reaction of business firms, non-profit organizations and government agencies to visitors and their activities in a national economy.</p> <p>Related terms: <i>Tourism Satellite Account (TSA) 2008</i> <i>Economic impact (tourism)</i> <i>Visitor</i> <i>Visitor-trip</i> <i>Visit</i></p>
Economic contribution (tourism) /A	<p>The direct effects on the national economy measured by the Tourism Satellite Account (TSA) basic aggregates .</p> <p>Related terms: <i>Tourism Satellite Account (TSA) 2008</i> <i>Economic impact (tourism)</i> <i>Job</i> <i>Employment</i> <i>Economic analysis (tourism)</i></p>
Economic impact (tourism) /A	<p>The sum of an expanded set of direct and secondary indirect effects of Tourism Consumption and other elements of Total Tourism Internal Demand on the national economy (such as Tourism Gross Fixed Capital Formation and</p>

Tourism Collective Consumption; all these aggregates are TSA aggregates)

Related terms:

Tourism satellite account (TSA 2008)

Economic contribution (tourism)

Job

Employment

Economic analysis (tourism)

Economically active population/B

The economically active population or labour force comprises all persons of either sex who furnish the supply of labour for the production of goods and services as defined by the system of national accounts during a specified time-reference period.

Related terms:

Employment

Tourism sector employment

Ecosystem/B

For accounting purposes ecosystems are defined in relation to spatial areas with each area considered an ecosystem asset. Thus, ecosystem assets are spatial areas containing a combination of biotic and abiotic components and other characteristics that function together.

Assessment of ecosystems should consider their ecology and location. Key characteristics of the ecology of an ecosystem are (i) its structure (e.g. the food web within the ecosystem); (ii) its composition, including biotic (flora and fauna) and abiotic (soil, water) components; (iii) its processes (e.g. photosynthesis or the recycling of nutrients in an ecosystem), and (iv) its functions (e.g. resilience). Key characteristics of its location are (i) its extent; (ii) its configuration (i.e. the way in which the various components are arranged and organised within the ecosystem); and (iii) the landscape forms (e.g. mountain regions, coastal areas) within which the ecosystem is located.

Traditionally, ecosystems have been associated with more or less 'natural' systems, i.e. systems with only a limited degree of human influence. However, a wider interpretation has become more common, based on the recognition that human activity influences ecosystems across the world. Consequently, ecosystems change as a result of natural processes and because of human actions.

Ecosystems provide a range of services for economic and other human activities such as recreation which is strongly related to tourism.

Related terms:

SEEA_CF

Territorial entities

Ecosystem (degradation and enhancement) /B

The measurement of ecosystem degradation is one of the key drivers of ecosystem accounting and for the System of Environmental-Economic Accounting (SEEA) international statistical standard more generally. Indeed, without a concern for a falling ability of the environment to provide ecosystem services it would be possible to continue to view the environment as infinitely capable of regeneration and of supporting economic and human activity.

While the general idea of ecosystem degradation as reflecting a fall in the capacity of ecosystems to supply ecosystem services is well accepted – there remains debate about how this concept should be defined for measurement purposes.

In the context of describing general principles for ecosystem accounting the most relevant observation is that ecosystem degradation is not something that can be directly measured.

Related terms:

SEEA_CF

Employees/B

Employees are all those workers who hold the type of job defined as “paid employment”.

Related terms:

Employment

Jobs

Employees (in full-time equivalent units)/B

Figures for the number of persons working less than the standard working time of a full-year full-time worker, should be converted into full time equivalents, with regard to the working time of a full-time full-year employee.

Included in this category are people working less than a standard working day, less than the standard number of working days in the week, or less than the standard number of weeks/months in the year. The conversion should be carried out on the basis of the number of hours, days, weeks or months worked.

Related terms:

Employees

Employment

Full time equivalent

**Employment (attributable to tourism industries)
/A –see E.N.-**

Employment in tourism industries may be measured in different ways: as a count of the persons employed in tourism industries in any of their jobs, as a count of the persons employed in tourism industries in their main job, or as a count of the jobs in tourism industries. Figures obtained in either of such measurements should be presented as full-time equivalent figures (See *Employees (in full-time equivalent units)*).

Related terms

Enterprise

Employees

Enterprise/B

The smallest combination of legal units that is an organizational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations.

It should be highlighted that the term enterprise is not used in the 2008 international standards on tourism statistics (national accountants might be familiar about the differences of the terms enterprise and establishment

specially regarding the two different but still complementary approaches in National Accounts between a sectorial vs functional approaches (being the enterprise associated to the first one while establishment is to the functional one –and this is precisely the approach used in the Tourism Satellite Account-).

Related terms:*Employment**Establishment**Job**Small and medium sized enterprise***Environment/B**

For accounting purposes, environment is defined in two perspectives:

- From the perspective of environmental flows, the environment is the source of all natural inputs to the economy, including natural resource inputs (minerals, timber, fish, water, etc.) and other natural inputs absorbed by the economy, for example, energy from solar and wind sources and the air used in combustion processes. (SEEA_CF).
- From a stock perspective, the environment includes all living and non-living components that constitute the biophysical environment, including all types of natural resources and the ecosystems within which they are located.

Related terms:*SEEA_CF***Establishment/A**

An establishment is an enterprise, or part of an enterprise, that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added.

The term “establishment” is used in Eurostat ESA 2010 lexicon as “local kind of activity” unit (term used in the SNA 2008)

Related terms:*Enterprises**Employment**Employees**Jobs**Relevance***Errors (statistical and non-statistical)/A – see E.N.-**

Usually errors are mentioned and measured when documenting statistical surveys (this is the case of sampling errors) while non-statistical errors are usually ignored (such as coverage, nonresponse, measurement and processing errors). It is not evident that non-statistical errors are neglectable

Related terms:*Data quality (evaluation)***Excursionist/A**

A visitor (domestic, inbound or outbound) is classified as a same-day visitor (or excursionist) if his/her trip does not include an overnight stay.

Related terms:*Tourism flows**Visitors*

Forms of tourism/A There are three basic forms of tourism: domestic tourism, inbound tourism, and outbound tourism. These can be combined in various ways to derive the following additional forms of tourism: internal/national/international tourism (i.e. internal = domestic + inbound; national = domestic + outbound; international = inbound + outbound)

Related terms:

Tourism flows

Domestic tourism

Inbound tourism

Outbound tourism

Regional Tourism

Frame/B A frame is any list, material or device that delimits, identifies, and allows access to the elements of the survey population. Frames are generally of two types: area frames and list frames. A list frame is a list of units in the survey population. Area frames are usually made up of a hierarchy of geographical units, which in turn contain units in the survey population; that is, the frame units at one level can be subdivided to form the units at the next level. All of the elements included in the frame constitute the frame population. Frames are often much more than a simple list of units or a map with geographic units delineated. A frame usually includes other information (e.g., identification, contact, classification, address, size, maps in case of geographical units) to be used in carrying out the survey.

The frame may or may not contain information about the size or other supplementary information about the units, but should have enough details so that a unit, if included in the sample, may be located and taken up for inquiry. The nature of the frame exerts a considerable influence over the structure of a sample survey. It is rarely perfect, and may be inaccurate, incomplete, inadequately described, out of date or subject to some degree of duplication. Reasonable reliability in the frame is a desirable condition for the reliability of a sample survey based on it.

Related terms:

Survey

Coverage

Full-time equivalent/A Is a measure of the time devoted to a specific type of activity

The term full-time equivalent, sometimes abbreviated as FTE, refers to a statistical procedure used to derive “average figures” during a reference period (either a week, a year or any other period). It has been basically applied to labour force statistics but also to education and other social research areas such as sustainability.

FTE data are used to improve the comparability of employment, jobs and resident/non-resident population figures.

In the case of employment, FTE data are made up of 3 parts: number of hours worked, a standard working time and a total number of employees.

A full-time employee is therefore counted as one also in FTE figures, while a part-time worker gets a score in proportion to the hours he or she works.

For example, a part-time worker employed for 20 hours a week where full-time work consists of 40 hours, is counted as 0.5 FTE.

Such statistical procedure could be also applied to tourism to derive Tourism Population estimates using overnights figures of both resident population and non-residents visitors (staying either in accommodation establishment or in second homes). In the case of tourism, such figures should refer to a calendar year.

Equivalent Tourism Population figures are used basically when measuring tourism contribution to sustainability, particularly on environmental sustainability and are necessary to derive territorial indicators of population density and tourism specialization that could allow for improved comparability between tourism destinations. .

Related terms:

Employees
Employment
Tourism population

Full-time equivalent units/A

Such figures are used to improve the comparability of employment, jobs, resident/non-resident population figures, etc.

Related terms:

Employees
Employment

Full-time job/B

One in which a person usually works 30 hours or more per week

Related terms:

Employment
Jobs
Main job
Tourism sector employment

Geography of tourism/C

Geography of tourism tries to explain the differentiation, organization and anthropization of space as a consequence of tourism activities; dimension, scope, impacts of flows produced in between origin and destination spaces; as well as the behavioural patterns of tourists in destinations; the role of agents intervening in the tourism production, distribution and consumption, and the representations and images that tourism produces in relation to the territory where it occurs.

At the same time, it is a study of the processes of valuing tourism resources and spaces, in an integrated manner, and it lays out the scope of impacts at social, environmental and economic levels, as well as those associated with competitiveness, positioning, and attractiveness of spaces within the destination.

Related terms:

Environment
Ecosystem

Governance/A

Tourism governance is a measurable government practice, geared towards the efficient management of the tourism sector at the different levels of

government, through forms of coordination and cooperation among them in order to achieve the goals shared by networks of actors that have a bearing on the sector, with the aim of attaining solutions and opportunities on the basis of agreements founded on the recognition of interdependencies and shared responsibilities.

Related terms:

Tourism destination management

Household/B

All persons who occupy the same housing unit and share responsibilities and resources. A household may consist of a family, one person living alone, two or more families living together, or any other group of related or unrelated persons who make joint decisions and share resources. These persons may or may not be related to each other.

For households, the centre of predominant economic interest lies in the region where they are resident, not the region where they work.

From a regional perspective, the following individuals could be treated as residents in a given region:

- (a) Travellers or visitors i.e. individuals who leave the region for less than one year.
- (b) Workers who work for part of the year in another region or country, in some cases in response to the varying seasonal demand for labour, and then return to their households.
- (c) Workers who regularly cross the border of the region or country where they live each day or somewhat less regularly (e.g. each week or month) to work in a neighbouring region or country.
- (d) People who go abroad for *short-term studies* as well as for full-time study generally continue to be resident in the territory in which they were resident prior to studying abroad. This treatment is adopted even though their course of study may exceed a year (*long-term students*). However, students become residents of the territory in which they are studying when they develop an intention to continue their presence in the territory of study after the completion of the studies. Members of the same household who are accompanying dependents of students are also considered to be residents of the same economy as the student.
- (e) People who go abroad for the purpose of *medical treatment* maintain their predominant centre of interest in the territory in which they were resident prior to the treatment, even in the rare cases where complex treatments take a year or more. As with students, accompanying dependents are treated in the same way.

An exception could be envisaged at the regional level, whereby these students and patients would be treated as residents of the host region, if the host region is in the home country and when they stay there more than one year.

Related terms:

Country of residence

Dwellings

Place of usual residence

Vacation home

- Household vehicle/B** A motorized vehicle that is owned, leased, rented or company-owned and available to be used regularly by household members during the travel period. Includes vehicles used solely for business purposes or business-owned vehicles if kept at home and used for the home to work trip (e.g., taxicabs, police cars) that may be owned by, or assigned to, household members for their regular use.
- Related terms:**
Means of transportation
Household
- Inbound tourism (national)/A** Comprises the activities of a non-resident visitor within the country of reference on an inbound tourism trip.
- Related terms:**
Forms of tourism
Regional Tourism
Visitors
- Indicator (statistical)/B** A statistical indicator is a data element that represents statistical data for a specified time, place, and other characteristics.
- A simple aggregation such as the number of accidents, total income or women Members of Parliament, is not in itself an indicator, as it is not comparable between populations. However, if these values are standardized, e.g. number of accidents per thousand of population, average income, or women Members of Parliament as a percentage of the total, the result meets the criteria for an indicator.
- Related terms:**
Visitors
- INRouTe (Research areas and topics)/C** The International Network on Regional Economics, Mobility and Tourism (INRouTe) proposal 's for the design of a R-TIS (Regional – Tourism Information System) is built on the following four research areas:
- A. Tourism as an economic sector;
 - B. Tourism and sustainable development;
 - 2.8. Tourism and the environmental, social and cultural dimensions;
 - 2.9. Tourism and the economic dimension;
 - C. Tourism and territorial cohesion;
 - D. Supporting tourism destinations' key stakeholders.
- Needless to say that there are many other areas that could be added in a later stage of the INRouTe project if the required resources (both financial and human) would be available.
- Related terms:**
Regional Tourism Information System
- IRTS 2008/A** The United Nations Statistical Commission approved in 2008 the new International Recommendations for Tourism Statistics (IRTS 2008); such Recommendations updated the 1993 recommendations in the following ways:
- (a) By reformulating the definition of visitors;
 - (b) By clarifying the concepts of trips and visits, and their characteristics (origin, destination, duration and purpose);

- (c) By clarifying the treatment of vacation homes;
- (d) By recognizing the travel party (members of the same household travelling together and sharing expenditure) as a relevant observation unit in tourism statistics;
- (e) By modifying the classification of tourism-related purposes of trips to take into consideration the changes undergone in tourism behaviour since 1993, in particular regarding education and training, health and medical care and incentive trips;
- (f) Through proposed classifications for characteristic tourism consumption products and characteristic tourism activities and revision of the classification of industries proposed in 1993 in line with the Central Product Classification, second revision, and the International Standard Industrial Classification of All Economic Activities, fourth revision;
- (g) By considering tourism-related employment an integral part of tourism analysis and defining and incorporating into the recommendations variables related to employment in the tourism industry, an effort in which ILO played an important role;
- (h) By making explicit the link with balance-of-payments statistics;
- (i) By clarifying the relationship with the tourism satellite account, providing guidance on extensions of tourism statistics to the subnational level and recognizing the need to collect data to address sustainability concerns;
- (j) By providing recommendations in several new areas, such as metadata, data quality, dissemination of data, inter-agency cooperation, implementation programme and policy for future updates.

Related terms:

Tourism Satellite Account (TSA)

ISIC Rev. 4/A

The International Standard Industrial Classification of All Economic Activities (ISIC) is the international reference classification of productive activities. Its main purpose is to provide a set of activity categories that can be utilized for the collection and reporting of statistics according to such activities.

In this fourth revision of ISIC, great efforts have been made to address the need for convergence between existing activity classifications at the international and multinational levels. Experience with the implementation of classifications and development work on classifications carried out in countries around the world have greatly contributed to ISIC, Rev.4. Explanatory notes have been extended to provide additional detail, allowing for more accurate interpretation of the content and boundaries of individual classes, which should lead to a less ambiguous application of ISIC, Rev.4.

The rationale for the final ISIC, Rev.4 structure, together with illustrative examples of the interpretation of the classification, will be discussed in the forthcoming UNSD Companion Guide to ISIC Rev. 4 and CPC, Ver. 2.

Related terms:

CPC, Ver.2

Tourism industries

Enterprises

Itinerary/C

IRTS 2008 identifies “trip” and “visit” as units related to the displacements of visitors: such trips qualify as “round trip”. From an analytical perspective the concept of itinerary (closer to the mobility research community –see *tourism trip* and *tourism visit*-) allows for deeper understanding of the movement of visitors in space and time while at destination.

From a measurement perspective an itinerary can be defined as a systematization of an alignment of potential points of interest to be visited: in the case of tourism, such alignment is usually defined and structured for planning, promotion and commercial purposes. Successful itineraries usually become a tourism product.

The measurement of itineraries should incorporate, in addition to a reference to the corresponding administrative and analytical territorial entities and characteristics of visitor (obtained from local surveys) other set of information as well, such as:

- georeferenced information, which includes number of stops and points of interest visited (visited spots)
- length of time
- distance covered

Related terms:

Tourism destination

Visitors

Visits

Stops

Job/B

A job is defined as an explicit or implicit contractual relationship (relating to the provision of labour input, not to supplying output of a good or service) between a person and a resident institutional unit to perform work (activities which contribute to the production of goods or services within the production boundary) in return for compensation (including mixed income of self-employed persons) for a defined period or until further notice.

In that definition, both employee and self-employment jobs are covered: that is, an employee job if the person belongs to another institutional unit than the employer and a self-employment job if the person belongs to the same institutional unit as the employer.

The concept of job differs from the concept of employment:

- It includes second, third, etc. jobs of the same person. Those second, third, etc. jobs of a person may either successively follow one another within the reference period (usually, a week) or, as when someone has an evening job as well as a daytime job, run in parallel.
- On the other hand, it excludes persons temporarily not at work but who have a ‘formal attachment to their job’ in the form, for instance, of ‘an assurance of return to work or an agreement as to the date of return’. Such an understanding between an employer and a person on lay-off or away on training is not counted as a job in the system.

Related terms:

Employment

Establishment

Jobs generated by tourism/B

Jobs that can be directly attributed to tourism demand.

	<p>Related terms: <i>Establishment</i> <i>Employment</i> <i>Full-time job</i> <i>Job</i> <i>Main job</i> <i>Tourism sector employment</i></p>
Jobs (in full-time equivalent units)/B	<p>Is defined as total hours worked divided by average annual hours worked in full-time jobs. This can be described as full-time equivalent work-years.</p> <p>Related terms: <i>Enterprises</i> <i>Employment</i></p>
Main destination (of a tourism trip)/A	<p>The main destination of a tourism trip is defined as the place visited that is central to the decision to take the trip. However, if no such place can be identified by the visitor, the main destination is defined as the place where he/she spent most of his/her time during the trip. Again, if no such place can be identified by the visitor, then the main destination is defined as the place that is the farthest from the place of usual residence.”</p> <p>The main destination, as well as any other destination during the trip (labelled as secondary destinations), can be requested in personal/household surveys</p> <p>Related terms: <i>Tourism destination</i> <i>Forms of tourism</i> <i>Tourism destination management</i></p>
Main job/B	<p>The job at which the most hours are worked.</p> <p>Related terms: <i>Enterprise</i> <i>Employment</i> <i>Full-time job</i> <i>Job</i> <i>Tourism sector employment</i></p>
Means of transportation/B	<p>A mode of travel used for going from one place (origin) to another (destination). Includes private (such as car, motorcycle, etc.) and public modes, as well as walking and other modes (such as plane, buses, ship, bicycle, passenger line/ferry, etc.).</p> <p>Related terms: <i>Household vehicle</i> <i>Transportation</i></p>
Metadata	<p>See <i>Data Documentation</i></p>
Meetings industry/A	<p>The term meetings industry is preferred by the International Congress and Convention Association (ICCA), Meeting Professionals International (MPI) and Reed Travel over the acronym MICE (Meetings, Incentives, Conferences and Exhibitions) which does not recognize the industrial nature of such activities.</p>

To highlight purposes relevant to the meetings industry, if a trip's main purpose is business/professional, it can be further subdivided into "attending meetings, conferences or congresses, trade fairs and exhibitions" and "other business and professional purposes".

Related terms:

Meeting tourism

Forms of tourism

MICE

See Meetings industry.

Mobility/C

In transportation literature, mobility is an area of research that refers to the measurement and analysis of travel behaviour (mainly road travel) of the resident population. For that purpose, mobility surveys are mostly addressed to households; data of households and their components (persons), vehicles used and trips undertaken are key to such analysis as well as for a multitude of planning, policy and infrastructures areas.

From a tourism research perspective particularly at the subnational level, "long distance/scale mobility surveys" are the most relevant ones.

Related terms:

Regional Tourism Information System

Modelled data

See Data modelling

Modules/A –see E.N.-

Also referred as supplementary surveys, are questions added to an existing survey to provide information on particular aspects of tourism or particular topics of interest. The results from supplementary questions can then be analyzed in conjunction with data already collected in the base survey

Related terms:

Regional Tourism Information System

Municipality

In relation with this document, the administrative unit corresponding to the first level of local level breakdown in the classification of Subnational Territorial entities proposed.

Related terms

Region

Territorial entities

NACE Rev. 2/B

NACE ("Nomenclature générale des Activités économiques dans les Communautés Européennes" – Statistical classification of economic activities in the European Communities) is the acronym used to designate the various statistical classifications of economic activities developed since 1970 in the European Union. It is the European standard classification of productive economic activities. NACE presents the universe of economic activities partitioned in such a way that a NACE code can be associated with a statistical unit carrying them out. NACE provides the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment, national accounts) and in other statistical domains.

NACE is derived from ISIC, in the sense that it is more detailed than ISIC. ISIC and NACE have exactly the same items at the highest levels, where NACE is more detailed at lower levels.

Related terms:

Tourism industries

ISIC Rev. 4

Nomenclature/A

When classifying, nomenclature involves a systemic naming of categories or items.

The terms "classification" and "nomenclature" are often used interchangeably, despite the definition of a "classification" being broader than that of a "nomenclature". A nomenclature is essentially a convention for describing observations, whereas a classification structures and codifies the observations as well.

Related terms:

Classifications (of products and industries)

NUTS/B

The Nomenclature of Territorial Units for Statistics (NUTS) provides a single uniform breakdown of the economic territory of the European Union (EU).

The NUTS classification is a hierarchical system for dividing up the economic territory of the EU for the purpose of:

- The collection, development and harmonization of EU regional statistics.
- Socio-economic analysis of the regions.
- Framing of EU regional policies.

In the context of EU Regional Accounts, the territory concept implies that activities are allocated to the territory where they actually take place, regardless of the residence of the units involved in the activity. In the hypothetical case where units in a region only have activities within their regional territory, the residence concept coincides with the territorial concept.

Related terms:

Nomenclature

Territorial entities

Occupation/A

A set of jobs whose main tasks and duties are characterised by a high degree of similarity (see also Tourism characteristic occupations).

Occupation refers to the type of work done during the reference period by the person employed (or the type of work done previously, if the person is unemployed), irrespective of the industry or the status in employment in which the person should be classified. Occupation is defined in terms of jobs or posts.

Related terms

Job

Employment

Post

Outbound tourism (national)/A

Comprises the activities of a resident visitor outside the country of reference, either as part of an outbound tourism trip or as part of a domestic tourism trip.

	<p>Related terms: <i>Visitors</i> <i>Trips</i> <i>Domestic Tourism</i> <i>Regional Tourism</i></p>
Package tour/A	<p>A single product provided by a tour operator which elaborates it and sells it directly or through travel agencies, in which travellers receive a combination of products associated to a trip, which are made of more than one of the following services: transport, accommodation sightseeing, entertainment, etc. and other goods and services at will.</p> <p>Package tours might refer to travel to one or more places within the economic territory of the country of residence of the packager selling the package, and also travel to destinations in one or more places or countries outside this economic territory, or a combination of both circumstances.</p> <p>Related terms: <i>Travel</i> <i>Tour operator</i> <i>Travel agencies</i></p>
Place of usual residence/A	<p>The place of usual residence is the geographical place where an individual usually resides, and is defined by the location of his/her principal dwelling.</p> <p>Related terms: <i>Country of residence</i> <i>Dwellings</i> <i>Household</i> <i>Residents</i></p>
Person Miles (Kilometres) of Travel/B	<p>A measure of person travel. When a person travels 1 mile (kilometer), 1-person mile (kilometer) of travel results. Where two or more persons travel together in the same vehicle, each person makes the same number of person miles (kilometers) as the vehicle miles (kilometers).</p> <p>Related terms: <i>Travel/Tourism</i></p>
Pilot survey/A	<p>The aim of a pilot survey is to test the questionnaire (pertinence of the questions, understanding of questions by those being interviewed, duration of the interview) and to check various potential sources for sampling and non-sampling errors: for instance, the place in which the surveys are carried out and the method used, the identification of any omitted answers and the reason for the omission, problems of communicating in various languages, translation, the mechanics of data collection, the organization of field work, etc.</p> <p>Related terms: <i>Errors (statistical)</i></p>
Points of interest	<p>See <i>Itinerary</i></p>
Post/B	<p>A post is a set of tasks, which are carried out by one person. Posts are assigned to persons through jobs (see also <i>Job</i>).</p>

Related terms:

Job
Employment
Enterprise

Product (tourism)/C

From a measurement perspective (which is the case of this document), the following definition is proposed: a tourist product is a supply side concept branded for attracting visitors to a specific territorial entity, that can be identified by them once at destination. This document also provides recommendations for the operationalization of the measurement of destinations for comparability purposes

Such products can neither be defined in a standard way, nor can a proper typology be set up; additionally, only part of their components can be measured although this is not usually done.

Such products include remunerated components (services -such as lodging, eating and transportation, as well as potential activities to be undertaken) and components provided for free (climate, nature, landscape, enjoyable “atmosphere”, etc.); the later ones, tied to non-reproducible resources, while price-less, influence greatly the consumption pattern of visitors.

The concept “tourism product” is totally different to “tourism characteristic consumption product”-see *Tourism industries*-

Propensity to travel/B

This concept is usually associated to household surveys addressing mobility or tourism and is defined as the number of households in the sample that took at least one tourism trip during a given period, in relation to the total population (the frame used for such survey). Such relationship is expressed in %. Usually a household type survey provides this type of information. Such concept can also be applied to visitors

Related terms:

Household
Trip (tourism)

Purpose of a tourism trip (main and secondary purposes)/A

The *main purpose* of a *tourism trip* is defined as the purpose in the absence of which the *trip* would not have taken place. Classification of *tourism trips* according to the *main purpose* refers to nine categories: this typology allows the identification of different subsets of *visitors* (business visitors, transit visitors, etc.).

Classification of tourism trips according to the main purpose

1. Personal
 - 1.1. Holidays, leisure and recreation
 - 1.2. Visiting friends and relatives
 - 1.3. Education and training
 - 1.4. Health and medical care
 - 1.5. Religion/pilgrimages
 - 1.6. Shopping
 - 1.7. Transit
 - 1.8. Other
2. Business and professional

Each tourism trip has one and only one main purpose though a visitor can also undertake secondary activities while on his/her trip.

For individuals traveling alone, each tourism trip has only one main purpose though a visitor can also undertake secondary activities not related to this main purpose while on his/her trip, from which secondary purposes can be inferred if relevant for analytical purposes. For instance, a person on a business trip might also spend a couple of days for recreation.

The main purpose of a trip is strongly linked with the main activities a visitor will deploy during his/her stay and determines significantly the level and pattern of his/her expenditure.

In the case of travel parties, the general principle when measuring expenditure is that the main purpose of the trip should be the one that is central to the decision for the travel party as a unit to take the trip, that is, the purpose in the absence of which the party would not have taken the trip.

However, it is evident that, once this central purpose has been defined, each individual member of the travel party might have a different particular purpose. This specific purpose will be considered as a secondary purpose of the trip for those of the accompanying party.

Related terms:

Activities (and main purpose of the trip)

Tourism destination

Trips

Visitors

Tourist behaviour

Rearrangement (of information):

See *Scalability*

Region (subnational)/C

In relation with this document, the administrative unit corresponding to the first level of territorial disaggregation of a country in terms of its political and administrative organization; for instance, NUTS 2 level in the EU, provinces in Canada and China, states in Brazil and Mexico, etc.

Related terms:

Regional tourism

Territorial entities

Regional tourism (subnational)/C -see E.N.-

In order to separate visitors who have their place of usual residence within the region of interest from those who come from other regions or countries, it is recommended that three subsets of visitors to or in this region be identified:

- Residents from countries other than the country of reference (inbound visitors to the country as a whole)
- Residents from another regions of the country of reference
- Residents in the region of interest

Such definitions are consistent with those addressed in IRTS 2008 under "forms of tourism" (see *Forms of Tourism*)

It should be noticed that inbound regional tourism would include the first two subsets while the third one includes both domestic and outbound regional

tourism (those who travel for tourism purposes within the region of interest or those who travel outside such region but either remain in the country of reference or travel outside the country of reference, correspondingly)

Regional tourism is a particular type of form of tourism to be used at the subnational-regional level which comprises the activities of these three subsets of visitors and it might be the case that the identification of outbound regional tourism (in either of the two cases already mentioned) is not a priority in most regions; if that were the case, a third subset is proposed referring exclusively to domestic regional tourism.

If deemed appropriate and feasible, additional subsets could also be identified for analytical purposes (in terms of tourists or same-day visitors).

Related terms:

Data Analysis

Visitors

Inbound tourism

Domestic tourism

Outbound tourism

Geography of tourism

**Regional Tourism
Expenditure
(subnational)/C –see
E.N.-**

The economic dimensions of tourism trips are linked to tourism expenditure. Though tourism expenditure always relates to persons travelling or intending to travel outside their usual environment, the acquisition of goods and services may well occur within the usual environment of the visitor or in any of the places visited during the trip. This might depend on the nature of the good or service purchased (vehicle fuel, travel agency services, inoculations required for the trip) or on the particular behaviour of a visitor (some prefer purchasing clothes, gear, or other goods to be used on the trip before leaving, while others prefer doing it on the trip as part of their tourism experience).

That's to say that the issue of the timing of tourism expenditure is relevant, as often items such as transportation, accommodation, etc., are booked and paid for before being "consumed". The corresponding payment might also happen after consumption when paying off a credit card or a special loan drawn for this specific purpose.

This document defines Regional Tourism in terms of the adaptation to the regional level of the three forms of tourism defined in IRTS 2008 paragraph 2.39; consequently, symmetrical to IRTS 2008 paragraph 4.15, this Glossary defines three categories of tourism expenditure based on the country/region of residence of the transactors involved:

- **Inbound regional tourism expenditure** includes two components:
 - Expenditure associated with foreign visitors (inbound visitors to the country as a whole)
 - Expenditure associated with resident visitors from another regions (of the country of reference)
- **Domestic regional tourism expenditure** includes the expenditure associated with resident visitors in the region of interest travelling within the such region
- **Outbound regional tourism expenditure** includes the expenditure associated with resident visitors in the region of interest travelling outside such region either remaining in the country of reference or travelling outside the country of reference, correspondingly)

Related terms:*Visitors**Regional Tourism**Forms of tourism***Regional Tourism Information System (subnational) (R-TIS)/C –see E.N.-**

The design of a proper R-TIS would be justified under two circumstances: the significance of tourism in a given region (see *Significance*) and the availability of a basic set of national statistical sources due to the fact that its design, as recommended by INRouTe, is very data demanding.

The main objective of a R-TIS should be to provide basic statistical data and indicators for territorial planning, tourism policies design and monitoring, and sustainable development measurement in such territorial entity. Consequently, R-TIS should consider both residents and visitors

In fact, such a system requires three sets of information:

- a first set including statistical information obtainable as a disaggregation of operations carried out with a national coverage and in an official capacity mainly by National Statistical Offices and National Tourism Administrations on tourism understood as an economic sector as well as available on economic, environmental and socio-cultural dimensions of sustainability
- a second set including statistical information provided by official statistical operations carried out by regional bodies (such as Regional Statistical Offices, Regional Tourism Administrations, Regional public institutes and agencies for tourism development and management, and other official bodies).

These operations are sought to be supplementary to the first set in order to avoid information overlapping between national and regional levels. Exceptionally, some countries might have institutionalized bottom-up methods of collection for national data purposes (basically for the National Statistical Offices).

It should be highlighted that both sets of statistical data do not allow to qualify R-TIS as a statistical system by its own; such set of data should be obtained using a systems approach (see *System approach*) and this is the focus recommended all along this document and consequently, constitute the basic core of the R-TIS

- third set, including information not necessarily of official and/or of statistical nature (such as electricity consumption by households, credit card expenditure records, transport authorities control, business cycle indicators, early warning indicators, other indicators regarding tourism and sustainable development, etc.), considered to be relevant at regional and sub-regional levels not only for the measurement/monitoring of tourism (carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope or even by national bodies), for analytical purposes (such as analysis of the performance of certain subsectors and foresee their evolution, the perceptions of the demand of a certain destination, etc.) and for gathering data requirement for providing answers to policy questions related with tourism itself or in relation with sustainable development issues.

The expansion of “big data” will certainly spread the content of this third set of information.

	<p>Related terms: <i>Statistics</i> <i>Region</i> <i>Regional tourism</i> <i>Geography of tourism</i> <i>System of Tourism Statistics</i></p>
Regional System of Tourism Statistics	See <i>Regional Tourism Information System</i>
Relevance/A	<p>The degree to which statistics meet current and potential users' needs.</p> <p>Related terms: <i>Survey (statistical)</i></p>
Residents (national)/A	<p>The residents of a country are individuals whose centre of predominant economic interest is located in its economic territory. Such concept needs to be adapted at the regional level (see <i>Regional Tourism</i>).</p> <p>Related terms: <i>Outbound tourism</i> <i>Residence</i> <i>Dwellings</i> <i>Household</i></p>
Same-day visitor	See <i>Excursionist</i>
Sample (statistical)/A	<p>A subset of the population of reference where elements are selected based on a process with a known probability of selection.</p> <p>Related terms: <i>Errors (statistical and non-statistical)</i> <i>Frame</i></p>
Scalability/C	<p>Refers to the integration of information across different spatial scales with the aim of developing information sets for particular type of analysis at a level suitable for public policy purposes as well as for key tourism stakeholders interest. In the case of tourism, the lack of territorial homogeneity of the characteristics of both visitors and trips (including the associated expenditures), is a strong argument to focus on scalability as a key concept</p> <p>Indicators, aggregates and totals may serve many purposes depending on the scale at which they are applied, on the audience to be reached, and on the quality of the underlying data</p> <p>Scalability might be associated to rearrangement of data meaning the procedure to reorganize information sets produced in a research area in order to be used in others; this is the case of INRouTe's proposed set up of a R-TIS in which the set of statistical data should be generated by articulating different type of information layers (see <i>Statistical information-layers-</i>)</p> <p>While in the particular case of INRouTe's Project, scalability is associated to the geo-reference of basic data and indicators at the sub-regional level, rearrangement means using own classification systems in order to use such information for analysis purposes.</p>

In the particular case of linking tourism and environmental sustainability, scalability should require the use of GIS at the level of cadastral units in order to integrate in such scale resident population, visitors, accommodation establishments and use-activity of visitors, as the main set of data; supplementary data such as other establishment in other tourism industries, tourism natural and build resources, etc., should also be geo-referenced in due time

Related terms:

Ecosystem

Territorial entities

Statistical information (layers)

Regional Tourism Information System R-TIS

Seasonality

See *Seasonal (adjustment)*

Seasonal (adjustment)/A

A statistical technique to remove the effects of seasonal calendar influences operating on a series of short-term data (such as arrivals, overnights, employment in the tourism industries, etc.). Calendar variations can be of very different kind: number of days in the calendar period, incidence of moving holidays, etc.

Related terms:

Statistics

Data documentation

Tourism demand

SEEA_CF/A

The System of Environmental-Economic Accounting 2012—Central Framework (SEEA Central Framework) -is a multipurpose conceptual framework that describes the interactions between the economy and the environment, and the stocks and changes in stocks of environmental assets; at the heart of such framework is a systems approach to the organization of economic and environmental information (this last type of information has its own international standard, the “Framework for the Development of Environment Statistics”-FDES 2013-).

The integration of information concerning the economy and the environment requires an interdisciplinary approach. The SEEA Central Framework brings together, in a single measurement system, information on water, minerals, energy, timber, fish, soil, land and ecosystems, pollution and waste, production, consumption and accumulation. To each of these areas are assigned specific and detailed measurement approaches that are integrated in the SEEA Central Framework so as to provide a comprehensive view.

The SEEA Central Framework is complemented by two publications: SEEA Experimental Ecosystem Accounting, and SEEA Applications and Extensions 2014.

Related terms:

System of National Accounts 2008 (2008 SNA)

Systems approach

Significance (economic)/C –see E.N.-

Refers to the economic importance of tourism in any subnational area; this concept, used in the IRTS 2008 (para. 5.10) as the criteria for defining a tourism characteristic product, is suggested to be also used at the

subnational level in order to identify when a territorial entity can be labelled as a tourism destination.

For the operationalization of “significance”, it is recommended that key tourism stakeholders should agree on the use of a limited number of indicators (both from the supply and demand side); each country should complement them and fix the threshold for its application in absolute terms, if deemed appropriate and feasible.

This document proposes the following criteria:

- *From the Supply side*, the use of employment figures associated with part of the “Accommodation for visitors” industry (hotels as well as other activities such as motels, guesthouse, pensions, bed and breakfast, time share units, etc.)
Complementary criteria could be based in other accommodation services for visitors, number of establishments in the tourism industries, etc.
- *From the Demand side*, the use of overnight figures; complementary criteria could be number of visitors, tourism expenditure as a proportion of regional GDP, etc.

Related terms:

Establishment
Employees
Tourism destination
Tourism population
Visitors

Skill/B

The ability to carry out the tasks and duties of a given job

Related terms:

Job
Employment

Spatial areas/C

See Territorial entities

Stakeholders

Tourism practitioners –including tourism official who commission surveys and research, and those who undertake such surveys- and different key stakeholders at regional and sub-regional levels include governments, public institutes and agencies, universities, research centers, industry associations, trade bodies, consulting firms, tourism destination managers, tourism development authorities, tourism businesses, etc.

Statistical data/C

The basic core of the R-TIS must refer to official statistical data (at the national and regional level) in order to allow for comparability (a golden rule that UNWTO share with all other UN Sister Agencies)

There are three elements that make a data be a statistical data:

- The existence of a Frame or Universe (a list with the total population of the observation unit of reference –productive establishments, population, overnights, arrivals, etc.-)
- The selection of a random sample of such Frame using statistical techniques so that the data obtained can be representative of such Frame
- How the data obtained are upgraded to the total population of such Frame

Statistical information (layers)/C	<p>This document proposes as the basic core of the design of a R-TIS, to articulate national / regional layers of statistical data derived from available national statistical sources on economic, environmental and socio-cultural dimensions of sustainability. In due time, a second type of layer is also suggested by extending such link to sub-regional levels such as the territorial entities breakdown proposed in this basic glossary: for such purpose it might be necessary to develop regional statistics for any of those dimensions. The term “articulation” implies linking with statistical rigor national and regional data used to measure the same variables.</p> <p>Related terms: <i>Regional Tourism Information System</i> <i>Territorial entities</i></p>
Stop	<p>See <i>Itinerary</i></p>
Structural business statistics/B	<p>Such type of statistics should allow the establishment of a common framework for the collection, compilation, transmission and evaluation on the structure, activity, competitiveness and performance of businesses at the national level. The compilation of structural business statistics has as its purpose, in particular, to analyze:</p> <ul style="list-style-type: none"> (i) the structure and evolution of the activities of businesses; (ii) the factors of production used and other elements allowing business activity, performance and competitiveness to be measured; (iii) the national and regional development of businesses and markets; (iv) business conduct; (v) small and medium-sized enterprises; (vi) specific characteristics of enterprises related to particular groupings of activities. <p>Related terms: <i>Statistics</i> <i>Enterprises</i> <i>Administrative data use</i> <i>Establishment</i></p>
Subnational area	<p>See <i>Territorial entities</i></p>
Survey (statistical)/A	<p>An investigation of the characteristics of a given population by means of collecting data from a sample of that population (see <i>Frame</i>) and estimating their characteristics through the systematic use of statistical methodology. Included are:</p> <ul style="list-style-type: none"> - A census, which attempts to collect data from all members of a population. - A sample survey, in which data are collected from a (usually random) sample of population members. - Collection of data from administrative records, in which data are derived from records originally kept for non-statistical purposes. - A derived statistical activity, in which data are estimated, modelled, or otherwise derived from existing statistical data sources (like the TSA). <p>Related terms: <i>Regional Tourism Information System</i></p>

Sustainable development/B

Is a broad political objective, encompassing an intention to avoid activities that will cause long-term damage and a desire to ensure adequate quality of life for present and future generations; as a policy concept “sustainable development” has played a defining role in helping to coalesce thinking, around goals such as the new UN 2030 Agenda for Sustainable Development.

Tourism as an activity refers to those who travel with a tourism purpose; besides its contribution to the economy of the destination and place visited, tourism trips affects environmental sustainability and impacts on the social and cultural dimensions of the resident population.

At present, there is no agreed definition of sustainable tourism that might be directly amenable to measurement. At this time, it may be premature to spend significant resources to determine a singular definition; however, it is likely to be necessary to be able to describe the elements and perspectives relevant to sustainable tourism such that the work on developing the statistical framework is scoped appropriately. The description of sustainable tourism will reflect a combination of the user requirements and a general understanding of sustainable development as encompassing economic, environmental and social dimensions

Related terms:

Ecosystem

Environment

SEEA_CF

Systems approach/B

In statistics, applying a systems approach to organize information in any particular thematic area means the application of concepts, definitions, classifications, accounting rules and principle of recording consistent with those of the System of National Accounts.

In the case of tourism, such approach has been followed in the 2008 international standards on tourism statistics as well as in the present document with the particularity that some supplementary concepts (those identified as /C) are proper to the sub-national adaptation of those 2008 international standards

Related terms:

IRTS 2008

SEEA_CF

Regional Tourism Information System

System of National Account 2008 (2008 SNA)/A

In order to ensure that the compilation of the integrated tourism statistics is in line with the compilation practices of other economic statistics, it was decided that it shall be further aligned with the updated System of National Accounts 2008 (2008 SNA).

The System of National Accounts 2008 (2008 SNA) consists of concepts, definitions, classifications, accounting rules, accounts and tables that constitute a comprehensive, integrated framework for the estimation of production, consumption, capital investment, income, stocks and flows of financial and non-financial wealth and other related economic variables.

The System of National Accounts 2008 includes a specific framework showing the interface between demand for goods and services and the supply of these goods and services within an economy, namely the supply and use tables.

What makes tourism special, however, is the temporary situation in which an individual in the capacity of consumer finds himself/herself: he/she is taking a trip or a visit to a place outside his/her usual environment for less than a year and for a purpose other than being employed by a resident entity there. This differentiates a visitor from the other categories of consumers.

These specific characteristics of the visitor cannot be made explicit within the core of the System of National Accounts, where transactors are classified according to (relatively) permanent characteristics, one of them being their country of residence.

In order to deal with such situations, the System of National Accounts 2008 suggests the use of satellite accounts, annexed to its core, and which, to an extent to be defined in each case, share its basic concepts, definitions, classifications and accounting rules.

Related terms:

R-TIS

SEEA_CF

Systems approach

Tourism Satellite Account (TSA)

System of Tourism Statistics/A

Concepts, definitions, classifications and indicators presented in International Recommendations 2008 should be viewed as an important foundation of the system of tourism statistics. As such, they should be used as a reference for coordination, reconciliation and interpretation of the information in the area of tourism, although this information might extend beyond the still restricted domain these Recommendations touch upon.

Related terms:

Regional Tourism Information System

Statistics

Target audience

See Stakeholders

Target population/A

The target population is the set of units about which information is wanted and estimates are required. Practical considerations can dictate that a survey population be defined which excludes some units in the target population or which is comprised of differently defined units through which the target population can be accessed.

Related terms:

Frame

Survey

Territorial cohesion/B

Cohesion is a policy concept used particularly in the European Union to refer to pursuing harmonious development across the Union; territorial cohesion focus on the objective of respect for the territorial and cultural features in Europe. Obviously, tourism might very well affect territorial cohesion in a given region as well as in other adjacent ones such as in the European Union, MERCOSUR in Latin America, Central America, and other areas that share as a main common feature the free movement of persons.

Such concept relates with one of the objectives of this document: the need for gaining further knowledge on territories in order to better guide their development in relation with tourism.

**Territorial entities
(subnational
breakdown) /C –see
E.N.-**

This document uses as reference for the identification of subnational territorial entities the following hierarchical classification composed of both administrative and analytical units at two basic levels:

INROUTE CLASSIFICATION OF SUBNATIONAL TERRITORIAL ENTITIES

REGIONAL LEVEL

- Region
- Multi-regional (supra-national)
- Multi-regional (intra-national)
- Other administrative units (sub-regional)
- Analytical units

LOCAL LEVEL

- Municipality
- Multi-local
- Other administrative units
- Analytical units

The classification is proposed in order to operationalize the implementation of the conceptual framework proposed and more specifically, to allow for the setting up of the R-TIS; consequently, it should be adapted to any of such territorial levels in different countries, and other extensions could also be envisaged for tourism purposes.

The terms [region](#), multi-regional and sub-regional used refers to subnational entities⁴³. Consequently, such terms and classification used in this document should not be understood as the same terms used by UNWTO in its capacity of UN Specialized Agency for Tourism (where region and regional refers to a pluri-national or international framework).

Starting from the classification of those basic entities, it is feasible to establish combinations per each different type of analysis. For this purpose, the criteria to be used should be defined, such as market segments (responding to different forms of tourism, and different characteristics of visitors and trips), availability of tourism infrastructure and facilities, territory physical characteristics, territorial planning requirements, etc. One of the possible examples is “tourism spatial area” (identified as small spatial scales where tourism is significant) which might be applicable in its entirety to a certain regional and/or sub-regional administrative entity, but more often it is likely that it might not cover a single municipality, neither an entire region. Such term is often used by territorial planners in order to bring tourism content into focus.

Such term is also implicitly identified in the *System of Environmental-Economic Accounting 2012 /Applications and Extensions* document (see Chapter IV “Extensions of the SEEA”⁴⁴).

⁴³ In the document, the administrative unit corresponding to the first level of territorial disaggregation of a country in terms of its political and administrative organization; for instance, NUTS 2 level in the EU, provinces in Canada and China, states in Brazil and Mexico, etc.(see Glossary)

⁴⁴ 4.1”The focus in this chapter is the potential of data from the accounts of the SEEA Central Framework to be extended and integrated with other information. The potential to connect SEEA accounts to a range of existing information sources can be of direct assistance in better understanding multi-faceted issues, such as sustainable development. It also recognises that responses to environmental pressures will usually rely on understanding connections between the environment, the economy and individuals. In this context the SEEA accounts do not provide

Such units would qualify as analytical units and could generically be labeled as “small tourism destination areas” (STDA)

Any of those unit/s of the proposed classification (either at the regional or local level) where tourism is economically significant (according to the criteria proposed in this [Glossary](#) (see [Significance](#)), should be the focus of tourism measurement and could be labeled as a “tourism destination/s”.

System In any case, the physical space of any of such units in the classification as well as any cluster of these must be identified precisely

Related terms:

NUTS

Product (tourism)

Regional Tourism Information System

Significance

SEEA_CF

Time share/A

There has been a trend towards the development of innovative types of vacation home ownership or something similar (as the outright ownership of a fixed asset is not always involved) that combine the privacy of an owned vacation home with the amenities, services and flexibility offered by collective accommodation as well as a reduction of costs for the “owner” over the periods in which he/she is not making use of the “property” for himself/herself. In the original timeshare system, what was purchased was a “right to use” a given physical property at a specific moment in time over its lifetime. Flexibility was gradually introduced in the system along different lines, relaxing the conditions concerning of a specific physical asset, the lifetime of the project, or the fixity of the period of use through the design of different types of administrative and financial constructs.

Related terms:

Accommodation for visitors

Tourism services

Tourism/A

Tourism is a social, cultural and economic phenomenon, which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which involve tourism expenditure.

Related terms:

Regional Tourism

a complete information set but can provide an important part of the information and SEEA is a framework that supports and encourages the integration of data”.

4.2 “There are two main approaches to considering extensions of the SEEA. The first approach involves a decomposition of existing SEEA accounts using additional information, for instance through linking to specific spatial areas, through further breakdown of the household sector, or through a focus on certain themes where there is an interaction between human activity and the environment, such as tourism or health..... The focus of this chapter is on the first approach”.

Tourism characteristic occupations/B	<p>Those occupations that predominantly lie within tourism industries</p> <p>Related terms: <i>Occupations</i> <i>Tourism industries</i></p>
Tourism destination/C	<p>This document approaches such concept from a twofold perspective: the type of physical space (see <i>Territorial entities</i> –which includes a classification of both administrative and analytical units-) and the economic importance of tourism in the territorial entity of reference (see <i>Significance</i>).</p> <p>It recommends for main existing tourism destinations to consider the opportunity to develop a R-TIS (as described in this Handbook) while for potential tourism destinations it is recommended to develop a partial R-TIS that comprises a limited set of data (basically supply side data and indicators).</p> <p>The application of the proposed economic criteria (both demand and supply side criteria) to decide if and when a territorial entity could be labeled as a tourism destination should foster the process by which existing tourism destinations improve their measurement and analysis by using administrative type of data linked to tourism activity (such as the number and performance of productive establishments associated to one or more tourism industries, jointly with the employment associated to them) and visitors surveys, if deemed appropriate.</p> <p>By 2015, the UNWTO Committee on Tourism and Competitiveness has provided the following definition: “<i>A tourism destination is a physical space with or without administrative and/or analytical boundaries in which a visitor can spend an overnight. It is the cluster (co-location) of activities, products, services and experiences along the tourism value chain and a basic unit of analysis of tourism. A destination incorporates various stakeholders and can network to form larger destinations. It is also intangible with its image and identity which may influence its market competitiveness.</i>”</p> <p>Related terms: <i>Product (tourism)</i> <i>Significance</i> <i>Territorial entities</i> <i>Visitors</i> <i>Visit</i></p>
Tourism economic consequences/A	<p>See <i>Economic consequences (tourism)</i></p>
Tourism economic contribution/A	<p>See <i>Economic contribution (tourism)</i></p>
Tourism expenditure/A	<p>Tourism expenditure refers to the amount paid by visitors for the acquisition of consumption goods and services, for own use or to give away, for and during tourism trips.</p> <p>Related terms: <i>Tourism Satellite Account (TSA 2008)</i> <i>Visitors</i></p>

Tourism flows/A Refers to the movement of visitors, within and across regions, domestically and internationally. The terms “tourism flows” and “flows of visitors” are used interchangeably

Related terms:

Visitors

Forms of tourism

Tourism industries/A Tourism industries (also referred to as tourism activities) are the activities that typically produce tourism characteristic consumption products.
- see E.N.-

Tourism characteristic consumption products are those that satisfy one or both of the following criteria:

- (a) Tourism expenditure on the product (either good or service) should represent a significant share of total tourism expenditure (share-of-expenditure/demand condition);
- (b) Tourism expenditure on the product should represent a significant share of the supply of the product in the economy (share-of-supply condition). This criterion implies that the supply of a tourism characteristic product would cease to exist in meaningful quantity in the absence of visitors.

List of categories of tourism characteristic consumption products and tourism industries

Products	Industries
1. Accommodation services for visitors	1. Accommodation for visitors
2. Food and beverage serving services	2. Food and beverage serving activities
3. Railway passenger transport services	3. Railway passenger transport
4. Road passenger transport services	4. Road passenger transport
5. Water passenger transport services	5. Water passenger transport
6. Air passenger transport services	6. Air passenger transport
7. Transport equipment rental services	7. Transport equipment rental
8. Travel agencies and other reservation services	8. Travel agencies and other reservation services activities
9. Cultural services	9. Cultural activities
10. Sports and recreational services	10. Sports and recreational activities
11. Country-specific tourism characteristic goods	11. Retail trade of country-specific tourism characteristic goods
12. Country-specific tourism characteristic services	12. Other country-specific tourism characteristic activities

Related terms:

Activities undertaken by visitors

Employment (attributable to tourism)

Tourism sector

ISIC Rev. 4

Tourism Satellite Account (TSA 2008)

Tourism population/C -see E.N.-

Tourism population is a tourism statistics concept based on full time equivalent (FTE) estimates; as other type of FTE figures, they allow to derive “average figures” during a reference period (either a week, a year or any other period). It has been basically applied to labour force statistics but also

to education and other social research areas such as sustainability, in order to improve the comparability of employment, jobs and resident/non-resident population figures.

In the case of tourism related environmental indicators (such as potential pressure on protected areas or “ecosystems”, urban waste production, electric power consumption, waste water treatment capacity, separate collection of containers, etc.), tourism population allows for deriving operational ratios used for environmental sustainability insight and monitoring purposes

Tourism Population regional figures should be estimated using the number of overnights associated to inbound and domestic regional tourists; ideally, the following four subsets of stays should be measured; in

- establishments providing conventional accommodation services (identified in ISIC Rev.4 as 5510) (see [Annex 3](#))
- establishments providing other type of accommodation services (identified in ISIC Rev.4 as 5520, 5590, 6810 and 6820) (see [Annex 3](#))
- vacation homes
- friends’ and relatives’ homes

Usually regional estimates of Tourism Population figures should allow for a correction factor because not all such number of overnights are usually available.

Related terms:

Full-time equivalent

Regional tourism (subnational)

Tourism product

See Product (tourism)

Tourism Satellite Account (TSA 2008)/A

The Tourism Satellite Account (described in the Tourism Satellite Account: Recommended Methodological Framework 2008) is the second international recommendation on tourism statistics that has been developed in a framework of consistency with the System of National Accounts (the International Recommendations for Tourism Statistics 2008 being the first). Both recommendations are mutually consistent and provide the conceptual framework for measuring and analyzing tourism as an economic activity at the national level.

As a statistical tool for the economic accounting of tourism, the TSA can be seen as a set of 10 summary tables, each with their underlying data and representing a different aspect of the economic data relative to tourism macroeconomics at the national level: inbound, domestic tourism and outbound tourism expenditure, internal tourism expenditure, production accounts of tourism industries, the Gross Value Added (GVA) and Gross Domestic Product (GDP) attributable to tourism demand, employment, investment, government consumption, and non-monetary indicators.

INRouTe has elaborated on a regional extended TSA approach

Related terms:

R-TIS

Systems approach

- Tourism sector/A** The *tourism sector* is the cluster of production units in different industries that provide consumption goods and services demanded by visitors. Such industries are called *tourism industries*.
- It should be highlighted that only part of the production of such industries is related to tourism demand –(see also *Tourism industries* for further clarification).
- Related terms:**
Tourism industries
- Tourism sector employment/B** Not all business units in an industry identified as part of the tourism sector may actually be providing services directly to visitors, and those that do offer tourism goods and services may not be providing those services exclusively to visitors. However, regardless of whether or not an individual’s work is completely attributable to tourism, the level of service provided and the skills or occupational requirements involved is the same whether a visitor or another type of consumer is involved in the commercial transaction. For example, whether or not a bartender serves tourists or local patrons, the profile of the occupation and the human resources needs of that individual will be the same.
- Therefore, for human resource planning purposes (i.e. training, recruitment, labour supply/demand imbalances, etc.) there is the need to understand the total number of people employed in the sector.
- Related terms:**
Enterprise
Employment
Establishment
Full-time job
Job
- Tourism trip/C –see E.N.-** A tourism trip is a trip taken by a visitor to a main destination outside his/her usual environment, for less than a year, for any main purpose other than to be employed by a resident entity in the country or place visited
- Related terms:**
Visits
Visitors
Itineraries
- Tourism visit/A –see E.N.-** It should be recalled that observing tourism trips and visits is not the same as observing visitors, as an individual might make more than one trip during the observation period. Quite frequently, tourism statistics uses the term “visitor” instead of “tourism trip” or “tourism visit”. IRTS 2008 recommends that these concepts be clearly defined and differentiated both in the statistical operations and data dissemination.
- A round-trip might be composed of one or more visits to different places, seen as different destinations, or as a unique (aggregated) destination. There might be as many visits as stops in different places visited.
- Related terms:**
Trip

Tourists
Visitors
Tourism flows

Tourist (or overnight visitor)/A A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor), if his/her trip includes an overnight stay.

Related terms:

Visitors
Trips
Domestic tourism
Inbound tourism
Outbound tourism

Tourist behaviour/C Refers to activities undertaken by visitors at destination, such as general type of activities (see *Activities-and main purpose of the trip-*) ,attraction visited, specific activities undertaken during displacements (tracks) through itineraries (either organized or not), etc.

In addition to associated characteristics of trips and visitors, tourist behaviour is a key element for measuring and analyzing tourism at subnational levels because the associated expenditure is critical for such measurement and analysis. No special reference can be found in IRTS 2008.

Related terms:

Activities (and main purpose of the trip)
Activity of visitors
Tourism destination
Itinerary
Stops
Data Analysis
Visitors
Visits

Tour operator/A Tour operators are businesses that combine two or more travel services (for example, transport, accommodation, meals, entertainment, sightseeing) and sell them through travel agencies or directly to final consumers as a single product (called a package tour) for a global price.

Related terms:

Travel/Tourism
Travel agencies
Package tours

Transportation (modes) See *Means of transportation*.

Travel /A Travel refers to the activity of travellers. A traveller is someone who moves between different geographic locations, for any purpose and any duration. The visitor is a particular type of traveller and consequently tourism is a subset of travel.

Related terms:

Travel agency
Trips

	<p><i>Visitors</i></p> <p><i>Visitor accommodation</i></p> <p><i>Tourism flows</i></p> <p><i>Destination</i></p> <p><i>Forms of tourism</i></p>
Travel agencies/A	<p>Visitors (or potential visitors), when planning and organizing their trip, often use the services of travel agencies in order to get information on alternatives and for making their bookings (transport, accommodation, recreation activities either packaged or individually purchased, etc.). Their function consists mainly of selling the right to use a certain service provided by others at a certain moment in time and within certain conditions. Their role is to provide information and other services to the visitor and they are the intermediary in the purchase of certain services, although they might also provide additional services such as accompanying tours, guiding services, etc. Finally, it should be mentioned that travel agencies are under the specific jurisdiction of most national tourism administrations.</p> <p>Related terms:</p> <p><i>Travel</i></p> <p><i>Tourism operators</i></p> <p><i>Package tours</i></p>
Travel group/A	<p>A travel group is made up of individuals or travel parties travelling together: examples are people travelling on the same package tour or youngsters attending a summer camp.</p> <p>Related terms:</p> <p><i>Travel party</i></p>
Travel party/A	<p>A travel party is defined as visitors travelling together on a trip and whose expenditures are pooled.</p> <p>Related terms:</p> <p><i>Trips</i></p> <p><i>Visitors</i></p>
Travel party (operational definition)/C	<p>As stated in the second paragraph of the 2008 International Recommendations for Tourism Statistics (IRTS 2008), “The activities carried out by a visitor may or may not involve a market transaction, and may be different from or similar to those normally carried out in his/her regular routine of life. If they are similar, their frequency or intensity is different when the person is travelling. These activities represent the actions and behaviours of people in preparation for and during a trip in their capacity as consumers”</p> <p>The “travel party” is a new observation unit introduced by the IRTS 2008 in order to foster credibility and rigour in the measurement of average tourism expenditure by visitors; consequently, it is obvious that the operationalization of “travel party” needs to be linked to the observation unit used in those surveys that focus on the behaviour of consumers (households surveys being the most relevant ones in the case of domestic and outbound tourism).</p>

Such unit is defined as “visitors travelling together on a trip and whose expenditures are pooled”; therefore, the operationalization of the concept of “travel party” should refer primarily to “all or part of the members of the same household travelling together in a tourism trip”. There might be also other possible grouping of visitors that might have “pooled expenditures” (such as a combination of individuals pertaining to different households travelling together in a tourism trip) but their identification in a survey would be in most cases highly inefficient.

Related terms:

Data Analysis

Trips

Visitors

Visits

Travel pattern (of visitors)/C

Refers to a homogenous subset of visitors in terms of one or more characteristics considered relevant. Each of such characteristics is also referred as “travel choices”.

The implementation of travel patterns (also referred as “travel styles”) would require, ideally, in addition to characteristics of both trips and visitor (main purpose of the trip, means of transportation used, type of lodging chosen, organization of the trip, etc.) , complementary ones associated with tourist behaviour at destination (these might also include qualitative ones).

The knowledge about what particular travel styles are prominent within a market is very useful for marketing campaigns, destination management and investors.

Related terms:

Data Analysis

Trips

Visitors

Visits

Trip

See *Tourism trip*

Turnover (business statistics) /B

Turnover comprises the totals invoiced by the enterprise or establishment during the reference period, and this corresponds to market sales of goods or services supplied to third parties.

Related terms:

Enterprises

Statistics

Visitors

Visitor trip

Visit

Types of tourism/C

See *Types of visitors*

Types of visitors/C

A cluster of visitors that share common characteristics either personal, related to the trip or travel behaviour created for analytical purposes.

Also referred as “types of tourism” or “market segments”.

Related terms:*Visitors**Visits**Data analysis***Universe (statistics)** See *Frame*

Usual environment/A The usual environment of an individual, a key concept in tourism, is defined as the geographical area (though not necessarily a contiguous one) within which an individual conducts his/her regular life routines.

There are often differences in density of, transportation accessibility, cultural behaviour, proximity to national or administrative borders, etc., between territorial entities. These differences hinder the development of a unique worldwide statistical determination of the usual environment of an individual. Nevertheless, the determination of the usual environment should be based on the following criteria:

- Frequency of the trip (except for visits to vacation homes)
- Duration of the trip
- The crossing of administrative or national borders
- Distance from the place of usual residence

In addition to using the frequency and duration criteria to determine the usual environment, IRTS 2008 recommends that in practice the crossing of administrative borders be combined with the distance criterion to establish the limits of the usual environment for the following reasons:

- Administrative units might have very different sizes.
- Metropolitan areas may stretch over administrative borders even though they represent a compact or contiguous geographical area.
- The place of usual residence of some individuals may be very close to the administrative borders so that their crossing might not be relevant for tourism analysis.

Related terms:*Survey**Dwellings**Place of usual residence*

Vacation home/A A vacation home (sometimes also designated as a holiday home) is a secondary dwelling that is visited by the members of the household mostly for purposes of recreation, vacation or any other form of leisure.

Related terms:*Dwelling**Accommodation for visitor**Household*

Value chain/C In tourism literature the term “value chain” refers to the full range of activities required to bring a product or service through the different phases of production (including physical transformation and the inputs of various producers and services) in response to consumer’s demand.

The UNWTO Committee on Tourism and Competitiveness has provided in 2015 the following definition: "Tourism value chain is the sequence of primary and support activities which are strategically fundamental for the

performance of the tourism sector. Linked processes such as policy making and integrated planning, product development and packaging, promotion and marketing, distribution and sales and destination operations and services are the key primary activities of the tourism value chain. Support activities involve transport and infrastructure, human resource development, technology and systems development and other complementary goods and services which may not be related to core tourism businesses but have a high impact to maximize the value of tourism."

Value chain might be useful as a method for identifying, for example, constraints and levels of inefficiencies that prevent the future addition of net value, innovation and competitiveness also in the tourism sector.

Sectorization of value chain analysis does not follow International Standard Industrial Classifications of all economic activities (ISIC) as recommended by the UN for developing tourism statistics basic data and indicators as well as macroeconomic analysis (input-output tables and Tourism Satellite Accounts); consequently, INRouTe understands that being a statistical based initiative, the proper measurement and analysis of value created by the tourism sector should be linked to UN standards.

Related terms:

Tourism sector

Vehicle Occupancy/B The number of persons, including driver and passenger(s), in a vehicle; also includes persons who did not complete a whole trip.

Related terms:

Means of transportation

Vehicle Trip/B A trip by a single vehicle regardless of the number of persons in the vehicle.

Related terms:

Trip

Means of transportation

Visit See *Tourism visit*

Visitor/A A visitor is a traveller taking a tourism trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited. A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor), if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise.

Related terms:

Trip

Visit

Tourism flows

Household

Residents

Visitor-trip/C A trip by one or more visitors in any mode of transportation; each visitor is considered as making one visitor-trip.

Related terms:*Visitors**Visits**Tourism flows**Means of transportation**Data analysis***Explanatory notes⁴⁵*****Administrative data use***

Administrative records present a number of advantages to a statistical agency or to analysts. Since these records already exist, costs of direct data collection and a further burden on respondents are avoided. They are usually available for the complete universe and, hence, for the most part unconstrained by sampling error considerations. Most importantly, they can be used in numerous ways in the production of statistical outputs. Examples of their uses include:

- the creation and maintenance of frames;
- the complete or partial (via record linkage) replacement of statistical collection;
- the editing, imputation and weighting of data from statistical collection; and
- the evaluation of statistical outputs.

Administrative datasets are not designed nor are the data collected with any specific statistical purposes in mind. The use of such data sources may require some compromises to be made with respect to population definition and coverage.

UNWTO is firmly convinced of the need to promote the use of administrative sources, among other reasons because it is impossible to base the development of the System of Tourism Statistics and the TSA on strictly statistical operations. And there are three areas on which attention should be focused: the information generated by traffic regulation authorities, fiscal sources and the “electronic fingerprints” left by tourists (toll motorways, bank cards, mobile telephones, use of the Internet to consult tourism websites, etc.) although not all of such electronic fingerprints qualify as administrative data.

Carrying capacity

From an analytical perspective, a particular concept that may be advanced from a measurement perspective is “carrying capacity”. This concept has been developed in the field of sustainable tourism and may speak directly to the linkage between the economic and environmental domains.

Carrying capacity is extremely difficult to determine due to its complexity. Nevertheless, tourist destinations—particularly ones with very fragile and rare ecosystems such as many National Parks—manage to estimate this in practice, using both objective (e.g. soil erosion level, presence of litter or graffiti) and subjective (e.g. visitors’ satisfaction, visitors’ perceived level of environmental degradation or crowdedness) indicators.

⁴⁵ These notes supplement the paragraphs included in a reduced number of terms (17); due to editorial reasons, this practice helps keep the List of terms reasonably balanced.

Destinations with fragile ecosystems or unstable economies can sustain fewer visitors than destinations with stable economies or ecosystems; however, destinations that are plagued by “destructive tourists” (e.g. those that produce too much litter to be removed in a timely manner, those that distress the local wildlife with their aggressive demeanor) could sustain fewer visitors than destinations without such “destructive tourists” even if the ecosystem is not initially fragile.

The terms “congestion” and “carrying capacity” are not synonymous. The term “congestion” is usually used to mean a condition where the number of visitors is large enough to alter their experience (e.g. having to wait unreasonably long in lines, not being able to enjoy peace and solitude in locations that promise these two things) and/or the destination in the social, environmental or economic dimension; however, the number of visitors might not be large enough to actually damage the destination, as is the case when the number of them exceeds the carrying capacity.

Comparability

This document accepts that only statistical basic data and indicators allow for robust interregional comparability of tourism within a given country as well as for international comparability. For both purposes –especially for intra-national comparability of tourism destinations– a continuous lobbying for the implementation of a common set of concepts, definitions and classifications is a necessary condition for deriving a basic set of tourism statistics and indicators for such purposes. It is recommended for those regions where tourism is significant, to focus on an incremental approach that involves, first of all, the development of a limited set of statistical basic data and indicators at the national/regional levels (the term “articulation” – see 3.4–implies linking with statistical rigor available national and regional data used to measure the same variables.); such possibility should be checked by a statistical insight regarding its feasibility. Such an articulation nation-region will produce a conceptual and data framework for analyzing interregional tourism within a harmonized framework; and by so doing, will also contribute to international comparability between regions. In a second step an articulation of regional / sub-regional levels should be foreseen (and this is basically feasible in statistically developed countries) including geo-referenced data (see also [Chapter 5/ D Adapting the R-TIS to sub-regional extensions](#)).

However, a less robust type of comparability is also sought mainly for very different analytical purposes. Translated to the case of regional data, the third component of the R-TIS (see *Regional Tourism Information System*) should also allow for comparability purposes between regions and main tourism destinations.

Either carried out by the regional tourism authority or other regional entities, other entities of supra-regional scope, or even national bodies, the initiatives to create such a different but supplementary type of information should foster the analysis of regional tourism activity and be also relevant for all or some of the principal actors of the tourism sector.

Non-strict statistical type of comparability based on this R-TIS third set of data requires in addition to a common set of concepts, definitions and classifications, the use of the right type of territorial entities (see *Territorial entities*), as well as the use of measurement tools that should allow for valid and comparable results.

Data analysis

Such process allows for developing answers to questions through the examination and interpretation of data. The basic steps in the analytic process consist of identifying issues, determining the availability of suitable data, deciding on which methods are appropriate for answering the questions of interest, applying the methods and evaluating, summarizing and communicating the results.

Data analysis is essential for understanding results from surveys, administrative sources and pilot studies; for providing information on data gaps; for designing and redesigning surveys; for planning new statistical activities; and for formulating quality objectives.

Data from a survey can be used for descriptive or analytic studies. Descriptive studies are directed at the estimation of summary measures of a target population (for instance, the average daily expenditure of a German tourist in a given tourist destination) while analytic studies may be used to explain behaviour of and relationship among characteristics.

Data modelling

Survey data are often restricted in their capacity to produce reliable estimates due to the restrictions of sample size whereas administrative data may bring good geographic coverage but may exclude certain groups of people from the population. Because subtle changes within the population in territorial entities may not always be recognized by the assumptions made in the modelling process, synthetic estimates should always be used with care and movements over time should be used rather than absolute values generated by any modelling process.

Consequently, where modelling become more in evidence is when there is a shortage of data for particular variables, i.e., there are no direct estimates or benchmarks that can be used to provide a starting point. In this case, modelling may be required.

Employment

Each measure serves different purposes, and countries may adopt one or more of them depending on the intended use. If the intent is to determine the number of people who depend to some extent for their livelihoods by working in the tourism industries, then a count of persons with a job (main or other) in these industries would be appropriate. The measure based on employment in the main job would serve to gauge those with significant attachment to the tourism industries, for instance. If the intent is to make a comparison between tourism and non-tourism industries or between the tourism industries and the economy overall, then a count of jobs in the tourism industries would be more appropriate.

Countries may also be limited to one or other measure depending on their unique circumstances in terms of sources available.

Errors (statistical and non-statistical)

Statistical errors are mentioned and measured when documenting statistical surveys (this is the case of sampling errors) while non-statistical errors are usually ignored (such as coverage, nonresponse, measurement and processing errors). It is evident that non-statistical errors might be relevant.

- *Sampling errors* occur when survey results were obtained from a sample rather than the population as a whole. For probability sampling, the random variation due to sampling can be calculated. In practice, these errors may also include estimation errors that may be attributable to the use of estimators, which, deliberately or otherwise, create a bias (e.g., some small area estimators).
- *Coverage errors*, which consist of omissions, erroneous inclusions, and duplications in the frame used to conduct the survey. Since they affect all survey estimates, they constitute one of the most important types of error. Coverage errors may translate into a negative or positive bias in the data, and the impact may vary depending on the survey universe subgroup. One should also be concerned about classification errors, notably industrial and geographical, among others. For example, badly defined limits or erroneous coding may lead to an omission of part of the territory.
- *Nonresponse errors* occur when there is no response to one or all of the survey questions. Nonresponse leads to an increase in variance as a result of a reduction in the actual size of the sample and the recourse to imputation, and produces a bias if the non-respondents have characteristics of interest that are different from those of the respondents. Furthermore, there is a risk of significantly underestimating the sampling error, if imputed data are treated as though they were observed data.

- *Measurement errors* occur when the response provided differs from the real value; such errors may be attributable to the respondent, the interviewer, the questionnaire, the collection method or the respondent's record-keeping system. Measurement errors usually occur during data collection. Such errors may be random or they may result in a systematic bias if they are not random.
- *Processing errors* occur at subsequent stages of the process, when checking, coding, entering, imputing, and tabulating data. Like measurement errors, processing errors may lead to variance and bias. It is also necessary to look into the potential impact of snags in the survey process: uneven staff training, unusually high staff turnover, procedural changes in mid-operation, etc.

Modules

For effective implementation of supplementary surveys a framework for developing and implementing supplementary surveys needs to be in place. This framework should include:

- a requirement for evaluation of alternative data sources, including administrative records. If the information is already available, a supplementary survey would not be required;
- criteria for assessing proposals for supplementary survey (for example, the supplementary survey shall not undermine the goodwill and value of the base survey);
- guidelines for signing the supplementary questions;
- checklists for assessing impact, including effect on respondent burden;
- restrictions (for example, maximum length of survey);
- guidelines for outputs.

Regional tourism (subnational)

The terminology used is respectful with the different forms of tourism as in the IRTS 2008; this decision makes these terms not easy to understand in a first reading. In fact, UNWTO has received different suggestions during the 2015 world-wide consultation process of the Basic Glossary such as the followings:

- Proposal A).
“Instead of the three categories listed under “Regional tourism (subnational)”, we propose the following 2 categories which could be break-down further needed be:
 - local: a resident of the region of interest
 - non-local: not a resident of the region of interestwhich can be combined in various ways with the forms of tourism listed in IRTS 2008 (e.g. domestic local inbound for domestic intra-regional tourism, domestic nonlocal inbound for domestic inter-regional tourism, etc.)”.

Readers should be aware that the terminology proposed in the Glossary is not only consistent with the one used in IRTS 2008 but takes also into account the proposed classification of territorial entities (which establish a distinction between region /local), but also with the fact that a Regional TSA should be consistent with the TSA international standard (which is also consistent with the IRTS 2008 definitions of forms of tourism)

- Proposal B).
“The definition of excursionists associated with each of forms of tourism should be developed in line with the following breakdown:

DOMESTIC TOURISM:

The definition of "Domestic tourism" should be adapted to the regional perspective.

Either there are two subsets of domestic Tourism:

1. National domestic tourism: a visitor resident in the country of reference but outside the region of reference, within the region of reference.

2. Regional domestic tourism: a visitor resident in the region of reference within the region of reference.

OR

Include those visitors residents within the country of reference but outside the region of reference (1) in the concept of inbound tourism as a different subset from those international tourism.

INBOUND TOURISM

The definition of "Inbound tourism" should be adapted to the regional perspective.

Either including two subsets of Inbound Tourism

1. International inbound tourism: the activities of a non-resident international visitor within the **region** of reference

2. National inbound tourism: the activities of a non-resident national visitor within the **region** of reference

OR

Include the above (2.) subset within domestic tourism.

OUTBOUND TOURISM

The definition of "Outbound tourism" should be adapted to the regional perspective:

Comprises the activities of a resident visitor outside the **region** of reference, either within the country of reference or outside the country of reference.

Readers should be aware that it might be the case that at sub-regional levels, it would be very challenging to open the classification of either tourists or excursionists at the territorial entity of reference

Regional Tourism Expenditure

Following the rules of the System of National Accounts 2008, final consumption is deemed to occur at the moment of the transfer of ownership of goods or that of the delivery of services, and not the time of its payment. Tourism expenditure follows the same rules. Consumption expenditure on transport services occurs when being transported; on accommodation services, when staying in the place of accommodation; on travel agency services, when the information is provided and the travel services are booked, etc.

The acquisition of all goods and services during a tourism trip is, in principle, part of tourism expenditure.

Moreover, all services delivered before the trip and clearly related to the trip, (for example, inoculations, passport services, medical control, travel agency services, travel insurance, transportation services from the usual environment to the place visited, etc.) are included in tourism expenditure. All goods acquired before the trip that are intended to be used on the trip (specific clothes, medication, small items to take along to use or give away, camping gear, luggage, etc.) or brought along as gifts, should also be included.

Consequently, determining the venue of tourism expenditure is not straightforward; from a subnational perspective, it is important to locate such expenditure geographically in order to analyse its impacts in a rigorous way.

Regional Tourism Information System

The R-TIS proposed in this document should include national information only for those data for which the corresponding statistical information sources provide the same information but at regional and eventually, also at sub-regional levels. It is a limited set of information sources for which it will be necessary to identify their existence and value their completion; in any case they allow for articulation of a relevant amount of statistical data at the national/regional level. The following six sources (all of them national sources) could provide most of those basic data and indicators:

- Border survey
- Domestic tourism household survey
- Accommodation survey
- Statistical business register
- Structural business survey
- Population census

Representativeness of regional data derived from national statistical surveys (see *Survey*) might be limited due to sample size. In such cases, modelling statistical data should be an option (see *Data modelling*).

More specifically, as a general remark, it should be recalled that tourism statistics are difficult and costly to compile at a national level. At a regional level these difficulties and costs escalate and may be so prohibitive as to prevent their compilation altogether. In terms of efficiency, the traditional methods of compiling tourism statistics (from survey data) cannot provide the basic set of statistical data and indicators required for regional tourism policy purposes and thus alternative approaches to compiling subnational statistics and deriving indicators must be considered. In particular, administrative datasets relating to the tourism supply side or large commercial datasets arising from tourists' electronic fingerprints should be explored and exploited. Ideally, such type of information should be obtained at national level allowing for regional breakdowns.

Besides the database being georeferenced, R-TIS should include historical data series, as well as the corresponding metadata for users. Access should be free and promoted between the academic community, consulting companies and individual researchers and practitioners.

The first two information sets mentioned above should be understood as the basic core of such a system including:

- a set of basic data and indicators derived from statistical surveys and statistical operations based on administrative records. Such sources should cover the measurement of the three forms of tourism –outbound, domestic and inbound- and of the tourism sector. The information sets would have different periodicities –monthly, quarterly and annual-, would be obtained from different informant units - visitors, households and productive establishments- and will refer to a limited number of research areas such as:
 - Tourism as an economic sector;
 - Tourism and sustainable dimension
 - The environmental, social and cultural dimension
 - Tourism and the economic dimension
 - Tourism and territorial cohesion;
 - Supporting tourism destinations' key stakeholders.
- The production of national statistics and the implementation of modelling techniques should also be taken in consideration in order to broaden the set of regional statistical information.

As an example:

- The estimate of a tourism price index by re-weighting of the basic indices used by national CPI.
- Employment data in the tourism industries to be derived from administrative records or continuous or regular annual or multi-annual statistic operations (as in the case of the Census of Population).
- Regionalization of national Input-Output or Supply/Use tables or estimated as a regional approach per se.
- As for modelling, neither at regional level, even fewer at sub-regional levels, will it be frequent enough to have a set of basic statistical data and indicators for analysis, policy design, monitoring and management planning of tourist destinations; In other words, the statistics included in the first and second set cannot always be expected to be used as direct sources (for that to happen the sample size of the relevant surveys might request relevant financial resources); consequently, the use of modelling is inevitable both in relation to both statistical data derived from national sources as well as regional sources.

- Macroeconomic aggregates (such as those derived from Tourism Satellite Account exercises – either regionalization of national TSA or, alternatively, setting up of proper regional TSA).

Significance (economical)

For the application of both criteria proposed, it is recommended the use of the following indicators (either for a calendar year or monthly):

A). Ratio between the Tourism Population and the overall Resident Population (%)

At the local level, the ratio of such Tourism Population to the overall Resident Population should be more than *X%*: such average of the Total Resident Population is considered to be relevant enough to affect (if maintained or increased during some years) the use of resources, environmental and urban services management and territorial planning. (See also *Tourism Population*)

B). Ratio between number of employees in ISIC Rev.4 class 5510 “Short term accommodation activities” and the total number of employees in the territory of reference (%)

At the local level, the ratio should be more than *Y%*.

Both criteria (and possible combination with other supplementary ones) should allow for the measurement of a tourism sector and a tourism market in such territorial entity

This document recommends that at the regional level, national and regional tourism authorities should agree on the value of such ratios.

Territorial entities (subnational breakdown)

At the regional level the following remarks apply:

- the region is the basic unit ((identified as the administrative unit corresponding to the first level of territorial disaggregation of a country in terms of its political and administrative organization – for instance, NUTS 2 level in the EU, provinces in Canada or China, states in Brazil and Mexico, etc.-);
- multi-regional implies combination of two or more regions;
- other administrative units (for instance, NUTS 3 level in the EU as well as other areas above Local);
- central to such administrative entities is the existence of Regional public institutes and agencies for tourism development and management;
- examples of analytical units are: the French Riviera (combination of regional territories – “counties”- and an independent state –Monaco-), some national parks, etc.

At the local level the following remarks apply:

This grouping includes any municipality or other defined subnational area below Regional:

- the municipality is the basic unit (identified with clear administrative/ political boundaries);
- multi-local implies combination of two or more municipalities;
- central to such administrative entities is the existence of a specific unit (Destination Management Organization-(DMO-) responsible for tourism in the municipality;
- “tourism destination” and “tourism spatial áreas” should not be identified as administrative entities because that would not always be the case; therefore they are considered as analytical units that might or not coincided with one of such entities.
- Both units might require some ventilation for incremental analytical purposes: in the case of a tourism destination with more than one tourism product or tourism spatial areas requiring more detailed insight regarding tourism specific infrastructure or equipment, a breakdown by “zones” (or whatever terminology could be preferred) should be implemented using supplementary criteria to those originally used for operationalizing such concepts;

- geospatial information enables better analysis particularly for tourism information related to environmental sustainability issues; geo-referenced data can be aggregated or disaggregated according to a wide range of scales and zones meeting diverse analytical and policy demands; this would be the case of areas that are meaningful from an ecological perspective, such as water catchments and coastal zones.

Tourism industries

Tourism as an economic sector is a cluster of production units in different industries that provide consumption goods and services demanded by visitors; only part of the production of such industries are tourism related.

Therefore, tourism as an economic sector is complex and fragmented; in addition, national policies affecting tourism are complex and vary considerably across regions (including EU policies, in the case of EU member countries). The combination of both seems to hamper a coherent tourism approach, especially if the interaction between different groups of policies (intended or not intended for tourism) is analyzed and their effectiveness in relation to the overall goals is assessed.

Although evident at the national level, fragmentation increases when the analysis refers to subnational territorial entities.

Tourism population

The measurement of such concept assumes that an occupied bedplace corresponds to a tourist equivalent figure; consequently, it refers only to overnight visitors (tourists). The term “tourism population” is preferred to “equivalent tourism population”

The annual ratio of tourism population (TP) to resident population (RP) in the territory of interest is a key indicator because it allows evaluating the pressure due to by tourists on land, resources and local communities, regardless seasonality. In order to measure such ratio both populations need to be transformed in terms of overnight figures; in the case of RP implies the use of a correction factor because not all residents overnight 365 days per year in their usual place of residence while in the case of TP such estimate implies multiplying the number of tourists by the average length of stay.

Given a territorial entity, a period of time (annual, for instance) and different types of stays by inbound and domestic regional tourists, such ratio expressed in % can be derived indicating the relevance of tourism flows in relation to the resident population.

TP: number of tourists* average length of stay / 365 (or number of total tourist nights / 365 or overnights by non-resident population / 365)

RP: overnights by resident population / 365

$$\left[\frac{TP / 365}{RP / 365} \right] 100 = \% \text{ Tourism Population}$$

Tourism trip

However, depending on the tool used for its measurement, a trip can be viewed from two different perspectives:

- From the perspective of the visitor (that’s the case when using household surveys)
- From the perspective of the place/s visited (that’s the case when surveying visitors at destination)

In each case the term “trip” is slightly different; focusing on the subnational level, the following remarks are relevant

- A) In the first case, aspects or attributes of the trip taken by resident visitors are usually gathered by way of a household survey. In this case, the term “trip” refers to a round trip. In these cases it is recommended to identify the associated visits, if any and to define the minimum duration of stops to be considered as visits (see *tourism visits*).
- B) Regarding non-resident visitors, the “trip” refers to the travel of the visitor from the time of arriving to a destination to the time of leaving:
 - In the second case, the visitor is interviewed at destination. From the perspective of a regional entity (see INRouTe Basic Glossary / *Territorial entities*), INRouTe understands that the term “trip” refers to two possible situations:
 - a proper trip (associated to residents in the region of reference)
 - part of a round-trip (associated to residents of another regions of the country of reference)

(In both cases see *Regional Tourism*)

In the transportation research community, a trip (also referred as a journey) is usually defined as a one-way movement from a point of origin to a point of destination. The concept of “tour” would be defined as a sequence of trips starting and ending at the same location; a “trip chain” is equivalent to a “tour” but it may not end at the same location.

Tourism visit

The term visit refers to a stop in a place visited during a tourism trip. The stop does not need to be overnight to qualify as a tourism visit. Entering a geographical area without stopping there does not qualify as a visit to that area. The IRTS 2008 recommends that countries define the minimum duration of stops to be considered as tourism visits.

Details of visits to individual destinations within a country might be collected by way of surveys at those destinations. Where a visitor has made a multi-destination trip, say for example, visiting three destinations, he/she could be recorded in the numbers of people visiting each of those destinations. If the statistics of the number of visitors to the destinations were aggregated, they would show a total of three visits. Consequently, statistics on visits at destinations cannot be aggregated to provide statistics on number of visits, or trips, at the national level.

In the transportation research community, the term “sojourn” is preferred (usually defined as a short period of stay in a particular location).

Annex 1. Resolution of the Sixth International Tourism Forum for Parliamentarians and Local Authorities, Cebu, Philippines, 22-25 October 2008



CEBU RESOLUTION 2008

Representatives of Parliaments and Local Authorities, comprising of 450 Delegates from 58 Countries met in Cebu, Philippines, for the 6th International Tourism Forum for Parliamentarians and Local Authorities, from 22 to 24 October 2008, under the auspices of the UNWTO and the Government of the Philippines, unanimously agreed on the following resolution.

1. Request the Secretary General to instruct the “Resilience Committee” (former Crisis Committee) of UNWTO to give urgent attention to all appropriate measures that could assist countries regarding the negative impacts the present financial crisis may have on their tourism industries;
2. Encourage Parliaments and Local Authorities to consider the implementation of the recommendations of the Davos Declaration and to set up appropriate programmes and projects that will enable their tourism sector to respond to the global challenges of climate change;
3. Urge Governments and all stakeholders in the tourism sector to implement in appropriate ways the principles of the Global Code of Ethics for Tourism in their country and in their various business activities;
4. Request UNWTO to deliver general guidelines on measuring tourism at the regional and local levels regarding basic statistics, the tourism satellite account and the economic analysis of the contribution that tourism makes at those levels, and
5. Call upon local and regional tourism authorities to implement these general guidelines by allocating approximately two per cent of their budget for tourism promotion to achieve those objectives.

Annex 2. Partial reproduction of: "UNWTO Report on the progress of the reform of the Organization (White Paper)" October 2011

World Tourism Organization

General Assembly Nineteenth session Gyeongju, Republic of Korea, 8-14 October 2011

Report on the progress of the reform of the Organization (White Paper)

A reform process for a more relevant UNWTO

5. UNWTO MISSION AND RELEVANCE

24. Given the nature of the tourism sector, especially its disaggregated, multi-industry structure and the way it is generally handled by and within governments, the mission of the World Tourism Organization is double:

1. **To provide leadership to the sector**, including its public and private stakeholders, serving as a global tourism policy forum and a practical source of tourism knowledge and awareness raising. This leadership can be gained through the timely and continuous provision of accurate, solid, reliable and undisputable statistical data on tourism, suitably broken down, so as to serve Members and the industry as a whole; leadership can and should also be gained through the provision of well-conceived guidelines for tourism policy definition by governments, as well as visions on the future likely developments of tourism and the challenges it will have to face; and

2. **To provide services to its Members** in order to help them develop and manage tourism in the most sustainable and competitive manner. In this respect, the Organization will adopt the philosophy of "Members First" and the culture of "Member-care". Among the services that UNWTO should provide, is assistance to its governmental Members, States and Associates, (Ministries of Tourism, NTOs or NTAs), as well as to Affiliate Members, to raise the profile of tourism within governments, i.e. to give them "leadership tools".

6. LINES OF ACTION TO BE PURSUED WITHIN THE ORGANIZATION

32. As stated above, the wide range of impacts, positive and negative, that tourism has on societies and their development is now widely acknowledged. Foreseeing, quantifying and understanding the likely implications of the impacts of tourism on the national and local economies, on the natural and cultural environments, and on the social fabric of communities is an essential preoccupation and responsibility of governments. Tourism cannot be responsibly promoted and sustainably developed if governments ignore the outcomes that will likely result from it, or if they only know some of these potential and actual results and prefer to overlook those of a negative sign.

33. The World Tourism Organization should play a leading and at the same time truthful role in this respect. This should be done, firstly, through the development of methodologies, policy guidelines and analytical tools and techniques that allow governments to foresee, quantify and understand current and future tourism trends, development opportunities and likely impacts of all nature and sign. These should be the bases for formulating public policies in tourism.

34. Secondly, UNWTO should assist its Members by providing them with tourism policy guidelines, orientations and methodologies, as well as specific advice for the application of such guidelines and related methodologies to their particular situation and circumstances, at the regional and sub-regional levels, as well as at the national and local levels through its technical cooperation activities. All types of governmental members ought to be able to benefit from this

type of services, irrespective of whether they are developed, developing, transition or least developed economies; the source of funding for the services to be provided will clearly be different in each case, matter that is dealt with later in this document.

.....

36. Three areas deserve special attention, especially because they have not been in the mainstream of UNWTO activities so far, and because they are now widely demanded by Member States; these are:

6. **Domestic tourism**, which has apparently been growing faster than international tourism and in many developed countries it has greater significance for economic growth and job creation than inbound tourism; it plays a particularly important role in times of crisis and serves also to spread the benefits of tourism to rural or depressed areas in many countries. This area of work should include the development of appropriate statistical and econometric tools for its measurement in each and every country with similar methodologies so as to make the results comparable; it should also include guidelines for the development, marketing and promotion of social forms of domestic tourism;

7. **Employment in tourism**, given the high labour-intensive character of the tourism industries and the priority granted by governments to employment creation. In these two areas, the Secretariat has already started to design the corresponding preprogrammes for possible implementation as from 2011. And finally:

8. **Governance in tourism**, including the different levels of public administration and their relationships with the private sector and other stakeholders, at both the national and local destination levels. This area should also include global tourism policy issues, institutional and legislative aspects.

7. HOW AND WHO SHOULD ESTABLISH THE PRIORITY AREAS OF WORK

38. It is clear that, with the financial and human resources made available to the Secretariat at the present time, it is impossible to tackle –in a serious, results-oriented manner– all these and future areas at the same time and with the same depth. If a full, all-purpose agenda of work is adopted, without any prioritisation, a dispersion of resources and efforts can occur and has indeed occurred, with the result that quite often the outputs achieved are rather shallow, do not make a difference to Members and are not sufficiently strong to provide the Organization with a distinguishable seal of relevance. There is a need, therefore, to establish a balance between needs and ambitions on the one hand, and resources availability on the other; this means establishing priorities.

39. There have certainly been important, ground-breaking contributions of UNWTO to the international community throughout its 35 years of life, such as the normalization of terms and criteria for collecting tourism statistics, elaboration and approval of the Global Code of Ethics, the Tourism Satellite Account, the sustainability guidelines and indicators, and a few others; but they have been the exception rather than the rule.

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Annex 3. International Standard Industrial Classification of All Economic Activities (ISIC) Rev.4 explanatory notes

Annex 3 of IRTS 2008

These explanatory notes refer exclusively to internationally comparable tourism characteristic activities and follow the same order as the list of tourism industries.

They have been extracted from *International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4*. Statistical papers (Series M No. 4/Rev.4), United Nations. New York, 2008.

The complete document can be consulted in

<http://unstats.un.org/unsd/cr/registry/regdntransfer.asp?f=135>

Accommodation for visitors

5510 Short term accommodation activities

This class includes the provision of accommodation, typically on a daily or weekly basis, principally for short stay by visitors. This includes the provision of furnished accommodation in guest rooms and suites or complete self-contained units with kitchens, with or without daily or other regular housekeeping services, and may often include a range of additional services such as food and beverage services, parking, laundry services, swimming pools and exercise rooms, recreational facilities and conference and convention facilities.

This class includes the provision of short-term accommodation provided by:

- hotels
- resort hotels
- suite / apartment hotels
- motels
- motor hotels
- guesthouses
- pensions
- bed and breakfast units
- visitor flats and bungalows
- time-share units
- holiday homes
- chalets, housekeeping cottages and cabins
- youth hostels and mountain refuges

This class excludes:

- provision of homes and furnished or unfurnished flats or apartments for more permanent use, typically on a monthly or annual basis, see division 68

5520 Camping grounds, recreational vehicle parks and trailer parks

This class includes:

- provision of accommodation in campgrounds, trailer parks, recreational camps and fishing and hunting camps for short stay visitors
- provision of space and facilities for recreational vehicles

This class also includes accommodation provided by:

- protective shelters or plain bivouac facilities for placing tents and/or sleeping bags

5590 Other accommodation

This class includes the provision of temporary or longer-term accommodation in single or shared rooms or dormitories for students, migrant (seasonal) workers and other individuals.

This class includes accommodation provided by:

- studentresidences
- schooldormitories
- workershostels
- rooming and boardinghouses
- railway sleeping cars

6810 Real estate activities with own or leased property

This class includes:

- buying, selling, renting and operating of self-owned or leased real estate, such as:
 - apartmentbuildings and dwellings
 - non-residential buildings, including exhibition halls, self-storage facilities, malls and shopping centers
 - land
- provision of homes and furnished or unfurnished flats or apartments for more permanent
- use, typically on a monthly or annual basis

This class also includes:

- development of building projects for own operation, i.e. for renting of space in these buildings
- subdividing real estate into lots, without land improvement
- operation of residential mobile home sites

This class excludes:

- development of building projects for sale, see 4100
- subdividing and improving of land, see 4290
- operation of hotels, suite hotels and similar accommodation, see 5510
- operation of campgrounds, trailer parks and similar accommodation, see 5520
- operation of workers hostels, rooming houses and similar accommodation, see 5590

6820 Real estate activities on a fee or contract basis

This class includes the provision of real estate activities on a fee or contract basis including real estate related services.

This class includes:

- activities of real estate agents and brokers
- intermediation in buying, selling and renting of real estate on a fee or contract basis
- management of real estate on a fee or contract basis
- appraisalservicesfor real estate
- activities of real estate escrow agents

This class excludes:

- legal activities, see 6910
- facilitiesupportservices, see 8110

- management of facilities, such as military bases, prisons and other facilities (except computer facilities management), see 8110

Food and beverage serving activities

5610 Restaurants and mobile food service activities

This class includes the provision of food services to customers, whether they are served while seated or serve themselves from a display of items, whether they eat the prepared meals on the premises, take them out or have them delivered. This includes the preparation and serving of meals for immediate consumption from motorized vehicles or nonmotorized carts.

This class includes activities of:

- restaurants
- cafeterias
- fast-food restaurants
- pizza delivery
- take-out eating places
- ice cream truck vendors
- mobile food carts
- food preparation in market stalls

This class also includes:

- restaurant and bar activities connected to transportation, when carried out by separate units

This class excludes:

- concession operation of eating facilities, see 5629

5629 Other food service activities

This class includes industrial catering, i.e. the provision of food services based on contractual arrangements with the customer, for a specific period of time.

Also included is the operation of food concessions at sports and similar facilities. The food is often prepared in a central unit.

This class includes:

- activities of food service contractors (e.g. for transportation companies)
- operation of food concessions at sports and similar facilities
- operation of canteens or cafeterias (e.g. for factories, offices, hospitals or schools) on a concession basis

This class excludes:

- manufacture of perishable food items for resale, see 1079
- retail sale of perishable food items, see division 47

5630 Beverage serving activities

This class includes the preparation and serving of beverages for immediate consumption on the premises.

This class includes activities of:

- bars
- taverns

- cocktail lounges
- discotheques (with beverage serving predominant)
- beer parlors and pubs
- coffee shops
- fruit juice bars
- mobile beverage vendors

This class excludes:

- reselling packaged/prepared beverages, see 4711, 4722, 4781, 4799
- operation of discotheques and dance floors without beverage serving, see 9329

Railway passenger transport

4911 Passenger rail transport, interurban

This class includes:

- passenger transport by inter-urban railways
- operation of sleeping cars or dining cars as an integrated operation of railway companies

This class excludes:

- passenger transport by urban and suburban transit systems, see 4921
- passenger terminal activities, see 5221
- operation of sleeping cars or dining cars when operated by separate units, see 5590, 5610

Road passenger transport

4922 Other passenger land transport

This class includes:

- other passenger road transport:
 - scheduled long-distance bus services
 - charters, excursions and other occasional coach services
 - taxi operation
 - airport shuttles
- operation of telfers (téléphériques), funiculars, ski and cable lifts if not part of urban or suburban transit systems

This class also includes:

- other renting of private cars with driver
- operation of school buses and buses for transport of employees
- passenger transport by man- or animal-drawn vehicles

This class excludes:

- ambulance transport, see 8690

Waterpassengertransport

5011 Sea and coastal passenger water transport

This class includes:

- transport of passengers over seas and coastal waters, whether scheduled or not:
 - operation of excursion, cruise or sightseeing boats
 - operation of ferries, water taxis etc.

This class also includes:

- renting of pleasure boats with crew for sea and coastal water transport (e.g. for fishing cruises)

This class excludes:

- restaurant and bar activities on board ships, when provided by separate units, see 5610, 5630
- operation of “floating casinos”, see 9200

5021 Inland passenger water transport

This class includes:

- transport of passenger via rivers, canals, lakes and other inland waterways, including inside harbours and ports

This class also includes:

- renting of pleasure boats with crew for inland water transport

Air passenger transport

5110 Passenger air transport

This class includes:

- transport of passengers by air over regular routes and on regular schedules
- charterflightsforpassengers
- scenic and sightseeingflights

This class also includes:

- renting of air-transport equipment with operator for the purpose of passenger transportation
- general aviation activities, such as:
 - transport of passengers by aero clubs for instruction or pleasure

Transport equipment rental

7710 Renting and leasing of motor vehicles

This class includes:

- renting and operational leasing of the following types of vehicles:
 - passenger cars (without drivers)
 - trucks, utility trailers and recreational vehicles

This class excludes:

- renting or leasing of vehicles or trucks with driver, see 4922, 4923
- financial leasing, see 6491

Travel agencies and other reservation service activities

7911 Travel agency activities

This class includes:

- activities of agencies primarily engaged in selling travel, tour, transportation and accommodation services to the general public and commercial clients

7912 Tour operator activities

This class includes:

- arranging and assembling tours that are sold through travel agencies or directly by tour operators. The tours may include any or all of the following:
 - transportation
 - accommodation
 - food
 - visits to museums, historical or cultural sites, theatrical, musical or sporting events

7990 Other reservation service and related activities

This class includes:

- provision of other travel-related reservation services:
 - reservations for transportation, hotels, restaurants, car rentals, entertainment and sport etc.
- provision of time-share exchange services
- ticket sales activities for theatrical, sports and other amusement and entertainment events
- provision of visitor assistance services:
 - provision of travel information to visitors
 - activities of tourist guides
- tourism promotion activities

This class excludes:

- activities of travel agencies and tour operators, see 7911, 7912
- organization and management of events such as meetings, conventions and conferences, see 8230

Cultural activities

9000 Creative, arts and entertainment activities

This class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers. This includes the production and promotion of, and participation in, live performances, events or exhibits intended for public viewing; the provision of artistic, creative or technical skills for the production of artistic products and live performances.

This class includes:

- production of live theatrical presentations, concerts and opera or dance productions and other stage productions:
 - activities of groups, circuses or companies, orchestras or bands
 - activities of individual artists such as authors, actors, directors, musicians, lecturers or speakers, stage-set designers and builders etc.
- operation of concert and theatre halls and other arts facilities
- activities of sculptors, painters, cartoonists, engravers, etchers etc.
- activities of individual writers, for all subjects including fictional writing, technical writing etc.
- activities of independent journalists
- restoring of works of art such as paintings etc.

This class also includes:

- activities of producers or entrepreneurs of arts live events, with or without facilities

This class excludes:

- restoring of stained glass windows, see 2310
- manufacture of statues, other than artistic originals, see 2396
- restoring of organs and other historical musical instruments, see 3319
- restoring of historical sites and buildings, see 4100
- motion picture and video production, see 5911, 5912
- operation of cinemas, see 5914
- activities of personal theatrical or artistic agents or agencies, see 7490
- casting activities, see 7810
- activities of ticket agencies, see 7990
- operation of museums of all kinds, see 9102
- sports and amusement and recreation activities, see division 93
- restoring of furniture (except museum type restoration), see 9524

9102 Museums activities and operation of historical sites and buildings

This class includes:

- operation of museums of all kinds:
 - art museums, museums of jewellery, furniture, costumes, ceramics, silverware
 - natural history, science and technological museums, historical museums, including military museums
 - otherspecializedmuseums
 - open-air museums
- operation of historical sites and buildings

This class excludes:

- renovation and restoration of historical sites and buildings, see section F
- restoration of works of art and museum collection objects, see 9000
- activities of libraries and archives, see 9101

9103 Botanical and zoological gardens and nature reserves activities

This class includes:

- operation of botanical and zoological gardens, including children's zoos
- operation of nature reserves, including wildlife preservation, etc.

This class excludes:

- landscape and gardening services, see 8130
- operation of sport fishing and hunting preserves, see 9319

Sports and recreational activities

7721 Renting and leasing of recreational and sports goods

This class includes:

- renting of recreational and sports equipment:
 - pleasureboats, canoes, sailboats,
 - bicycles
 - beachchairs and umbrellas
 - othersportsequipment
 - skis

This class excludes:

- renting of video tapes and disks, see 7722
- renting of other personal and household goods n.e.c., see 7729
- renting of leisure and pleasure equipment as an integral part of recreational facilities, see 9329

9200 Gambling and betting activities

This class includes:

- bookmaking and otherbettingoperations
- off-trackbetting
- operation of casinos, including “floating casinos”
- sale of lottery tickets
- operation (exploitation) of coin-operated gambling machines
- operation of virtual gambling web sites

This class excludes:

- operation (exploitation) of coin-operated games, see 9329

9311 Operation of sports facilities

This class includes:

- operation of facilities for indoor or outdoor sports events (open, closed or covered, with or without spectator seating):
 - football, hockey, cricket, baseball, jai-alai stadiums
 - racetracks for auto, dog, horse races
 - swimming pools and stadiums
 - track and fieldstadiums
 - wintersports arenas and stadiums
 - ice-hockey arenas
 - boxing arenas
 - golf courses
 - bowlinglanes
 - fitness centers
- organization and operation of outdoor or indoor sports events for professionals or amateurs by organizations with own facilities

This class includes managing and providing the staff to operate these facilities.

This class excludes:

- renting of recreation and sports equipment, see 7721
- operation of ski hills, see 9329
- park and beach activities, see 9329

9319 Other sports activities

This class includes:

- activities of producers or promoters of sports events, with or without facilities
- activities of individual own-account sportsmen and athletes, referees, judges, timekeepers etc.
- activities of sports leagues and regulating bodies
- activities related to promotion of sporting events
- activities of racing stables, kennels and garages
- operation of sport fishing and hunting preserves
- activities of mountain guides
- support activities for sport or recreational hunting and fishing

This class excludes:

- breeding of racing horses, see 0142
- renting of sports equipment, see 7721
- activities of sport and game schools, see 8541
- activities of sports instructors, teachers, coaches, see 8541
- organization and operation of outdoor or indoor sports events for professionals or amateurs by sports clubs with/without own facilities, see 9311, 9312
- park and beach activities, see 9329

9321 Activities of amusement parks and theme parks

This class includes:

- activities of amusement parks or theme parks, including the operation of a variety of attractions, such as mechanical rides, water rides, games, shows, theme exhibits and picnic grounds

9329 Other amusement and recreation activities n.e.c.

This class includes:

- activities of recreation parks, beaches, including renting of facilities such as bathhouses, lockers, chairs etc.
- operation of recreational transport facilities, e.g. marinas
- operation of skihills
- renting of leisure and pleasure equipment as an integral part of recreational facilities
- operation of fairs and shows of a recreational nature
- operation of discotheques and dance floors
- operation (exploitation) of coin-operated games
- other amusement and recreation activities (except amusement parks and theme parks) not elsewhere classified

This class also includes:

- activities of producers or entrepreneurs of live events other than arts or sports events, with or without facilities

This class excludes:

- fishingcruises, see 5011, 5021
- provision of space and facilities for short stay by visitors in recreational parks and forests and campgrounds, see 5520
- beverage serving activities of discotheques, see 5630
- trailer parks, campgrounds, recreational camps, hunting and fishing camps, campsites and campgrounds, see 5520
- separate renting of leisure and pleasure equipment, see 7721
- operation (exploitation) of coin-operated gambling machines, see 9200
- activities of amusement parks and theme parks, see 9321

Annex 4. Extending the Regional Inter-institutional Network (RIN) to sub-regional entities

Background

The document refers to a Regional Tourism Inter-Institutional Network but the design suggested by INRouTe could be further adapted to other territorial levels. The local level (any municipality where tourism is, or potentially can be, relevant) would be the first priority but also other levels should be envisaged such as:

- Multi-regional: either intra-national (two or more contiguous regions of a country) or supra-national (two or more contiguous regions of different countries)
- Other sub-national territorial entities: such entities could combine different type of units (of an institutional or analytical nature) referring to any of the previous types, (such as such as aggregations of municipalities, specific areas intra or inter contiguous municipalities, or other possible territories) where tourism is, or potentially can be, relevant may be considered for interested stakeholders -mainly investors- and analytical purposes).

It should be also recalled that the design of a Regional Tourism Information System (R-TIS) is the first priority and that its implementation is the strategic objective for INRouTe over the period 2012/2015. Having said that, INRouTe has warned in the document jointly issued by INRouTe and UNWTO “**Towards a Set of UNWTO Guidelines**” (December 2012) that even for those municipalities where tourism is or potentially could be relevant it may not be evident that a Local Tourism Information System is necessary nor that it could be feasible.

INRouTe considers that for these municipalities, the main issues to focus on could be:

- Identify the set of statistical information available and appropriate for the measurement and analysis of tourism (principally concerning accommodation services for visitors, numbers of establishments and the corresponding associated employment); most of such information will refer to a set of national sources; most of them –if not all- will be those proposed by INRouTe in order to articulate a set of national / regional statistical data and indicators (Border survey, Domestic tourism household survey, Accommodation survey, Statistical business register, Structural business survey and Population census)
- Explore the existence of a broader set of administrative information generated basically by the municipality itself that could complement the statistical set of basic data and indicators. Additional non official and non statistical information could be sought in order to identify those characteristics of tourism activity considered to be of special interest;
- Checking if such municipalities have or not the necessary resources to assess such data with the appropriate statistical insight (see chapter 6) and to properly use such administrative records or other information.
- Search for those topics that are especially relevant for the design of policies and which should be properly measured and analyzed, such as vacation homes, same-day visitors, impact of special events, identifying the main subsets of activities undertaken by visitors, etc.;

It could be the case that after such exploratory exercise the municipality would find more appropriate to address statistical and non-statistical efforts to the development of a Local Tourism Data Warehouse instead of the setting up of a proper Local Tourism Information System which is a more challenging issue assuming that such a system should be the result of the adaptation of the R-TIS explained in Chapter 2 of this document.

It might neither be obvious that the strategic objective at the local level should be the setting up of a local tourism data warehouse. It might be the case that for most of those municipalities, the lack of technical expertise would justify that other objectives such as to foster the proper

management of such tourism destinations and its contribution to sustainable development would be more pertinent. In any case, if a Regional Tourism Inter-Institutional Network in the region of reference of such tourism destination existed, its experience could be helpful in providing guidance to set up the appropriate programmes and activities for the Local Tourism Destination Inter-Institutional Network.

About the opportunity to implement Local Tourism Destination Observatories

Such recommendations are rooted in the professional knowledge and experience of a good number of INRouTe members but nevertheless, the appropriateness or not to implement Local Tourism Destination Observatories should be related to the present relevance of tourism in such destination and in the availability of the necessary human resources and professional skill to support such initiative

The term relevance implies both the territorial scale of the municipality and the number of establishments in the tourism industries in such territory of reference –and, consequently, also the number of associated jobs- and the value added generated by them, in relation to the local economy. Such industries include accommodation for visitors as well as others that provide other goods and services consumed by visitors.

It should be highlighted that the concept of relevance might be redundant in mature destinations. It is defined from the supply side in order to provide a more stable criteria than a demand side approach one –like number of tourist arrivals or overnight- because demand side factors are more volatile and would require more frequent information updates of data sources.

The concept of relevance is related with that of critical mass of existing establishments providing services (to visitors in a given destination); that's to say that it focuses strictly on the supply side, just the opposite as in IRTS 2008 where the criteria to define tourism characteristic products referred either to a demand criteria –tourism expenditure on the product should represent a significant share of total tourism expenditure- or a supply condition –tourism expenditure on the product should represent a significant share of the supply of the product in the economy (this criterion implies that the supply of a tourism characteristic product would cease to exist in meaningful quantity in the absence of visitors).

Consequently, the very concept of tourism sector is central to define if a municipality qualifies or not as a local tourism destination. That's to say that if in addition to such qualification the municipality has the necessary human resources and professional skill to support the setting up of a Local Tourism Destination I, such initiative might have a different strategic objective than the proposed for a Regional Tourism Inter-Institutional Network or could have even more than one.

Defining programmes and activities for a Local Tourism Inter-Institutional Network

Of the four programmes proposed for the setting up of a Regional Tourism Inter-Institutional Network identified in chapter 3, the one related with *training* would be in most cases, inadequate due to the difficulty to manage the appropriate resources (especially human resources). Instead, a programme focused on the creation and follow up of tourism product/s and their effectiveness to attract visitors would be, for instance, more targeted to the strategic objective.

Nevertheless, the other three programmes about *lobbying tourism*, *identification of available and necessary information* and *fostering the cooperation of key tourism stakeholders and relevant practitioners* are very adequate also at the local level but should be properly adapted.

INRouTe has identified some case studies that might be of interest for different type of regions:

- Regarding the *lobbying tourism* programme, it should be feasible to build on existing regional Tourism Observatories database. Such possibility would also allow setting up monitoring systems for tourism destination managers. Please read BOX 1 below.
- Regarding the *information* programme, measurement and research on tourism behaviour and associated topics (such as itineraries, attractions, tourism products and type of tourism) would seem of special importance to tourism destination managers
- In this regard, the guidelines provided to the Baltic Sea Region countries by the EU/ Baltic Tourism Heritage Information System (BASTIS) project, could be used as a useful material for creating attractions. Please read below BOX 2
- Regarding the *cooperation* programme, the initiative launched by the Tuscanynetwork for the setting up of a significant number of Local Tourism Destination Observatories (around 50) deserves special attention. Conceived as a network of relevant stakeholders, each RIN is designed as an operational tool serving the municipality by focusing in the evaluation and orientation of the local tourism system. For each of them, eight states are suggested for its setting up, please read BOX 3 which presents "Progetto Osservatorio Turistico di Destinazione /del Comune di Greve in Chianti"
- Such initiative illustrates the ambition of the NECStour project in the European Union.

BOX 1: Towards a monitoring system for local destinations – the Italian experience

By M. Manente, CISET, 2008

So that statistics collected by the Regional Tourism Observatory are not end in themselves but they can be a support for policy makers and destination managers, it seems relevant to stimulate the debate towards the opportunity to develop monitoring systems for local destinations. This link proposes the Italian experience, starting from the socio-economic model developed in 2006 to identify local tourist destinations as defined by the Italian law, and presented at the 8th International Forum on Tourism Statistics in Cáceres .

The resulting tool which is summarised below, represents an evolution towards an effective monitoring system to be used both from a diagnostic point of view, i.e. giving a photograph of the "here and now" of the destination, and as a support for tourism planning and management.

The objectives of the evolved monitoring system are the following:

- to evaluate over time the phases of development of a local tourist destination;
- to make comparisons with other destinations;
- to be a support for defining strategies and planning.

About 90 indicators, standardized according to a benchmark area, have been identified and integrated into the model. The benchmark area can then be identified by decision makers according to individual contexts, needs and points of reference (a region, a competitive destination, a best practice, etc.).

The set of indicators is ideal, as it is ample enough to allow the model maximum flexibility and adaptability with regards to the diverse needs of different destinations. In fact, the intention is to make available the most complete set of indicators possible for the destination, from which it can then draw its own set of indicators to meet its needs, according to its individual characteristics, experience, objectives and available data. Furthermore, in some cases, alternative calculations for certain indices are suggested.

An application of the use of a selection of a set of indicators of the proposed monitoring tool was carried out during technical assistance given to Local Tourism Systems of the region of Sardinia. During this time the model was developed and improved upon.

90 indicators can be grouped by subject, emphasizing their essential characteristics.

- Set A – Capacity of attraction: a series of indicators with the aim of evaluating the variety and number of resources and how they have been exploited.
- Set T - Tourism sector importance: gathers together all the indices that describe the essential characteristics of tourism supply and demand, for example impact of supply, tourist pressure, market diversification, average spend per capita , etc..
- Set S – System: integration of economic system indicators (number of businesses , value , relations between the different business sectors, etc.) and traditional tourism indices; this helps to evaluate the characteristics of the economic system in general, the connections between private businesses and public institutions, as the performance of the economic system, for better or for worse, will create (or not, as in the latter case), competitive advantage; within this set there is also a specific subset (St) that evaluates the characteristics and level of development of the tourism system (economic role of the tourism sector, readiness or openness of tourism enterprises to collaborate and form partnerships ,

etc.).

- Set P – Planning: planning indices, that aim at testing the ability of the system to develop projects and to attract funding, as, for example, project-making in the tourism context .
- Set O – Tourism superstructures / infrastructures: this set gathers together two subsets of indices (9 indicators for each set) and evaluates the use and suitability of infrastructures (and superstructures) (congress centres, sports centres, restaurants, etc.).
- Set E – Environment: gathers together those indicators which can evaluate the state of environmental preservation, the availability of dwindling resources, other critiques relative to carrying capacity and the possible fragile aspects of the destination which must be taken into account when planning for tourism development.
- Set F - Quality of life: the aim of this set is to demonstrate the level of use of essential services (e.g. hospitals) and the existence, if any, of anti-social risks (e.g. high level of crime) that may need to be taken into account when defining objectives and strategies for tourism.
- Set D - Performance: a set of indicators that evaluate the dynamics of supply and demand (room occupancy, variations in the number of tourist arrivals and nights, accommodation rates, etc.).
- Set M - Market: a series of indices that take evaluation beyond the borders of the destination, estimating the overall trends and margins generated by each typology of product/segment, the physical and economic volume of certain segments, etc.

This set of indicators must allow, on one hand, simultaneous evaluation of many different aspects, and on the other hand, the selection of only those indicators per each subject (capacity to attract, tourism component, etc.) that will have real significance for that particular type of strategic decision-making. Irrelevant indicators only risk creating confusion.

In order to respond to the needs of decision-makers therefore, the monitoring model presented here, regroups the indicators belonging to the sets described above (capacity to attract, the strength of tourism, planning, systems etc.) in different ways, integrating them in such a way that decision-makers are helped to evaluate, in relation to objectives and strategies:

- the strengths and weaknesses of the destination;
- opportunities and threats posed by the environment;
- the challenges posed by the competition;
- the relationship between destination and benchmark area;
- the possible gaps to be filled and how and where to invest in order to achieve predetermined objectives.

The monitoring model is then designed to prompt planners and policy-makers to take into account a series of variables in an organized way, in order to avoid the distorted effects of evaluations as a result of having to evaluate too many aspects simultaneously. The system seeks to prevent errors, or at least, it allows decisions to be made in an informed way and not made on the basis of sensations and trends dictated by other destinations.

The Italian experience can as a consequence be seen as an attempt to coordinate, organize and integrate all statistics that a Regional Observatory can collect, in order to obtain a structured and comprehensive vision of tourism in the area, to supports policy- and decision-makers.

FURTHER LINKS

<http://virgo.unive.it/ciset/website/>

REFERENCES

- Ciset – WTO (2004). *Destination management, economic analysis of tourism and monitoring systems*. Documented presented at the WTO Workshop Contribution of statistics and economic analysis to effective destination management strategies. Antibes-Juan les Pins, 2004.
- Manente, M., (2008). *Destination management and economic background: defining and monitoring local tourist destinations*. Paper presented at the International Conference of Tourism “Knowledge as value advantage of tourist destination”, Malaga, Spain, 2008.
- Manente, M, Cerato, M. (2000). *From destination to destination marketing and management. Designing and repositioning tourism products*. Cafoscarina, Venezia.
- Manente, M., Meneghello, S. (2006). *Defining and testing a socio-economic model to identify Italian Local Tourism Systems (STL): a methodological framework*. Paper presented at the 8th international Forum on Tourism Statistics, Caceres, Spain, 2006.
- Manente, M., Minghetti, V. (2006). “Destination management organisations and actors”. In Buhalis, D., Costa, C. (editors). *Tourism Business Frontiers*. Elsevier.
- Manente, M. Pechlaner, H. (2006). “How to define, identify and monitor the decline of tourist destinations: towards an Early Warning System”. In Butler, R.W. (editor). *The Tourism area life cycle, vol. 2, Conceptual and Theoretical Issue*. Channel View Publications.

BOX 2: Booklet for creating tourism attractions – Tools from the AGORA 2.0 workshops (provided by www.bastis-tourism.info)

By Copenhagen Business School and Lise Lyck, 2012

In order to develop attractions to promote tourism and use of local nature and culture some instruments

can be useful to apply to achieve a successful development, but how to do it in practice is often the question. What is presented is a design for development. Realization requires involvement of decision makers and of economic resources outside the AGORA 2.0 project. In other words, what can be presented are design models for decision-making.

This booklet is meant to be help in this process. It is based on the principle “learning by doing” applied to product/service ideas and concepts which the participants in the workshops have elaborated themselves. These examples have already been discussed and presented for the 22 AGORA 2.0 partners based on a draft version. It is furthermore based on “Baltic transnational learning”, as a result of all participants coming from different Baltic countries and with a variety of ideas rooted in Baltic landscapes and traditions. The knowledge sharing has taken place in workshops in the Baltic Sea Region countries.

The work packages in AGORA 2.0 include workshops and development of a network that can connect and link Baltic developers and AGORA 2.0 partners and thereby create a vivid Baltic cultural cooperation and development. The design of the development process has been the following:

1. The participants meet and exchange ideas and learn to know each other.
2. The participants meet and have a first introduction to development of ideas and instruments.
3. Presentation of SWOT-analyses.
4. Presentation of the Experience Wheel.
5. Presentation of PESTEL analyses.
6. Presentation of the 7Ps model.
7. Development of business plans.
8. Production of a questionnaire to analyse the demand side of attraction development.

Concerning the AGORA 2.0 project step 1 it began with the start of the project in February 2010. Step 2 was included in the Copenhagen meeting, June 2010. Step 3 took place in Copenhagen in September, including SWOT analyses and a first step to the Experience Wheel model developed by Lise Lyck. The steps 4-7 was scheduled at the project meetings and workshops in accordance with the AGORA lead partner. Step 8 has taken place at the meetings and workshops, but especially in a current dialogue between the single partner and Center for Tourism and Culture Management, Copenhagen Business School. This booklet relates to step 3 to 8.

SWOT-Analysis:

A SWOT-analysis is related to an evaluation of a production. This wider use of the model often results in a SWOT-analysis being a brainstorm instrument. S stands for strengths and related to what internal strengths a specific production of goods or investment possess. W stands for weaknesses, i.e. what internal weaknesses are parts of a specific production or investment. Both S and W are internal in origin. By this is meant that the corporation itself can influence the S and W by own decision-making and thereby impact the S and W as well as the result of the production or investment. The two tiles that are external and have influence on the production or investment are O, which refers to opportunities, and T, that refers to threat. The question that is sought to be answered through these external factors is how they have a positive or a negative impact on production or investment? As the final step of the analyses a conclusion of the SWOT model analysis must be made. It can be a guide for management of a production or for decision-making concerning the undertaking of an investment.

The Experience Wheel:

The development of attractions both in production and investment is today narrowly connected to creation of experiences. It is not only to create an attraction; it is to create an experience that is a decisive element in production and investment of the attractions. The Experience Wheel model is produced by Lise Lyck (Lyck 2008). In order to understand, the Experience Wheel acts as a communication tool to disseminate the experience concept and to develop and measure the experience value of product clustering, such a museum or a park. The Experience Wheel measures the relevant stakeholders' experience of the products that can be of both quantitative and qualitative nature. There are no limits to the use of the Experience Wheel. It is a universal instrument. However, it best fulfils its potential when quantifying subjective, qualitative experiences

PESTEL Analyses:

The purpose of the PESTEL model is to elucidate and analyse the external factors that have an influence on the organization. By applying the model the organization gets an overview of which external factors that facilitate or limit its operations. The letters represent the following factors: P (Political), E (Economic), S (Socio cultural), T (Technological), E (Environmental) and L (Legal).

The 7Ps:

Originally, the 4Ps (McCarthy 1960) were developed to outline the variables concerned with marketing of a product: Product, Price, Place and Promotion. These were called the Marketing Mix. They served as a framework of how to carry out decision making in marketing processes. However, with the steadily increasing focus on services it became clear that the 4Ps alone were not sufficient.

Among others, two distinct implications are evident in services: 1) Difficulty in determining quality before purchase and 2) production and consumption takes place simultaneously. These implications make the correlation between price, place and promotion more complex. To cater for this the extended marketing mix was developed, i.e. the 7Ps. It adds People, Physical evidence and Process to the framework (Lovelock & Wirtz, 2011).

Development of Business Plans:

The purpose of the business plan is to provide a blueprint of your company (in this case a tourist attraction). It serves as a guideline for employees to work towards the same goal and to elucidate all relevant aspects for potential investors/sponsors. It should contain the following elements: Executive Summary (key points of your business plan); Company Summary (What does your company/organization look like?); Services (the products and/or services that you offer); Market Analysis Summary (Segments that you are going to target or are already targeting); Strategy and Implementation Summary (organizational strategy for marketing/sales activities, and product/service development); Management Summary (management and personnel structure of the company); Financial Plan (financial aspects of your business plan - How do you generate revenue?)

The demand side of managing an attraction:

Attractions are supposed to monitor and manage customer opinion and demand in an effort to keep customers happy. It is here argued that the purpose of a business, i.e. an attraction, is to create and maintain satisfied customers. After all, customers are attracted to an attraction and retained when their needs are met. Not only do they return to your attraction, but (maybe even more important) they also talk favourably to friends and relatives about your attraction, thereby recommending them to come to visit as well (Kotler et al., 2012). Thus, instead of considering what you as a manager see at an attraction or what you think creates profit, try the alternative management approach of putting the customer first.

One method is to use the AIDA model, in which A stands for awareness. The first step is to make the attraction visible for potential visitors. I stand for interest, and deals with how to create an interest for the attraction. D stands for desire, and looks into how the potential visitor should create a desire for visiting the attraction. The last A stands for action, meaning that the process should result in a visitor action, i.e. that the potential visitor becomes an active visitor at the attraction.

Unfortunately, there is often a discrepancy between what you think you offer and what the customer perceive/think of your attraction. Please keep this in mind when you are doing product developments at your attraction. Have a look at what the statistics from questionnaires filled out by visitors say or ask visitors at your attraction yourself – before you implement your ideas. Doing analysis of your customers is important because it gives each attraction a concrete picture of the visitors of that specific attraction. By doing this the managers and the staff is provided with knowledge that gives them the opportunity to either further develop this specific customer segment or to target other customer segments, which are not being targeted at the moment.

Therefore, for product development to be successful it is important to listen to your customers. Ultimately, they are the ones who visit, revisit and recommend your attraction to others.

Conclusion

As it is shown in this methodological chapter there is a number of different ways to gain different kinds of information. Each of these methods has different pros and cons and none is superior to the others. The method of collecting data through the use of questionnaires was selected due to the wish of being able to track developments over time and to have the opportunity of comparing the individual attractions with each other. Furthermore, from a resource perspective it would have been unrealistic to conduct enough interviews of a certain quality to get useful data, if not supplemented with local resources.

FURTHER LINKS

http://www.bastis-tourism.info/images/3/33/CBS_Publication1.pdf

Cases Studies from the Baltic Sea Region where this approach was taken can be found here:

http://www.bastis-tourism.info/images/6/65/CBS_Publication2.pdf

REFERENCES

- Kotler, Philip; Bown, John T; Makens, James C (2012), "Marketing for Tourism and Hospitality", International Edition, Fifth edition, Pearson
- Lovelock & Wirtz (2011). Services Marketing, 7th ed., Prentice Hall 2011.
- Lyck, L. (2008). Service- og Oplevelsesøkonomi i Teori og Praksis. Copenhagen: Academica.
- McCarthy, E.J. (1960). Basic Marketing: A Managerial Approach. Illinois: Richard D. Irwin Inc.

BOX 3: THE TOURISM DESTINATION OBSERVATORY (TDO) PROJECT IN TUSCANY

Tuscany is a laboratory where, since 2010, innovative models for the sustainable management of tourist destinations are experimented, following the principles of the EC Communications COM(2007) 621 final and COM (2010) 352 final, and inspired by NECSTouR's strategies.

With this project Tuscany promotes the birth of a regional network of tourist destinations of excellence. The experimentation is done in the context of the action no. 11 of the European Commission's Communication COM 352(2010), which assigns to the NECSTouR Network an important role in the testing and research that aim to identify a model of indicators for the sustainable management of destinations, in order to develop a brand for the promotion of tourist destinations.

The project focuses specifically on two levels: regional and local (destination) level. This because the destinations (in this case, the municipalities) are the places where sustainability can be actually put in place. At the same time, the regional level is very important, for policy making, coordination and statistical

<p>purposes.</p> <p>The 64 destinations involved in the TDO - Sustainable Tourism Observatories project are highly representatives, altogether they receive 60 % of total tourist flows in Tuscany (more than 25 million tourist arrivals per year) and they include all the major tourist destinations (Florence, Pisa, Siena etc.), and all the various typologies (sea resorts, art destinations, mountain resorts, spas, cultural itineraries etc.).</p> <p>The goal of the project is to create an environment capable to give strength and effectiveness to local networks of players of the tourist sector, which are willing to commit to the following fundamental principles:</p> <ul style="list-style-type: none"> ▪ social dialogue/promotion of participatory processes, specifically related to the issues of sustainable development of tourism; ▪ measurement of indicators related to the ten thematic areas that are considered strategic by NECSTouR, and monitoring of these thematic areas so to ensure the true effectiveness of sustainable tourism policies and the related strategic objectives. <p>The 10 NECSTouR thematic areas are:</p> <ul style="list-style-type: none"> - Impact of transport, - Quality of life of residents, - Quality of work, - De-seasonalization - Active protection of Cultural Heritage, - Active protection of environmental heritage - Active protection of distinctive identities of destinations - Reduction and optimization of use of natural resources with particular reference to water - Reduction and optimization of energy consumption, - Reduction and management of waste. <p>Thus, Tuscany is a sort of European lab of NECSTouR: the initial selection of Local tourist destinations can relate with one another both at the regional and European level.</p>
<p>The Management Model at a glance</p> <p>The sustainable management model consists of four areas:</p> <ul style="list-style-type: none"> ▪ Social Dialogue ▪ Self-assessment ▪ Management (Competitiveness) ▪ Management (Sustainability) <p>The on-line platform highlights the progress of each municipality. To each area is assigned a weight (in percentage), which will contribute to the overall assessment. The assessment foresees four quality levels:</p> <ul style="list-style-type: none"> ▪ Model is being activated / Model needs to be reorganized ▪ Model is activated and functional ▪ Model is activated, and has a good level of functionality ▪ Model is activated and has an excellent functionality <p>The main steps of the process are the following:</p> <p>1) <u>Setting up of the committees and tools for social dialogue</u></p> <p>The model for social dialogue and participation foresees two committees, the destination's Steering Committee (including various types of stakeholders' representatives) and the Technical Committee (technical people appointed by the municipalities to collect and manage data referring to each theme).</p> <p>The model identifies the procedures to ensure a productive discussion and an adequate collection of the opinions of the various representatives. The areas of dialogue revolve around (but are not limited to) the following issues:</p> <ul style="list-style-type: none"> ▪ collection / analysis of knowledge ▪ planning of actions for the sustainable development of tourism ▪ monitoring of destination management indicators <p>2) <u>Self-assessment of the destination</u></p> <p>This is a very delicate phase. The self-assessment, carried out by the Steering Committee, is done in a structured and consistent way, and its various stages are not stand-alone activities, but functional to the subsequent design and implementation of actions.</p> <p>a) <i>Destination profile indicators</i></p> <p>The data relating to the indicators of the Destination Profile (IP) are collected. These are seven general indicators that are used to describe the destination in a way that can allow its comparison with the other European tourist destinations. These indicators, that represent the basic profile of each destination, should be updated annually:</p>

<p>1. n. of arrivals per year 2. n. of tourist stays per year 3. n. of accommodation facilities 4. n. of beds 5. n. of employees directly employed in the tourist accommodation facilities 6. n. of people employed in tourism-related activities 7. type of tourist destination (art/cultural, sea resort, lake, business/conference, thermal, mountain, religious, countryside, sports)</p> <p>These indicators gain more significance if they are related to the resident population in the destination and square kilometres of the destination</p> <p>b) <i>The self-assessment questions</i></p> <p>The Model provides a list of about 50 questions to which each destination must give a plausible answer. This set of questions is generated by the analysis of the ten NECSTouR thematic areas, taking into account the tourist demand (both internal and external) and supply of services, in all their possible forms. The goal is to determine whether, with respect to tourism, the programming tools / planning regulations are adequate, current, and complete. First of all, the analysis impacts on the planning instruments and can enlighten the need to reorganize the overall policies. This analysis, in essence, aims to figure out how we would like the tourist destination to be in five, ten, twenty years. This is a fundamental exercise that helps to identify new choices to make, programs and projects to carry out, support requests to propose, parties to involve.</p> <p>Each answer contributes to the identification of appropriate indicators of competitiveness and sustainability.</p> <p>3) <u>Measurement of the level of competitiveness and sustainability of the destination</u></p> <p>In order to operate in the framework of a development program, the level of competitiveness and of sustainability of the destination is measured with respect to <i>the indicators of output and outcome</i>, which are closely related to and consequential with the results of the self-assessment phase, while taking still as a reference the ten thematic areas.</p> <p>To make an example, with reference to mobility, efficiency indicators will tell us if the planned park-and-ride and shuttle service to reach the tourist areas is a goal achieved, measuring the number of infrastructures built and the number of tourists carried; effectiveness indicators will tell us whether the parameters of environmental pollution are reduced during periods of increased tourist flow. It is then necessary to fix the target values desired for each indicators and monitor the path towards these values</p>
<p>The steps for the establishment of the regional network of destinations of excellence</p>
<p>After two years of experimentation, in 2012 the Government of Tuscany (with the Decree No.667/2012) has started a process for the setting up of an interactive on-line platform specifically dedicated to the model of sustainable management of the destinations.</p> <p>In order to be certified by the Tuscany Region as members of the regional network, the municipalities have to carry out a process composed of the following 8 steps:</p> <p>Step 1: Activation of the Partnership</p> <p>This phase is activated by means of the signature of a Memorandum of Understanding with stakeholders representing the economic and social components, and with the signing of a Memorandum of cooperation with at least one university operating in the region</p> <p>Step 2: Activation of the Steering Committee</p> <p>This phase is activated by means of the setting up of a Steering Committee composed of experts representing the partnership, and the definition of the rules for its operation;</p> <p>Step 3: 'Self assessment'</p> <p>The Municipality will define a document, which, starting from the analysis of phenomena related to tourism in the destination, identifies the strengths and weaknesses of the local system in relation to the development potential and limitations arising from the objective of harmonizing the economic aspects with environmental and social issues. The analysis relates specifically to 10 thematic areas identified by the NECSTouR model and takes into account, for each issue, the implications related to the destination's competitiveness and sustainability principles. This phase is triggered by means of the formal evaluation of the document by the signatories of the Partnership Protocol (Phase 1) and the technical and administrative bodies of the municipal administration.</p> <p>Step 4: Identification of the Person in charge of the Tourist Destination Observatory</p> <p>The Municipal Administration checks the characteristics and the organization of the municipal offices that carry out activities related to the phenomena analysed, with particular reference to the forms of integration and communication flows among the various offices. This phase is activated with the identification of the Person in charge of the TDO and the production of the Document on cooperation procedures with the other</p>

municipal offices;

Step 5: Setting up of the permanent Technical Structure (S T) and work plan

This phase includes the identification of the technical/operational people, appointed to be competent for each one of the 10 NECSTouR thematic areas, and the definition of the TDO Work Plan.

Step 6: Definition of competitiveness and sustainability indicators

This phase is activated with the approval by the provincial and regional offices, of a document defining: the Profile indicators and the Competitiveness and Sustainability indicators, the data collection procedures and the resulting behavioural patterns in relation to the outcomes of the surveys. The document is approved by the municipality and then sent to the provincial and regional offices.

Step 7 Defining modalities of data collection and data flow among municipalities, provincial and regional offices

This phase is activated with the approval, by the competent offices of the provinces and of the region of a specific document, prepared by the Municipality, which defines the characteristics of the information, the methods and tools that the municipality can put in place and the modalities of data collection. For the preparation of the document a group effort is essential, where the relevant provincial and regional offices are involved from a very early stage of the project.

Step 8: Approval of the TDO process and participation to the regional TDO network

The person in charge of the OTD forwards to the offices of the Province and the Region a specific request for approval of the TDO management procedure (Step 1-7), complete of all the necessary technical documentation. This phase is activated after the approval by the relevant Regional Offices. The participation to the regional TDOD network is finalized when the information relating to the TDO management process and the data relating to its profile, competitiveness and sustainability indicators are uploaded in the regional platform for the data networking, interoperability and sharing.

Annex 5. Documenting tourism statistics sources at sub-national levels

Presentation

Because tourism statistics include a wide range of data produced by different type of institutions (both at a national and subnational levels), there is a need for standards for the presentation of *metadata* (which comprise data and other documentation that provide information about the process of producing and using data).

In fact, users are often confronted by some difficulties of interpretation when comparing statistics compiled over time within one agency and by agencies in different countries as well as by different international organizations:

- conceptual differences arising from the use of different variable definitions, units and classifications;
- operational differences flowing out of differences in data collection and processing practices by countries, and;
- different practices in the presentation of data.

This Annex pursues two objectives that complement each other:

- the first one is to help regions to develop a useful database regarding not only the sources of information from which data integrating the Regional System of Tourism Statistics but also other relevant information not necessarily of statistical nature (see chapter 3, Para. 3.3.);
- the second one is to share part of this documentation at international level in such a form that it could be easy to consult, to exchange experiences and to compare the procedures used in the different regions so that best practices might be derived.

For some regions, this project might seem too ambitious or somewhat unnecessary as the objective might seem to be to rapidly put data together and get some idea of what tourism looks like. Nevertheless, UNWTO's experience is that too much haste, using data whose quality has not been sufficiently assessed, might lead to difficult situations in which low-quality data, used carelessly, might show a picture of tourism that is quite far from reality, compared to what more solid statistical work could show. This, in turn, might generate a general distrust towards the whole process of estimation of the economic impact of tourism.

These guidelines are geared toward identifying and discovering existing sources, the information a region has for measuring the economic impacts of tourism activity, the quality of the available data, etc. In other words, the guidelines have to do with the documentation relative to the coverage, temporal reference, distribution and an entire set of technical characteristics of the methodology used in obtaining the data used building up Regional Tourism Information Systems.

The project designed by UNWTO and shared by INRouTe is a medium-term project, and aims at documenting information from two complementary perspectives. It concerns:

- existing statistical and non-statistical source of Regional-Tourism Information Systems. The outcome will be an "Inventory of data sources";
- the type and nature of available information viewed from the perspective of the main tourism variables to be measured. The outcome will be an "Inventory of available data";
- the two perspectives entail a twofold inventory: on sources and available data.

I. The inventory of data sources

Normally, the term *survey* is used in a general sense to refer to any activity that collects or acquires statistical data. Included as such are:

- a *census*, which attempts to collect data from all members of a population;
- a *sample survey*, in which data are collected from a (usually random) sample of population members;
- collection of data from *administrative records*, in which data are derived from files originally collected for non-statistical purposes;
- *derived statistical activity*, in which data are estimated, modelled, or otherwise derived from existing statistical data sources.

This Annex respected this typology, albeit with a slight terminological adaptation:

- two types of surveys are considered: *surveys applied to travellers or visitors*, and, eventually, household or *surveys applied to enterprises / establishments of those productive activities serving visitors*;
- the term *statistical syntheses* is used to refer to those sources (such as Regional Accounts/Input-Output or other models) that could be included in the category of *derived statistical activity*;
- also included, as another type of source, are *databases* as well as *statistical publications on tourism*, as supports used for the storage/dissemination of the data obtained for the other mentioned sources.

Consequently, seven types of data sources are recommended:

- **T.1 *Surveys applied to the whole population of travellers or visitors or to clearly predefined segments of this population.*** These surveys (derived from the demand perspective) typically occur at the national borders for inbound and outbound visitors; at hotels or other places of collective accommodations; at tourism attractions, or can be modules of household type surveys, etc.
- **T.2 *Surveys applied to enterprises / establishments of those productive activities serving visitors.*** All of them share a supply perspective and might be general purposes surveys, or surveys specifically designed to supply information on tourism productive activities. Usually, it is the National Statistical Office, which shall be in charge of general-purpose surveys encompassing also tourism characteristic activities, whereas the National or Regional Tourism Administrations might develop specific surveys for the activities under its direct responsibility.
- **T.3 *Statistics based on data collection from administrative records.*** These usually concern passenger transport and border control statistics, registration of guests in hotels, etc.
- **T.4 *Census or directories.*** Censuses are complete enumerations of the target population). It must be mentioned that the fact for a variable to be based on a Census, that is, on an exhaustive enumeration, is not a guarantee of having a perfect estimation of the variable as there are many reasons for omission and duplication which have to be identified (errors of observation) and which importance has to be measured.
- **T.5 *Statistical synthesis.*** This category includes those sources (basically Regional Accounts and models) which elaboration requires the use of information stemming from some of those previously enumerated.
- **T.6 *Databases.*** These can be from a unique source or combine various sources.
- **T.7 *Statistical publications on regional tourism.*** These may incorporate quantitative as well as qualitative data from various sources.

A standard format is proposed although it needs to be slightly adapted to each of the seven types of data sources already defined.

INVENTORY OF DATA SOURCES: BASIC FORMAT

Country

Region

The statistical procedure

Title

Data source

Description

Administration

Institutional framework

 Institution in charge

 Unit responsible within this institution

 Other units and/or institutions involved

Data dissemination

 Name of publication

 Published by

 Frequency

 Length of time series available

 Reference period for the latest available publication

 Timeliness

 Access to data via the Internet

Coverage

Geographical coverage

Frequency

Reference period for the first procedure

Reference period for the last procedure conducted

Concepts

Specific subjects

Variables of reference

Data collection, manipulation / accounting conventions, etc.

Frame

Type of enumeration

Sampling

Distribution of the sample over time

Data collection principles

Geographical breakdown

Reporting units

Other issues

- Geocoding

- others

Observations on its use

Additional documentation

II. The inventory of available data

It has been mentioned that this proposed inventory is geared toward identifying the existence or not of a basic set of data and indicators that are essential for the analysis of tourism activity.

The proposal would be to structure a matrix where the rows contain the selected tourism variables and the columns contain the corresponding available information sources. The corresponding cells should be marked to identify where there is information in any or all the existing sources, and the periodicity of the data should also be noted (monthly, quarterly, every six months, annual, or no predefined periodicity).

Annex 6. The Statistic system in Italy and in Italian Regions

By M. Manente & E. Mingotto, Ciset, 2013

The Italian Statistic System can be an interesting example of the adoption of a bottom-up process for collecting data of national interest.

In Italy the National Statistic System is governed by the law D.Lgs. 6-9-1989 n. 322 that regulates the activities of collection, processing, analysis, dissemination and storage of statistical data of national interest, including those relating to tourism.

According to the law n. 322, the National Statistic System is composed by:

- the National Statistic Institute (ISTAT);
- the statistic offices of Italian Regions and local authorities as Provinces and Municipalities;
- the statistic offices of other bodies and public administrations.

The law n. 322 also stipulates that every Region has to establish its own Regional Statistic Office with special law and according to the national guidelines adopted at national level to assure methodology uniformity and data comparability.

The Veneto Region, for example, instituted its own Regional Statistic System with the regional law 29-3-2002 n.8, regulating the activities of collection, processing, analysis, dissemination and storage of statistical data in the regional area, establishing the statistic offices of Provinces, municipalities and other regional bodies and regulating its relationships with ISTAT. The same has been done by the other Italian Regions.

As regards tourism statistics, since tourism is considered one of the themes of national interest, it is included in the National Statistic Program.

The main statistics provided by ISTAT and collected and processed following the EU directive on tourism statistics are the following. They are the result of a bottom-up approach, since Regions collect and validate data, which are then submitted to ISTAT for the final aggregation.

- “Movimento dei clienti negli esercizi ricettivi”: a monthly census survey on the number of customers in Italian accommodation facilities. It measures tourist arrivals and overnights of both Italians and foreigners (with the specification of the Italian region or foreign country of origin) in the national territory, in every specific region, province and municipality, in each type of accommodation facilities (both hotels and other collective accommodation establishments) and in every month of the reference year.
- This survey is based on the daily form that accommodations are obliged to fill with the number and overnights of their clients and to submit to the competent authority, i.e. the local statistic office. Every Region regulates in a different way the procedure of sending data from accommodations to local authorities and finally to ISTAT.
- The Veneto Region, for example, according to the regional law 07-10-2008 n. 2794, states that accommodations are obliged to submit data to the Province office, which in turns sends them to the Region by day 20th of the month following that of data collection; finally the Veneto Region sends statistics to ISTAT every month, by day 30th of the month following that of data collection.
- “Capacità degli esercizi ricettivi”: a census survey on the capacity of accommodation facilities. It is conducted on a yearly basis and enables the quantification of available accommodation facilities in the national territory. It measures the number of establishments, rooms and beds in every region, province and municipalities for every accommodation category (hotels, camping, resorts, vacation houses rented for business, farmhouses, youth hostels, vacation homes, mountain hostels, B&Bs).

- This survey is based on the annual form that local authorities, i.e. Provinces or Regions are obliged to fill with the data referring to their own territorial area and to submit to ISTAT. Every Region regulates in a different way the procedure of sending data to ISTAT.

In the case of the Veneto Region, for example, the regional law 07-10-2008 n. 2794 asserts that the statistic office of Provinces must collect and process the data about accommodation capacity, sending them to the Region, which in turns transfers them to ISTAT generally by the end of March of the year following that of the reference data.

The procedure of both surveys is summarized in the following table.

Table 1 – Tourism statistics in Italy and Italian Regions – tasks of ISTAT and Regional Statistic Offices (the example of the Veneto Region).

	Main tourism statistics of national interest	
	Clients in accommodation facilities	Capacity of accommodation facilities
Variable of references	<ul style="list-style-type: none"> – Tourist arrivals – Tourist overnights in accommodation facilities 	Number of: <ul style="list-style-type: none"> – accommodation establishments; – rooms; – beds both of hotels and of other collective accommodation facilities
Unit on which the survey is carried out	Accommodation facilities (hotels, camping, resorts, vacation houses rented for business, farmhouses, youth hostels, vacation homes, mountain hostels, B&Bs)	Accommodation facilities (hotels, camping, resorts, vacation houses rented for business, farmhouses, youth hostels, vacation homes, mountain hostels, B&Bs)
Type of survey (census or sample survey)	Census	Census
Frequency	Monthly	Annual
Geographical coverage	Both the national territory as a whole and the local areas (regions, provinces, municipalities)	Both the national territory as a whole and the local areas (regions, provinces, municipalities)
Competent authority at national level and tasks	<ul style="list-style-type: none"> – ISTAT: it processes, analyses and disseminates data received every month from local statistic offices 	<ul style="list-style-type: none"> – ISTAT: it processes, analyses and disseminates data received every year from local statistic offices
Competent authority at regional level and tasks – the case of the Veneto Region	Local Statistic Offices (Regions, Provinces, Municipalities) The case of the Veneto Region <ul style="list-style-type: none"> – Statistic Office of Provinces: they collect data submitted daily from accommodation facilities in their competence area and they send data to Region every month; – Statistic Office of the Veneto Region: it collects, processes and validates data received from Provinces and it sends them to ISTAT every month. It disseminates regional data through its web site. 	Local Statistic Offices (Regions, Provinces, Municipalities) The case of the Veneto Region <ul style="list-style-type: none"> – Statistic Offices of Provinces: they fill the form with data about the capacity of accommodation facilities in their competence area and they send data to Region every year; – Statistic Office of Veneto Region: it collects, processes and validates data received from Provinces and it sends them to ISTAT every year.

It is evident that in Italy the national statistic system is strongly linked to the regional one, since Italy has institutionalized a bottom-up method for the collection of data of national interest.

As regards statistics about tourist flows (arrivals and overnights) in accommodation facilities and about accommodation capacity (establishments and beds), the official statistics processed and published by the National Institute are available also for regions, since it is just their task to collect, validate and submit data referring to their own territorial area to ISTAT.

As a consequence in Italy every region has direct access to these statistics, without facing the problem to disaggregate national data. At least in terms of tourist flows and accommodation capacity, the first set of information defined in paragraph 2.5 and the second one coincide.

FURTHER LINKS

<http://www.istat.it/it/>

http://statistica.regione.veneto.it/banche_dati_economia_turismo.jsp

<http://statistica.regione.veneto.it/sistar/Europea.jsp>

<http://virgo.unive.it/ciset/website/>

REFERENCES

Circolare n. 6, 22/01/2013. Rilevazione sulla capacità degli esercizi ricettivi – Anno 2012. Istituto Nazionale di Statistica. Dipartimento per i conti nazionali e le statistiche economiche. Direzione centrale statistiche economiche congiunturali.

Circolare n. 14, 13/03/2013. Rilevazione Movimento dei clienti negli esercizi ricettivi – Anno 2013. Istituto Nazionale di Statistica. Dipartimento per i conti nazionali e le statistiche economiche. Direzione centrale statistiche economiche congiunturali.

Dgr n. 2794 del 07/10/2008, Allegato A. Disposizioni operative e di gestione del nuovo sistema informativo regionale turistico – Sirt. Regione del Veneto

D.Lgs. 06/09/1989 n. 322. Norme sul Sistema statistico e sulla riorganizzazione dell'Istituto nazionale di statistica, ai sensi dell'art. 24 della L. 23 agosto 1989 n. 222. Gazzetta Ufficiale, Italia.

Legge regionale 29/03/2002, n. 8 (BUR n. 36/2002). Norme sul sistema statistico regionale. Regione del Veneto.

Annex 7. Côte d'Azur tourism Observatory: confrontation and reconciliation of sources

By Patrick VECE, Comité Régional du Tourisme Côte d'Azur, 2013

One of the first observatories to be set up in France in the mid 80s, the French Riviera Tourism Observatory aims at producing reliable statistics and information on tourism, endeavoring to make the most of every available source of information, within their own limits and strengths.

Particularity of the area, at the crossroads of territorial units and destination management

The missions defined for a regional tourism Observatory can vary according to the carrying institution and the local context. However, basically its *raison d'être* will be to produce the official data, to fill a wide range of needs : knowledge, measure, intelligence, analysis, etc... In the French Riviera Côte d'Azur, the Observatory was set up and developed by the Comité régional du tourisme in Nice, which administrates tourism on the sole territory of the county of Alpes-Maritimes, encompassing (on the basis of a partnership agreement), the Principality of Monaco. This is a unique position, as this regional institution extends its activities over a sub-regional territory, corresponding to NUTS3 level, but including the territory of a sovereign state within what is defined as the "destination". However, the density of tourism supply as well as the importance of tourism in the economy both justify this territory as the most adequately observed geographical and economical perimeter, the NUTS2 PACA region being a much wider, diversified and non homogeneous tourism territory, lacking technical, human and financial means to properly satisfy information needs of all local territories. Moreover, the efficiency of observation processes is higher when there is proper correspondence between these three space types : 1/ the territory which constitutes the « tourist destination », 2/ the administrative territory and its tourism observation tool 3/ the operational frame to organize surveys and statistical tools (neither too small, for organization or cost reasons, nor too large, for heterogeneity, sampling or representativeness issues).

Construction process of a regional system of tourism statistics

Several critical steps had to be followed in order to create an efficient information system :

Step 1 : identification/assessment of available sources

Considering the limited budgets usually available, it is advantageous to check, at an early stage, the existence of sources liable to be mobilized and integrated into the system. These surveys must be long-lasting (renewed from one year to the next), with regular output (on a monthly or yearly basis), founded on reasonably transparent methodologies (assessable, adaptable, even evolutionary), and with possible regional extraction, with, if necessary, required sample extensions. If these requirements are not met, it is difficult to construct from them a sustainable tourism information system. The choice of the source surveys must be carefully examined, with well supported assessment of their reliability, consistency, robustness, and long-term operation.

National, even regional surveys can be used, but often their objective does not respond to local measurement needs in a satisfying way. This link, nevertheless, has to be searched and established, whenever possible, for comparability reasons. The Côte d'Azur tourism observatory is linked to two national surveys : national accommodation surveys (hotels and campsites) and SDT (French tourism demand survey). It was not possible, unfortunately, to link it to the

national survey on foreign tourism (EVE survey « Enquête Auprès des Visiteurs de l'Étranger »), mainly for methodological reasons. The national sample used is not representative of regional tourist flows, and, for instance, the airports side of the survey only includes 4 to 5 half-days of surveys each month (around 15 hours in total) at Nice Côte d'Azur airport (second in France after Paris) and this sample is simply not strong or representative enough to capture the reality of air visitors to the region in all its diversity.

Step 2 : construction of a sustainable comprehensive methodology and system

Once exogenous sources have been selected, it was necessary to design one or two new tools to found the system of statistics. That means setting up one or two new “pillar surveys” to cover up a large perimeter of observation through 2 or 3 major segments. In the case of Côte d'Azur, these fields were selected : air visitors leaving from Nice airport (Visavion survey), and a complementary survey on non hotel establishments (tourism residences). For these pillar surveys, the aim is to make these tools as robust and representative as possible. This was done through several parallel processes, for each survey, with a constant search for quality. For instance, data from the hotel survey needed to be improved, with the correction of data based on real verified availability of rooms. In the national survey, the file contains information on hotel rooms theoretically available, but the real availability of rooms is only correctly known for respondents, and not precisely known for non respondents, that is to say more or less half of the existing hotels. The observatory has determined that monitoring precisely this information is critical and impacts on the true results. For that reason, a verification of data on opening/closing dates and real number of rooms for rent is conducted for every hotel, leading to a correction of hotel rooms supply and consequently on the number of arrivals and overnights. Regarding the national SDT survey on domestic demand, the “integration” process was designed and applied, to make these data totally compatible and coherent with other surveys. This process includes marginal corrections on the number of hotel nights (from the hotel survey), reframing of the statistical universe covered, and replacement of information on air visitors by more robust data from the Visavion survey.

The critical point is to allow coverage overlapping in the main surveys. Transport surveys include all accommodations and accommodation surveys include all means of transport. The crossed comparison of data is therefore possible, segments volumes can be better estimated, each source survey being integrated in a global system. Major segments are estimated through several sources, allowing validation and/or marginal corrections to make volumes fit into the frame.

In the national system of statistics, this coherence reaching process is not yet properly conducted. There are inconsistencies between volumes measuring the same segments but based on different sources. For instance the volume of nights estimated through accommodation surveys is not made consistent with the volume of nights estimated through visitor surveys or household surveys.

It is also important to base the statistical system on the most adequate tools. For instance, quantifying business tourism through household surveys will not provide satisfying results, whereas this will be more easily done through airport surveys.

Step 3: ongoing improvement process

Survey results are systematically compared to other results, trying to make them, as much as possible, compatible and coherent, at least for the measurement of main segments volumes : domestic and foreign stays and overnights, split by motivation of stay, main accommodation, and

arrival transport means. This is important since all further analysis and measurement operations will be based and calibrated on these volumes.

Some adjustments can be made. For instance, accommodation surveys do not exclude non tourists which should not to be considered as such since they are in their usual environment. This could be seen as marginal, but it may be enough to account for differences in results across surveys. Therefore, an attempt can be made to estimate these intra-territory stays and deduce them from the survey results. Another example is the correct estimation of length of stays in tourist accommodations. Usually, when we compare these ratios from the accommodation surveys (2.7 nights in Côte d'Azur hotels and residences) to those collected directly from the visitors, an important gap will appear (4-5 nights declared). To make statistics compatible and coherent, the reason for this gap must be properly understood and taken into account. It may be caused by a change of hotel during the stay, by stays made over two consecutive months with two arrivals reported by the hotel instead of just one, by the mentioned issue of intra-territory stays, often limited to one night, etc...

Whenever a new source becomes available, efforts are made to check comparability and if necessary revise previous estimates. For instance, in the summer of 2012, an experiment was conducted with Orange (French telecom company) to quantify the number of tourist and excursionists arrivals by country of origin. On one side available statistics were used to assess the relevance of the tourist flows observed through mobile telephones, but on the other side mobile phones data will possibly be used to correct some previous estimations in the statistics, as the length of stays by countries of origin. At the same time, this new methodology will probably be adopted as the source to measure excursionists, for which no other available source had proved adequate.

Some critical findings

Initially, a stable notion of the observed territory must be defined, as well as which territory will be considered as belonging to the "usual environment", and which areas will need extracted local data

No single source is self sufficient or perfect, and every tool should be used according to its own strengths (where it proves most efficient).

Existing and new pillar surveys should be used in combination, to cover up a sizable share of the global demand, and estimate from them, through ratios, the non covered segments
Supply and demand approaches are to be pursued in parallel, as a way to improve and reconcile data

Reconciling sources is as important as producing new information or sources, and may often lead to methodology improvements

FURTHER LINKS

<http://www.cotedazur-touriscope.com>

<http://www.revue-espaces.com/librairie/5066/observation-tourisme.html>

http://www.revue-espaces.com/carnet/754.vece_patrick.html

REFERENCES

- Vece, P. - CRT Côte d'Azur - Etude de cas : La Côte d'Azur, le système de statistiques du tourisme, approche et applications - Document presented at the WTO Workshop Contribution of statistics and economic analysis to effective destination management strategies. Antibes-Juan les Pins, 2004.
- Vece, P. - Revue espaces Septembre 2006 – Cahier Espaces N°90 Observation et tourisme – sous la direction de Desvignes C et Vece, P. – articles « L'environnement habituel : une notion à clarifier » et « Comptes régionaux du tourisme : de nombreuses questions encore sans réponse »
- Vece, P. – Atout France - Rencontres nationales du tourisme Paris October 12th, 2009 – Atelier Observation – Les outils d'observation économique des territoires.

Annex 8. Touristic knowledge at a regional level. The Tourist Information System of Asturias

By Luis Valdés Peláez. University of Oviedo and Director of the Tourist Information System of Asturias. 2013. www.sita.org.

Tourism, like any branch of economic activity, requires information systems that allow to structure useful tools for decision making by all the stakeholders, of both the public and private sectors, involved in its management, at a national level and with more reduced administrative units such as the regional or local governments. In the case of Spain, the areas of competence in the field of tourism are assumed by the autonomous regions who are in need of specific local information. On the other hand, the private sector also demands precise knowledge linked specifically to its activity (accommodation, transport, distribution, hotel management...) that allows it to adopt the most suitable business strategies (Valdés & Del Valle, 2011).

Since 1997, the Tourist Information System of Asturias (SITA) (<http://www.sita.org>) has undertaken an integral analysis of the tourist sector of the Principality of Asturias by means of a series of research lines organized in four basic blocks of information, perfectly complementary and synergical: the analysis of demand, the study of supply, the estimation of the economic impact generated by the touristic activity, and also an area of research and knowledge making it a reference model for the study and analysis of tourism in a socio-economic framework.

Analysis of demand

The goal of the study of demand is to characterize the behavior of the tourists who visit Asturias. The methodology used is based on the completion of a structured personal interview by the visitor. The data obtained sheds light on the opinions and perceptions of the visitors, highlights complaints and suggestions and identifies which elements should be modified. It helps to determine new demand for products, the activities the tourists undertake, pool information on the time of year in which they travel to Asturias and how they travel to the region, their expenditure, the duration of their stay, the factors of attraction of the tourists to their holiday destination, etc. The sampling procedure is structured on two different levels: in collective establishments and in the street, in places of particular touristic interest, using different places to conduct the interviews throughout the year. Market Studies in Origin (EMOs) are studies into the characteristics of the trips of the individuals carried out in their place of residence with the objective of determining the potential of a specific geographical market or segment thereof. By means of a personal survey, the dynamics of choice of touristic destinations are evaluated, revealing the image of Asturias as a tourist destination and determining the basic profiles and potential demand of the population in origin with regard to our region. The field work is carried out by means of market research by zones, taking into consideration the population, sex and age, using a random selection. The period of collection of the information is very reduced, of approximately one week and always in non-holiday periods. This information is completed by in-depth interviews with travel agents in order to learn more in detail about how the commercialization of Asturias as a tourist destination is carried out (Valdés et al, 2004b).

Analysis of Supply

An analysis is undertaken of the characteristics of the touristic accommodation establishments, their strategies and company policies. By means of a survey, information is gathered on different aspects such as: investment made, human resources training policies, the degree of technological equipment of the sector, prices, invoicing, environmental policies, evaluation of the activity, etc. Thus an overall view is obtained of the sector, highlighting its strengths and weaknesses.

The methodology of the study is based on the accomplishment of an annual personal interview with the owners, managers and those in charge of or responsible for accommodation.

Moreover, through administrative registers, a database is built up which gives a quantitative analysis in terms of establishments and the capacity of the touristic supply, monitoring the opening and closing of the accommodation establishments and also elaborating indicators of the evolution of the capacity of the touristic supply.

The economic impact of tourism

Through an input-output analysis, and with the data obtained from the different statistical operations, the impact of the touristic activity on the local economy is evaluated, showing the important role that tourism plays. The starting point is the estimation of tourist expenditure which is obtained through the survey of demand in destination. The average expenditure of the different types of visitors is calculated and according to different areas of expenditure (lodging, meals, transport...).

The methodology employed consists in the application of the input-output analysis to the measurement of the regional touristic expenditure, so allowing to evaluate the different levels of effects (direct, indirect and induced) and also discover the sectorial disintegration (Valdés *et al.*, 2010).

The analysis is carried out annually and is updated according to the regional Input-Output Tables that are elaborated periodically.

Research and knowledge

The continuous research, the accumulated experience and the knowledge acquired by the SITA multidiscipline team has led to interesting results both through externalisation and application in other zones or socioeconomic areas and also from the development of methodologies which enhance touristic research.

The experience of SITA has also been used by cities such as La Habana in Cuba (Valdés *et al.*, 2011b) designing operations of demand for touristic knowledge, also in the state of Baja California del Sur in Mexico or even nationally in cities such as Santiago de Compostela or Gijón. In the field of research and methodological development, SITA has also contributed through the publication and spreading of its work in journals of scientific interest, not only with the analysis of results but also in the diffusion of estimation techniques.

The use of new techniques with nonparametric models can be highlighted for the estimation of the economic cost of the tourists in destination from the expenditure made in the establishment of collective lodging (Valdés *et al.* 2007).

Given that the classical parametric procedures (linear or logarithmic regressions, etc.) are not adequate in this particular case, a more realistic and objective model is developed, based on new nonparametric techniques. This model permits the analysis of expenditure in destination, taking into account the different touristic typologies.

A research line has also been developed about private touristic accommodation and problems associated to quantification in places of touristic interest (Torres, *et al.* 2002).

The surveys made over a number of years have produced a great volume of data, facilitating analysis of tourist segments as in Valdés and De la Ballina (2005) where the results are presented, from the point of view of both supply and demand, of the establishments of rural tourism that assume quality as a competitive strategy in relation to other establishments. The differences perceived by the management of the quality mark Casonas Asturianas have been analyzed, in terms of competitive evolution and their business strategy and the influence on their principal management ratios in comparison with the rest of the establishments of the sector. Through the analysis of demand, it has been possible to learn and estimate the significative differences in terms of the assessment of the establishments, the tourists' expenditure and even the organization and development of their stay.

Given the constant growth of the use of the Internet by tourists, both for searching for information and as a means of reserving accommodation, in Menéndez (2012) a model is presented that explains the variables of the tourist receiver which are the most decisive in the accomplishment of hotel booking through the Internet, offering data on the probability of the use of this method as a means of reservation according to the type of tourist.

All the above means that SITA is a centre of knowledge orientated to the improvement of tourism and society. In 2013 SITA has developed the Strategic Program of Tourism of the Principality of Asturias (2013-2015 PrEsTa) (Department of Economy and Employment, 2013), in which from a diagnosis of the current situation and a review of the main perspectives of tourism, proposals are made and the necessary high-priority actions in order to improve the tourist activity in Asturias are defined, preserving the economic, social and environmental interests.

FURTHER LINKS:

Consejería de Economía y Empleo del Principado de Asturias (2013). Plan Estratégico de Turismo del Principado de Asturias (PrEsTa 2013-2015). Principado de Asturias. <http://www.asturias.es/Asturias/descargas/presta.pdf>
Sistema de Información Turística de Asturias (SITA) <http://www.sita.org>
Sistema de Información Turística en Estado de Baja California del Sur en México <http://www.sitcaugc.com.mx>

REFERENCES:

- Menéndez, J.M. (2012). Modelo estadístico explicativo de la reserva de alojamiento a través de internet en la hotelería asturiana. En Guevara, A., Aguayo, A., Caro, J.L., Cerezo, A., *IX Congreso Nacional "Turismo y Tecnologías de la información y las comunicaciones", Turitec 2012*, pp. 245-257. Málaga: Universidad de Málaga. http://www.turismo.uma.es/turitec/turitec/actas/2012/Actas_Turitec_2012_Completas.pdf
- Torres, E., Sustacha, I., Menéndez, J.M., Valdés, L. (2002). A solution to problems and disadvantages in statistical operations of surveys of visitors at accommodation establishments and at popular visitors places. En Ákos Probáld (Ed.), *Proceedings of The Sixth International Forum On Tourism Statistics*, pp. 385-399. Budapest: Hungarian Central Statistical Office.
- Valdés, L, Torres, E., Del Valle, E. (2004b). New research lines on tourism information systems: potential demand analyses. *Proceedings of the 7th International Forum on Tourism Statistics*, 9-11 June 2004, Stockholm (Sweden). <http://www.docstoc.com/docs/42003734/POTENTIAL---7th-International-Forum-on-Tourism-Statistics>

- Valdés, L., Torres, E., Domínguez, J.S. (2007). A model to study the economic impact of collective accommodation in a region. *Tourism Management*, 28(1), 152-161. <http://dx.doi.org/10.1016/j.tourman.2005.11.004>
- Valdés, L., Baños, J.F., Del Valle, E. (2011a). Application of an Input-Output analysis for the estimation of the regional economic impact of tourism. The experience in Asturias. In MOVE, *2nd International Conference on the Measurement and Economics Analysis of Regional Tourism*. Bilbao: MOVE. http://dl.dropboxusercontent.com/u/23683139/fp/FP_DEL%20VALLE%20valdes%20et%20al_Asturias%20FINAL%20BUENO_05102011.pdf
- Valdés, L., Del Valle, E. (2011). Information systems at the regional level. Tourism Information System of Asturias. In MOVE, *2nd International Conference on the Measurement and Economics Analysis of Regional Tourism*. Bilbao: MOVE. <http://dl.dropboxusercontent.com/u/23683139/Sesion%202a/valdes.pdf>
- Valdés, L., Martín, R., Aza, R., Del Valle, E., Delgado, A. (Coordinadores) (2011b). *La demanda turística hacia La Habana. Implementación adaptada del Sistema de Información Turística de Asturias*. Oviedo: Servicio de publicaciones de la Universidad de Oviedo.
- Valdés, L., De la Ballina, F.J. (2005). La calidad en el turismo rural: el caso de las marcas de calidad regionales. *Investigación y marketing*, 87, 43-48. <http://old.aedemo.es/socios/revista87/ad-87-07.pdf>

Annex 9. The experience of the “Osservatorio del Distretto Turistico delle Province di Venezia, Rovigo, Treviso e Vicenza”

By M. Manente & E. Celotto, Ciset, 2007

The Tourist District of the Provinces of Venezia, Rovigo, Treviso e Vicenza (Veneto Region – Italy) was instituted in 2005, thanks to the alliance of the four Provinces and Chamber of Commerce of Venice, Rovigo, Vicenza and Treviso and of other local public authorities, private associations and operators.

Starting from the definition of ISTAT, the Italian national statistic institute, the main inspirational concept of a Tourist District is the tourism production chain based on the territorial analysis of the development degree of some economic sectors and activities directly or indirectly connected to tourism. A Tourist District includes municipalities with a high level of specialization in the following four relevant tourism activities: a) accommodation (hotels); b) outdoor accommodation and b&b; c) restoration, pub, night clubs; d) services for tourists (travel agencies, tourist guides). Other conditions indicated by the Italian law n. 317 are entrepreneurship density of the area (ratio between the number of specialized industries and the number of inhabitants) and concentration (ratio between employees of a specific activity and total employees of the district).

One of the main goals of the Tourist District of the Provinces of Venice, Rovigo, Vicenza and Treviso is to share data and provide all the stakeholders with useful information to support common decision making process and effective tools to assess the success of tourism policies. Therefore, District Agreement subscribers planned to create the Observatory of the Tourism District, whose main topics to be investigated are:

- tourist demand;
- tourist supply;
- tourist production chains and integration;
- human resources;
- environmental sustainability;
- building area and real property (for example hotels, camping sites);
- Public Administration (laws, projects and economic incentives for tourism activities, infrastructures, environment, etc.).

The Partners commissioned a third party (Ciset – University of Venice) to implement the Observatory which should guarantee a scientific approach, mediate different points of view, provide tools to support common decision by the Partners, finding out innovative solutions acceptable for all the Partners.

It has been clear that a huge quantity of information is available from several data sources about different aspects connected with tourism (for example tourist arrivals and overnights, number of accommodation establishments and beds, tourist spending, etc), even though some difficulties have to be faced. Actually existing data sources are not always updated at the same date and are not always referred to same geographical subdivisions; data availability is also very limited, since each subject knows its own data but cannot access other data sources easily; classifications and denomination used might be different from a source to another, and so on.

Therefore in this case the point is not to have information but to select and to organize the exiting information produced by several offices in a tourism-oriented coherent and affordable system. The first condition to start with the implementation of such activity is that each subject agrees to share data with other operators, following as a consequence a collaborative approach.

In order to meet the defined goals, the Observatory Staff needed to implement and manage an information system, named DIST (District Information System for Tourism), composed by a proper Information System (data base) and by a web site. The process started from the identification and collection of different data sets. Then follow data selection, data integration, data processing, analysis and preparation.

On the supply side, a database (RVT) produced by the Provinces contains information about all the accommodation establishments (capacity, prices, services) and a data warehouse (STOCKVIEW) produced by the Chambers of Commerce summarizes the whole company supply of the Tourism District.

Employment is described by a data warehouse (EXCELSIOR) derived from a yearly sample survey held by the Chambers of Commerce Union.

On the demand side, a database (TURISTAT) produced by the Provinces allows to count arrivals and nights spent by tourists in the accommodation establishments and a database (UIC) produced by a sample survey held by Italian Foreign Exchange Office provides information on tourists' characteristics.

Comparing data from the different sources or data from the same source along time by means of appropriate indicators allows the final evaluation. The following table summarises and explains the results and the documents (summary sheet with descriptive analysis, crosstabs, maps and graphs) developed by the Observatory for each area of interest (demand, supply, employment, tourism and environment) and for each province and municipality of the district.

Table 1 - Results and the documents developed by the Observatory for each area of interest

	Database / Data warehouse	Results and documents
Tourist Demand	<ul style="list-style-type: none"> - TURISTAT (data from the four Provinces); - UIC (data from Italian Foreign Exchange Office) 	<p>Summary sheet with crosstabs, maps and graphs about:</p> <ul style="list-style-type: none"> - tourist arrivals and overnights in each area and accommodation and for region/country of origin; - accommodation occupancy rate; - seasonality; - foreigner tourists' spending; - itineraries followed by tourists in the different areas of the district; - Etc. <p>N.B. Particular attention was given to business/MICE tourism.</p>
Tourist Supply	<ul style="list-style-type: none"> - RVT (data from the four Provinces); - STOCKVIEW (data from Chambers of Commerce) 	<p>Summary sheet with crosstabs, maps and graphs about:</p> <ul style="list-style-type: none"> - spatial distribution of accommodations facilities; - accommodation capacity; - official and implicit quality of accommodations on the basis of the services offered, - price; - seasonality; - role of all tourism businesses in the district: ratio between number of tourism businesses and total number of businesses in the District; - spatial distribution of tourism businesses; - role of women in management position: ratio between number of tourism businesses managed by women and the total number of tourism businesses. - etc. <p>N.B. Particular attention was given to business/MICE tourism.</p>

Labour market and Employment	- EXCELSIOR (yearly sample survey held by the Chambers of Commerce Union)	Summary sheet with crosstabs, maps and graphs about: <ul style="list-style-type: none"> - number of employees in tourism businesses in the district; - number of new jobs planned in the future in tourism businesses; - seasonality of tourism jobs; - typology of contracts in tourism businesses; - socio-demographic characteristics, skills and knowledge of employees in tourism businesses; - etc.
Tourism and environment		- A first preliminary set of indicators monitoring the impact of tourism activities on the environment in the district

It is evident that the District Information System for Tourism focuses not only on traditional and official statistics as tourist arrivals/overnights and accommodation capacity but also on other data about the tourism demand (spending, itineraries, etc.), the tourism industry, the labour market and the impacts of tourism on the environment in the district. In this way it is possible to measure and monitor tourism with a more comprehensive vision and also to analyse the performance of certain subsectors or area of interest, such as business/MICE tourism, tourist characteristics, tourism employment, etc.

FURTHER LINKS

<http://virgo.unive.it/ciset/website/>

REFERENCES

- CISSET – WTO (2004). *Destination management, economic analysis of tourism and monitoring systems*. Documented presented at the WTO Workshop Contribution of statistics and economic analysis to effective destination management strategies. Antibes-Juan les Pins, 2004.
- Manente, M., Celotto, E., Conte, Silvia. (2007). *Dealing with complexity: improving Italian Tourist Districts competitiveness by means of data sharing*. ISI.
- Manente, M, Cerato, M. (2000). *From destination to destination marketing and management. Designing and repositioning tourism products*. Cafoscarina, Venezia.
- Manente, M., Conte, S., Celotto, E., Santoro, G. (2006/2007). *L'economia del Distretto Turistico. Un quadro di sintesi a partire dalle elaborazioni condotte dall'Osservatorio del Distretto Turistico delle Province di Venezia, Rovigo, Treviso e Vicenza*. ODT.
- Manente, M., Meneghello, S. (2006). *Defining and testing a socio-economic model to identify Italian Local Tourism Systems (STL): a methodological framework*. Paper presented at the 8th international Forum on Tourism Statistics, Caceres, Spain, 2006.
- Manente, M., Minghetti, V. (2006). "Destination management organisations and actors". In Buhalis, D., Costa, C. (editors). *Tourism Business Frontiers*. Elsevier.
- Manente, M. Pechlaner, H. (2006). "How to define, identify and monitor the decline of tourist destinations: towards an Early Warning System". In Butler, R.W. (editor). *The Tourism area life cycle, vol. 2, Conceptual and Theoretical Issue*. Channel View Publications.

Annex 10. New sources and the digital domain within the Basque Tourism Observatory

By J.K. Gerrikagoitia, I. Roman, I. Ibarguren, A. Alzua, N. Espinosa Uresandi, CICtourGUNE, 2013.

The present executive summary refers to the dynamic pricing monitor embodied in the Basque Tourism Observatory, which represents a real proof of the use it can be done of online market data.

Dynamic Pricing Monitor

Competitive Intelligence based on Internet is one of the most robust trends triggering the awakening of a growing interest in the field of strategic management and eScience (Teo and Choo, 2001; du Toit, 2003). This concept integrates both technology and market surveillance. As a result, it provides an excellent tool for anticipating and estimating consumer habits on a changing environment (Shih, Liu and Hsu, 2010).

In the field of Tourism, managers demand good information in order to make decisions. Competitive Intelligence organises the information, sorts it, analyses it and evaluates it providing easy and valuable information to final users. An essential aspect of Competitive Intelligence in the arena of tourism implies pointing out competitors and help managers with the following key questions: What is happening in the market? Which are the current trends? Who are the competitors? How are our products positioned in the minds of consumers? Which needs are important to consumers? Are needs being met by the products on the market?

Dynamic pricing provides an opportunity, from a consumer point of view, to purchase products at different prices at different times. Electronic commerce means, business being conducted anywhere, at any time, especially in the field of tourism (Buhalis and Law, 2008). In such conditions, the decision of the customer to purchase airline seats or hotel rooms on the internet depends on several factors such as information quality (Wong and Law, 2005), time, past experiences (Kim and Kim, 2004) and frequency (Magnini and Karande, 2011). However, the most important factor influencing hotel selection is price (Tanford, Raab, and Kim, 2012; Lockyer, 2005; Tso and Law, 2005). Customers choose a destination and then select accommodation based on price and available rooms (Wu, Zhang, and Fujiwara, 2011), using the most convenient distribution channel.

One of the areas where traditional data sources run short is hotel performance measurement. Certainly there are national statistical institutes where there are purposely built surveys to analyze the profitability of the hotel sector (namely Spanish National Statistic Institute (INE), 2009; Statistics New Zealand, 2011; Statistics Norway, 2012), and they draw figures based on monthly averages and are published with a certain delay. However, revenue management pricing practices can benefit from, instead of monthly data, a daily indicator of the hotel Average Daily Rate.

Information technology, measurement and Businesses Intelligence, provide a novel direction to support enterprise business in a new way. At the same time, there is a high amount of relevant information available in the market but companies and non-professional knowledge managers do not easily access it.

Acknowledging this reality brought the Basque Tourism Observatory to design a monitor that concentrates on Hotel Pricing, being able to monitor prices day by day, providing valuable and daily information for the local, regional or even national levels. In this sense the Basque Tourism Observatory is acting as a tourism intelligence platform for different tourism actors within the

region. The Observatory serves the Autonomous Community of the Basque Country, a region located in the North of Spain. Price competitiveness is an essential component in the overall tourism competitiveness of any tourism destination or industry and currently countries and industries have developed or use price indicators. This monitor, and the method it implements, provides a low cost and uncomplicated system to count with daily hotel prices within a few hours.

The Pricing Monitor represents the implementation of a robust and efficient data collection process from an out of the ordinary source, an Internet Distribution System (IDS). Moreover, it opens the possibility of posing a wide range of research questions that can be answered with such data, providing a significant source of business intelligence information for destination managers.

The monitor can provide information per each hotel that uses a certain IDS as their distribution channel. Therefore, the Observatory can provide information concerning hotel prices per municipality, being able to compare data from one municipality with another in the same province (out of the three embodied in the Basque Country) or even with other provinces in Spain, or any other country where the given IDS is used as a major distribution channel. The monitor is currently collecting data from Spain, Ireland, France, Greece, Tunisia, Morocco, Croatia and Turkey.

The methodology behind the monitor comprises a web crawler that obtains prices and availability for twin bedded rooms on every available hotel for a given IDS, taking into account location and time scope. The data extraction process is launched automatically every 24hours, it aims at a specific region, at a given date and processes the response to extract the prices for a twin bedded room on every hotel on the list obtained as response. If there are different rates for the same hotel, the cheapest price is selected.

Currently the monitor collects daily rates of more than nine thousand hotels in Spain, more than twelve thousand in France and more than seven hundred in Ireland. Which means that the monitor and the methodology it follows provides responses to questions such as, to name but a few:

- Which is the average rate for a three star hotel in Cork for a specific date?
- Which city is more expensive for Easter period Madrid? Dublin? Paris?
- How many hotels sell their rooms through IDSs of a given city, region, country?
- Which is a convenient date to book a room? Does this date vary in different cities? How?
- How does a given event impact on occupancy & rates in a city? Does it have and impact beyond such city, into neighbouring municipalities?

Therefore, the monitor can respond to numerous performance questions for a given hotel, for a given city, moreover, it allows such a hotel or city to benchmark itself with others, even cross country comparisons.

Another element that might be worth highlighting is that the monitor, given the significant load of information that it collects and the logic it follows, it can analyze the past as much as the future. It can analyze how a given event has impacted not only on the city that hosts it, but also in neighbouring cities or regions.

Figure 1, reflects upon the average prices for a double room of the province of Biscay (within the Basque Country) **for the next 14 days**, here exemplifying that the monitor can bring light into the future. The forecast of 14 days, attends to a demand of the hotel business.

Figure 1 Basque Tourism Observatory - Viewpoint



The graph on the right shows:

- Percentage of Hotels having sales online
- Average price in € for all hotels
- Average price in € for three star hotels

This is probably the element that provides the edge, pricing information for the future. Traditional information sources cannot possibly provide hotel managers, tourism destination managers or other information consumers with this valuable information.

Furthermore, one relevant point needs to be made concerning comparability. National Statistical Institutes using traditional methods tend to have the advantage of providing comparability among countries, regions within a given country and in certain values in-between countries. As opposed to regional initiatives to measure performance, where the methodologies used tend not to be easily transferable to other settings. However, in this case, given that most hotels in the world use IDSs, the current monitor is capable to grow and start collecting data of more and more countries, and continue providing benchmark among countries, regions, cities...etc. In the case of the Basque Country, a given city, for instance Bilbao, can choose to compare itself through the monitor with other cities within Spain or any other of the countries where data is being collected at this moment in time.

In sum, revenue management needs just-in-time information on daily hotel prices. National statistical institutes publish monthly time series with a delay of months and there is where initiatives such as the current monitor of the Basque Tourism Observatory can contribute. Moreover, Web crawling of IDS provides an excellent opportunity to test new statistical methodologies.

FURTHER LINKS:

<http://observatorioturisticodeuskadi.basquetour.net/SitePages/index.aspx#>

REFERENCES

- Buhalis, D. and Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the internet—the state of tourism research. *Tourism Management*, 29(4):609 – 623.
- Kim, W. G. and Kim, D. J. (2004). Factors affecting online hotel reservation intention between online and non-online customers. *International Journal of Hospitality Management*, 23(4):381 – 395.
- Lockyer, T. (2005). The perceived importance of price as one hotel selection dimension. *Tourism Management*, 26(4):529 – 537.
- Magnini, V. P. and Karande, K. (2011). Understanding consumer services buyers based upon their purchase channel. *Journal of Business Research*, 64(6):543 – 550.
- Shih, M.-J., Liu, D.-R., and Hsu, M.-L. (2010). Discovering competitive intelligence by mining changes in patent trends. *Expert Systems with Applications*, 37(4):2882 – 2890.
- Tanford, S., Raab, C., and Kim, Y.-S. (2012). Determinants of customer loyalty and purchasing behavior for full-service and limited-service hotels. *International Journal of Hospitality Management*, 31(2):319 – 328.
- Teo, T. S. H. and Choo, W. Y. (2001). Assessing the impact of using the internet for competitive intelligence. *Information & Management*, 39(1):67 – 83.
- Tso, A. and Law, R. (2005). Analysing the online pricing practices of hotels in Hong Kong. *International Journal of Hospitality Management*, 24(2):301 – 307.
- Wong, J. and Law, R. (2005). Analysing the intention to purchase on hotel websites: a study of travellers to Hong Kong. *International Journal of Hospitality Management*, 24(3):311 – 329.
- Wu, L., Zhang, J., and Fujiwara, A. (2011). Representing tourists' heterogeneous choices of destination and travel party with an integrated latent class and nested logit model. *Tourism Management*, 32(6):1407 – 1413.

Annex 11. Sustainable Tourism Development in the Baltic Sea Region: A guideline for strategic cooperation in tourism (provided by www.bastis-tourism.info)

By Wolfgang Günther and Karen Winkler, NIT, Kiel, 2007

The issue of strategic cooperation is becoming more and more important as it can be a means to deal with various challenges that not only the tourism industry is facing. Over the last decade, the tourism sector had to face and is still facing major challenges such as changing market demands, increasing competition and the need to make do with insufficient resources (WTO 2001). Due to this, some consider cooperation as an inescapable survival strategy, others as a voluntary way to success (Müller 2005).

Furthermore, the very nature of the tourism product requires the cooperation of individual tourism suppliers as it is essentially a 'production system'. Tourists at a destination draw their benefit from the whole range of single product parts on offer, not just from their accommodation or one particular restaurant (Wöhler 2001). Hence, the single product parts complement each other and make the individual suppliers at a destination dependent on each other.

Clearly, this is not a new realisation and to a certain extent cooperation has always been undertaken within the tourism industry. However, because of the mentioned changes, even more cooperation is now required in order to meet changing consumer demands, gain a competitive advantage and mark one's place on the tourist map. Ullmann (2000) writes that this basically requires nothing more than building on already existing structures, only with the differences that new relationships need to be deliberately selected with the purpose of improving the overall product offer.

Through cooperation you can also make a contribution to reaching the aim of sustainability. Although cooperation in itself cannot be sustainable, it can contribute to sustainable tourism development through its integrative approach. In order to successfully implement sustainable tourism, a wide range of tourism stakeholders need to be included, hence cooperation provides an ideal basis to do so. Furthermore, the fragmented and diverse nature of the tourism industry is frequently a barrier to the adoption of sustainable practices and as cooperation can help to overcome this fragmentation, it can also help to spread sustainable practices (Vernon, Essex, Pinder and Curry 2005). Also, cooperation allows for a more efficient resource use which in turn leads to an enhanced 'benefit impact relation' (BIR) for the destination and thus a more positive outcome from tourism.

In order to build up a strategic cooperation, you have to go through the steps shown in Fig. 1. This order is not compulsory as steps 2, 3 and 4 may overlap, but has been chosen here because it is the most logical way for building up cooperation. Each of these steps will be described in more detail in the remainder of this guideline.

Fig. 1: Steps in strategic cooperation



Step 1: Situation analysis

If you are thinking about cooperating with others, then you probably want to solve a problem that you have or simply improve on a certain issue. But before you try to find a suitable partner, you need to take some time and analyse the situation you are in, as you would in any other strategic decision. By going through each of the following steps, you will build up a partner profile that you need later on in the cooperation process.

Step 2: Aim definition

In the previous step, you were asked to undertake a situation analysis and above all an analysis of your particular problem. If you have decided that cooperation is the best way to solve your problem, then you need to define the aim(s) of your cooperation next, i.e. what you want to achieve with your cooperation. You should be very precise about what your aims are as this will enable you later on to align your activities closely to what you want to achieve. Furthermore, having clear aims will also ease the process of finding a possible partner as you will be able to state exactly what you want to achieve together with him.

Step 3: Identify possible partners

By going through the different analyses in step 1, you have built up a partner profile that you should use now to identify suitable partners. If you already have an existing partner for whatever reason, then you need to check whether he fits the partner profile for your particular cooperation purpose. If so, you can continue with step 4. If not, you should consider the following points for identifying a suitable cooperation partner: (a) Consider existing contacts, (b) Other sources for possible partners (e.g. Internet, use of a professional intermediary, trade fairs), (c) Making contact and assessing the partner profile.

Step 4: Create the cooperation

Before you embarked on the process of finding a suitable partner for your cooperation, you probably already had a good idea of what your future cooperation should look like. In this step,

you need to turn your idea into reality and define the structure and content of your cooperation in more detail.

As mentioned before, cooperation can take many different forms which can be described in relation to the following parameters (a) Purpose (e.g. product development, marketing etc.), (b) Formality (loose vs. formalised), (c) Time-frame (one-off vs. long-lasting), (d) Geographical reach (small vs. wide), (e) Size (small vs. large), (f) Organisational diversity (horizontal, vertical or diagonal cooperation, public-private partnership).

Step 5: Manage the cooperation

In the previous step, you have defined all necessary structures and details for your cooperation; hence the basis for working in cooperation has been laid now. However, as mentioned in the previous step, a cooperation is more than the usual business case and hence, special consideration needs to be given to managing the cooperation (Kempert 2005). Therefore, the aim of this step is to ensure a smooth functioning of your cooperation by: (a) Observe the rules of the game, (b) Build up and maintain trust, (c) Communication and information are crucial (d) Clearly articulated transparent goals and objectives, (e) Build capability through continuous learning.

Step 6: Evaluation

In order to know how your cooperation performs in relation to the aims that you have set for your cooperation, you should build up a monitoring system. It was already mentioned that you should define quantitative and qualitative measures in order to determine whether your cooperation has achieved its aims. These measures need to be checked frequently to monitor your progress.

This can be done in an informal or formal way and can include quantitative as well as qualitative factors of your cooperation. If the results of your monitoring system are not satisfactory to you or your partner, you need to analyse why this is the case and what you can do to improve on these issues. However, if your monitoring indicates that you are not making any progress towards reaching your aim, then you should also consider whether it might be best to terminate the cooperation. As stated before, a cooperation that does not deliver results anymore has to be terminated.

However, cooperation does not only fail because the aims are not achieved. It may also happen that you and your partner do not get along anymore for whatever reason, this in turn probably means that the aims of cooperation will not be reached either and that you should terminate the cooperation, too. In other words, it is crucial that you check the progress of your cooperation frequently and that you are able to realise when your cooperation should be terminated.

FURTHER LINKS

http://www.bastis-tourism.info/images/7/7e/Agora_Toolbox_Strategic_Cooperation.pdf

REFERENCES

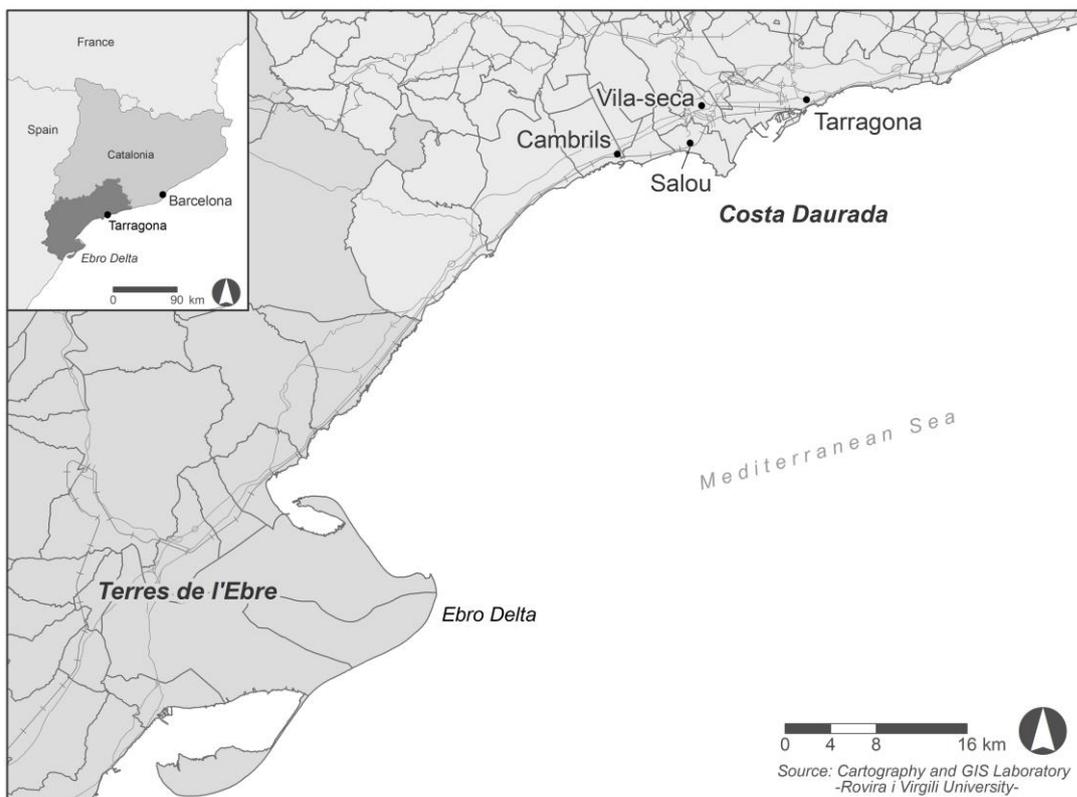
- Kempert, W. (2005) 'Wirtschaftliche Kooperationen kleiner und mittlerer Unternehmen – auch international?' *TU International*, Vol. 56, Mai 2005. Available at http://www.tuberlin.de/foreign-relations/archiv/tui_56/kempert.pdf [Accessed 8 December 2006].
- Müller, H. (2005): 'Mit Kooperationen zum Erfolg'. *fif Akzente*, No. 38, pp. 1.
- Ullmann, S. (2000): *Strategischer Wandel im Tourismus: Dynamische Netzwerke als Zukunftsperspektive*. Deutsche Universitäts-Verlag: Wiesbaden.
- Vernon, J., Essex, S., Pinder, D. and Curry, K. (2005): 'Collaborative policymaking – local sustainable projects'. *Annals of Tourism Research*, Vol. 32, No. 2, pp. 325-345.
- Wöhler, K. (2001): 'Kooperationen im Tourismus – Netzwerkbildung kleiner und mittlerer Unternehmen: Von der Konkurrenz zur Kooperation in Tourismusregionen'. *Materialien zur angewandten Tourismuswissenschaft*, No. 36, pp. 1-10.
- WTO (2001): *Public-private-sector cooperation – enhancing tourism competitiveness*. WTO: Madrid. WTO/Canadian Tourism Commission (2003): *Cooperation and Partnerships in tourism: a global perspective*. WTO: Madrid.

Annex 12. Stakeholders involvement in the Costa Daurada Tourism Observatory, Tarragona

By Salvador Antón Clavé, Rovira y Virgili University, Tarragona, 2013

With more than 150.000 accommodation units and near to 20 million of overnights per year excluding second homes in the area where it has been developed, the Costa Daurada Tourism Observatory of Tarragona (the “Observatory”), has played, since its creation in 2001, a central role both as statistical data producer for the private and public sector but also as part of the system of tourism governance of the destination. The creation, in 1999, of the Costa Daurada Tourist Studies Foundation (FETCD) by the main associative stakeholders of the tourism private sector of the Costa Daurada was followed by the implantation of the first Tourism Observatory of Catalonia in 2001 as an operational unit of the Foundation with the collaboration of the most important municipal tourist boards of the destination and the University Rovira I Virgili.

Map 1. Tarragona main tourism brands and destinations



Nowadays, from the perspective of the private sector, the Costa Daurada Observatory includes the participation, above all, of the Hotel and Tourism Business Federation of Tarragona (FEHT) and several professional organizations both at the provincial and sub-provincial levels, such as the Association of Hotel Entrepreneurs of the Tarragona Province, the Hotel Association of Salou-Cambrils-La Pineda (coastal area), the Tourist Apartments Association of the Costa Daurada and the Campsites Association of the Costa Daurada. It also includes the participation of corporations such as the theme park PortAventura (more than 3,5 million visitors per year) and other private organizations such the Chamber of Commerce of Tarragona. Finally, the private sector has the collaboration of the regional branch office of the main Catalan savings bank “la Caixa”.

From the perspective of the public administration, the Observatory has the proactive role of the Tourist Board of the Provincial Council of Tarragona and the commitment of the Tourist Boards of the four main tourist municipalities of the destinations (Salou, Cambrils, Vila-seca and

Tarragona). The third pillar of the Observatory cooperative network consists of the local higher education and research system, represented by the Rovira I Virgili University (URV), with campuses in the cities of Tarragona, Reus, Vila-seca and Tortosa. Actually, it has to be noted that University plays a fundamental role in this system as, since 2001, its Strategic Research Plan has taken into account the fact that the tourism sector in Catalonia and in Tarragona is one of the main fields of economic activity, in addition to being essential for the regional economy and strategic for socioeconomic development at large. In fact, 'tourism and leisure' is one of the five strategic fields included in the successful project leaded by the URV to become an "International Campus of Excellence" in Southern Catalonia, promoted in 2009 and officially recognized in 2010.

The Observatory's main mission is to generate information and databases on the tourism dynamics of the Tarragona region in order to facilitate decision-making by local companies and institutions. Data created and analysed is related to two principal axes of information: the occupation of tourist accommodation establishments (hotels, campsites, apartments and rural tourism accommodations) of the destination and characteristics of visitors that arrive to the destination. As a result, the Observatory provides biweekly accommodation statistics disaggregating the information at different geographical scales within the destination (by municipalities, by the whole coastal resort areas, by the regional tourist brands of Costa Daurada and Terres de l'Ebre and for the whole province of Tarragona) and periodical analysis based in questionnaire surveys on the characteristics of tourism demand at the main tourism municipalities and at the two main regional brands of the province of Tarragona previously mentioned. Otherwise, the Observatory carries out *ad hoc* statistical operations at the request of the institutions that are part of it, as well as other institutions, organisations and companies.

Currently the Observatory runs its own data management software for the occupation operation analysis, the Tourism Data System (TDS) interface "TDS" is a web tool providing interactive access to private companies and public stakeholders to the local data on tourism generated by the Observatory in real time. It provides access to current data on the level of occupation of accommodations surveyed, lets view the history of surveying operations conducted since 2006, answers custom queries according to user information need, allows to compare results of one specific property with regard to the results of the different areas of the territory or types and/or level of accommodation and has a repository function of the statistics produced by the Observatory. According to this, currently the Observatory responds to the needs to customize the information available to the companies and generate a fast information access enabling them to act tactically. So, as an interactive platform for information management, this web tool is actually improving the efficiency in the decision making of tourism managers because it provides immediacy in obtaining data and facilitates each company choosing the type of information more useful for its management

The success of the Costa Daurada Tourism Observatory's has encouraged the emergence of new collaborative projects between tourism businesses, public sector and the University at the destination level. In fact, since the beginning of the 2000 to now, the public and private actors of the Costa Daurada, in collaboration with the Rovira i Virgili University, have developed an intense strategy of generation of innovative mechanisms that involve the joint realization of projects. As a result, nowadays the Costa Daurada Observatory is, in fact, a single unit of the Science & Technology Park for Tourism and Leisure (PCTTO) created in Vila-seca the year 2006 through an agreement between the Rovira i Virgili University, the Hotel and Tourism Business Federation of Tarragona and Vila-seca Town Council enhancing the objectives of the previously created Costa Daurada Tourist Studies Foundation and with the aims of:

- Supporting public and private regional tourism actors in the application, assessment and sharing of current and future knowledge
- Promoting innovation, technological development and sustainable growth among firms and institutions of the region

- Being a “broker” between regional agents and the international knowledge networks of tourism
- Catalyzing and channelling high level academic research in this field
- Creating and disseminating new tourism knowledge, with a special focus on the Catalan, Spanish, Mediterranean and Latin American contexts
- Boosting the development of tourism research streams among research groups of the Rovira I Virgili University.

It can thus be argued that the generation of a cooperative tourism information system such as the Observatory has been followed in this case by new transfer knowledge developments becoming a solid factor of the competitive advantage of the destination, to such an extent that it is managed in the best interest of the local stakeholders. This has occurred, by the way, in a context of the reformulation of the current model of tourism in coastal tourism destinations such as the Costa Daurada of Tarragona. The case, in fact, underlines the importance of the creation of knowledge management instruments in a context of improvement of the competitiveness of a destination and can be understood as an interesting example of local response to the need to intensify the ability to innovate on all levels in the field of tourism and leisure. All in all, the Costa Daurada Tourism Observatory, beyond their description, highlights the usefulness of creating a knowledge-integrated strategy that, beyond *top-down* schemes and policies, cooperates in the creation of successful *bottom-up* transformation dynamics at the destination scale.

FURTHER LINKS:

<http://www.observatoricostadaurada.com>
<http://plataforma.pct-turisme.cat/>
<http://www.pct-turisme.cat/eng/index.php>

REFERENCES

- Anton Clavé, S. (2012) “Creación de un sistema de innovación colaborativo en el ámbito del turismo y ocio. El Parque Científico y Tecnológico de Turismo y Ocio. *100 buenas prácticas en emprendimiento universitario*. Colección Estudios Redemprendia. Netbiblo, La Coruña. Pgs. 61-65.
(<http://www.redemprendia.org/publicaciones/coleccion-estudios-redemprendia>)
- Anton Clavé, S. and Duro, J.A. (2010) *Competitividad y sistemas de innovación territorial en turismo*. Monografía 2009-2, Càtedra Universitat-Empresa per al Foment de la Innovació Empresarial. Rovira i Virgili University. Tarragona.
([http://www.urv.cat/media/upload//arxius/Catedra Innovacio/wp 1.pdf](http://www.urv.cat/media/upload//arxius/Catedra%20Innovacio/wp%201.pdf))
- Russo, P. (2012) “Knowledge Management tools for the enhancement of tourism competitiveness. The Science and Technology Park for Tourism and Leisure” In: Anton Clavé, S. (ed) *10 lessons on Tourism. The challenge of reinventing destinations*. Planeta. Barcelona. 429-443pgs.

Annex 13. A framework for the assessment of effectiveness and efficiency

By M. Manente & E. Mingotto, CISET, 2012

Introduction: the problem

Public bodies responsible for tourism management and promotion are nowadays subject, like any other public administration, to an increasing pressure, since on one hand they have to face considerable limitations on their budgets and on the other hand they have to develop successful actions able to deal with the increasing competition of other destinations.

Improving effectiveness and efficiency is then strategic, since managing public spending in the most effective and efficient way helps to assure better performances and the destination competitiveness, optimising at the same time the use of resources.

If implemented during the overall life cycle of the action – ex-ante, in-itinere, ex-post -, the evaluation⁴⁶ of effectiveness and efficiency plays a strategic role not only in terms of transparency and control of the public fund allocation, but also and in particular in terms of support to decision-makers: it is a continuous feedback to identify areas where actual results and efficiency are weak, so that interventions can be taken to promote improvements and, given the expected results and the budget constraints, to address public resources to the most effective and profitable activities only.

Also the European Union has confirmed the importance of the evaluation, especially in a period in which public bodies face continuous problems of budget restriction. Motivated by the ineffectiveness and inefficiency affecting the previous use of Community Funds, the European Union has recently invited national governments and regions to develop a new methodological approach for assuring a better planning and use of the future Community Funds for the period 2014-2020 and verifying project effectiveness and efficiency. This approach should articulate in: the clear definition of objectives, expected outputs and outcomes, key performance indicators and their target value; the identification of consistent interventions to be implemented for achieving expected results; the definition of resources and times; the availability of data and information; the involvement in the assessment of all stakeholders on which the intervention directly or indirectly impacts; the assessment of impacts, effectiveness and efficiency, verifying whether and to what extent the intervention has caused the impacts.

Unfortunately, the assessment of effectiveness and efficiency is not yet largely implemented by public bodies of any territorial level. The evaluation is very often left to improvisation and carried out without logic and rigorous approaches and professionalism. This problem can however partially depend on the deficiency of systems specifically designed for the evaluation of interventions carried out by public administrations in the field of tourism. Indeed, the whole field of program evaluation is still relatively under developed in tourism compared to other areas as health, education and public economics.

The aim of this document is to make policy- and decision-makers aware of the importance of the evaluation of effectiveness and efficiency, suggesting them a possible approach they can follow. The discussion draws on a CISET research project which has developed an assessment

⁴⁶ With the word “evaluation” (or “assessment”) authors refer to a process which allows to interpret, understand and verify the merit and worth of a public activity, in this case in terms of effectiveness and efficiency; evaluation consists in assessing and giving meaning to the actual impacts produced by the actions, verifying whether and to what extent these impacts correspond to the expected results and they have been achieved minimizing the use of resources.

framework specifically designed for the evaluation of public activity carried out by territorial public bodies (Regions) in tourism.

An approach for the assessment of effectiveness and efficiency

According to the study carried out by Ciset, a valid approach to the evaluation should be based first of all on ten important elements, which represent the starting conditions for a more rigorous and logic assessment. Even though these requirements can seem obvious, they are very often overlooked by public administrations.

1. Policy and decision-makers are required to specify the reasons for which they carry out the assessment of effectiveness and efficiency and the way in which results will be employed for supporting the decision-making process.
2. The assessment should be carried out ex-ante, in-itinere and ex-post, since these three steps are connected to each other.
3. The assessment of effectiveness and efficiency can not be separated from a clear and logic specification of objectives and expected outputs and outcomes, to which resources and activities should be aligned.
4. Since the impacts of an intervention can occur within different time frames, both short-term effects (outputs) and long-term effects (outcomes) must be considered. This means that the assessment process must follow the same time frames in which effects happen and that it is not completed until outcomes occur and they are measured.
5. Assessing effectiveness and efficiency means verifying whether, to what extent and with what resources results have been achieved and not simply controlling if a plan, a program or an action has been implemented.
6. Effectiveness and efficiency can not be assessed without verifying the causal relation between activity and results, in other words whether the impacts monitored at the conclusion of the intervention have been really caused by the intervention itself and not by other external factors.
7. Outputs and outcomes should be expressed through specific, realistic and measurable variables and indicators. However, the complexity of measuring some outputs or outcomes represents a big limit to the evaluation; this does not mean that the auditor should give up the evaluation, but, this means that, if it is not possible to express the variable with a proxi, he has to sincerely recognize and explain the limitations of the assessment.
8. Since the assessment can be a complex and expensive process, a balance between result quality and costs is required. A careful definition of the assessment system (set of indicators, methodologies, etc.) is required in order to answer both evaluation and information needs and available resources.

In order to avoid useless waste of time and money, the assessment should ignore interventions based on secondary objectives only apparently related to tourism.

9. The assessment of effectiveness and efficiency is based on a comparison: the intervention under consideration should be compared with other alternative activities, in order to identify the best one; the alternative can be represented also by the option "doing nothing".
10. The assessment should be supported by a flexible, comprehensive and valid information system.

Together with these essential requirements, a valid approach for the assessment of effectiveness and efficiency should be based on a global and comprehensive vision that embraces the evaluation of interventions of different entities and complexity: from well-structured tourism

plans to programs to specific actions⁴⁷. Indeed the evaluation should be a continuous and cyclical approach, in the sense that on one hand the evaluation of a specific action does not make sense if it is not included in a more global evaluation referring to the program and the overall tourism plan to which it belongs; on the other hand the assessment of a plan can not be separated from the analysis of its programs and individual actions.

As summarised as follows, the assessment should follow a sequential and logic process and be integrated in the overall decision-making process, so that it can be a real support to decisions and to the implementation of effective and efficient activities.

1. Analysis of the current situation, for identifying and assessing real problems to be solved, gaps to be filled, opportunities to be taken. While the definition of a well-structured tourism plan requires the study of all aspects of tourism, in order to identify priorities for the future development of tourism in the destination, the definition of specific programs and specific actions require an analysis limited to the specific area to which the intervention refers (for example the analysis of tourism market segments and perceived image for developing a program of promotion).
2. Explanation (in a smart way – specific, measurable, achievable, realistic, time) of primary objectives and expected results, both outputs and outcomes, paying attention to the interaction of secondary objectives as political issues and maintaining consensus, pressures from lobbies, superregional directives, etc.
3. Ex-ante evaluation: identification, assessment and comparison of alternatives interventions (programs or actions) in order to identify, estimate and measure their costs and benefits (for example through cost-effective analysis, cost-benefits analysis, multicriteria analysis, causal logic models, case-study analysis, etc.) and select the most effective and efficient one, also in relation to available resources. It is important to pay attention also to the possible effects of other interventions already implemented in tourism and in other areas non directly linked to tourism but affecting it (agriculture, transports, culture, environmental policies, ict, fiscal policies, etc.).
4. Selection of interventions (programs to be included in the plan or actions for putting into practice programs) and specifications of the period of timeframe, amount of resources used for the intervention, subjects' responsibility, coordination with other interventions, etc.
5. Definition of an assessment system for the in-itinere and ex-post evaluation, selecting a set of variables and indicators of effectiveness and efficiency for each of the objectives, defining their target value and specifying the methodologies and tools for collecting data, measuring indicators and evaluating effectiveness and efficiency.
6. Implementation of interventions.
7. In-itinere and ex-post evaluation through the assessment system previously defined: identification and measurement of real outputs and outcomes, test of the causal relation between effects and intervention, comparison between actual effects and expected results, final judgment about effectiveness and efficiency. The evaluation of those more complex activities articulating in several different interventions (for example the tourism plan which consists of different programs or the program which consists of several actions) requires the assessment of the impacts produced by all these interventions and by their interactions.

⁴⁷ Focusing in particular on a territorial public bodies (the region), with the word “*plan*”, we refer to the tool with which the region define the future strategic development of the regional tourism. It is generally held every three years and it is composed by different programs, according to the priorities and strategic objectives.

With the word “*program*” we refers to a coordinated and organized set of actions aimed at achieving the objectives defined in the plan for a specific areas of interest (for example the program for the tourism promotion or a program for supporting tourism operators and enterprises of the region, etc).

8. Feedback for decision-makers and use of the assessment results for correcting/improving ongoing or future interventions.

Final considerations

The evaluation approach suggested above has been applied to the assessment of some actions taken by the Veneto Region (Italy) in the field of tourism, bringing interesting results.

It as a consequence represents a starting point to increase awareness of policy- and decision-makers, bringing them to progressively integrate the assessment of effectiveness and efficiency in the decision-making process and to develop a more logic and rigorous evaluation.

FURTHER LINKS

<http://virgo.unive.it/ciset/website/>

REFERENCES

Mingotto, E. (2012). *Research Grant final report - Metodologie di valutazione dell'efficacia e dell'efficienza di azioni svolte dalle amministrazioni pubbliche in ambito turistico. Applicazione ad alcuni casi di studio*. Ciset, Università Ca' Foscari. Unpublished report.

Manente, M., Mingotto, E. (2012). *How tourism statistics can support di assessment of effectiveness and efficiency of public actions. Paper presented at the 11th Global Forum on Tourism Statistics, Reykjavik, Iceland, 2012.*

Annex 14. Basque Tourism Observatory

By A. Alzua, and J.K. Gerrikagoitia, CICtourGUNE, 2013

Travel and Tourism is one of the world's great industries and vital economic engine for numerous regions. In the Basque Country the last decades, travel and tourism has showed resilience and steady growth. The Basque Government has been prone to identify that tourism can contribute to the transformation of the economic profile of the region in terms of a competitive and dynamic knowledge-based economy, capable of growing in a sustainable manner and improving employment from a quantitative and qualitative perspective.

Good performance is the criterion whereby an organization or destination determines its capability to be efficient and compete. Performance measurement estimates the parameters whether programs and investments are reaching the targeted results. However, a model for performance set faulty may depict a disadvantageous situation that does not support the organization nor the thriving to the set aims.

All process of measuring performance requires a scientific and technical approach; and usually the use of statistical modeling to determine results. As far as the present capabilities and knowledge is concern, a full scope copy of the performance of a destination can not be obtained, as generally some of the parameters cannot be measured directly but must be estimated via indirect observation.

In that sense, a Basque Tourism Observatory backed up by the Basque Tourism Agency – Basquetour; and by the Cooperative Research Center in Tourism – CICtourGUNE, was designed and launched during 2011 as a public and private demand of market and strategic knowledge needs.

Two concepts that vertebrate the Observatory are *Competitive Intelligence (CI)* and *Open Innovation*. Competitive Intelligence tends to be defined as an **ethical and systematic process for the collection of information, analysis and relevant, accurate, opportune, predictable and active dissemination about the business environment, competitors and one's own organization** (SCIP (2005)). Based on the Theory of the Information Economy, the Theories on Strategy, the Competitive Advantage and Resources and Capabilities, Knowledge and Marketing Orientation, CI also has a strong connection to the areas of Technology and Security. Hence, CICtourGUNE believes that the tourism observatory should also be conceived as:

- A platform for objective observation
- A facilitator of analyzed information at the decision-making point
- An administrative tool for warning and monitoring purposes
- A means whereby companies and the Basque tourism sector can improve their baseline
- A tool for detecting and anticipating trends
- A means of obtaining reasonable valuations that help to interpret reality
- A short- and long-term tool.

The benefits arising from the application of good conceptualization based on Competitive Intelligence and keeping this updated through strategic monitoring (integration of technological and market monitoring) can be summarized as follows:

- Giving an organization the capability to Anticipate and React in the face of a changing environment. Having ordered, classified and suitably analyzed information allows observatory users to have an overview of the competitive environment. Tendencies and macro-tendencies will allow fulfilling forecasts and realities observed on a daily basis, both in terms of what is obvious and in terms of what can go unnoticed.

- Greater probability of success in the implementation of the strategy given that Competitive Intelligence can be the analytical tool to estimate the reaction of competitors in the face of a change of strategy around the Basque Country as a destination.
- Identify opportunities: Quite often a lack of time prevents us from seeing opportunities clearly. Competitive Intelligence means that these can be detected earlier.
- Change of corporate culture: This invites us to act, take decisions on all levels and stops us from becoming complacent, facilitating a spirit of innovation and competitiveness in the public administration and the private sector in general.

The second concept, **Open Innovation**, it is seen as a new strategy of innovation in which companies go beyond the internal limits of their organisation and where the co-operation with external professionals takes on a fundamental role. *Open Innovation* means combining internal knowledge with external knowledge to take R&D projects forward. It also means that companies use both internal and external channels to place their products and innovations in the market. Starting from this framework, the Tourism Observatory embodies an open model of work, with the certainty that companies in the sector are both customers and external collaborators with which information and knowledge can be exchanged.

By incorporating the technical advances and the scientific know-how, the Basque Tourism Observatory allows currently for the following elements:

- The availability of macroeconomic data on supply and demand in the Basque tourism sector.
- The determination of the present situation of strategic issuing markets, both national and international.
- Paying special attention to certain products aimed at segments such as meetings and business tourism, cultural and gastronomic tourism, etc.
- Updated information on the main variables in the supply side of tourism: number of hotel beds, museums, shows, restaurants, special venues, trade fairs, etc.
- Analysis of the visitor profile: age, gender, profession, reasons for travel, average duration, average expenditure, type of trip, etc.
- A periodical comparison of the position of the Basque Country (and its cities) vis-à-vis other regions (and cities) of the world in each one of the areas analyzed: business, knowledge, tourism, culture and quality of life, price and cost, and labor market and training.
- Accurate, reliable information that is constant over time and comparable, for good decision-making.
- Better access to information for all key groups in the sector. These groups are currently finding it difficult to obtain information.

In sum, the added value of the Basque Tourism Observatory lies on the next three elements

- Scope and Methodology: The observatory represents a major step forward towards the **standardization of sources** to present a meaningful statistical analysis of supply and demand, and also using the basic standards as gathered in the International Recommendations (IRTS2008) by the UNWTO.. Although it is true that, like each country and region, the Basque Country already has its own particular features recorded in the adoption of the satellite account for the Spanish State, and this enables the region to achieve a certain homogeneity and, above all, statistical comparability with regions in the same country and other countries. **The observatory is starting to allow the administration to optimize resources, minimize costs, and generate a new data layout.** This matches the concept proposed by INRouTe related to the Regional Tourism Information System where three sets of information are conceived (this term is explained in the present document's glossary), in the sense that the Basque Country counts with the

National Official Statistics Institute, then the Regional one, represented by EUSTAT, and the third set of information can be provided by the Basque Tourism Observatory.

- **New ways for the visualization and layout of information:** One of the improvements identified is that the information published by other observatories based on traditional visualization tools appears rigid. Sometimes it does not even allow the final user to analyze it. In many cases it comes in PDF or Excel files that show certain data but it is not possible to surf through them or generate auxiliary databases. This is why CICtourGUNE proposed the incorporation of technologies such as performance point services (Microsoft SharePoint) and other Business Intelligence tools in conjunction with statistical software that will enable CICtourGUNE to carry out a dynamic analysis of the data online on a web platform. **More importantly, this means empowering the data & information consumer, providing the tools to create *ad hoc* reports, so that users can be as passive or as active as they please when consuming information.**
- **New sources and the digital domain:** The study of tourism cannot only be based on data generated by statistics institutes or traditional census-based or field studies collection. Nowadays the digital footprint left by companies, institutions, visitors, tourists or potential travellers interested in the Basque region as a destination means that it can be learnt more about tourism patterns through an innovative and wide-ranging approach. This observatory deals with the so-called BIG DATA, specifically TOURISM BIG DATA, provides advances towards how regions can make sense of the big data and take advantage of it. The content generated by users on the Internet through the social media, access to destination and intermediation sites allow information consumers to gain knowledge about patterns of behavior, consumption, situations, analyze the creation of a brand, impact analysis, opinions posted spontaneously ... so that destination managers can **get to know customers and the given market better and relate to them more efficiently and with greater efficacy.**

Concerning this advantage the document named *INRouTe – Tourism Observatory* counts with a specific insert on paragraph 4.2. about one of the monitors incorporated to the Basque Tourism Observatory whose information source is not traditional.

FURTHER LINKS

<http://observatorioturisticodeeuskadi.basquetour.net/SitePages/index.aspx#>

REFERENCES

- Navarro, J.R., Rubio, J.Q. (2000). "DATATUR: Tourism statistics information system—the experience of Spain". *Information and Communication Technologies in Tourism*.
- Ramos, C., Perna, F. (2009). "Information system for Tourism Activity Monitoring and Forecasting Indicators as an experience for Portugal". *Tourism & Hospitality Research*.
- Wöber, KW. (1998). "TourMIS: An adaptive distributed Marketing Information System for strategic decision support in national, regional, or city tourist offices". *Pacific Tourism Review*.

Annex 15. BASTIS, the Baltic Sea Heritage Tourism Service

(www.bastis-tourism.info)

By Ulf Sonntag, NIT, Kiel, 2013

BASTIS, the Baltic Sea Heritage Tourism Information Service (www.bastis-tourism.info) has been developed to provide tourism professionals in the Baltic Sea Region (BSR) with the market information they need. The focus of BASTIS is heritage tourism but is not limited to this topic. Its general contents are valuable for basically all areas of tourism. Its approach is based on the assumption that a lot of the needed information is publicly available, yet scattered in many sources, unstructured and not harmonised; other relevant information is existing, but exclusive to certain institutions and persons. The aim of BASTIS is to access and harmonise publicly available information and locate and make accessible restricted information in order to provide relevant market information free of charge and easily accessible for SMEs, tourism authorities and tourism associations working in heritage tourism in the BSR. Its content is now focussing on the national level, but the technology and structure could very easily be adapted for the regional level.

To address its strategic objective, its programmes and activities as described by INRouTe, a Regional Tourism Inter-Institutional Network is required to design the corresponding technological medium integrated in an online platform, which should count with diverse services and applications, among which are the following: (a) the front office of the platform would be a web page constructed with a collaborative ambition, (b) as part of the back office of the platform, it would be relevant to count with a user management module where key stakeholders are included as a separate set of users, (c) given that the Regional Tourism Inter-Institutional Network needs to keep escalating its work, upgrading continuously, this requires collaborative modules, (d) a forum module, where users, mainly stakeholders, can participate with their opinions on specific topics, (e) the core of the back office will be formed by the data warehouse and its different datamarts, (f) a module that allows for online training (webinars and other similar functions), (g) a visualization module, facilitating the comprehension of the statistical information provided.

The BASTIS approach already encompasses all these aspects. Its technical approach is at the same time very cost-effective and user-friendly. Its philosophy particularly focuses on a collaborative multi-editor approach and the contextualisation of data from different sources. Speaking in technical terms, the core of BASTIS is a 'wiki'. This makes BASTIS in comparison to other existing tourism observatories very special and at the same time very simple. By using free and widely used software instead of an individual solution, this means that software and IT infrastructure is very inexpensive and the technological skill of the administrators and editors does not require any special knowledge. It also means that the system is very easy to transfer to other regions and to adapt to their needs. There are no licensing costs or copyright issues to be taken into account.

In the case of BASTIS, the decision to use the wiki idea had three main reasons: First, wikis allow to providing freely formatted reports and profiles, combining numerical data, explanations, comments, links to other resources, footnotes, images, video and sounds. Thus, a wiki is much more flexible than an information system that collects data in fully structured way. Second, a wiki is designed to collect data in a collaborative way. Wikipedia as the most prominent application of the wiki idea shows that this collaborative approach works. BASTIS is dependent on multiple users and institutions to provide data and feed them into the information system. The collaborative nature of a wiki therefore supports this aspect in an almost ideal way.

Finally, the project team needed a robust and readily available solution. Wikipedia's software basis is Media Wiki, a free XAMP configuration. BASTIS uses this software and thus profits from several advantages Media Wiki provides: (a) It allows a high degree of display control through the extensive use of templates based upon CSS, (b) it allows detailed control of user rights and thus making it possible to exempt defined areas of the application from uncontrolled editing, (c) it allows integration of images, video and other media including the assignment of copyright schemes, (d) through Wikipedia, Media Wiki is probably the best known wiki system available today, (e) it only has minimal hardware requirements and even runs on most shared hosting servers as long as they provide the XAMP standard configuration, (f) it is free software.

Above, we described the free formatting capabilities (as opposed to a fully structured data scheme) of a wiki system as one of the advantages. However, if one wishes to collate data from several profiles in order to compare or export them, the free formatting can become a serious drawback. Luckily, there is a solution for this problem: Semantic Media Wiki (SMW), developed by Markus Krötzsch and Denny Vrandečić in Karlsruhe (Germany), allows tagging information in a profile and thus giving it a "meaning". SMW can collect the tagged data from various profiles and make them available for display or export at a central place. It is not relevant where the information is being stored, it is only important that it is tagged in a correct way. To avoid user confusion, BASTIS hides most of the tagging code through the use of templates and thus gives the user a clear structure for entering relevant information.

The wiki system is the core element of BASTIS. Two additional modules provide additional functionality. The editors use a weblog (blog) system mostly for announcements and a forum can be used for discussions among users (see Fig. 1). Both modules are also based upon free software making use of the XAMP server architecture. Altogether, the technical configuration of BASTIS provides a maximum of ease of use and functionality at a minimum of cost and has proven to be working well since going online in March 2011.

Fig. 1: Screenshot of the BASTIS starting page (www.bastis-tourism.info, March 21, 2013)

The screenshot shows the BASTIS website interface. At the top left is the BASTIS logo with the text 'baltic sea heritage tourism information service'. To the right of the logo is a navigation bar with 'wiki', 'blog', and 'forum' buttons, and a search box. Below the navigation bar is a sidebar with a 'wiki' menu and a 'Helpful Documents' section. The main content area features a 'Welcome to BASTIS!' message, followed by a detailed description of the service. Below this are three columns: 'wiki' (explaining the wiki's purpose and listing thematic sections like Destinations, Source Markets, Heritage Tourists, and Heritage Sites), 'blog' (describing the news center), and 'forum' (describing the discussion platform). On the right side of the main content, there is a map of the Baltic Sea Region and a 'BASTIS user survey' section. At the bottom, there is a footer with logos for AGORA 2.0 and the Baltic Sea Region Programme, along with a disclaimer about the EU Interreg project.

The set of indicators to be covered in BASTIS was developed together with the heritage tourism stakeholders in the BSR. A conceptual model was used to classify the indicators and to make sure that nothing was forgotten due to the bottom-up approach: A travelling person, the tourist, and a region she or he travels to, the destination, are essential for tourism. Other aspects, although they might be important, are secondary. This assumption is in line with a great deal of the tourism literature (e.g. Burkart and Medlik 1981, 42, Seddighi and Theocharous 2002, Pearce 2005). Our approach is to focus actively on these aspects and to describe which central factors determine whether and where tourism takes place (Lohmann 2009). In defining what leads to potential demand and a potential offer in tourism, it refers to the five factors being a prerequisite for tourism: (1) attractiveness, (2) amenities (or facilities) and (3) accessibility on the side of the region to become a destination and (4) ability and (5) motivation to travel on the demand side (Lohmann et al. 1998, 69).

The indicators put forward to use in BASTIS reflect the complexity of today's world by taking into account different aspects of both sides of the medal, supply (destination) and demand (source markets and tourism segments). Hence, the information in BASTIS is structured in thematic sections containing specific, interlinked profiles: Country profiles, with information on (1) tourism destinations in the BSR and (2) important source markets for those destinations; (3) Tourist segment profiles, providing information on special target groups; (4) Heritage site profiles, dealing with the heritage tourism attractions in the BSR (see Fig. 1).

The information processing for the thematic profiles follows a path of scanning for availability, selecting, compiling and reanalysing of existing tourism and socio-economic statistics, reports and surveys (e.g. Eurostat, TourMIS, National Statistical Offices, IMF statistics, CIA factbook, Flash Eurobarometer 258 and 291). Other than e.g. in the Italian National Tourism Observatory (INTO) no primary research is conducted (Nacca et al. 2010).

Obviously, sources with the most detailed, most complete and most harmonised set of data are preferred in the selection process. Yet, other sources, even if only valuable for single or few profiles, are used supplementary. Within each profile this implies that the more comparable sources come first, the more individual sources come second. This procedure needs a lot of effort put on clear references and definitions. To make the information profiles "digestible" for the heritage tourism practitioners on the local level, only the most important data are compiled and analysed, yet clear indications and direct links to the original sources are given if more details are available.

FURTHER LINKS

<http://bastis-tourism.info>

http://dl.dropbox.com/u/23683139/fp/FP_Sonntag_19092011.pdf

http://www.congress.is/11thtourismstatisticsforum/presentations/Ulf_Sonntag.pdf

REFERENCES

- Burkart, A. J. and S. Medlik. 1981. *Tourism – Past, Present, and Future*. 2nd edition. London: Heinemann.
- Leuf, B. and W. Cunningham. 2001. *The Wiki Way: Quick Collaboration on the Web*. Boston: Addison-Wesley.
- Lohmann, M. 2009. "Coastal Tourism in Germany – Changing Demand Patterns and New Challenges." In *Coastal Tourism Development – Planning and Management Issues*, edited by Dowling, R. and Ch. Pforr: 321-342. Elmsford: Cognizant.

- Lohmann, M., Kierchhoff, H. W., Kaim, E., and K. Warncke. 1998. "Küstentourismus in Deutschland: Nachfragestruktur und die Anfälligkeit für Klimaänderungen." *Tourismjournal*, 2. Jg., Heft 1: 67-79.
- Nacca, N., Di Maula, R., Arcangela, A., F. Coccia, 2010. "The Italian National Tourism Observatory: Governance and statistical issues: The experience of the Italian National Tourism Observatory (INTO) and the [www.ontit.it](http://10thtourismstatisticsforum.ine.pt/xportal/xmain?xpid=INE&xpgid=tur_papers&APERSEst_boui=101893552&PAPERSmodo=2) portal." http://10thtourismstatisticsforum.ine.pt/xportal/xmain?xpid=INE&xpgid=tur_papers&APERSEst_boui=101893552&PAPERSmodo=2 (Accessed Sept. 13, 2012.).
- Pearce, P. L. 2005. *Tourist Behaviour – Themes and Conceptual Schemes*. Clevedon: Channel View.
- Seddighi, H. R. and A. L. Theocharous. 2002. "A model of tourism destination choice: a theoretical and empirical analysis". *Tourism Management* 23: 475-487.

Annex 16. System of Environmental-Economic Accounts (SEEA) data for tourism

Please note: The present ANNEX is a full reproduction of EC, OECD, UN & WB. (2014). System of Environmental-Economic Accounting 2012: Applications and Extensions paragraph 4.40 to 4.59.

1. There are a number of perspectives on economic activity that may not be easily reflected in the structure of information on economic activity following standard international industry classifications. This may occur for two reasons. First, a particular activity may involve enterprises from a range of different parts of the economy each having different production functions and principle outputs. Consequently while the enterprises are classified to different industries they may have relationships that could be analyzed jointly. The most commonly considered activity in this regard is tourism activity. Another example would be activities around health (e.g. hospitals, pharmaceuticals, medical equipment, education, policy development, etc).
2. Second, there may be a particular activity that is undertaken by many enterprises in different industries but which may be difficult to identify in standard industry statistics since it is often not the principal activity of the enterprise. The most relevant example of this for environmental economic accounting is transport activity which is a significant user of natural resources and a significant contributor to air emissions. The own-production of energy is another activity that may fit this type of analysis. It is noted that for analysis of these specific activity an important aspect may be the own-account production of households in addition to production by enterprises.
3. This Annex presents an example of an extension of the SEEA Central Framework in relation to tourism activity: it therefore refers to the national level.

In general, the same considerations as described in relation to tourism will apply to other activities. That is, it will generally be necessary to start with a standard monetary PSUT or IOT, then determine the key products and industries of relevance to measurement of the activity (this may require disaggregation of some of the standard rows and columns), and finally extend the modified table with relevant physical flow information (e.g. on flows of emissions or solid waste).

Presentation of environmental-economic accounts data for tourism

Introduction

4. The importance of good information on the tourism sector has been recognised within the presentation of principles and objectives in the Lanzarote Charter developed at the 1995 World Conference on Sustainable Tourism. Significantly, it was observed in that charter that tourism can contribute positively to socio-economic and cultural development, while at the same time it can cause degradation of the natural environment and loss of local identity. Integrated environmental, economic and social information is essential, then, for defining policies regarding tourism.
5. In the context of the SEEA it is relevant to consider links between the accounting approach that has been developed for analysis of tourism, the Tourism Satellite Account (TSA), and the SEEA_CF since both are based on the accounting principles of the SNA. A combining of TSA and SEEA would enable consideration, within an integrated dataset of both the contribution of tourism to the economy and the environmental uses and pressures of tourism activities.

6. The extension of the SEEA suggested here is along the lines of an approach explained in the International Recommendations for Tourism Statistics 2008 (IRTS2008) whereby tourism is incorporated as a specific set of industries and of consumers within environmental combined physical and monetary flow accounts of the SEEA Central Framework (see SEEA Central Framework Chapter 6). The document *SEEA2012 Application and Extensions* provides a summary of the approach and uses of information from Italy where this approach has been trialled to give an insight to the potential in this area.
7. The coverage of the information concerning tourism and the environment in this case is not limited to consideration of what may be referred to as “eco-tourism”, i.e. tourism activities designed to enhance the connection between the tourist and the environment. Rather the coverage here is all type of tourism activities and its use of natural inputs and generation of residuals. In principle, the approaches described here may be applied more narrowly as data permit.
8. It is noted that TSA fall within the general family of satellite accounts described in the SNA (2008 SNA, Chapter 29) of functionally oriented accounts. More specifically, tourism is a concept that must be defined from the perspective of the consumer rather than the producer and hence the following description should be applicable to the combination of the SEEA with other functionally oriented satellite accounts defined from the demand side, such as health.

Key aspects of integrating tourism and environmental information

9. In general terms, the focus for measurement should be on regular monitoring of tourism activity and allowing analysis of the pressures emerging from tourism activities. Within this scope aspects to be considered particularly important include: current measures of tourism activity (e.g. value added, output, consumption), number of enterprises, employment supported, visitor facilities and services, environmental conditions (air, water), relative contribution of tourism to the economy. All these elements are of interest for making assessments concerning the tourism sector inspired by a holistic approach.
10. Satellite accounting, within official statistics, is a specific tool that in principle best allows the integration of information on the environmental, the economic and the social systems, by focusing on the interrelationships between these three distinct spheres. One specific advantage of accounting approaches is linking data on tourism and on the environment, to the economic aggregates of the core system of national accounts (e.g. GDP), by making use of common concepts, definitions and classifications.
11. From a methodological point of view, compiling a TSA requires a precise definition of the boundaries of the tourism sector. This is done through a focus on the qualitative and quantitative elements observed on the demand side, i.e. to the acquisition of goods and services (products) by visitors. Tourism consumption is then a key concept for a correct identification of tourism-related activities and consumption products. From the supply perspective, the aim is to describe the productive activities that provide the tourism products that visitors acquire.
12. The link to the SEEA can then be made by focusing on (i) the residuals generated as a result of tourism consumption (either by the visitors themselves or by the enterprises supplying goods and services to visitors; and (ii) the natural inputs used in the production of tourism products. Important connections may also be possible by linking measures of tourism activity to measures of ecosystem condition and extent. For example, activity to

improve the attractiveness of an area to tourists may lead to improvements in ecosystem condition. Alternatively, increasing tourism activity may increase environmental pressures and reduce ecosystem condition.

13. Measures of ecosystem condition and extent are not well developed. Initial efforts in this area are summarised in *SEEA Experimental Ecosystem Accounting* document which is the basic reference for any exercise linking environmental sustainability and tourism at subnational levels (see Chapter 8).
14. In line with the IRTS 2008, the following tourism products are distinguished:
 - tourism characteristic consumption products: those that satisfy one or both of the following criteria:
 - tourism expenditure on the product should represent a significant share of total tourism expenditure (share-of-expenditure/demand condition);
 - tourism expenditure on the product should represent a significant share of the supply of the product in the economy (share-of-supply condition). This criterion implies that the supply of a tourism characteristic product would cease to exist in meaningful quantity in the absence of visitors.”
 - tourism connected products: those of lower significance to tourism analysis.
15. Once the relevant set of tourism products is identified, connections to relevant producing industries can be made using standard supply-use and input-output relationships. These relationships form the core of the TSA model. Tourism expenditures are usually estimated on the basis of surveys of visitors and these data form the basis to distinguish between visitor and non-visitor expenditure.
16. Using the defined set of economic activities and products of relevance, the connection can be made to relevant environmental flows noting that some disaggregation of industry level data normally recorded in the SEEA accounts is likely to be required. Thus, the core of the approach consists of establishing a more complex type of input/output matrix in which not only the ‘usual’ inputs are considered, but also environment inputs established in quantity, and output also includes waste, greenhouse gas emissions and other environmentally significant by-products.
17. Table 4.3 [as part of this document it is Table 2] shows the type of information that may be organized using the type of matrix just described based on research undertaken in Italy. The main value added of the proposed framework stems from the fact that it organizes statistical information on economic and environmental aspects in a way that best enables a detailed assessment of the environmental pressures of the economic development of tourism. By making it possible to identify trade-offs between economic development and environmental pressures as far as tourism is concerned, the statistical information organized according to the framework is best suited for providing a valuable support to decision-making for sustainable tourism.

Table 3 Stylized tourism-environment accounts – specifying tourism industries and tourism characteristic consumption products. Source: SEEA Table 4.3. EC, OECD, UN & WB. (2014).

		Tourism Satellite Account (TSA) – Monetary units					Environmental accounts (SEEA) Physical units								
		Economic aggregates				Other	Environmental pressures								
		Production	Intermediate Consumption	Valued Added	Tourism consumption	Employment	Residual flows			Natural inputs					
							Air emissions	Water emissions	Solid waste	Energy resources	Minerals	Biological resources	Water		
Supply (tourism industries)	Accommodation for visitors														
	Food and beverage serving activities														
	Railway passenger transport														
	Road passenger transport														
	Water passenger transport														
	Air passenger transport														
	Transport equipment rental														
	Travel agencies and other reservation services activities														
	Cultural activities														
	Sports and recreational activities														
	Retail trade of country-specific tourism characteristic goods														
	Country-specific tourism characteristic activities														
	Use (tourism characteristic consumption products)	Accommodation services for visitors													
		Food and beverage serving services													
Railway passenger transport services															
Road passenger transport services															
Water passenger transport services															
Air passenger transport services															
Transport equipment rental services															
Travel agencies and other reservation services															
Cultural services															
Sports and recreational services															
Country-specific tourism characteristic goods															
Country-specific tourism characteristic services															

■ Not applicable

18. Once time series are made available, these tourism-environment accounts allow to assess, for example, whether or not decoupling is occurring and, in this perspective, they can be used as a key tool for assessing the sustainability of actions taken or policies proposed for adoption in the tourism sector.
19. Using the sequence of economic accounts outlined in SEEA Central Framework Chapter 6, it is also possible to consider the integration of information on relevant taxes, subsidies and similar transfer and also the connection to information on environmental protection expenditure.
20. Table 4.4 [within this document this table is Table 3] shows a simple way of depicting tourism related economic activity and environmental flows in contrast to other economic activities. As with the SEEA more generally, it is clear that the organization of information following integrated use of classifications and accounting principles can help to provide readily accessible and relevant information.

Table 4 Flows from tourism-environment accounts. Source: SEEA Table 4.3. EC, OECD, UN & WB. (2014).

	Tourism industries (%)	Other industries (%)		Tourism industries (%)	Other industries (%)
Production	5	95	Hg	0	100
Intermediate consumption	5	95	N2O	0.2	99.8
Value added	7	93	NH3	0	100
Employment	9.5	90.5	Ni	5	95
As	0	100	NMVOG	1.5	98.5
Cd	0.3	99.7	Nox	16	84
CH4	0	100	Pb	2	98
CO	2.5	97.5	PM10	8	92
CO2	4.5	95.5	PM2.5	10	90
Cr	0.5	99.5	Se	3.5	96.5
CU	6	94	Sox	15	85
			Zn	0	100

Annex 17. The demand perspective in tourism statistics: basic concepts and definitions

This annex reproduces some paragraphs of the International Recommendations for Tourism Statistics 2008 (UNWTO, 2008) (identifying the paragraph numbering originally assigned to such concepts and definitions within the UNWTO IRTS 2008); and they have been extracted and brought here as all of them are considered relevant for setting the focus of the document.

1. Tourism is a social, cultural and economic phenomenon related to the movement of people to places outside their usual place of residence, pleasure being the usual motivation. (para 1.1 within IRTS2008)
2. The activities carried out by a visitor may or may not involve a market transaction, and may be different from or similar to those normally carried out in his/ her regular routine of life. If they are similar, their frequency or intensity is different when the person is travelling. These activities represent the actions and behaviours of people in preparation for and during a trip in their capacity as consumers. (para 1.2 within IRTS2008)
3. Tourism has an impact on the economy, the natural and built environment, the local population at the places visited and the visitors themselves. (para 1.3 within IRTS2008)
4. Owing to this range of impacts and the wide spectrum of stakeholders involved, there is a need for a holistic approach to tourism development, management and monitoring. This approach is supported by the World Tourism Organization (UNWTO) in order to formulate and implement national and local tourism policies. (para 1.4 within IRTS2008)
5. Having more and reliable statistics is essential for policymakers to make effective decisions. Only with sufficient and adequate data that generate credible statistics is it possible to undertake different types of analysis of tourism. This is essential in order to evaluate the different aspects of tourism and to support and improve policy and decision-making. (para 1.5 within IRTS 2008).
6. 1.6. Tourism statistics are necessary for designing marketing strategies, strengthening inter-institutional relations, evaluating the efficiency and effectiveness of management decisions and measuring tourism throughout the national economy. (para 1.6 within IRTS 2008).
7. International Recommendations for Tourism Statistics 2008 focuses on the activities carried out by visitors and on measuring them with both monetary and non-monetary indicators. Its purpose is to provide a common reference framework for countries to use in the compilation of tourism statistics. (para 1.7 within IRTS2008)
8. The main objective of IRTS 2008 is to present a system of definitions, concepts, classifications and indicators that are internally consistent and that facilitate the link to the conceptual frameworks of the Tourism Satellite Account national accounts, the balance of payments and labour statistics, among others. In addition, general guidance with respect to data sources and data compilation methods is also provided and will be complemented by a forthcoming compilation guide. (para 1.8 within IRTS2008)⁴⁸

⁴⁸UNWTO has recently published *the International Recommendations for Tourism Statistics 2008 Compilation Guide*

9. The present focus is on the economic perspective and from this perspective tourism is defined as the activities of persons, identified as visitors. A visitor is someone who is travelling under certain conditions, namely, for holiday, leisure and recreation, business, health, education or other purposes. (para 1.9 within IRTS2008)
10. Tourism comprises the activities of all these categories of visitors. This scope is much wider than the traditional perception of tourists, which includes only those travelling for leisure. (para 1.10 within IRTS2008)
11. The notion of activities encompasses all the actions of visitors in preparation for a trip or while on a trip. It is not restricted to what are often considered “typical” tourism activities, such as sightseeing, sunbathing, visiting sites, and practising or watching sports. Being a visitor is a transient situation; once the trip is over, the individual loses his/her condition of being a visitor. (para 1.11 within IRTS2008)
12. As a demand-side phenomenon, the economic contribution of tourism has to be approached from the activities of visitors and their impact on the acquisition of goods and services. However, it can also be viewed from the supply side, and tourism will then be understood as a set of productive activities that cater mainly to visitors or for which an important share of their main output is consumed by visitors. These two aspects, as well as employment in the tourism industries, will be considered in the present volume. (para 1.12 within IRTS2008)
13. Travel refers to the activity of travellers. A traveller is someone who moves between different geographic locations for any purpose and any duration. (para 2.4 within IRTS2008)
14. Those who undertake travel, be it domestic, inbound or outbound, will be called domestic, inbound or outbound travellers, respectively. (para 2.6 within IRTS2008)
15. A visitor is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited. These trips taken by visitors qualify as tourism trips. Tourism refers to the activity of visitors. (para 2.9 within IRTS2008)
16. A domestic, inbound or outbound traveller on a tourism trip is called a domestic, inbound or outbound visitor, respectively. (para 2.10 within IRTS2008)
17. Furthermore, the travel of domestic, inbound or outbound visitors is called domestic, inbound or outbound tourism, respectively. (para 2.11 within IRTS2008)
18. Tourism is therefore a subset of travel and visitors are a subset of travellers. These distinctions are crucial for the compilation of data on flows of travellers and visitors and for the credibility of tourism statistics. (para 2.12 within IRTS2008)
19. A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor) if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise. (para 2.13 within IRTS2008).

Annex 18. About the operational definition of “travel party”

1. IRTS 2008 include three chapters on the demand perspective; as already mentioned, some paragraphs need further clarifications in order to avoid confusion regarding the link between “visitor” and “household” and a clear recommendation about the operationalization of “travel party” was presented (see 1.7). Because INRouTe’s strategic objective is the conceptual design of a Regional Tourism Information System (R-TIS), it would be obvious that if such recommendations could gain a more extended support by national key stakeholders, it would allow for exploring the opportunity for clarifications and editorial amendments in IRTS2008 such as:
 - In paragraph 3.6 one of the characteristics of visitors mentioned is “Annual household, family or individual income”: it seems obvious that the characteristic is “Income” irrespective how it has been estimated or what the reference period of such income might be.

Other paragraphs deserve also of such modifications to be introduced in a future update of the *IRTS 2008*. In fact, such document is not clear enough about the distinction between the new unit “**travel party**” and “**household**”; in this chapter a supplementary reasoning is presented in order to support such possibility.

2. Although defined as “visitors travelling together on a trip whose expenditure are pooled”, such official definition of “travel party” does not allow for the measurement of tourism expenditure to be linked “with the universe of visitors observed in other statistical procedures and to expand properly the data that have been collected” (*IRTS 2008* para. 4.36 (a)).

More precisely, *IRTS 2008* paragraph 1.34 (b) mentions that one of the criteria set forth in the set of concepts, definitions, classifications and indicators included in this international standard on tourism statistics is that “they should be consistent with definitions and classifications used in the national accounts, balance of payments, statistics of international trade in services, and household and migration statistics”.

3. With such objective in mind, *IRTS 2008* warns about the fact that “although many characteristics of visitors can be separately identified for each individual member of a travel party, some of them might not be so identified, as in the case of economic variables”. Chapter 4 “The demand perspective: tourism expenditure” makes the following statement: “in addition to the traditional measurement of the characteristics of visitors by means of physical (non-monetary) indicators, the measurement of the contribution of tourism to the economy requires the use of monetary variables. The present chapter provides a definition of tourism expenditure....It also provides some recommendations about its measurement” (*IRTS 2008*, para. 4.1)
4. One of such recommendations – paragraph 4.36 (i) indicates that “travel parties deserve special attention due to the following:
 - The pooling of some or all expenditures within a travel party so that different data reported in an expenditure survey will often refer to the travel party and not to each member
 - Some countries might find it relevant to define equivalence scales for all or some items of tourism expenditure as is the current practice in some household budget analysis

It should be noted that both reasons are very different: while the first one focus on the need for a proper operationalization of the definition of travel party to be used in “an

expenditure survey”, the second one focuses on an analytical issue related to a particular type of survey.

5. Other recommendation –*IRTS 2008*, paragraph 4.36 sections (g)- makes explicit that “most of the items of tourism expenditure are part of household final consumption”. Although a national account concept (and therefore a TSA issue), this reference is relevant because in *IRTS 2008* there is also other national account references regarding households: it relates to the concept of residence in Chapter 2 / section B.2. Such section refers to one of the basic concepts in tourism statistics because “the concept of residence allows for the classification of visitors according to their place of origin and for the characterization of their destinations, thus making possible to distinguish the different forms of tourism” (*IRTS 2008* para. 2.16)

The following paragraph (*IRTS 2008* para. 2.17) introduces confusion because it mentions that “the country of residence of a household is defined in exactly the same way as in the balance of payments and in a System of National Accounts ... As a consequence, it is possible to share and reconcile data coming from these different sources and to work in a coordinated way on related topics such as the measurement of the flows and the expenditure of international travellers and visitors”

The confusion arises for two reasons:

- The possibility of linking the expenditure of international travellers and visitors to other official statistical frameworks is explained in chapters 3 and 4 and linked to the new concept of “travel party” (as already explained)
 - When identifying the basic statistical units from the demand side, *IRTS 2008* does not include “household” but just “visitors”, “travel party” and “trips”
6. Also the third and final paragraph of *IRTS 2008* section B.2 on the concept of residence, adds confusion to the use of the concept of “household” in the *IRTS 2008* because:
 - it introduces the topic of the measurement of domestic tourism at a subnational level
 - Recommends that “residents in a given country be classified according to their place of usual residence, as determined in household surveys”
 - Highlights that “determining the place of usual residence and thus the principal dwelling of a household is not always straightforward as some individuals might stay for long periods of time in more than one place (for example, retirees) and thus have a strong link with more than one local economy”
 - True enough, all these different types of references points to the need for an operational definition of the “travel party” and as an added outcome, making explicit the link of such a concept with “household”. Nevertheless, all along this reasoning - arguing for further clarifications - it should be bore in mind that the individual (named as “visitor”) is the central observation unit all along the conceptual framework of tourism statistics: more precisely The usual environment, the basic core of such framework, refers only to the individual (defined as “the geographical area –though not necessarily a contiguous one- within which an individual conducts his/her regular life routine”)
 7. “The usual environment of an individual includes the place of usual residence of the household to which he/she belongs, his/her own place of work or study and any other place that he/she visits regularly and frequently” (*IRTS 2008*, para. 2.25)
 8. Arguing for further clarifications is further needed because the main statistical units in tourism (the **visitor** and **travel party**) are, properly speaking, derived (that is, those units

which are constructed during the statistical production process, but not directly observed):

- For a traveller to qualify as visitor, he/she must answer, at least, to the main purpose of the trip and eventually, also to some related questions. It should not be a self-declaration
 - In order to identify a travel party, visitors must provide information about the persons with which he/she travels and confirm that all of them share a same budget
9. It is recommended to use as a first operational definition of the “travel party” which assumes that such unit might coincide with the household if, and only if, all the members (and only them) travel together. Increasing change in travel patterns also justifies the opportunity to be more precise when analyzing tourism behaviour of those visitors travelling or intending to travel together but not being part of the same household.

As a complementary remark, it should be noticed that:

- the link of “travel party” and “household” is a relevant issue only for the measurement of resident visitors domestic tourism
 - while household is a classification category in different statistical universe types, that is not the case of “travel party”, as there is no room for a statistical universe.
10. It should be noticed that most of the references to “households” refer to quotation of different paragraphs of the System of National Accounts 2008 included in the TSA official document with the intention that basic TSA aggregates (such as “Internal tourism consumption” –defined in 4.113 as “the central aggregate to describe the size of direct visitor acquisition within the country of reference”-) should be estimated in a similar way for those common items included as SNA aggregates (such as “final consumption”): such purpose is precisely behind the term “satellite” of the TSA (meaning that the TSA shares the same concepts, definitions and classifications as SNA).
11. As a final remark, the point is that TSA aggregate refers to visitors whilst SNA aggregate does to household; no table of TSA refers neither to “travel parties” nor to “households”.

Tourism practitioners –including tourism officials who commission surveys and research, and those who undertake such surveys- interested in this approach might find further explanations in chapter 5.

(For more details, interested readers should see Annex 6/4 “Understanding the relevance of households in the System of National Accounts”)

Annex 19. Understanding the relevance of households in the System of National Accounts⁴⁹

The System of National Accounts (SNA2008) is a standard accounting system that summarizes the transactions within the economy and the rest of the world. More specifically, the system of national accounts represents an integrated set of standard concepts and classifications applicable to the most important macrodata of economic statistics and characterized by the fact that all concepts are interrelated within a system of definitional relations. They represent a useful frame for developing statistics, facilitating the identification of gaps and the setting of priorities in quantitative perspective (para. 371).

Of particular interest are the accounts by industries and *institutional sectors*. The breakdown of the economic accounts of the nation into institutional *sector units*, such as households, aims to study their economic behavior in terms of the kind of income they receive, how incomes are used, etc.

An *institutional unit* is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities with other units. It takes economic decisions on what to produce and how to finance its activities and is directly accountable at law; household is one of such units. The resident institutional units make up the total economy

A household refers to “all persons who occupy the same housing unit and share responsibilities and resources. A household may consist of a family, one person living alone, two or more families living together, or any other group of related or unrelated persons who make joint decisions and share resources. These persons may or may not be related to each other”.

The sector includes resident household units as consumers and also most of all their economic activities. The household sector can be further subdivided by main sources of income (mainly into employers / own-account workers / employees / others) and by types of income for accountability or other analytical purposes

Institutional sector accounts derive for each institutional sector value added, primary income, disposable income, final consumption expenditure, saving, gross capital formation, net lending or net borrowing like those of the whole economy. Sector accounts provide information on transactions in income and financial flows between domestic sectors and between the domestic sectors and the rest of the world: this information allows for an analysis of the institutional structure and behavior of every institutional sector in the economy. In the case of the household sector the main objective is to measure the consumption of households not only from their own final expenditure but also from the expenditure of other sectors to benefit them.

⁴⁹ Handbook of Statistical Organization (third edition), Studies in Methods Series F No.88, United Nations, New York, 2003

Annex 20. Adapting the Tourism Satellite Account at the Subnational levels⁵⁰

Tourism in a country is unevenly “localized” in the national territory, from the perspective of both demand and supply. Consequently, it generates additional demand at the different territorial levels that needs to be measured using reliable and suitable tourism statistics for decision-making by public and private stakeholders, within a framework of coherence and compatibility with national and regional statistics.

The territorial localization of tourism is a necessity from both the regional and national perspectives, and, consequently, the regional development of the systems of tourism statistics of a country is obligatory. Its implementation will depend on the priority that is given to one of the following two approaches: an interregional or regionalization approach, or a regional approach. International Recommendations for Tourism Statistics 2008 addresses the specific issues related to establishing tourism statistics covering different geographical environments and the need for definitions and concepts to adjust to such new venues, particularly the usual environment, the definition of the different categories of visitors, and the existence of different procedures to relate tourism statistics at other geographical levels with national tourism statistics (see IRTS 2008, chap. 8.C).

There are various reasons for encouraging discussion on how the Tourism Satellite Account can be adapted to the subnational level:

- The worldwide trend towards a certain degree of decentralization of political power and, more especially, the decentralized management of national resources in federal states, regions, municipalities, etc., which, in order to allocate and monitor those resources effectively, needs more and better integrated regional and local information;
- The multifaceted nature of tourism activities, which can potentially benefit rural areas seeking to diversify, as well as areas overlooked so far as the prevailing production model is concerned;
- The unequal geographical distribution and characteristics of tourism activity within the national territory, from the standpoint of both demand and supply, leading to additional requirements for tourism statistics at the various territorial levels;
- The growing interest of tourism-related businesses in learning about the interrelation of their activity with others and its main determinants and seasonal cycles;
- The necessity of improving the allocation of resources in national and local economies, which can only be achieved by upgrading quantitative references and measuring economic impacts.

There are two possible approaches to this adaptation:

- The interregional approach, which would be common to all the regions of the national territory and based on and intimately linked to the System of National Accounts. It is an approach that relies on the existence of a national Tourism Satellite Account and the availability in each region of uniform tourism information for each of the tables and aggregates to be regionalized;
- The regional approach, which would entail the development of a specific Tourism Satellite Account for any given region, in which specific situations and differentials may also be identified for important sub-regional territories, provided there is sufficient information on them.

⁵⁰ This Annex reproduces TSA:RMF 2008 Annex 7

For either of these approaches, the first thing to note is that no conceptual framework exists at regional level equivalent to that of the System of National Accounts: the System of National Accounts 2008 does not define a specific framework for regional accounting, nor are the general statistical systems of most countries designed for this purpose. When the national accounts speak of regional accounts, they refer to a table or set of aggregates but never to a set of associated accounts developed to a similar degree. This is due not only to observation difficulties, which are many owing to the non-existence of border controls in these territories, but also to the fact that many national accounting concepts are not directly applicable at subnational level.

Only in the European System of Accounts (ESA-2000 is an adaptation of the System of National Accounts 2008) is there a simplified scheme of regional accounts, which owes its existence to the regional policy applied by the European Union for the distribution of structural and other funds.

At present, for neither of the two approaches (interregional or strictly regional) nor for each and every region in most countries is it possible to make a strict identification of tourism activity in terms of the scheme used in the design of the System of National Accounts 2008 and the Tourism Satellite Account, whose formal representation is a body of interconnected accounts and accounting aggregates. There are three main reasons for this:

- Not all tourism variables (for instance, trips, residence and forms of tourism) are additive or easily transportable from the national environment to the subnational level; the same applies to other variables, such as the export and import of goods and services;
- Some activities cannot, strictly speaking, be regionalized (auxiliary activities of multiregional units and central government services related to tourism), and for others, such as the interregional transport of passengers and tour operator and travel agency services (more specifically, the disaggregation of the tourism package), measurement is even more complicated than at the national level; and
- The enormous amount of statistical information required because, although officially there are administrative boundaries separating the regions, there is free movement of people, goods, services, capital, etc., which means that no instruments are in place for monitoring flows to and from the region.

Nevertheless, the greatest restrictions occur on the demand side, both because of the requirement to adapt the conceptual framework of the Tourism Satellite Account (the definitions of such concepts as usual environment, residence, forms of tourism, trips and purpose of the trip are the most significant examples) and because of the complexity and cost of capturing the corresponding data.

Among statisticians and national accountants in particular, the first option (interregional) corresponds to what is known as the “top-down” approach, whereas the second (regional) is known as the “bottom-up” approach.

It should be noted that the top-down approach provides a set of regional estimates that adds up to the national Tourism Satellite Account totals and can be interpreted as shares of those totals and are comparable to one another, while the bottom-up approach is likely to produce a set of regional estimates that adds up to greater than the national Tourism Satellite Account totals and can only fairly be compared to one another.

Annex 21. Statistical units and residence in the case of industries

2.3.1.1. Introduction⁵¹

A feature of the system is the use of types of unit corresponding to three ways of subdividing the economy (ESA 2010, par. 2.03): a. To analyse flows and positions, it is essential to select units, which make it possible to study behavioural relationships among economic agents. b. To analyse the process of production, it is essential to select units that bring out relationships of a technological-economic nature, or that reflect local activities. c. To allow regional analyses, units that reflect local kinds of activity are needed.

Institutional units are defined to meet the first of these objectives. Behavioural relationships as described in (a) require units reflecting all of their institutional economic activity. The production processes, technological-economic relationships and regional analyses of (b) and (c) require units such as local kind-of-activity units (local KAUs).

Two types of unit are distinguished for the national economy. Firstly, records for the institutional unit reflect flows affecting income, capital and financial transactions, other flows and balance sheets. Enterprises are an example of an institutional unit. A characteristic of enterprises is that they can engage in production activities at more than one location, and for regional accounts it is necessary to allocate the activities to location. Where enterprises are partitioned by location, the partitioned parts are called local units.

Institutional units can be classified on the basis of economic activities, describing the economy's production activities by industry. This results in heterogeneous industries, as many enterprises have substantial secondary activities that are different from their principal activity. It also results in some industries having the principal product of the industry as a small proportion of total output. In order to obtain groups of producers whose activities are more homogeneous in terms of output, cost structure and technology of production, enterprises are partitioned into smaller and more homogeneous units. These are called kind-of-activity units (KAUs).

The local kind-of-activity unit (local KAU) is the part of a KAU which corresponds to a local unit. When a KAU is engaged in production activities in several regions, the information on the KAU is split in order to obtain regional accounts.

Secondly, records for the local KAU show flows occurring in the process of production and in the use of goods and services (ESA 2010, par. 13.13). For regional accounts, depending on the size of the regional level, two types of institutional units can be distinguished: Uniregional units and multiregional units.

2.3.1.2. Uniregional units

Uniregional units are units for which the centre of predominant economic interest is in one region. Examples of uniregional units are: households; unincorporated enterprises; corporations whose local KAUs are all located in the same region; most local and regional governments; part of social security; and some non-profit institutions serving households (NPISH). All their transactions are allocated to the region in which they are resident.

⁵¹This Annex reproduces subsection 2.3.1. of the Manual on Regional Accounts Methods, Eurostat, December 2012

2.3.1.3. Multiregional and heterogeneous units

Multiregional units are units for which the centre of predominant economic interest is in more than one region. Corporations and NPISH are examples of units which can span regions. Other examples are institutional units whose activities span the whole country, such as central government and a small number of corporations exercising monopolies or near-monopolies.

With regard to available data for regionalisation of activities of industries, two main possible situations can be distinguished: 1. Full data for the local KAUs can be provided. No problems arise; the compilation of aggregates by industry and their correct regional allocation is straightforward. 2. Full information exists only at enterprise level. The regional data have to be estimated for all enterprises or KAUs with local KAUs in different regions.

Annex 22. Main statistics used to develop the R-TSA for Madrid / Spain

Table 5 Main Statistics used to develop the Tourism Satellite Account in Madrid. Source: Cañada, 2013

Title	Objectives and characteristics	Territorial scope	Timeframe	Agency
a) Demand				
Survey of visitors in tourism places	Characterization of the visitors to regional places of tourism. Estimation of tourism consumption in the region	Regional	2010, 2011	Statistical Institute of the Community of Madrid
Survey on tourism expenditure (EGATUR)	Estimation of expenditure by non-resident visitors (inbound tourism consumption)	National with regional breakdown	Monthly	IET - INE
Tourist movements at frontiers (FRONTUR)	Quantification and characterization of foreign visitors (inbound tourism consumption).	National with regional breakdown	Monthly.	IET
Survey on tourism expenditure by resident households	Estimation of tourism expenditure by resident households in the Region (domestic and outbound)	Regional	2009	Statistical Institute, Community of Madrid
Survey on family budgets	Distribution of expenditure by resident households	National with regional breakdown	Annual	INE
Tourism travel by residents (FAMILITUR)	Quantification and characterization of travel by Spanish residents.	National with regional breakdown	Monthly	IET
Survey on occupancy of tourist accommodations	Travellers in hotel establishments	National with regional breakdown		INE
Survey on intermediate consumption by businesses in the Community of Madrid	Business travel: Regional survey on intermediate consumption: specific business travel module for companies residing in the region.	Regional	Biannual. Latest: 2010	Statistical Institute, Community of Madrid
b) Supply				
Structural statistics on the services sector: tourism supply	Includes estimates of the economic variables referring to tourism-related activities. (Hotel and similar establishments, restaurants, travel agencies, passenger transport and vehicle rentals)	National with regional breakdown	Annual	INE
Module for travel agency and tour operator services (Annual Survey on Services)	Information on income by type of services supplied (tourism packages, product supplied individually, etc.) and on the composition of packages.	National with regional breakdown	Annual	INE
Specific module for accommodation services (Annual Survey on Services)	Information from hotel enterprises on production by type of service (accommodation, restaurant and related expenditures)	National with regional breakdown	Annual	INE
Hotel price and revenue index	Trends in invoiced pricing	National with regional breakdown	Monthly	INE
Workforce survey (EPA)	Compilation of employment statistics	National with regional breakdown	Quarterly	IET
Social Security records	Contributors by work centre	National with regional breakdown	Monthly	Social Security,
Register of hotel enterprises of the Community of Madrid	Number of enterprises by category	Regional	(Register) Continually updated	Statistical Institute, Community of Madrid
Housing and building census.	Secondary homes by location and frequency of use	National with regional breakdown	Latest available: 2001	

IET: Institute of Tourism Studies (Ministry of Industry and Tourism).

INE: National Institute of Statistics.

Annex 23. Correspondence between the classification of fixed assets according to CPC ver.2 and the classification of tourism specific assets from TSA: RMF 2008

Table 6 The correspondence between the classification of fixed assets according to CPC ver. 2 and the classification of tourism specific assets from TSA:RMF (2008). Source: Frent (2014, Annex 3) from SNA, 2008, pp.202-207, UNSD, 2014c and TSA:RMF, 2008, pp.98-99.

No	SNA (2008) categorization of fixed assets	CPC Ver. 2 (part of)	Tourism-specific assets
1.	Dwellings	5311 Residential buildings 3870 Prefabricated buildings	Vacation homes (all types of ownership)
2.	Other buildings and structures		
2.1.	Buildings other than dwellings	53129 Other non-residential buildings 53122 Commercial buildings	Hotels and other accommodation facilities for visitors Restaurants and similar buildings for food-and beverage-serving services Buildings for cultural and similar services mainly for use by visitors Facilities for sport, recreation and entertainment (only indoor) Buildings and infrastructure for the long distance transport of passengers (i.e. passenger transport terminals) Other facilities and structures (i.e. for shopping centres)
2.2.	Other structures	5321 Highways (except elevated highways), streets and roads 5322 Bridges, elevated highways and tunnels 53232 Harbours, waterways and related facilities 53270 Outdoor sport and recreation facilities	Buildings and infrastructure for the long distance transport of passengers Facilities for sport, recreation and entertainment
2.3.	Land improvements	54320 Site formation and clearance services	Improvements of land used for tourism purposes
3.	Machinery and equipment		
	Transport equipment	49113 Motor cars and other motor vehicles principally designed for the transport of persons 49116 Motor vehicles, for the transport of persons, specially designed for travelling on snow; golf cars and similar vehicles 49222 Trailer and semi-trailers of the caravan type, for housing or camping 495 Railway and tramway locomotives and rolling stock, and parts thereof 4991 Motorcycles and side-cars 49921 Bicycles and other cycles, not motorized 49311 Cruise ships, excursion boats and similar vessels, principally designed for the transport of persons; ferry boats of all kinds	Passenger transport equipment: Land Sea

No	SNA (2008) categorization of fixed assets	CPC Ver. 2 (part of)	Tourism-specific assets
		494 Pleasure and sporting boats 4961 Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft 4962 Aeroplanes and helicopters	Air
	Other machinery and equipment	43 General-purpose machinery 44 Special purpose machinery 45 Office, accounting and computing equipment 46 Electrical machinery and apparatus 47 Radio, television and communication equipment and apparatus 48 Medical appliances, precision and optical instruments, watches and clocks 381 Furniture 383 Musical instruments 384 Sport goods	Other machinery and equipment specialized for the production of tourism characteristic products

Source: SNA, 2008, pp. 202-207, United Nations Statistical Division, 2014c and TSA:RMF, 2008, pp. 98-99

Annex 24. What CPC products are included or excluded from the corresponding industries of the elements that make up Tourism Collective Consumption

Table 7 What CPC products are included or excluded from the corresponding industries of the elements that make up Tourism Collective Consumption. Source: Frent (2014, Annex 5) based on UNSD 2014a

No	Generic name	Corresponding industry (ISIC Rev. 4)	CPC products included	CPC products excluded
1.	Tourism promotion & Visitor information	7990 Other reservation service and related activities	85561 Tourism promotion services 85562 Visitor information services	85512 Reservation services for rail transportation 85513 Reservation services for bus transportation 85514 Reservation services for vehicle rental 85519 Other transportation arrangement and reservation services n.e.c. 85521 Reservation services for accommodation 85522 Timeshare exchange services 85539 Reservation services for event tickets, entertainment and recreational services and other reservation services 85550 Tourist guide services
2.	Public administrative services specific for tourism and tourism industries (excluding cultural and recreational activities)	8413 Regulation of and contribution to more efficient operation of businesses	91136 Public administrative services related to tourism affairs 91135 Public administrative services related to the distributive and catering trades, hotels and restaurants* 91134 Public administrative services related to transport and communications* 91137 Public administrative services related to multipurpose development projects*	91131 Public administrative services related to agriculture, forestry, fishing and hunting 91132 Public administrative services related to fuel and energy 91133 Public administrative services related to mining and mineral resources, manufacturing and construction 91138 Public administrative services related to general economic, commercial and labour affairs
<i>Part of</i>				
3.	Market research in tourism	7320 Market research and public opinion polling	83700 Market research and public opinion polling services	No CPC code left to be excluded but it should exclude all what is not related to tourism
4.	Public order and safety related to tourism	8423 Public order and safety activities	91260 Police and fire protection services	91270 Public administrative services related to law courts 91280 Administrative services related to the detention or rehabilitation of criminals 91290 Public administrative services related to other public order and safety affairs

No	Generic name	Corresponding industry (ISIC Rev. 4)	CPC products included	CPC products excluded
5.	Education related to tourism	8549 Other education n.e.c. 8550 Educational support services	92919 Other education and training services, n.e.c. 92920 Educational support services	No CPC code left to be excluded but it should exclude all what is not related to tourism
6.	Research and development related to tourism	7210 Research and experimental development on natural sciences and engineering 7220 Research and experimental development on social sciences and humanities	81119 Research and experimental development services in other natural sciences (e.g. related to environment) 81300 Interdisciplinary research and experimental development services 81212 Research and experimental development services in economics 81219 Research and experimental development services in other social sciences 81300 Interdisciplinary research and experimental development services	81111 Research and experimental development services in physical sciences 81112 Research and experimental development services in chemistry and biology 81121 Research and experimental development services in biotechnology 81129 Research and experimental development services in other engineering and technology 81130 Research and experimental development services in medical sciences and pharmacy 81140 Research and experimental development services in agricultural sciences 81400 Research and development originals 81211 Research and experimental development services in psychology 81213 Research and experimental development services in law 81221 Research and experimental development services in languages and literature 81229 Research and experimental development services in other humanities 81211 Research and experimental development services in psychology 81400 Research and development originals
7.	Official statistics for tourism	8411 General public administration activities	91113 Overall economic and social planning and statistical services*	91111 Executive and legislative services 91112 Financial and fiscal services 91114 Government services (administrative services) to research and development 91119 Other overall government public services 91191 Administrative services related to government personnel

Annex 24. What CPC products are included or excluded from the corresponding industries of the elements that make up Tourism Collective Consumption

No	Generic name	Corresponding industry (ISIC Rev. 4)	CPC products included	CPC products excluded
				91199 Other administrative services of the government n.e.c.
8.	Public administrative services specific for culture and recreation	8412 Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security	91124 Public administrative services related to recreation, culture and religion*	91121 Public administrative services related to education* 91122 Public administrative services related to health care 91123 Public administrative services related to housing and community amenities*

* - part of

Source: own conception based on United Nations Statistics Division, 2014a

Annex 25. A Meetings Satellite Account (MSA) for the UK

A Meetings Satellite Account (MSA) for the UK

By Calvin Jones (Cardiff Business School), ShiNa Li & Jackie Mulligan (Leeds Metropolitan University)

1. Introduction

In 2012, Leeds Metropolitan University in collaboration with partners were commissioned by the MPI Foundation to present an economic impact assessment of the Meetings Industry (MI) in the UK. Whilst this built upon previous studies, the project was the first that transparently constructed its estimates using established Tourism Satellite Accounting processes, concepts and approaches, and referenced established conceptual work by UNWTO, Larry Dwyer and colleagues.

The compilation of the MSA was supported by (and in turn enabled) a comprehensive evaluation of the economic impact of this activity in the UK, supported by the industry, relevant associations, NGOs and government. Information was collected via bespoke online surveys and was in addition to extensive surveys of MI attendees – including panel data covering overseas attendees. Overall some 3,500 stakeholder and attendee survey responses were collected.

The primary work resulted in the most comprehensive study yet to assess the *direct* economic impact of the UK meetings. An assessment was also made of the indirect and sub-national impact of MI activity (not TSA-based) but those results and implications are not discussed here (see in *Further Links* the Meetings Professionals International (MPI) Foundation research documents)

2 Compiling a Meetings Satellite Account (MSA)

2.1 Structuring the Supply Side

Achieving 'headline' estimates of gross value added and dependent employment for the meetings industry requires the creation of a satellite account to the system of national accounts (SNA) that can decompose the output of these industries into inputs, taxes, payments to labour and then other value added. This was here achieved through manipulation and further refinement of the existing Tourism Satellite Account for the UK. The 'Exhibitions and Conferences' TSA sector was disaggregated into two, more appropriate supplying industries and supplied products – meeting and conference organisers (and services), and meeting and exhibition venues (and services).

In order to replicate the 'make matrix' of TSA Table 5 (from whence key indicators are estimated) for each of our new industries (columns) we must estimate their constituent products – what products is it that these industries supply? Whilst most industry output is of the core product there may be significant other commodities produced – for example, for 2011 we estimate that meeting and exhibition venues supplied around £225m of accommodation services (see Table 1). Here, the information gleaned from the survey detailed in Section 1 above is critical in understanding the behaviours of the industries in question and then estimating the overall production function. A critical arising from this survey was an estimate also of transactions between meeting organisers and meeting venues – in terms mostly of hire fees. The disaggregation and integration of these two industries within the MSA structure helps avoid any double counting.

Table 1: Production (Make) accounts of UK Meetings Industry and other industries (summarised) 2011 Estimate (at basic prices) (£ million)

Products	Accom. for visitors	Food and beverage serving industry	Sport, recreation & culture	Meeting Organisations	Meeting Venues	TOTAL	Other industries	Output of domestic producers (at basic prices)
Accommodation services for visitors	11,827	296	43		226	12,392	277	12,669
Food and beverage serving services	8,401	60,615	506		743	70,477	15,753	86,230
Railway passenger transport services	-	-	-		-	9,235	-	9,235
Road passenger transport services	-	-	-		-	4,049	2,877	6,926
Water passenger transport services	-	-	-		-	5,537	3	5,541
Air passenger transport services	-	-	-		-	16,388	391	16,779
Transport equipment rental services	75	53	243		-	6,574	6,167	12,741
Travel agencies & other reservation services	-	-	3		-	2,351	-	2,351
Sport, recreation & culture activities	-	-	24,515	194	-	24,710	489	25,199
Exhibitions & Conferences - Organisers			-	6,391	-	6,391	1,339	7,729
Exhibitions & Conferences - Venues	155		-	-	4,701	4,856	371	5,227
Other consumption products	161	600	3,182	2,578	793	21,549	2,537,141	2,558,690
TOTAL OUTPUT	20,618	61,563	28,492	9,163	6,463	184,508	2,564,807	
TOTAL INTERMEDIATE CONSUMPTION (at purchasers prices)	12,154	31,447	17,188	5,644	3,981	106,243	1,310,360	1,416,603
TOTAL GROSS VALUE ADDED (at basic prices)	8,464	30,117	11,304	3,519	2,482	78,265	1,254,447	1,332,712

2.2 Estimating Meeting Demand

The survey of over 1,600 meeting delegates provided information on the spending by category of attendees and their accompanying persons, with this grossed up to estimated overall visitor volumes. A critical element is the re-allocation of meeting fees which often comprise, in part, an indirect payment for accommodation services. Here, then, the industry survey helps us undertake the appropriate reallocation, whilst following TSA practice and reporting organiser economic output *net* of these non-value adding purchases (but gross of relevant fees; it should be noted that this treatment is not replicated for payments to event venues by meeting organisers where we treat venue hire as an intermediate input to the production of MI services). Also on the demand side is the spending of exhibitors at conferences (where a survey with over 800 respondents was available for estimation purposes). This is conceptually rather unsound: exhibitors are themselves more usually companies or organisations, rather than a component of final demand. However, embedding the spending of exhibitors into the MSA supply side proved challenging. Each exhibitor has a 'home industry' and these range widely depending on the subject of the exhibition. Full estimation would mean altering every industry of the TSA to reveal exhibition payments to venues and meeting organisers. With no data available on the 'home industry' of exhibitors in UK-aggregate (let alone to estimate the size of payments by exhibitors')

industries), the preferable option was to treat exhibitors as a final demand factor to the MSA supply side, and thus incorporate the economic activity consequent on that spending, albeit at the expense of conceptual purity.

2.3 Headline Results in Brief

We estimate total MI consumption at £34bn for 2011 in the UK. Almost two thirds of this consumption arose from spending by UK-based attendees and accompanying persons (£21.2bn or 62%). Most of the rest was from non-UK based MI attendees (Table 2). Overall, 25% of spend accrued to meeting organisers; 20% to accommodation; around 9% each to food and beverage and air transport services; and 17% to non-tourism services.

Table 2: Demand for MI commodities and other commodities in the UK, 2011, £million

	UK resident Attendees (inc. accompanying and exhibitors)	ROW resident Attendees (inc. accompanying and exhibitors)	Organisers revenue from overseas (exports by organisers)	Operation spend by exhibitors	Internal meeting demand (total)
Accommodation services for visitors	4,705.2	2,214.3			6,919.5
Food and beverage serving services	2,061.3	1,101.6			3,163.0
Railway passenger transport services	1,411.6	418.6			1,830.2
Road passenger transport services	1,187.5	705.0			1,892.6
Water passenger transport services	201.7	88.1			289.8
Air passenger transport services	1,053.1	1,839.7			2,892.8
Transport equipment rental services	425.7	242.4			668.1
Travel agencies & other reservation services	291.3	187.3			478.6
Sport, recreation & culture activities	806.6	517.8		49.4	1,373.8
Exhibitions & Conferences - Organisers	5,265.1	1,788.6	1374.0		8,427.7
Exhibitions & Conferences - Venues				172.5	172.5
Other consumption products	3,697.0	1,619.4		598.8	5,915.2
Total	21,106.0	10,722.9	1374.0	820.8	34,023.7

Reconciliation of the supply side and the demand side for the MSA enables our estimate of directly supported gross value added and employment. This process is conceptually identical to that undertaken in estimating headline outputs from Tourism Satellite Accounts via estimation of a 'meetings ratio on supply' (albeit slightly simplified to reflect data constraints). We estimate that 11% of Air passenger transport services supply is directly related to meeting activity. This ratio is then applied to the gross value added (from the MSA) and employment (estimated from the MI surveys and other published sources) for the relevant industry to achieve meetings-dependent GVA and employment (in full time equivalent employees -FTE figures-) for that industry. The sum of MI-dependent GVA and employment for all industries then provides the estimate of the overall gross value added and employment directly supported by MI activity in the UK in 2011.

This analysis suggests MI in the UK directly supported £20.6bn of gross value added in the UK, with around £8bn (39%) within the MI industry itself - i.e. venues and organisers. MI supported £3.7bn of Accommodation GVA and £1.6bn in Food and beverage serving. MI supported 423,000

full-time equivalent jobs in 2011, with only 8% (33,000) of these in MI industries, showing the high level of value added per employee in these activities compared to other visitor facing sectors. The sectors to benefit most in employment terms were Accommodation; and Food and beverage serving. We estimate around 1.9% of all UK FTE employment was directly MI-dependent in 2011 (Table 3)

Table 3: MI directly dependent gross value added and directly dependent employment in the UK, 2011

Industries	GVA (£ million)	Employment (FTE figures)
Accommodation services for visitors	3,738	133,228
Food and beverage serving services	1,671	54,607
Railway passenger transport services	899	15,585
Road passenger transport services	700	45,951
Water passenger transport services	101	273
Air passenger transport services	692	6,605
Transport equipment rental services	210	1,772
Travel agencies & other reservation services	633	15,711
Sport, recreation & culture activities	588	25,025
Meeting Organisations	3,449	14,755
Meeting Venues	2,220	18,399
Other consumption products	5,737	87,006
Total	20,639	423,445

3. Conclusion

This paper shows that it is possible to refashion an extant TSA into a ‘first-cut’ meetings satellite account with a modest amount of structural alteration. There are some conceptual decisions to be made, for example regarding the treatment of indirectly purchased services (such as accommodation), but established World Tourism Organisation (2006; 2008) guidance is fit for the purpose of helping the MSA compiler chart a reasonable path. However, this attempt required extensive research effort that included both meeting attendees; exhibitors; organisers and venues, extending across a number of countries. This effort was industry-resourced and wholly additional to the UK statistical office’s own TSA efforts, which were fully used (and needed) in MSA development. To compile an MSA is therefore not a trivial task, due mostly to the need for data on attendee and industry behaviour (in economic terms) that are far in excess of those gathered in business or tourism surveys, or contained in administrative datasets. The re-engineering of such surveys to enable the fuller reporting of MI activity within national TSAs then requires identifiable benefits and beneficiaries to offset the clear costs. These benefits can be seen in some cases (the policy use of CGE models in Australia being a case in point) but requires significant investment in both the difficult collection of data from MI attendees and industries, and in underlying statistical systems – whether at national or regional scale.

Further links

<http://www.mpiweb.org/UKEIS/ReportSummary>

<http://www.mpiweb.org/UKEIS/ReportFinal>

World Tourism Organization (2014). AM Reports, Volume seven-Global Report on the Meetings Industry.UNWTO, Madrid

References

Deery, M. Jago, L., Fredline, L. and Dwyer, L. (2005), *National Business Events Study Australia for Sustainable Tourism CRC*

http://www.crctourism.com.au/wms/upload/resources/bookshop/NBES_FINAL_Mar05.

[pdf](#) [accessed 5th March 2014]

Dwyer, L., Deery, M., Jago, L, Spurr, R., Fredline, L. (2007) 'Adapting the Tourism Satellite Account Conceptual Framework to Measure the Economic Importance of the Meetings Industry', *Tourism Analysis* 12(4), 247-255(9)
<http://dx.doi.org/10.3727/108354207782212459>

Jones, C. & Munday, M. (2008), 'Tourism Satellite Accounts and Impact Assessments: Some Considerations', *Tourism Analysis* 13(1), 53-69 DOI: 10.3727/108354208784548788

Jones, C., Munday, M. and Roberts, A. (2009) Top down or bottom up? Issues in the development of sub-national tourism satellite accounts. *Current Issues in Tourism* 12(4), 301-313. DOI: [10.1080/13683500802346177](http://dx.doi.org/10.1080/13683500802346177)

Maritz Research Canada / The Conference Board of Canada *Canadian Economic Impact Study (CEIS) Update 2007-2008 Meeting Professionals International Foundation Canada, 2008*
http://www.mpiweb.org/Libraries/Research_and_Reports/2008English_CEIS_FullReport.pdf (accessed 25th October 2013)

Office for National Statistics (2012) Tourism Satellite Account, 2009 - The Economic Importance of Tourism <http://www.ons.gov.uk/ons/rel/tourism/tourism-satellite-account/2009---the-economic-importance-of-tourism/index.html>

Smeral, E. (2006) Tourism satellite accounts: a critical assessment *Journal of Travel Research* 45(1), 92 - 98. 10.1177/ 0047287506288887

World Tourism Organization (2006), *Measuring the Economic Importance of the Meetings Industry: Developing a Tourism Satellite Account Extension*, UNWTO, Madrid. Also available at the UNWTO Elibrary: www.e-unwto.org.

World Tourism Organization (2010), *Tourism Satellite Account Recommended Methodological Framework 2008*, (online), available at: <http://unstats.un.org/unsd/tradeserv/tourism/manual.html> [accessed 13th January 2014]

Annex 26. Triple impact assessments of meetings

Triple impact assessments of meetings

By Tommy D. Andersson, School of Business, Economics and Law at University of Gothenburg, 2013

Abstract

Impacts of meetings may appear in many forms and research in the area of impact assessments is at present developing wider perspectives rather than being limited to economic impact assessments. Concepts like social and cultural capital, environmental care, "footprint analysis" and "triple bottom line" are now appropriate and traditional cost-benefit analysis is regaining momentum. Another important dimension for an analytical framework is the subject of analysis i.e. from whose perspective are impacts assessed.

The purpose of this text box is to discuss the impacts of meetings based on the three dimensions economic, socio-cultural, and environmental impacts. Existing methods will be discussed with a focus on measurement issues.

Impacts of meetings

Meetings have impacts on individuals, social life and society at large in many different ways and it is relevant to discuss how impacts of meetings can be assessed from a wide social science perspective with a focus on sustainability and issues related to economic, socio-cultural and environmental impacts.

Meetings have impacts on the economy but also on social capital through social interaction related to the meeting as well as on the cultural capital of the society. Sustainability includes economic, environmental as well as social and cultural dimensions and sustainable *tourism* has been defined by the Global Sustainable Tourism Council uniting large organisations such as UNWTO and UNEP.

The criteria stipulate that sustainable tourism *should maximize benefits and minimize negative impacts* regarding:

- Economic impacts on the local community;
- Social impacts on the local community;
- Cultural heritage; and
- The environment.

A framework for analyses of the sustainability of meetings, which should be analysed as a specific type of events, can include the following impacts (cf. Sherwood, 2007):

Economic impacts: Direct expenditure related to the meeting

Leakage out of the local community

Value added (wages, salaries, taxes and gross profit)

Indirect and induced economic impact

Opportunity cost

Socio-cultural impacts: Impact on public health and welfare

Impact on community pride

Impact on social and cultural capital

Impact on quality of life

Environmental impacts: Emissions from transport to and from event
 Energy and gas use
 Solid waste – percentage of recycled waste
 Water use

Objects and subjects of impacts

The complexity of an assessment of the impacts of meetings may be described in terms of the *objects of analysis* i.e. what type of impacts should be taken into consideration. But it is equally important to be clear about the *subject of analysis* i.e. from what stakeholder perspective should an analysis be made.

Table 1: Subjects and objects of an impact analysis

<i>Objects</i> <i>Subjects</i>	Economic impacts	Socio-cultural impacts	Environmental impacts
The Community			
The Regional Economy			
The Industry			
The Event			

At the community level, economic impacts are preferably described by a cost-benefit analysis including tangible as well as intangible costs and benefits. Environmental impacts are similarly experienced mainly by the local and global community but managed by the industry and the event organisation.

Economic Impacts

There is a comparatively long tradition of economic impact analysis. The financial inflow into a region from tourists creates an economic effect that lends itself to economic analyses based on theories by Keynes as well as by Leontief . There are, however, a number of fundamental issues that need to be clarified in order to interpret the results of an economic impact analysis of meetings correctly. A good review of economic impacts is provided by e.g. Preuss (2004).

A large number of economic impact analyses describe the inflow of money in terms of “direct economic effect”. This is sometimes further elaborated with the help of multipliers to include indirect and induced effects. Economic indicators used politically and by economists, like GDP, are based on value added as the basic measure. Multipliers are relevant to use when calculations are made in terms of value added. A synthesis of various methodologies with a particular emphasis on the opportunity cost is described in (Andersson, Armbrecht & Lundberg (2008).

Socio-cultural impacts

Socio-cultural impacts comprise social as well as cultural impacts but have only rarely and only recently been measured in impact studies. Reviews of literature on social impact studies are provided by Deery and Jago (2010).

The Social Impact Evaluation Framework (SIE) is based on an assessment of socio-cultural impacts likely to occur. This assessment ex-ante may be followed up by an ex-post Social Impact Perception (SIP) study. This approach follows closely expectancy-value (EV) and value-attitude (VA) models developed into assessments of economic value in terms of willingness-to-pay for various social impacts of tourism (Lindberg et al., 2001).

The most frequently used approach is however to assess perceptions and attitudes. Based on a multiple item tourism impact attitude scale (TIAS), further developments of instruments to measure socio-cultural impacts of events have been made. These scales are based on answers in

ordinal scales to a large number of items and cluster analyses as well as factor analyses are frequently used statistical techniques.

Environmental impacts

The Ecological Footprint gives a measure in a single unit of land that is required to support consumption and subsequent waste discharge. Ecological Footprint Analysis is a concept developed at the University of British Columbia (Wackernagel, Rees, 1996). A study of event organisers revealed that the environmental impacts identified as the most important were transport, waste management and noise. The focus on one measure “global hectares” is probably one factor explaining the success of the concept ecological footprint. While most academics probably are in favour of the concept of ecological footprint, this does not mean that academic scrutiny and reflection should be ignored and the universality of the measure is an issue that raises academic concern.

The market for trade of emission rights may present an opportunity to overcome many of these setbacks. Ideally, the emission rights market will help to allocate environmental impacts not only between areas but also between industries and it is thus theoretically possible that e.g. a petroleum refinery will reduce production and emissions to allow for an exciting congress to take place simply because the congress creates more pleasure and utility than a day’s production at the refinery. In practise it seems however difficult to create a well-functioning emission rights market (Grubb & Neuhoff, 2006) and it will take long before emissions and gha are used in the most effective way.

Conclusions and implications for research

Scope of assessment

A focus on economic, socio-cultural and environmental aspects cover a great deal of perspectives suggested by other researchers but it is not a complete coverage which is important to keep in mind. A Cost-Benefit Analysis is all inclusive but only implicitly so. An analysis of the complete life-cycle of a meeting event is desirable in order to describe not only cash-flows over the life-cycle but also how other tangible as well as intangible impacts are distributed over time. Another issue related to scope is to what extent an impact assessment should describe not only direct but also indirect effects. This is explicitly discussed in economic assessments but is equally relevant for socio-cultural and environmental assessments.

Opportunity cost

The need to consider opportunity cost i.e. the impact from the best alternative activity, has been strongly argued. This is relevant not only for the economic analysis but also for a socio-cultural and environmental analysis. Not discussing the opportunity cost is equal to assuming that participants and others involved in a meeting event would be living in a vacuum with nil economic expenditure, nil socio-cultural activity and nil environmental impact if they did not participate in the meeting. This is, of course, an incorrect assumption and may severely distort the result.

Commensurability

By producing results of an assessment in three non-comparable units i.e. a monetary value, a 1-7 ordinal scale value, and global hectares, the researcher dodges the task of giving a final total measure of the impact. An argument for doing so is that it must be a political decision to weigh cultural and social impacts against economics and against the environment. Many would be very sceptical about this (e.g. Caplan, 2007) and would rather argue that if researchers leave too

much room for flexible interpretations of the impact assessment, other political issues will determine the final decision. Attempts have been made (Andersson, Lundberg, 2013) to measure the total impact in monetary terms incorporating a measure of non-use value (Andersson, Armbrecht, Lundberg, 2012) of social impacts.

References

Andersson, T.D., Armbrecht, J., Lundberg, E. (2012) Estimating Use and Non-use Values of a Music Festival, *Scandinavian Journal of Hospitality and Tourism*, Vol. 12(3) pp 215-231

Andersson, T. D., & Lundberg, E. (2013). Commensurability and sustainability: Triple impact assessments of a tourism event. *Tourism Management*, 37(0), 99-109. doi:<http://dx.doi.org/10.1016/j.tourman.2012.12.015>

Andersson, T. D., Armbrecht, J., & Lundberg, E. (2008). Impact of Mega-Events on the Economy. *Asian Business & Management*, 7, 163-179.

Caplan, B., (2007) *The Myth of the Rational Voter; Why democracies choose bad policies*. Oxford: Princeton University Press.

Deery, M., & Jago, L. (2010). Social impacts of events and the role of anti-social behavior. *International Journal of Event and Festival Management*, 1(1), 8-28.

Grubb, M., & Neuhoff, K. (2006) Allocation and competitiveness in the EU emissions trading scheme: policy overview. *Climate Policy* 6, 7-30.

Lindberg, K., Andersson, T.D., & Dellaert, B. (2001). Tourism Development; Assessing Social Gains and Losses. *Annals of Tourism Research*. Vol 28 (4) pp 1010-1030.

Preuss, H. (2004). *The Economics of Staging the Olympics. A Comparison of the Games 1972-2008*. Cheltenham, UK: Edward Elgar.

Sherwood, P. (2007). *A Triple Bottom Line Evaluation of the Impact of Special Events: The Development of Indicators*. Victoria University, Melbourne.

Wackernagel, M., & Rees, W. E. (1996). *Our ecological footprint : reducing human impact on the earth*. Philadelphia, Pa.: New Society Publishers.

Annex 27. Measuring expenditure from the perspective of demand in meetings and conventions tourism. The experience of Andalusia

Measuring expenditure from the perspective of demand in meetings and conventions tourism. The experience of Andalusia.

Statistics and Market Research Area, Public Company for the Management of Tourism and Sport of Andalusia, Regional Ministry of Tourism and Trade, 2013.

Decision-making in any activity requires having an information system that allows an approximation of the reality of such activity and which helps establish the strategies suited to the needs and opportunities detected in its analysis. This is a long-standing demand of the meetings and conventions sector in Andalusia, and since 2009 the Regional Ministry of Tourism and Trade has been addressing it through a specific project of a statistical nature with annual periodicity, which in its current state of development is limited to these two types of events.

The experience gained in these four years makes it possible to gauge the additional complexity that would be entailed by tackling, as recommended by the UNWTO, another set of events that are part of the Meetings Industry, such as the fairs and incentive travel segments; both are organized in very different ways, and presumably, their expenditure structures would require ad hoc research.

According to the latest estimates for 2012, Andalusia received a total of 1.76 million participants in meetings and conventions, of which 602,000 were tourists with total tourism expenditure of 282 million euros. This represents a share of total tourism demand in the region of 2.8%. It should be pointed out that the definition of tourists conforms to that given by INRouTe for regional tourism and therefore includes three subsets of tourists: residents from countries other than the country of reference (inbound visitors to the country as a whole), residents from another region of the country of reference, and residents in the region of reference (with their usual environment being located in such region)

The holding of meetings and conventions generate tourism activity of great interest to any destination, not only due to its economic impact, but also because of its deseasonalizing capability.

In Andalusia, specifically, meetings and convention tourism takes place mainly from March to June and from October to November, thus covering the low season.

This segment also stands out owing to its effect of generating additional visits compared to other segments (sun and beach, golf, etc.) by extending the stay of this type of tourists. This makes complementary offerings a basic pillar as they not only help to increase tourism spending during the holding of these events but also allow the creation of additional tourists to the same destination where the event is held or in other destinations of the territory of reference. (It is different from the regional perspective).

The project carried out in Andalusia responds to an observation that can probably be generalized to any region where business tourism is substantial: There is an entire series of characteristics of this segment that complicate its measurement and analysis and therefore it requires its specific treatment relative to the methods used for the tourists in general for the purposes of estimating their associated expenditure. Specifically, the following are worth noting:

- The destination is not chosen by the participant or attendee but rather by the company, association or organizer of the event.
- There are no secondary motivations, because 100% choose the destination only for the

purpose of attending the meeting or convention.

- Attendees and participants do not have all the expenditure data, as part of the disbursement may be carried out by the company or organization they belong to.
- It is common for there to be a registration fee whose itemized breakdown is not known by the participant or attendee.
- There is a range of specific cases that hinder the measurement of expenditure, such as different registration fees by type of participant and date of payment, whether or not there are pre-negotiated prices for accommodation, whether or not there are social programmes for participants and accompanying persons, etc.

Due to these characteristics, the measurement of associated tourism expenditure requires the parallel implementation of two investigations: a survey of the organizers and another of the participants. This is a statistical approach that differs from the general case in which only one survey is used among tourists for the purposes of estimating the corresponding characteristics of the trip and the traveller.

The experience gained in these years leaves no doubt—both surveys are essential and complementary for the following:

- Carrying out proper filtering of the records deriving from one source or another referring to the same event, with the objective of avoiding overlapping information on expenditure items that are common between the organizers and the participants

The structure of these expenditures is strictly consistent with that used by the regional statistical body in other statistical operations (specifically, the survey on the tourism situation in Andalusia):

- Accommodation. The information provided by the participant or conventioner is combined with that obtained from the organizer when there are pre-negotiated hotel prices;
- Board. The expenditure made in the destination by the participant or attendee and by the organizers during the course of the meeting (coffee breaks, lunches and dinners) are included, as well as hosted meals;
- Transport at the destination. The expenditure in the destination by attendees and participants is included as well as that by the organizer for transfers or shuttles.
- Fuel. The fuel expenditure by attendees and participants who used their own car or a rental car for transport at the destination is included;
- Leisure. Expenditures made directly by attendees and participants (out-of-pocket expenditure) during organized visits or excursions are included as well as the expenditure per participant of the social programme included in the convention and applied only to those who chose to avail of them according to the information of the organizers;
- Shopping. The expenditure on this item by attendees and participants;
- Other expenditure. The expenditure by attendees and participants not included under the headings above.
- Obtaining a rigorous estimation of aggregate tourism expenditure: expenditure by organizers, collaborating institutions, as well as by the attendees themselves during their stay
- Establishing a typology of those attendees who can be categorized as tourists, in relation with the structure and level of such expenditure
- Once established, it will be possible to tackle—at a later stage of the project—the modelling of part of the statistical work done today with the aim of expanding the analytical use of the information generated in order to undertake economic impact studies in relation to employment associated with such events, the production structure of this part of the Meetings Industry, etc.

This experience has required, in the case of Andalusia, previously carrying out research to identify the universe of the three types of establishments where the vast majority of these events are held: hotels, convention centres and unique buildings. This made it possible to design a survey by random sampling of both attendees (through a system of quotas and personal interviews in situ using a questionnaire of 11 questions) and the corresponding organizers (these may be carried out by personal or telephone interviews and/or by e-mail).

The importance of this second type of surveys of event organizers in order to get information on expenditure and its breakdown should be underlined because, without it, it would not be possible to calculate the actual average daily expenditure per attendee, its breakdown or the tourism income generated by this segment of the Meetings Industry.

More specifically, good note should be taken of the difficulty involved in gaining the trust of the managers of the establishments in which these events take place and of the organizers themselves, probably motivated by two types of reservations: the special care they take in treating their clients and/or the high level of competition in the segment. Therefore, it is essential to pay special attention to improving communication processes and the transfer of information on the number and characteristics of meetings and conventions as well as on the quality and coverage of information on the expenditure generated by holding them, as the availability of reliable statistics depend heavily on this aspect.

As recommended by the UNWTO (“Governance for the Tourism Sector and its Measurement”), this project would not have been possible without the design and development of a system of governance, which made the viability of regularly providing useful information a credible proposition for all parties involved (organizers, establishments where these events are held, collaborating entities and the regional tourism administration itself).

The development of this project includes as a priority carrying out in a new phase an estimation of the expenditure by accompanying persons, as recommended by the UNWTO.

It is also necessary to understand that this is a continuously evolving project, in which any improvement in definitions, statistics, records, etc. will be incorporated and where the collaboration of industry actors is essential in order to improve the analysis and its approximation of reality.

Further links

Questionnaires used in the project:

Request by e-mail to: igallego@andalucia.org

References

Duran, C (2013), Governance for the Tourism Sector and its Measurement, UNWTO Statistics and TSA Issue Paper Series STSA/IP/2013/01 (Online), available: <http://statistics.unwto.org/content/papers>

Commission of the European Communities, Organization for Economic Cooperation and Development, United Nations and World Tourism Organization (2010), *Tourism Satellite Account: Recommended Methodological Framework 2008*, (online), available at: <http://unstats.un.org/unsd/tradeserv/tourism/manual.html>

Tourism Statistics Andalusia: <http://www.andalucia.org/es/profesional/estadisticas-e-investigacion-de-mercados/> (Spanish only)

Turismo de Reuniones (Meture) 2003 – 2011. Instituto de Turismo de España. (Spanish only)

Informes estadísticos “Turismo de Reuniones”. Spain Convention Bureau and Federación Española de Municipios y Provincias. (Spanish only).

Annex 28. Measuring national business tourism by using CATI techniques in Austria, shortcomings and challenges

Measuring national business tourism by using CATI techniques in Austria, shortcomings and challenges

By P. Laimer, Statistics Austria, 2013

Statistics Austria is currently conducting quarterly surveys regarding the travel habits of individuals living in Austria aged 15 and above, which concern domestic and outbound trips of the Austrians. Every quarter, 3500 representatively chosen respondents (=net sample) are contacted by telephone (CATI). The participation on the survey is voluntary. The selection framework for the proportionally stratified random sample is the Central Register of Residence Registrations, the telephone numbers are received from the public telephone book. - Since the reference year 2000 the collected information concerns data on holiday and business trips with at least one overnight stay and same-day trips, as well (see Table 1 related business trips); for the reference years 1969 till 1999 detailed data regarding holiday trips with at least four overnight stays is available, only.

Table 1: Travel habits of the Austrians 2000-2012 (business tourism)

Aggregate	Reference year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Business tourists													
Travel intensity													
Total (in 1000) ¹⁾	526,5	797,5	977,7	987,5	1.096,1	1.104,6	1.224,9	1.133,3	1.219,8	1.139,1	1.103,1	1.237,0	1.310,4
of which male (in %)	71,6	70,8	78,4	67,2	72,4	66,2	67,7	66,5	67,5	69,1	70,5	60,4	63,0
of which female (in %)	28,4	29,2	21,6	32,8	27,6	33,8	32,3	33,5	32,5	30,9	29,5	39,6	37,0
Share related to overall population (in %)	7,9	11,9	14,6	14,8	16,4	16,3	17,8	16,3	17,5	16,2	15,7	17,4	18,4
Business trips (in 1000)													
Total	3.397,2	3.959,2	3.765,8	3.920,0	3.348,1	3.532,7	4.588,8	4.958,6	4.651,3	4.096,6	3.223,7	3.665,6	3.920,6
Domestic	2.056,1	2.317,9	2.113,6	2.156,2	1.774,5	1.891,0	2.231,6	2.641,2	2.442,2	2.153,5	1.743,4	1.945,6	1.946,7
of which trips with 1-3 overnight stays	1.715,6	1.858,7	1.790,6	1.847,6	1.486,1	1.415,3	1.842,1	2.208,1	2.151,9	1.821,0	1.469,6	1.673,7	1.717,3
Abroad	1.341,1	1.641,2	1.652,2	1.763,8	1.573,5	1.641,7	2.357,2	2.317,4	2.209,1	1.943,1	1.480,2	1.719,9	1.973,9
of which trips with 1-3 overnight stays	911,5	1.102,9	1.120,5	1.257,2	1.084,1	1.209,3	1.747,6	1.707,3	1.623,9	1.358,9	1.008,6	1.177,9	1.355,4
By main destinations abroad ²⁾													
Germany	557,9	758,0	664,7	729,1	668,1	628,4	879,0	1.025,6	844,4	768,7	605,1	642,1	845,0
Italy	125,7	149,4	171,4	161,0	115,4	125,6	188,4	150,0	160,6	153,2	120,5	155,7	148,3
Switzerland (incl. Liechtenstein)	76,0	94,5	85,7	77,3	117,3	55,3	77,9	121,6	137,1	97,9	89,0	82,9	82,9
By months													
January	306,5	210,9	307,6	298,4	211,1	169,1	420,9	400,8	314,0	373,5	223,2	183,3	271,2
February	353,6	272,4	323,0	397,6	278,1	224,8	373,2	423,0	388,2	413,2	267,0	211,3	289,6
March	434,8	432,8	355,9	473,5	308,9	232,1	492,3	519,4	402,5	471,1	246,0	344,0	461,5
April	248,8	336,2	320,8	253,4	294,4	294,4	377,7	430,8	358,7	355,4	221,3	339,3	397,8
May	288,1	487,8	410,9	293,0	291,0	360,4	460,5	468,8	417,2	345,1	305,5	401,8	371,8
June	361,5	353,7	419,6	310,7	308,5	361,2	378,2	446,2	348,8	341,2	297,6	404,7	353,4
July	196,4	327,4	276,8	278,2	282,7	262,3	276,7	310,0	314,6	312,5	258,5	250,8	318,1
August	209,5	254,9	215,3	255,6	228,6	271,2	186,5	297,1	292,8	289,1	214,8	237,3	210,0
September	301,2	349,3	261,5	355,0	355,7	352,9	325,8	463,0	483,6	360,1	349,4	364,9	286,8
October	235,7	323,0	344,9	346,2	292,3	320,4	533,5	493,1	498,0	305,2	384,9	370,0	421,1
November	282,9	355,9	298,8	373,3	278,8	367,9	421,7	395,4	507,3	336,5	274,6	339,0	326,7
December	178,1	254,9	230,7	287,0	219,9	316,0	341,7	310,9	325,5	193,7	180,9	219,2	212,5
By kind of accommodation													
Hotels and similar	2.731,9	3.275,9	3.168,2	3.215,4	2.816,7	2.910,1	3.811,2	4.128,8	3.869,2	3.333,4	2.574,1	2.976,4	3.156,1
Private accommodation (rented)	96,9	147,2	94,5	229,3	61,9	68,8	105,0	185,9	183,7	108,0	146,4	125,7	150,0
Private accommodation (non-rented)	296,0	283,4	318,6	375,7	321,9	154,5	105,0	360,5	376,2	354,5	222,7	305,0	285,3
Other	272,4	252,7	184,5	99,5	147,5	399,3	105,0	283,3	222,2	300,8	280,5	258,4	329,2

S: Statistics Austria. - 1) Number of persons aged 15 and above with at least one business trip. 2) According to ranking 2012.

The major advantage of this method is that information on the basic population is available, and the coverage of the whole volume is possible since the sample is amenable for extrapolations. Nevertheless, due to the fact that the survey is based on a rather small sample (3500 net interviews) detailed data related to particular items are hardly available or/and due to huge sample errors not sufficiently reliable for drawing reasonable conclusions (e.g. the sample error increases with the level of information's detail).

This also concerns information on business tourism (apart from other items, such as same-day visits) since the number of cases doing business trips is rather low, for several reasons:

- In general, in Austria the number of persons doing business trips is rather low; the travel intensity (share of persons with at least one trip per year compared to overall population) related to business trips is about 50%-points below of that of holiday trips (2012: 18.4% versus 76.2%).
- In particular business tourists are traveling a lot and they - if a telephone number is available - are not easy to reach, therefore; this causes a systematic bias.
- Related to business tourists the phenomenon of the so called “silent numbers” is evident since business phone numbers are not open to the public (i.e. cell phones).
- However, in particular for business tourist time restraints during the interview are becoming obvious; respondents who are doing holiday and business trips as well abort the interview after a while because of the interview length, therefore.

Furthermore, for several sub-items for holiday and in particular for business tourists - such as monetary information – either no data or data of less quality are available, only, which is mainly due to two reasons:

- There is commonly a recall problem concerning the expenses during a trip, because the respondents simply cannot remember.
- Some respondents have no information on the expenditures, because they did not pay for themselves which is rather often the case with business trips (i.e. hotel and transport costs).

The quarterly CATI surveys are fully in line with the methodological requirements of UNWTO “International Recommendations on Tourism Statistics 2008” (IRTS 2008), including the definition of holiday and business tourists, as well. According to these recommendations “Business and professional” is including “activities of the self-employed and employees as long as they do not correspond to an implicit or explicit employer-employee relationship with a resident producer in the country or place visited, those of investors, businessmen, etc. It also includes, for example, attending meetings, conferences or congresses, trade fairs and exhibitions.....” (see IRTS 2008, para. 3.17).

However, IRTS 2008 definition of business tourism is including the “Meeting Industry” (MICE), as well. According to UNWTO, ICCA and MPI (Meeting Professional International) and Reed Travel Exhibitions the term “meeting” concerns three areas: “Congresses, conventions, conferences, seminars”, “Trade fairs and exhibitions” and “Incentive activities”.

Apart from the difficulty to explain the respondents within a time-limited CATI-based survey the term “meeting industry”, the quality of the received data (i.e. concerning the number of business trips concerning the “meeting industry”) would be rather low. Since the results are based on a sample, the extrapolated values are afflicted with a certain sample error which is rather high for results with a low number of cases; so it can be assumed that the values would vary between different reference periods which would not allow significant conclusions. The higher the level of information detail wished (i.e. meetings as part of business trips), the greater the random sample size must be ensuring reliable extrapolations.

Concluding, in order to receive more reliable figures related to business tourism additional data sources – namely based on business statistics, administrative data or mirror data (in the case of outbound trips) – have to be taken into consideration. Furthermore, the investigations related alternative data sources must be intensified (i.e. analysis of the roaming statistics from mobile phone companies).

Further links

- IAPCO: http://www.iapco.org/dictionary.cfm?page_id=130# (Meetings Industry Terminology Dictionary)

- Statistics Austria:
http://www.statistik.at/web_en/statistics/tourism/travel_habits/index.html (travel habits of the Austrians, results)
- Statistics Austria:
[http://www.statistik.at/web_de/wcmsprod/groups/gd/documents/stddok/035991.pdf - pagemode=bookmarks](http://www.statistik.at/web_de/wcmsprod/groups/gd/documents/stddok/035991.pdf_-_pagemode=bookmarks) (travel habits of the Austrians, methodology; in German only)
- UNWTO:
http://www.iccaworld.com/cnt/docs/UNWTO_Complete%20Stats%20Report.pdf
(Measuring the Economic Importance of the Meetings Industry)

References

European Parliament and Council, Regulation (EU) No 692/2011 of the European Parliament and of the Council of 6 July 2011 concerning European statistics on tourism and repealing Council Directive 95/57/EC.

Eurostat, Methodological Manual for Tourism Statistics, version 1.2, 2012 edition, ISBN 978-92-79-21480-6, Luxembourg 2012.

Laimer, P., Ostertag, J., Methodological issues concerning the compilation of same-day trips in Austria, Research Paper for Session 3 “Selected measurement issues related to visitor surveys” of the 9th International Forum on Tourism Statistics, 19-21 November 2008, Paris.

Statistics Austria, Holiday and Business Trips in the year 2012, rapid report, Vienna 2013 (in German only).

Commission of the European Communities, Organization for Economic Cooperation and Development, United Nations and World Tourism Organization (2010), *Tourism Satellite Account: Recommended Methodological Framework 2008*, (online), available at: <http://unstats.un.org/unsd/tradeserv/tourism/manual.html>

United Nations (2010), *International Recommendations for Tourism Statistics 2008*, (online), available at: <http://unstats.un.org/unsd/tradeserv/tourism/manual.html>

Annex 29. Environment Statistics Background

1. A Framework for the Development of Environment Statistics (FDES) was first published in 1984 by the United Nations Statistics Division (UNSD), along with its subsequent publications, Concepts and Methods of Environment Statistics: Human Settlements Statistics³ (1988) and Concepts and Methods of Environment Statistics: Statistics of the Natural Environment⁴ (1991). The 1984 FDES and subsequent publications have been a useful framework for guiding countries in the development of their environment statistics programmes. Since its publication there have been many scientific, political, technological, statistical and experience-based developments which suggested that the FDES was ready for revision.
2. As a consequence, the United Nations Statistical Commission, at its 41st session (23-26 February 2010), endorsed a work programme and the establishment of an Expert Group for the revision of the FDES and the development of a Core Set of Environmental Statistics. The members of the Expert Group represented producers and users of environment statistics of countries from all regions and at different stages of development, as well as international organizations, specialized agencies and non-governmental organizations.
3. The revision was based on an agreed set of criteria and has been supported by extensive international expert consultation. The 1984 FDES was used as the starting point. It was revised taking into account the lessons learned during its application in different countries as well as improved scientific knowledge about the environment. The revision has also taken into account the increasing prominence of environmental sustainability and sustainable development issues and concepts. Existing environment statistics and indicator frameworks were analyzed, including major developments in the field of environmental-economic accounting and selected thematic developments pertinent to environment statistics

Finally, the new text was approved by the UN Statistical Commission in 2013

4. The FDES 2013 is a multi-purpose conceptual and statistical framework that is comprehensive and integrative in nature. It marks out the scope of environment statistics and provides an organizing structure to guide their collection and compilation and to synthesize data from various subject areas and sources. It is broad and holistic in nature, covering the issues and aspects of the environment that are relevant for analysis, policy and decision making (FDES 2013, para. 1.9).
5. The FDES 2013 is structured in a way that allows links to economic and social domains. It seeks to be compatible with other frameworks and systems, both statistical and analytical, such as the System of Environmental-Economic Accounting (SEEA), and the sustainable development indicator frameworks. It is based, when applicable, on existing statistical classifications. As such, the FDES facilitates data integration within environment statistics and with economic and social statistics (FDES 2013, para. 1.11).

As stated in FDES 2013, there are six constituents' components of environment statistics:

- 1.Environmental Conditions and Quality
- 2.Environmental Resources and their Use
- 3.Residuals
- 4.Extreme Events and Disasters
- 5.Human Settlements and Environmental Health
- 6.Environment Protection, Management and Engagement

Only a few of them include tourism related topics:

- 2. The Environmental Resources and their Use component include *land use* as well as *use and returns of water*
- 3. Residuals include *emissions to air* and *generation of waste*
- 5. Human Settlements and Environmental Health include *urban and rural population, access to water* and *housing conditions*

Of all of these topics, only those included in the Residuals component have not been addressed in this document under the research area *Guidance related to "Tourism and the environmental dimension, non-economic contributions and impacts"* (basically because they have been extensively addressed by UNWTO in the past); the rest are linked to the following topics (see [1.7/Box1](#)):

- General Background on Tourism and the environmental dimension (topic 7)
- The consumption of water (topic 8)
- Tourism and rural economy development (topic 9)

6. Given the statistics nature of the present document, the approach to these three topics cannot be but finding the tourism connection to FDES 2013 conceptual framework; the next paragraphs address the set of issues particularly relevant in relation to that connection:
 - Human settlements
 - Cross cutting issues
7. As previously mentioned, environment statistics background insist once and again on the need for developing integrated information systems; consequently, terms as "integrated data", "multi-dimensional", "cross-cutting issues", etc. appear systematically all along this and the following sections.

Human settlements

8. As indicated in paragraphs 5.129 and 5.130, measurement of water use and rural/urban development as a proxy to poverty needs to focus on data integration and a multi-purpose approach as recommended by UN in the new international statistical standards already mentioned in previous sections; consequently, the focus on how tourism could contribute to poverty alleviation should not be on individuals but on human settlements.
9. UNWTO has been working during the last years on poverty alleviation focusing mainly on the rural population; nevertheless, given UN forecasts for the next years on population growth data, it would seem necessary to associate the eradication of poverty to the certitude that almost 75% of the world population will be living in urban settlements.

In any case, regarding the measurement of the target population of poverty alleviation initiatives FDES2013 component 5 "Human Settlements and Environmental Health" contains statistics on the environment in which humans live and work, particularly with regard to living conditions and environmental health. These statistics are important for the management and improvement of conditions related to human settlements, shelter conditions, safe water, sanitation, and health, particularly in the context of rapid urbanization, increasing pollution, environmental degradation, disasters, extreme events, and climate change. (FDES 2013, para 3.214)

The sub-component "Human settlements" refer to the totality of the human community, whether people live in large cities, towns or villages. They refer to the human population that resides in a settlement, the physical elements (e.g., shelter and infrastructure),

services (e.g., water, sanitation, waste removal, energy and transport), and the exposure of humans to potentially deleterious environmental conditions. (FDES 2013, para. 3.194)

Statistics on human settlements are required by policy makers, analysts and civil society in order to inform on how humans live and work in these settlements, how they transform the landscape and the supporting ecosystems, and in turn how this affects human wellbeing and health. The extent of human settlements, their ecological footprint (which is closely related to prevailing production and consumption patterns), the supporting and nearby environmental conditions and quality, as well as human access to infrastructure and services, all affect both humans and the environment in a cyclical and iterative way. (FDES 2013, para 3.195)

The type of sources that are needed to document the state and changes in human settlements include censuses, surveys, administrative records, and remote sensing. Institutional partners of the NSO include housing and urban planning authorities, health and transportation authorities, as well as research institutions. Presenting the statistics spatially using maps and geospatial statistics adds important value to the information being produced. (FDES 2013, par 3.196)

Cross-cutting issues

10. The FDES 2013 is a framework which organizes the domain of environment statistics into six components which are further broken down into sub-components and statistical topics. The statistical topics in the FDES, and the underlying environment statistics in the Core Set of Environment Statistics and the Basic Set of Environment Statistics, can be combined and reorganized in different ways according to specific analytical needs and policy requirements. This is an inherent aspect of the design of the FDES 2013 as a flexible multi-purpose framework. (FDES 2013, para.5.1)
11. When compiling environment statistics on a particular cross-cutting issue, it is important to start by first understanding the scientific background, underlying processes and cause-effect relationships. It is also necessary to analyze and understand its relevance to the country and to particular sub-national areas, productive sectors and social groups, its national policy implications and commitments, as well as the institutional aspects and the international context. (FDES 2013, para.5.3)
12. The cross-cutting issues of water, energy, climate change and agriculture are examples and should be considered illustrative applications of selected cross-cutting issues. The FDES2013 users might wish to develop other analyses of cross-cutting issues for specific purposes, according to national relevance and needs (e.g., sustainable management of natural resources, or environmental impacts of specific activities such as tourism, transport, poverty, mining, manufacturing, etc.). (FDES 2013, para.5.4)

E.1. The consumption of water

Water as a cross-cutting issue

13. Water is fundamental to every form of life and plays a critical role in human development. It is critical both in terms of quantity and quality. (FDES 2013, para.5.6)
14. Water use and returns affect the environment in different ways. If water is abstracted faster than its natural replenishment, the resource can be depleted and even exhausted. Water abstraction itself affects the environment by decreasing, at least momentarily, the

available water for other purposes including key ecological functions. Distribution losses also can cause inefficiency and require higher amounts to be extracted. When the water is used and then returned to the environment, quality and pollution become the major problems. Returns of water can either be treated or not, and to different extents, so when it is returned it has the potential to adversely affect the environment. (FDES 2013, para.5.9).

15. Protecting the quality of freshwater is important for ecosystems, drinking water supply, food production and recreational water use. (FDES 2013, para.5.10)
16. The Rio+20 United Nations Conference on Sustainable Development (20-22 June 2012) provided the context for the pivotal role of water. It noted in its outcome document that water was “at the core of sustainable development”, through its link to key global challenges such as poverty eradication (FDES 2013, para.5.13)

Statistical approach

17. FDES Component 2. Environmental Resources and their Use is closely related to the asset and physical flow accounts of the SEEA Central Framework on which, where relevant, the terms and definitions are based. Environmental resources (or assets as they are referred to in the SEEA Central Framework) are the living and non-living constituents of the earth together comprising the biophysical environment that may provide benefits to humanity. Environmental resources include: subsoil resources (non-energy and energy minerals); land; soil resources; biological resources; and water resources. They can be naturally renewable (e.g., fish, timber or water) or non-renewable (e.g., minerals). (FDES 2013, para.3.73)
18. Environmental resources are used as important inputs in production and consumption. They contribute to the provision of shelter, food, health care, infrastructure, communications, transportation, defense and virtually every other aspect of human activity. Consequently, statistics documenting their availability and quality over time are necessary for policy makers to make informed decisions. (FDES 2013, para.3.74)
19. Regarding water, such environmental resource is abstracted from surface and groundwater resources by economic activities and households. Water can be abstracted for own use or for distribution to other users. Statistics on water abstraction are usually available from administrative records (monitoring of actual water abstractions as well as abstraction permits). (FDES 2013, para.3.133)
20. After abstraction and distribution water is used in the economy in production and consumption activities. Water can be recycled and reused several times before returning it to the environment. Water use should be disaggregated according to economic activity and household use. Statistics on water use can be obtained from statistical surveys of primary users, household surveys and administrative records of the water supply industry. (FDES 2013, para.3.134)
21. In-stream water use refers to the use of water in situ, without abstracting it from its source. Examples of in-stream water use are transportation, hydropower generation, fishing, recreation and tourism, and waste loading (pollution dilution). In-stream activities are usually measured in terms of the intensity of the use. Statistics on water transport, tourism and recreation can be used to indicate the pressures these activities put on water resources. (FDES 2013, para.3.135)

22. All economic activities and households can abstract, use and return water to the environment with or without treatment (FDES 2013, para.3.153)

This reference deserves particular attention because household access to natural resources as well as “spatial analysis” (like rural/urban –see [previous section A / Tourism and the Environmental Dimension: General Background](#)) opens the door for multi-dimension analysis on water but also on other topics such as poverty (associated with the objective of fostering rural economy development an issue that will be discussed in next [Section E.2.](#))

23. Integrated data, including social, economic and environmental accounts based on agreed classifications and methods, are important in efforts to help countries design effective sustainable development and other cross-cutting policies. Comparable data over time and across countries are needed to track performance across a range of sustainable development related goals and objectives, including, for example the Sustainable Development Goals.

As previously mentioned (see [para.3.16](#)), the proposal for gathering a basic set of no more than 15 statistical data and indicators at subnational levels includes the use of water

B. Tourism and sustainable development:

B.1. Tourism and the environmental dimension

B.1.1 Urban drinking water consumption due to tourism –m3- (Annual)

Administrative records (either from the water suppliers or the municipal authorities) seem to be the proper source for such data as for most of environmental type indicators proposed.

24. UN-Water is the United Nations (UN) inter-agency mechanism for all freshwater and sanitation related matters. It provides the platform to maximize system-wide coordinated action and coherence and serves UN Member States in their efforts towards achieving development goals related to freshwater and sanitation.

In the new Sustainable Development Goals (SDG) agenda post-2015 includes a global goal for water: *securing sustainable water for all*.

The former Millennium Development Goals (MDGs) launched during 2000/2015, did not address the full water and development agenda, nor fully recognized its synergies with other areas and concerns. Emphasis on “sustainability” was not included and human rights and inequalities were also largely ignored in the MDG framework. Subsequently, member states have agreed that human rights, equality and sustainability should form the core of the development agenda and be recognized as critical for true development.

25. Water’s fundamental importance for human development, the environment and the economy needs to feature prominently in the new post-2015 development agenda.

Such global goal aims to support the protection of water resources from over exploitation and pollution while meeting drinking water and sanitation needs, energy, agriculture and other uses.

26. Such goal builds on and extends existing commitments: it is fundamental to all other development goals and the proposed framework works for all countries. The targets for the goal for water have important explicit and implicit interlinkages, making them mutually supportive. For example, access to drinking water and ensuring it is fairly shared requires good governance, balancing competing demands, and the protection of natural

supply systems from pollution and water-related disasters. Furthermore, the goal for water and its targets is of direct importance to addressing other proposed areas within the post-2015 framework, such as health, energy, food, employment, gender equality and environmental sustainability.

27. These UN Water suggestions recognize that water needs both a goal in its own right and consideration in the formulation of other goals. Water is much more than a cross-cutting issue - unless the fundamental role of water and the water issues raised in this proposal can be resolved, other important elements of the new development agenda will be unachievable. Water and water infrastructure is a vital part of the foundations for sustainable development, poverty alleviation and human well-being.
28. One of such targets (“achieve universal access to safe drinking water, sanitation and hygiene”) includes the reference to “households, schools and health facilities”; as mentioned in [chapter 2](#), INRouTe proposes that also the consumption of drinking water by visitors should be measured estimating the tourism population in those regions and other sub-regional territorial entities where tourism is significant. It would be probably the only way to use a robust estimate for national figures as required by post-2015 initiative.
29. Also complementary initiatives on water consumption due to the tourism sector at the subnational level could include estimates of golf courses and other tourism related infrastructures.
30. Data to monitor progress on the SDG’s post-2015 global goal for water focuses exclusively on the national level and most of them are based on country level household surveys and other nationally collected data.
31. Nationally representative household surveys are currently the main source of data used for developing countries while regulatory data is used in a smaller number of developed countries. It is expected that household surveys will remain a major source of data for global monitoring in the short term, with regulatory data becoming increasingly important after 2015.
32. As previously mentioned, an indicator on water consumption at subnational levels (see 4.19) is proposed to be developed using administrative records (either from the water suppliers or the municipal authorities) which are envisaged as the proper source for such data as for most of environmental type indicators proposed. At the national level it might happen that the use of household surveys as proposed by the UN SDG development agenda could be the proper source for assessing the overall objective but progress made on a temporal basis might also be supported by administrative records associated to the provision or payment of water provision.

E.2. Tourism and rural economy development

33. As already mentioned expanded SEEA indicators should help capture and inform the multi-dimensional poverty and environment nexus. Poverty may be linked to environmental conditions and often the poor and vulnerable groups rely on the environment for their livelihoods and well-being.

In fact, SEEA conceptual background looks for a multi-dimensional approach in which spatial disaggregation (such as the rural and non-rural areas) and poverty are predominant in relation with understanding how tourism can contribute to poverty eradication instead of using other approaches such as tourism and rural economy

development. The following paragraphs are extracted from the System of Environmental Economic Accounting 2012 / Applications and Extensions (SEEA_AE).

34. Given the many different factors influencing well-being, livelihoods, and sustainable development, no single indicator, such as income or other financial data, can reflect the multiple aspects of poverty, deprivation, and links to the environment. The multiple dimensions of poverty link to the environment and the economy in many ways. These links include empowerment, inclusion, health, education, living standards, environmental degradation, ecosystem services, income, employment, food, water, sanitation, energy, safety, and access to basic services and infrastructure. (SEEA_AE para. 4.25).
35. The main areas in which SEEA might be extended to capture relevant information relate to data on stocks and flows of water resources and energy resources. These two types of resources are central to the operation of well-functioning households and communities in all parts of the world. The extension of most direct relevance is likely to be a breakdown of household consumption of water and energy by household income. (SEEA_AE para. 4.26).
36. The types of breakdown that are applied will depend on the analytical interest and data availability. There may be interest in decomposing information on household consumption of energy and water use by purpose, i.e. differentiating energy used for heating, cooking, transportation or water used for washing, cooking, bathing, etc. Alternatively, there may be interest in decompositions that aid in the study of equality and development. In this case data that differentiates urban and regional areas, special population groups (e.g., the elderly, families with young children, specific ethnic groups) or household consumption and activity by income, may be relevant. (SEEA_AE para. 4.27).
37. Extensions in terms of spatial disaggregation is of particular importance; in fact, the first topic in this sub-component covers urban and rural population which highlights that humans live in either rural or urban communities, building their shelters and institutions, while using environmental resources to satisfy human needs. Depending on the carrying capacity of ecosystems, these settlements and their use of environmental resources will affect environmental conditions, as well as human wellbeing and health. (FDES 2013, para.3.197)
38. Statistics on the location of human settlements can be found both in traditional demographic statistics, and increasingly in geospatial information sources. The potential for the use of georeferenced population data in the field of environment statistics is ample. They can be used not only as a reference but also in combination with other environment statistics to construct indicators. For instance, in combination with housing, water and sanitation statistics, they can provide telling determinants of the environmental sustainability of human settlements and environmental health. (FDES 2013, para.3.199)
39. The main statistics pertaining to this topic are rural, urban and total population, including population density. When possible, these statistics should include geospatial information regarding specific geographic distributions in the country. Data availability is ample for this topic in most countries, the main source being both population censuses and household surveys. These statistics are generally produced by NSOs, usually in the demographic or social domains. (FDES 2013, para.3.200)
40. The following examples gathered by UNWTO for the Second T.20 Ministers Meeting / Republic of Korea, 11-13 October 2010, illustrate that tourism seems to be a growing economic alternative for the economic viability of rural regions:
 - The fact that Japan has historically developed Provincial Input-Output Tables has allowed for particular research on tourism economic impacts at subnational levels:

- one of such findings is that domestic tourism counts for a greater positive impacts in rural areas than inbound tourism (Miyagawa, 2011)
- In Canada it has been documented that the intensity of tourism employment in predominantly rural regions is about the same as in urban areas
 - Several countries argue that tourism has been helpful in dealing with poverty in economically lagging, especially rural regions. China states that “in recent years, tourism has played a key role in tackling poverty by providing job opportunities to the surplus labour force in the underdeveloped areas of China”. Indonesia and Turkey note similar experiences where the latter, as well as Mexico, maintains that tourism provides opportunities for low-skilled labour. Following Indonesia’s argument that “poverty is related to the lack of skills”, one may deduce that accompanying tourism jobs with training for skills development may thus be a way to boost the mitigation effect on poverty.
 - These examples point out that the way tourism contribute to poverty alleviation is through visitor’s expenditure impact on local population income; for the purpose of proper measurement of such impacts, there is the need for precise definition of the target population. In this perspective, it seems relevant the distinction between unskilled jobs and poor: while in the first case we are focusing on individuals employed that receive an income, in the second case the focus is on households which income is under the poverty line
41. In each case observation instruments (in the first case mainly administrative records while in the second case household surveys) oblige to find the connection between visitor /travel party / household (see [Chapter 6](#))
42. Finally, UN General Assembly has formally accepted (November 2014) that tourism can contribute to “poverty eradication and environment protection” stressing two relevant issues in line with this chapter:
- “Poverty is a multifaceted problem that requires a multifaceted and integrated approach in addressing its economic, political, social, environmental and institutional dimension at all levels”
 - “The role of sustainable tourism, including ecotourism, in promoting rural development and better living conditions for sustainable rural populations”

Annex 30. Tourism Economic Contribution and Impact: Selected Topics

This Annex focuses on some initiatives for which UNWTO has either elaborated useful material that should be adapted to be used at sub-national levels (this is the case of measuring the Meetings Industry and its tourism connection as well as the measurement of vacation homes) or has been insisting all along this document about the opportunity for expanding the third component of the proposed R-TIS with data useful for key stakeholders although non necessary being official nor statistical data (the case of measuring special events is definitively one example for which there is a relevant number of research and case study since B. Richie seminal work in 1980).

These three examples illustrate that in addition “to promote a descriptive analysis that identifies the main characteristics of regional tourism from the supply and demand side”, measuring these topics would support the setting up of sort of regional or sub-regional network of experts and stakeholders that in due time could be part of a more ambitious Regional inter-institutional network for the setting up of a R_TIS.

A. The Meetings Industry and its Tourism Connection

A.1 Background

1. Although not a tourism industry, the Meetings Industry has been highlighted in the first document jointly issues by the International Network on Regional Economics, Mobility and Tourism (INRouTe) and the World Tourism Organization (UNWTO), **“Towards a set of UNWTO Guidelines” (December 2012)**- part of the series *A closer look at Tourism: Sub-national Measurement and Analysis*-.
 2. The present chapter is about the measurement of the tourism contribution (also referred as tourism connection) of the Meetings Industry and is based on two complementary research carried on under a cooperation agreement by UNWTO and the International Congress and Convention Association (ICCA), Meeting Professionals International (MPI) and Reed Travel Exhibitions during the years 2006/2008⁵²:
 - The first of them described the general functioning of the Meeting Industry, its identification in the revised version of the International Standard Industrial Classification of All Economic Activities (ISIC Rev.4) and explored its identification in the Tourism Satellite Account due to such connection. The results were published by UNWTO as *“Measuring the economic contribution of the Meetings Industry: a TSA extension”* in 2007;
 - As a follow up of such approach, the second research was more practical oriented in order to provide guidance and support for the compilation of statistical data at country level for comparability purposes by ICCA, MPI and Reed Travel Exhibitions; all of them agreed to work in the implementation of case studies in a number of pilot countries under a joint initiative. The conceptual background for such initiative was prepared by the UNWTO Department of Statistics and TSA and disseminated during 2008 in three volumes named as *“Global Meetings Initiative: basic concepts and definitions (vol 1), identifying the link between tourism and the Meeting Industry: case studies (vol 2) and pilot country data schedule (vol 3)”*.

⁵² UNWTO prepared a report rooted in such documents aiming a “practical approach to the Meetings Industry as a way to help and encourage new destinations and organizations to meet the requirements of a demanding and ever-changing industry” (see World Tourism Organization (2014), AM Reports, Volume seven- Global Report on the Meetings Industry, UNWTO, Madrid)

3. The adaptation of such research for drafting this document refers basically to the setting up of a Regional Tourism Information System (R-TIS).

Consequently, in a future period, topics like the measurement of the economic contribution of the Meetings Industry in terms of a Tourism Satellite Account framework or the analysis of individual meeting impacts on sustainability, etc. should be explored in line with recent research work as mentioned in [Annex 26](#) and [Annex 27](#), respectively.

4. Although deliberately conservative in its focus, the recommended guidance provided in this chapter might be useful for those regions and other sub-regional entities where the celebration of congresses, conventions, conferences and seminars are economically significant.

(For more details, interested readers should see [Annex 26 "Meetings Satellite Account \(MSA\) for the UK" drafted by Calvin Jones](#) and [Annex 27 "Triple impact assessments of meetings" drafted by Tommy D. Andersson](#).)

A.2 Conceptual Framework

5. Although not a tourism industry, those establishments pertaining to the Meetings Industry usually have a tourism connection; consequently it is relevant to understand what such an industry really is.
6. The term meetings industry is preferred by the International Congress and Convention Association (ICCA), Meeting Professionals International (MPI) and Reed Travel Exhibitions over the acronym MICE (Meetings, Incentives, Conferences and Exhibitions) which does not recognize the industrial nature of such activities. A common definition of meetings was adopted by UNWTO and these three organizations.

A meeting is a general term indicating the coming together of a number of people in one place, to confer or carry out a particular activity. The key purposes of meetings are to motivate participants (share ideas, learn, and hold discussions on professional, scientific or business matters) and to conduct business. Frequency can be on an ad-hoc basis or according to a set pattern, as for instance annual general meetings, committee meetings, etc.

The term *meeting* must be understood to encompass the three major areas of activity included in the scope of the industry under consideration, which are the following:

- Congresses, conventions, conferences, seminars
- Trade fairs and exhibitions
- Incentive activities

7. The present chapter (as was the case of the research carried on by the UNWTO and the three associations already mentioned) will refer exclusively to the first group of congresses, conventions, conferences and seminars. Such group can be further broken down into different categories:
 - *Public conference or lecture*: basically unidirectional meetings where the audience adopts a predominantly passive role and specialized knowledge is not required;
 - *Governmental conference*: technical or political meetings between governments or governments and private agents, with the aim of discussing topics or reaching agreements;
 - *General assembly*: meetings limited to the members of an organization, of an internal nature;

- *Convention*: general and formal meeting of a legislative body, social or economic group in order to provide information, deliberate or establish consent or policies among participants. In the United States the term is used to describe large, usually national meetings of business circles, for discussion and /or commercial exhibition;
 - *Scientific congress* (forum, colloquium, seminar, symposium): specialized meetings of a technical and academic nature whose objective is to make a profound study of several matters, and whose treatment requires interactive dialogue between participants.
8. For a meeting to take place there is a need for a host or convener: the entity that makes the initial decision to hold or convene a meeting. The organization of the meeting itself may then be carried out entirely by a specialized organizer, by the host itself, or in a combination of outsourced and host's own resources. In coherence with the scope of the adopted definition, meetings that are held in the host's own premises might not be a priority for measurement purposes.

A meeting host may respond, in more concrete terms, to any of the following types:

- A government or public service organization; this class includes international governmental organizations;
 - A business or corporate organization;
 - An association, meaning an organized group of individuals that serves a given purpose, usually cultural, scientific, or professional, and that is usually non-profit oriented. This class also includes any non-profit, non-governmental organization of national or international scope.
9. Because one of the objectives of this document is to allow for international and intranational comparability on a limited number of topics, it should be highlighted that the terminology used by the international classifications of products and economic activities (CPC and ISIC) –which are the obliged classifications to be used for such purpose- is not the same as the one used by meetings industry professionals. This is an important issue that should be taken into account when reading the following paragraphs.
10. In a broad sense, the scope of the Meetings Industry includes the establishments engaged, either as a principal or as a secondary economic activity, in:
- The organization, promotion, marketing and selling of congresses, conferences, conventions, seminars, trade exhibitions and fairs, and incentive activities, whether as packages or bundles of services or consisting of specific services, including intermediation or the management of reservations for any particular meetings-related services;
 - The commercial provision of meeting facilities or accommodation for meeting participants or exhibitors; and
 - Auxiliary services, which are typical or necessary for the hosting or organisation of meetings, such as personnel, technical equipment, catering and other materials.

Such services may be offered by a specialized meeting organizer or other types of establishments included within the scope of such industry, to a variety of business units or persons: a hosting corporation, association or government, a trade fair exhibitor, a meeting participant, or another establishment belonging to the Meetings Industry.

A first step in delimitating the industries included is adopting a definition of the services and products that typically enter into the organization of a meeting, and that at the same time can be identified as specific items within international and national standard product classifications.

In this light, a list of products that are typical, closely connected and necessary for the hosting and organization of meetings is proposed below. They are already identified as items or part of items within the Standard International Classification of Products, specifically the CPC Version 2 that is one of the two classifications to be used for tourism statistics as mentioned in the IRTS 2008. As an indicative approach, and for ease of reference, the denomination *meeting-characteristic products* is proposed, including:

- *Convention assistance and organization services.* These correspond to CPC class 8596, subclass 85961; they include the organization and management of conventions and congresses and provision of convention assistance and support services, with or without own staff, including, among others, components such as:
 - advice and consultancy services with respect to all aspects of the organization of conventions
 - assistance in choosing and locating space
 - marketing and public relations
 - provision of secretariat services, equipment and other auxiliary services
 - provision of accommodation booking as well as on-site and delegate transfer services
- *Trade show assistance and organization services.* This service item corresponds to CPC class 8596, subclass 85962; it includes the organization and management of trade shows and trade fairs and provision of assistance and support services, including services which are analogous to the subclass 85961 above.
- *Rental or leasing services involving own or leased non-residential property.* This corresponds to CPC subclass 72112, and it includes rental or leasing services concerning industrial, commercial or other non-residential buildings or property by owners or leaseholders. Within the list of examples of activities covered in this subclass, CPC specifically refers to “convention centres, exhibition halls and multiple-use buildings that are primarily non-residential”. This item is therefore suitable for the classification of meetings-characteristic services of rental of facilities for meetings and trade exhibitions, whether by convention centres, exhibition halls, meeting hotels, universities or other providers of such a service.
- *Reservation services for convention centres, congress centres and exhibit halls.* This corresponds to CPC subclass 85531, and includes the arrangement of reservations for the use of such facilities. From a Meetings Industry viewpoint, these services may be offered by the management of the facilities themselves, by specialized meetings organizers, or by establishments such as Convention Bureaux.
- *Tour operator services.* This service item, which corresponds to CPC class 8554, subclass 85540, includes the arrangement, assembling and marketing of custom package tours for groups of domestic or international travellers. From the viewpoint of the Meetings Industry, this item in the CPC classification can be used for identifying services offered by establishments such as destination management companies and incentive houses. Such package tours may be offered generally to hosting corporations, associations or other Meetings industry establishments such as specialized meeting organizers or Convention Bureaux.

11. In order to adequately reflect the nature of the types of establishments operating under the scope of the Meetings Industry, and to facilitate the design of a methodological framework for evaluating their economic contribution as well as its tourism connection, it is important to distinguish, within the industry, between a concept of ***core Meetings Industry*** and an ***extended approach*** that would include a broader array of businesses. Thus the ***core Meetings Industry*** can be defined to include all business units in the reporting territory that specialize in the production of typically meetings-related services, as their principal economic activity, in particular, businesses whose principal economic activity consists of the production and supply of services included in the list of *meetings-characteristic products* proposed above. Using an analogy with the concept of tourism

characteristic activities established by the International Recommendations for Tourism Statistics 2008, these could be labeled as *meetings-characteristic industries*.

Such activities would include the following, all of which correspond to specific 3- and 4-digit codes of the ISIC Rev.4 international classification, as is set out in detail below:

- *Specialized meeting organizers*: business establishments that fall within the boundary of the national equivalents of code ISIC 823: *Organization of conventions and trade shows*. Following the ISIC official definition, these businesses engage in the “organization, promotion and/or management of events, such as business and trade shows, conventions, conferences and meetings, whether or not including the management and provision of the staff to operate the facilities in which these events take place”;
- *Convention Centres, Congress and Exhibition Halls*: other than the above code, these establishments may be registered under the national equivalents of ISIC 6810: *Real estate activities with own or leased property*, which includes businesses engaging in buying, selling, renting and operating of self-owned or leased real estate; specifically non-residential buildings, including exhibition halls;
- *Incentive houses and destination management companies*: these establishments may be classified, among others, under the national equivalents of codes ISIC 7911: *Travel agency activities*, or even ISIC 7912: *Tour operator activities*. Code ISIC 7911 includes the activities of agencies primarily engaged in selling travel, tour, transportation and accommodation services to the general public and commercial clients. Code 7912 refers to tour operator activities, and includes arranging and assembling tours that may include items such as transportation, accommodation, food and recreational or sporting activities;
- *Convention and Visitor Bureaux*: these units specialize in the provision of information, reservation services or in the promotion of meetings activity in a specific destination. In some countries, they may act as a private business offering packages of meetings services. Depending on the nature of their legal status and of their activities, these establishments may be registered under different codes, including in particular the national equivalents of ISIC 823, ISIC 7911, ISIC 7990: *Other reservation service and related activities*, which specifically includes *Tourism promotion activities*, or those corresponding to public administration establishments.

12. An **extended approach** of the concept of Meetings Industry would include all businesses in the reporting territory, other than those described above, that engage in the production of services that intervene directly or are connected to the participation or organization of meetings, including services provided to meeting participants, exhibitors and hosting entities.

In particular, this approach would require considering the meetings-related activity generated by the accommodation industry; indeed, this industry, which is defined by the IRTS 2008 as a Tourism characteristic industry, produces both a meetings-characteristic product (rental of meeting venues), as well as accommodation services for meeting participants, which are therefore closely connected to the hosting of meetings.

Aside from providers of accommodation services, there exist a host of other economic activities that provide auxiliary services, equipment, and personnel that are used intensively in organizing or attending meetings; these would include activities such as:

- transportation,
- technical equipment (audio/video/interpretation systems)
- secretarial support services,
- catering, food and restaurant services,

- speakers' representation services, or
- stand construction.

13. All these paragraphs illustrate the complexity of a connection between tourism and such industry. The following comments included in an interesting research carried out by VisitDenmark in 2012 (The Economic Contribution of Meeting Activity in Denmark), are very pertinent in this context and are clearly related with the complexity of properly measuring the activity of such industry (see [section Basic data and Indicators](#))

“The meeting industry faces the same difficulties as the tourism industry faced before the development of the Tourism Satellite Account (TSA) in that it is an activity hidden among different industries. Where the economic contributions of other industries are measured in the National Accounts, the meeting industry is a demand side activity, dependent on the status of the consumer rather than the supplier. Just as with tourism, the consumer is the key to identifying the economic contribution of the meeting industry. The study, presented here, is a satellite account for the meeting industry in Denmark. A satellite account measures an industry from the demand side. For this reason, the values presented in this report all include taxes and VAT.

The meeting industry overlaps with the tourism industry. Tourists can be travelling for the purpose of either business or pleasure, and if it is business, it may involve a meeting. However, business tourism in the TSA framework includes much more than meeting delegates. Business tourists can be travelling salespersons, journalists, and others not attending meetings held in commercial venues and involving less than 10 participants.

Conversely, some meeting activities are not tourism in the TSA sense and thus not comprised in the Tourism Satellite Account. Non-tourism meetings include among others meetings involving local day-delegates and participants who are not staying at the traditional tourism facilities. In this way, the tourism industry and the meeting industry overlap”. (VisitDenmark 2012, section 1.3)

A.3 Basic Data and Indicators

14. One of the purposes for which persons travel is to attend different type of meetings, such as congresses, conferences, conventions, trade fairs, exhibition, and others. This has become an increasingly important purpose of travel and IRTS 2008 explicitly recommends that if a tourism trip's main purpose is business/professional, it can be further subdivided into “attending congresses, conventions, conferences and seminars”, “trade fair and exhibitions” and “other business and professional purposes”.

Congresses, conventions, conferences and seminars (as previously mentioned the present chapter will refer exclusively to such group) are held by businesses across the spectrum of the economy. Businesses may hold them for their own employees. Membership organizations, professional organizations, political organizations may hold them for their members, educational institutions may hold them, private and public institutions may hold them for their own employees or for others, so it is an activity of any business, in any sector of the economy.

15. Till recently no special attempt was made to isolate the phenomenon or to estimate the revenues and costs associated with such activities. Organizing congresses, conventions, conferences and seminars has now become important and the number of businesses who specialize in these activities has increased. For instance, hotels provide accommodation

with congress facilities to those wishing to hold conferences and make the necessary arrangements including for food and entertainment.

Identifying the activities and gathering all the information about the services directly and indirectly involved in bringing about these events is as yet in its preliminary stages but is of great interest to tourism, because attending conferences is a purpose of visit of tourists.

16. As mentioned in the previous section, it has become necessary first, to recognize and delineate a place for their activity in the international classifications of products and activities and second to determine the nature of the services they provide and how they should be measured. The activity is now recognized as ISIC 8230 *Organization of conventions and trade shows* of which 8231 is *Organization of conventions*. It is a service regarded as an administrative and support service to business. The service provided is classified as CPC 855961 *Convention assistance and organization services*. It is also the case that some businesses that are covered under the general terminology of Meetings Industry provide other specialized services that would be identified as other ISIC activities (rental of space, other types of intermediation, etc.).
17. Regarding these improvements in international classifications, it should also be noted that the organization of a meeting and all the other services that are necessary for the meeting to be held might be either imported or locally produced: consequently, the production of the service might be provided by a resident entity in such territory or other entities. The businesses included cover a great variety of different specialized activities, some of which can overlap with previously enumerated tourism characteristic activities (when they also cater directly to visitors), such as: Congress Travel agencies and Destination Management Companies, but others would belong to the newly expanded ISIC activity of *Organization of convention and trade show* e.g. Professional Congress Organizers, Convention Bureaus and yet others might belong to other ISIC categories depending on their principal activity. e.g. tourism boards, meetings information and technical specialists, meetings hotels, convention and exhibition centers, etc.

Generally these specialized organizations provide the services of organizing conferences and conventions on a fee or contract basis for those who want to hold a conference or convention. Sometimes they might both initiate and organize the conference.

18. Holding a conference or convention requires financial resources. These are raised through admission or convention fees, through contributions made by the business or organization holding the conference, through income from rental of space from display booths, through sponsorship revenues and the like. In turn there are the costs of administration, rental of space for the convention and rental of all technical services required. Around a convention there are a number of other events that are organized, such as dinners and special tours.

Besides the payment of a fee, participants might be asked to pay additional fees to attend these events: these payments as well as all other payments of participants as visitors during their stay in such territory (including those expenditures of their accompanying parties) is the tourism connection of the Meetings Industry. INRouTe suggest to measure such payments as a first step of a more complete measurement of the tourism contribution of this industry as mentioned in this chapter.

19. Measuring the tourism connection of the Meetings Industry at subnational levels has been a pioneer effort carried on by UNWTO with the support of a set of Australian researchers grouped under the Sustainable Tourism Cooperative Research Center (STCRC). More recently, the Regional Government of Andalucía and Austria have carried on a research on this topic as explained in [Annex 28](#) and [Annex 29](#).

20. In the following paragraphs the attention will be given to the core statistical information to be compiled in line with previous paragraphs. In order to measure the tourism connection of the Meetings Industry, the following sets of data and indicators are needed:
- Identification of the number of meetings held according to some characteristics of them
 - Measurement of the number of inbound and domestic visitors who attend meetings as participants as well as their accompanying parties (either as their principal or secondary purpose of the trip) according to some characteristics of the trip and themselves;
 - Measurement of expenditure of meeting participants and their accompanying party according to such characteristics
 - An estimate of employment generated by the meetings held

Such information should be obtained from the Meetings Industry associations and organizers, using supplementary sources, if needed. **section Table** layouts highlight the type of recommended data to be obtained in a first approach, for the proper measurement of the tourism connection of meetings industry at regional and sub-regional levels.

A.3.1 Demand-side perspective

The following concepts are central for that purpose:

Meeting venue

21. In a first approach, it is suggested that only meetings that take place in contracted venues, where payment has been made (including payment in-kind) for the use of the facilities, should be considered.
22. The venues that are included are those offered commercially for hosting activities as well as universities' meeting facilities and corporate or association facilities, insofar as they are offered against payment of a fee. Venues that are used for in-house meetings, however, should be excluded from measurement due to the difficulties in data compilation and the absence of an explicit payment.
23. A basic classification of meeting venues would include:
- Congress hall
 - Congress and convention centres
 - Congress and convention centres with hotel accommodation
 - Hotel or resort with meeting facilities
 - University
 - Other venues, not specifically built for meetings, which have facilities that are used for meetings

Meeting participant

24. In principle, any person who attends a meeting for any given purpose is treated as a meeting participant. However, a distinction should be made between meeting participants in a strict sense, or meeting delegates, and persons who may attend a meeting for different purposes, such as meeting exhibitors or representatives of exhibiting firms, who play a distinct, supply-related role in the organization of a trade exhibition.

25. INRouTe suggest adopting the strict definition of meeting participant as a standard for data compilation, a definition that is closely related to a demand-side perspective. Additionally, to meeting participants themselves, some aggregates should also refer to persons that travel with the meeting participant and constitute a unique expenditure unit: the travel party. Some of the data that will be collected will also refer to participants and their accompanying parties.

Regarding categories of meeting participants in a given region, the fundamental distinction in order to estimate the corresponding tourism connection is related with the concept of regional tourism (see [Glossary/ regional tourism](#))

Accordingly, meeting participants shall be broken down according to the following categories:

- Inbound visitors – residents from countries other than the country of reference (inbound visitors to the country as a whole) as well as residents from another regions of the country of reference. In both cases, it should also be included, if that would be the case, persons who form part of the same travel party.
- Domestic visitors – residents in the region of reference (who travel for tourism purposes outside their usual environment which is located in such region, and optionally those who form part of the same travel party.
- Non visitors – local area residents (persons who attend a meeting within their usual environment) as well as non-residents that are in the place visited in order to perform some work and being paid locally for that, without having become an usual resident.

Additionally, other characteristics may be used to classify meeting participants, such as basic demographic characterization, country or place of residence, status in employment or occupation, in accordance with the relevant international standard classifications.

International meeting

26. An international meeting is defined as a meeting in which a minimum of 20% of participants are residents of at least one country other than the meeting's host country.

Meeting size and duration

27. It is recommended that data be collected on all meetings with at least 10 participants, and that last for a minimum of four hours or half a day.
28. *Meeting participants and their accompanying party's expenditure* represents the core of relevant data for a first estimation of the tourism connection of the Meetings Industry.
29. Estimating such expenditures requires obtaining reliable estimates of average expenditure per meeting participant and the corresponding travel party, based on ad-hoc sample surveys, in combination with estimates of the total population of meeting participants reference period.

A.3.2 Supply-side perspective

30. The basic concepts are limited to
- employment in establishments belonging to the *core Meetings Industry* and employment (jobs) generated by the meetings held; both type of data will refer to the corresponding territorial level (region or local), and
 - quantification and characterization of meeting venues and capacity.

31. Other type of data (such as output, value added or remuneration of employees) are much more complex to obtain.

A.4 Table Layouts

A.4.1 Demand-side perspective

32. As mentioned in the previous section, the basic concepts related to the measurement of the tourism connection of the Meetings Industry imply that monetary and non-monetary data and indicators should be gathered. While monetary statistics should refer both to the participant as well as to the accompanying party, non-monetary ones include a great variety of data showing the importance of meetings held in the reporting territory.

Either for a regional or a sub-regional territorial entity, the tables proposed in this section should be considered as a minimum proposal for a first approach to measure such connection.

33. The main non-monetary data can be summarized as follows:
 - number of meetings held in the reporting territory, by type, size and duration of meetings;
 - number of participants in such meetings, by categories of participants and type of meeting;
 - number of other individuals travelling with the meeting participant
 - total number of individuals and overnights of travel parties associated to meetings held in the reporting territory
34. Meeting participants and their accompanying party's expenditure relates to total expenditure directly connected to the participation in meetings held in the reference territory and period.
 - The scope of expenditure to be covered includes all goods and services purchased which are directly related to the participation in the meeting and stay (in the case of visitors). This should include, indicatively, the following items:
 - Transportation to and from the place where the meeting is held, from the participant's place of residence;
 - Accommodation and meals during the length of the meeting;
 - Goods purchased in the municipality where the meeting is held during the length of the meeting;
 - Meeting registration fees;
 - Special events connected with the meeting, such as dinners, optional visits, and others;
 - To the extent possible, the expenditure covered will also include, as a separately identifiable section, expenditure related to any extra days spent visiting the reference country as part of the same trip, whether these visits take place before or after the meeting.
35. From the demand-side perspective, the basic statistical sources to be used include official statistical surveys (basically accommodation and regional / local visitors' surveys), as well as ad-hoc sector specific surveys addressed to meeting participants; also data reported by meeting venues/organizers are the only ones that can provide data for table 12. The robustness and completeness of the analysis will essentially depend on the sources available, their quality and the type of data that can be derived from them.

36. If reliable statistical regional and sub-regional data of visitor flows are available, and the questionnaires include expenditure modules as well as a specific category within the description of the purposes of travel that allows identifying meeting participants (whether as a main purpose or as a secondary purpose) and their accompanying party, then identification of the meeting participant segment of the visitor population and tabulation of the expenditure vectors to compile table 13 and table 14 could be obtained.
37. It should also be recalled that the definition of “meetings” that is used in this chapter might differ from what visitors consider as “meetings” in the official classification by purpose of the trip (as mentioned in the IRTS 2008 official document and referred in [chapter 3](#) and [chapter 4](#)), so that it might be necessary to collect additional information in those territories where meetings are relevant by further subdividing the main or secondary purpose of the trip when identified as “business / professional purpose” into “attending meeting, conferences or congresses”, “trade fair and exhibitions” and “other business and professional purposes”.
38. The latter, however, depends on the availability of samples of meeting participants that are sufficiently large so that reliable estimates of the population of meeting participants and their expenditure vector can be obtained by those surveys already mentioned.
39. Even if official tourism flow surveys are available, ad hoc meeting participant surveys are basic for measuring the meetings industry and the corresponding tourism connection at regional and sub-regional territorial entities: they play an essential role in terms of facilitating the collection of large samples of meeting participants and therefore are potentially producers of reliable estimates on their expenditure and travel patterns.

Table 8 Number of meetings held, by type of activities

Type of activities	Number of meetings held
1. Congresses	
2. Conventions	
3. Conferences	
4. Seminars	
Subtotal	
5. All other type of meetings	
Total	

Table 9 Meetings participants and other individuals travelling with them (travel party): number and overnights, by type of activities

Travel Party					
Type of activities	Meeting participants		Other individuals travelling with them		Average size of the travel party
	Number	Overnights	Number	Overnights	
1. Congresses					
2. Conventions					
3. Conferences					
4. Seminars					
Subtotal					
5. All other type of meetings					

Table 10 Meetings participants' key basic data and indicators according to forms of tourism

Forms of tourism	Meeting participants (1)	Travel party			Associated expenditures		
		Other individuals travelling with them (2)	Average size of the travel party (3)	Overnights (4)	Average expenditure per participant per day (5)	Average expenditure of the travel party	Total expenditure (7)
Inbound visitors Domestic visitors Non visitors: Local area residents other non-visitors							
Total							
Data sources	-	Data reported by meeting venues/organizers		Accommodation surveys	- Meetings industry ad hoc surveys - Official regional/local visitor surveys		

A.4.2. Supply-side perspective

40. If the Meetings Industry is relevant in a given territorial entity, it would be of interest to gather some basic data and indicators of the establishments providing those goods and services necessary to held such events: such information would be included in table 15 and table 16.
41. The compilation of table 15 should include data derived from national sources under the responsibility of National Statistical Offices: service sector annual surveys as well as Business registers data. In any case, also the Meetings Industry associations could help in checking consistency of such data and completeness of official registers for developing such census, as well as cooperate in gathering information of the meetings held in such venues and relevant characteristics of them.
42. Table 16 presents number of venues in the territory of reference and some basic characteristics (capacity). In accordance with the proposed definitions of meeting venue data should refer only to commercial meeting venues, meaning those that are commercially offered and that charge a rental fee for holding meetings. It therefore excludes meeting spaces for internal use, located within the premises of corporations or other institutions. The Meetings Industry associations could help in obtaining such list (which should be ideally a census regularly updated) and cooperate in gathering regular information about their activities held.
43. Both the number of venues and their size, in terms of total number of persons that they can accommodate in normal use and area, are of interest and should be provided. Ideally, these data should be completed by information on actual use (number of days and potential number of participants) and provide break down by region/major congress cities.

Table 11 Meetings industry: establishments and employment generated by type of activities

Types of activities	Number of establishments	Number of jobs in those establishments			Jobs generated by the meetings held		
1- Specialized meeting organizers 2- Convention centers, congress and exhibition halls 3- Incentive houses and destination management companies 4- Convention and visitor bureaux							
Total							

Note: this typology is based in the ISIC Rev.4 classification of all economic activities because data obtained should be based in official statistics. In due time, all other sets of basic data and indicators presented in table 13, table 14, and table 15 will also use ISIC Rev.4

Table 12 Meeting venues by type and capacity

Type of venue	Number	Total capacity (m2)	Total capacity (number of participants)
1. Congress and convention halls 2. Hotels 3. Universities 4. Trade exhibition halls 5. Other venues			
Total			

B. Vacation Homes

B.1 Introduction

44. For many years and still in many circumstances, tourism statistics and analyses have focused on visitors staying in hotels or other forms of collective accommodation. It was not that staying at private accommodation was not accounted for, but it was considered as a rather marginal phenomenon, that did not have much importance and, therefore, could be neglected without generating major biases in the analysis.
45. Nevertheless, things have changed. There are statistical evidences of the increasing importance of second home ownership by non residents. A few examples will be shown here: that of Europe as a whole, that of France, that of Spain, and that of the United Kingdom. Whereas France and Spain are “destination countries”, that is, countries in which the ownership of vacation homes by non residents is relevant, the United Kingdom is rather an “originating” country as United Kingdom residents are important owners of vacation homes abroad and in particular in the two above mentioned countries. Other cases are also known to be important (for instance, the ownership of vacation homes by United States and Canada residents in many Caribbean islands).
46. The approach to measure vacation homes that are owned by non-residents in a given country has been traditionally the focus used by National Statistical Offices and International Organizations such as UNWTO (Libreros (2010) and Cañada, (2010)), Vacation home ownership in a globalized World, Working Paper, UNWTO, Madrid; in fact, tourism as an international traded service is an increasing issue of interest for National Accounts and Balance of Payments officials. For them, the main practical obstacles for the

proper measurement of such phenomenon, arise from various factors both on the supply and on the demand side:

- From the supply side, the measure of the stock of vacation homes and its change over time needs to be done, using Population and Housing Census or administrative data, or any other available source.
- From the demand side, experience has shown that demand side sources (specific surveys of tenants, tourism surveys) are also necessary to collect data like time of using (length of vacation periods) and detailed expenditures linked to those dwellings

From a subnational perspective, the measurement of vacation homes imply, in the case of the demand side measurement a very different focus and interest than at the national level; in fact, the focus on regional tourism (see [Glossary/regional tourism](#)) makes the measurement of the number and characteristics of vacation homes (including the ownership by residents and non-residents) the first priority.

Due to the fact that for a given region, the concept of inbound tourism includes both residents of countries other than the country of reference (inbound visitors to the country as a whole) and residents from another regions of the country of reference, the supply side approach requires a more detailed insight. Before addressing this issue, it should be highlighted the conceptualization of vacation homes in tourism international statistical standard.

B.2 Treatment in the International Recommendations for Tourism Statistics (IRTS 2008)

47. In tourism statistics, visiting one's vacation home is considered in all cases as a tourism activity so that its measurement is germane to the measurement of tourism. This derives from the following statements:

“Tourism is defined as the activity of visitors, that is, of individuals as they take trips outside their usual environment for less than a year for any main purpose (business, leisure, or other personal) other than to be employed by a resident entity in the place visited” (IRTS 2008 para. 2.8).

48. The determination of the usual environment of a person is crucial to the definition of tourism. For this reason, the new International Recommendations for Tourism Statistics 2008 (IRTS 2008) explain what the usual environment is, and that definition is related, but not exclusively, with that of vacation or holiday homes, as they are frequently visited by their owners or long term renters. The definition used is the following:

“Each household has a principal dwelling (sometimes also designated as main or primary home), usually defined with reference to time spent there, whose location defines the country of residence and place of usual residence of this household and of all its members. All other dwellings (owned or leased by the household) are considered as secondary dwellings.

A vacation home (sometimes also designated as a holiday home) is a secondary dwelling that is visited by the members of the household mostly for purposes of recreation, vacation or any other form of leisure. Trips should not be so frequent and the duration of the stay so large so as to turn the secondary dwelling into the principal dwelling of the visitor” (IRTS 2008 paras. 2.26 – 2.27).

49. According to this description, not all secondary dwellings are vacation (holiday) homes. Some households may own another residence than the one in which they usually live for other purposes: (i) rent it and generate an additional income; (ii) occupy it for work purposes, etc. Only those dwellings intended to be seasonally occupied by their owner for vacation or recreation purposes are considered within the category of vacation or holiday home and are the object of the present discussion.
50. In tourism analyses, visiting one's vacation home is treated as a tourism activity: vacation homes are considered as being outside one's usual environment, irrespective of the frequency, regularity of visit or distance from the usual environment. Visiting one's vacation home is viewed as a break away from the routine of every day's life.
51. This is true, for both subsets of visitors considered in regional inbound tourism and covers both traditional vacation home ownership as well as time shares and other new forms of vacation home ownership.

B.3 Measurement issues⁵³

52. If relevant at regional or sub-regional levels, the measurement of the number and characteristics of vacation homes (including the ownership by residents and non-residents) might be a priority and requires a more detailed insight regarding the supply side measurement of such dwellings.
53. Establishing the number of vacation homes owned and used by visitors associated to the different forms of regional tourism, require the combination of different types of sources: basically owned by regional Housing censuses, housing surveys and administrative data.

B.3.1. Housing censuses

54. Persons and households may own or rent a secondary place of residence and use it for holidays, leisure and recreation purposes. It is also useful to know whether the property is owned or leased. (This refers to properties leased on a longer term basis and used for leisure or vacation purposes. It is different from accommodation services purchased from hotels and similar types of establishments).
55. It must be understood that the term vacation or holiday homes covers the ownership and lease of homes, cottages, apartments, flats and condominiums time-share arrangements that allow the use of space for limited periods of time each year, under legal arrangements that vary from outright ownership to the purchase of points that provide access to accommodation located in different places within a country or in different countries of the world, as well as other new modalities (as deeded interests or other types of contractual arrangements including those operating like a club in which the membership gives the right to use any of the properties of the club, or of any other affiliated system, abiding by the rules that have been established, there are also new modalities such as condo hotels, fractionals and private residence clubs, hotel residences, etc.).
56. Housing censuses (usually associated to Population censuses) do not only provide the actual number and physical characteristics of housing units, but also their form of occupancy, in which being used as a vacation home is specifically identified (this

⁵³ This section uses Libreros, M and Cañada, A (2010) as reference

information is obtained by co-censal surveys that are usually applied simultaneously or very shortly after a census). Nevertheless, as censuses are usually held when people are present in their main residence, it might not be possible to get further information on homes used as vacation homes, in particular on the characteristics of their owners and other users (if that could be the case) as well as the the number of days occupied by each subset along the year. Such information would be useful in order to estimate occupancy levels by non- commercial accommodation supply.

Particularly at subnational levels (more specifically in relevant tourism destinations), it would be of great interest to measure the use by such vacation homes that are rented or leased to friends and relatives

Housing census would thus provide a baseline information, that would need to be complemented by other statistical procedures, both to precise the census data (census surveys collected at the time of the census in order to collect additional information), or, collected in other periods, to provide additional information and observe changes overtime, or administrative data that might be used as a complement.

B.3.2. Housing surveys

57. Perhaps other housing surveys are usually conducted in current, non census periods, in order to give a follow-up to the stock of housing units and their characteristics. The design of those surveys might also be such so as to aim at collecting information that the census could not provide.
58. In such a context, some countries or regions (particularly tourism regions, but also those in which the housing shortage is relevant and is coupled with a high number of vacant units) might decide to develop special survey operations in order to get a deeper insight into the characteristics of units within the category of vacant housing units. In such cases, the operations might require a specific statistical design as vacation homes are not uniformly spread over the territory. In those cases, it should be possible to determine the country of residence of the owner and the use of such dwelling all over the year.

B.3.3. Use of administrative data

59. Fiscal sources can also provide relevant information to identify and provide some characteristics of second homes owned both by residents and non residents (there are different experiences in major national tourism destinations such as France and Spain that are particularly interesting in that respect.
60. Such sources (FILOCOM in France and Catastro in Spain) have been used for a great variety of uses and in particular in order to determine the number of dwellings that are not the main dwelling of a household, and the place of residence of the owners of such dwellings classified at a great geographical detail, and providing also a possible estimate of its rental value.
61. The coverage is that of all housing units that are subject to the housing tax, and the information that is included covers the characteristics of the housing units, the mode of occupancy of the unit; the characteristics of the occupants of main residences; the characteristics of the owners and the movements of properties.

62. Using such sources is possible to determine those housing units that are not the main residence of their occupants, and as the place of residence of the owner is known, it is possible to establish those owned and used by visitors associated to the different forms of regional tourism. These secondary residences might not be all vacation homes, but the difference between both might be very small.
63. The benefit of using such type of exhaustive sources is that the information is readily there, and has a total coverage; nevertheless, an important statistical work is required to make this source compatible with census data.

A related type of experience using administrative data instead of surveys to set up housing censuses is the case of Sweden's 2011 Population and Housing Census

Sweden Statistical Office decided by 2008 to such Census should be totally register-based.

In earlier Population and Housing Censuses the general public and property owners have had to provide information by filling in and sending in questionnaires. It has however in recent Censuses been possible to use increasing amounts of information from administrative register-based sources. Future Censuses, of which the first is planned for 2011, will be based entirely on information from different administrative sources. This means the general public will not be required to fill in questionnaires, nor from now on will property owners have to provide information about the buildings and dwellings they own.

In order to undertake the first Population and Housing Census in Sweden based on administrative sources, a register of dwellings and a register of housing units is needed. All those who live in multi-dwelling buildings will be updated in the population register with a dwelling number. Data from this and other registers, as Statistics Sweden's register on employment, occupation, education, income and wealth, plus the geographical database of Census 1990, will be presented in the form of current statistics on the population, households and dwellings.

C. Special Events

64. Clearly there is a link between tourism and events; those who attend or participate in an event are basically visitors (tourists or same-day visitors). From a tourism point of view, events can be considered as attraction the same as others.

Attending an event (a concert, museum exhibitions, sportive match, etc.) may be a good "excuse" for visiting a city or country. They may be not the main reason for the trip, but give just the right incentive to consider to travel.

Some other events (special events) may indeed be the main reason to visit a city; this is certainly the case for "large scale" cultural, arts and sport events. Special events are basically public events mainly organized by public bodies or authorities seeking a benefit for the region in which it takes place

It should be highlighted that those arts or cultural "mega events" (either regular festivals or one-time "mega event") provide the opportunity to identify the tourism connection which is not just about measuring characteristics of visitors and their trips, but also about socio-cultural impact of such events in the resident population hosting the event. As already mentioned in chapter 8 of this document, linking tourism and culture is a promising path in relation with the measurement of regional tourism

Because tourism is about visitors, part of the spectators of such special events qualify as visitors; it is relevant to distinguish between residents in the region of reference or foreigners; also about the economic and non-economic effects they procure.

65. Public support to special events is often predicated on positive effects, including the economic impacts of spectator spending and “spin-off” benefits for the host region; however, there is an extensive body of evidence that suggests sports and culture large events can also have significant negative impacts, including financial losses and a wide range of social costs including environmental costs associated with event staging (constructing ad hoc infrastructure).
66. Measuring the economic effects (which are the easiest to quantify) require special demand side surveys due to the fact that conventional surveys and official statistics are basically not suited for such type of exercises: nor the period of the event to measure (basically they last for less than a month), nor the territorial entity in which it takes place (cities or other type of sub-regional territorial entities) are considered in official statistics. Nevertheless, regional official statistics (derived either from national or regional surveys) provide an information background to be used for such purposes

A common approach to economic impact analysis of such events is to measure the expenditure inflow from spectators that qualify as visitors to the region or tourism destination hosting the event; such measurement refers to the direct impact and is usually based on surveys addressed to those spectators associated to different forms of regional tourism (see [Glossary](#)). Organizers of the event can provide a precise figure or an estimate of the total number of spectators (depending if the acquisition of tickets is a prerequisite to attend the event)

Such surveys (including both quantitative and qualitative type of questions) might supplement the UNWTO proposed basic questions to measure flows and expenditure associated to inbound tourism (see UNWTO IRTS Compilation Guide) regarding some characteristics of the trip (basically overnights and expenditure) as well as the itinerary of the trip (in order to estimate both out-of-town visitors days and expenditure) and main and secondary activities carried on while at destination (in order to develop visitor’s profiles)

But there are other components of expenditures that should also be measured if the objective would be to estimate a more precise measurement of the overall economic impact of such events: ticket sales, media and sponsorship, tourism sector establishments, etc. Also direct participants on the event might account for a significant level of total expenditures (for instance in the case on Americas Cup).

Basic data and indicators derived from such measurements (which might not be official nor statistical) should be integrated in the third component of the [Regional Tourism Information System \(R-TIS\)](#)

Annex 31. List of tourism characteristic products and grouping by main categories according to CPC Ver. 2

Annex 4 of IRTS 2008

List of tourism characteristic products and grouping by main categories according to CPC Ver. 2					
1.	Accommodation services for visitors		6.	Air passenger transport services	
	63111	Room or unit accommodation for visitors, with daily housekeeping services		64134	Sightseeing services by air
	63112	Room or unit accommodation for visitors, without daily housekeeping services		64241	Domestic scheduled air transport services of passengers
	63113	Room or unit accommodation services for visitors in timeshare properties		64242	Domestic non-scheduled air transport services of passengers
	63114	Accommodation services for visitors, in rooms with multiple occupancy		64243	International scheduled air transport services of passengers
	63120	Campsite services		64244	International non-scheduled air transport services of passengers
	63130	Recreational vacation camp services		64250	Space transport services of passengers
	63210	Room or unit accommodation services for students in student residences			
	63290	All other room or unit accommodation services	7.	Transport equipment rental	
	72111	Renting or leasing services involving own or leased residential property		73111	Leasing or rental services concerning cars and light vans without operator
	72123	Trade services of timeshare properties	8.	Travel agencies and other reservation services	
	72211	Residential property management services on a fee or contract basis except of timeshare ownership properties		85511	Reservation services for air transport
	72213	Time share (ownership type) property management services on a fee or contract basis		85512	Reservation services for rail transportation
	72221	Residential building sales on a fee or contract basis except of time share ownership properties		85513	Reservation services for bus transportation
	72223	Sale of time share properties on a fee or contract basis		85514	Reservation services for vehicle rental
2.	Food and beverage serving services			85519	Other transportation arrangement and reservation services n.e.c
	63310	Meal serving services with full restaurant services		85521	Reservation services for accommodation
	63320	Meal serving services with limited services		85522	Time-share exchange services
	63399	Other food serving services		85523	Reservation services for cruises
	63400	Beverage serving services		85524	Reservation services for package tours
3.	Railway passenger transport services			85539	Reservation services for event tickets and other entertainment and recreational services
	64131	Sightseeing services by rail		85540	Tour operator services
	64210	Interurban railway transport services of passengers		85550	Tourist guide services
4.	Road passenger transport services			85562	Visitor information services
	64115	Taxi services	9.	Cultural services	
	64116	Rental services of passenger cars with operator		96220	Performing arts event production and presentation services
	64117	Road transport services of passengers by man- or animal-drawn vehicles		96310	Services of performing artists
	64118	Non-scheduled local bus and coach services		96411	Museum services except for historical sites and buildings
	64119	Other land transportation services of passengers, n.e.c.		96412	Preservation services of historical sites and buildings
	64132	Sightseeing services by land, except rail		96421	Botanical and zoological garden services
	64221	Interurban scheduled road transport services of passengers		96422	Nature reserve services including wildlife preservation services
	64222	Interurban special-purpose scheduled road transport services of passengers	10.	Sports and Recreational services	
	64223	Non-scheduled long distance bus and coach services		96520	Sports and recreational sports facility operation services
5.	Water passenger transport services			96590	Other sports and recreational sports services
	64121	Inland water transport services of passengers by ferries		96910	Amusement park and similar attraction services
	64122	Inland water transport services of passengers on cruises		96929	Other gambling and betting services
	64129	All other inland water transport services of passengers		96930	Coin-operated amusement machine services
	64133	Sightseeing services by water		96990	Other recreation and amusement services n.e.c.
	64231	Coastal and transoceanic water transport services of passengers by ferries	11.	Country-specific tourism characteristic goods	
	64232	Coastal and transoceanic water transport services of passengers on cruise ships			
	64239	All other coastal and transoceanic water transport services of passengers	12.	Country-specific tourism characteristic services	

Explanatory notes

These explanatory notes refer exclusively to internationally comparable tourism characteristic products and follow the same order as in Annex 4 above.

They have been extracted from *Central Product Classification / Draft CPC Ver. 2 structure* (document prepared by UNSD to the thirty seventh session of the UNSC – 7/10 March 2006).

The complete document can be consulted in <http://unstats.un.org/unsd/statcom/doc06/CPC-Ver2-Structure.pdf>.

Accommodation services for visitors

63111 Room or unit accommodation services for visitors, with daily housekeeping services

This subclass includes:

- accommodation services consisting of rooms or units with daily housekeeping services in for example hotels, resort hotels and similar establishments, typically provided on a daily or weekly basis

63112 Room or unit accommodation services for visitors, without daily housekeeping services

This subclass includes:

- accommodation services consisting of rooms or units with housekeeping services provided less than daily in for example pensions, guesthouses, bed and breakfast, apartments, bungalows or housekeeping cottages for persons away from their usual place of residence, typically provided on a daily or weekly basis

63113 Room or unit accommodation services for visitors, in time-share properties

This subclass includes:

- accommodation services in time-share properties, for visitors away from their permanent place of residence

63114 Accommodation services for visitors, in rooms for multiple occupancy

This subclass includes:

- accommodation services for persons away from their usual place of residence, in rooms for multiple occupancy typically provided on a daily or weekly basis, such as for example in youth hostels, mountain shelters or cabins

This subclass does not include:

- accommodation services for students in student residences, cf. 63210
- accommodation services in workers hostels or camps, cf. 63220

63120 Camp sites for visitors

This subclass includes:

- provision of space for a recreational vehicle or tent, for persons away from their permanent place of residence, typically provided on a daily or weekly basis

63130 Recreational vacation camp services

This subclass includes:

- provision of overnight accommodation, combined with food and recreational or training services in a combined package at a camp for adults, youth or children for which an all-inclusive fee is charged

63210 Room or unit accommodation services for students in student residences

This subclass includes:

- room or unit accommodation services for students in student residences attached to schools and universities

This subclass does not include:

- provision of rooms or units to visitors in student residences during the summer holidays, cf. 63111
- provision of rooms and units in student residences to conference participants, cf. 63111

63290 All other room or unit accommodation services

This subclass includes:

- room or unit accommodation services for semi-permanent residents in rooming or boarding houses and residential clubs
- sleeping car services

72111 Renting or leasing services involving own or leased residential property

This subclass includes:

- renting or leasing services concerning residential properties by owners or leaseholders to others:
 - houses, flats, apartment buildings
 - multiple-use buildings that are primarily residential
 - residential mobile home sites

This subclass does not include:

- accommodation services provided by operating hotels, motels, rooming houses, school dormitories, camp sites and other lodging places, cf. 631

72123 Trade services of time-share properties

This subclass includes:

- sale on own account of time-share properties

72211 Residential property management services on a fee or contract basis except of time-share ownership properties

This subclass includes:

- management services concerning houses and other residential properties, on a fee or contract basis
- management services concerning multi-apartment apartment buildings (or multiple-use buildings that are primarily residential)
- residential mobile home sites
- rent collection services
- management services concerning dwellings in joint ownership

This subclass does not include:

- time share (ownership type) property management services on a fee or contract basis, cf. 72213

72213 Time-share property management services on a fee or contract basis

This subclass includes:

- management services concerning buildings or properties used on a time-share basis

72221 Residential building sales on a fee or contract basis except of time share ownership properties

This subclass includes:

- real estate agency and brokerage services related to the sale of houses, flats, apartment buildings and other residential properties, and similar intermediation services involving buying, selling and renting of residential buildings and associated land, on a fee or contract basis

This subclass does not include:

- sale of time share ownership properties on a fee or contract basis, cf. 72223
- sale of land on a fee or contract basis, cf. 72230

72223 Sale of time-share properties on a fee or contract basis

This subclass includes:

- real estate agency and brokerage services related to the sale of time-share properties

85522 Time-share exchange services

This subclass includes:

- exchange and reservation services (often based on points) for owners of time-share units

Food and beverage serving services

63310 Meal serving services with full restaurant services

This subclass includes:

- food preparation and related beverage services furnished by restaurants, cafes and similar eating facilities providing full service consisting of waiter service to individual customers seated at tables (including counters or booths) with or without entertainment
- food preparation and related beverage services furnished in hotels or other lodging places or in transport facilities, e.g., in trains or aboard ships. Normally a full service consisting of waiter service to individual customers seated at tables (including counters or booths) is provided.
- dining car services

This subclass does not include:

- serving services of beverages without prepared foods, cf. 63400

63320 Meal serving services with limited services

This subclass includes:

- meals services in limited- and self-service establishments. These facilities provide seating but not waiter service; included are food preparation and non-waiter food and beverage serving services furnished by eating facilities providing a range of pre-cooked and other food
- canteen services. Provision services of meals and drinks, usually at reduced prices to groups of clearly defined persons who are mostly linked by ties of a professional nature such as sport, factory or office canteens, schools canteens and kitchens, services of university dining halls, messes and canteens for members of the armed forces, etc.
- meal services in fast-food outlets with seating

This subclass does not include:

- the provision of food by facilities without waiter service and not normally offering seating, cf. 63399
- serving services of beverages without prepared foods, cf. 63400

63399 Other food serving services

This subclass includes:

- other food preparation and related beverages services provided by refreshment stands, fish-and-chips stands, fast-food outlets without seating, take-away facilities, etc.
- services of ice-cream parlours and cake serving places
- services of meals and snacks prepared on the premises dispensed through vending machines
- mobile food services, preparing and serving food and beverages for immediate consumption from motorized vehicle or non-motorized carts

These services are provided without seating or waiter services.

This subclass does not include:

- services of meals and snacks not prepared on the premises dispensed through vending machines, cf. 6242

63400 Beverage serving services

This subclass includes:

- beverage-serving services, of alcoholic or non-alcoholic beverages, such as provided in bars, beer halls, nightclubs, discotheques and similar facilities, with or without entertainment

This subclass also includes:

- such services provided by bars operated in hotels or other lodging places or in transport facilities, e.g. in trains or aboard ships
- services of meals, snacks and beverages dispensed through vending machines, cf. 6242
- meals services for food and related beverages, cf. 6331, 6332

Railway passenger transport services

64131 Sightseeing services by rail

This subclass includes:

- sightseeing passenger rail transportation services

64210 Interurban railway transport services of passengers

This subclass includes:

- interurban passenger transportation provided by railway, regardless of the distance covered and the class used
- transport of accompanying vehicles, luggage, animals and other items

This subclass does not include:

- sleeping car services, cf. 63290
- dining car services, cf. 63310

Road passenger transport services

64115 Taxi services

This subclass includes:

- motorized taxi services, including urban, suburban and interurban

These services are generally rendered on a distance-travelled basis and to a specific destination. Connected reservation services are also included

- non-scheduled airport shuttle services

This subclass does not include:

- man or animal-drawn taxi services, cf. 64117
- water taxi services, cf. 64129
- air taxi services, cf. 64242
- ambulance services, cf. 93194

64116 Rental services of passenger cars with operator

This subclass includes:

- chauffeur-driven hire car services, wherever delivered, except taxi services

These services are generally supplied on a time basis to a limited number of passengers and frequently involve transportation to more than one destination.

64117 Road transport services of passengers by man- or animal-drawn vehicles

This subclass includes:

- passenger transportation by man- or animal-drawn vehicles or conveyances such as rickshaws and by pack animals, provided that the services of an operator are provided with the vehicle or animals

This subclass does not include:

- man- or animal-drawn passenger vehicle rental services without the services of a driver, cf. 73114

64118 Non-scheduled local bus and coach services

This subclass includes:

- non-scheduled chauffeur-driven hired bus and motor coach services within urban and suburban areas, generally rendered on a time and distance basis, frequently involving transportation to more than one destination

Unlike renting of a bus, which gives the client full control, this service is typically provided on a predetermined route and time-table.

This subclass does not include:

- sightseeing-bus services, cf. 64132
- renting of buses with driver, cf. 66011

64119 Other land transportation services of passengers, n.e.c.

This subclass includes:

- cable-operated passenger transportation, e.g. services by funiculars, teleferics, ski lifts and similar services rendered on a scheduled basis
 - other scheduled passenger land transportation by mechanized land vehicle, not elsewhere classified
 - passenger transportation by non-scheduled vehicles with driver, not elsewhere classified
 - transport of accompanying luggage, animals and other items that may be carried at no extra cost
- Incidental services not charged for separately (guides, provision of food, etc.) are included.

This subclass does not include:

- sightseeing-bus services, cf. 64132

64132 Sightseeing services by land, except rail

This subclass includes:

- sightseeing passenger land transportation services, except by rail:
- sightseeing transportation services by buses

64221 Interurban scheduled road transport services of passengers

This subclass includes:

- interurban passenger transportation services over predetermined routes on a predetermined schedule open to any user by motor bus, tramway, trolley bus and similar transport vehicles
- transport of accompanying luggage, animals and other items that may be carried at no extra cost

64222 Interurban special-purpose scheduled road transport services of passengers

This subclass includes:

- passenger transportation services over predetermined routes on a predetermined schedule for a specific segment of users by motor bus, tramway, trolley bus and similar
- scheduled interurban shuttle services, e.g. airport shuttles

64223 Non-scheduled long distance bus and coach services

This subclass includes:

- chauffeur-driven hired bus and motor coach services interurban and long distance, generally rendered on a time and distance basis, frequently involving transportation to more than one destination

Unlike renting of a bus, which gives the client full control, this service is typically provided on a predetermined route and time-table.

This subclass does not include:

- renting of buses with driver, cf. 66011

Water passenger transport services

64121 Inland water transport services of passengers by ferries

This subclass includes:

- passenger transportation on rivers, on canals and on other inland waters by ferries, including hydrofoils and hovercraft, whether on a scheduled or non-scheduled basis
- transportation services of accompanying vehicles, luggage, animals and other items

64122 Inland water transport services of passengers on cruises

This subclass includes:

- inland water cruises that include transportation, accommodation, food services and other incidental services in an all inclusive fare

This subclass does not include:

- sightseeing and excursion boat services, cf. 64133

64129 All other inland water transport services of passengers

This subclass includes:

- passenger transportation on rivers, canals and other inland waters on a scheduled or non-scheduled basis by vessels other than ferries, cruise ships, sightseeing and excursion boats
- water taxis

This subclass does not include:

- passenger transportation services by ferries, cf. 64121
- sightseeing boat services, cf. 64133

64133 Sightseeing services by water

This subclass includes:

- sightseeing passenger water transportation services

64231 Coastal and transoceanic water transport services of passengers by ferries

This subclass includes:

- coastal and transoceanic passenger transportation by ferries, including hydrofoils and hovercraft, on a scheduled or non-scheduled basis
- transport of accompanying luggage, animals and other items that may be carried at no extra cost

64232 Coastal and transoceanic water transport services of passengers on cruise ships

This subclass includes:

- the services provided by sea cruises that include transportation, accommodation, food services, recreational and other entertainment services in an all inclusive fare

64239 All other coastal and transoceanic water transport services of passengers

This subclass includes:

- coastal and transoceanic water transportation of passengers on scheduled or non-scheduled basis, regardless of the class of service, except by ferries and cruise ships
- transportation of passengers from port to port, including on freight ships
- transport of accompanying luggage, animals and other items that may be carried at no additional cost

Air passenger transport services

64134 Sightseeing services by air

This subclass includes:

- sightseeing passenger air transportation services

64241 Domestic scheduled air transport services of passengers

This subclass includes:

- passenger air transportation on regular domestic routes and on regular schedules supplied in aircraft (including helicopters) of any type
- associated transportation of passenger baggage and other items that may be carried at no extra cost

64242 Domestic non-scheduled air transport services of passengers

This subclass includes:

- passenger air transportation on a non-scheduled basis on domestic routes, supplied in aircraft (including helicopters) of any type
- associated transportation of passenger baggage and other items that may be carried at no extra cost

This subclass does not include:

- sightseeing passenger air transport services, cf. 64134
- rental services of passenger aircraft with crew, cf. 66031

64243 International scheduled air transport services of passengers

This subclass includes:

- passenger air transportation on regular international routes and on regular schedules supplied in aircraft (including helicopters) of any type
- associated transportation of passenger baggage and other items that may be carried at no extra cost

64244 International non-scheduled air transport services of passengers

This subclass includes:

- passenger air transportation on a non-scheduled basis on international routes, supplied in aircraft (including helicopters) of any type
- associated transportation of passenger baggage and other items that may be carried at no extra cost

This subclass does not include:

- sightseeing passenger air transport services, cf. 64134
- rental services of passenger aircraft with crew, cf. 66031

64250 Space transport services of passengers

This subclass includes:

- space transportation services of passengers

Transport equipment rental services

73111 Leasing or rental services concerning cars and light vans without operator

This subclass does not include:

- leasing, renting or hiring services concerning private cars with driver, cf. 64116

Travel agencies and other reservation services

85511 Reservation services for airline seats

This subclass includes:

- arranging reservations for airline tickets for:
 - domestic airline ticket reservation
 - international airline ticket reservation

85512 Reservation services for rail seats

This subclass includes:

- arranging reservations for rail seats

85513 Reservation services for bus transportation

This subclass includes:

- reservation services for bus transportation

85514 Reservation services for vehicle rental

This subclass includes:

- arranging reservations for rental cars

85519 Other transportation arrangement and reservation services, n.e.c.

This subclass includes arranging reservations for other services n.e.c., such as:

- reservation services for ferry transportation
- reservation services for airport shuttle transportation
- other transportation reservation services, n.e.c.

85521 Reservation services for accommodation

This subclass includes:

- arranging reservations for accommodation services for:
 - domestic accommodation reservation services
 - international accommodation reservation services
- direct exchange services for other owners of residential property such as homes or apartments/flats

85523 Reservation services for cruises

This subclass includes:

- arranging reservations for cruise bookings for:
 - cruises of one day or less
 - cruises of more than one day

85524 Reservation services for package tours

This subclass includes:

- arranging reservations for package tours for:
 - domestic package tours
 - international package tours

85539 Reservation services for event tickets, entertainment and recreational services and other reservation services

This subclass includes:

- arranging reservations for attendance at events, such as theater performances, concerts or sporting events

85540 Tour operator services

This subclass includes the services of:

- arranging, assembling, and marketing package tours:
 - pre-packaged tours, domestic and international
 - custom package tours for groups, domestic and international

Such a package usually includes buying and reselling passenger and baggage transportation, accommodation, food and sightseeing services. The resulting package tours may be sold to individuals, to travel agents or other tour operators

85550 Tourist guide services

This subclass includes:

- tourist guide services from own account tourist guides

85562 Visitor information services

This subclass includes:

- provision of information to visitors or potential visitors regarding destinations, preparing brochures, etc.

Cultural services

96220 Performing arts event production and presentation services

This subclass includes:

- production and presentation services for:
 - theatre, opera, ballet, musical, concert performances
 - puppet shows
 - circus performances

This subclass does not include:

- production and presentation services for "sound and light" performances or fireworks, cf. 96990

96310 Services of performing artists

This subclass includes:

- services of actors, readers, singers, musicians, dancers, stunt people, television personality hosts/presenters and other performing artists
- services of independent models

96411 Museum services except for historical sites and buildings

This subclass includes:

- display services of collections of all kinds (art, science and technology, history)
- management and conservation services for the collections
- organization of traveling collection exhibitions

This subclass does not include:

- sale and display services furnished by commercial art galleries, cf. 62299
- services of historical sites and buildings, cf. 96412
- services of botanical and zoological gardens, cf. 96421

96412 Preservation services of historical sites and buildings

This subclass includes:

- operation of, and access and visiting services to historical sites, monuments and buildings
- preservation services for historical sites, monuments and buildings

96421 Botanical and zoological garden services

This subclass includes:

- operation of, and access and visiting services of botanical and zoological gardens
- conservation and maintenance services of botanical and zoological gardens

This subclass does not include:

- nature reserves services, cf. 96422

96422 Nature reserve services including wildlife preservation services

This subclass includes:

- operation of, and access and visiting services to national parks, nature parks and reserves
- supervision services of national parks, nature parks and reserves
- conservation and maintenance services of national parks, nature parks and reserves

Sports and recreational services

96520 Sports and recreational sports facility operation services

This subclass includes:

- operation of and access services to indoor and outdoor sports and recreational sports facilities, such as stadiums, arenas, rinks, swimming pools, sports fields, tracks, golf courses, bowling alleys, tennis courts, etc.
- services of riding academies

This subclass does not include:

- non-residential property management services on a fee or contract basis, cf. 72212

96590 Other sports and recreational sports services

This subclass includes:

- skydiving services
- hang-gliding services
- scuba-diving services

96910 Amusement park and similar attraction services

This subclass includes:

- amusement park services
- attractions and fun fair services
- operation services of preserved railways

96929 Other gambling and betting services

This subclass includes:

- organization and selling services of lotteries, lottos, off-track betting
- casino and gambling house services
- gambling slot-machine services

96930 Coin-operated amusement machine services

96990 Other recreation and amusement services n.e.c.

This subclass includes:

- operation of, and access services to ballrooms, dance halls and other recreational facilities
- operation of ski hills
- recreation park and beach services
- production and presentation services for:
 - "sound and light" performances
 - fireworks

This subclass does not include:

- non-residential property management services on a fee or contract basis, cf. 72212
- personal theatrical or artistic agency services, cf. 85999
- motion picture, television and other theatrical casting services, cf. 85999
- operation of and access services to sports and recreational sports facilities, cf. 96520

Annex 32. List of consumption products grouped by purpose, according to their categorization as internationally comparable tourism characteristic products

Annex 2 of IRTS 2008

List of consumption products grouped by purpose, according to their categorization as internationally comparable tourism characteristic products			
(Products are identified as in CPC Ver. 2 and their correspondence with ISIC Rev. 4, according to the main industry of origin)			
CPC Ver. 2	Description	Categorization ⁽¹⁾	corresponding activity ISIC Rev. 4
subclass			
<i>Package travel, package holidays and package tours (a)</i>			
64122	Inland water transport services of passengers on cruises	X	5021
64232	Coastal and transoceanic water transport services of passengers on cruise ships	X	5011
85524	Reservation services for package tours	X	7911, 7920
85540	Tour operator services	X	7912
85523	Reservation services for cruises	X	7911, 7920
<i>Accommodation</i>			
63111	Room or unit accommodation for visitors, with daily housekeeping services	X	5510
63112	Room or unit accommodation for visitors, without daily housekeeping services	X	5510
63113	Room or unit accommodation services for visitors in timeshare properties	X	5510
63114	Accommodation services for visitors, in rooms with multiple occupancy	X	5510
63120	Campsite services	X	5520
63130	Recreational vacation camp services	X	5520
63210	Room or unit accommodation services for students in student residences	X	5590
63290	All other room or unit accommodation services	X	5590
72111	Renting or leasing services involving own or leased residential property (b)	X	6810
72123	Trade services of timeshare properties	X	6810
72211	Residential property management services on a fee or contract basis except of time-share ownership properties (b)	X	6820
72213	Time share (ownership type) property management services on a fee or contract basis	X	6820
72221	Residential building sales on a fee or contract basis except of time share ownership properties (b)	X	6820
72223	Sale of time share properties on a fee or contract basis	X	6820
85521	Reservation services for accommodation (b)	X	7911, 7920
85522	Time-share exchange services	X	7920
<i>Food and drink (c)</i>			
63310	Meal serving services with full restaurant services	X	5610
63320	Meal serving services with limited services	X	5610
63399	Other food serving services	X	5610, 5629
63400	Beverage serving services	X	5630
<i>Local and international transportation (d)</i>			
64111	Urban and suburban railway transport services of passengers		4921
64112	Urban and suburban scheduled road transport services of passengers		4921
64113	Mixed mode urban and suburban transportation services of passengers		4921
64114	Urban and suburban special purpose scheduled road transport services of passengers		4921
64115	Taxi services	X	4922
64116	Rental services of passenger cars with operator	X	4922
64117	Road transport services of passengers by man- or animal-drawn vehicles	X	4922
64118	Non-scheduled local bus and coach services	X	4922
64119	Other land transportation services of passengers, n.e.c.	X	4922
64121	Inland water transport services of passengers by ferries	X	5021
64129	All other inland water transport services of passengers	X	5021

1. The absence of cross (x) indicates that the product does not qualify as an internationally comparable tourism characteristic product but to any of the other typologies (see para. 5.16.). Consequently, its categorization corresponds to countries.

CPC rev 2	Description	Categorization	corresponding activity ISIC Rev. 4
subclass			
64131	Sightseeing services by rail	X	4911
64132	Sightseeing services by land, except rail	X	4922
64133	Sightseeing services by water	X	5021
64134	Sightseeing services by air	X	5110
64210	Interurban railway transport services of passengers	X	4911
64221	Interurban scheduled road transport services of passengers	X	4922
64222	Interurban special-purpose scheduled road transport services of passengers	X	4922
64223	Non-scheduled long distance bus and coach services	X	4922
64231	Coastal and transoceanic water transport services of passengers by ferries	X	5011
64239	All other coastal and transoceanic water transport services of passengers	X	5011
64241	Domestic scheduled air transport services of passengers	X	5110
64242	Domestic non-scheduled air transport services of passengers	X	5110
64243	International scheduled air transport services of passengers	X	5110
64244	International non-scheduled air transport services of passengers	X	5110
64250	Space transport services of passengers	X	5110
66011	Rental services of buses and coaches with operator		4922
66021	Rental services of vessels for coastal and transoceanic water transport with operator		5011, 5012
66022	Rental services of inland water vessels with operator		5011, 5012
66031	Rental services of passenger aircraft with operator		5110
67190	Other cargo and baggage handling services		5224
67309	Other supporting services for railway transport		5221
67410	Bus station services		5221
67420	Highway, bridge and tunnel operation services		5221
67430	Parking lot services		5221
67440	Towing services for commercial and private vehicles		5221
67511	Port and waterway operation services (excl. cargo handling), on coastal and transoceanic waters		5222
67512	Inland waterway operation services (excl. cargo handling)		5222
67521	Pilotage and berthing services on coastal and transoceanic waters		5222
67522	Pilotage and berthing services in inland waters		5222
67531	Vessel salvage and refloating services on coastal and transoceanic waters		5222
67532	Vessel salvage and refloating services in inland waters		5222
67610	Air operation services (excl. cargo handling)		5223
67620	Air traffic control services		5223
67730	Other supporting services for air transport		5223
73111	Leasing or rental services concerning cars and light vans without operator	X	7710
73114	Leasing or rental services concerning other land transport equipment without operator		7730
73115	Leasing or rental services concerning vessels without operator		7730
73116	Leasing or rental services concerning aircraft without operator		7730
85511	Reservation services for air transport	X	7911, 7920
85512	Reservation services for rail transportation	X	7911, 7920
85513	Reservation services for bus transportation	X	7911, 7920
85514	Reservation services for vehicle rental	X	7911, 7920
85519	Other transportation arrangement and reservation services n.e.c	X	7911, 7920
87141	Maintenance and repair services of motor vehicles		4520
87142	Maintenance and repair services of motorcycles and snowmobiles		4540
87143	Maintenance and repair services of trailers, semi-trailers and other motor vehicles n.e.c.		4520
87149	Maintenance and repair services of other transport equipment		3315

Annex 32. List of consumption products grouped by purpose, according to their categorization as internationally comparable tourism characteristic products

CPC rev 2	Description	Categorization	corresponding activity ISIC Rev. 4
subclass			
<i>Recreation, culture and sporting activities (e)</i>			
73240	Leasing or rental services concerning pleasure and leisure equipment		7721
85539	Reservation services for event tickets and other entertainment and recreational services	X	7920
85550	Tourist guide services	X	7912
85562	Visitor information services	X	7920
96151	Motion picture projection services		5914
96152	Videotape projection services		5914
96220	Performing arts event production and presentation services	X	9000
96310	Services of performing artists	X	9000
96411	Museum services except for historical sites and buildings	X	9102
96412	Preservation services of historical sites and buildings	X	9102
96421	Botanical and zoological garden services	X	9103
96422	Nature reserve services including wildlife preservation services	X	9103
96511	Sports and recreational sports event promotion services		9319
96512	Services of sports clubs		9312
96520	Sports and recreational sports facility operation services	X	9311
96590	Other sports and recreational sports services	X	9319
96620	Support services related to sports and recreation		9319
96910	Amusement park and similar attraction services	X	9321
96929	Other gambling and betting services	X	9200
96930	Coin-operated amusement machine services	X	9329
96990	Other recreation and amusement services n.e.c.	X	9329
<i>Shopping (f)</i>			
	Goods purchased by visitors within their shopping activity		
<i>Other</i>			
71134	Credit card services		6492
71331	Motor vehicle insurance services		6512
71334	Other property insurance services		6512
71337	Travel insurance services		6512
71592	Foreign exchange services		6612
73260	Leasing and rental services concerning textiles, clothing and footwear		7729
73290	Leasing or rental services concerning other goods n.e.c.		7729
83811	Portrait photography services		7420
83820	Photography processing services		7420
85953	Document preparation and other specialized office support services		8219
85961	Convention assistance and organisation services		8230
85962	Trade show assistance and organisation services		8230
87290	Maintenance and repair services of other goods n.e.c.		9529
92330	Upper secondary education services general		8521
92340	Upper secondary education services, technical and vocational		8522
92410	Post-secondary non-tertiary education services, general		8521

CPC rev 2	Description	Categorization	corresponding activity ISIC Rev. 4
subclass			
92420	Post-secondary non-tertiary education services, technical and vocational		8522
92510	First stage tertiary education services		8530
92520	Second stage tertiary education services		8530
92911	Cultural education services		8542
92912	Sports and recreation education services		8541
92919	Other education and training services, n.e.c.		8549
92920	Educational support services		8550
93111	Surgical services for inpatients		8610
93112	Gynecological and obstetrical services for inpatients		8610
93113	Psychiatric services for inpatients		8610
93119	Other services for inpatients		8610
93121	General medical services		8620
93122	Specialized medical services		8620
93123	Dental services		8620
93191	Deliveries and related services		8690
93192	Nursing services		8690
93193	Physiotherapeutic services		8690
93194	Ambulance services		8690
93195	Medical laboratory services		8690
93196	Diagnostic imaging services		8690
93199	Other human health services n.e.c.		8690
	Other unidentified services		
	Other unidentified goods		

(a) The value of the components of the package would also be included

(b) It only refers to vacation homes

(c) It also includes the direct purchase to be consumed or to be prepared

(d) It also includes the purchase of goods such as fuel, spareparts, etc.

(e) it also includes goods related to this purpose

(f) It only includes goods: single purpose consumer durables, souvenirs, handicrafts, and any other goods principally to bring along back home

Annex 33. Exploring an experimental approach to TSA “Other aggregates”

1. This Annex stresses the opportunity to advance in the development of Tables 8 & 9 of TSA (“Tourism Gross Fixed Capital Formation” and “Tourism Collective Consumption”). These tables lack guidance within the TSA:RMF 2008 document, where the territorial framework of reference is the nation. It could be a path to steer the project TSA at last.
2. Precisely, it would be reasonable to consider that at subnational levels in fact it makes sense to advance on the estimation of these other aggregates starting from the first Regional TSA exercises. This way, it would be given priority to the impact on analysis, over statistic rigor that in any case should be requested to estimate the main aggregates defined under TSA (such as internal tourism consumption, gross value added of tourism industries, internal tourism expenditure, etc), as it is mentioned in the following paragraph. In this sense, those exercises might be understood as useful statistical exercises although based on experimental basis.
3. TSA:RMF 2008 identifies four supplementary aggregates derived from TSA tables out of which two refer to Tourism Gross Fixed Capital Formation and Tourism Collective Consumption; although Tables 8 and 9 refer to “Tourism gross fixed capital formation of tourism industries” and “Tourism collective consumption, by product and level of government”, the corresponding aggregates derived from such tables are considered as potentially useful and in any case, “should be the object of a more advanced development of the Tourism Satellite Account” (TSA:RMF 2008, para. 4.99)

More precisely, paragraph 4.100 states that in the case of such aggregates, “the limited character of the estimations is not only the result of methodological issues but is also attributable to a lack of experience in defining operative solutions for the estimation of corresponding data by national statistical offices”.

4. It might be arguable that regional and sub-regional levels allow for a more sizeable approach as opposed to the national level for some very relevant topics for key tourism stakeholders; that would be the case of
 - Measurement of investments for attracting visitors and improve basic tourism related infrastructure
 - Support of regional as well as local authorities for holidays by targeted resident population segments (particularly youngsters and retired people)
 - Using cultural infrastructure, resources and initiatives for attracting visitors
5. In this section some guidance is provided in order to explore the feasibility of such approach in the understanding that case studies at the subnational level on such topics might contribute to advance on these TSA “other aggregates”. Before so doing (see sub-section *C/Fostering experimental approaches*), sub-sections A) and B) summarize first TSA key references.
6. This section builds on Frent (2014) which is a major contribution on this topic for different reasons:
 - a correspondence with CPC ver.2 for TSA table 8 is provided as well as correspondence CPC ver.2 and ISIC Rev.4 with TSA table 9
 - presents a breakdown on categories 4 and 5 of TSA table 8 and suggests new categories using the logic of UNWTO 2000 TSA doc already mentioned
 - suggest the inclusion in TSA table 9 of culture services as a kind of non-market tourism related collective services

1. TSA Tourism Gross Fixed Capital Formation aggregate

7. TSA:RMF (2008) proposes both the concept of Tourism Gross Fixed Capital Formation (TGFCF) and Gross Fixed Capital Formation of Tourism Industries (GFCFTI). It should be noted that these are different concepts. Actually, TGFCF is more encompassing than GFCFTI comprising both GFCFTI and the “net acquisition of tourism specific capital goods by all other industries” (TSA:RMF, 2008, para. 4.70) In fact, three main categories of “tourism driven investment” are proposed by TSA:RMF (2008): “Tourism-specific fixed assets”, “Investment by the tourism industries in non-tourism-specific fixed assets” and “Tourism-related infrastructure” (TSA:RMF, 2008, para. 2.46).

“There are a number of different perspectives on tourism gross fixed capital formation, and different aggregates could be proposed depending on the focus of analysis. Consequently, the estimation of a tourism gross fixed capital formation aggregate is suggested in order to guide further statistical development and research in those countries where tourism is especially relevant” (para 4.106 and 107 of TSA:RMF 2008).

8. It is stated that tourism-specific assets are: used exclusively or almost exclusively in the production of tourism characteristic goods and services. If tourism did not exist, such assets would be of little value as they could not easily be converted into non-tourism tourism applications. (TSA:RMF, 2008, para. 2.47)

TSA:RMF (2008) presents a list of such assets which is stated to be consistent with the classification of tangible produced fixed assets used in the System of National Accounts 2008 (TSA:RMF, 2008 para. 2.48) (see table 3). Mainly, there are five categories proposed: each of them can be associated with National Accounts categorization of fixed assets (SNA 2008) and international classification of products (CPC Ver.2) See [Annex 24](#)

Table 13 Classification of tourism specific fixed assets according to TSA:RMF (2008). Source: Frent (2014, table 1) adapted from TSA:RMF (2008), p.98.

No.	Categories	No.	Subcategories
1.	Accommodation for visitors	1.1.	Hotels and other accommodation facilities for visitors
		1.2.	Vacation homes under full ownership
		1.3.	Vacation homes under other types of ownership
2.	Other non-residential buildings and structures proper to tourism industries	2.1.	Restaurants and similar buildings for food-and beverage-serving services
		2.2.	Buildings and infrastructure for the long distance transport of passengers
		2.3.	Buildings for cultural and similar services mainly for use by visitors
		2.4.	Facilities for sport, recreation and entertainment
		2.5.	Other facilities and structures
3.	Passenger transport equipment for tourism purposes	3.1.	Land (including road and rail)
		3.2.	Sea
		3.3.	Air
4.	Other machinery and equipment specialized for the production of tourism characteristic products		Not provided by TSA:RMF (2008)
5.	Improvements of land used for tourism purposes		Not provided by TSA:RMF (2008)

9. Regarding the second category (“Investment by the tourism industries in non-tourism-specific fixed assets”) this is considered tourism related not “because of the nature of assets themselves, but because of the use which is made of them by a tourism industry” (TSA:RMF, 2008, para. 2.49). Laundry facility in a hotel is an example, which falls within this category. Recognizing that at present there is a diversity of assets which can be part of

this category, TSA:RMF (2008) does not make any recommendation to classify these assets but encourages countries "when feasible, to identify some specific classes of such assets that might be significant in their economy" (TSA:RMF, 2008, para. 2.49). Only the two first categories are included in TSA:RMF (2008) table 7.

10. The third category ("Tourism-related infrastructure") is not included in table 8 because of the "difficulties in identifying elements of tourism investments" (TSA:RMF, 2008, para. 2.54). Despite this, TSA:RMF (2008) encourages countries to work on this issue and to include "tourism-related infrastructure" to TGFCF ("countries that are able to estimate all or part of it are encouraged to include it as an additional category") (TSA:RMF, 2008, para. 4.70).
11. It is considered that tourism-related infrastructure either has been developed for a touristic purpose or tourism was not necessarily the main purpose of investment (TSA:RMF, 2008, para. 2.50). Anyway, in the category of "Tourism-related infrastructure", three cases were identified by World Tourism Organization in the previous version of the TSA international standard (WTO, 2000, p. 73):
 - The asset might have been produced or acquired with the purpose of being used exclusively or principally by visitors, such as development of areas specifically for tourism purposes;
 - At the time the investment was made, it might have been done with the view of its exclusive or principal use by visitors at a given point in time (e.g. investments for a special event such as the Olympic Games, an important international meeting, etc.), but a later non-tourism use is taken into consideration in the decision making process for this investment;
 - It might be directed generally to all activities and also favour tourism (e.g. an airport open to all type of traffic, a non-toll road, a hospital in an area visited by visitors), because in its absence tourism would probably be of a lesser intensity.

Nevertheless, in each case the public sector has the responsibility to put in place this "tourism-related infrastructure" in order to facilitate tourism development. In addition, the measurement of "tourism-related infrastructure" can be further complicated specially in the case of basic infrastructure which tourism is a beneficiary of and where "the process of identification and allocation to tourism might present more theoretical and practical difficulties" (WTO, 2000, p. 74)

2. TSA Tourism Collective Consumption aggregate

12. Collective consumption of the general government would include provision of legislation and regulatory framework for tourism or related to tourism (i.e. cultural heritage), tourism promotion, security and public order in the places visited by tourists, cleaning services of beaches, ski resorts or other areas visited by tourists and the production of tourism statistics.

Nevertheless, tourism promotion can be considered a special case when there is a public/private partnership involved and the private sector provides part or all the funds required. In this case, one cannot consider it as "a collective non-market service but as a service provided by a market producer (which might receive support from general government under the form of a current transfer) and are considered as an intermediate consumption of the private sector" (TSA:RMF, 2008, p. 20).

13. At the same time, it is important to mention that services provided by national parks and museums are excluded since they are considered individual non-market services and already included in tourism consumption as social transfer in kind. This is because “their beneficiaries can be identified separately” (TSA:RMF, 2008, para. 4.73). There is no definition of Tourism Collective Consumption in TSA:RMF (2008) but an earlier publication of the World Tourism Organization (WTO, 2000) did present an important clarification: Tourism collective consumption is comprised of those collective non-market services which unambiguously benefit visitors and/or those activities that serve them directly (i.e., the [tourism industries](#)) (p. 74).
14. Tourism Collective Consumption is found in the TSA:RMF (2008) table 9 entitled “Tourism collective consumption, by product and level of government”. In this table the rows are in fact “a proposed list of non-market services that are to be considered as tourism collective nonmarket services in terms of the corresponding CPC subclasses” (TSA:RMF, 2008, para. 4.72). Some of these services can be considered entirely related to tourism (e.g. tourism promotion) while others are only partly related to tourism (see table 4). It is specifically mentioned by TSA:RMF (2008) that “countries are encouraged to increase this list with further proposals” (TSA:RMF, 2008, p. 100).

Table 14 The proposed classification of Tourism Collective Consumption according to CPC classification in TSA:RMF (2008). Source: Frent (2014, table 3) adapted from TSA:RMF (2008), p.100.

CPC code	Name of products
85561	Tourism promotion services
85562	Visitor information services
91135	Public administrative services related to the distributive and catering trades, hotels and restaurants
91136	Public administrative services related to tourism affairs
Part of	
83700	Market research and public opinion polling services
91260	Police and fire protection services
92919	Other education and training services, n.e.c. ²
92920	Education support services

15. In addition to the classification of products, a classification by levels of government is also proposed within TSA:RMF (2008) table 9 as three separate columns for each of the CPC subclasses of table 3. Three levels are suggested: national, regional and local; each of the corresponding governmental authorities in charge of tourism might provide subsidies to foster tourism.

TSA:RMF (2008) also comprises a supplementary column, in fact a “memorandum item”, entitled “Intermediate consumption by the tourism industries”, which reflects the expenditure by the tourism industries in tourism promotion or other services related to the products described in such table (TSA:RMF, 2008, p. 70).

3. Fostering experimental approaches to TSA tables 8 and 9

16. Following Frent (2014), the proposal of extending TSA table 8 is considered a suggestive proposal. Such table considers the five categories of tourism –specific fixed assets included in TSA 2008 official document as well as other categories (4) using the logic of UNWTO 2000 TSA DOC as previously mentioned. Below table 5 presents a new proposed classification of tourism-specific fixed assets following CPC ver2. products and a better integration with the classification of assets from National Accounts. by Frent (2014, table 6).

Table 15 A new proposed⁵⁴ classification of tourism-specific fixed assets following CPC ver2. Products and a better integration with the classification of assets from National Accounts. Source: Frent (2014, table 6)

New categories of tourism fixed assets proposed	CPC ver. 2 code	CPC ver. 2 name	SNA (2008) classification by types of assets
1. Dwellings – vacation homes. (referred as TSA c1 in TSA RMF 2008)	5311*	Residential buildings	Dwellings
	3870*	Prefabricated buildings	
2. Buildings for tourism industries. (ibid TSA c2)	53129*	Other non-residential buildings	Other buildings and structures – Building other than dwellings & Other structures
	53122*	Commercial buildings (in this case it includes only passenger terminals)	
3. Structures mostly related tourism	53270*	Outdoor sport and recreation facilities	
4. Passenger transport equipment mostly related to tourism	49222	Trailers and semi-trailers of the caravan type, for housing or camping	Machinery and equipment - Transport equipment
	49311	Cruise ships, excursion boats and similar vessels, principally designed for the transport of persons; ferry boats of all kinds	
	494	Pleasure and sporting boats	
	49116	Motor vehicles, for the transport of persons, specially designed for travelling on snow, golf cars and similar vehicles	
5. Other passenger transport equipment (ibid TSA c3)	49113*	Motor cars and other motor vehicles principally designed for the transport of persons (except public-transport type vehicles, vehicles specially designed for travelling on snow, and golf cars and similar vehicles)	
	495*	Railway and tramway locomotives and rolling stock, and parts thereof	
	4991*	Motorcycles and side-cars	
	49921*	Bicycles and other cycles, not motorized	
	4961*	Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft	
	4962*	Aeroplanes and helicopters	
6. Equipment mostly related to tourism	384*	Sport goods	Machinery and equipment - other machinery and equipment
7. Civil engineering works used by tourism	5321*	Highways (except elevated highways) streets and roads, railways and airfield runways	Other buildings and structures - Other structures
	5322*	Bridges, elevated highways and tunnels	
	53232*	Harbours, waterways and related facilities	
8. Other machinery and equipment used to supply goods and services to visitors (ibid TSA c4)	43*	General-purpose machinery	Machinery and equipment - ICT equipment & Other machinery and equipment
	44*	Special purpose machinery	
	45*	Office, accounting and computing equipment	
	46*	Electrical machinery and apparatus	

⁵⁴ This table is based upon Table 8 of the TSA:RMF 2008, and in this version Frent (2014) addresses a further breakdown for categories 4 and 5.

New categories of tourism fixed assets proposed	CPC ver. 2 code	CPC ver. 2 name	SNA (2008) classification by types of assets
	47*	Radio, television and communication equipment and apparatus	
	48*	Medical appliances, precision and optical instruments, watches and clocks	
	381*	Furniture	
	383*	Musical instruments	
9. Land improvements for tourism (ibid TSA c5)	54320*	Site formation and clearance services	Other buildings and structures - Land improvements

*-part of

Note: the shaded area designates categories which are difficult to be allocated to tourism

17. The above classification introduces a sort of fine-tuning with three categories being named as “mostly related to tourism”: “Structures mostly related to tourism”, “Equipment mostly related to tourism” and “Passenger transport mostly related to tourism”. The assumption behind them is that they are more related to tourism consumption. Together with the categories of “Dwellings-Vacation homes” and “Buildings for tourism industries” they can form a sort of “core classification” very close to tourism. To some extent, the category of “Other passenger transport equipment” can also join this classification, if passenger transportation can be distinctly identified.

18. At the same time, the author mentions that three categories are difficult to allocate to tourism: “Civil engineering works used by tourism”, “Other machinery and equipment used to supply goods and services to visitors” and “Land improvements for tourism”. “This is a domain where further research is indeed necessary. However, their importance for tourism shouldn’t be neglected”. (Frent, 2014 p. 21)

19. On the other hand, as explicitly mentioned in TSA:RMF 2008, proposing more non-market collective services in tourism is particularly encouraged; in fact, when referring to the classification of tourism collective consumption following CPC ver. 2 it states that “countries are encouraged to increase this list with further proposals” (TSA:RMF, 2008, p. 100). This could be the case of culture.

Table 16 The correspondence between products (CPC Ver.2) and industries (ISIC Rev.4, NACE Rev.2 and ISAT 2008) that make up tourism collective consumption. Source: partial reproduction from Frent (2014, table 7) from TSA:RMF 2008, p.100 and United Nations Statistics Division, 2013.

No	CPC Code	Product Name	ISIC code	ISIC industry name
1.	85561	Tourism promotion services	7990*	Other reservation service and related activities
2.	85562	Visitor information services	7990*	Other reservation service and related activities
3.	91135	Public administrative services related to the distributive and catering trades, hotels and restaurants	8413*	Regulation of and contribution to more efficient operation of businesses
4.	91136	Public administrative services related to tourism affairs	8413*	Regulation of and contribution to more efficient operation of businesses
Part of				
5.	83700	Market research and public opinion polling services	7320	Market research and public opinion polling
6.	91260	Police and fire protection services	8423*	Public order and safety activities
7.	92919	Other education and training services, n.e.c.	8549	Other education n.e.c.
8.	92920	Education support services	8550	Educational support activities
14.	91124	Public administrative services related to recreation, culture and religion	8412*	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security

20. Operating at industry level poses difficulties due to the fact that an industry usually produces more than one product. In this regard for a better understanding of what kind of products are excluded from the industries related to collective consumption in tourism on the one hand and, what kind of products are included on the other, a summarizing table was created by the author (see [Annex 24](#)).
21. Anyhow, Frent (2014) proposed another generic category entitled "Economic affairs envisaging some tourism industries" to include the economic activities which concern the businesses in the main tourism industries. It refers here to hotels and restaurants, transport, recreation and *culture*.

Table 17 A new proposed structure for classifying collective consumption “largely related” to tourism according with COFOG and the related CPC Ver.2 and ISIC Rev.4. Source: partial reproduction from Frent (2014, table 8)

No.	Category	Related CPC Ver.2		Related ISIC Rev.4	
		Code	Name	Code	Name
1	Specific tourism affairs	91136	Public administrative services related to tourism affairs	8413*	Regulation of and contribution to more efficient operation of businesses
		85561	Tourism promotion services	7990*	Other reservation service and related activities
		85562	Visitor information services	7990*	Other reservation service and related activities
2	Economic affairs envisaging some tourism industries	91135*	Public administrative services related to the distributive and catering trades, hotels and restaurants	8413*	Regulation of and contribution to more efficient operation of businesses
		91134*	Public administrative services related to transport and communication	8413*	Regulation of and contribution to more efficient operation of businesses
		91134*	Public administrative services related to transport and communication	8413*	Regulation of and contribution to more efficient operation of businesses
		91134*	Public administrative services related to transport and communication	8413*	Regulation of and contribution to more efficient operation of businesses
		91134*	Public administrative services related to transport and communication	8413*	Regulation of and contribution to more efficient operation of businesses
		91124*	Public administrative services related to recreation, culture and religion	8412*	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security

22. The inclusion of culture refers to the following codes:

- CPC 91124* Public administrative services related to recreation, culture and religion
- ISIC 8412* Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security

It should be highlighted that CPC Ver.2 code 91124 includes:

- Public administrative services related to cultural facility support and individual artists and organizations engaged in promoting cultural activities
- Public administrative services related to national, regional or local festivities and the maintenance and running of religious institutions

Also ISIC Rev.4 code 8412 includes:

Regulation of the activities of providing health care, education, cultural
(Interested readers see [Annex 25](#))

23. As previously mentioned, one of the reasons for which the reference document (Frent, 2014) can be considered a major contribution on the topic addressed in this sub-section is that it suggest the inclusion in TSA table 9 of culture services as a kind of non-market tourism related collective services.
24. Culture as a sector has no standardize statistical definition (the most relevant step being UNESCO adopting statistical standards in 2012) but there is some type of understanding that it includes different economic activities associated to cultural domains such as archives, libraries, books & press, performing arts, audiovisual & multimedia, arts & craft, etc.
25. Besides specific socio-economic characteristics to culture and tourism sectors, there are nevertheless two shared characteristics that explain why measuring the public and private economic initiatives to support both sectors is a relevant issue particularly at sub-national levels; the fact that culture and tourism are territorial based activities and labour-intensive sectors.

Annex 34. Fostering analysis: alternatives beyond the R-TSA

1. As stated by Statistics Canada Quality Guidelines, December 2009 (fifth edition), “data analysis is the process of developing answers to questions through the examination and interpretation of data. The basic steps in the analytic process consist of identifying issues, determining the availability of suitable data, deciding on which methods are appropriate for answering the questions of interest, applying the methods and evaluating, summarizing and communicating the results”.

“Data analysis is essential for understanding results from surveys, administrative sources and pilot studies; for providing information on data gaps; for designing and redesigning surveys; for planning new statistical activities; and for formulating quality objectives”.

“A good analysis of relatively poor quality data is often worth much more than a poor analysis of good quality data”

2. “Data from a survey can be used for descriptive or analytic studies. Descriptive studies are directed at the estimation of summary measures of a target population (for instance, the average daily expenditure of German tourist in a given tourist destination) while analytic studies may be used to explain behaviour of and relationship among characteristics.”

“Prior to conducting an analytical study the following questions should be addressed:

- *Objectives.* What are the objectives of this analysis? What issue am I addressing? What question(s) will I answer?
- *Justification.* Why is this issue interesting? How will these answers contribute to existing knowledge? How is this study relevant?
- *Data.* What data am I using? Why it is the best source for this analysis? Are there any limitations?
- *Analytical methods.* What statistical techniques are appropriate? Will they satisfy the objectives?
- *Audience.* Who is interested in this issue and why?”

3. If resources are unavailable to launch a project in the perspective of developing a proper R-TSA, this document suggests to consider the opportunity to launch instead some initiatives in line with the abovementioned guidelines:

- build on a descriptive type analysis identifying main characteristics of tourism supply using available data in line with the proposed estimates of regional employment in tourism industries as well as the use of Business Register for the national/regional articulation of a set of basic data and indicators
- start the set up of a R-TIS and identify information gaps that might be relevant for regional key tourism stakeholders (see 1.4)
- consider the opportunity to use other tools to foster economic analysis

4. Complementary to such recommended initiatives, a particular topic would be to identify possible shortcomings of national domestic surveys and consider the opportunity to prepare technical proposals for an improved national survey or an eventual design of a regional one; either initiative should deserve special attention and such analysis might require assistance of other key tourism stakeholders

Finally, as already mentioned (see chapter 4, section C.1), household surveys designed for tourism measurement is a complex task particularly when a national survey is designed for allowing the set up of an origin/destination matrix (see chapter 6, [sections 6/C.2](#) and [6/D.](#))

5. In fact, while at the national level UNWTO clearly indicates that household surveys should be the preferred option for measuring domestic tourism, this document has raised the attention that nevertheless, it should be kept in mind that sample size and design of such surveys are strongly related to the significance and accuracy of the variables to be estimated. Two different issues need to be taken into consideration when designing such national surveys: the unequal distribution of tourism over the national territory and the high degree of heterogeneity of the population in terms of tourism behavior.

Such warning is also pertinent when considering regional visitor surveys for tourism purposes; particularly at the regional level where tourism is a strongly consolidated phenomenon, it might happen that more than 75% of overnights is related with a very limited number of municipalities and consequently, traditional sample designs might not be as efficient as applied in other type of research areas.

6. Due to the fact that it is very data demanding, the design of a proper [R-TIS](#) would be justified under two circumstances: the significance of tourism in a given region (see Glossary) and the availability of a basic set of national statistical sources (such as border survey, domestic tourism household survey, statistical business register, structural business survey and population census)
7. Obviously, there are many things that could be done regarding descriptive type of analysis; a very different issue is to conduct analytical type of studies. In fact, it is pretty obvious that developing a tourism impact study for instance, might raise awareness in some key stakeholders about the importance to foster economic measurement and analysis of tourism
8. It should not be neglected that R-TSA becomes an input to economic models, and then a mean of appraising and evaluating investments and policy; it also provides a foundation for carbon and water foot-printing of tourism consumption, accounts of interest to regional environmental agencies in areas such as planning around natural resources

9-8 In this perspective, Douglas Frechtling has prepared for *UNWTO Issue Paper Series* (Frechtling, 2013) a useful text analyzing pros and cons of three tools that have been applied for macroeconomic analysis of tourism that could be also used at a regional level:

- Input-Output model
- Social Accounting Matrix (SAM)
- Computable General Equilibrium (CGE) models

Such document (which also includes some examples for each type of model) should be used as a reference document for those interested in the measurement of the economic contribution and impact of tourism and macroeconomic analysis. In fact, the application of such models to regional tourism analysis is well known in the academic literature

Annex 35. Governance Structure for a Statistical Project

1. Linking the setting up of a R-TIS with the TSA as the foundation for a R-TSA requires a medium-long term process; the success of such a process depends greatly on the initiatives taken regarding the complexity of key stakeholders involved.

In this regard, the document recommends the promotion of two complementary type of initiatives:

- Define and design a responsibility delimitation of whom is responsible for generating what type of information for the national / regional level, which is the information required by key tourism stakeholders at both type of territorial levels, and which should be the most suitable information sources to be used for these different purposes.
 - Assume the need of leadership by the corresponding tourism authorities in order to design, update and monitor such information system, with all the implications for budgeting, training, coordination and communication protocols, etc.
2. There are many arguments that justify taking governance seriously, not the least of which is the fact that each dimension of sustainable development necessarily requires the sustainability over time of the very actions taken for the development of tourism

Before addressing the governance issue (which is about key stakeholders support and cooperation mechanisms), some recommended initiatives should be clarified in order to better understand how both processes are related; each of them might have its own governance requirements.

3. It might also be pertinent to have in mind that the TSA is an extremely data demanding initiative and that a R-TSA must be understood as an outcome of a developed R-TIS already set up by a region.
4. With this context in mind, this document recommends for such a region that two main information sets should be properly articulated: the first step refers to the priority to define the main statistical background to support a proper R-TIS in the perspective of measuring tourism economic contributions at the regional level (which is the focus of the R-TSA) and as a second step, look for key supplementary information required by main tourism stakeholders in such a region about a wide range of topics (such as information gaps identified by key stakeholders, measurement of tourism products, etc.)

Regarding the priority set, it should be guaranteed that the basic core of the R-TIS includes basic data and indicators of the following four building blocks:

- Elaboration of inter-regional consumption matrixes
“Interregional origin/destination data condition the estimation of a key parameter in both market research and tourism promotion policies, i.e. the propensity for travel in regions of origin and the demographic and behaviour factors associated with the tourists generated by such regions”. (WTO 2005, para 5.15)
“The data gathered, as well as the corresponding estimate of overnight stays, should be checked against data obtained from accommodation surveys and from other administrative records available from either traffic management bodies, motorway concession holders or even credit and debit cards. This internal reconciliation between sources is crucial for ensuring the reliability of the source data that will be used for the future regional tourism account. The internal reconciliation of sources should precede external reconciliation (with the national level in particular)”. (WTO 2005, para 5.17)

“This kind of check is known as cross-comparison/validation of data and is new to most of the professionals working in RTAs. Be that as it may, this practice will be a fundamental element of the new culture of interagency cooperation.” (WTO 2005, para 5.18)

- Estimate of regional employment in tourism industries
Patricia Sakowski (Sakowski, 2012) has chaired the development of a multi-annual project carried on by IPEA / Brazil using administrative and statistical records on employment; the paper explains and presents the articulation of a national / regional /local database of such employment and related characteristics useful for the analysis.
- Use of Business Register for the national / regional articulation of a set of basic statistical data and indicators
MacFeely, S, Delaney, J and O’Donoghue, F (2012) explains the Irish experience using Business Registers to conduct a regional analysis of Enterprise Demography and Employment in the Tourism Industries.
Such contribution and complementary research carried out at the Irish Tourism Department (Fáilte Ireland) have positioned Ireland as a best practice exercise about the potential of using Business Register data for regional tourism analysis.
- Existence of the statistical universe (frame) of establishments providing accommodation to visitors and guarantee its update mechanisms and procedures (see [Glossary](#))

These references are of interest for those regions: guidance already provided by UNWTO (WTO, 2005) is highlighted as well as different type of initiatives that could be properly considered as relevant case study developed by INRouTe associated partners.

5. Setting the R-TIS and moving on a R-TSA exercise in line with the priority set of initiatives mentioned in the previous paragraphs should presuppose the existence of a strategy of inter-institutional cooperation both with regional key tourism stakeholders and with the Central Statistical Office and other possible national bodies. The design of such strategy and the leadership of launching such projects should correspond to those regional bodies with clear competences in tourism development.
6. More precisely, this document recommends that the setting up of such strategy and its operationalization should be supported by a regional inter-institutional network (RIN). Such network requires at least three basic components:
 - the integration of such stakeholders both at the regional and sub-regional levels
 - a governance structure and a working agenda must be designed and agreed by key tourism stakeholders for the set up of a R-TIS. Such agenda should identify common initiatives for both regional and sub-regional levels, as well as others proper for each of such initiatives.
 - the technical support of a multidisciplinary group of experts in statistics, geography, economics and tourism as well as other practitioners and researchers. Such a group might request the cooperation of any type of national or subnational institution/s

Consequently, such a network should be understood as the necessary tool for a proper governance structure decided by those stakeholders in order to guarantee the sustainability of such medium-long term initiative.

7. The following paragraphs address the governance issue (or more precisely, the governance function of regional / sub-regional governments) required for the setting up of both projects (the R-TIS and the R-TSA) and insist on the relevance of taking governance seriously due to the comparative weakness of Regional Tourism Administrations and the inter-sectorial nature of tourism; such weakness might be even more relevant at sub-regional levels.

Besides UNWTO contributions focusing on the setting up a R-TIS type of initiative, references found in INRouTe associated partners focus basically on this topic in relation with R-TSA.

8. In fact, key actors in early R-TSA development, have insisted once and again about the consequences of not taking seriously the setting up of a governance structure: both Calvin Jones in UK (Jones, 2005) and Agustín Cañada in Spain (Cañada, 2013) are very explicit about the need to design and operate such structure: not as an academic issue but as a policy issue applied to a statistical project addressed to a subnational context

“Experience in the UK and elsewhere has shown that whilst the developmental impact and policy-management of tourism is most critical at a regional (or indeed destination) spatial scale, tourism and business surveys that underpin TSA construction are formulated at the national level. ... Separation within central governments of departments with responsibility for tourism management, for regional affairs and for the collection of statistics risks significantly hindering the regional TSA project. Tourism and regional departments may not have sufficient political ‘clout’ or statistical knowledge to lobby central statistical offices to ensure the appropriate resourcing and design of travel and tourism surveys, or the structure of national accounts.” (Jones, 2005 page 13)

“In treating the region as a small nation, developers will need to make judgments regarding how far national classifications and definitions can or should be replaced with those that are regionally based. For example a definition of usual environment suitable for the nation may not be appropriate if the reference region is geographically small, or culturally distinct from the country as a whole. Again, the need for regionally-relevant outputs must be balanced against any need for interregional/national comparability. It may be desirable to ensure comparability at a broad scale. For example, in the same way that it should be possible to aggregate any specific regional product classifications to those in the national TSA, a regional definition of usual environment might be a sub-set of that in the national account, or there could be a dual reporting approach (Jones, 2005:14). The remarks made by Agustín Cañada (Cañada, 2013) should be considered as appropriate guidance in relation with the governance structure of such type of projects.

“Among the examples of regional TSAs that have been done in a coordinated and joint manner by central and regional administrations are the case of Wales, whose TSA was the fruit of a multi- institutional team (although it is also an atypical case, since a “national” TSA was not available for reference), as well as various regions of Spain (Andalusia, Canary Islands, Basque Country). Although all the regional TSA’s in Spain have been prepared in a quite independent manner by the institutions of each region (normally regional statistical institutes), there has been conceptual or methodological coordination with the central government. The central statistical office (INE) collaborated with the regional agencies that were developing the TSA – always at their request – either by providing some kind of methodological support at the start of the project or a nonbinding opinion on the preliminary results of a TSA to ensure that it met the international methodological criteria”. (Cañada,2013, para. 4.7)

“Without such coordination, the risks are obvious: there is no guarantee that the results obtained for the regions will be compatible with each other or with the national TSA. There is also the risk of duplication or inefficient use of resources, for example, if regional and central administrations take on similar statistical projects without coordination”. (Cañada, 2013, para. 4.8)

“One concrete aspect of the proposals in this document can be used to frame the institutional aspects in general: what institution or institutional framework should be entrusted with the development of interregional matrices, which in our opinion are crucial for the consistent estimation of regional TSAs?” (Cañada, 2013, para. 4.9)

“Naturally, given this paper’s advocacy of a system of shared responsibilities, consideration could be given to a system in which regions participate in the development of these matrices, and particularly in the conversion of nonmonetary versions into tourism consumption matrices. These could be the result of a joint effort by the administrations concerned. This would constitute an intermediate approach to national and regional TSA’s, developed independently but with a common estimation of (monetary) interregional tourism data” (Cañada, 2013, para. 4.11)

“At any rate, and as an additional argument in favor of joint action by different administrative levels, there is the fact that when there is no coordinated, homogeneous regional approach to the TSA, private initiative tends to fill the gap, using model-based estimates. This can also be observed in countries with major tourism sectors, such as Spain, where, in the absence of any official regional tourism GDP estimates, private institutions have emerged and developed estimates directly inspired by the TSA but constructed using models, without guarantees as to their statistical soundness. The spread of this practice, even in competition with regions with their own TSA statistical schemes, has created confusion among users and adversely affected the credibility of all tourism data.” (Cañada, 2013, para. 4.12)

“Such institutional complexities can largely be anticipated by designing an RTSA development strategy that takes inter-institutional collaboration into account as a crucial aspect. In that sense, it can be difficult to design a more complete implementation plan than the one recommended by UNWTO (WTO, 2005), summarized and supplemented in Frechtling [2008]”. (Cañada, 2013, para. 4.13)

“Among the other aspects to be highlighted here as especially important is the role given to the central statistical office in these schemes, permitting certain aspects to be safeguarded in any regional approach, such as ensuring compatibility with the TSA:RMF methodology and facilitating the integration of regional tourism estimates into the economic context”. (Cañada, 2013, para. 4.14)

“The strategy must also be realistic, based on such principles as a precise definition of the institutional framework, clearly establishing the distribution of functions and costs among the institutions involved; or the creation of a joint supervisory mechanism for the work, but always avoiding unnecessary bureaucracy”. (Cañada, 2013, para 4.15)

“Priority must also be given to other common aspects of such efforts, such as the development of a pilot or experimental version of the RTSA. In addition to advancing some initial estimates of the importance of tourism for the economy, such versions can also provide a tool for the analysis and discussion of methodological and statistical problems arising during the estimation process, or for the supervision and direction of future work”. (Cañada, 2013, para 4.16)

9. The advice provided by these two pioneers of R-TSA development in UK and Spain has been a valuable reference for drafting this document and insist about the need to take governance seriously: not as an academic issue but as a policy issue applied to a statistical project addressed to a subnational context.
10. In fact, relevant international organizations have developed different definitions of governance as a normative concept adapted to their respective constituencies (that has been the case, for instance of the OCDE, Commission of the European Union, United Nations Development Program , United Nations Economic and Social Commission for Asia and the Pacific, and the World Bank): this has not been the case of the UNWTO who nevertheless, as clearly explained in the White Paper approved by the General Assembly in 2011 (UNWTO 2011), “there are areas that warrant special attention, both because they have not been included in UNWTO’s general activities to date and because they are currently in great demand among the member States. Apart from employment in the tourism sector, two others are mentioned:
 - [Domestic tourism](#), which in many developed countries is more meaningful for economic growth and job creation than inbound tourism, has an especially important role to play in times of crisis, and also helps to extend the benefits of tourism to rural or depressed areas in many countries.
 - [Governance in tourism](#), including the various levels of public administration and their relations with the private sector and other parties, at national as well as local destinations. This area also covers matters pertaining to overall tourism policies and institutional and legislative aspects.” (UNWTO 2011, article 36)
11. The integration of “governance” as a research area in the conceptual design of the R-TIS (see [Chapter 3, para. 3.10](#)) implies an operational definition (so that the concept can be measured) and identifying appropriate indicators at the regional level. For that to happen, it is obvious that a conceptual framework of governance applied to tourism is needed.
12. UNWTO has recently published a first contribution (see Duran, C. (2013)) which has been taken as reference for drafting this document because it provides the methodological support for the three initiatives previously mentioned associated all of them with governance: the conceptual design and set up of the R-TIS, the Regional inter-institutional network for the R-TIS project, and the R-TSA.

“UNWTO defines governance as a practice of government that is measurable, that is aimed to effectively direct the tourism sectors at the different levels of government through forms of coordination, collaboration and/or cooperation that are efficient, transparent and subject to accountability, that help to achieve goals of collective interest shared by networks of actors involved in the sector, with the aim of developing solutions and opportunities through agreements based on the recognition of interdependencies and shared responsibilities.” (Duran, 2013) paragraph 3.20)

“Defined in this way, governance can have diverse connotations along two interrelated dimensions:

- *Directive capacity of government*, determined by its institutional powers and resources, irrespective of its territorial extent, to promote and transparently exercise mechanisms of coordination, collaboration and/or cooperation subject to accountability, with networks of actors based on agreements recognizing interdependencies and shared responsibilities.
- *Directive effectiveness*, derived from the efficient use of institutional powers and resources for coordination, collaboration and/or cooperation characterized by co-responsibility, transparency and accountability, which are fundamental to the

definition and achievement of objectives with respect to mutually beneficial solutions and opportunities in the general interest". (Duran, 2013) paragraph3.21)

13. It might be of interest to highlight that both dimensions have been implicitly considered when designing the R-TIS. In fact, the three sets of data to be integrated in the R-TIS implies two different levels of governance:
 - In the case of governmental institutions producing the basic core of R-TIS (including basic statistical data and indicators), it is recommended that regions should supplement national data as well as produce new regional data. The relationship national / regional bodies such as Central Statistics Office and National Tourism Administration with their regional counterparts define a governance schema by its own
 - For other type of information (not necessary official nor statistics), regional tourism administration seems the proper body to take the lead for more focused information needed by key tourism stakeholders. Some of them might argue that regional tourism information is of importance because it is at this level that many decisions are taken, whether by central or local government, or by tourism businesses, most of whom operate regionally and are part of the wider tourism industry operating environment
In this case the governance structure to set in place would be different
14. While in the first case bilateral agreements should be the proper way for articulating cooperation agreements, in the second one some kind of networking initiatives should be set in place.
15. Duran (2013) warns about that it should not be taken as given "that governance simply exists, for the simple reason that a government is empowered and/or has institutional resources for coordination, collaboration and/or cooperation. These are necessary but not sufficient conditions for the existence of governance. In any case, emphasis is placed on the willingness and aptitude of a government to practice coordination, collaboration and cooperation as directive guidelines for its interactions with the aim of making it possible for networks of actors (public, private and social sector) not only to recognize but also participate in and endorse the objectives of general interest". (Duran, 2013, para.3.22)

Such guidelines should be based on approaches especially relevant for regional key tourism stakeholders such as tourism practitioners (including tourism officials who commission surveys and research, and those who undertake such surveys) and key stakeholders in relevant tourism destinations (including public institutes and agencies, universities, research centers, industry associations and specialized firms).

"The first of these would pertain to the devolution of governmental decision-making toward local governments... Such devolution has been a significant part of the processes of restructuring and modernizing public administrations, pursued by most countries since the 1980s, with the aim of improving the efficiency and effectiveness of public administration. In practice, this has led to a greater distribution of powers to subnational governments and the development of management processes that depend to significant degrees on the capacity of government actors and public authorities to coordinate with the various actors that are indispensable to improving the efficiency and effectiveness of public administration". (Duran, 2013, paragraph3.24).

16. Duran (2013) identifies two tools that should be used in the tourism sector with regard to governance: public-private partnerships and the creation of regional inter-institutional networks for the setting up of the R-TIS project. Quite often such networks "have been created and managed by tourism administrations, although there are cases of network

created by universities or strongly supported by business organizations or with a pronounced business orientation. Precisely for this reason both their composition and functioning are far from homogeneous, although they do share certain especially significant aspects:

- They were created out of recognition for the importance of tourism in the territorial units where they conduct their work.
- Their main objective is usually to provide useful information for different stakeholders.
- They also serve as a platform for meetings among these agents to detect trends and report situations that may affect tourism activity.
- They have enormous potential for use in supporting the design and evaluation of public policies". (Duran (2013), para. 3.33).

17. The UNWTO document also refers to the territorial level of application of suggested guidelines and very clearly points that "in the various territorial units where governance occupies a space in the tourism sector it would be useful to initiate its measurement at subnational levels, and more specifically at regional level." (Duran, 2013, para.4.10)

"The indicators proposed by way of example should provide a way to indicate in quantitative terms the degree to which the purpose of tourism sector governance, as defined, has been fulfilled, by:

- determining the directive capacity of governments and their Public Tourism Administrations (PTA) for coordination, cooperation and collaboration in the tourism sector with co- responsibility, transparency and accountability; and
- measuring the extent to which governmental powers and resources are used in pursuit of governance objectives" (Duran (2013), para. 4.17)

"Irrespective of the specific procedures that may be established for the development of indicators, the first step is to analyze the current situation so as to establish a baseline relative to the objectives and expected results to be measured. These objectives are illustrated in Figure 1" (Duran, 2013, paragraph4.18)

Figure 2 Baseline situation for the objectives established. Source: UNWTO (2013, Table 3)

OBJECTIVES TO BE MEASURED	The space occupied by governance Directive capacity dimension	The space occupied by governance Directive effectiveness dimension
INDICATORS TO BE MEASURED FOR EACH OBJECTIVE	The conferring of institutional powers and resources for: <ul style="list-style-type: none"> a. Coordination, cooperation and collaboration among Public Tourism Administrations (PTAs) at different levels of government b. Establishment of cooperative and collaborative public-private relations c. Assurance of co-responsibility, transparency and accountability 	The exercise of powers and the mobilization of institutional resources subject to co-responsibility, transparency and accountability: <ul style="list-style-type: none"> d. Coordination, cooperation and collaboration among Public Tourism Administrations (PTAs) and with other public sector actors and networks at different levels of government e. Cooperation and collaboration by public administrations with other nongovernmental actors and networks of actors
EXPECTED RESULT (CRITICAL FACTOR)	Increase in the directive capacity of Public Tourism Administrations (PTAs)	Increase in the directive effectiveness of Public Tourism Administrations (PTAs)

“The following table illustrates an example of seven indicators, each with the corresponding basic elements. Whereas the first three indicators in Table 1 refer to and correlate with each of the directive capacity objectives to be measured (see Figure 3, subpar. (a) and (c)), indicators 4 and 5 correspond to subpar. (d) of Figure 3, whereas 6 and 7 refer to subpar. (e)”. (Duran, 2013, para. 4.19)

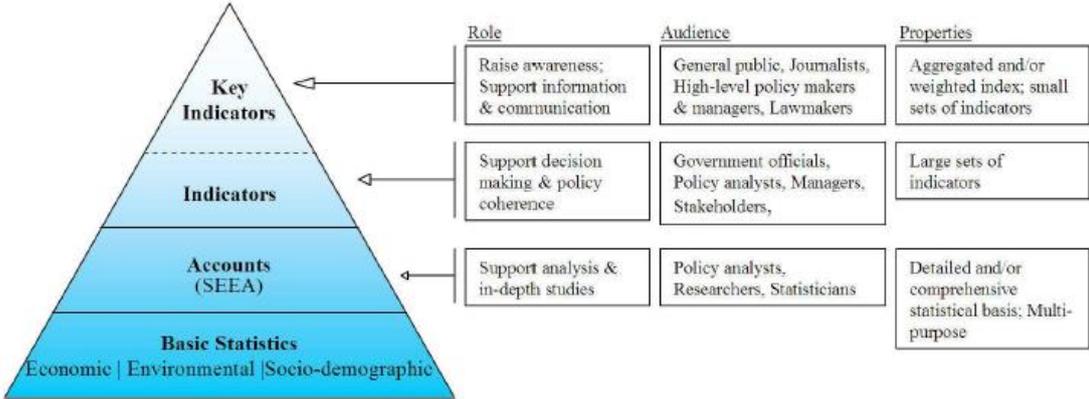
Table 1 Indicators of governance at subnational levels. Source: Duran (2013, Table 4)

DIMENSION MEASURED	EXPECTED RESULT	NAME	DEFINITION	METHOD OF CALCULATION	UNIT OF MEASUREMENT	FREQUENCY	GOALS
Directive capacity	Increase in the directive capacity of PTAs	1. Institutional capacity of PTAs for public coordination, collaboration and cooperation	Out of the total number of PTAs at subnational level, this indicator will show what percentage is considered competent for the exercise of public coordination, collaboration and cooperation. The baseline covers all relevant PTAs at the start of measurement	(No. of PTAs considered competent out of the total number of PTAs at subnational level) x 100	Percentage	Triennial	20% annual increase
		2. Institutional capacity of PTAs for public-private collaboration	Out of the total number of PTAs at subnational level, this indicator will show what percentage is considered competent to sign instruments of public-private collaboration. The baseline includes all relevant PTAs at the start of measurement	(No. of relevant PTAs out of the total number of PTAs at subnational level) x 100	Percentage	Biannual	30% annual increase
		3. Institutional capacity of PTAs for transparency	Out of the total number of PTAs, this indicator will show what percentage operates based on norms and procedures for regulation of the right to access to public information	(No. of PTAs with norms and procedures with respect to access to public information / Total no. of PTAs in the country) x 100	Percentage	Annual	100% annual
Directive effectiveness	Increase in the directive effectiveness of PTAs	4. Degree of co-responsibility in the management of tourism	This indicator will show what percentage of PTAs have instruments for public-private collaboration in the delivery of services in areas specific to tourism management.	(No. of PTAs with instruments for public-private collaboration/ total no. of PTAs in the country) x 100	Percentage	Biannual	30% annual increase
		5. Degree of transparency and accountability in public-private collaboration	Out of the total number of existing public-private collaboration frameworks in connection with tourism, this indicator will show what percentage is public information, subject to two parameters with respect to publicity, inclusion, verifiability and responsibility	(No. of tourism partnerships characterized by transparency and accountability / total number of tourism partnerships) x 100	Percentage	Annual	100% annual
		6. Degree of nongovernmental participation in decisions about tourism	Out of the total number of PTAs, this indicator will show what percentage have established collaboration frameworks with networks of nongovernmental actors enabling them to participate in decision-making processes	(No. of PTAs with cooperation or collaboration frameworks with networks of actors / total number of PTAs) x 100	Percentage	Annual	100% annual
		7. PTA directive effectiveness index	Average sample of directive effectiveness among all PTAs, weighted according to five indicators: public-private collaboration; public intersectoral coordination; business and social sector co-participation for development; compliance with parameters for transparency		Average	Annual	100

Annex 36. Tourism and the Environmental Dimension: General Background

1. Indicators are used to synthesize, simplify and communicate information. Given that environment statistics are usually too numerous and detailed to satisfy the needs of policy makers and the general public, they often require further processing and interpretation, resulting in environmental indicators. Environmental indicators have the purpose of defining objectives, assessing present and future direction with respect to goals and values, evaluating specific programmes, demonstrating progress, measuring changes in a specific condition or situation over time, determining impact of programmes and conveying messages. UN policy frameworks such as the Millennium Development Goals (MDGs) or the new post-2015 Sustainable Development Goals (SDGs) indicator frameworks are typically used for the identification and structuring of indicators. (SEEA Experimental Ecosystem Accounting, 1.33).
2. Accounting frameworks, such as the SEEA, reorganize the relevant economic and environmental statistics according to stocks and flows within and between the environment and the economy based on national accounting principles, thus linking environment statistics with the System of National Accounts (SNA) and facilitating the analysis of relationships between the economy and the environment. (SEEA Experimental Ecosystem Accounting, 1.36).
3. The relationships between different types of information in the context of the SEEA are shown in **Figure 1**. The figure highlights that basic statistics and data are organized using accounting frameworks and that indicators can be sourced from accounts. While it is the case that indicators can be sourced directly from basic statistics, the filter of an accounting framework lends significantly to the coherence of the indicators (SEEA Applications and Extensions 2.9).

Figure 3 Information Pyramid. Source: EC, OECD, UN & WB (2014) SEEA Applications and Extensions, para 2.9.



4. There are two issues of great relevance regarding tourism and the environmental dimension of sustainability that should be highlighted in this overview section:
 - Spatial analysis
 - Combining physical and monetary data

A.1. Spatial analysis

5. One of the most challenging issues regarding the use of national data of the SEEA accounting framework is the ventilation of data on the different territorial entities related with such information: the term “spatial analysis” is used in the SEEA documents to refer to such issue.
6. The occurrence and impacts of environmental phenomena are distributed through space without regard for political-administrative boundaries. The most meaningful spatial units for environment statistics are natural units, such as ecosystems, landscape or land cover units; or management and planning units based on the natural units, such as protected areas, coastal areas or river basin districts.
7. Economic and social statistics are traditionally aggregated according to administrative units. This difference can complicate the collection and analysis of environment statistics. There is however a trend towards producing more geo-referenced data, which would overcome some of the spatial complications of analysis.

Environmental indicators have some characteristics being the geospatial information one of great relevance for the INRouTe project as mentioned in different parts of this document (see particularly Section 5/D.2) *Analytical territorial units for sub-regional measurement and analysis*). The following paragraphs highlight different topics to better understand why the setting up of geocoded data bases is crucial for measuring and analyzing subnational tourism activity; they also allow to understand how the measurement of tourism at subnational levels can provide useful inputs for a better design of national policy initiatives.

8. Geographically referenced information that includes digital maps, satellite and aerial imagery, and other sources of data that are linked to a location or a map feature, all structured in databases, will also add significantly to the quantity and quality of information that is organized within the context of environment statistics. GIS can be viewed as an integrating technology that helps to capture, manage, analyze, distribute and use a wide range of data with a spatial or locational component (SEEA Experimental Ecosystem Accounting, 1.38).
9. Geospatial information presents the location and characteristics of different attributes of the atmosphere, surface and sub-surface. It is used to describe, display and analyze data that have discernible spatial aspects, such as land use, water resources and natural disasters. Geospatial information allows for the visual display of different statistics in a map-based layout, which can make it easier for users to work with and understand the data. The ability to overlay multiple data sets using software, for instance on population, environmental quality, and environmental health, allows for a deeper analysis of the relationship among these phenomena.
10. The complexity of current environmental issues (e.g., climate change, biodiversity loss, health, natural disaster frequency and intensity, population growth, food and water shortages, etc.) increasingly calls for the integration of geospatial information, statistics and sectorial data for more effective and efficient monitoring of progress in the environmental pillar of sustainable development. Geographic Information Systems (GIS) can help establish the links between different types and layers of data by providing powerful tools for storage and analysis of spatial data and by integrating databases from different sectors in the same format and structure.

11. Geospatial information adds significant value and utility to environment statistics. Ideally, geographic aspects of data should always be collected, represented and analyzed at the most detailed scale possible, dependent on national capacities and priorities. Geospatial information enables better analysis of environmental issues as environmental, social and economic statistics can be aggregated or disaggregated according to a wide range of scales and zones meeting diverse analytical and policy demands, such as: natural units (e.g., watersheds, ecosystems, etc.); administrative units (e.g., municipalities, districts, counties, regions, etc.); management units (e.g., protected areas, river basin districts, etc.); planning units (e.g., coastal zones, urban areas, etc.); legal property units (e.g., cadastral units, etc.); and analytical units (e.g., land cover units, socio-ecological landscape units, eco-complexes, geo-systems, eco-zones, etc.).
12. Learning from and studying the subnational level significantly contributes to comprehend the complexity of domestic tourism at a national scale (thus, there would be feedback subnational/national). Similarly, the analysis of the links between tourism and sub-regional territorial entities (both administrative or analytical units) can be of an enormous use for subnational levels (thus for the national level).

This would be the case of using geo-referenced databases within the tourism domain (both by public and private key stakeholders) as explained in [Chapter 6/ C Adapting the R-TIS to Sub-regional Extensions](#).

A.2. Combining physical and monetary data

13. This issue is well known in the case of tourism: not only tourism statistics development has been mainly about physical data and indicators but also the TSA: RMF2008 recommends to identify a selected number of physical type of data for the purpose of allowing for consistency analysis between both type of data in particular topics (TSA table 10 refers to such a set of data).
14. In environment accounting the measurement of physical flows refers to three types: the flows from the environment to the economy, flows within the economy and flows from the economy to the environment (SEEA_CF 2.14)
15. Physical flows are recorded in physical supply and use tables. These tables are extensions of the monetary supply and use tables used for the recording of flows of products in monetary terms in the SNA.
16. The presentation of information in a consistent format, which combines integrated physical and monetary data, is one of the strongest features of the SEEA Central Framework. This feature enables the provision of a wide range of information on specific themes (e.g., water, energy and air emissions), the comparison of related information across different themes, and the derivation of indicators that use both physical and monetary data.
17. Given the integrated accounting structures of physical and monetary accounts, it is logical to use these structures and the common underlying accounting rules and principles to present physical and monetary information at the same time. Such integrated formats have sometimes been referred to as “hybrid” presentations or accounts because they contain data in different measurement units. However, although the measurement units are different, the data sets are presented in accordance with common classifications and definitions; hence, these formats are referred to as combined physical and monetary presentations.

18. Combining physical and monetary data is governed at its core by the logic of recording physical flows in a manner compatible with economic transactions as presented in the System of National Account framework. This linkage ensures a consistent comparison of environmental burdens with economic benefits, or environmental benefits with economic costs. It can be examined not only at the national level but also at disaggregated levels, for example, in relation to regions of the economy, or specific industries, or for the purpose of examining the flows associated with the extraction of a particular natural resource or the emissions of a particular material.
19. In combined presentations, it is legitimate to include only a limited set of variables, depending on the most urgent environmental concerns to be taken into consideration, and it is not necessary to construct an exhaustive physical supply and use table in order to be able to present combinations of physical and monetary data.
20. A combined physical and monetary presentation thus represents an analytical framework for showing which parts of the economy are most relevant to specific indicators and how changes in the economic structure influence the evolution of indicators over time.
21. It might be of interest to finalize these references to combining physical and monetary data both in TSA and SEEA_CF, reproducing Table 10 Non-monetary indicators in TSA: RMF 2008

Table 18 Non Monetary Indicators. Source: Table 10 TSA 2008 UNWTO

a. Number of trips and overnights by forms of tourism and classes of visitors

	Inbound tourism			Domestic tourism			Outbound tourism		
	Tourists (overnight visitors)	Excursionists (same-day visitors)	Visitors	Tourists (overnight visitors)	Excursionists (same-day visitors)	Visitors	Tourists (overnight visitors)	Excursionists (same-day visitors)	Visitors
Number of trips									
Number of overnights		x			x			x	

b. Inbound tourism: Number of arrivals and overnights by modes of transport

	Number of arrivals	Number of overnights
1. Air		
1.1 Scheduled flights		
1.2 Unscheduled flight		
1.3 Private aircraft		
1.4 Other modes of air transport		
2. Waterway		
2.1 Passenger line and ferry		
2.2 Cruise ship		
2.3 Yacht		
2.4 Other modes of water transport		
3. Land		
3.1 Railway		
3.2 Motor coach or bus and other public road transportation		
(i) taxis, limousines and rental private motor vehicle with driver		
(ii) Rental of man or animal drawn vehicle		
3.4 Owned private vehicle (with capacity up to 8 pers.)		
3.5 Vehicle rental without operator (up to 8 pers.)		
3.6 Other modes of land transport (horse back bicycle, motorcycles, etc.		
3.7 On foot		
TOTAL		

(*) In the case of inbound tourism, the variable would be "arrivals"

c. Number of establishments and capacity by types of accommodation

	Accommodation for visitors in ISIC 55			Real estate activities in ISIC 68	
	Short-term accommodation activities	Camping grounds, recreational vehicle parks and trailer parks	Other accommodation	Real estate activities with own or leased property	Real estate activities on a fee or contract basis
Number of establishments					
Capacity (rooms)					
Capacity (beds)					
Capacity utilization (rooms)					
Capacity utilization (beds)					

d. Number of establishments in tourism industries classified according to average number of jobs

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	>1000	TOTAL
Tourism industries										
1 – Accommodation for visitors										
1.a – accommodation services for visitors except in 1-b										
1.b – accommodation services associated with all types of vacation home ownership										
2 – Food and beverage serving industry										
3 – Railways passenger transport										
4 – Road passenger transport										
5 – Water passenger transport										
6 – Air passenger transport										
7 – Transport equipment rental										
8 – Travel agencies and other reservation services industry										
9 – Cultural industry										
10 – Sports and recreational industry										
11 – Retail trade of country-specific tourism characteristic goods										
12 – Country specific tourism industries										
TOTAL										

22. As expressed in IRTS 2008:

- “Table 10 presents a few quantitative indicators that are related to the previous tables and are important for the interpretation of the monetary information presented. The indicators include number of trips by forms of tourism, classes of visitors and duration of the stay; physical indicators regarding types of accommodation; modes of transport used by non-resident visitors traveling to the economic territory of the country of reference; and number and size of the establishments belonging to tourism industries” (para. 4.76).
- “The SNA 2008 states explicitly that physical indicators are an important component of satellite accounts and therefore they should not be viewed as secondary items of the TSA (SNA 1993, paras. 21.5 and 21.113). However, further work will be required to improve the link between the provisional list of non-monetary indicators and the monetary tables. The data contained in this table will assist in the use non-monetary indicators as a key element in tourism analysis” (para. 4.77).

Annex 37. Tourism in the Conceptual Framework of SEEA

1. Although referred to a national context, the following paragraphs contain a range of classifications and lists (taken from the SEEA CF) to support the understanding of the key concepts and the compilation of relevant statistics; they are intended to provide a starting point for the compilation of relevant statistics. However, this material is not at the same level of sophistication in each case and certain classifications are labeled “interim”.

The classifications and lists contained in SEEA Central Framework are:

- Classification of environmental activities:
 - Environmental protection;
 - Resource management (interim);
- Classification of land use (interim);
- Land cover classification (interim);

List of solid waste.

2. Looking for tourism in these classifications, the classification of land use includes category 1.4 “Use of built-up *and related areas*” defined as “land affected or adapted by man, under buildings, roads, mines and quarries and any other facilities, including their auxiliary spaces, deliberately installed for the pursuit of human activities. Included also are certain types of open land (non built-up land), which are closely related to these activities, such as waste tips, derelict land in built-up areas, junkyards, city parks and gardens. Land under closed villages or similar rural localities are included” (UNSD et al. 2014: SEEA_CF 2012).

Tourism can be found in two groups of category 1.4 (UNSD et al. 2014: SEEA_CF 2012).

1.4.6 Commercial, financial and public services

Land mainly used for commerce, trade and related services, public administrations and judicial services, public order and safety services, social security and social work services, and professional and trade associations, including private roads and other auxiliary spaces located in the areas concerned. This category includes wholesale and retail trade; ***hotel and catering services***; banks and insurance; personal services; installations for national defense; education and research/development; and land occupied by religious buildings (UNSD et al. 2014: SEEA_CF 2012).

1.4.7 Recreational facilities

Land developed for and occupied by leisure or recreational purposes, including cultural sites: archaeological sites; historic sites, classified monuments, ruins and stately homes; museums, libraries and media centres; concert halls and theatres; cemeteries, and associated areas (water, wooded areas, lawns and gardens); sport facilities: public beaches and swimming pools, gymnasiums and sports halls; stadiums and games fields; assembly and dancing halls; golf courses; riding tracks; car racing circuits; green or leisure areas: urban parks, public gardens, zoological and botanical gardens and hobby gardens; major burial grounds used as walking places with considerable vegetation; ***facilities for tourism***: camping and caravanning sites; amusement parks, circuses, youth hostels and country centres; marinas; ***secondary residences or vacation houses***; and casinos. Excludes areas that can be used for recreation if this is not the main utilization. (UNSD et al. 2014: SEEA_CF 2012).

3. SEEA Central Framework 2012 (UNSD, EC, Food & Agriculture Organization of UN, IMF, OECD & WB., 2014) explicitly states that the proposed classification is subject to be revised, especially when the intention is to identify more rigorously and precisely land use for tourism related purposes. It should be then possible and feasible to generate statistics far more useful for tourism key stakeholders. That is one of the objectives of the proposed classification.

The following paragraphs try to identify concrete contributions that if considered appropriate, might require a more detailed focus or presentation.

4. In the first place, group 1.4.7. *Recreational facilities* SEEA Central Framework 2012 (UNSD, EC, Food & Agriculture Organization of UN, IMF, OECD & WB., 2014) should be better structured because the use of such facilities impact both resident and non-resident population; it would be desirable to define the terms “recreation” and “leisure” versus tourism (because tourism is already defined in an international statistical standard).

More precisely, such clarification process should use the International Recommendations for Tourism Statistics 2008 as a starting point, where not only the term “tourism” has been defined, but also a list of purposes of the tourism trip is proposed which allows defining a classification on the main purposes of the trip. In fact, the list of related activities to the different main purposes of a tourism trip implicitly includes a clarification among the three mentioned terms.

Precisely, the group of main activities undertaken during a tourism trip for the main purpose of *Holidays, leisure and recreation* includes for example, sightseeing, visiting natural or man-made sites, attending sporting or cultural events, practicing a sport (skiing, riding, golfing, playing tennis, diving, surfing, hiking, trekking, mountain climbing, etc.) as a non-professional activity; using beaches, swimming pools and any recreation and entertainment facilities, cruising, gambling, attending summer camps for youngsters, resting, honey-mooning, fine dining, visiting establishments specialized in well-being (for example, wellness hotels), fitness except in the context of a medical treatment (in which case the purpose would be 1.4 health and medical care), staying in a vacation home owned or leased by the household, etc. (IRTS 2008).

5. Also the group 1.4.6. *Commercial, financial and public services*, includes land use for the provision of “hotel and catering services”. Consequently, it would seem appropriate that the tourism connection to the classification of land use should take into account the following:
 - Activities mainly performed by visitors for personal purposes: this means obviating possible uses associated to “business and professional purposes” as well as other personal purposes different “holidays, leisure and recreation” which embodies displacements to vacation homes.
 - Those buildings, infrastructures and collective equipment which are built due to the significance of tourism

UNWTO could certainly contribute to the revision of the present “interim” classification.

6. On a very different context, SEEA _CF 2012 states that data from the accounts can be extended and integrated with other information with the objective of deriving “expanded SEEA indicators”. Such an approach involves a breakdown of existing SEEA accounts using additional information, for instance by linking to specific spatial areas, by further breakdown of the household sector, or by a focus on certain themes where there is an interaction between human activity and the environment, such as tourism or health.

The *SEEA Applications and Extensions* document includes explicitly a “tourism extension” exercise (see Annex 1 of SEEA).

7. Interestingly enough, such an extension to the household sector allows for a more powerful type of analysis in areas of particular interest to UNWTO such as poverty alleviation. As stated in paragraphs 4.19 and 4.20 of such document, “integrated data, including social, economic and environmental accounts based on agreed classifications and methods, are important in efforts to help countries design effective sustainable development and other cross-cutting policies. Comparable data over time and across countries are needed to track performance across a range of sustainable development related goals and objectives” (including, for example the post-2015 agenda and Sustainable Development Goals) (*SEEA Applications and Extensions*, 4.19)
8. “It is important that these common sets of data are used to inform policymaking and implementation as part of integrated planning at all levels. Such data is also integral to the systems used to define, track and achieve future national and international development objectives. Extensions into these areas are encouraged by the Rio+20 Conference Outcome Document, and are supported by several development programmes linking the collection and analysis of data to integrated policymaking” (*SEEA Applications and Extensions*, para. 4.20.)

Annex 38. Tourism “Micro-Destinations” in the Canary Islands Case Study⁵⁵

1. Before identifying how this case study provides knowledge on operationalizing each of these four topics, referred in Chapter 6 (para. 6.57), the relevance of tourism in the overall economic activity in the Canary Islands should be mentioned.

The tourism sector is of the utmost importance for the Canary Islands economy. The results obtained by the 2002 TSA produced by the Canary Islands Statistics Institute (ISTAC) indicate that tourism generates 32% of the Canary Islands GDP and the 30% of jobs. When comparing these figures with the information provided by the UNWTO concerning tourism revenues in 2003, the Canary Islands is located within the first 15 countries, the 11th or the 15th position depending on the methodology applied. Countries such as Greece, Canada or Mexico and regions such as South America obtain revenues similar to the ones by the Canary Islands. According to Eurostat data, within the document [Tourism statistics at regional level](#), the Canary Islands was the European region that in 2012 led the number of overnights within tourism accommodation establishments, reaching the 87.5 million nights.

2. Regarding the first topic mentioned (tourism is unevenly distributed in most regional territories), the Canary Islands case study is a good example that warns about the implications of accuracy and proper measurement for analytical purposes in those tourism destinations where tourism activity is highly concentrated geographically:
 - Around 12 million tourists every year. First European region (NUTS 2) regarding overnights in hotels
 - 1,7% of the territory include 92% of bed places and account for 94% of tourist overnights in hotel
 - Such concentration of tourism activity refers to 16 municipalities out of 88 (18% of the total)
 - Resident population around 2.1 million

This lack of homogeneity in terms of administrative type of territorial entities has also relevant implications in monetary terms as there is clear evidence based on data provided by the Canary Islands Regional Tourism Information System (R-TIS) main indicators such as:

- Average expenditure at destination: differences between nationalities
- Tourist of the main countries of origin have their own geographically concentration in such municipalities
- REVPAR differences in these 16 municipalities are relevant
- Etc.

These and other type of relevant differences of those 12 million tourists can be analyzed in terms of main variables measuring tourism activity, such as:

- Accommodation establishments
- Beds
- Overnights
- Visitors
- Occupancy rates

⁵⁵ The term “micro-destination” does not appear in the proposed Classification of Territorial Entities used in this document, where the generic term of “small tourism destination area” is preferred in order to design such small size analytical units. As explained in the Glossary (see “Territorial entities/Explanatory notes”), at the local level, “tourism destination” and “tourism spatial area are not basic administrative units” of the proposed classification and should therefore be considered as analytical units that might or not coincide with one of such entities.

- Average daily rate (ADR)
 - REVPAR
 - Employment associated to accommodation establishments
 - Personal characteristics of tourists
 - Characteristics of tourism trips
 - Average daily expenditure
 - Tourism expenditure profile
3. All these basic data and indicators are provided by the Canary Islands R-TIS which has been developed focusing on the articulation of national / regional official statistics (what INRouTe identifies as the basic core of a R-TIS); such a system, as will be referred in the following paragraphs includes different type of statistical sources being the frame of accommodation establishments its basic support. Such Directory (named ALOJATUR) is geo-referenced and the way it is explains that all those variables already mentioned are also geo-referenced (see paragraphs 8.37 and beyond)
 4. The Canary Islands Statistics Institute (ISTAC), adopting 2008 international tourism statistics standards, has developed a research strategy with the aim of providing more and better tourism information at the sub-national level. However, public administrations and economic agents request information at a higher level of specialization and territorial disaggregation in order to address both tourism promotion activities and tourism excellence plans at the micro level.
 5. In this sense, the Canary Islands R-TIS focuses not only on providing subnational macroeconomic tourism data, but also on providing data for the tourism management in all its dimensions, as a necessary input for the Canary Islands or some of its small tourism destinations to become a Smart Tourism Destination. Moreover, the Canary Islands R-TIS is aligned with the Smart Specialization Strategy of the Canary Islands 2014-2020 fostered by the Regional Government which stresses the smart leadership of tourism, identifying two general objectives: (1) Improving the competitiveness and productivity of the Canary “tourism product”; (2) Productive diversification of the tourism based economy.

Components of Canary Islands R-TIS

6. Canary Islands R-TIS consist of different statistical operations. These operations combine different data gathering methods: in addition to conventional methods such as surveys, census, and administrative records also new methods such as sensors or other renowned sources embodied in big data are part of such a system. The following table gathers a classification of the statistical operations according to analysis dimensions and data gathering methods:

Statistical operations	Data gathering methods
Tourism demand operations	Surveys / Administrative records
Tourism supply operations	Census / Administrative records / Sensors
Tourism employment	Administrative records
Synthesis operations	Secondary information

7. R-TIS aims at not only providing regional tourism macroeconomic figures for the seven islands, but mainly at responding different questions that arise when managing tourism destinations in all its dimensions, such as: Where do tourists obtain information and motivates them to visit Canary Islands? Which distribution channels do they use?, Where do they overnight and what influences their choice? What activities do they do within the

destination and how do they move therein? How much do visitors and excursionist spend and how is this expenditure distributed? What image do tourists have of the destination and what do they project to others? What is the tourists' opinion on the destination and how many recommend it? What is the social and environmental pressure level of tourism?

8. In order to respond to these questions, the launching of a extensive set of data gathering tools is needed, including:
- statistical information obtained as a disaggregation of the operations officially conducted for the national level
 - official statistical operations conducted by regional public entities

The statistical activities, both main and secondary, which today are part of the action plan of the Canary Islands R-TIS are those gathered in the following table:

Table 19 Set of Main and Secondary Operations by The Canary Islands R-TIS. Source ISTAC

SET OF MAIN AND SECONDARY OPERATIONS BY THE CANARY ISLANDS R-TIS				
Statistical Operation		Data gathering methodology	Analysis Dimensions	Time and Space Disaggregation
DEMAND	Monitoring Survey Canary Islands Tourism Brand (TRACKING-Canarias)	Survey	Tourism market Position of the Canary tourism brand	Aperiodic Canary Islands, 20 origin markets
	Collection of Air Transportation Statistics	Administrative records	Passengers Cruise ship passengers	Months Islands, airports, ports
	Collection of maritime transport statistics			
	Survey of Tourist Movements in Canary Borders (FRONTUR-Canarias)	Monthly survey	Tourists Tourists (forecasts) Excursionists Cruise ship passengers	Months, years Islands
	Tourism Expenditure Survey	Monthly survey	Tourism expenditure Profile Satisfaction Trip characteristics Specific annual modules (shopping, active tourism, sports tourism, health tourism, etc.)	Months, quarters, years Microdestination, tourism towns, islands
SUPPLY	Tourism Accommodation Survey on Hotel Establishments	Census, every establishment, every day	Occupation (passengers entered, travelers staying, average stay, occupancy rates) Rates (ADR, RevPar, revenue) Employment	Days, special periods, months, years Microdestination, tourism towns, islands
	Tourism Accommodation Survey on Non-Hotel Establishments	Sensors	Tourist population equivalent Land use Power Water Waste Renewal range of accommodation Infrastructure Equipment Services	
	Hotel Outlook Survey	Census, every establishment	Confidence Outlook Situation	Quarters Islands

SET OF MAIN AND SECONDARY OPERATIONS BY THE CANARY ISLANDS R-TIS				
Statistical Operation		Data gathering methodology	Analysis Dimensions	Time and Space Disaggregation
	Statistics Companies Registered to Social Security (tourism companies)	Administrative record, the last day of the quarter	Companies with employees in tourism characteristic activities	Quarters Towns, Islands
	Directory of Economic Units of the Canary Islands (DUE) Collective Tourist Accommodation Directory (ALOJATUR)	Census prepared by combined methods	Companies and establishments in tourism characteristic activities	Month, year Georeferenced
EMPLOYMENT	Statistics of Social Security Affiliation	Administrative record, the last day of the quarter	Registered employment	Quarter Towns, Islands
	Movement Labor Statistics Joined	Administrative record, the last day of the month	Registered unemployment Registered contracts	Month Towns, Islands
SYNTHESIS	Synthetic Index of Tourism Activity	Secondary source	Indicators	Quarter Islands
	Indicator System Tourism Situation	Secondary source	Indicators	Quarter Towns, Islands
	Simplified Tourism Account	Secondary source	VAB GDP Employment	Aperiodic Canary Islands

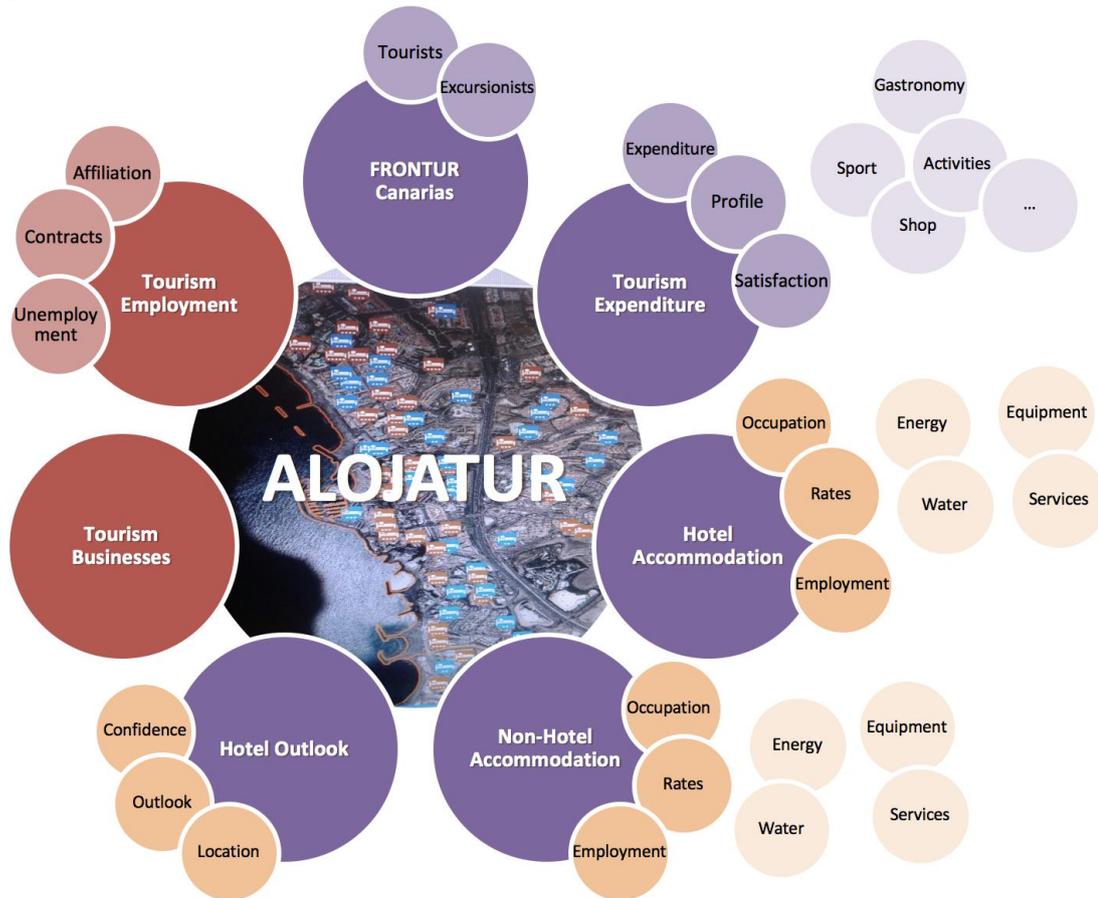
9. The second topic identified in 6.57 (defining territorial boundaries for setting up a small tourism destination area -STDA- zone design) refers to the use of those tourism related productive establishments to be used for defining such territorial boundaries between “small tourism destination areas” and “non-tourism areas”. It is proposed to use as the main criterion “Accommodation for visitors” ISIC Rev.4 class, which includes the following categories:
- 5510 Short term accommodation activities
 - 5520 Camping grounds, recreational vehicle parks and trailers parks
 - 6810 Real estate activities with own or leased property
 - 6820 Real estate activities on a fee or contract basis
10. In practically all EU member countries as well as in non-European countries pertaining to the G.20 (all of them statistically developed countries), the corresponding establishments provide regular data on accommodation, other provision of services to guests, equipment, any other type of information to National and/or Regional Statistical Offices (either monthly or annual); also data provision of any physical improvement of such establishment (or the construction of new ones) are administratively recorded and might be included in the frame of accommodation units held by such Offices. Also bed capacity associated to such establishment is a stable parameter along the medium term for tourism destinations and consequently, the STDA zone design also benefit of such spatial type of stability.

11. As might seem obvious, economic territorial impact derived from expenditure associated to visitors lodged in a given STDA will be associated to such territorial entity unless itinerary type surveys or IT records could allow for distributing such expenditure all along the different territorial entities visited during the stay (see Glossary / [Tourism trip](#) and [tourism visit](#)).
12. In addition to the main criterion (type of accommodation establishments for tourists), other complementary ones could be used for zone design if required, depending on the type and location of the tourism destination:
 - The existence of different main tourism products in such spatial area
 - Proposals received after consultation with tourism key stakeholders at such tourism destination
 - Inspection of the proposed zone design
13. In the case of the Canary Islands, this main criterion was used complemented with the existence or not of some other type of tourism industry establishments. (see Hernández-Martín et al., 2014, p. 8-11)

What is interesting to highlight is that the Directory of accommodation establishments (ALojATUR) is geo-referenced and regularly updated including legal and not fully legalized facilities. More specifically, in order to improve the directory, the Regional Statistical Office (ISTAC) utilises a very useful source - the *Tourism Expenditure Survey*. In this monthly survey around 37,000 tourists are asked every year for the name of the collective accommodation establishment (if applicable) in which they have stayed. If the name provided is not already in the directory, then research begins in order to clarify the situation and, eventually, to ensure its inclusion. In June 2012 there were 716 tourism accommodation establishments in Tenerife, including 250 hotels, 199 apartment complexes and 267 rural houses. The average size of each hotel is bigger than that of apartments complexes and, of course, of rural houses. Therefore, 61% of bed-places correspond to hotels, 38% correspond to apartments and 1.6% to rural houses". (Hernández-Martín et al., 2014, p. 12)

14. Two different issues regarding the central role played by the Directory of accommodation establishments in the setting up of the Canary Islands R-TIS must be highlighted:
 - Linking the main demand side surveys to ALojATUR requires the inclusion of a question in the questionnaires used about the identification of the name of the establishment where the tourist overnighed; by so doing, it is not only possible to update such Directory but also to geo-reference the answers of such tourists. Consequently, because being geo-referenced, the database including both demand and supply side basic data and indicators allows for expanding the original regional set of data (by articulating national/regional main national statistical sources) with proper regional surveys so as to include in the database sub-regional extensions of official statistical data.
 - As visualized in the following graphic, ALojATUR is the basic core of such a system; the way this Directory is being updated and the fact that it is geo-referenced explains the difference with the conventional way such directories are designed and updated.

Figure 4 Alojatur. Source: ISTAC



15. What is also relevant in this case study is that the main operations described in the Canary Islands R-TIS includes a spatial set of basic data and indicators duly checked (looking for [coherence](#)) and properly linked (seeking for a proper integration of the same or related data provided by different sources). For instance, data obtained from tourists using ships and airplanes are coherent with the number of total arrivals, which are also coherent with data of guests in accommodation establishments. Also data on employment provided by accommodation establishments can be checked for coherence with administrative registers.
16. INRouTe strongly supports and recommends that in order to advance in the measurement and analysis of tourism at subnational levels (particularly at sub-regional levels), the corresponding authorities (mainly at the regional level) should assume the design and management of the Directory of accommodation establishments (starting with hotel but expanding to all type of ISIC categories as previously mentioned –see Annex 3) and guarantee the proper geo-reference of the supporting database; this recommendation is a sort of a necessary condition to allow for territorial scalability regarding the measurement and analysis of tourism at subnational levels.
17. Such recommendation is very much supported by the potential to improve tourism economic analysis at destinations. For instance, the distribution of tourists by nationality does not follow a regular pattern through the micro-destinations as can be seen in the following graph; consequently, aggregate figures for municipalities do not necessarily represents what is happening in such lower units (and this is something that key tourism stakeholders at destination really care about)

Figure 5 Overnights according to place of residence. Source: ISTAC

Pernoctaciones según lugares de residencia

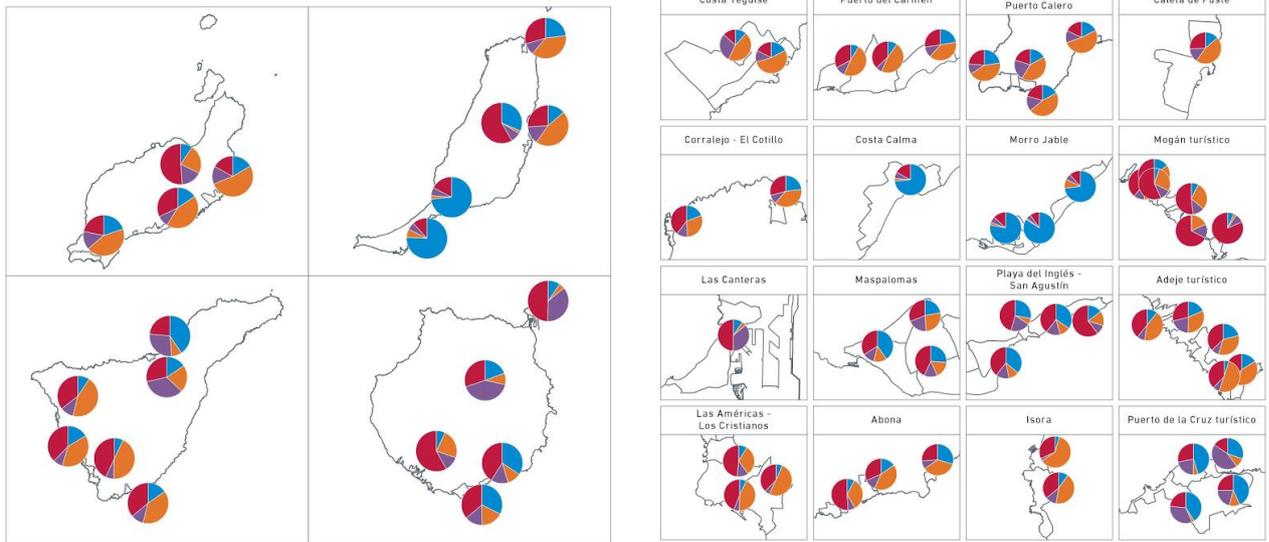
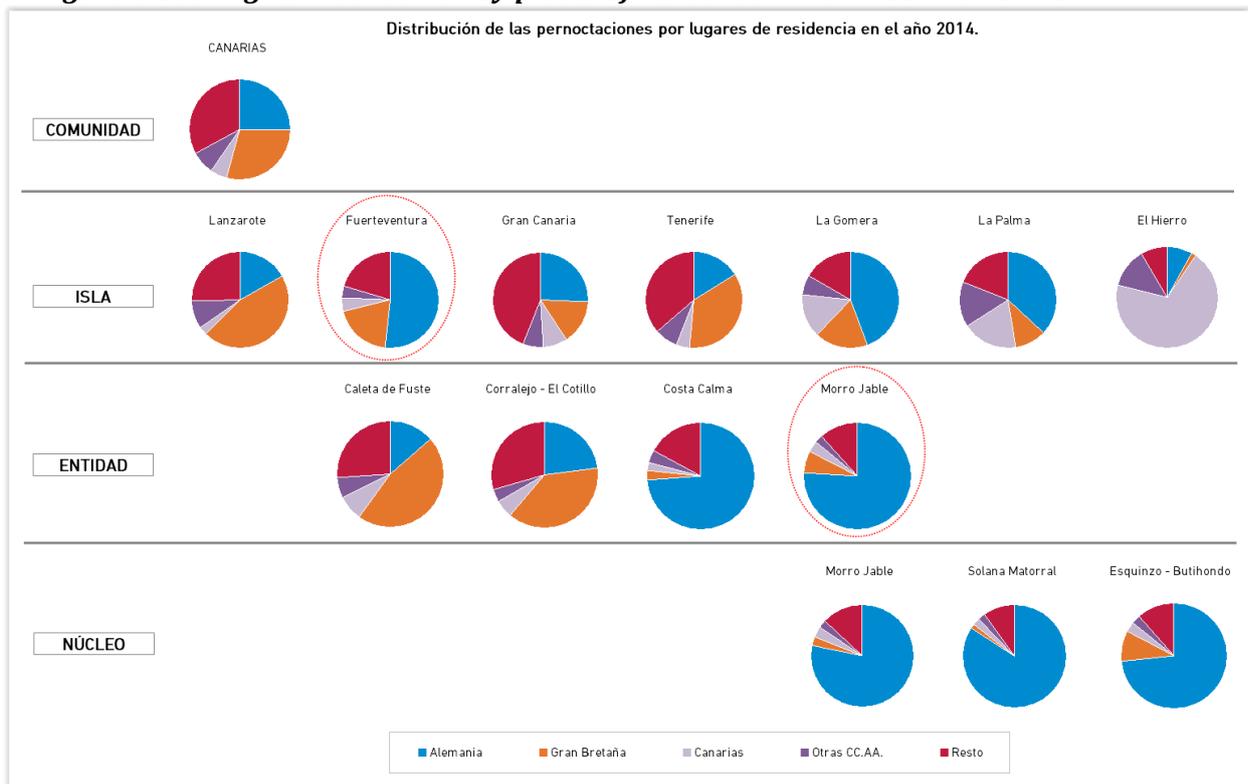


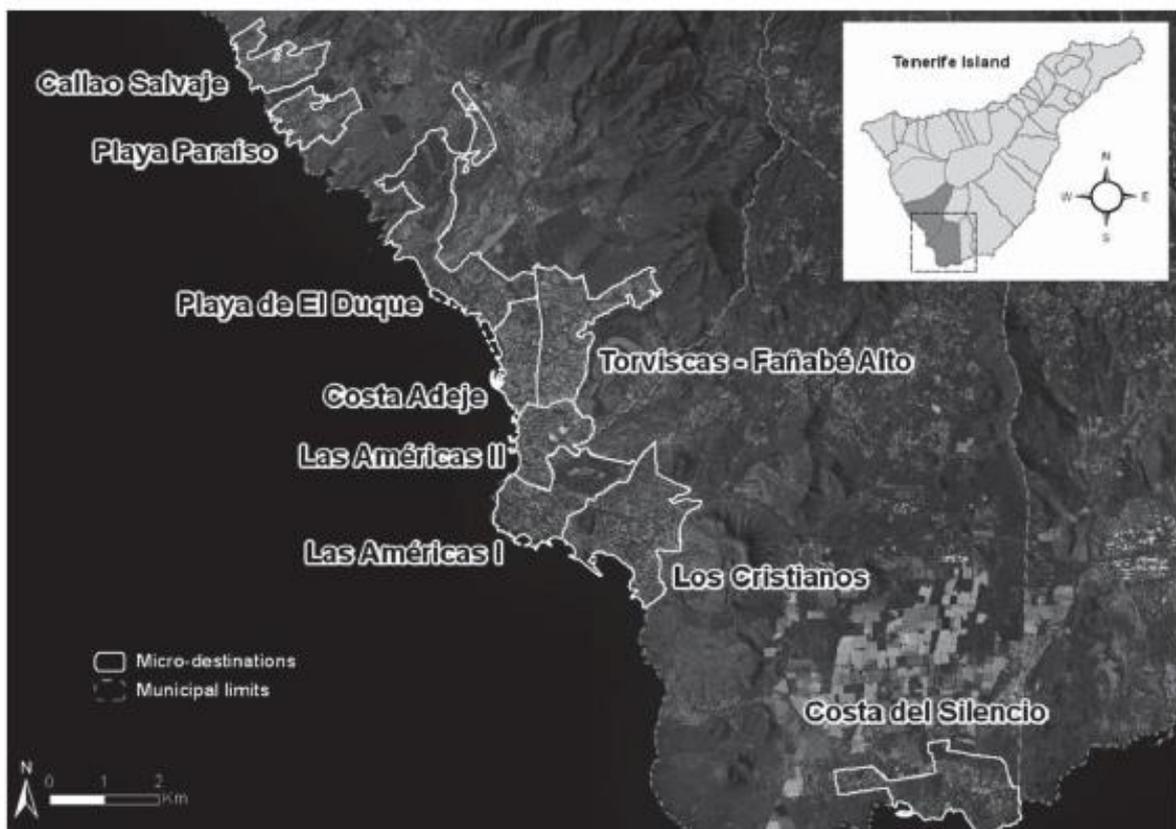
Figure 6 Overnights Distribution by places of residence in 2014. Source: ISTAC



- The third topic identified in 6.57 refers to homogeneity, a complex concept that can be defined in different ways according to what the area of research might be; in the case of tourism such complexity relates to the fact that there are different possible typologies of visitors that ideally could be obtained from available data in order to address different type of analysis (for instance, tourism behavior, main activities undertaken while at destination, etc.). This concept allows us to divide a given destination in several more homogeneous areas using specific criteria. Once created STDAs, also non-official and/or non-statistical data should be geo-referenced and added to the R-TIS data base being mobile phones records a particularly relevant source.

19. This kind of “critical mass of information” criteria for zone design should also assist improving management and monitoring in such tourism destinations by allowing for a more focused and efficient market designed initiatives.
20. As already mentioned, the main criteria used in the case study has been the type of accommodation establishments for tourists. The following paragraphs explain the process followed: starting with a pilot study in two municipalities in the south of the island of Tenerife and extending the methodology used to all the seven islands of the archipelago.
21. The spatial area chosen for the pilot study can be seen in figure and the definition of the different areas to be identified in those two municipalities (Adeje and Arona) labeled as “micro-destinations” (nine of them have been identified). (see 6.47)

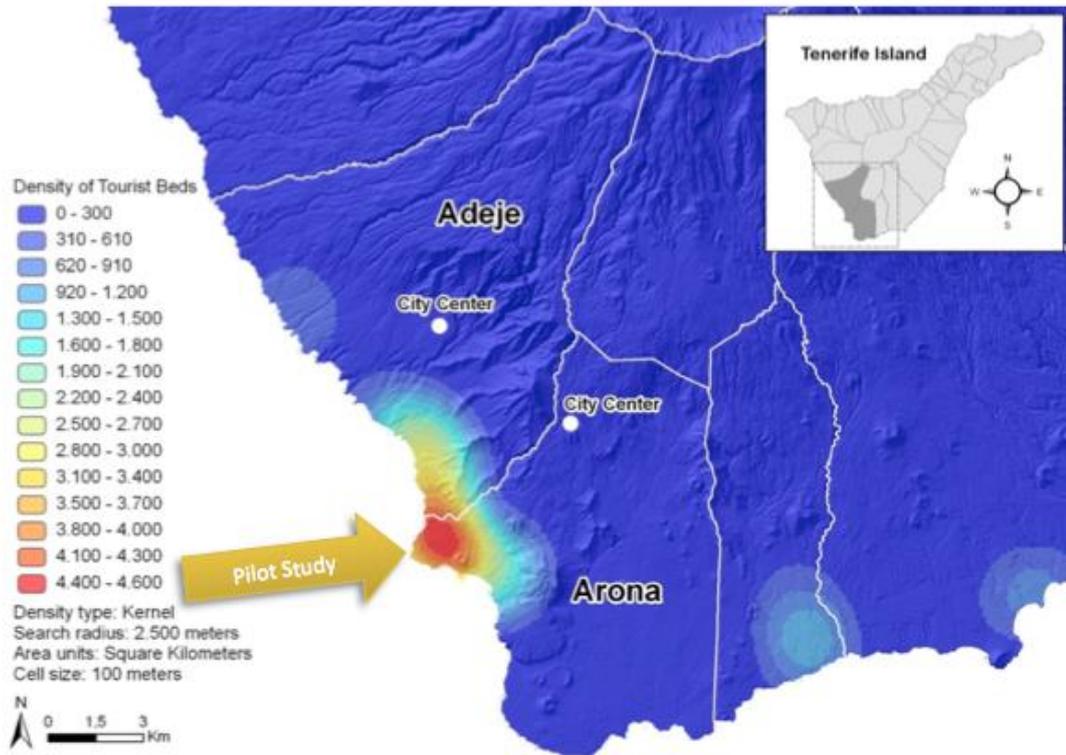
Figure 7 Tourism microdestination in Arona-Adeje (South Tenerife) Source: Cartográfica de Canarias S.A. (GRAFCAN) for cartography and aerial orthophotography



In the project of reference, a “micro-destination” is defined as a small geographical unit that is highly dependent on tourism. It comprises of a wide range of tourism facilities and has a differentiated image and tourism typology (tourism products). In addition, a micro-destination is a useful individual unit for the purposes of decision making in tourism management and planning. For a more operational definition, a micro-destination is a spatial unit of statistical analysis characterized by a high density of establishments of tourism characteristic industries, tourism homogeneous statistical information, and a spatial continuity. Note that because micro-destination are small areas specialized in tourism, they show a high concentration or density of tourists and tourism activities.

22. The application of the criteria for delimiting the tourism micro-destinations in both municipalities of South Tenerife has led to the identification of nine different micro-destinations, each with their own characteristics. The following figures illustrate the complexity of the work process carried out for the pilot study by the Canary Islands Statistical Institute (ISTAC).

Figure 8 Location of Pilot Study - Density of Tourist Beds. Source: ISTAC



Source: ISTAC

Figure 9 Tourism Entity Las Americas Los Cristianos. Source ISTAC

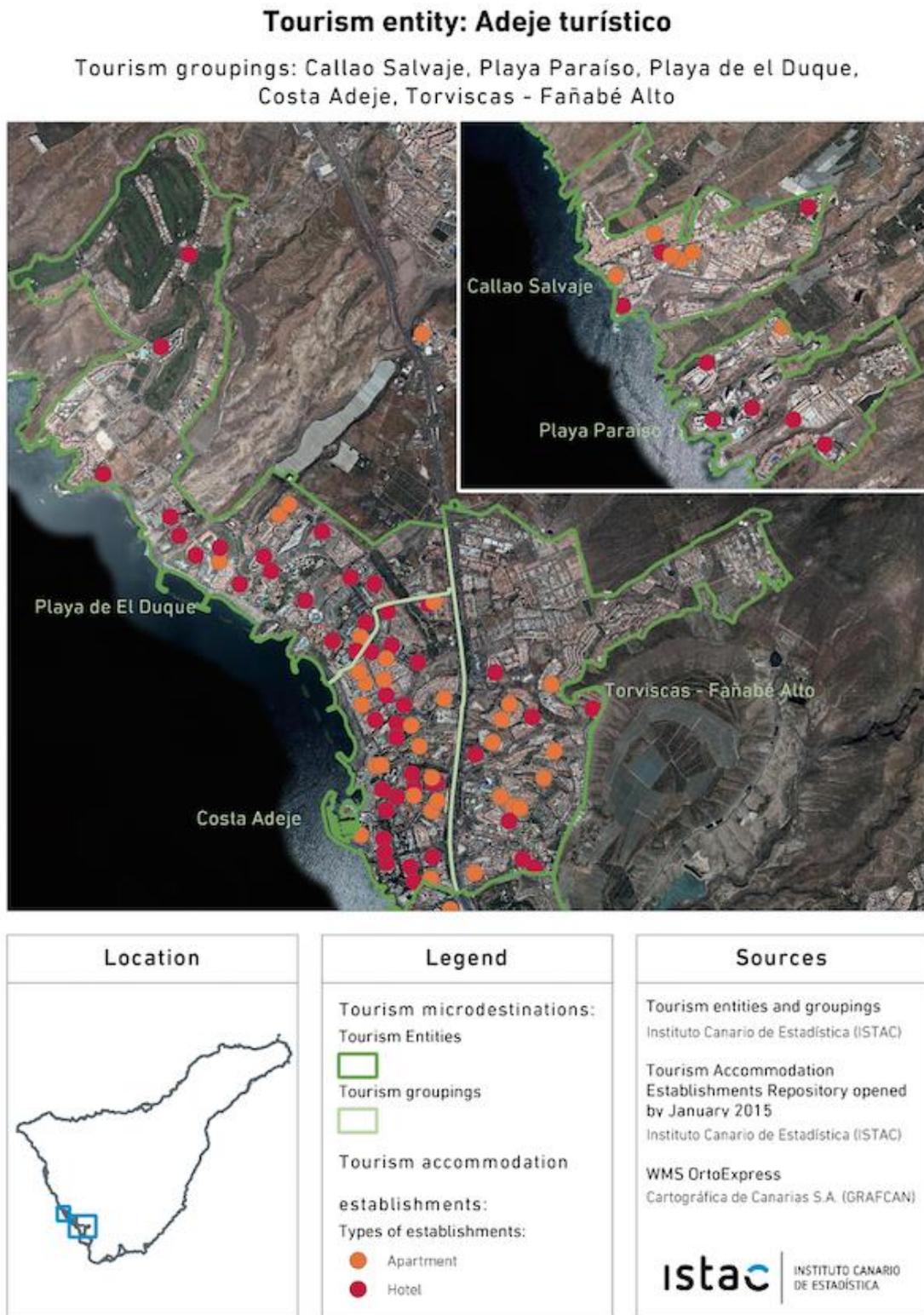
Tourism entity: Las Américas - Los Cristianos

Tourism groupings: Las Américas - Adeje, Las Américas - Arona, Los Cristianos



Location	Legend	Sources
	<p>Tourism microdestinations:</p> <p>Tourism Entities</p>  <p>Tourism groupings</p>  <p>Tourism accommodation establishments:</p> <p>Types of establishments:</p> <ul style="list-style-type: none">  Apartment  Hotel 	<p>Tourism entities and groupings Instituto Canario de Estadística (ISTAC)</p> <p>Tourism Accommodation Establishments Repository opened by January 2015 Instituto Canario de Estadística (ISTAC)</p> <p>WMS OrtoExpress Cartográfica de Canarias S.A. (GRAFCAN)</p>  <p>INSTITUTO CANARIO DE ESTADÍSTICA</p>

Figure 10 Tourism Entity Adeje Turístico Source: ISTAC



These micro-destinations represent around 1% of the island's surface area, but inside their boundaries 63.8% of the island's tourism collective accommodation bed-places can be found here (accounting for 22,6 millions of overnights in 2011. In December 2011, there were a total of 93,620 tourism bed-places in the nine micro-destinations while the population living in the two municipalities in the same year reached an official total of 120,473 inhabitants.

23. “The statistical data obtained for the nine micro-destinations allow us to affirm that each of the resulting units exhibit a sufficient number of differential characteristics to justify producing specific tourism information for them, such as illustrated in Table 4”

Table 20 Tourism Statistics for micro-destinations 2011. Source Hernandez-Martin et al., 2014, table 1 p. 15.

	Overnights	Average daily expenditure per tourist (€)	% of British tourists	% repeat tourists $\geq 5^a$	% all-inclusive packages	% satisfaction ^b
Callao Salvaje	467,300	95.74	43.9	33.8	15.6	90.0
Costa Adeje	5,373,303	122.32	41.5	28.3	28.0	92.6
Costa del Silencio	466,450	87.71	36.9	37.3	35.3	93.8
Las Américas 1	4,959,210	131.13	43.2	32.6	24.4	93.8
Las Américas 2	2,989,851	122.50	43.8	20.3	15.8	88.2
Los Cristianos	2,281,942	106.18	55.6	39.4	11.6	94.0
Playa Paraíso	1,623,828	125.23	40.0	21.0	79.0	93.0
Playa de El Duque	3,151,379	164.63	33.7	23.4	20.7	93.7
Torviscas y Fañabé	1,323,727	104.94	59.0	27.4	18.7	89.4

^aTourists having been more than five times in the Canary Islands.

^bOverall impression of the trip being good or very good.

Source: Canary Islands Institute of Statistics.

24. As mentioned in Chapter 6, the methodology used in the pilot study was extended to all the seven islands of the archipelago allowing for a more precise analysis of tourism impacts and contributions at sub-regional levels

For instance, a characteristic of the tourism model of the Canary Islands is the high ratio of tourism expenditure that is spent in countries of origin (on air transport, packages, excursions) and the small amount of money spent once at the destination. The figures on the ratio of tourism expenditure made once at the destination reflect that tourists staying in micro-destinations with more obsolete accommodation facilities and a predominance of apartments tend to have a higher ratio of expenditure at the destination. This is also true in the case of the total expenditure made at restaurants, for example.

Figure 11 Concentration of the tourism activity in the Canary Islands. Source: ULL



Source: ISTAC

25. Finally, the existence of "small tourism destination areas" (STDAs) will greatly contribute to the forth topic previously mentioned: linking recommended guidelines included in this document with a more holistic approach regarding tourism and environmental sustainability.
26. In the case of the Canary Islands, the actual database should be supplemented with geo-referenced information on water and electricity consumption as well as with other data useful for connecting tourism and environmental sustainability analysis (see box in next para. 28). There are also many other topics at destination levels that could greatly benefit from more data and analysis. Just as an example, a relevant issue to be addressed is the place where tourists stay and the places visited because they explain the mobility of tourists and consequently, allows for environmental impact analysis. Therefore, the available information on places visited by tourists is still not related to geo-located information on accommodation establishments in the case study used; when this could be achieved, the information on the mobility of tourists while at destination will be significantly improved.
27. As already mentioned, the Framework for the Development of Environmental Statistics (FDES) 2013 was approved by the UN Statistics Commission as part of their 44th session period. FDES (2013) recognizes that the environmental statistics gather a wide range of information and are interdisciplinary in nature. Their sources are different data producers, likewise for their compilation numerous methods are used.

FDES (2013) enumerates the most important environmental statistics for the description of statistical topics, thus being useful for the guidance of countries developing national programmes of environmental statistics. The minimum set of environmental statistics is conceived with enough flexibility so that it can be adapted to the concerns, priorities and resources of each country within the environmental field, and therein diverse indicators are defined for which breakdowns linked to tourism are recommended. These indicators are as follows:

- Final consumption of energy
- Water use
- Total emissions of direct greenhouse gases (GHGs), by gas
- Consumption of ozone depleting substances (ODS), by substance
- Emissions of other substances
- Volume of wastewater generated
- Amount of waste generated

On the other hand, from the point of view of human pressure, tourism population is a tourism statistics concept proposed by INRouTe for tourists, as a subset of visitors, and for the measurement and analytical purposes linked to concentration/diffusion of tourism activity indexes as well as for setting up tourism environmental indicators.

Finally, for island territories, with a vast surface under environmental protection, coinciding with a land shortage, it is important to measure the amount of land used by the tourism supply.

(For more details, interested readers should see Annex 39/Background)

28. The measurement of many of the cited indicators is not a minor issue. The Canary Islands Statistics Institute (ISTAC) strategy implies providing data from the accommodation supply and for tourism micro-destinations, which is valuable for the sustainable management of tourism destinations. The data gathering strategy within the Tourism

Accommodation Survey embodies different types of methods: survey, cross check of administrative records and sensorization. The indicators that will be dealt with as part of the first phase are:

Indicator	Data gathering methods
Final consumption of energy	Survey Intake sensorization
Water use	Survey Intake sensorization
Amount of waste generated	Sensorization by waste type
Tourism population (already published)	Survey
Land use	Administrative record (Cadastre)

29. If it could be accepted that the Canary Islands Tourism micro-destination project as well as other similar initiatives in other countries will pave the way towards operational initiatives to support tourism stakeholders at sub-regional levels, such experience will certainly improve regional insight on those four topics already discussed which seem particularly relevant for all type of such stakeholders tourism practitioners –including tourism officials who commission surveys and research, and those who undertake such surveys- as well as public institutes and agencies, regional and local governments, universities, research centers, industry associations, trade bodies and specialized firms- and obviously, it will allow for improving definitions and guidelines recommended in this document

Annex 39. The INRouTe agenda and the UN Ecosystem Proposed Approach to Environmental Economic Accounting

Background

1. A number of relevant policy and conceptual developments have occurred since the original FDES was published in 1984: one of them has been the ecosystem approach.

Please note the following paragraphs are part of the publication UNSD. (2014). Framework for the Development of Environment Statistics (FDES) 2013, United Nations Statistics Division.

2. The ecosystem approach was originally conceived as the strategic concept for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way, as opposed to per individual parts of the systems. A more holistic approach, where parts interacting together constantly modify everything else, the ecosystem view integrally considers spatially defined units (basins, forest, marine, dry-land, etc.) at the local, national or global levels, applying appropriate scientific methodologies. (FDES 2013, para. B.30).
3. As a conceptual construct, this approach sets out to value and recognize ecosystem services that would otherwise not be explicitly acknowledged and accounted for. It is based on the application of appropriate scientific methodologies, focused on levels of biological organization, which encompass the essential structure, processes, functions and interactions among organisms and their environment. It recognizes humans, with their cultural diversity, as an integral component of many ecosystems. As such, in principle it is realistic in promoting understanding of the environment and assessing the complex nature of interactions among the different components of the ecosystem. Delineation of the environment into spatially recognizable units that are influenced by associated seasonality and flora, along with physical data such as elevation, humidity and drainage. However, the focus of the ecosystem approach is designed to trigger management interventions, which must invariably be carried out in an economic and political context. Consequently, it has also attracted economic and political significance. (FDES 2013, para. B.34)
4. The ecosystem approach is therefore an important conceptual framework that can be used in environment statistics to model the structure and contents of the information to be produced by any given country or at any scale; the concept of “scalability” refers to the integration of information across different spatial scales with the aim of developing information sets for particular type of analysis at a level suitable for public policy purposes.

As such, the ecosystem approach embodies a compelling logic to which the national and global statistical systems must respond and reverberate through the economic, social and political spheres to ensure legitimate planetary awareness. The ecosystem approach is therefore a significant input into the development of the FDES 2013. (FDES 2013. Para. B.35)

5. For the purposes of characterizing the ecosystems of a country, in the absence of an internationally agreed ecosystem classification, national classifications could be used and fully described for statistical purposes. Alternatively, the country could follow and adapt other internationally used ecosystem categories, such as the Millennium Ecosystem Assessment reporting categories. (FDES, 2013, para. 3.31)

6. Ecosystem categories are complicated to describe because of considerations of scale. Ecosystems can be alternatively grouped into biomes, bio-geographical regions, habitats, river basins/sub-basins, etc. Depending on the country, ecosystems and biomes can be subdivided into small homogenous units (in practice, land cover units which are homogenous considering provisioning ecosystem services) and broader spatial and statistical units reflecting socioecological systems. (FDES, 2013, para. 3.32).
7. Because of these challenging issues in relation to the measurement of ecosystem, the approval of the SEEA 2102 international standard opened the door to setting up an accounting framework coherent with the environmental accounting system identified as experimental.
8. This is precisely the focus and aim of the United Nations Statistics Division initiative proposing a first set of proposals and guidelines in order to start defining an experimental ecosystem accounting framework.
9. Please note the following paragraphs are inspired both in chapter 2 “Principles of ecosystem accounting” of UNSD. (2013). Revision of the System of Environmental-Economic Accounting (SEEA). SEEA Experimental Ecosystem Accounting: Consultation Draft. United Nations Statistics Division, as well as in the work carried on by INRouTe in relation with possible extensions of the proposed design of Regional Tourism Information System to sub-regional levels; it is at such territorial levels where the contribution of INRouTe to the SEEA ecosystem approach might be promising.
10. The SEEA Experimental Ecosystem Accounting has been developed within the broader process of revising the SEEA-2003 – a process initiated by the United Nations Statistical Commission (UNSC) in 2007. The primary objective of the SEEA revision process was the establishment of a statistical standard for environmental-economic accounting. At its 43rd meeting in February 2012, the UNSC adopted the SEEA Central Framework as an initial international statistical standard for environmental-economic accounting. The SEEA Central Framework is a multi-purpose, conceptual framework that describes interactions between the economy and the environment, and the stocks and changes in stocks of environmental assets. (SEEA_EEA v1 para 1.12).
11. During the SEEA revision process it became clear that there were some aspects of the SEEA2003 that could not be advanced and agreed to at the level of an internationally agreed standard. Consequently, these aspects, primarily relating to accounting for ecosystems and their degradation, were set-aside in the finalization of the SEEA Central Framework. (SEEA_EEA v1 para 1.13)
12. Ecosystem accounting is an approach to the assessment of the environment through the measurement of ecosystems, and measurement of the flows of services from ecosystems into economic and other human activity. Such measurement objectives should be consistent with the SEEA_CF although all of them should qualify as experimental exercises. (SEEA_EEA v1 para 1.1)
13. In fact, ecosystem accounting has a particular interest in linking standard measures of economic activity (provision of services) to encompass links to other human activity (such as recreational opportunities) in sub-national spatial areas. (SEEA_EEA v1 para 1.3)
14. Rather than focusing on the various individual environmental assets (e.g. timber resources, land, water resources), SEEA Experimental Ecosystem Accounting takes the perspective of ecosystems and, in effect, assesses how individual environmental assets interact as part of natural processes in a spatial area to provide a range of services for economic and other human activity. (SEEA_EEA v1 para 1.3)

15. The SEEA Central Framework consists of three broad areas of measurement (i) physical flows between the environment and the economy, (ii) the stocks of environmental assets and changes in these stocks; and (iii) economic activity and transactions related to the environment. The ecosystem accounting described in SEEA Experimental Ecosystem Accounting provides additional perspectives on measurement in these three areas. (SEEA_EEA v1 para 2.102)
16. First, SEEA Experimental Ecosystem Accounting extends the range of flows measured in physical and non-monetary terms. The focus in the SEEA Central Framework is on the flows of materials and energy that either enter the economy as natural inputs or return to the environment from the economy as residuals. Many of these flows are also included as part of the physical flows recorded in ecosystem accounting (e.g. flows of timber to the economy). In addition, SEEA Experimental Ecosystem Accounting includes measurement of the ecosystem services that are generated from ongoing ecosystem processes (such as the regulation of climate, air filtration and flood protection) and from human engagement with the environment (such as through recreation activity). (SEEA_EEA v1 para 2.103)
17. SEEA Experimental Ecosystem Accounting provides an initial basic conceptual framework to allow testing and experimentation that will in turn allow for an inter-disciplinary improved understanding and development of the accounting framework. (SEEA_EEA v1 para 1.7)
18. By taking a more holistic view, information organized following SEEA Experimental Ecosystem Accounting is able to provide an indication of impacts (both positive and negative) of economic and other human activity on the environment and can highlight the trade-offs between alternative uses of ecosystems. (SEEA_EEA v1 para 1.15)
19. For many environmental concerns the policy response is developed and implemented at a specific local level; since ecosystem accounting requires the development of spatially specific datasets it can form a basic tool for the assessment of integrated policy responses at that level of detail. But such datasets raise some issues related with the proper units to be used and the scalability of the information needed. (SEEA_EEA v1 para 1.21)
20. These issues include (i) determining the appropriate scale for analysis, (ii) defining the relationship between the delineation of spatial areas (and hence ecosystem assets) and the generation of ecosystem services since ecosystem services, particularly regulating services, which may be generated over spatial areas that cross ecosystem asset types; and (iii) connecting the spatial areas relevant for measuring the generation of ecosystem services with the location of beneficiaries of those services. (SEEA EEA TG 2.29)
21. Another role of the units model (see Units paragraph...) is to facilitate the up scaling and downscaling of information. Since so many different data are likely to be required from national level production data to site specific condition data, an important challenge in ecosystem accounting is the integration of information to a common scale, using scaling techniques, and then re-presentation of the data to the relevant level for aggregation and communication (SEEA EEA TG 2.30)
22. Because the allocation of economic activity to small spatial areas can be conceptually difficult, it may be most useful to commence with identification of measures of economic activity for those industries and activities for which a clear link can be established between an ecosystem and the location of the production; this is precisely the case of tourism.
23. Where links between economic units and particular ecosystems can be established, it is also possible to consider integrating information on a range of other transactions that may take place in relation to the economic activity.

For that to happen it is crucial that tourism datasets at subnational levels be geo-referenced and include not just tourism data but also supplementary data in order to allow for linking measurement and analysis between tourism and ecosystems in specific territorial entities. Such geo-referenced databases would allow for scalability of the information needed in different sub-regional territorial levels.

24. This way, Tourism, a knowledge field created from a multidisciplinary perspective, is ready to give back to those disciplines that have contributed to its design as a knowledge and research area (mainly sociology, statistics, economy and geography). Giving back certain type of experiences and knowledge that might be useful as tourism measurement is strongly dependent on physical type of data (in fact, most of tourism basic statistical data and indicators are non-monetary).
25. For instance, Tourism can provide required information for the ecosystem proposed accounting structure in terms of organizing information on the environment from a spatial perspective describing, in a coherent manner, linkages between ecosystems and economic and other human activity.
26. More specifically, INRouTe already recommends an operational link between the concept of visitor/travel-party/household that could break the household sector information in order to explicitly identify the tourism connection to ecosystem services; also for international visitors population (see “Classification of ecosystem services”)
27. From an accounting perspective ecological economics captures many relevant concepts including those relating to ecosystem capital and a flow of services. By using a broad conceptualization of services, ecological economics is able to consider trade-offs between the generation and use of different services in a more comprehensive fashion. Further, by considering the relationship between ecosystem capital and services flows, the potential for ecosystems to continue to provide services into the future becomes a direct point of analysis. Such analysis involves consideration of the carrying capacity of the environment. (SEEA_EEA v1, para. 1.45).
28. As will be mentioned later on (Classification of ecosystem services) INRouTe can contribute to a more precise conceptualization of “Cultural services” as referred in the SEEA Ecosystem Accounting document at different levels.

Units

29. In order to undertake measurement of ecosystems in a co-ordinated way and to subsequently compare and analyze information across time and between ecosystems, there must be a clear focus for measurement. Boundaries for specific ecosystems are generally drawn on the basis of relative homogeneity of ecosystem characteristics, and in terms of having stronger internal functional relations than external ones⁵⁶. However, these

⁵⁶The general approach to identifying transactions related to a particular theme or topic is described in the SNA in its discussion of satellite accounts. A satellite account is formed through the adaptation and rearrangement of the core structures of the SNA to suit particular objectives. For the objective of identifying environmental transactions, the primary rearrangement is based on consideration of the purpose underlying each transaction and using so-called functional classifications. The compilation of accounts, known as functional accounts, using these alternative classifications requires that the underlying statistics also be capable of reorganization so as to provide the requisite information.

This is not exactly the case in tourism with the TSA; while the main purpose of the trip is basic in collecting tourism statistics, the accounting system used in the TSA refers to the ISIC and CPC classifications

- boundaries are often gradual and diffuse and a definitive boundary between two ecosystems may be difficult to establish. Further, ecosystems may be very small or very large and operate at different spatial scales. (SEEA_EEA v1 para 2.40)
30. Statistical units are the entities about which information is sought and about which statistics are ultimately compiled. It is the unit that provides the basis for statistical aggregates and to which tabulated data refer. The statistical units of ecosystem accounting are spatial areas about which information is collected and statistics are compiled. (SEEA_EEA v1 para 2.41)
 31. The units model consists of three different types of units: basic spatial units (BSU), land cover/ecosystem units (LCEU) and ecosystem accounting units (EAU). The following subsections describe each type of unit SEEA Application and Extension document refers to SEEA Experimental Ecosystem Accounting regarding geo-spatial analysis, the analytical relevance of the integration of environmental and economic information in geo-referenced datasets, as well as units model for spatial areas. No other SEEA complementary document focuses on sub-national levels (in fact, the SEEA Application and Extension document suggests that a “top down” approach is desirable and feasible regarding the presentation of environmental-economic accounts data by theme –in the case of tourism such assumption is far from being evident) (SEEA_EEA v1 para 2.42)
 32. The delineation of units should be undertaken in concert with the development of spatial databases in Geographic Information Systems (GIS). (SEEA_EEA v1 para 2.68)
 33. A basic spatial unit (BSU) is a small spatial area with a basic set of information. The most common starting point for this attribution process will be information on the location of the unit and land cover. This basic information is then extended with information relevant to the purpose of the account being compiled. (SEEA_EEA v1 para 2.43)
 34. It should be recognized that since any given spatial area may generate a number of types of ecosystem services it is likely that a single BSU will be involved in the generation of a range of ecosystem services. In this sense there is no direct analogy between the BSU and an establishment in economic statistics that undertakes a single kind of activity. (SEEA_EEA v1 para 2.61)
 35. The second type of unit is the land cover/ecosystem unit (LCEU). For most terrestrial areas an LCEU is defined as the set of contiguous BSU satisfying a pre-determined set of factors relating to the characteristics and operation of an ecosystem.
 36. Following standard approaches to statistical classification, BSU would be classified to particular LCEU on the basis of a pre-dominance of characteristics within the BSU. This is akin to classifying an enterprise to a particular industry based on the pre-dominance of a particular economic activity in that enterprise. (SEEA_EEA v1 para 2.47)
 37. At any point in time, all LCEU should be mutually exclusive, i.e. all BSU should be within only one LCEU. However, over time as changes in land cover and land use occur, some BSU will need to be re-classified to different LCEU. (SEEA_EEA v1 para 2.51)
 38. It is likely that LCEU represent the closest approximation to ecosystems in spatial terms in the way that ecosystems are commonly envisaged. (SEEA_EEA v1 para 2.53)

Types of services

39. Based on the definitions of environmental activities, it is possible to define environmental goods and services and environmental producers. Environmental goods and services are different from ecosystem services. "Ecosystem services" is the term used to describe the contributions of ecosystems to benefits used in economic and other human activity (e.g., extracted natural resources, carbon sequestration and recreational opportunities (SEEA_CF, para. 4.31)
40. A fundamental aspect of ecosystem accounting is recognition that a single ecosystem will generate a range of ecosystem services thus contributing to the generation of a number of benefits. In some cases the ecosystem services may be produced "in tandem", such as when forest areas are preserved and provide air filtration services and opportunities for recreation and walking. In other cases the ecosystem services may be in competition, such as when forest areas are logged thus providing the benefits of timber but losing opportunities for recreation. Ecosystem accounting enables the examination of these trade-offs. (SEEA_EEA v1, para 3.3.)
41. To support evaluation of these trade-offs ecosystem services are grouped into different types. In SEEA Experimental Ecosystem Accounting, building on a number of large ecosystem service measurement projects, three broad internationally agreed categories of ecosystem services are used (SEEA_EEA v1, para 3.4):
 - Provisioning services relating to the materials that can be harvested from an ecosystem (such as the harvesting of timber from forests);
 - Regulating services relating to natural processes (such as the benefits from clean air that has been filtered in the environment) 11; and
 - Cultural services arising from human interaction with nature (such as benefits from recreation).
42. Such broad categories are defined in the Common International Classification of Ecosystems Services (CICES)

Spatial location of beneficiaries

43. The generation of ecosystem services is assumed to be able to be attributed to particular ecosystem assets whose spatial area is known. However, it is not necessarily the case that the users of the ecosystem services are located in the same spatial area. This is particularly true of regulating services and cultural services where the beneficiaries may often live in cities and large urban areas while the services are generated in ecosystems away from these areas. (SEEA_EEA v1 para 3.31)
44. Although a simple assumption regarding the location of the beneficiaries cannot be made, it is important in accounting for ecosystem services that attempts are made to understand the location of beneficiaries. This information is needed to ensure that changes in the population of beneficiaries are taken into account in measuring the volume of ecosystem services. They should also be taken into account when developing estimates of ecosystem assets since measures of expected ecosystem service flows will be related to changing populations of individuals and enterprises. (SEEA_EEA v1 para 3.31)
45. Irrespective of that, not all "cultural services" are tourism related, it seems obvious that tourism population associated to a particular ecosystem should be estimated. It should be highlighted that "tourism population" is a tourism statistics concept proposed by INRouTe

for measurement and analytical purposes linked to concentration / diffusion of tourism activity indexes as well as for setting up tourism environmental indicators (see Glossary)

Classification of ecosystem services

46. Not all “Cultural services” are tourism related but tourism is nevertheless associated to them. INRouTe can contribute to a more precise conceptualization of Cultural services as referred in the SEEA Ecosystem Accounting document at different levels:
 - at the proper structure of CICES (at least at the broad level) by clarifying the proper concepts and wording to be used
 - the present text lacks of a precise understanding of present IRTS 2008 when referring to tourism (the terms “tourism destinations”, “recreation and tourism”, “recreation and tourism industries”, “number of tourists who visit certain areas”, “increased number of visitors in the tourism industry”, etc. should be properly used and defined)

47. Also in relation with Ecosystem Accounting Units (EAU) and tourism contribution for the generation of ecosystem services, INRouTe has already drafted guidelines in order to link at the tourism destination levels visitor (the basic unit in tourism statistics), travel party and household (the proper unit in macroeconomic statistics accounting frameworks).



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