



Università Ca'Foscari Venezia

PROJECT ACRONYM AND TITLE: CaLIBRAte - Performance testing, calibration and implementation of a next generation system-of-systems Risk Governance Framework for nanomaterials

FUNDING PROGRAMME: Horizon 2020 – Industrial Leadership – Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing and Biotechnology

CALL: H2020-NMP-2015

SCIENTIFIC FIELD: Nanomaterials, Nanotechnologies, Risk Assessment

HOST DEPARTMENT/CENTRE: Departement of Environmental Sciences, Informatics and Statistics

SCIENTIFIC RESPONSIBLE: Prof. Antonio Marcomini

FINANCIAL DATA:

Project total costs	Overall funding assigned to UNIVE
€ 9.828.106,25	€ 158.525,00

ABSTRACT:

The objective of the caLIBRAte project is to establish a state-of-the-art versatile Risk Governance Framework for the assessment and management of human and environmental risks of MN and MN-enabled products. The framework will be a web-based “system-of-systems” linking different models and methods for:

- 1) screening of apparent and perceived risks and trends in nanotechnology;
- 2) control banding, qualitative and fully integrated predictive quantitative risk assessment operational at different information levels;
- 3) safety-by-design and multi-criteria decision support methods;
- 4) risk surveillance, - management and -guidance documents.

The risk management framework will support assessments of emerging and existing MN and MN-enabled products following the recent ISO31000 risk governance framework, as well as safety in innovation by matching models to the principle innovation steps in the “Cooper Stage-Gate®” product innovation model. Control banding tools and quantitative models will be subject to sensitivity analysis and performance testing followed by a revision as needed. After revision the models will again be analyzed by sensitivity testing, calibration, performance tested to establish the uncertainties. After calibration, the models will be part of the framework, which will be demonstrated by case studies. Stakeholders will be involved for defining the user requirements of the framework and will receive training in the framework at the end. The caLIBRAte project proposal answers to the call of NMP30-2015: Next generation tools for risk governance of MNs. The project is specifically designed to address the key challenges defined in the scope of the call text.

There is particular focus on model revision, calibration and demonstration of existing models and methods that support the risk governance framework in regards to safe innovation and already implemented nanomaterials. Next generation computational exposure assessment and -toxicology is anticipated in the framework.

Planned Start date	Planned End date
May 1st, 2016	October 31st, 2019

PARTNERSHIP:

1	DET NATIONALE FORSKNINGSCENTER FORARBEJDSMILJO	Denmark	Lead Partner/Coordinator
2	UNIVERSITA' CA' FOSCARI VENEZIA	Italy	Partner
3	EIDGENOESSISCHE ANSTALT FUER WASSERVERSORGUNG ABWASSERREINIGUNG UND GEWAESSERSCHUTZ	Switzerland	Partner
4	EIDGENOSSISCHE MATERIALPRUFUNGS UNDFORSCHUNGSANSTALT	Switzerland	Partner
5	TYOETERVEYSLAITOS	Finland	Partner
6	FUNDACION GAIKER	Spain	Partner
7	KAROLINSKA INSTITUTET	Sweden	Partner
8	ACONDICIONAMIENTO TARRASENSE ASSOCIACION	Spain	Partner
9	MISVIK BIOLOGY OY	Finland	Partner
10	ASSOCIAZIONE ITALIANA PER LA RICERCA INDUSTRIALE - AIRI	Italy	Partner
11	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK	Partner
12	NANOTECHNOLOGY INDUSTRIES ASSOCIATION AISBL	Belgium	Partner
13	DIALOGIK GEMEINNUETZIGE GESELLSCHAFT FUER KOMMUNIKATIONS- UND KOOPERATIONSFORSCHUNG mbH	Germany	Partner
14	RIJKSINSTITUUT VOOR VOLKSGEZONDHEIDEN MILIEU*NATIONAL INSTITUTEFOR PUBLIC HEALTH AND THE ENVIRONMENTEN	Netherlands	Partner
15	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO	Netherlands	Partner
16	TTY-SAATIO	Finland	Partner
17	DANMARKS TEKNISKE UNIVERSITET	Denmark	Partner
18	Steinbeis Advanced Risk Technologies GmbH	Germany	Partner
19	HEALTH CANADA	Canada	Partner
20	RESEARCH TRIANGLE INSTITUTE	USA	Partner
21	DUKE UNIVERSITY	USA	Partner
22	GreenDecision s.r.l.	Italy	Partner
23	INSTITUT NATIONAL DE L ENVIRONNEMENT ET DES RISQUES INERIS	France	Partner

WEBSITE: available within three months after the starting date