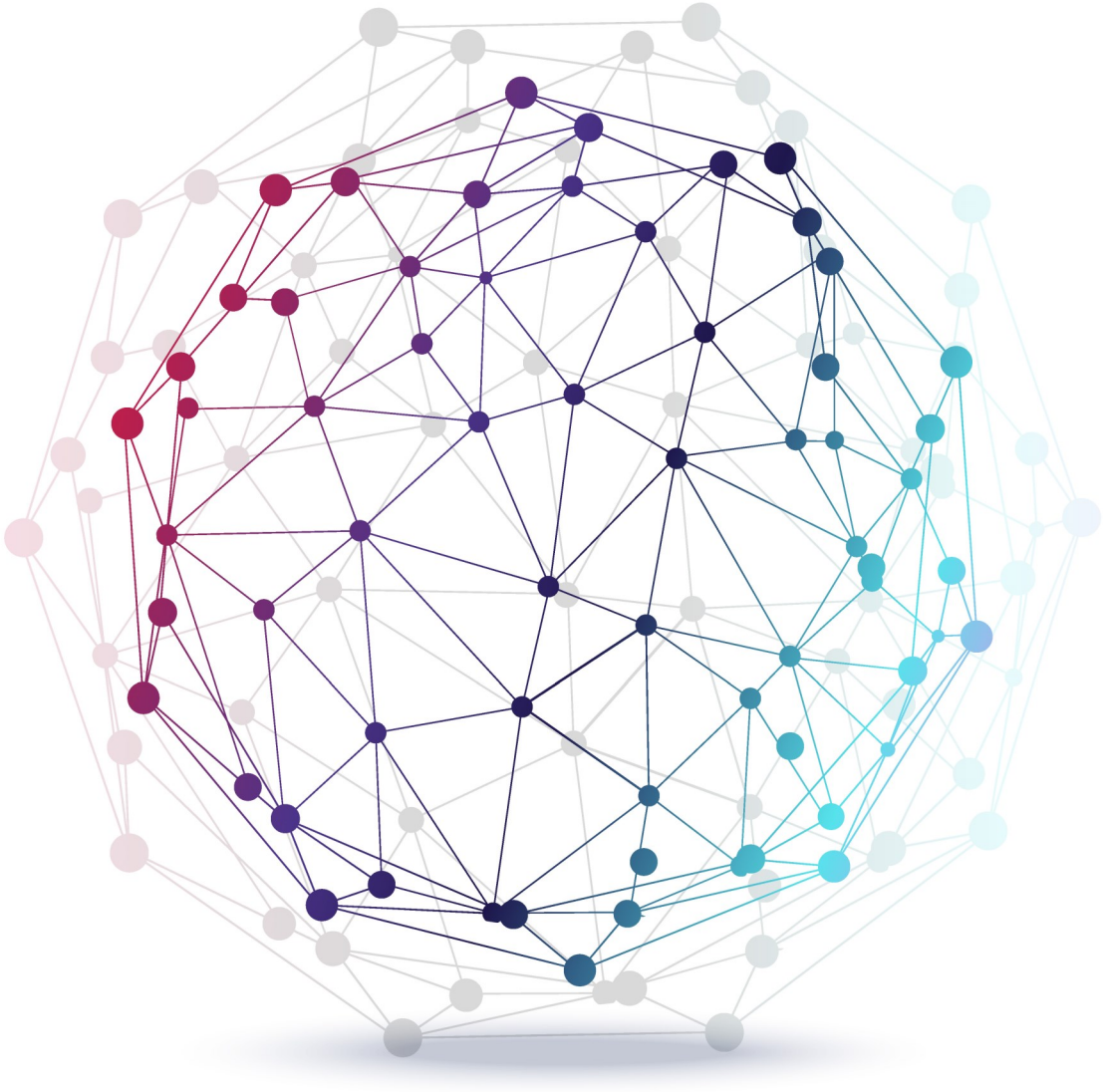
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# COOPERATIVE PROJECTS PORTFOLIO

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# COOPERATIVE PROJECTS PORTFOLIO

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# Airi - Italian Association for Industrial Research

Airi (Italian Association for Industrial Research) is a not-for-profit private organization, funded in 1974. Its mission is to promote industrial Research and Innovation and co-operation between the private and public sectors, to enhance the competitive position of the Country.

Airi members are large industrial enterprises and SMEs, universities, public research institutions, technology clusters and financial organizations. The researchers of Airi members represent about one third of those operating in the Country.

Airi is leading Committees and Working groups involving a large number of R&D managers and researchers from Industry and Public Research, Airi is acknowledged as a key opinion leader in Technology forecasting and Research-policy design.

Airi publishes on a regular basis the report «Innovations of the future: Key Technologies for the Italian Industry», with a focus on Chemistry, Digital technologies, Electronics, Health and Biotech, Energy, Environment, Transportation, Space, Advanced Manufacturing.

Airi is member of Agency for the Promotion of EU Research (APRE) and of the Italian Standard Body (UNI).

Over the past 15 years Airi has been very active in participating in European, national and regional cooperative projects, both as coordinator or partner, dealing with emerging and enabling technologies. Areas of interest include future industrial innovation, R&I policies and strategies, sustainability, and social responsibility, co-creation and open Innovation.

**Airi contribution to projects encompass a variety of activities, highlighted in the boxes below.**

| | |
|---|---|
| **Research and Innovation Policies & Strategies** | **Sustainability & Social Responsibility & Open Innovation** |
| **Nanotechnologies & Key Enabling Technologies** | **Foresight & technology trends** |

| | | | | | |
|---|---|---|---|---|---|
| **Technology Assessment** | **Ethical, Legal and Social Impacts** | **Regulation Standards Risk Governance, Risk Management** | **Multi-stakeholder dialogues** | **Exploitation & Tech Transfer** | **Networking & Dissemination** |

### Project description

- Project ID: 101112379
- Funding: HORIZON-JU-CBE-2022-R-02
- Funding scheme: HORIZON JU Research and Innovation Actions
- Call: HORIZON-JU-CBE-2022
- Start/End: From 01/06/2023 to 31/05/2026
- Total Cost: EUR 4 083 971,25
- EU Contribution: EUR 4 083 971,25

### Partnership

- Coordinator: CSIS (ES)
- 4 RTOs
- 4 SMEs
- 3 Large companies
- 1 Industrial association

### Airi role

Partner, activities on:

- *Leader of Communication and Dissemination activities*
- *Stakeholder & Public engagement*
- *Ethical, Legal and Social Impacts*
- *Project management support*

### Participants

- CSIS, Consejo Nacional de Investigaciones Científicas, ES
- PDC, Process Design Center BV, NL
- K&K, Keuken & De Koning BV, NL
- GAIKER, Fundación Gaiker, ES
- Airi, Italian Association for Industrial Research, IT
- Exportun, Export Blue Market SL, ES
- COLOROBBIA, Colorobbia Consulting SRL, IT
- LIKAT, Leibniz – Institute for Catalysis e.V., DE
- Vertoro BV, NL
- FAB, FAB srl, IT
- URJC, Universidad Rey Juan Carlos, ES
- Maier Scoop, ES
- MTC, Maier Technology Centre S. Coop, ES
- TEMASOL, Temas Solutions GmbH, CH

## Objective

*BIORING aims to develop a novel portfolio of renewable formulations for UV curable polyurethane biocoatings with optimal biodegradable and/or recyclable features for the construction, furniture, automotive sectors and beyond.*

*A Safe and Sustainable by Design (SSbD) approach will be applied in conjunction with digital technologies, taking advantage of the multidisciplinary expertise of the team of the project.*

*UV curable polyurethane (PU) coatings play a major role in a wide range of industries, due to their versatility, excellent performance and energy-efficient production and application, but they still largely depend on fossil-based raw materials.*

*On the other side, biobased coatings are a small but emerging market, since specific sustainable targets of companies, increasing awareness of end-users and customers, and sustainability goals from policies push to increase opportunities for biobased systems, in line with the EU bioeconomy strategy and the global transition to a circular economy.*

*To answer this need, we will advance in the production of biobased building blocks that allow the formulation of novel high performance biocoatings with enhanced thermomechanical performance, providing a viable alternative to existing fossil-based ones.*

*BIORING objective is to provide a versatile, robust and scalable solution of biobased coatings based on biomass-derived photoreactive hydroxyl-functionalised molecules, validated on a semi-industrial scale on rigid substances like paper and plastic.*

*Our solution is structured as a modular platform which will allow the integration of new and different building blocks in the future, to adapt to a variety of applications and industries.*

*BIORING will adopt an upstream approach which integrates product performance, sustainability, safety, and potential legal concerns since the early stages of the development of the coatings.*

### Project description

- Project ID: 101091891
- Funding: HORIZON-CL4-2022-RESILIENCE-01-11
- Funding scheme: HORIZON Research and Innovation Actions
- Call: HORIZON-CL4-2022-RESILIENCE-01
- Start/End: From 01/12/2022 to 31/05/2026
- Total Cost: EUR 3 810 103,00
- EU Contribution: EUR 3 810 103,00

### Partnership

- Coordinator: AVA (ES)
- 8 SMEs
- 5 Universities
- 3 RTDs

### Airi role

Partner, activities on:

- *Leader of Communication and Dissemination activities*
- *Stakeholder & Public engagement*
- *Ethical, Legal, Social and Economic Impacts*
- *Project management support*

### Participants

- AVA, Avanzare Innovacion Tecnologica, ES
- GAIKER, Fundación Gaiker, ES
- ONY, Onyriq Labs sl, ES
- TEMASOL, Temas Solutions GmbH, CH
- UPATRAS, University of Patras, GR
- UL, University of Ljubljana, SI
- DAC, Campania Aerospace Tecnology District, IT
- OMI, Officine Meccaniche Irpine srl, IT
- BOKU, University of Natural Resources and Life Sciences, Vienna, AT
- Airi, Italian association for industrial research, IT
- SAT, Saturntech Unipesoal ld, PT
- RIVERS, Riversimple Movement ltd, UK
- GURIT Limited, UK
- UDG, Universitat de Girona, ES
- USOUTH, University of Southempton, UK

## Objective

*REPOXYBLE aims to develop a new class of high-performance advanced materials targeting cost and energy effectiveness, recyclability, and thus sustainability, for the aerospace and automotive sectors. For this, the so-called Safe and Sustainable by Design (SSbD) approach will be investigated and applied by the multidisciplinary team of the project.*

*As the European Green Deal and the Europe's Digital Decade establish high-priority policies for Europe regarding sustainability and green transition, we will develop innovative and bio-based lightweight polymer-nanocomposites, which are indispensable in the aeronautic and automotive industries.*

*Such advanced materials play a key role in manufacturing fuel-efficient and high-performing vehicles, but the poor recyclability and end-of-life aspect poses a significant challenge. This is where REPOXYBLE comes in: minimising resource demand and energy of manufacturing processes, using bio-based and safe (non-toxic) raw materials and optimising chemical recycling. The project will mitigate cost and product's end-to-end footprint throughout the lifecycle, significantly improving its overall environmental performance.*

*Moreover, REPOXYBLE assumes an upstream approach more efficient and effective which integrates product performance, multifunctionality, sustainability, safety, and potential legal concerns since the beginning of the development of these advance materials (the monomers' synthesis, the resin formulation including nanomaterial-based additives and the future composite design).*

### Project description

- Project ID: 101006249
- Funding: H2020-EU.5.
- Funding scheme: CSA- Coordination and Support Action
- Call: H2020-SwafS-2020-1
- Start/End: From 01/01/2021 to 31/12/2023
- Total Cost: EUR 3 994 592,50
- EU Contribution: EUR 3 994 592,50

### Airi role

Partner, activities on:

- *Leader Horizon scan & Technology assessment*
- *Stakeholder & Public engagement*
- *Ethical, Legal and Social Impacts*
- *Project management support*

### Partnership

- Coordinator: AIT (AT)
- 3 Universities
- 2 Research and technology centers
- 2 Non-profit organizations
- 1 Industrial association
- 1 Small and mild-Size Enterprise (SME)
- 1 Research center

### Participants

- AIT, Austrian institute of Technology, AT
- Airi, Italian association for industrial research, IT
- Alle, All European Academies, DE
- CEA, Commissariat à l'énergie atomique et aux énergies alternatives, FR
- DMU, De Montfort University, UK
- ECSITE, Association européenne des expositions scientifiques techniques et industrielles, BE
- EUREC, European Network of Research Ethics Committees Office, DE
- TRI, Trilateral Research, UK
- TUD, Technische Universiteit Delft, NL
- UT, Universiteit Twente, NL

## Objective

*TechEthos is a new European project that aims to develop guidelines and criteria for the ethical and social evaluation of new and emerging technologies. The TechEthos project will engage partners from research bodies, universities, industries, ethics committees and civil society organizations to achieve the objectives set.*

*TechEthos aims to facilitate Ethics-by-design approaches, i.e., integrating ethical and social values from the earliest stages of technology design and development.*

*In the project's first phase, a Horizon scanning activity of emerging, current and future technologies will be carried out, with expected high social and economic impact.*

*This analysis will, in turn, identify 3 or 4 emerging technologies with a high socio-economic impact and significant and complex ethical implications, such as the Internet of Things (IoT), artificial intelligence, synthetic biology, virtual and augmented reality, climate engineering and technologies or neurotechnologies.*

*In the subsequent phases of the project on the 3 or 4 emerging technologies identified, a detailed analysis will be carried out on the possible ethical, legal and social impacts.*

*This analysis will allow the development of guidelines to promote the integration of ethical and social values in the development and application phase of both new technologies and the innovations connected to them.*

### Project description

- Project ID: 968277
- Funding: H2020-EU.2.1.2,3,5
- Funding scheme: CSA- Coordination and Support Action
- Call : H2020-NMBP-TO-IND-2020-singlestage
- Start/End: From 01/10/2020 to 30/09/2023
- Total Cost: EUR 1 545 323,75
- EU Contribution: EUR 1 545 323,75

### Airi role

Partner, activities on:

- *Technology assessment*
- *Co-creation & public engagement*
- *Ethical, Legal and Social Impacts*
- *Project management*
- *R&I policies*

### Partnership

- Coordinator: DBT (DK)
- 4 Research & Technology centers
- 1 Industrial association
- 2 Universities
- 1 Non-profit organizations
- 2 Civil Society Organizations

### Participants

- DBT, Danish Board of Technology, DK
- Airi, Italian Association for Industrial Research, IT
- DTI, Danish Technological Institute, DK
- Tecnalia, Fundacion Tecnalia Research & Innovation, ES
- VU, Vrije Universiteit Amsterdam, NL
- ECSITE, The European Network of Science Centres and Museums, BE
- CRA - The Centre for Research and Analysis, BG
- AHHAA, Science Centre, EE
- CPN, Centre for the Promotion of Science, RS.
- MUST, Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci, IT

## Objective

*The SocKETs project aims to develop methods and tools for the involvement of social actors in technological innovation processes. Research and innovation are changing the world around us and our daily life with unprecedented speed and continuity. Digital technologies, biotechnologies, nanotechnologies, new production systems, and robotics are examples of enabling and "disruptive" technologies, which can radically affect society's production and life.*

*The SocKETs project will carry out a co-creation process: a collaborative instrument to share ideas between the parties involved in the technological design and research to improve and increase the social value of the innovation process. Such interactive involvement of participants determines a double positive effect on the results of R&I: it decreases the risk of generating negative impacts or of encountering strong resistance in society, and it increases the chances of equitable and sustainable development. The SocKETs co-creation involves industry representatives, market operators, researchers, policymakers, civil society and citizens and developing experiments in three distinct areas of application of the KeyEnablingTechnologies:*

- *Circular economy (case studies in Italy & Estonia)*
- *E-health (case studies in Denmark, Bulgari & Serbia)*
- *Industrial automation (case study in Spain)*

*The experimentations conducted through these cases study will allow SocKETs to develop practical product proposals, ideas and innovation strategies in these areas. In addition, it will develop and collect methodologies and tools (toolbox) to support co-creation activities.. Results of case studies will be disseminated in living exhibitions across Science Museums in Europe.*

TernAria

### Project description

- Funding: Carit Foundation, Terni and Narni (Umbria Region)
- Funding scheme: Subcontracting
- Call: Scientific research and sustainable development for the territory
- Start/End: From 01/09/2020 to 15/12/2022
- Total Cost: EUR 100 000
- Contribution: EUR 85 000

### Airi role

Partner, activities on:

- *Project Management*
- *Exploitation & Tech Transfer*
- *Co-creation*
- *Dissemination*

### Partnership

- Coordinator: Bruno Kessler Foundation
- 5 schools
- 2 Industrial Association
- 1 Regional authority

## Participants:

- Fondazione Bruno Kessler
- Associazione Italiana per la Ricerca Industriale
- Associazione Disegno Industriale
- Agenzia Regionale per la Protezione Ambientale dell'Umbria

## Schools:

- Istituto Tecnico Tecnologico "Allievi - Sangallo"
- Istituto Istruzione Superiore Professionale e Tecnico Commerciale "A. Casagrande"
- Liceo Scientifico Renato Donatelli Terni
- Istituto Di Istruzione Superiore Classico e Artistico di Terni
- Liceo Scientifico Statale G. Galilei

## Objective

*The aim is to to develop and test new technologies for the environmental sector, using an innovative co-creation model, involving researchers, professionals, authorities and students: the School-Work didactic model DomoSens.*

*TernAria aims to monitor air quality in urban environments using fixed sensors and other mobile devices to allow experimentation of data collection in real-time to monitor the distribution of contaminant concentrations (e.g., $NO_2$, $O_3$ and CO) and build a mapping of urban areas ed suburban inspected. Testing will also be done in cooperation with the city public transport system.*

*The schools involved are proposed to collaborate together, supervised by teachers, researchers and professional. The goal is to study a gas detector for environmental monitoring, to co-create prototypes, and to test them as a smart network of environmental sensors in urban areas and city buses, and develop an exploitation and business plan to bring these sensors to the market. The project aims to educate students to run and manage cooperation projects, raise awareness about air pollution problems and stimulate models of active citizenship in proposing new consumption trends. The project involves 5 schools and over 150 students. In the course of the project, elements of the typical innovation chain such as production and supply chain issues, engineering and design issues, market context, legal aspects, communication strategies, will be addressed.*

## Project description

- Project ID: 814401
- Funding: H2020-EU.2.1., H2020-EU.2.1.3
- Funding scheme: RIA- Research and Innovation action
- Call : H2020-NMBP-TO-IND-2018
- Start/End: From 01/01/2019 to 31/12/2022
- Total Cost: EUR 8 678 466,50
- EU Contribution: EUR 7 795 549

## Airi role

Partner, activities on:

- *R&I policies*
- *Risk Management*
- *Regulation & Standards*
- *Ethical, Legal and Social Impacts*
- *Project management support*

## Partnership

- Coordinator: RIVM (NL)
- 14 Research & Technology centers
- 3 Universities
- 7 Companies
- 3 Industry associations
- 2 Governmental Agencies
- 1 Standard Organizations

## Participants

- RIVM, National Institute for Public Health and the Environment, NL
- Airi, IT
- BauA,Federal Institute for Occupational Safety and Health, DE
- BNN, BioNanoNet AT
- NRCWE, The National Research Center for Work Environment, DK
- IOM, Institute Occupational Medicine, UK
- ISS, Istituto Superiore di Sanità, IT
- JRC, Joint Research Centre, BE
- Acondicionamiento Tarrasense, ES
- INIA, ES
- Karolinska Institutet, SW
- INERIS, Institut de l'Environnement Industriel et des Risques, FR
- TNO, NL
- East EU R&I Enterprise, BU
- Centre Européen de Recherche des Géosciences de l'Environnement, FR
- National Institute for Occupational Health, South Africa
- EMPA, Swiss Federal Laboratories for Material Science and Tech, CH
- FOPH, Federal Office of Public Health, CH
- Korea Research Institute Standards and Science
- University of Vienna, AT
- Duke University, US
- Korea Research Institute of Chemical Tech
- Temas AG, CH
- Ecamricert SRL, IT
- Dialog Basis, DE
- Ideaconsult Ltd., BU
- Solvay SA, BE
- AcumenIST , BE
- CEFIC, EU Chemical Industry Council, BE
- NIA, Nanotech Industries Association, BE
- Ministry Infrastructure and Water Management, NL
- BfR, Bundesinstitut für Riskobewertung, DE

## Objective

*Gov4Nano will work towards a resilient and adaptive form of risk governance covering the needs of a continously developing technology and addressing the needs of stakeholders.*

*The Gov4Nano project will develop the first implementation of a future-proof operational Nano Risk Governance Model (NRGM) that addresses the needs of the transdisciplinary field and innovative (and key enabling) character of nanotechnology:*

- *It will explore the potential added value of upcoming tools and approaches such as Findable, Accessible Interoperable and Reusable (FAIR) databases, data-hackathons, blockchain technology and implementation of Safe-by-Design approach.*
- *It will support consensus building, prioritization and harmonization of practices amongst stakeholders, with a focus on risk assessment, risk management, risk perception and risk communication, risk-benefit evaluation, risk-transfer and the societal desirability of nanotechnology applications.*
- *It will include knowledge management and data management, efficiently executed through stakeholder involvement.*

*Gov4Nano will take into account the different generations of nanotechnologies and risk/benefits/public concerns to develop an integrated approach connecting the scientific, regulatory and market layers and the different actors involved. The Gov4Nano project will design and establish a Nanotechnology Risk Governance Council (NRGC), to create a trustworthy and objective international umbrella for the risk governance of nanotechnologies.*

### Project description

- Project ID: 768622
- Funding: H2020-EU.2.1.2. - Industrial Leadership- Enabling and industrial tech – Nanotechnologies
- Funding scheme: CSA - Coordination and support action
- Call : H2020-NMBP-CSA-2017
- Start/End: From 01/09/2017 to 31/08/2020
- Total Cost: EUR 1 998 366,25
- EU Contribution: EUR 1 998 366,25

### Airi role

Partner, activities on:

- *Technology assessment*
- *Ethical, Legal and Social Impacts*
- *Regulation & Standards*
- *R&I policies*
- *Project management support (evaluation of activities)*

### Partnership

- Coordinator: DBT (DK)
- 3 Universities
- 3 Research & Technology centers
- 1 Company (consultancy)
- 1 Industrial association
- 2 Civil Society Organizations

### Participants

- DBT—Danish Board of Technology Foundation, Denmark (Coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- The Technology Centre, Czech Republic
- Royal Melbourne Institute of Technology, Spain
- Austrian Academy of Science, Austria
- Oslo and Akershus University College, Norway
- University of Twente, Netherlands
- De Proeffabriek, Daniel Schuurbiers, Netherlands
- CIEL—Center for International Environmental Law, Switzerland
- EIWH, European Institute of Women's Health Limited, Ireland

## Objective

*GoNano has as its main objective to improve the responsiveness of research & innovation processes to public values and concerns.*

*The project builds on previous projects in public engagement and new technologies to develop a pilot project in each of the nanotechnology research areas 'Health', 'Energy' and 'Food'.*

*The pilot projects will engage citizens with researchers, professional users, civil society organisations, industry, and policy makers in a continuous process of deliberative workshops and online consultations to co-create concrete suggestions for future nanotechnologies.*

*GoNano will build a broad community of 'change agents' for integrating an 'RRI way' of working on research and innovation, and it will develop and disseminate an RRI business case to align public values, needs and concerns with industry' for profit ambition. GoNano builds on the basic assumption that several types of knowledge are needed to define sustainability, acceptability, and desirability of nanotechnologies, as well as the belief that online and offline engagement activities must be combined with a creative approach to dissemination and communication to ensure continued interest and engagement in the debate on nanotechnologies future application.*

*GoNano believes that its interactive and open approach to: developing the nanotechnology product suggestion; writing policy recommendation and building an RRI business case; informing and educating about nanotechnology as well as the value of co-creation will build trust and mutual understanding among all the stakeholders, including public and private stakeholders and citizens.*

### Project description

- Project ID: 710059
- Funding: H2020-EU.5.f. Science With and For Society (SWAFS)
- Funding scheme: CSA - Coordination and support action
- Call : H2020-GARRI-2015-1
- Start/End: From 01/08/2016 to 31/07/2019
- Total Cost: EUR 1 708 096,25
- EU Contribution: EUR 1 708 095

### Airi role

WP leader, activities on:

- *R&I Strategies*
- *Technology assessment*
- *Regulation & Standards*
- *Ethical, Legal and Social Impacts*
- *Dissemination*
- *Project management*

### Partnership

- Coordinator: DBT (DK)
- 2 Universities
- 2 Research & Technology centers
- 1 Industrial Association

### Participants

- Delft University of Technology Netherland (Coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- RIVM—National Institute for Public Health and the Environment, Netherlands
- The Karlsruhe Institute of Technology (KIT),Germany
- The University of Warwick United Kingdom

**Objective**

*There is now only limited experience with RRI in industry and there is also limited evidence of the added value of opening up the innovation process in industry for social engagement and gender considerations.*

*We will overcome these current limitations by carrying out eight RRI pilot projects in a real-world industry context. To establish the added value of the RRI approach and the gender dimension in and for industry, we will assess the pilot projects on a number of product and process RRI dimensions and compare the score of the pilots on the relevant RRI dimensions with the score of similar projects in the same companies in which the RRI approach has not been followed.*

*We focus on implementing RRI for some of the major technological challenges in the EU including nanotechnology, synthetic biology, Internet of Things and self-driving or automated cars. These are all transformative technologies that have the potential to transform existing modes of production and to change the relation of the company with users, suppliers or other stakeholders.*

*The pilots aim at integrating RRI in the CSR (Corporate Social Responsibility) policies of the participating companies. Some pilots will take place in private companies and some in public-private partnerships (PPPs). The project will be supported by extensive stakeholder consultations and dialogues. These will feed into the set-up and the carrying out of the pilots.*

*The project will result in a RRI-CSR roadmap for transformative technologies. The roadmap will be widely disseminated through the partner's extensive industry network, and through industry branch and CSR organizations. An important means of dissemination will also be the MOOC (Massive Open Online Course) on RRI in industry. The dissemination is expected to lead to a better uptake of RRI approaches by industry. This will also contribute to the competiveness of the European industry.*

### Project description

- Project ID: 741477
- Funding: H2020-EU.5.f. Science With and For Society (SWAFS)
- Funding scheme: CSA - Coordination and support action
- Call : SWAFS-04-2016-1
- Start/End: From 01/05/2017 to 30/04/2020
- Total Cost: EUR 3 248 233,50
- EU Contribution: EUR 3 248 233,50

### Airi role

Subcontracting:

- *Ethical, Legal and Social Impacts*
- *Dissemination*

### Partnership

- Coordinator: University of Roma Sapienza (IT)
- 8 Universities
- 2 Research & Technology centers
- 2 SMEs

### Participants

- University of Rome Sapienza, Italy (Coordinator)
- Instituto da Soldadura e Qualidade (ISQ), PT
- South European Research Centre (SEERC), GR
- Ciencia Viva (CV), PT
- Open University (OU), UK
- University of Helsinki (UH), FI
- University of Maastricht (MUSTS), UK
- Norwegian University of Science and Technology (NTNU), NO
- University of Minho (UMINHO), PT
- Conoscenza e Innovazione Srls (K&I), IT
- University of Liverpool (UNLIV), UK
- Goettingen University (UGOE), UK

**Objective**

*FIT4RRI moves from the assumption that there is a serious gap between the potential role Responsible Research and innovation (RRI) and Open Science (OS) could play in helping Research Funding and Performing Organisations (RFPOs) to manage the rapid transformation processes affecting science (especially the science-in-society aspects) and the actual impact RRI and OS are currently having on RFPOs, research sectors and national research systems. FIT4RRI is precisely intended to contribute in bridging this gap, promoting viable strategies to activate institutional changes in RFPOs. The project will act on two key factors i.e.*

*i) Enhancing competences and skills related to RRI and OS through an improvement of the RRI and OS training offer (in terms of training tools, actions and strategies)*

*ii) Institutionally embedding RRI/OS practices and approaches by promoting the diffusion of more advanced governance settings able to create an enabling environment for RRI and OS.*

*With this double aim in view, FIT4RRI is organised following an overall methodology based on three main steps: analysis of what is happening in the RRI and OS practice in research organizations in Europe; observing RRI/OS in action though 4 co-creation experiments in research organizations, aimed at figuring out possible solutions in terms of training approaches and governance settings; promoting changes, developing training tools and actions and easy-accessible evidence-based guidelines on governance settings functioning as enablers for RRI and OS).*

# NANORESTART

**NANOmaterials for the REStoration of works of ART**

## Project description

- Project ID: 646063
- Funding : H2020-EU.2.1.3.1. - Cross-cutting and enabling materials technologies
- Funding scheme: IA - Innovation action
- Call: H2020-NMP-2014-two-stage
- Start/End: 1/06/2015 to 30/11/2018
- Total Cost: EUR 9 178 647,25
- EU Contribution: EUR 7 918 397

## Partnership

- Coordinator: CSGI (IT)
- 10 Universities
- 3 Research & Technology centers
- 4 Companies
- 5 Museums
- 2 Cultural heritage professionals
- 1 Government Agency
- 1 Industrial association

## Airi role

WP leader, activities on:

- *Technology assessment*
- *Exploitation & Tech Transfer*
- *Standardization*
- *Project Management*

## Participants

- CSGI—Consorzio Interuniversitario per lo sviluppo dei sistemi a grande interfase (Coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- Chalmers University, Sweden
- University College Cork- National University of Ireland, Ireland
- Federal University of Rio Grande do Sul, Brazil
- Università Ca' Foscari Venezia, Italy
- University of Santiago de Compostela , Spain
- University College London, UK
- University of Barcelona, Spain
- The University of Amsterdam, Netherlands
- The Federal University of Rio de Janeiro, Brazil
- CNR—Consiglio Nazionale delle Ricerche, Italy
- National Institute of Chemistry, Slovenia
- CEA—Commissariat à l'energie atomique et aux energies alternatives, France
- Akzo Nobel AB, Sweden
- Arkema, France
- ZFB- Zentrum fur Bucherhaltung Gmbh, Germany
- MBN Nanomaterialia SPA, Italy
- National Museum of Denmark, Denmark
- The Board of Trustees of the Tate Gallery, UK
- The Art Institute of Chicago, USA
- The Rijksmuseum, Netherlands
- Accademia di Belle Arti di Brera, Italy
- Antonio Mirabile, France
- Aurelia Chevalier, France
- Ministry of Education, Culture and Sports, Spain

**Objective**

*Currently there is a lack of methodologies for the conservation of modern and contemporary artworks, many of which will not be accessible in very short time due to extremely fast degradation processes. The challenge of NANORESTART will be to address this issue within a new framework with respect to the state of the art of conservation science.*

*NANORESTART is devoted to the development of nanomaterials to ensure long term protection and security of modern/contemporary cultural heritage, taking into account environmental and human risks, feasibility and materials costs.*

*The market for conservation of this heritage is estimated at some €5 billion per year, and could increase by a significant factor in the next years due to the wider use of* nanomaterials. *The new tools and materials developed will represent a breakthrough in cultural heritage and conservation science and will focus on:*

- *Tools for controlled cleaning, such as highly retentive gels for the confinement of enzymes and nanostructured fluids based on green surfactants*
- *The strengthening and protection of surfaces by using nanocontainers,nanoparticles and supramolecular systems/assemblies;*
- *Nanostructured substrates and sensors for enhanced molecules detection;*
- *Evaluation of the environmental impact and the development of security measures for long lasting conservation of cultural heritage.*

*Within the project the industrial scalability of the developed materials will be demonstrated.*

# CALIBRATE

Performance testing, calibration and implementation of a next generation system-of-systems Risk Governance Framework for nanomaterials

caLIBRAte nano risk governance

HORIZON 2020

## Project description

- Project ID: 686239
- Funding: H2020-EU.2.1.2.2. - safe and sustainable development of nanotechnologies
- Funding scheme: Research and Innovation Actions
- Call : H2020-NMP-30-2015-two-stage
- Start/End: From 01/05/2016 to
- Total Cost: EUR 9 828 106,25
- EU Contribution: EUR 7 999 687,50

## Airi role

Partner, activities on:

- *Risk management*
- *Technology assessment*
- *Networking & Multi-stakeholder dialogues*
- *Exploitation*
- *Dissemination*

## Partnership

- Coordinator: NRCWE (DK)
- 5 Universities
- 14 Research & Technology centers
- 4 Companies
- 2 Industrial associations

## Participants

- NRCWE -The National Research Center for Work Environment, Denmark (Coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- Empa- Materials Science and Technology, Switzerland
- LEITAT - Technological Centre - Acondicionamiento Tarrasense Association, Spain
- Gaiker Foundation, Spain
- RIVM - Netherlands National Institute for Public Health and the Environment, Netherlands
- TNO- Applied Scientific Research, Netherlands
- Finnish Institute of Occupational Health, Finland
- Eawag—Swiss Federal Institute of Aquatic Science and Technology, Switzerland
- Karolinska Institute, Sweden
- Natural Environment Research Council, UK
- Research Triangle Institute, United States
- Ineris—Institut National de l'Environment et des Risques, France
- National Health Laboratory Services, South Africa
- Technical University of Denmark, Denmark
- Tampere University of Technology, Finland
- Università Ca' Foscari Venezia, Italy
- Duke University, United States
- University of Helsinki, Finland
- Misvik Biology Oy., Finland
- Dialogik GmbH, Germany
- Steinbeis Advanced Risk Technologies GmbH, Germany
- Greendecision Srl, Italy
- NIA - Nanotechnology Industries Association, Belgium

**www.nano-calibrate.eu — www.airi.it/progetti**

Airi ASSOCIAZIONE ITALIANA PER LA RICERCA INDUSTRIALE

**Objective**

*The objective of the caLIBRAte project is to establish a state-of-the-art versatile Risk Governance framework for 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:*

- *Screening of apparent and perceived risks and trends in nanotechnology*
- *Control banding, qualitative and fully integrated predictive quantitative risk assessment operational at different information levels,*
- *Safety-by-design and multi-criteria decision support methods,*
- *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 testing, calibration, and performance testing. 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 and will receive training in the framework at the end.*

*The project focus on model revision, calibration and demonstration of existing models and methods to support safe innovation on nanomaterials. Next generation computational exposure assessment and -toxicology will be anticipated in the framework.*

### Project description

- Project Id: FILAS-RU-2014-104
- Funding: Lazio Region and National Institute of Health
- Funding scheme: Sub-contracting
- Call: R&I projects for universities and re-search centers- Regio-nal Law 13/2008—
- Start/End: From 01/11/2015 to 30/03/2018
- Total Cost: EUR 1 100 000

### Airi role

Partner, activities on:

- *Technology assessment*
- *Risk Management*
- *Exploitation & Tech Transfer*
- *Dissemination*

### Partnership

- Coordinator: Istituto Superiore di Sanità
- 1 Research & Technology centers
- 1 Industrial Association

### Participants

- Istituto Superiore di Sanità (National Institute of Health), , Environment and Health Deparment, Italy
- Airi—Associazione Italiana per la Ricerca Industriale, Italy

**Objective**

*The RInnovaReNano project aims to develop competences and scientific and technological capabilities to support companies, especially SMEs, and other organizations in developing safe nanomaterials and nano-related products.*

*The National Institute of Health has developed competences and specific tools to deliver the necessary knowledges for NMs risk analysis from a scientific and regulatory point of view.*

*The project focus on key sectors for industrial development in the Lazio region, including: chemicals, medicinal products, medical devices, cosmetics, and agrifood.*

*RinnovareNano will develop a web platform providing normative and scientific guidance to the industrial and research community for the safety evaluation of nanomaterials and nano-related product, based on both results of in-house research activities and most updated data by EU and Member states authorities and agencies active in the field. The platform will provide immediate access to:*

- *Normative requirements for nanomaterials*
- *Methods and tools for safety evaluation*
- *Research activity on the safety of nanomaterials at national and international level*
- *Competences and capabilities available at the National Institute of Health and related networks*
- *Opportunities offered by nanotechnologies for public health (healthcare and wellbeing)*

*The project will perform several networking activities with the industrial and scientific community, as well as specific training activities for SMEs.*

### Project description

- Project ID: 612231
- Funding: FP7-Science in Society—SiS.2013.1.2-1
- Funding scheme: CSA-SA - Support actions
- Call: FP7-SCIENCE-IN-SOCIETY-2013-1
- Start/End: From 01/01/2014 to 30/09/2017
- Total Cost: EUR 4 669 382,86
- EU Contribution: EUR 3 662 800,35

### Airi role

Partner, activities on:

- *R&I Policies*
- *Technology assessment*
- *Regulation & Standards*
- *Ethical, Legal and Social Impacts*
- *Networking*
- *Multi-stakeholder dialogues*

### Partnership

- Coordinator: University of Twente (NL)
- 4 Research & Technology centers
- 4 Universities
- 2 companies
- 2 Civil Society Organizations
- 2 Standard Organization
- 1 Industrial Association
- 1 Governmental agency
- 1 International organization

### Participants

- University of Twente, Netherlands (coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- VTT Technical Research Centre of Finland
- Danish Board of Technology Foundation, Denmark
- The Carlos III Health Institute, Spain
- Center for the Promotion of Science, Serbia
- Ericsson Telecomunicazioni, Italy
- Trilateral Research & Consulting LLP United Kingdom
- De Montfort University, United Kingdom
- Research Centre of the Slovenia Academy, Slovenia
- Linköping University, Sweden
- L'Union Europeenne des Associations de Journalistes Scientifiques Association,France
- Helsinki Foundation for Human Rights, Poland
- Danish Standards Foundation, Denmark
- Stichting Nederlands Normalisatie Instituut (National Standard Body), Netherlands
- The Federal Chancellery, Austria
- UNESCO - United Nations Educational, Scientific and Cultural Organization, France

**Objective**

*SATORI is a 45-month project, comprising 17 partners from 13 countries, including an intergovernmental organisation, the aim of which is to improve respect of ethics principles and laws in research and innovation, and to make sure that they are adequately adapted to the evolution of technologies and societal concerns.*

*The partners will develop an ethics assessment framework based on thorough analysis, commonly accepted ethical principles, participatory processes and engagement with stakeholders, including the public, in Europe and beyond.*

*The project comprises 12 work packages, starting with a systematized inventory of current practices and principles in ethics assessment. WP2 reviews existing projects and identifies stakeholders. WP3 investigates the impact of globalization and the extent to which research is conducted outside Europe to profit from more flexible frameworks. In WP4, the partners outline an ethical assessment framework and create a roadmap for a fully developed framework. WP5 concerns the cost-effectiveness and risk-benefit of ethics assessment. WP6 address other impacts and gathers stakeholder views on those impacts. The partners will study the prospects for standardizing the framework in WP7. In WP8, the partners will develop a strategy for sustainability of the SATORI network. In WP9, which runs throughout the project, the partners will monitor policy developments and other initiatives at the EU, Member States and local levels which merit ethical assessment and alert our network accordingly.*

*The partners have devised a multi-pronged communications strategy to interact with stakeholders in WP10. SATORI's experienced partners bring complementary perspectives and knowledge from academia, industry, research institutes, science academies, journalism and other sectors.*

## Project description

- Project ID: 609817
- Funding: FP7-Science In Society—SiS.2013.1.1.1-2
- Funding scheme: CSA-SA - Support actions
- Call: FP7-SCIENCE-IN-SOCIETY-2013-1
- Start/End: From 01/02/2014 to 31/07/2017
- Total Cost: EUR 1 881 663,65
- EU Contribution: EUR 1 496 992

## Airi role

WP leader, activities on:

- *R&I Policies and Strategies*
- *Multi-stakeholder dialogues*
- *Technology assessment*
- *Dissemination*
- *Project Management*

## Partnership

- Coordinator: De Monfort University (UK)
- 5 Universities
- 3 Research & Technology centers
- 1 Industrial association
- 1 Civil Society Organizations

## Participants

- De Monfort University, UK (Coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- KIT—The Karlsruhe Institute of Technology, Germany
- Tecnalia- Foundation Tecnalia Research & Innovation, Spain
- VTT-Technical Research Centre of Finland
- Uclan—The University of Central Lancashire, Cyprus
- University of Twente, Netherlands
- University of Erlangen-Nuremberg, Germany
- The University of Southern Denmark
- Euclid Network, UK

**Objective**

*Responsible-Industry explores how private corporations can conduct their R&I activities responsibly, i.e. with a view to the ethical acceptability, sustainability and the needs of society. The project focus on the application of ICT to the grand challenge of health, demographic change and wellbeing.*

*Responsible-Industry will guide interactive discussions between leading industry partners, established RRI experts, policy advisors and civil society organisations to drive the R&I process with the principles of RRI in mind. In doing so, Responsible-Industry will achieve the following objectives:*

- *Synthesis of current discourses on RRI in the industrial context, based on literature review, 30 in-depth interviews with industry leaders, 5 bottom-up case studies and an International Delphi Study of RRI in ICT industry involving 150 stakeholders .*
- *Practical cases with companies to investigate challenges and opportunities leading to responsible innovation along specific value chains of products and applications.*
- *Development of a framework for integration of RRI in ICT companies, supported by 15 industry-driven focus groups and tested in at least 4 pilot projects.*
- *Design of an Exemplar Implementation Plan for RRI, suitable for different kind of sectors and organizations*

## Project description

- Funding: co-funded by Italian Workers Compensation Authority
- Funding scheme:
- Call: Bando Ricerche in Collaborazione (BRiC)- 2013-2015- Inail— area on Occupational Health
- Start/End: From 01/01/2016 to 30/03/2017
- Total Cost: EUR 350 0004

## Airi role

Partner, activities on:

- *Technology assessment*
- *R&I Strategies*
- *Exploitation & Tech Transfer*
- *Dissemination*

## Partnership

- Coordinator: Scuola Normale Superiore
- 3 Research & Technology centers
- 1 Industrial association
- 1 Government agency

## Participants

- NEST Lab – Scuola Normale Superiore (coordinator)
- Airi - Associazione Italiana per la Ricerca Industriale, Italy
- CNR-NANO - Nanoscience Institute, National Research Council
- IIT@NEST - Center for Nanotechnology Innovation, Istituto Italiano di Tecnologia
- INAIL - Italian Workers Compensation Authority

**Objective**

*Goal of the NanoLab project is to develop novel communication tools for risk prevention and safety management of nanomaterials in R&D laboratories, on the basis of a precautionary approach aiming to ensure a safe and successful development of nanomaterials.*

*The project is focusing on three case studies (nanoparticles, graphene, nanowires) within the research labs of the partners. Risk assessment has been performed through a combination of modelling activities, basing on application of three different control banding tools for nanomaterials, and multi-parameters exposure measurements in the labs.*
*Risk control bands and precautionary measures have been determined for all R&D processes in the three case studies.*

*Risk communication will be realized through an interactive and user friendly tool, including a visual webplatform and pictograms targeted to different type of workers in the Lab. The tool is being developed in Italian, for easy and immediate access by workers.*

# NANODIODE

Developing Innovative Outreach and Dialogue on responsible nanotechnologies in EU civil society

## Project description

- Project ID: 608891
- Funding: FP7-NMP-Nanotechnologies, Materials and New Production Technologies
- Funding scheme: CSA-SA - Support actions
- Call: FP7-NMP-2013-CSA-7
- Start/End: From 01/07/2013 to 30/06/2016
- Total Cost: EUR 2 408 863,15
- EU Contribution: EUR 1 899 842

## Airi role

Partner, activities on:

- *Technology assessment*
- *R&I Policies*
- *Multi-stakeholder and citizens dialogues*
- *Ethical, Legal and Social Impact*
- *Dissemination*

## Partnership

- Coordinator: IVAM (NL)
- 5 Research & Technology centers
- 4 Industrial Association
- 2 Universities
- 2 Companies
- 2 Civil Society Organizations

## Participants

- IVAM Environmental Research UVA BV, Netherlands (coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- Nanotechnology Industries Association, UK
- Nanofutures ASBL, Belgium
- The NanoNet Foundation, Poland
- The National Institute for Consumer Research, Norway
- CEA - Commissariat à l'energie atomique et aux Energies Alternatives, France
- Bionanonet Research Society MBH, Austria
- INSERM - Transfert SA France
- The University of Stuttgart, Germany
- Oslo and Akershus University College, Norway
- Daniel Schuurbiers, Netherlands
- Studio HB, Netherlands
- ETUI - Institut Syndical Europeen, Belgium
- EUSJA - L'Union Europeenne des Associations de Journalistes Scientifiques Association, France

**www.nanodiode.eu — www.airi.it/progetti**

**Objective**

*Stakeholder engagement is essential to the responsible development of nanotechnologies in Europe. NANODIODE establishes an innovative, coordinated programme for outreach and dialogue throughout Europe to support the effective governance of nanotechnologies.*

*The project integrates vital engagement activities along the innovation value chain: it combines 'upstream' public engagement (by way of dialogues that integrate societal needs and expectations into the policy debate) with 'midstream' engagement (by organising open innovation workshops at the level of R&D) and 'downstream' strategies for education and communication. The overall objectives are to:*

- *Develop new outreach/dialogue strategies along nanotech value chains*
- *Organise dialogue at the 'upstream' level of research policy*
- *Enable processes of co-creation during research and innovation*
- *Professionalise nanotechnology education and training*
- *Establish an innovative programme for outreach and communication*
- *Assess the impact of the project's activities and provide policy feedback with a view to Horizon 2020*

# NANOSILVER

Toxicology of chronic exposure to engineered silver nanoparticles

### Project description

- Funding: Cariplo Foundation & University of Milano
- Funding scheme: Subcontracting
- Call: Nanoparticles, nanotechnologies and ultrafine particles
- Start/End: from 01/06/2012 to 30/06/2015
- Total Cost: EUR 600000

### Airi role

Subcontractor, activities on:

- *Technology assessment*
- *Regulation & Standards*
- *Risk Management*
- *Exploitation & Tech Transfer*
- *Networking & Dissemination*

### Partnership

- Coordinator: CIMAINA (IT)
- 2 Research & Technology centers
- 1 University
- 1 Industrial association

### Participants

- CIMAINA—University of Milano, Interdisciplinary Centre for Nanostructured Materials and Interfaces
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- Humanitas Research Foundation
- Filarete Foundation

**Objective**

*Silver nanoparticles (AgNPs) are increasingly considered for commercial applications in a number of sectors, mainly for their enhanced antiseptic properties, and a growing attention is posed to evaluate their potential impact on health and safety and understand how to regulate their use.*

*The objective of Nanotox is to assess the toxicological effects of chronic exposure to AgNPs, focusing on the inflammatory and neuronal effects by means of in-vitro and in-vivo (oral and topical application) experiments.*

*A selection of commercial AgNPs of different size will be used, aiming to evaluate size dependent effects in the biodistribution and accumulation in organs. Also specific coatings will be considered to closely simulate physiological conditions in which the nanoparticles are found inside the body.*

*A monitoring of the regulatory and standards activities for AgNPs and an analysis of the current and potential impact of the use of these materials in the industrial landscape (in particular with reference to Lombardy region) will integrate the project activities.*

*Nanotox brings together an interdisciplinary team, including biologists, chemists, medical doctors, veterinarians, physicists as well as policy and technology analysts.*
*The results are expected to contribute to the definition of appropriate risk assessment and risk management procedures for AgNPs, in comparison with the evolving regulatory situation. Project findings will be disseminated throughout the project life and with a final workshop.*

# OBSERVATORYNANO

European observatory for science-based and economic expert analysis of nanotechnologies

### Project description

- Project ID: 218528
- Funding: FP7-NMP-Nanotechnologies, Materials and New Production Technologies
- Funding scheme: CSA-SA - Support actions
- Call: FP7-NMP-2007-CSA-1
- Start/End: From 01/04/2008 to 31/03/2012
- Total Cost: EUR 5 141 986,65
- EU Contribution: EUR 3 999 840

### Airi role

WP leader, activities on:

- *R&I Policies*
- *Regulation & Standards*
- *Technology assessment*
- *Ethical, Legal and Social Impacts*
- *Networking*
- *Project Management*

### Partnership

- Coordinator: IoN (UK)
- 5 Companies
- 5 Research & Technology centers
- 3 Universities
- 2 Industrial Associations

### Participants

- IoN - Institute of Nanotechnology, UK (coordinator)
- Airi—Associazione Italiana per la Ricerca Industriale, Italy
- Bax Innovation Consulting, Spain
- Spinverse Innovation Management oy, Finland
- Malsch Technoevaluation, Netherlands
- Triple Innova, Germany
- NMTC - Nano & Micro Technology Consulting, Germany
- VDI TechnologieZentrum Gmbh, Germany
- CEA - Commisariat à l'energie atomique et aux energies alternatives France
- IOM - Institute of Occupational Medicine, UK
- RIVM - National Institute for Public Health and the Environment, Netherlands
- EMPA - The Swiss Federal Laboratories for Materials Science and Technology, Switzerland
- Technical University of Darmstadt, Germany
- Aarhus University, Denmark
- Maastricht University, Netherlands

**Objective**

*observatoryNANO aim is to develop appropriate methodologies to link scientific and technological development of nanotechnologies with socio-economic impacts.*

*Both of these aspects will be enhanced by expert opinion, making this project unique in providing relevant web-based reports in a common format across all sectors, considered by all criteria, and widely publicized. observatoryNANO will become an industry leading and opinion forming catalyst for nanotechnology in the EU. The purpose is to avoid the exaggerated socio-economic impact of nanotechnologies and place developments in a realistic time-frame.*

*It will present a reliable, complete, and responsible science-based and economic expert analysis of peer-reviewed literature, patents, national funding strategies, investment trends, and markets; in combination with information derived from questionnaires, interviews and workshops with academic and industry leaders, investors, and other key stakeholders.*

*It will place these developments in the context of potential ethical and societal issues, and risks to human health and the environment, through its own analysis and through engagement with other actors, to ensure that its recommendations are balanced and contribute to the safe and responsible development of nanotechnologies. It will collaborate with all appropriate organizations including the EPO, OECD, industry associations, ETPs, and other EU-funded projects.*

*Through these activities observatoryNANO will form a balanced governing board of key EU stakeholders. It will react to advice and input from these stakeholders, and advise on potential opportunities, barriers, and risks. This will allow decision-makers to take appropriate action to ensure that nanotechnology developments are realized as socio-economic benefits.*

# NANOCODE

A multistakeholder dialogue providing inputs to implement the European Code of Conduct for Nanotechnologies

### Project description

- Project ID: 244521
- Funding: FP7-Science in Society
- Funding scheme: CSA-SA - Support actions
- Call: FP7-SCIENCE-IN-SOCIETY-2009-1
- Start/End: From 01/01/2010 to 30/11/2011
- Total Cost: EUR 1 417 801
- EU Contribution: EUR 1 243 777

### Airi role

Coordinator, activities on:

- *Project Management*
- *R&I Policies*
- *Ethical, Legal and Social Impacts*
- *Multi-stakeholder dialogues*
- *Networking*
- *Dissemination*

### Partnership

- Coordinator: Airi (IT)
- 3 Industrial Association
- 2 Research & Technology centers
- 2 Universities
- 1 Company
- 2 Government Agencies

### Participants

- Airi—Associazione Italiana per la Ricerca Industriale, Italy (coordinator)
- Institute of Nanotechnology, UK
- The Phantoms Foundation, Spain
- The Innovation Society Ltd, Switzerland
- CEA- Commisariat à l'energie atomique et aux energies alternatives France
- The Technology Centre of the CAS, Czech Republic
- The University of Stuttgart, Germany
- Delft University of Technology, Netherlands
- National Atomic Energy Commission, Argentina
- Department of Science and Technology, South Africa

**Objective**

*NanoCode aims to develop a framework enabling the successful integration and implementation at European level and beyond, of the Code of Conduct (CoC) for responsible N&N research published by the European Commission. This will be done by:*

- *Identifying and consulting stakeholders (scientific, institutional, industrial and Civil society organisations) to explore knowledge, attitudes, reactions and proposals in relation to the CoC*
- *Assessing the most relevant codes of conducts, voluntary measures and practices for a responsible technology development, regarding in first place N&N R&D*
- *Proposing criteria and indicators of "good practices" to implement the CoC*
- *Defining and testing a practical tool for the assessment of performances for the application of the CoC ("CodeMeter")*
- *Selecting a set of incentives and disincentives to stimulate the adoption of the CoC*
- *Identifying future regulatory, policy and research needs in order to integrate foresight oriented aspects in further developments of the CoC.*
- *Designing of a CoC MasterPlan enabling the implementation and integration of the CoC*

*The project outcomes will support the EC, EU policy makers and stakeholders in the implementation of the European CoC The engagement of stakeholders in the debate will help to increase awareness on the CoC and in shaping its content to the stakeholders' needs and expectations, making it a more accepted, concrete and practical instrument for decision-making in N&N R&D.*

# FRAMINGNANO

International multi-stakeholder dialogue platform framing the responsible development of nanotechnologies

### Project description

- Project ID: 217724
- Funding: FP7—Science in Society
- Funding scheme: CSA-SA - Support actions
- Call:FP7-SCIENCE-IN-SOCIETY-2007-1
- Start/End: From 01/05/2008 to 31/03/2010
- Total Cost: EUR 742 934,74
- EU Contribution: EUR 675 044

### Airi role

Coordinator, activities on:

- *Project Management*
- *R&I Policies*
- *Multi-stakeholder dialogues*
- *Technology assessment*
- *Networking*
- *Dissemination*

### Partnership

- Coordinator: Airi (IT)
- 2 Industrial Association
- 2 Research & Technology centers
- 1 Company
- 1 Journalists foundation

### Participants

- Airi—Associazione Italiana per la Ricerca Industriale, Italy (coordinator)
- IoN—Institute of Nanotechnology, UK
- The Innovation Society Ltd, Switzerland
- RIVM—National Institute for Public Health and the Environment, Netherlands
- The Technology Centre of the CAS, Czech Republic
- Fondation EurActiv, Belgium

**Objective**

*The FramingNano project will support the establishment of a multi-stakeholders dialogue on NS&T regulation and governance among the scientific, institutional, industrial communities, the broad public to articulate consensus and absence of consensus between the various stakeholders, sustain a European debate between them, and foster the development of a shared frame of knowledge, objectives, actions to define constructive and practicable regulatory solutions toward a responsible development of NS&T.*

*This action will lead to a proposal of a Governance Plan designing a deliberative process for the responsible development of NS&T at European level and beyond, including recommendations for future research, policy actions, and co-operative research processes over the years 2009-2013.*

*The activity of the project will be articulated in 28 months and geared around 4 key actions:*

- *Analysis and review of existing-proposed regulatory processes, identification of stakeholders*
- *collection and analysis of stakeholders positions and needs*
- *Development of an appropriate proposal of a Governance Plan*
- *Communication and dissemination of information on the project and NS&T governance.*

*Project website and Newsletter, a mid term international workshop, a final international conference, and national workshops will be organised. The project will support the European Commission, EU policy makers and stakeholders in designing a European model that assure that the development of NS&T takes place responsibly and to the benefit of the individuals and the society.*

# www.airi.it/progetti






























































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