



## Welcome to the third edition of our Newsletter!

In the last months, six citizen dialogue events took place in different European countries within NANO2ALL. These events gathered groups of citizens to reflect upon their values, concerns and needs regarding nanotechnology. This did not only bring us important insight into citizen views about this technological area, but also collected essential inputs into the upcoming multi-stakeholder dialogue events. These will involve participants active in fields relevant to nanotechnology research and innovation (researchers, technologists, research funders, political decision-makers), interest groups, science journalists and citizen representatives. Through this newsletter you will learn more about these events, as well as other NANO2ALL activities and materials. We also gathered for you news from other interesting initiatives. We thank you for your interest in NANO2ALL and wish you good reading!

NANO2ALL Team.

NANO2ALL - Nanotechnology Mutual Learning Action Plan for Transparent and Responsible Understanding of Science and Technology aims to create a climate of dialogue and aspires to engage different societal groups (citizens, researchers, technology developers, policy makers, civil society organizations and journalists) in discussing how nanotechnology can result in socially desirable solutions and products through Responsible Research and Innovation uptake (RRI). It will also debate how the involvement of the public and stakeholders can be increased in nanotechnology research and development (R&D), allowing such communities to contribute to shaping the future of these technologies. This 42-month initiative started in October 2015 and has received funding through the Horizon 2020 programme of the European Union.

NANO2ALL is coordinated by Sociedade Portuguesa de Inovação (SPI), and the consortium is composed of 11 other partners: Vilabs (Greece); MALSCH (The Netherlands); APRE (Italy); ECSITE (Belgium); NANO futures (Belgium); EUSJA (France); EMRS (France); VU/VUmc (The Netherlands); UNINOVA (Portugal); SYSTASI (Greece) and JRC (Belgium).

NANO2ALL also integrates science centres linked to ECSITE (The Bloomfield Science Museum, Jerusalem, TRACES, Innovatum Science Center, Bialystok University of Technology, MUSE, ICN2) and PRODINTEC and CERTH linked to NANO futures.

More information on NANO2ALL is available at

[www.nano2all.eu](http://www.nano2all.eu)

## How do citizens feel about nanotechnology?

### What were citizen dialogues about?

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The NANO2ALL citizen dialogues were deliberative events that took place in France, Israel, Italy, Poland, Spain and Sweden during the last months. They aimed to gather input from citizens about their values, desires, and concerns regarding nanotechnology. Citizens in the dialogues were encouraged to build their own objects that helped them compose narratives of the future in relation to three different nanotechnology application fields: Nanotextiles, Brain-machine interfaces and Nanomedicine. Narratives served as a fruitful basis for discussion amongst participants about their perspective on nanotechnology research and innovation (R&I). These citizen perspectives will be used to broaden stakeholder reflections in the national multi-stakeholder dialogues organized in autumn 2017.

### How did citizens feel about nanotextiles?

Citizen dialogues focusing on nanotextiles took place in Italy and Poland. Italian citizens stressed that nanotextile products for **health and medical** purposes were important, as they respond to real needs of the society. **Transparency and responsibility** were highlighted as crucial values to be adopted by the actors involved in R&D of nanotechnology, in particular those that are in charge of governing research. As for the concerns, participants gave more importance to social issues that nanotextile products might generate, including **social discrimination**. Polish citizens also thought nanotextile products should contribute to health and quality of life, making life easier, more efficient and comfortable. **Sustainability** and no harm to **environment** were important values. Polish citizens feared that by these types of products, consumers may become **technology-dependent**, losing personal control over their lives.



## How did citizens feel about nanomedicine?



Citizen dialogues on nanomedicine took place in Israel and Sweden. Israeli citizens thought nanotechnology could have an important role in creating **personal autonomy**, as well as developing **preventive treatment** for disabilities. They were most afraid that nanotechnology through robotization could cause the **loss of jobs**. They also feared that nanotechnology could be used to empower a minority of people allowing them to exert **social control** over the rest or other groups of the society. **Social inequalities** due to unequal access to nanomedicine were also highlighted by Swedish citizens, as one of the concerns. They emphasized that these technologies should be **affordable and accessible** to everyone. They stressed that the development of these technologies should be driven by the right of everyone to participate in society and lead a **good and dignified life**.

## How did citizens feel about nanotechnology for brain-machine interfaces?

Citizen dialogues on nanomedicine took place in France and Spain. French citizens thought **equality, wider access** to technologies for medical treatments, **autonomy and independent choice** for everyone as important values to consider in R&D in this area. They specifically pointed out that every technological improvement should be made **in collaboration with citizens**, and within a very strict **ethical framework**. The main worries concerning these technologies were related to unethical and **inappropriate use of data**, but also to the health consequences of brain implants. Spanish citizens welcomed using nanodevices to enable the recovery of cognitive and motor functions but were concerned that this same technology could be used as an **intelligence- or strength-enhancing device** that would compound existing and even create new **social inequalities**. In general, they highly valued the pursuit of more efficient, more safety compliant and fairer societies and social processes.



What comes next?

## MULTI-STAKEHOLDER DIALOGUES

Multi-stakeholder dialogue events will take place this autumn in NANO2ALL in the six countries where we previously organised the citizen dialogues. In these sessions, participants will discuss **how societal values, needs and concerns can be better reflected through an increased uptake of societal engagement in R&I in the area of nanomedicine, nanotextiles and nanotechnology applied to brain-computer interface**. The sessions will bring together policy-makers, researchers, industry, interest groups, science journalists and citizen representatives from the national contexts that will take part in interactive group work, open

discussions and a scenario exploration experience developed and adapted to the area of nanotechnologies by the Joint Research Centre of the European Commission. The results of the dialogue event will be taken forward towards national and European decision makers in the area of science and technology and help them in the development of national and European policies that stimulate improved alignment between nanotechnology R&I and societal expectations.

The following multi-stakeholder dialogues will take place in local languages.

23 NOVEMBER 2017	<b>MULTI-STAKEHOLDER DIALOGUE FRANCE</b> 📍 Espace des Sciences Pierre-Gilles de Gennes, Paris, France	19 OCTOBER 2017	<b>MULTI-STAKEHOLDER DIALOGUE ISRAEL</b> 📍 The Bloomfield science museum, Jerusalem, Israel
21 OCTOBER 2017	<b>MULTI-STAKEHOLDER DIALOGUE ITALY</b> 📍 Museo delle Scienze Corso del Lavoro e della Scienza, Trento, Italy	21 OCTOBER 2017	<b>MULTI-STAKEHOLDER DIALOGUE POLAND</b> 📍 Faculty of Management, Bialystok University of Technology, Kleosin, Poland
5 DECEMBER 2017	<b>MULTI-STAKEHOLDER DIALOGUE SPAIN</b> 📍 Centre de Cultura Contemporània de Barcelona (CCCB), Barcelona, Spain	23 NOVEMBER 2017	<b>MULTI-STAKEHOLDER DIALOGUE SWEDEN</b> 📍 Innovatum Science Center, Trollhättan, Sweden (CCCB)

## MEET US AT THE FOLLOWING EVENTS

11  
OCTOBER  
2017

### COMPASS NANOTECHNOLOGY RRI LAB

The [COMPASS](#) project organises Labs with Small and Medium sized enterprises (SMEs) in the field of nanotechnologies, in order to co-design visions towards RRI with companies and roadmaps for incorporating the principles of RRI in companies' everyday activities. NANO2ALL will take part in the virtual Lab of 11 October, 2017.

[MORE INFORMATION](#)

24  
OCTOBER  
2017

### WORKSHOP ON CONTAMINATION BETWEEN MARINE RRI KNOWLEDGE AND NANOTECHNOLOGIES FOR CULTURAL HERITAGE

📍 Brussels, Belgium

This cross-sectoral exploitation workshop (24 October, Brussels, Belgium) is organized under the [MARINA project](#). The event focuses on exploring potential synergies between MARINA and the domain of nanotechnologies and establishes the basis for transferring the MARINA results into nanotechnologies. NANO2ALL's progress and insights into the application of RRI to nanotechnology will be presented.

[MORE INFORMATION](#)

10  
NOVEMBER  
2017

### 2017 RIVM-KIR NANO ANNUAL MEETING OF THE NATIONAL PLATFORM ON NANOMEDICINE

📍 Netherlands

NANO2ALL will report on its nanomedicine related findings resulting from the citizen and multi-stakeholder dialogues at the tour-de-table of the 7th annual meeting of the National Platform Nanomedicine organised by [RIVM-KIR](#) Nano on 10 November, 2017 in the Netherlands. The aim of the meeting is to bring together policy makers, scientists, industrialists and other stakeholders interested in nanomedicine in the Netherlands, to informally exchange information.

[MORE INFORMATION](#)

20  
NOVEMBER  
2017

## ARK OF INQUIRY FINAL CONFERENCE

Paris, France

NANO2ALL will present its findings at the [Ark of Inquiry](#) project final conference (20 November, 2017 at UNESCO Headquarters in Paris, France). In addition to the 13 Ark of Inquiry consortium members, teachers, representatives from selected Science Centers and Museums, Researchers, Policy-makers and others from the 12 participating countries of the Ark of Inquiry project and beyond will also be present. NANO2ALL will share its RRI methodologies and findings at the conference.

[MORE INFORMATION](#)

20-21  
NOVEMBER  
2017

## PRISMA STAKEHOLDER DIALOGUE

Berlin, Germany

The [PRISMA project](#) will hold a stakeholder dialogue (20-21 November, 2017, Berlin, Germany) that will focus on integrating RRI in private sector organisations in transformative technologies: nanotechnology and synthetic biology. NANO2ALL will share its experience on RRI in the area of nanotechnologies.

[MORE INFORMATION](#)

## NANO2ALL outputs with interest for you

Our consortium has been busy with paving the ground for future citizen and stakeholder dialogues.

Some of these outputs are highlighted here:

### Reports on Citizen Dialogues

These documents summarise some of the preliminary results of the citizen dialogues held in several countries in the framework of the NANO2ALL project.

[MORE INFORMATION](#)

### Posters on citizen dialogue outcomes

Several posters were elaborated by professional graphic designers based on the narratives of the future from citizen dialogues. The posters will be soon accessible here.

[MORE INFORMATION](#)

### Future nano-RRI application and techno-moral-scenarios

A report portraying the range of drivers expected to affect research and innovation with nanotechnologies and nanomaterials in the next 5, 10 and 20 years, as well as the respective scenarios around these that include the technological as well as moral aspects of them.

[MORE INFORMATION](#)

## News from related initiatives



workshops with and for SMEs in nanotechnology, cyber security and biomedicine sectors already kicked off. These labs will be all about co-creation and experimentation of new practices. They will allow companies to look at their own practices and methods to see what improvements can be made in order to maximise mid to long term profits or extend their markets through becoming more receptive to the needs of customers and users. [Join upcoming labs!](#)

[MORE INFORMATION](#)

## PRISMA



Karlsruhe Institute of Technology will host the next PRISMA project Stakeholder Dialogue "Setting the agenda of RRI in Industry", on November 20-21 and the Third Consortium Meeting on November 22, 2017 in Berlin, Germany. The Dialogue will bring together representatives of industry, research conducting organisations, Civil Society Organizations and others who are interested in fostering RRI approach in industry.

[MORE INFORMATION](#)

## ARK OF INQUIRY



The project Ark of Inquiry: Inquiry Awards for Youth Over Europe is a research and development project on teacher training, oriented towards raising science awareness, particularly that of youth aged 7 to 18, to Responsible Research and Innovation (RRI). Funded by the European Commission and involving 13 project partners from 12 countries, the project started in 2014 and has a duration of 4 years. Currently, Ark of Inquiry is inviting teachers, researchers and other EU projects to join at its final conference, to be held 20 November, 2017 at UNESCO headquarters in Paris, France.

[MORE INFORMATION](#)

## SPARKS



Sparks is an ambitious EU engagement project on the topic of technology shifts in health and medicine. Its aim is to raise awareness and communicate the concept of Responsible Research and Innovation (RRI) through the topic of technology shifts in health and medicine. Sparks organizes an interactive touring exhibition called "Beyond the Lab: the DIY science revolution", currently on display in Lithuania, The Netherlands, and the Czech Republic, which will be exhibited in 29 EU countries along with hundreds of public events. In collaboration with science centers and museums the project utilizes creative disruptions to engage various stakeholders and create local multi-stakeholder collaborative partnerships.

[MORE INFORMATION](#)

## HONEST



HoNESt (History of Nuclear Energy and Society) is a three-year interdisciplinary H2020 project. Its main objective is to understand how societies have engaged with nuclear energy sector, and how the sector has engaged with societies over course of the past 60 years. Based on a critical examination of past experiences, HoNESt's results will contribute to a more reflexive debate on future energy sources and the transition to sustainable, secure, and clean energy provision in the future. HoNESt is organizing a stakeholder workshop in January 2018 at the Science Museum in London. More information will be available shortly on the project's website.

[MORE INFORMATION](#)

## RRI-PRACTICE PROJECT



Last week a major milestone in the RRI-Practice project was achieved when representatives of research conducting and research funding/policy organisations from 12 countries within and outside Europe, as well as project researchers, met at the beautiful premises of the Helmholtz Foundation in Berlin to share experiences in implementing RRI in practice. There seemed to be a shared enthusiasm among most of the participants related to RRI; not necessarily because the RRI concept is the best concept for all countries, but because the substantial content of what was discussed as "RRI" was regarded as important by all participants. The workshops were an important arena for calibrating RRI understandings and hopefully inspiring new reflections on how RRI - and responsibility in research and innovation more generally - can and should be implemented in the organisations participating in the project.

[MORE INFORMATION](#)

## HEIRRI



**HEIRRI workshop in Accra 'Facilitating reflection on Responsible Research and Innovation'**. Registration is now open! The GUNI's Regional Office in Africa, together with the Association of African Universities (AAU) and the Global University Network for Innovation Secretariat, organize the workshop 'Facilitating reflection on Responsible Research and Innovation' in the framework of the HEIRRI internationalization plan to spread the project amongst Higher Education Institutions outside Europe. The workshop is aimed to gather together researchers, teachers and university staff interested in Responsible Research and Innovation (RRI).

[MORE INFORMATION](#)

## PROSO



The PROSO project organised a one-day conference in Brussels, in June, to discuss third sector organizations views on barriers and motivations for societal engagement with R&I. Relevant messages from the event include: (1) In RRI, impact is less tangible. As such it is important to **share results and success stories**; (2) **Conflict is part of democracy**. A variety of perspectives should be understood as a valuable resource; (3) Transparency is key, particularly regarding the use of results and its intended impact. (4) **Be selective** in what is tackled. Engagement policies need to reflect on the areas and types of research where it is most likely to have an added value; and, (5) **Give results** back to those that participated and **acknowledge** their efforts.

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