STOA NEWS

In October two projects carried out by ETAG on behalf of STOA have been completed with final reports. Both reports will soon be available from STOA's webpage (http://www.europarl.europa. eu/stoa/default_en.htm). Brief summaries of the reports are given below.

E-Democracy: E-Public, E-Participation and E-Voting in Europe – Prospects and Challenges

The final report of the STOA-project "E-Democracy - Technical Possibilities of the Use of Electronic Voting and other Internet Tools in Europe" includes the analysis and insights of a research and consultation project in which three scientific institutes, six researchers of the project team, eleven external experts as participants of two workshops, several Members of the European Parliament as well as about 40 experts and interested individuals were involved. The aim of the project, which ran from January 2010 to September 2011, was to analyse current developments in the area of e-democracy and to relate the insights to the European policy context, especially to the needs of the European Parliament wherever possible. The three research institutes involved were the Fraunhofer Institute for Systems and Innovation Research ISI, Germany (coordinator), the Institute for Technology Assessment and Systems Analysis (ITAS), Germany, and the Institute for Technology Assessment (ITA) in Austria.

After an initial conceptual phase in which the state-of-the-art in research on e-democracy was analysed, in-depth studies were carried out on the topics of e-public, e-participation and evoting. Within these three areas the following research questions were defined:

- 1. How can the Internet contribute to the development and establishment of a genuinely European public? (e-public)
- 2. What are good practices for e-participation in Europe, resp. how can public organisations profit from opening their processes to a wider audience by using the Internet? (e-participation)

3. Is e-voting a realistic means to increase electoral turnout and what are the concrete conditions for its success? (e-voting)

For e-voting the report after consultation of many documents and experts clearly comes to the conclusion that the build-up of a comprehensive system for e-voting in Europe cannot be recommended for the time being. The reasons for this are primarily cost-benefit considerations, technological issues and reasons of political legitimacy. Elections are at the core of representative democracy, and the main challenge is to transfer the democratic principles of equal, direct, universal, secret, and free suffrage into the digital age. E-voting systems which cannot fully cover all of these aspects and which trade democracy requirements for user friendliness, efficiency or cost savings should generally be rejected. Suggesting to lower the requirements or claiming that total security has never been possible and should hence also not be expected from e-voting systems, seems to reflect the fact that people in Western European democracies tend to take democratic achievements for granted. However, as the current struggles for democracy in several developing countries show, these are high goals and achievements which should not be given up. A perceived lack of security or just a missing understanding of the different stages that are passed through in e-voting processes can lead to a decline of trust and negatively affect the legitimacy of the whole political system.

One important insight from research on e-participation is that e-participation works best when it is connected to real world formats of political activity and communication. In this respect the report holds that the European Citizens' Initiative (ECI) provides a unique opportunity to foster the elements of an emerging European public sphere. The ECI introduces a new element of (formal) European citizenship beyond the right to vote, it provides a new Pan-European form of meaningful political engagement of civil society organisations. And as far a platform for online deliberation on issues taken up by ECIs is provided, a new element of targeted European political communication and European opinion forming can be implemented as a focal point for national and local Internet based political deliberation formats. The ECI is not only about a certain number of signatures that is needed

and the authenticity of which has to be verified, it should primarily be regarded as a platform for debate and will formation that stands out from other (non-committal) fora as it relates deliberation to the process of policy formulation.

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NanoSafety – Risk Governance of Manufactured Nanoparticles

The STOA-project "NanoSafety – Risk Governance of Manufactured Nanoparticles" deals with the governance of potential environmental, health and safety (EHS) risks of manufactured nanoparticles. The project was carried out by two members of ETAG, the Institute for Technology Assessment and System Analysis (ITAS) in Germany (coordinator) and the Institute of Technology Assessment (ITA), in Austria from January 2010 to October 2011.

In the initial phase of the project an executive overview of the state-of-the-art in scientific research on potential EHS risks of manufactured particulate nanomaterials (MPN), intrinsic limitations and knowledge gaps for risk assessment were elucidated. Various studies showed that inhalation is the main portal of entry of MPN into the body, followed by a deposition in different regions of the lung. They may even pass membrane barriers and enter individual cells causing toxicological effects. Only few studies claim to have observed a dose-response relationship, especially due to the lack of reliable measurement and characterisation methodologies. Also exposure assessment faces similar problems of data availability.

In addition the project focused on the important role of the definition of the term "nanomaterial". Relevant definition proposals from regulators, scientific committees and standardisation organisations in the EU context were analysed to develop general suggestions and criteria for an enforceable legal definition. Just recently the European Commission has published a recommendation for an overarching definition, which could serve as a starting point for sector-specific definitions. The fundamental political question of how lawmakers should regulate risk in the face of scientific uncertainty lead to a new conceptual risk management framework for the governance of nanotechnology. According to this concept the classic risk assessment, dealing with hazard, exposure and risk have to complement with a socalled concern assessment. This element aims for deeper insights and a comprehensive diagnosis of concerns, expectations and perceptions of the general public and stakeholders.

For concern assessment two focus group discussions were performed with citizens from Karlsruhe und Vienna studying individual arguments, ideas and values about benefits, risks and safe handling of nanoproducts and nanomaterials. Also a brief outline of the results of a representative study among European citizens as well as positions expressed by various stakeholders were analysed. From the results of the qualitative and quantitative methods it could be deduced that the main aspects of perceptions of nanomaterials are the possible harm to environment, health and safety, the dealing with uncertainty, the question of sufficient and adequate information and communication and the possibility of public participation in the decision making process. After all, concerns about adequate regulatory measures were expressed.

The final report presents a review of existing mandatory and voluntary nanospecific regulations at the European level and points out especially open issues and gaps with regard to possible regulatory instruments. The involvement of concerned parties and representatives of organised societal groups and the participation of the general public in the governance process of EHS risks of nanomaterials play a dominant role for creating trust. The report specifies the challenges for the development of regulatory approaches more precisely and discusses options for appropriate parliamentary action.

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