

8 July 2013

Round Table JRC / Euro-CASE: The dialogue between science, technology and society around two cases: energy and climate change

Berlaymont, Schuman room, Brussels, 19 September 2013

The round table on the dialogue between science, technology and society is jointly organised by the Joint Research Centre, JRC of the European Commission and the European Council of Academies of Applied Sciences, Technologies and Engineering, Euro-CASE.

The JRC is the in-house science service of the European Commission in charge of direct research and provides scientific support for the conception, development and monitoring of European policies and now and in particular on the Europe 2020 priorities.

Euro-CASE is an independent, non-profit organisation of European National Academies of Applied Sciences, Technologies and Engineering from 21 countries. The mission of Euro-CASE is to pursue, encourage and maintain excellence in the fields of engineering, applied sciences and technology, and promote their science, art and practice for the benefit of the citizens of Europe.

Introduction

The world is experiencing an unprecedented series of scientific and technological developments. These very rapid changes have a significant impact on the lives of individuals and on the organisation of society. They have also changed the public's perception of science, innovation and technology in society.

For a long time, science has been considered as a factor of knowledge and progress as well as technological innovations which in turn led to better wellbeing for humanity.

However, public perception and confidence, keys of the dialogue, have evolved over time due to the increasing complexity of the problems and the emergence of new technologies, which are considered in some areas more like a danger factor than a factor of progress. Furthermore, various crises such as in the areas of energy, environment and food have had an impact on the public's perception and confidence in science and technology. On the other hand, scientists as well as technologists have some difficulties to understand that science and technology have a social impact.

Nevertheless during the same period, the impact of science and technology has become increasingly important in many aspects of our societies. The organisation of a strong dialogue between scientists, engineers, entrepreneurs, civil society and policy makers becomes more and more necessary to address major societal challenges of our time.

Each subject has several dimensions such as economic, social, psychosocial, historical and political. Scientific and technical approaches are not sufficient today to promote adequate understanding of science and technology by society and to facilitate required evolution. An interdisciplinary approach is increasingly necessary to address the causes and consequences of problems of our societies as well as their solutions.

All these dimensions are more and more involved in the interaction between science, technology and society. It is linked also with levels of education, different cultural values or emergence of new social networks and new ways of information. These factors have a direct impact on the functioning of the traditional political system and modify the attitude of public opinion.

Nevertheless, science, technology and innovation remain among the indispensable conditions for the development and survival of our societies.

Objectives of the round table

The objectives of the round table are:

- **to identify** how our societies perceive important technological changes
- **and to analyse** the various key factors which are necessary to facilitate a better interaction between science, technology and society on two important subjects concerning the key societal challenges of our time such as energy and climate change.

A better understanding of these interactions is indispensable to facilitate a more balanced public debate and the link with the policy making.

Organisation of the round table

The round table is organised in two sessions on the basis of two thematic cases:

- Energy and especially nuclear energy, alternative energy sources and renewable energy.
- Climate change.

Agenda

09.30 - 10.00 Registration and welcome coffee

10.00 - 10.30 OPENING SESSION

- ***Dominique Ristori, Director General, Joint Research Centre, European Commission***
- ***Maria Da Graça Carvalho, MEP, member of Committee on Industry, Research and Energy (tbc)***
- ***Jacques Lukasik, Secretary-General of Euro-CASE, member of the National Academy of Technologies of France , NATF***

10.30 - 13.00 SESSION I: What are the main elements of the debate?

General introduction of session I by moderator:

Catherine Bréchignac, "Secrétaire Perpétuel de l'Académie des Sciences", member of NATF, Ambassadrice Déléguée à la Science, la Technologie et l'Innovation (10')

Clarification of the issues:

- ***Energy: Dominique Vignon, Director General, NucAdvisor, member of NATF, (15')***
- ***Climate change: Jean-Pascal van Ypersele, Professor of Climatology at the Université catholique de Louvan (UCL), Member of the Royal Belgian Academy (ARB) and Vice-chair of the Intergovernmental Panel on Climate Change (IPCC) (15')***

What are the main elements of the debate?

- **Factors of impact on public perception: cultural heritage, education and environmental consciousness;**

Lucia Reisch, Professor, Copenhagen Business School, member of acatech, (15')

- **Evolution of the perception of technological innovation: Is there a loss of trust in society?**

Brice Teinturier, Directeur-Général Délégué de l'Institut de Sondage IPSOS, (15')

- **Feeling of populations between advantages and disadvantages of technology;**

Thierry De Smedt, Professor, Department of Communication, UCL, member of ARB, (15')

- **Place of media and new societal networks on public debate.**

Fiona Fox, Chief Executive of the Science Media Centre, UK, (15')

- **Open discussion with participants,**
- **Conclusion of session I by moderator, (5')**

13.00 - 14.00 Buffet lunch

14.00 16.00 SESSION II: How to promote a more efficient dialogue between science, innovation, technology and society?

General introduction of session II by moderator and identification of the perspectives:

John Loughhead, Executive Director of the UK Energy Research Centre, member of the Royal Academy of Engineering (RAEng), (20')

- **Explaining choices and decisions in terms of impact: economic development, environment, public health ...**

Don Moore, President-Elect of the Irish Academy of Engineering (IAE), (15')

- **The role of policy makers in conjunction with technological innovation and societal challenges;**

Jean-Michel Charpin, Vice President, French Association of Economics Science, member of NATF, (15')

- **The consequences of the different timings between science, technological innovation and policy making,**

Didier Schmitt, Member of Bureau of European Advisers - BEPA - European Commission, (15')

- **Which conditions and tools are necessary to favorise debates? Is it possible?**

Johannes Meier, Chief Executive Officer, European Climate Foundation, (15')

- **Open discussion with participants**
- **Conclusion of session II by the moderator, (5')**

16.00 – 16.30 CONCLUSIONS OF THE ROUND TABLE

- ***Edit Herczog, MEP, member of the Committee on Industry Research and Energy,***
- ***Igor Emri, Professor, Former President, Engineering Academy of Slovenia, Chairman of the Committee "Engineering and Technology Sciences" of SCIENCE EUROPE***
- ***Dominique Ristori, Director General, Joint Research Centre, European Commission***