FINAL WORKSHOP DISCUSSION PAPER

The workshop "**The socialisation of the European research in the perspective of the knowledge society**. *Interpretations and policies with the contribution of social sciences*" is the final step of the project "Social Sciences and the European Research Capacities" (SS-ERC). Its objective is presenting the **Handbook on the socialisation of scientific and technological research,** which represents the main deliverable of the project, and promoting a discussion on the changing relations between science and society in the context of the European Research Area. The following information is intended as a background for the discussion in the workshop.

CHANGES IN SCIENCE AND IN SOCIETY

All contemporary societies are experiencing a **shift towards the so-called "knowledge society",** characterised by social diversification, globalisation and increasing importance of cognitive and affective dynamics. In this framework, scientific and technological research has taken on an importance it never had before in all sectors of social life. At the same time, **the way research is produced is also changing**: it involves a decidedly broader number of actors and stakeholders; it is growingly result-oriented; it is increasingly taking on a mainly trans-disciplinary nature; it is asked to be more effective, accountable, and able to generate benefits for people and industry. These transformations have greatly increased the relevance of **social dynamics** embedded in scientific and technological research and made **science-society relationships** more intense, complex but also problematic and difficult to manage.

THE SOCIALISATION OF SCIENCE AND TECHNOLOGY

The **handbook** produced by the SS-ERC Project **is intended to approach these issues**, from the perspective of the **socialisation of science and technology**, which can overall understood as the capacity of science and innovation systems to adapt to a changing society and to manage and steer the transformations affecting them. A poorly socialised science is destined to decrease as regards quality and significance of results and to remain a foreign body with respect to the rest of society. Similarly, a society where science is poorly socialised runs the increasing risk of social and economic backwardness

THE EUROPEAN WEAKNESS

Even though all advanced economies have to deal with problems related to the socialisation of science and technology, in Europe the **question of socialisation is particularly worrying**. Actually, Europe risks lagging behind other countries (United States, China, India, South-East Asia), not only because of the low level of expenditures on science and technology, but e.g. for the lack of effective mechanisms to integrate research into society, to connect university with industry, to attract young people to the scientific careers, to increase the orientation of scientists towards innovation or to update the organisation and management of research institutions.

SCIENCE AND TECHNOLOGY SOCIALISATION POLICIES

European research could be more effective and performing if social dynamics, in a broad sense, connected with research were successfully handled. These dynamics, when ignored or poorly managed, may manifest themselves as **constrains** and **obstacles** of different nature (e.g. conflicts, tensions, tendencies to resist changes, lack of co-ordination and communication, skill shortage, lack of transparent behaviours, etc.) affecting various areas of the research process. The picture is further puzzled by the high fragmentation characterising the 27 member states, each of them displaying different combinations of problems and potentials. In this framework, it should be appropriate to speak of a **gap** in the capacity of the European and national policies to handle social dynamics embedded in science and technology. Hence derives the need - brought forward in the handbook - to flank research policies with science and technology socialisation policies specifically aimed at coping with the constraints and exploiting the opportunities related to the social aspects of the research process. In particular, **six socialisation areas** have been identified where socialisation policies are utmost needed: scientific practices; scientific mediation, i.e. the processes linking research to its social "environment" (research management, research funding, local networking, etc.); scientific communication; evaluation; governance; innovation.

THE ROLE OF SOCIAL SCIENCES

Increasing socialisation levels of European research requires a **closer cooperation between natural scientists and social researchers**. This is possible only by overcoming the many social, cultural and organisational barriers which are presently making this cooperation difficult to achieve.

TECHNOLOGICAL RESPONSIBILITY

At the same time, it requires also a broader and diffused "**technological responsibility**" – that is a commitment to support and drive research, which should firstly involve researchers themselves, research institutes, innovation agencies or firms, but also many other actors and, to a certain extent, the public as a whole. However, all this can happen only by feeding a widespread sense of ownership of research and developing a "**scientific citizenship**" (viewed as a set of responsibilities, rights and duties specifically concerning science and technology) which involves everyone in the same way, from researchers to ordinary citizens.