

Conference

Celebrating the first concrete steps towards the implementation of the ERC

Meeting Summary

Wednesday 9 – Thursday 10 November 2005

UNESCO • Paris • France

Provisional Secretariat of ise:

*c/o European Life Sciences Forum ELSF
Meyerhofstraße 1
D-69117 Heidelberg | Germany*

*PHONE +49 (0) 6221-8891-552
FAX +49 (0) 6221-8891-210*

*www.initiative-science-europe.org
ise@elsf.org*

The establishment of the ERC has dramatically gained pace in recent months, with the endorsement of the ERC concept in all capital cities of the EU member states, discussions taking place at the ministerial level on the proposal of the European Commission (ftp://ftp.cordis.lu/pub/fp7/docs/fp7sp_ideas_en.pdf) and the nomination by Research Commissioner J. Potocnick of the 22 members of the ERC Scientific Council (http://www.initiative-science-europe.org/establishment_underway.html), the body whose role will be to “determine the ERC’s scientific strategy and ensure that its operations are conducted according to the requirements of scientific excellence.” Since its inception, the Initiative for Science in Europe (ISE) has had the ERC as its major focus and, having significantly contributed to the process, ISE welcomes the progress that has been made towards the ERC. But the Initiative is also aware of the need to maintain vigilance with respect, notably, to the autonomy of the Scientific Council and the scope, funding and structure of the ERC.

On 9-10 November 2005, the Initiative for Science in Europe (ISE) organized a conference with the aims to:

- 1) Celebrate the first concrete steps towards the implementation of the ERC. The meeting brought together many of the players who contributed towards advancing the ERC thus far, but also members of the ERC Scientific Council, the European Commission and the European Parliament. It also allowed the views of the members of the Scientific Council to be heard and provided a context for further discussion on the implementation of the ERC.
- 2) Discuss the issue of research infrastructures, a question that is central to establishing a science policy vision in Europe and may constitute the topic of future ISE initiatives.
- 3) Inform the ISE constituency and the scientific community on new instruments in the 7th Framework Programme (FP7) through presentations by European Commission’s Officers and allowing for a debate on the proposals.

Some 220 participants, scientists and administrators, registered for the event, which was kindly hosted by UNESCO at its headquarters in Paris, France. The present document presents a summary of the discussions that took place.

The conference was organized with the financial support of the European Molecular Biology Laboratory (EMBL), European Molecular Biology Organization (EMBO) and the Federation of European Biochemical Societies (FEBS) as well as additional contributions from the European Physical Society (EPS), the European Plant Science Organization (EPSO) and the European Science Foundation (ESF). We wish to thank all the speakers for their participation in the conference.

Luc Van Dyck

30 November 2005

Part 1. Roundtable discussion “Implementing the ERC: Practical and Political Aspects”

Report by Frank Gannon, Executive Director, European Molecular Biology Organization (EMBO)

The session on the ERC was constructed to be a celebration of progress that has been made towards what at one stage seemed like an impossible goal. There was an excellent participation from various players in the ERC story including the EC Director General for research, Achileas Mitsos, eight members of the ERC Scientific Council, Claudio Bordignon (Medicine), Mathias Dewatripont (Economics), Pavel Exner (Mathematics), Fotis Kafatos (Life Sciences), Maria Teresa Lago (Astronomy), Helga Nowotny (Social Sciences), Leena Peltonen-Palotie (Life Sciences), Oscar Marin Parra (Life Sciences), the rapporteur from the European Parliament on the 7th Framework Programme, Jerzy Buzek, the Chair of the high level group on the ERC, William Harris, and the Chair of the crucial start-up meeting on the ERC which took place in Denmark over three years ago, Mogen Flensted-Jensen. The presentations and discussions highlighted the following aspects:

- The concept of the ERC as a scientifically driven support mechanism for frontier research, monitored and controlled by an independent Scientific Council was reiterated.
- The latest assumption provided by Achileas Mitsos is that a budget of 1 billion Euro per year would be available for the ERC from 2008, the second year of activity of the ERC, onwards.
- The Scientific Council for the ERC will have full autonomy in defining the mechanisms that will be used by the ERC, including the details of the calls for proposals and the selection process.
- The Executive Agency, which will be appointed by the Commission and will use predominantly Commission employees, will be responsible for implementing the selection process.
- A strong plea was made by William Harris, Head of Science Foundation Ireland and former Executive of the US National Science Foundation (NSF), to start the ERC with the right processes from the very beginning and, notably, to recruit the most suitable Director for the Executive Agency, possibly outside the Commission services.
- The details of how the Scientific Council and the Executive Agency will work together were unclear. The fact that the Scientific Council is moving to appointing a Secretary General indicated a greater degree of separation between the processes or a greater lack of trust than had been previously anticipated.
- The perspective of the European Parliament was quite different from that presented by those on the Scientific Council or the Commission. At this stage of the debate, the European Parliament apparently anticipates that there will be a change very early in the procedures such that the ERC will become an Article 171 type organization with a consequence of the disbanding of the Executive Agency and the introduction of a new group composed of representatives from the Parliament, the Commission and the member states who would act as Trustees for the ERC.
- The concept of targeting young investigator scientists for the first series of grants was presented and debated with the advantages of this being a new input to this important sector of the research community being contrasted with the reluctance to introduce any eligibility constraints.
- The need to have in place mechanisms that would constrain the number of applications was recognized and the targeting of young scientists would be one mechanism to achieve this goal.

Overall the session on the ERC provided a refreshing update on progress, provided an opportunity for the members of the Scientific Council to give some indication of their background and perspectives and, nonetheless, highlighted some of the delicate topics that remained to be resolved. At present, it would appear that there are two such points where clarity has not been achieved:

1. The manner in which the ERC Scientific Council and the Executive Agency will work together.
2. The duration of the current EC plan of using a Scientific Council and an Executive Agency for the ERC, given the continuing proposal from the European Parliament that it should be based on Article 171.

Part 2. Roundtable discussion “A Roadmap to Research Infrastructures in Europe”

Report by *Peter Tindemans, Convener of the Science Policy Working Group, EuroScience*

The panel members introduced a variety of aspects related to research infrastructures which, taken together, demonstrated their increasing importance for practically all fields of science. The nature of research infrastructures and the traditions in dealing with them differ, however, very much from discipline to discipline.

Crucially important is the European Strategy Forum on Research Infrastructures (ESFRI) Roadmap process, which was outlined by the Chairman of the Forum, John Wood. ESFRI will produce, taking as an example the 20-year Facilities Outlook of the US Department of Energy, a Roadmap for each of three broad fields of science: Natural Sciences and Engineering (NSE), Biological and Medical Sciences (BMS), and Social Sciences and Humanities (SSH). A Roadmap Working Group is responsible for drawing up each of these Roadmaps, in a number of cases assisted by Expert Groups (10 in NES, 3 in BMS, 2 in SSH). The process should be completed by late 2006.

The Roadmaps will provide the most important input in FP7, which aims to set greater emphasis than beforehand on research infrastructures, although they will not represent priority lists. National governments of the EU member states will, in the end, have to join with each other in getting decisions on specific infrastructures. As to the role of the European Commission, Robert-Jan Smits, Director with the Directorate General for Research, pointed out that the EC would play a role in the preparatory phase of new facilities (feasibility studies, from designing to signing an MoU), but also, in a limited number of cases, in the implementation phase by making available up to 15 % of the investment costs for medium size infrastructures.

Finn Valentin (Copenhagen Business School) discussed the economic aspects of large research infrastructures, which demand increasing attention. It is often assumed that infrastructures should be established in regions with dense scientific and industrial fabric to maximize their output. Increasingly, however, the potential of large infrastructures to stimulate regional economic development is being recognized. This impact is provided through procurements and the demand generated by facility’s staff, but also because potentially significant spill-over effects can be created, as companies and human resources in the host region are particularly well suited to profit from the output of the facility. Finn Valentin remarked, however, that few detailed studies substantiate and quantify these impacts.

Another aspect of the discussion concerned the distribution of research infrastructures across Europe. Jerzy Langer (Polish Ministry of Science and Information Society Technologies) pointed out that, at present, there are

no large-scale research infrastructures in the new EU member states, a situation that is not sustainable for a balanced European scientific development.

Herwig Schopper (Chair of the Scientific Board of UNESCO IBSP) underlined the role of an organization such as UNESCO using the example of the CERN success story, to which UNESCO gave the initial impetus, and presented the new UNESCO International Basic Science Programme (IBSP) that aims to strengthen the role of basic science, especially in developing countries.

Ian Corbett, from the European Southern Observatory (ESO) discussed the running costs of research infrastructures, which need careful attention from the outset. These costs need to incorporate sufficient funding for maintenance and upgrading. This issue is even more critical for the development of new large facilities that are not based on existing international or national facilities, which usually have relatively stable budgets.

Finally, the president-elect of the European Science Foundation (ESF), Ian Halliday, made an important plea for a more strategic and coherent approach to new facilities based on long-term vision documents for scientific areas, including the role facilities would need to play, as well as a recognition that facility planning need to come from the scientific community, but in an iterative feed-back process between bottom-up idea development and top-down strategy and affordability injection by, e.g., funding agencies. He further indicated the readiness of ESF to assist in the preparation of vision documents.

The PowerPoint presentations made by the panellists can be found under (<http://www.initiative-science-europe.org/>). A report by Finn Valentin can be found under <http://www.biotechbusiness.dk/publications.htm>.

For ISE, five issues of interest seem to emerge from the presentations and discussions on research infrastructures:

- The need to ensure that also for SSH and BMS, where there is less experience with (large) infrastructures, solid roadmaps are produced;
- The need to ensure that the EU support under FP7 builds on the intensive preparations that, by definition, would have taken place for any project on a roadmap, as these must be mature projects;
- The regional socio-economic impacts of research infrastructures, especially of large scale facilities;
- The distribution of research infrastructures over Europe;
- The need to develop visions for scientific disciplines or areas of science, including the role of research infrastructures and their sustainability.

Part 3. Session “New Instruments of Framework Programme (FP) 7”

Report by *Peter Tindemans, Convener of the Science Policy Working Group, EuroScience*

Jean David Malo (EC) presented in details the various simplifications that are currently under discussion by the Commission for the implementation of FP7. A number of options, notably concerning the types of financial support and including, for instance, less frequent auditing requirements, are being reviewed; however, simplifications will be restricted due to accountability requirements imposed by Council and Parliament.

Jean David Malo (EC) also discussed the concept of Technology Platforms, explaining that educational and research organizations, enterprises and funding organisations collaborate in such platforms to define a research agenda and implement it. He stressed that in this programme industry must be in the lead. Of the 25 existing

Technology Platforms, most will be considered for further funding under the FP7 collaborative actions. A few (6 have already been identified) will be stimulated under the new instrument of Joint Technology Initiatives. Dedicated legal structures will be established for this purpose.

Noting that over 90% of the European research funding is national, John Marks, Director of Science and Strategy at ESF, stressed that it is becoming crucial to increase the synergy between the national and European systems. Substantial progress has been made recently, notably through joint initiatives such as the EURYI and EUROCORES programmes organized by ESF; however, further gains are possible by establishing other similar programmes and simplifying, shortening and synchronizing national procedures. The EC ERA-Net programme should help promoting these synergies.

Cornelis-Mario Vis (EC) described the integrated approach the EU is now developing for its human resources and mobility strategy. Programmes and financial instruments (the Marie Curie Programme primarily, with continued attention for training, mobility and career development, but also some discontinuity, for instance concerning: the 'Excellent Teams' scheme due to the creation of the ERC) and Policy and Regulations measures (recent Directive on Visas, Charter for Young Scientists) will complement each other to make Europe a more attractive place for researchers. Future focus will be on increasing the structuring impact on national actions, on the involvement of SMEs and on the international dimension (outgoing fellowships with mandatory return, host-driven MC actions open to non-EU researchers, support for scientific diaspora, for example).

Support for the social sciences and humanities (SSH) at the European level is an area which is still very much evolving. Theodius Lennon (EC) and Peter Day (Academia Europaea) explained that only since 1994 has there been attention for these areas of science in the Framework Programmes. While it is true that in FP6, a trend that will be reinforced in FP7, a larger number of areas and an increasing amount of money are devoted to SSH, the area still suffers from fragmentation, both between and within disciplines. Academia Europaea and All European Academies (ALLEA), therefore, have been in touch with the national Research Councils to arrive at metrics for consistent evaluation of research efforts in SSH, a move that is dramatically required.

Further information on these topics can be found in the PowerPoint presentations of the speakers (<http://www.initiative-science-europe.org/>) and in the FP7 specific programmes (<http://www.cordis.lu/fp7/>). Please note, however, that the presentation on the Community Financial Contribution made by Jean-David Malo is embargoed until the Commission makes final decisions on these topics.

For ISE, the main conclusions of the session on new FP7 instruments are:

- A more complete framework for funding at European level is emerging (ERC, focused 'People' instruments, Technology Platforms, more attention for social sciences and humanities). But the still small amounts (in relative terms) spent at the European level require ongoing discussion of increased focus ('one instrument for objective') and cost-effectiveness (money and implementation procedure per instrument).
- The interface, relative focus, synergy and complementarity between national and European funding mechanisms require, and begin to get, serious attention.
- The simplifications in the financial implementation foreseen for FP7 can be an important step forward, but more remains to be done.

- The integrated human resources strategy that the EU is developing (financial support, training, visa and permits etc.) is a very valuable instrument for Europe.