## Support to Research Infrastructures (RI) in the 7<sup>th</sup> Framework Programme (FP) for Research and Technological Development (2007 – 2013)

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#### 1. What are Research Infrastructures?

The term "Research infrastructures" refers to facilities, resources and services that are needed by the research community (ies) to carry out their research in all scientific and technological fields). Examples include major equipment or a set of instruments; knowledge based resources such as collections, scientific archives and/or structured information; enabling Information and Communication Technology-based infrastructures; and any other entity of a unique nature that is used for scientific research. Research infrastructures may be "single-sited", "distributed", or "virtual" (the services being provided electronically). Last but not least, "One size does not fit all" and it is recognised that the needs for research infrastructures may vary considerably from one scientific field to another. from physical sciences and engineering to environmental, biological, biomedical and social sciences and humanities

#### 2. Evolution of the Community support to Research Infrastructures

Community support to research infrastructures has been developed with success over consecutive Framework Programmes. The budget has increased from around €30 million in FP2 to €735 million in the current FP6 (2002-2006), which includes € 220 million for the further development of the communication network development for all researchers in Europe, Geant and Grids. Under this total budget for RIs in FP6, 142 projects have been funded and support has been given to 259 RIs serving directly more than 20000 users. Through the so-called Integrating Activities, Community support in FP6 concentrates primarily on activities which are related to the coherent use and development of existing research infrastructures. These activities cover access of researchers to research facilities, the networking of research infrastructures, and joint research projects to improve their performance. Through design studies and limited contribution to construction studies, the Community actions have started to support the development of new (or the major upgrading of existing) research infrastructures of pan-European significance. The DAM-LR project is an example of an FP6 construction study, which is

aiming at creating a single, virtual linguistics resource out of four linguistics research institutions from the Netherlands, Sweden and the United Kingdom.

# 3. The Research Infrastructures' action in the FP7 proposal

There can be no doubt that state–of-the-art research infrastructures are essential for Europe's researchers to stay at the forefront of research development, and thus, an important task for the EU's research policy and FP7. In the Commission's proposal for FP7, this action forms part of the Specific Programme on "Capacities" and its budget is expected to increase considerably in FP7.

- How to reduce fragmentation of efforts and structure better, on a European scale, the way existing research infrastructures operate in a given field.? How to enhance existing research infrastructure capacity in the European Research Area (ERA)? One of the main objectives of the Research Infrastructure programme will be to continue to optimise the use and development of the best research infrastructures existing in Europe through the following activities:
  - *Reinforcement of Integrating Activities* to structure better, on a European scale, the way research infrastructures operate, in a given field, and promote their coherent and cross-disciplinary use. They will be implemented through both a "bottom up approach" to calls for proposals, open to all fields of science and technology as well as a "targeted approach" to calls for proposals and in close cooperation with the other FP7 thematic priorities
  - *ICT based e-infrastructures*: to foster the development and evolution of high-capacity and high-performance communication and grid infrastructures.

 How to develop a European long-term approach to the creation of new research infrastructures? What mechanisms to put in place to ensure a coherent and strategy-led approach to policy making on research infrastructures of pan European interest? How to facilitate multilateral initiatives leading to the better development, construction and use of research infrastructures in Europe? These are some of the questions, which have been continuously in the focus of high level discussions and reflections in recent years.

The other major objective of FP7 is, therefore, to <u>support the construction of new research</u> <u>infrastructures</u>. Community action will be primarily based on the work of ESFRI<sup>1</sup> and the development of the first <u>Roadmap</u> for such new infrastructures.

The Community action will include the following activities

- *Design studies:* to promote the creation of new research infrastructures by funding feasibility studies;
- Support to Construction of new infrastructures (or major upgrades of existing ones)

In FP7, the construction of new infrastructures (incl. major upgrades) will follow a two-stage approach with a first stage supporting the *preparatory phase* and a second stage supporting the *implementation phase*. The preparatory phase will involve the finalisation of the detailed construction plans, of the legal organisation, of the management and multi-annual planning. The European Commission will act as a "facilitator" during this preparatory phase where selected projects will be funded with a maximum Community financial contribution of up to 50% of the total eligible costs. Only projects which will have completed successfully the preparatory phase.

FP7 financial support for the construction phase may vary from 0% to a substantial financial

contribution where there is critical need for such support. The possible EC funding to the construction of new RI could take different forms: a direct grant from FP7 to the construction costs, a guarantee of EIB loans through the Risk Sharing Finance Facility and ad-hoc decisions based on Article 171 of the Treaty.

More information on EU Research Infrastructures :http://www.cordis.lu/infrastructures/

<sup>&</sup>lt;sup>1</sup> Following a Commission initiative, the European Strategy Forum on Research Infrastructures (ESFRI) was set up in 2002. ESFRI brings together representatives of research ministers, and representatives of the European Commission to help developing a European policy on Research infrastructures, based on a medium to long term vision of the scientific needs in Europe. (http://www.cordis.lu/esfri)