

Recommendations of the CPU on infrastructures in Europe

Definition of infrastructures and procedures for action by the European Commission

For the European Commission, "research infrastructures" covers either very large transnational facilities or facilities/instruments networks or virtual joint resources ("e-infrastructures").

Under various schemes, the Commission co-finances new infrastructures and existing infrastructures for which the member states still remain the principal players.

Through the Framework Programme, the European Commission provides funding for new infrastructures:

- by financing design studies for the design of large-scale projects and updating existing infrastructures;
- by financing the preparatory stage of implementing major European infrastructures as defined in the road map of the European Strategy Forum on Research Infrastructures (ESFRI).

On the other hand, the European Commission supports existing infrastructures by promoting the integration and availability of major resources at European level through two schemes:

- by financing integrating activities (I3) through networking, joint research activities, access or transnational availability;
- financing ICT-based e-Infrastructures: virtual infrastructures (on the same model as I3).

The research infrastructures programme is therefore all the more important for the universities as it enables the pooling of facilities, resources and services used by the science community, in particular making it possible to:

- establish networks necessary for developing the European Research Area;
- consolidate the knowledge triangle (transmission, exchange, preservation of knowledge).

The role of universities in research infrastructures

In spite of the above developments, the French universities are hardly involved in the infrastructure projects - often through a major research body - and almost never in infrastructure coordination.

Nevertheless, the French universities show a marked interest in I3 projects.

The aim is therefore to get the universities more involved in IR actions, either as users or as direct players.

CPU recommendations for new and existing research infrastructure

1. New infrastructures

1.1 Ensuring CPU involvement in compiling the ESFRI list

As strategic players in research, the universities are asking to be more closely involved in drafting road maps, at all levels: regional, national and also European. At regional level, the CPU has

already emphasised the importance of the universities being involved in compiling the operational programmes of the European structural funds (cf. recommendations of the CPU seminar at Nancy concerning the structural funds, 1 December 2010). They should also put forward proposals and ensure to be heard at national level and be represented at the ESFRI and at European institutions with responsibility for policy on major facilities. This necessarily requires the possibility of having a say in national strategies.

1.2 Design studies : The universities wish to improve possibilities for opening up this instrument to entirely new and/or innovative projects that do not necessarily result from the national or European road maps.

2. Existing infrastructures

2.1. Integrating activities

In parallel with tomorrow's strategic infrastructures, identified on the road maps, the universities can operate specific infrastructure (including e-infrastructures) of European significance whose networking will have a very strong impact on the structuring of the European research area, science communities, regional development and student training.

The universities support the I3 because they concern instruments and facilities (not only large-scale but certainly of scientific significance worldwide) which are the tools of excellence used by most of the science community. The impact of transnational access is of particular importance for all European researchers.

However, the universities regret that the subjects of the latest I3 calls for proposals have been increasingly targeted, which could limit the structuring effect of projects to particular communities. Moreover, pre-targeted and narrowly targeted topics could also inhibit competition among projects.

Similarly, the universities consider that the practice of extending I3 projects already funded should not further restrict the possibility of proposing new projects.

Proposal 1 : The universities wish to see a significant increase of the budget for integrating activities.

Proposal 2 : The universities should like the Commission to rebalance bottom-up and top-down approaches. This would open up opportunities for new joint strategic activities for Europe and support new players. Non-targeted projects (open calls) should benefit from part of the budget earmarked.

Proposal 3 : A balance should make it possible to extend projects already financed and at the same time support emerging projects.

Proposal 4 : As a measure conducive to the knowledge triangle, the universities wish to see more emphasis put on the "training" aspect of infrastructures (e.g. participation of students and making a part of access time or services available to students). This aspect could be included in the project assessment criteria.

2.2 e-Infrastructures

The European Commission stresses the development of virtual infrastructures (see COM 2010/0245 A Digital Agenda for Europe - pan-European scientific databases). The universities evidently have a role to play in this type of infrastructure because of the resources at their disposal (e.g. cohort studies, scientific databases, digital libraries, etc.) and the relative ease of creating networks among these resources. Provided that proper attention is paid to aspects of intellectual property, the universities and citizens stand to gain a great deal by pooling of resources and open access to this type of infrastructure.

Proposal 5 : However, the universities wish to have a clarification of the definition and context of funding these types of infrastructures among the various directorates-general of the Commission and the different Community programmes DG RTD/INFSO, CIP, NoE of ICT in Cooperation, etc.).

Proposal 6 : Open access should be considered with due adherence to intellectual property rights.

Proposal 7 : Like integrating activities, training ought to be included among the assessment criteria of these projects.

3. Infrastructure and regional development

In the framework of smart specialisation, the structural funds should enhance complementarity among the regions by supporting the strategies formulated by the universities, research centres and companies in consultation with territorial players. Smart specialisation assumes a bottom-up approach, cooperation to pinpoint the most promising regional development areas and a clearly defined research and innovation policy. The competitiveness and employment objective also makes it possible to co-finance the establishment of infrastructures and competency centres (that are nevertheless capable of having a cross-border impact).

Proposal 8 : The universities should like to see a review of the financial regulations to facilitate additional funding (European funding, FPRD and structural funds, national and regional).

Proposal 9 : The universities wish to see emphasis placed on the training aspect of these infrastructures.

4. Simplification

Proposal 10 : The universities should like to see a simplification of the methods for calculating the European contribution (e.g. harmonisation of direct/indirect costs per type of activity). They also call for a review of the ERDF rules for funding the acquisition of scientific equipment.