



Session on Research Infrastructures

Introduction by the moderator

(Carlo Rizzuto)

Defining the subject

- The Green Paper focuses on those Research Infrastructures (RIs) which, because of quality, rarity, cost, impact and operation modes, are valuable for all EU researchers, and attract also international researchers: “Pan-EU RIs”
- These are strategic and essential for EU’s competitiveness and contribute strongly to the ERA
- All EU Countries and the EC must join forces, to acquire and operate them, making them accessible to all good researchers
- What are the best and most effective policies to achieve this? And which are the bottlenecks? How to develop strategies to progress?

The size of the issue

Even by limiting the concept to Pan-EU RIs we are faced with a wide taxonomy of RIs and problems:

- Single site, complex, unique, standard technology,
- ... or networks of complementary centres
- From Globally unique, to Regionally distributed
- Underlying and growing use of e-infrastructures
- Opportunities but difficulties of interaction between Basic Research and Industry
- The case of national / EU / Regional and other funding instruments: contributions / loans / etc.

Costs of new + upgrades: ~15 B€ +~2 B€/yr

Costs of existing ones: ~100's of B€ past investment, and 10's of B€ operation per year

Need to bring together

- The EU Countries, involved directly or through Intergovernmental Organizations (when available)
- The EU, in its various Institutions: EC, EP, Agencies, EIB,.....
- Other Countries outside EU: USA, India, China, Japan, South Africa, Australia,.....
- But also industries, research councils, scientific representative organizations, donors.....
In different phases: design, siting, construction.....not forgetting long term operation and sustainability!!!
- Need to train, attract, grow and mobilize Human Resources

Growing coordination

- At global level, the Global Science Forum, and now the EU with bilateral actions and ESFRI's Roadmap
- At EU level,
 - the catalyzing role of the FProgrammes
 - Now also ESFRI with multilateral discussions + developing Roadmap for new and upgraded RIs
 - Developing a structured view of existing RIs (with ESF)
- At regional and “variable geometry” levels: direct negotiations between Countries, Regions,

Bottleneck: None of the actors has a determining power, and most are weary of increasing costs vs budget limits!

And today.....

- Thanks to the ERA green paper and responses from the ERA actors, we have the opportunity to assess what needs to be done
- The working group presents an interim report
- Important inputs by discussants
- Very important the input by the public

We should use all these to develop strategic priorities, Conference conclusions and as a guidelines for the future work of European stakeholders, including ESFRI