

SESSION 1: Future EU activities

ESF Member Organization Forum on RI – a follow-up project broadening the scope (Johannes Janssen, DFG)

The **EUROHORCs and ESF Vision a Globally competitive ERA** states 10 points – one among those relates to “world-class research infrastructure”. This point is taken up in “The Road Map for Actions to Help construct the ERA” as the action “to develop shared funding and exploitation of research infrastructure”.

The following statements characterise the situation:

RI is mainly funded by national stakeholders

European Roadmap (ESFRI), focus on 44 large scale projects

Issues of European relevance for RIs:

- boundary conditions for effective use
- funding procedures
- access rules
- running costs, personnel, replacement, etc.

In conclusion, there is a need for European discussion and coordination!

The mandate for this task is delegated to the DFG. This includes:

-Establishing an ESF Member Organisation Forum;

-Continue updating the inventory of national research infrastructures with European significance;

-Using ERA-Instruments as a pilot project for collaboration in medium sized research infrastructures.

The proposed agenda for next 2 years includes

- achieving a definition of RI
- standards a RI should fulfil
- mapping of existing RI
- enabling networking of RI
- encouraging external access to RI

The scope and field is exemplified by cases such as bio-analytical facilities, information infrastructures in the life sciences (biobanks), research vessels, the archaeology data base, the need for state of the art equipment in engineering, and archives and libraries in the arts and humanities.

The **Member Organisation (MO) Forum on Research Infrastructures** currently consists of 23 MOs plus 7 Observers. Recent activities were the Kick-off meeting in January 2010 with an agreement on definition of RI (adopting an existing one by ERIC), the decision to erase the previously used term “Medium-Sized” and to establish four Working Groups (WG):

Access and Standards (DFG, DE)
Funding and Evaluation (STFC, UK)
Networks (CNR, Italy)
Mapping (CNRS, France)

The Meeting of WG leaders in March 2010 agreed on working plans, future meetings and support of/ cross-linking with MERIL-Project (ESF) on mapping.

Planned Activities and next steps include:

2010: first draft recommendations on standards/access

2011: recommendations on funding, evaluation, networks

2011: book of specifications for mapping

Policy developments and challenges in the field of Research Infrastructures (Hervé Perot, EC)

World-class research infrastructures are key element of the Lund & Donostia declarations (July 09 –Jan 10). They are essential for Europe’s researchers to stay at the forefront of research development and are key component of Europe’s competitiveness in “frontier” research.

The key challenges are overcoming fragmentation in Europe, coping with increasing costs / complexity and improving efficiency of (and access to) research services, incl. e-infrastructures.

As the several hundreds of RI, are mainly nationally funded RI, policy at EU level has the objective to reinforce coordination integration.

The **European Strategy Forum on Research Infrastructures (ESFRI)**, established in 2002 brings together representatives of the Research Ministers of Member and Associated States and a representative of the European Commission.

The mission and strategy of ESFRI is to support a coherent, strategy-led approach to policy-making & to facilitate multilateral initiatives leading to a better use and development of RIs.

At the European Conference on Research Infrastructures (**ECRI conference 2010**) the importance of RIs was stated. RI are essential to address Grand Challenges & research-based innovation. The EU RI policy is based on a partnership approach between regional, national, EU, possibly global levels. Human resources and of service-oriented e-infrastructures for the setting-up and operation of attractive and sustainable research infrastructures are important. Involving industry from early stage is aimed for.

There is a large number of RI currently in the preparatory phase. Many of these have an international dimension.

Implementation of the Roadmap has already begun:

Eleven (11) new RIs “under implementation”: agreement reached; the construction phase of these projects is ongoing or imminent;

Eight (7) new RIs are “moving to implementation”: stakeholders are clearly engaged;

Ten (10) additional projects into the definition of leading country, financial & technical aspects.

This has been possible thanks to synergies between the EC, EP, and Council: an EU budget of 135M€ has supported the start-up phase of several RIs, and the Council, supported by the EP, has approved the new ERIC regulation mid 2009.

Integrating activities in FP7 include collaboration of existing research infrastructures. These are normally major RIs in Europe in a particular field. They make out ~250 M€/y in EC funds, that is 2.5% of EU RI costs.

There are three types of obligatory activities: *Networking Activities, Trans-national Access/Research Services, and Joint Research Activities.*

Although the ESFRI projects are very visible, the “integrating activities” are most important EC actions.

ERA 2020 Vision

As part of a real “ecosystem”, major research infrastructures promote scientific excellence on a globally competitive basis.

With rapid development of new distributed and e-infrastructures, they offer equitable access to world class modern research facilities and technology demonstrators.

This vision should still be agreed... and would include:

- A fully integrated, consistent, efficient eco-system of Research Infrastructures, serving researchers and society in all S&T fields (broader approach than just FP8)
- Research Infrastructures are seen as knowledge industry for the knowledge society, as source of attraction for world scientists and as well as source of innovation and are based on widely used and efficient e-infrastructures (increased inter-services / inter-ministries cooperation needed)

Which are the **key factors affecting the vision?**

- The current situation is forcing Europe to quickly advance on research investments, which is twice virtuous (support to research + industry)
- Networking spirit is a European strength, but collaboration remains a challenge to be faced...
- A new way of managing research needs to emerge (partnerships) ... this is a major challenge, not scientific but mainly political, possibly cultural...
- Need to review evaluation criteria at EU & MS level
- Need for harmonisation at EU level...
- Need to analyse better returns for stakeholders

Increased synergies between RTD funds and SFs

For the period 2007-2013 under the Cohesion Policy, about €10 Billion concern "R&TD infrastructure and centres of competence in a specific technology"

- An assessment of the 34 ongoing ESFRI Preparatory Phase projects was recently carried out by DG RTD and DG REGIO to identify the potential use of specific stakeholders under the above mentioned category.
- More than 450 facilities were identified
- There is a need to increase awareness of all possible stakeholders.

Next FP7 actions

WP 2011 to be launched in July 2010 (closing end 2010): ERANETs continued, a specific support measure to prepare an FP8 dedicated action for instrumentation
WP 2012 to be prepared by end of 2010: Input is welcome from TWGs, PC (Committees), Thematic priorities, experts, and ERA-Instruments?

The following new directions for FP-8 are expected:

- The research and innovation strategy foresees dedicated actions for instrumentation development.
- There is a trend which emphasises scientific excellence in relation to RIs

A major challenge RIs are faced with will be competition for human resources, hence attractiveness will be vital for RIs.

The future of ERA-Instruments (Thomas Gübitz, DFG)

The goal for ERA-Instruments or a continuation in different form and possibly different scope needs to be specified and decided.

Possible form for a continuation of ERA-Instruments would be:

- ▶ Another ERA-Net
- ▶ A Network with partner funding
- ▶ Loose network without funding

Clearly, the form has to follow function, and therefore the consortium has to think about what activities should be continued respectively commenced. The third year of ERA-Instruments will be used to clarify the situation.