

Findings of the ERF Workshop “The Socio-Economic Relevance of Research Infrastructures”

Hamburg 31 May /1st June 2012

(<http://erf.desy.de/workshop>)

Preamble

RIs (Research Infrastructures) are an important cornerstone of the European Research and Innovation Area. They are instrumental for the advancement of science and stimulate- through their excellence in research- important innovation, learning and education processes that are highly relevant for society and the economy. The evaluation of their impact is difficult because their competitiveness must be understood in a way unfamiliar to conventional commercial investors (e.g. they give “free open access” to users selected by peer review without asking fees). By doing this, they generate an effective process where the quality is driven by the competition, and the ROI (Return on Investment) is visible but difficult to evaluate, quantify and understand in conventional commercial terms, being a return on Society more than a return to Shareholders. In these conditions how may the RI managers convince the funders, the public and the media that RIs are, when evaluated appropriately, extremely beneficial for Society? The ERF Workshop brought together experts from research infrastructures, science, policy makers and industry to discuss the many dimensions of socio-economic relevance and return on investment of Research Infrastructures.

The objectives were to:

- **evolve from description – mainly based on narratives – to quantification of RI benefits**
- **disentangle (and characterize) the benefits and best practices towards the different stakeholders**
- **improve the documented evidence and the measurement techniques and results concerning outputs, outcomes and impacts at all levels**
- **improve the capability to increase the positive impacts, and decrease the less positive ones**

Major Findings

1/ Open-access (if well managed) is a good long-term investment in terms of public acceptance, of support to the economy and to respond to societal challenges. For this reason cost-benefit analysis is insufficient and a clear strategy is required to measure impact delivery.

2/ Open-access does not mean that all outcomes are free of charge. Somewhere the cost has to be funded. RIs must be able to transform the know-how and the applied knowledge inherent to their activities into economic returns. Should they go to the extreme of adopting the principle recently introduced by the DOE (“come for free”, publish the “R”, but leave behind the “D”), in which the free access to produce Research is “paid” by the possible value of Developments?

3/ Research generates but also amplifies knowledge in RIs, especially in optimizing the networking and exchange through some basic principles:

- be ready to give one another access to their networks
- the greater the overlap of knowledge, the more efficient is the transfer of knowledge
- the greater the confidence, the stronger is the effect of reciprocity, if applied
- promote the “tacit dimension of knowledge transfer”

4/ RIs are the cornerstone of knowledge exchanges. The RIs are entry points into networks of expertise, knowledge and practice, and facilitate generating new forms of interactions among actors in the innovation system, stimulating learning environments, creation of new options for R&D, and for industries. They are considered as important reference customers and an holder of a valuable portfolio of products. Furthermore the added values of education and innovation, which are not yet so well understood and appreciated, should be better detailed.

Next Steps

Following strong feedback received from participants, this preliminary report will be followed by a more detailed report with analysis of the completed questionnaires and recommendations. This will be developed by a Task Group of ERF. A target date for this second report is end-October 2012.

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