

## **Essential background paper**

### **for a strategy to build an International Partnership for Advanced Facilities for Materials and Analytical Facilities in the Central European Area**

On 25 June 2009 the Council of the European Union adopted a Regulation providing for the setting up of a European Research Infrastructure Consortium (ERIC), designed to facilitate the joint establishment and operation of research facilities of European interest. This is an outcome of the activities of the European Strategy Forum on Research Infrastructures (ESFRI) aiming at providing the European Research Area, including all Member and Associate States, with the needed Research Infrastructures (RIs) at international level allowing the attraction of the best researchers at world level, and the equilibrated growth of research and its socioeconomic returns in all regions of Europe.

ESFRI has, as one of its main activities, developed through its Regional Working Group and deliberating on its proposals an approach to ensure an equilibrated growth of capacities in the participating Member and Accession Countries. This approach calls for the development of Regional Infrastructures, acting in international partnerships (i.e. as regional partner centres) as entry points to allow access and the outreach to researchers and technicians as well as their international training and benchmarking, thus helping to express the full potential of all regions.

The Central-East European Area has an excellent historical scientific tradition, but due to developments in the last century has had fewer opportunities to invest in large research infrastructures. This situation is however changing, thanks to a coherent effort by all countries in the area, that have developed or are in the process of developing roadmaps for RIs, and have already invested in RIs both of international and regional level, in all cases referring to the quality criteria developed in the Pan-EU ESFRI context. This follows the EU 2020 indications for the more effective use of EU and national resources, as for example the use of Structural Funds to build RTD and innovation capacity.

This has also allowed to build transnational initiatives between existing RIs and in particular in the wide research area connected to Advanced Materials and Analytical and Synthetic approaches at the Nano-Science and Nano-Technological level, with already on-going successful joint initiatives involving partnerships in Austria, Croatia, the Czech Republic, Hungary, Italy (in particular the Trieste Area), Poland, Romania, Serbia, Slovenia and connected with other countries including those outside EU. An invitation to observers raised positive interest also from Greece and Cyprus. In several cases this has already led to the strengthening of wider research environments and to the birth of socioeconomic returns, both in terms of local spill-overs and the setting-up of spin-off companies within the partner countries.

The setting-up of a distributed RI, established as an ERIC and connecting different and complementary RIs to an institution in the Central European Area (as consortium members and regional partner centres to develop the best scientific, educational and industrial returns) is now a realistic possibility to build and support a strong research and innovation capability in the overall area. According to the above mentioned Regulation, this must be decided at governmental level by the interested countries, while its subsequent operation can be delegated to specific research institutions. The specific scope of this ERIC concerns centres having analytical and sample preparation capabilities, and research projects in different research topics such as Structural Biology, Nano-Materials, Cultural Heritage and Environment and their various technological and industrial outcomes ranging from energy to biomedical and most manufacturing industries.

In February 2011 a working group started its activities in Vienna, in particular drafting the MoU for preparing the necessary documentation for the establishment of above mentioned distributed RI as an ERIC. The MoU was subsequently signed in Bregenz, June 26<sup>th</sup> 2011, by the Ministers of the interested Countries.