of the European Community for research, technological development and demonstration activities (2007-2013)

Collaborative Project & Coordination and Support Action

ELISA

Project title:	**European Light Sources Activities – Synchrotrons and Free Electron Lasers**
Project number:	**226716**
Project coordinator:	**Sinchrotrone Trieste SCPA, Trieste, Italy**
Project homepage:	http://www.elettra.trieste.it/ELISA/
FZD participant:	**Institute of Ion Beam Physics and Materials Research**
Starting date:	**01.03.2009**
Duration (months):	**30**

Summary

Europe has the largest and most advanced system of synchrotrons and free electron lasers (FELs): 17 operating facilities, several under construction, some 300 beamlines, 25,000-30,000 users per year from many disciplines (materials, chemistry, biology, medicine, physics, technology and others); this is also the world's largest experimental network. The system is an open resource for all scientists based on merit, without national barriers. The network and its bottom-up approach to transnational access are major factors in the European competitiveness in science and technology.

The European Commission had a major role in this accomplishment by providing through different channels resources for joint activities and transnational access. The present proposal is well enhance this role guaranteeing full exploitation of the research infrastructure by European scientists. The specific objectives are: (1) to provide resources for a concrete transnational access independent of the financial situation of the concerned users; (2) to support joint research activities to build new capacities in existing research infrastructures to even better serve the transnational user community and make European synchrotrons and FELs even more competitive

with respect to the USA, Japan and others.

In addition, (3) networking activities – schools, workshops, documentation, standards and public dissemination – will boost cooperation in the network and its positive effects in Europe and beyond. The requested financial support is much smaller than the overall funding of the network but its impact is major, benefiting some 10,000 scientists in Europe. Transnational access is crucial for researchers from less-favored countries – new EU members in particular. The concrete access front-line instruments without emigration and brain drain is a key effect of the open access to the European synchrotrons and FELs. Similarly positive is the impact on junior researchers and woman scientists.