



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

Collaborative Project & Coordination and Support Action

ESRFUP

Project title: **ESRF UPGRADE**

Project number: **211549**

Project coordinator: **European Synchrotron Radiation Facility ESRF,
Grenoble, France**

Project homepage: <http://www.esrf.eu/Upgrade>

FZD participant: **Dresden High Magnetic Field Laboratory**

Starting date: **15.10.2007**

Duration (months): **48**

Summary

The aim of the project is to create a unique world-class high magnetic field facility where it will be possible to perform advanced neutron and X-ray investigation of the effect of high dc magnetic fields on condensed matter. This facility will be organized as a partnership for joint high magnetic field research between the ESRF and the Institut Laue-Langevin (ILL) and all major European high magnetic fields facilities, namely the Laboratoire des Champs Magnétiques Intenses (LCMI-Grenoble), the Laboratoire National des Champs Magnétiques Pulsés (LNCMP-Toulouse), the High Field Magnet Laboratory (HFML-Nijmegen) and the Hochfeld-Magnetlabor Dresden (HLD-Dresden).

This partnership will assure that the new facility will have a large technical and instrumentation support, and that it will be immediately strongly coupled to ongoing high magnetic field research in Europe. The user operation of the new facility with respect to ongoing user programs at the ILL and ESRF on the one hand, and at the existing high field facilities will be organized to give optimal access to the best research proposals for high field scattering experiments. This facility

will be open to all projects related to high fields, those which will imply pulsed fields will only have access, for technical reasons, to X-ray scattering investigation. On a long term basis, the planned power installations could eventually be used to generate “long pulse” fields beyond 40 T.