CONCEPTUAL DESIGN REPORTS FOR THE UPGRADE MOVE FORWARD

The 31 different CDRs, or Conceptual Design Reports for the beamlines within the Upgrade Programme, will play an important role in shaping the future of our institute.

The CDRs describe the scientific cases for the whole ESRF beamlines portfolio to be realised in the next seven years, including both completely new beamlines and refurbished beamlines. The CDRs also include basic technical information, and estimates for the cost and time scales for realisation.

The lion’s share of the Upgrade budget will go into new beamlines and instrumentation. The CDRs are the first step to transform the ideas written in the Purple Book into the blueprint for the future ESRF beamlines. As Council has approved funding for the Upgrade, complemented by the ESRF refurbishment resources, this blueprint is being made to a maximum budget of 90 million Euros for the beamlines. The funding will go to eight completely new “Upgrade” beamlines, to be selected from the eleven candidates, and to allow refurbishment of all our other beamlines according to previous Beamlines Review recommendations.

The CDRs form the basis for a master plan for the future portfolio of the ESRF. It will also direct the programme of developing technologies such as detectors, software, and the plans to improve the X-ray source. The ESRF management will present this master plan, together with the underlying CDRs, to the Science Advisory Committee (SAC) on 28-29 May for their feedback and advice.

Last year, SAC asked that three Upgrade beamlines well advanced in their ideas (evolutions of the existing ID14, ID22 and ID24) started work on their detailed Technical Design Reports; further beamline projects should be able to start detailed work soon to continue to build a pipeline of beamline projects to be completed by 2015. The CDRs, when finalised and supported by SAC, will be reunified in a publication for ESRF Users’, Committee Panels and Governing bodies.

On the other hand, building plans for the new experimental hall are progressing well. The floor plan was approved by SAC in its last meeting. According to the plan, around 1/3 of the beamlines will be moved in the new configuration.

CHANGES AT THE ESRF CAMPUS IN THE NEXT TWO YEARS

Starting in 2011, visitors to the ESRF will see more changes brought by an extensive additional building programme funded by French regional and local authorities.

The list of new buildings includes a new site entrance with a visitors’ centre, an extension of the restaurant, a warehouse and, most importantly, a new science building with a surface of around 3,000 square metres dedicated to partnerships. The facilities will be common to the three European institutes ESRF, Institut Laue Langevin (ILL) and European Molecular Biology Laboratory (EMBL) in Grenoble and will make ESRF an even more attractive place for users. The building, shared with ILL, will house state-of-the-art laboratories for sample preparation and analysis and will make it possible to establish more partnerships, initially for soft-condensed matter and later possibly for extreme conditions. The value of this concept was proven with the Partnership for Structural Biology (PSB), in operation since 2003.