

## EPAC Project

### ISTAC Charge questions for Meeting No 4

The EPAC project has made good progress over the 18 months since the last ISTAC meeting. Installation phase continues and the commissioning of laser systems has commenced, but many technical risks still remain. We would welcome the opinion of the ISTAC on the following topics.

#### **1 – The status of the experimental areas (EA1 & EA2) and the proposed plan for early operations**

Please comment on the proposed plan for the first experiments for the experimental areas, and also on the options for future beams, such as the long pulse (ns) beam and auxiliary beams in the experimental areas

#### **2 – User requirements and engagement plan**

The team have continued to engage with a diverse set of users. Please comment on the current plan for user engagement, with both industrial and academic users. Has the team understood the user requirements such that the facility will meet their expectations?

The team has limited resources, and the recruitment for a IPI group leader has not been completed; however, there is a plan to continue engagement with industry. Please comment on the activities to date to attract new users.

#### **3 – The 1 PW laser system**

Please comment on progress made on the laser systems to meet the laser specification. Please highlight any concerns outstanding technical risks such as Ti-Sa solid-state cladding, compressor gratings, and beam transport.

#### **4 – The designs for detectors**

Please comment on the proposed approach to ensure that key detectors are available for the user programme, and on the progress made.

#### **5 – The baseline plans for data management, the DAQ and CT**

The CLF continues to work closely with STFC's Scientific Computing Department, Observatory Sciences, and Diamond Light Source to develop different elements for data management. Please comment on the progress made in the development of the data management system and its appropriateness for the initial operations of EPAC. Please also highlight the areas on which we should concentrate more for future operations.