



## **Status and future plans of the EISCAT\_3D Preparatory Phase Study**

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The EISCAT Scientific Association is currently leading a Preparatory Phase project dedicated to the development of EISCAT\_3D, a new multistatic phased array incoherent scatter radar system, which will replace EISCAT's present generation of radars on the Scandinavian mainland. The EISCAT\_3D radar is planned to be the most advanced incoherent scatter radar yet constructed, combining capabilities for multiple beams, wide-scale volumetric imaging, small-scale aperture synthesis imaging and high flexibility in transmission and signal processing, along with greatly improved resolution and sensitivity compared to the existing EISCAT radars. The present Preparatory Phase study builds upon the work done in a design study which was funded by the European Union during the period from 2005 to 2009. The task of the Preparatory Phase is to resolve all of the remaining issues (technical, financial, logistical and political) which need to be clarified before construction can begin. This study is funded by the European 7th Framework; it began in October 2010 and will continue until September 2014. In this presentation, we will review the objectives of the Preparatory Phase study and summarise the current status. We will also look ahead to the challenges facing the project in the coming twelve months, and report on the various supporting actions which are supporting the development of EISCAT\_3D through a range of other funding sources. Some of these will be described in more detail by subsequent presentations in this session.