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PRINCIPAL LHCC DELIBERATIONS

5TH MEETING OF THE TOTEM RESOURCES REVIEW BOARD

13 OCTOBER 2009

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GENERAL

This document summarises the principal LHCC deliberations concerning TOTEM at the Committee's sessions in July 2009 and September 2009.

Progress was reported on the completion of the TOTEM experiment. However, the LHCC considers that the schedule for completion of the T1 Telescope prior to LHC beam in 2009 is aggressive.

CONCERNS FROM THE PREVIOUS TOTEM RESOURCES REVIEW BOARD

SUB-SYSTEM	CONCERN	STATUS
T1 Telescope	Completion of the construction of the T1 Telescope.	Progress has been made in the production of the T1 Telescope but it remains significantly behind schedule and its readiness for first LHC beam is very tight.

STATUS OF EXPERIMENT SUB-SYSTEMS

T1 AND T2 TELESCOPES

Progress has been made on the production of the T1 Telescope. The construction of the T1 Telescope is, however, significantly behind schedule. Construction of the first half of the T1 Telescope is now complete and the Cathode Strip Chambers (CSCs) for the second half, together with spares, have been delivered to CERN. Commissioning of the T1 Telescope is underway at the SPS test beam and the LHCC is looking forward to receiving the results from the test beam commissioning of the complete T1 Telescope, using the final DAQ, Detector Control System and offline software. Prior to installation of the T1 Telescope within the CMS envelope, a joint meeting between TOTEM and CMS should be arranged to discuss the ready-for-installation procedure as required by the latter.

Installation of the T2 Telescope is complete inside the CMS Hadron Forward Calorimeter (HF). Commissioning of the T2 Telescope is advancing well and much has been achieved over the past months.

ROMAN POT STATIONS

Good progress was reported on the Roman Pot detectors. All Roman Pot detectors are installed at the LHC together with their ancillary systems.

TRIGGER AND DAQ

The Trigger hardware is ready and a preliminary Trigger system will be available for testing soon. Much progress was reported on the DAQ and Detector Control System and the system is on track to be ready for LHC beam. All TOTEM sub-detectors need to be integrated and tested as a complete system using the global DAQ system.

SOFTWARE & COMPUTING

Progress was reported on the development of the offline software. An increased effort is needed to complete the software and to ensure that it is possible to run a complete analysis chain with all the TOTEM sub-detectors. The online software and analysis tools are at an early stage. Much work remains to be done in the area of databases.