

CERN-RRB-2010-024
23 MARCH 2010

PRINCIPAL LHCC DELIBERATIONS

28TH MEETING OF THE ALICE RESOURCES REVIEW BOARD
21 APRIL 2010

EMMANUEL TSESMELIS
SCIENTIFIC SECRETARY, LHCC

GENERAL

This document summarises the principal LHCC deliberations concerning ALICE at the Committee's session in February 2010.

The LHCC considers that ALICE has made excellent progress in all aspects of the experiment and the Committee congratulates the ALICE Collaboration on its achievements.

CONCERNS FROM THE PREVIOUS ALICE RESOURCES REVIEW BOARD

SUB-SYSTEM	CONCERN	STATUS
Silicon Pixel Detector (SPD)	Loss of pixel channels due to failures in the cooling.	Problem identified to be related to clogging in the cooling system. There is, however, no easy solution due to the inaccessibility of the Inner Tracking System and investigations are continuing.

STATUS OF THE EXPERIMENT

Most detector components operated smoothly during the first LHC beam run in 2009. One paper has been published and six more publications are in preparation.

The LHCC identified certain issues which it will monitor at its future sessions. Firstly, as a consequence of problems in the cooling system of the Silicon Pixel Detector (SPD), 20% of the pixel detectors were turned off during the 2009 run. This problem is now believed to originate from clogging in the cooling fluid lines. There is, however, no easy solution due to the inaccessibility of the Inner Tracking System and investigations are continuing. Secondly, there is a lack of computing resources available in time for the upcoming heavy-ion run. In addition, the funding situation in the United Kingdom, that may force the Birmingham group (which is responsible for the trigger system) to leave ALICE, is a concern to the Collaboration.

Finally, the scheduling for the upcoming heavy-ion runs in 2010 and 2011 were reviewed. The ALICE Collaboration pointed out that further accelerator simulation studies are required for proton-nucleon running in the future, which is an indispensable part of the ALICE physics programme. With respect to the installation of the remaining Electromagnetic Calorimeter (EMCAL) and Transition Radiation Detector (TRD) modules, a minimum shutdown duration of about three months would be required. The installation of these modules would significantly enhance the physics potential of ALICE.