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PRINCIPAL LHCC DELIBERATIONS

11TH MEETING OF THE COMPUTING RESOURCES REVIEW BOARD

24 APRIL 2007

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GENERAL

This document summarises the principal LHCC deliberations concerning the LHC Computing Grid (LCG) Project at the Committee's sessions in November 2006 and February and March 2007.

Commissioning of the LCG for the experiments is advancing well. Some delays have been noted in the deployment of the World-wide LCG (WLCG), most notably in the area of Storage Resource Manager SRMv2.2.

The experiments have also developed re-scaled computing models, adapting to the projected LHC luminosity with time. In particular, ATLAS, CMS and LHCb have pledged resources that are essentially in line with their requirements. However, care must be taken to ensure that the resources that actually become available are indeed what have been requested. The pledged resources for ALICE at present are less than what is required and discussions are underway to address this deficit.

CONCERNS FROM THE PREVIOUS COMPUTING RESOURCES REVIEW BOARD

SUB-SYSTEM	CONCERN	STATUS
Storage Management Systems	Performance and stability of storage management systems need to be improved. New version of Storage Resources Manager interface needs to be implemented in all mass storage systems.	The LHCC noted a considerable improvement in this area since the beginning of this year, but more work is needed to fully complete their deployment at the LHC.
Service	Overall stability of computing service needs to be improved. Complete test of the entire chain from the DAQ to the physics analysis is still lacking.	Overall stability has improved but has not yet reached the necessary level. The complete test remains to be done for all experiments.

LCG SUB-AREAS

MIDDLEWARE

Good progress was reported on the deployment of gLite-3.0. The gLite-3.0 has become the production middleware on Enabling Grids for E-science (EGEE) and all services are in production use.

DATA STORAGE

The LHCC noted a considerable improvement in this area since the beginning of this year, but more work is needed to fully complete their deployment at the LHC. It presently remains unclear whether the Dress Rehearsal scheduled for July 2007 will be able to use SRMv2.2 on either the dCache or CASTOR storage management services. The most critical issues concerning CASTOR have been addressed successfully and now the service needs to be deployed and tested in a production environment.

TIER CENTRES

The so-called Megatable, which provides the inter-relationship and bandwidth between Tier centres, is evolving. The transfer rate between Tier centres is improving but it still needs to be stabilised.