

CERN-RRB-2008-103  
31 OCTOBER 2008

# PRINCIPAL LHCC DELIBERATIONS

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14<sup>TH</sup> MEETING OF THE COMPUTING RESOURCES REVIEW BOARD

11 NOVEMBER 2008

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SCIENTIFIC SECRETARY, LHCC

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**GENERAL**

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This document summarises the principal LHCC deliberations concerning the World-wide LHC Computing Grid (W-LCG) Project at the Committee's sessions in May, July and September 2008.

The LHCC congratulates the W-LCG Project for realizing the computing system in time for first LHC beams. The W-LCG is ready to receive data from the LHC experiments and to provide services in production mode and good progress has been made by the experiments in their use of the W-LCG. The current infrastructure, based on the Enabling Grids for E-Science (EGEE) and the Open Science Grid (OSG), is funded until 2010 and the question of the long-term sustainability of the infrastructure is under discussion with the creation of the European Grid Initiative (EGI).

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**CONCERNS FROM THE PREVIOUS COMPUTING RESOURCES REVIEW BOARD**

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SUB-SYSTEM	CONCERN	STATUS
Fabric	Site stability and reliability are not yet at the desired level.	Reliability and stability have been improving steadily in 2008.  A number of performance metrics have been implemented, allowing for a better monitoring of the system performance.
Mass storage management	Deployment schedule extremely tight for Combined Computing Readiness Challenge CCRC08.	The deployment, configuration and usage of the Storage Resource Manager SRM v2.2 went well and an improvement of the service was noticeable.
Resources	Risk that not all resources of computing power and data storage will be available in time for the Combined Computing Readiness Challenge CCRC08.	Although the pledged resources do not yet fully match the experiment requirements, with the significant short-fall for ALICE being noteworthy, this did not result in any noticeable effect on the CCRC08.

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## W-LCG SUB-AREAS

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### MIDDLEWARE

Good progress was reported on the deployment of gLite-3.1 and the middleware is in place and functional. The deployment, configuration and usage of the Storage Resource Manager SRM v2.2 went well and an improvement of the service was noticeable.

### DATA STORAGE AND COMPUTING POWER

The pledged resources do not fully match the experiment requirements, with the significant short-fall for ALICE being noteworthy. This deficit did not result in any noticeable effect on the CCRC08.

### APPLICATION AREA

Good progress was reported on the Application Area, with no major concerns been identified.

### FABRIC

Good progress was reported on the Fabric, with no major concerns been identified. Reliability and stability have been improving steadily in 2008, and a number of performance metrics have been implemented, allowing for a better monitoring of the system performance.

### COMMON COMPUTING READINESS CHALLENGE (CCRC08)

The LHC experiments tested successfully their computing and analysis models to various degrees of complexity, validating the overall functionality of the system. During the CCRC08 exercise most of the project-wide and individual experiment performance and scalability targets were met. The only areas where this was not possible were in the large-scale study of the behaviour of the Tier infrastructure against chaotic usage of resources and the possible interference between experiments during tape recall for re-processing at the Tier-1 centres.