LCG PROJECT COMPREHENSIVE REVIEW

November 2004

Key Issues Identified in the Report

- The service provided by LCG-2 for the Data Challenges was much less than production quality. Inadequacies of the workload management and data management systems. The LHCC asks that the general reliability of the Grid services be tracked in terms of a pre-defined metric.

- Concern over gLite delivery - the LHCC has made the following recommendations concerning gLite:

  o a detailed plan for the release of gLite components must be provided, defining the functionality of each and the dates by which they will be delivered to the certification team for installation on the pre-production service,

  o testing of gLite needs to be continued,

  o debugging and commissioning of gLite needs to be approached with high priority,

  o individual pieces of gLite should be made available for deployment onto production LCG-2 sites and

  o current LCG-2 system has to be properly maintained in the meantime.

- The connection between LCG, gLite and the experiments is considered to be too weak

  o Grid-based analysis of the simulated data has barely begun.

  o ARDA and the experiments should also renew their efforts to ensure that the people involved in running the analysis on the gLite prototype are representative of the experiments.

- The LHCC noted that the type of Grid middleware to be installed at various university computing centers and national/regional organizations may differ.

  The LHCC recommends

  o the creation of a dedicated forum inside the LCG framework to coordinate and review the global Grid effort for LHC computing and

  o all Grids should be accessible via a common interface.

- Concern over delays in the new CASTOR disk pool management system.

- Applications

  o The major outstanding issues lie with the insufficient coordination between the Applications Areas and ROOT

  o The imminent reduction of manpower due to the transition from the development to the deployment, maintenance and support phases.

- The lines of responsibility and authority in the overall organization structure need further clarification.

- The Committee is of the position that efforts should now be focused on the software which is vital for the first year of LHC data-taking.