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CERN Awarded High-Performance Computing Prize at Supercomputing 2005

Geneva, 16 Nov 2005. CERN* has received the High Performance Computing (HPC) Public Awareness Award at a ceremony at Supercomputing 2005 in Seattle this week. Supercomputing 2005 is the foremost international conference for HPC. The award was presented by HPCwire, the leading HPC publication, as one of their 2005 Editors' Choice Awards, a category where the winner is determined by a panel of recognized HPC luminaries and contributing editors from industry. The award citation is for 'Outstanding Achievement in Creating Public Awareness for the Contributions of High Performance Computing', and reflects CERN's high visibility in scientific computing through its lead role in some of the world's largest and most ambitious international Grid projects.

CERN is leading the LHC Computing Grid (LCG) project** to build a Grid for the huge data storage and processing requirements of the Large Hadron Collider (LHC), CERN's new flagship facility, which is scheduled to start operation in 2007. The LCG project already involves more than 150 sites in over 30 countries worldwide. Four experiments at the LHC (ALICE, ATLAS, CMS and LHCb) are expected to produce some 15 Petabytes (millions of Gigabytes) each year, which will need the equivalent of 100,000 of today's processors to be analysed in search of elusive fundamental particles. CERN is also coordinating the EU-funded Enabling Grids for E-science (EGEE) project***, which involves 70 institutional partners in Europe, the US and Russia. EGEE aims to provide a production Grid infrastructure for all sciences. Already, over 20 applications from scientific domains including Earth observation, climate prediction, petroleum exploration and drug discovery are running on this infrastructure. CERN has also pioneered a novel form of industrial partnership, the CERN openlab, with partners Enterasys, HP, IBM, Intel and Oracle, which is testing and validating new hardware and software solutions from the partners in CERN's advanced Grid environment.

Receiving the prize on behalf of CERN, David Foster, head of CERN's network and communications group, said, "*this is a significant honour for CERN, and I really feel that all our institutional and industrial partners in LCG, EGEE and CERN openlab deserve to share in the credit for this. The Grid technology that is being deployed for the LHC is inevitably something that spans many institutions, all of whom are contributing to the broader public awareness concerning this new approach to high performance computing.*" Tom Tabor, publisher of HPCwire, said, "*HPCwire's Editors' Choice Awards indicate where those on the front lines of both commercial and academic high performance computing believe the cutting edge of technology lies. An overwhelming number of responses selected CERN for the Public Awareness category. This reflects CERN's outstanding image as an organization that pushes the boundaries of scientific computing.*"

Useful Links:

LCG public website: www.cern.ch/lcg

EGEE public website: <http://public.eu-egee.org/>

CERN openlab public website: www.cern.ch/openlab

GridCafé, CERN's public outreach website on Grids: www.gridcafe.org

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Notes for Editor:

*CERN, the European Organization for Nuclear Research, has its headquarters in Geneva. At present, its Member States are Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom. India, Israel, Japan, the Russian Federation, the United States of America, Turkey, the European Commission and UNESCO have Observer status.

**The mission of the LHC Computing Grid (LCG) project is to build and maintain a data storage and analysis infrastructure for the entire high energy physics community that will use the LHC. Discovering new fundamental particles and analysing their properties with the LHC accelerator is possible only through statistical analysis of the massive amounts of data gathered by the LHC detectors ATLAS, CMS, ALICE and LHCb, and detailed comparison with compute-intensive theoretical simulations.

***The EGEE project, funded by the EC initially for two years, aims to build on recent advances in grid technology and develop a service grid infrastructure which is available to scientists 24 hours a day. The project aims to provide researchers in both academia and industry with access to major computing resources, independent of their geographic location. The EGEE project identifies a wide-range of scientific disciplines and their applications and supports a number of them for deployment.