

### **Baltic Grid**

SIXTH FRAMEWORK PROGRAMME
RESEARCH INFRASTRUCTURES
COMMUNICATION NETWORK DEVELOPMENT

INTEGRATED INFRASTRUCTURE INITIATIVE

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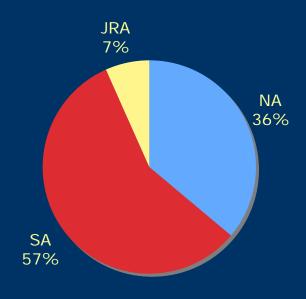
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http://www.balticgrid.org/



#### BalticGrid in One Slide

- Partners:
  - 10 Leading institutions in six countries in the Baltic Region and CERN
- Budget:
  - 3.0 M€ over 30 months
- Coordinator:
  - KTH PDC, Stockholm
- Compute Resources:
  - 17 resource centres
- Start:
  - 1 November 2005



**Effort by Activity** 

SA - Specific Service Activities
NA - Networking Activities
JRA - Joint Research Activities



## BalticGrid Objectives

- Sustainable integration of the research and educational computing and communication infrastructure in the Baltic States into the European Grid infrastructure.
- Enable the formation of effective research collaborations in the Baltic States, within Europe and beyond.
- Enabling an efficient sharing of unique instruments and data, as for instance environmental data related to the Baltic Sea.



### BalticGrid Approach

- Maximize use of human resources for Grid development and deployment by implementing the Baltic Grid as an extension of EGEE
  - Grid Operations coordinated with the EGEE North European Regional Operating Centre
- Assure manageable co-existence with other European Grids
  - NorduGrid, DEISA, CrossGrid,...
- Engage the Baltic States in Grid related policy and standards activities



#### BalticGrid Partners

- Estonian Educational and Research Network, EENet
  - The Network operator for the Estonian research and educational institutions. Working infrastructure for IPv6, maintainer of Estonian CA (EUGridPMA) and BalticGrid CA
- Keemilise ja Bioloogilse Füüsika Instituut, NICPB
  - Estonia's largest independent research institute in the areas of high-energy physics, chemical physics and biophysics with more than 100 researchers. Internationally recognized NMR effort. First Estonian internet connection. First Estonian grid enabled system.
- Institute of Mathematics and Computer Science, IMCS UL
  - Latvian leading research institute of mathematics and computer science. Hosts
     LATNET, the Latvian academic network operator, and is the GEANT partner in Latvia.
     Partner in BALTNET and host of the first BALTNET conference 1993.
- Riga Technical University, RTU
  - Technical university strong in materials science, architecture, E-learning. Latvian representative e-IRG.
- Vilnius University, VU
  - Leading university in Lithuania with 30 000 students. Strong areas are mathematics, physics and chemistry. Partner of LITNET



## BalticGrid Partners (cont)

- Institute of Theoretical Physics and Astronomy, ITPA
  - Lithuanian independent research institute in observatory astronomy and fundamental physics.
- Poznan Supercomputing and Networking Center, PSNC
  - Leading Polish HPCN centre. Responsible for the Polish academic and educational network PIONIER
     early 10G backbone. Partner in several Grid projects like CROSSGRID, GridLab and European Grid Support Centre. Member of the Globus Alliance
- Instytut Fizyki Jadrowej, im. Henryka Niewodniczanskiego, Polskiej Akademii Nauk, IFJ PAN
  - Research institute with 200 researchers in the areas of high-energy and subatomic physics and their application. Partner in Grid projects like CROSSGRID and EGEE. Close cooperation with the HPC centre CYFRONET
- Parallelldatorcentrum at Kungl Tekniska Högskolan, KTH PDC
  - Leading Swedish technical university. Nine years of experience in Grid technologies. EGEE Northern
    Europe Regional operating centre. Leads the EGEE Security JRA. GGF security area director.
    Founding member of the Globus Alliance. Partner in SWEGRID. Founder of the European Grid
    Support Centre
- CERN
  - Leading European Centre in High-Energy Physics and Grid technologies. Leader of EGEE.



## Eight Activities

- Networking Activities
  - NA1: Management of the I3
  - NA2: Education, Training, Dissemination and Outreach
  - NA3: Application Identification and Support
  - NA4: Policy and Standards Development
- Specific Service Activities
  - SA1: Baltic Grid Operation
  - SA2: Network Resource Provisioning
- Joint Research Activity
  - JRA1: Account Service Level Agreements Markets and Dynamic Account Management



## Relationship to EGEE and other Grid Projects

- Collaborating or Related Grid Projects
  - EGEE
    - Infrastructure, Operations
  - ICEAGE
    - Education and Training
  - BELIEF
    - Dissemination and Outreach
  - elRGSP
    - Policy and Standards Development



# Relationship to EGEE and other Projects

- Middleware
  - gLite
- Infrastructure
  - EGEE
- Applications
  - Application Pilots
  - Regional Special Interest Groups
- ETDO
  - Own activities as well as join(t) activities with EGEE(-II) and ICEAGE
- Policy Issues
  - NA4: Policy and Standards Development
    - elRG
    - GGF
    - EUGridPMA