



DISSEMINATION REPORT

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Abstract:

This document is a report on the dissemination activities that were carried out by the whole BalticGrid consortium during the second year of the Project. The document summarizes all kinds of the NA2 activities and events held in this period.



DISSEMINATION REPORT

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LIST OF ACRONYMS

AHM	All-Hands Meeting
ALs	Activity Leaders
BG	BalticGrid
CERN	The European Organization for Nuclear Research, Geneva, Switzerland
GGF	Global Grid Forum
EENet	Estonian Educational and Research Network, Tartu, Estonia
EGEE	Enabling Grids for E-science, EU project
ETDO	Education, Training, Dissemination and Outreach (NA2)
HEP	High-Energy Physics
ICEAGE	International Collaboration to Extend and Advance Grid Education, EU project
ICFA	International Committee for Future Accelerators
IMCS UL	Institute of Mathematics and Computer Science, University of Latvia, Riga, Latvia
IFJPAN	Institute of Nuclear Physics, Polish Academy of Sciences, Kraków, Poland
ISSeG	Integrated Site Security for Grids, EU project
IST	Information Society Technologies
ITPA	Vilnius University Institute of Theoretical Physics and Astronomy, Lithuania
JRA1	Joint Research Activity 1: Service Level Agreement Markets and Dynamic Account Management
KTH	Royal Institute of Technology, Stockholm, Sweden
NA1	Networking Activity 1: Management of I3
NA2	Networking Activity 2: Education, Training, Dissemination and Outreach
NA3	Networking Activity 3: Application Identification and Support
NA4	Networking Activity 4: Policy and Standards Development
NICPB	National Institute of Chemical Physics and Biophysics, Tallinn, Estonia
PD	Project Director
PMB	Project Management Board
PSNC	Poznan Supercomputing and Networking Center, Poznan, Poland
RTU	Riga Technical University, Riga, Latvia
SA1	Specific Service Activity 1: Grid Operations
SA2	Specific Service Activity 2: Network Resource Provisioning
SICS	Swedish Institute of Computer Science
VU	Vilnius University, Vilnius, Lithuania



REFERENCES

- [WEBSITE] BalticGrid DNA2.2 deliverable: BG Dissemination Website
http://www.balticgrid.org/Results/Deliverables_final/BG-DNA2.2-v0.4-IFJPAN-BGDisseminationWebsite.pdf
- [ROADMAP] BalticGrid DNA2.3 deliverable: Dissemination Roadmap
http://www.balticgrid.org/Results/Deliverables_final/BG-DNA2.3-v0.5-IFJPAN-DisseminationRoadmap.pdf
- [REVISION] BalticGrid DNA2.5 deliverable: Dissemination Roadmap-Revision
http://www.balticgrid.org/Results/Deliverables_final/BG-DNA2.5-v1.0-IFJPAN-DisseminationRoadmap-Revision.pdf



1. INTRODUCTION

1.1. PURPOSE OF THE DOCUMENT

The objective of the Dissemination Report is to present the summary of the planned NA2 activities after the second year of the Project life. The activities were carried out in order to promote the technical and scientific Project results and ensure the widest possible use of knowledge derived from the Project. The report will describe the activities carried out by the BG Consortium, performed in two directions:

- Education and Training – consisting in helping administrators of the Grid infrastructure and users of the research community from Lithuania, Latvia and Estonia acquire necessary knowledge and experience with Grid computing,
- Dissemination and Outreach – with aims to spread awareness of the Project and knowledge on Grid computing to a wider community of potential users in the Baltic States as well as on promoting the Project on the European stage.

1.2. EXECUTIVE SUMMARY

The goal of the BG project is to extend the European Grid by integrating new partners from the Baltic States (Lithuania, Latvia and Estonia) in the European Grid research community and to foster the development of the Grid infrastructure in these countries. To this end, the BG consortium has enlisted the help of experienced EU Grid computing centers whose aim is to guide our new partners through the process of deploying Grid resources and applications at their respective institutions.

In the context of the Project, a number of dissemination activities were performed, all in order to ensure the applicability of the Project results, increase the usability of its applications and boost the Project's recognition within the Grid community.

The following issues are brought up in this document.

Objectives of the NA2 activity

The main tasks of the NA2 will be presented in this section.

Cooperation with the Project Partners and its managerial bodies in the framework of NA2

Common work within the NA2 team, as well as cooperation with Partners, ALs and PD will be described here.

The dissemination report

A separate detailed report presents the various kinds of dissemination activities performed during the second 12 months of the Project life. The description will comprise three parts: central, local and internal activities. This section of the document includes short information on each of the performed tasks. Extended descriptions of most of the activities are enclosed in appendices.

Fulfillment of the plan

The degree of the fulfillment of the activities planned in the Dissemination Roadmap and Dissemination Roadmap – Revision deliverables will be described here.

Appendices

At the end of the document the following appendices have been enclosed.

A. Long descriptions of events organized at the central level



- B. BG customer feedback form
- C. BG event evaluation form
- D. BG dissemination activities delivered by the BG partners



2. OBJECTIVES OF THE NA2 ACTIVITY

The objectives of this activity are twofold:

1. to transfer Grid skills from the more experienced Project partners to new participants from the Baltic States so as to ensure the creation of a viable Grid community in these states
2. to spread awareness of the Project to a wider community of users and Grid specialists from the participating countries as well as from other EU Member States.

The Education and Training task focuses on integrating prospective users into the BG community as well as creating a trained group of Grid users and administrators in the Baltic States. The Dissemination and Outreach task focuses on spreading knowledge on Grid computing to a wider community of users in the Baltic States as well as on promoting the Project on the European stage.



3. COOPERATION WITH THE PROJECT PARTNERS AND ITS MANAGERIAL BODIES

The BG NA2 Team consists of:

- the NA2 leader group: Zofia Mosurska, Robert Pajak, Michal Turala - from IFJ PAN, Krakow, Poland,
- dissemination contact persons – representatives of all BG Partners:
 - Inger Karlsson, KTH, Sweden
 - Hardi Teder, EENet, Estonia
 - Andi Hektor, NICPB, Estonia
 - Baiba Kaskina, Inara Opmane, IMCS UL, Latvia
 - Mirosław Kupczyk, PSNC, Poland
 - Dalius Mazeika, VU, Lithuania
 - Olgerts Belmanis, RTU, Latvia
 - Grazina Tautvaisiene, ITPA, Lithuania
 - Florida Estrella, Rolandas Naujikas, CERN, Switzerland

The NA2 leader is in charge of defining the strategic options of the Project dissemination and implementing the dissemination activity in close cooperation with all the participants of the BG consortium.

3.1. COOPERATION WITHIN NA2 TEAM

The rules of cooperation between the NA2 leader and dissemination contact persons enforced by this activity from the beginning of the Project have been implemented in the following way:

- Every Partner identified a contact person responsible for dissemination within his/her institution/community and for actively supporting NA2 activities at the central level. These persons:
 - distributed information received from the NA2 leader among BG members and other interested parties at their respective institutions;
 - provided information on their dissemination activities every month, as input for:
 - dissemination reports before P12 and P24, as well as quarterly reports,
 - BalticGrid web pages – to keep them up to date,
 - brochures, posters and presentations.

IFJ PAN collected the data through specially-prepared questionnaires.
- The NA2 leader supported local dissemination activities carried out at the Partners' institutions.
- Regular contacts and cooperation between the NA2 leader and Dissemination Contact Persons were performed mainly through e-mail announcements and action lists sent by the NA2 leader as well as through face-to-face meetings organized in order to:



- discuss current activities and plans;
- update all partners on NA2 work progress, plans, events, decisions, etc.

3.2. COOPERATION WITH PROJECT PARTNERS

As stated in [ROADMAP], in the framework of cooperation with NA2, the following roles have been assigned to BG partners:

- EENet, NICPB, IMCS UL, VU, RTU, ITPA (partners from the Baltic States) – spreading information on the Project and its achievements via local seminars, partners' websites and local news media, as well as promoting BG activities during conferences and workshops; organizing BG conferences, Grid Summer Schools, Grid Open Days and exhibitions;
- KTH, IFJ PAN, PSNC, CERN – helping prepare programs and conduct tutorials, Summer Schools, exhibitions and seminars; supporting preparation of disseminative materials;
- IFJ PAN (NA2 leader) – planning, organizing events on the central level and coordinating all NA2 activities.

The results of fulfilling these roles by all Partners after the second year of the Project life are presented in further sections of this document.

3.3. COOPERATION WITH PD AND ALS

In the framework of cooperation with NA2, the following tasks were fulfilled by PD and ALs:

- approval of NA2 actions, dissemination materials, documents – the actions undertaken by the NA2 leader were discussed with PD and ALs usually by e-mail or during weekly PMB meetings; the PMB members were also provided with draft versions of brochures, posters, deliverables and other materials; PMB comments helped the NA2 leader prepare final versions of all mentioned materials and documents; PD and ALs also supported NA2 in organization of Project events;
- providing information on the progress of each Activity (results, achievements, news); this information was subsequently used in the BalticGrid website, and also as material for Project brochures, posters, presentations, etc.;
- maintenance of Activity web pages, containing more detailed and up-to-date information useful for potential users of the BG infrastructure or people interested in BG applications (VO descriptions, application forms, instructions and related links).



4. THE DISSEMINATION REPORT

4.1. STRUCTURING THE DISSEMINATION EFFORTS

According to the plans presented in [ROADMAP], the dissemination activity in the context of BG has been split into two distinct levels: internal (in the framework of the BG consortium) and public. The latter includes local (national) and central sub-levels. It was quite important to promote Project objectives and results at all these levels since they are complementary and hierarchically support one another.

4.2. CENTRAL ACTIVITIES

The activities carried out within the framework of the central dissemination are initiated and coordinated by the NA2 leader (IFJPAN) and the PD. The tasks of the central dissemination team are presented below:

- organization of BG events,
- creation, development and maintenance of the Project website,
- creation and distribution of disseminative materials,
- building the BG corporate image,
- maintaining a web repository for BG publications, presentations and results achieved at various Project stages as well as final versions of deliverables,
- distributing information about Grid events and news,
- participation and promotion of the Project at Grid events held outside the Baltic States,
- cooperation with related projects,
- searching for and support in contacting audiences.

4.2.1. Organization of BG events

Several relevant events – conferences, workshops, tutorials, Grid summer schools, exhibitions, Grid Open Days – have been organized by the BalticGrid project partners in collaboration with the NA2 Team and the PD. The events are listed below in a chronological order.

3rd BalticGrid All-Hands Meeting with Grid Open Day and Grid Tutorial, Tallinn, Estonia, 15 – 17 May 2007

The third All Hands Meeting (AHM3) was held at the Estonian Academy of Science and National Institute of Chemical Physics and Biophysics (NICPB), Tallinn, Estonia, from May 15 to May 17 2007. AHM3 was arranged by the High Energy Physics group at the NICPB.

The meeting was divided between three days. The first day had an open public seminar with the general introduction to the Grid, so called Grid Open Day. Potential users of the parallel computing joined this meeting. In the same day a practical tutorial session was held to introduce the Grid and some applications of Grid. The tutorial comprised basics and advances of the Grid. The second day was devoted to the plenary sessions of the BG project. The third day had parallel sessions for all the activities of the project. The meeting ended with a joint conclusion session.

More info in Appendix A.



2nd BG Summer School, Riga, Latvia, 2 – 6 July 2007

The 2nd BalticGrid Summer School (http://www.balticgrid.org/Dissemination/Events/2nd_BG_SummerSchool/) took place in the Faculty of Telecommunications and Electronics of Riga Technical University in Riga, Latvia from 2 to 6 July 2007. It was organized by both BalticGrid partners from Latvia: RTU ETF and IMCS UL in collaboration with the BG consortium.

The summer school program was 5 days long and consisted of lectures and practical work. The first day lectures and hands-on tutorial were dedicated to the general introduction and presentation of the Grid Computing opportunities. Lectures and exercises on various aspects of applications grid-enabling covered the next 3 days. The last day of the school was devoted to significant Grid security issues.

The total number of participants was 18.

More info in Appendix A.

The Seventh Cracow Grid Workshop (CGW'07), Cracow, Poland, 15 – 17 October 2007

The Seventh Cracow Grid Workshop (www.cyfronet.pl/cgw07/) was organized jointly by the Academic Computer Centre CYFRONET, IFJ PAN, the Institute of Computer Science AGH and Jagiellonian University, Collegium Medicum, Kraków in the framework of EU IST grid projects: EGEE, Int.eu.grid, GREDIA, CoreGRID, K-WfGrid, BalticGrid, EUChinaGrid and ViroLab.

About 150 participants representing many EU countries took part in the Workshop. During the event several keynote lectures were given, among others by Norbert Attig from John von Neumann Institute for Computing, ZAM, Juelich, Germany, Carole Goble from Department of Computer Science, University of Manchester, UK, Dieter Kranzlmüller from Johannes Kepler University Linz, Austria, Peter Sloot from University of Amsterdam and Hai Zhuge from the Institute of Computing Technology, Chinese Academy of Sciences, China. Almost 100 contributed papers, accepted for presentation during the Workshop, provided a very good overview of the research activity in the area of Grid computing. This international meeting covered current advances in research in Grid systems and Grid applications, overviews of research in the main European Grid projects, overviews of national Grid projects and the Chemomomentum Tutorial. Among the contributed papers 4 papers have been delivered by the BalticGrid members, which concerned some tools developed within the framework of the BG project as well as results of investigation obtained using RTU cluster connected to BG VO for running small size tasks. The papers will be published in conference proceedings after the conference. During the conference a number of BalticGrid brochures have been distributed among the participants.

4.2.2. Creation, development and maintenance of the Project website

During the second year of the Project life the BG website (see Fig.1 below) was continuously maintained. Although no new big sections have been created, the contents of the existing ones have been extended and updated.

All information regarding the structure and content of the BG Dissemination Website can be found in the corresponding deliverable [WEBSITE].

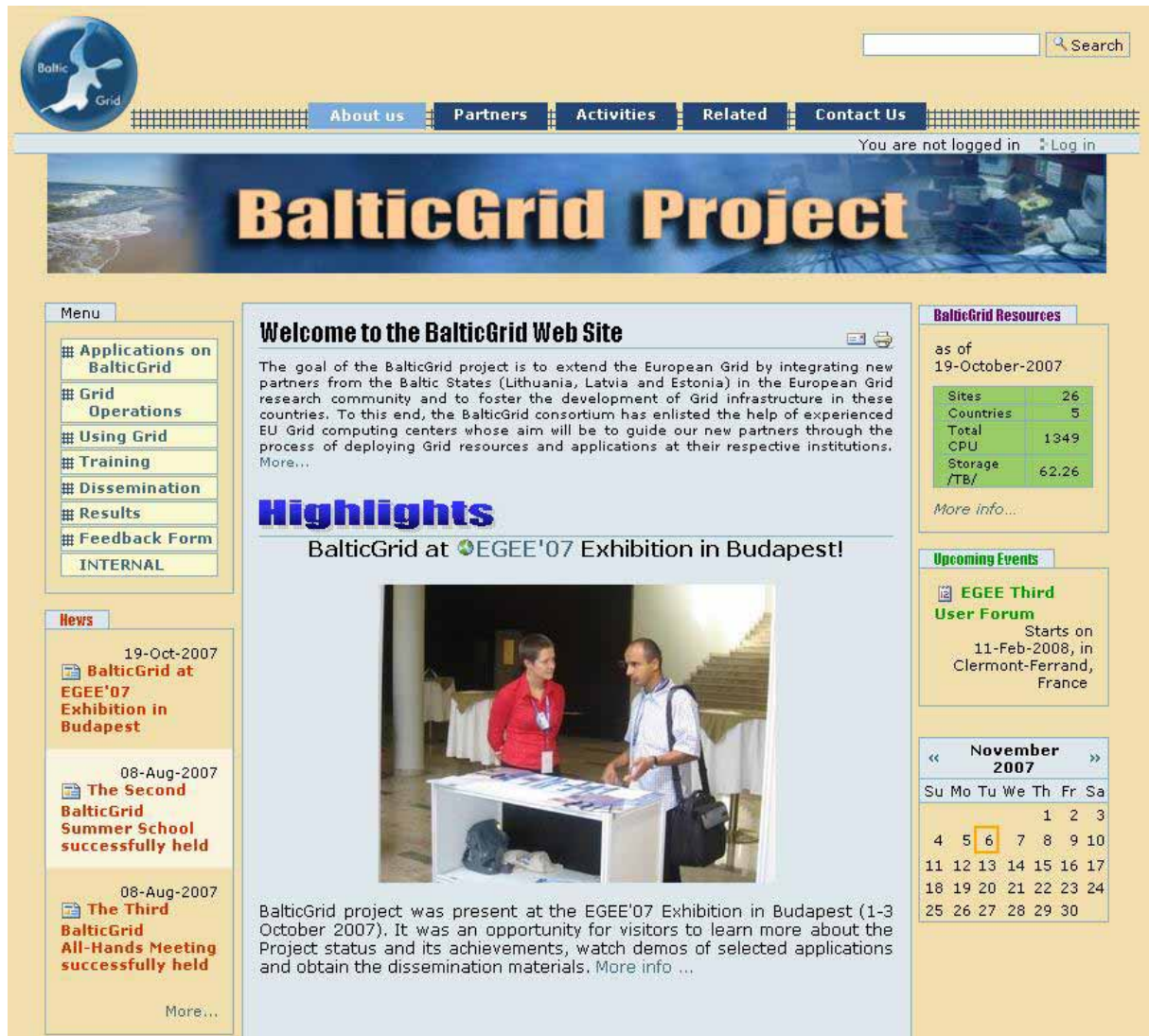


Fig. 1: BG main website

Web usage reports

A Web statistics tool (WebLogExpert) was continuously being used, to allow monitoring of section usage patterns.

Sample data covering the second year of the Project (November 2006 – October 2007) is presented below. Full reports are available in the Internal section of the BG website.

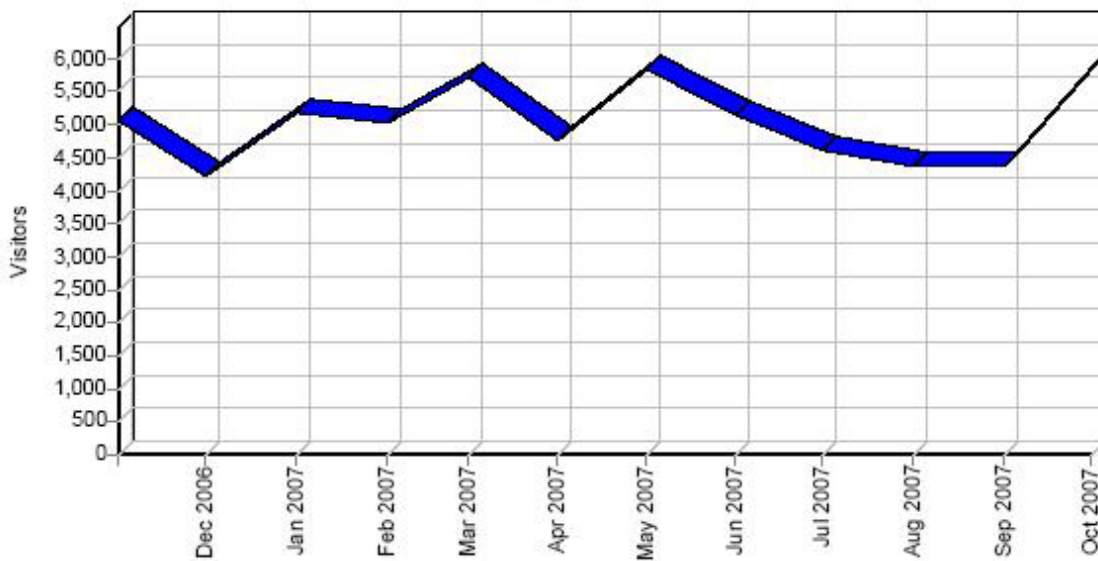
Summary

Hits	
Total Hits	1,206,339
Average Hits per Day	3,305
Average Hits per Visitor	20.04
Page Views	

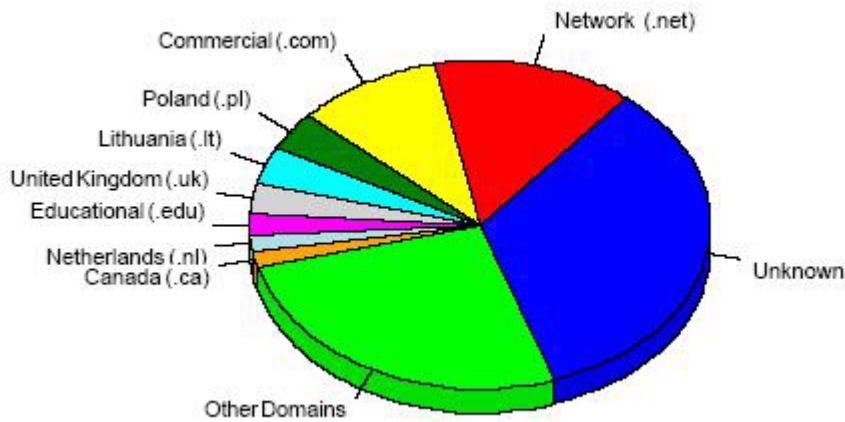


Total Page Views	123,840
Average Page Views per Day	339
Average Page Views per Visitor	2.06
Visitors	
Total Visitors	60,206
Average Visitors per Day	164
Total Unique IPs	36,259

Daily Visitors
Activity by Month



Top 10 level domains





Reference:

Page View – a request for a page file.

Total Unique IPs – a number of different user IP addresses or domain names.

Visitor – The program determines number of visitors by the IP addresses. If a request from an IP address came after some time (timeout) since the last request from this IP, it is considered to belong to a different visitor.

4.2.3. Creation and procurement of disseminative materials

During the second year of the Project life a number of advertising materials for the BG project have been produced and distributed through various channels during international workshops, conferences, exhibitions, seminars, BG Grid Open Day and Summer School that were directly organized by the Project or in which Project participants took part. They are described in chronological order below.

The updated general BG brochure was elaborated in April 2007. It consists of four A4 pages. The cover pages accommodate the general BG info and contact details. The two remaining pages are devoted to the BG activities' achievements and were produced using information provided by Project ALs. The brochure was printed on high quality glossy paper and in a run of 500 copies. The brochure content has been revised, in order to include elements of the Project's progress. It has been presented for the first time during the 3rd AHM and Grid Open Day in Tallinn (15-17 May 2007).

Preparation of the multimedia presentation showing the status and main achievements of the Project has been finished in April 2007. The presentation (in MS PowerPoint) includes about 40 animated slides, two recorded demos and a voice narration. It is a general BG project presentation intended for a broad audience. It was displayed at the BG stand during the OGF20 / EGEE User Forum in Manchester, in May 2007 and during the EGEE'07 conference in Budapest, in October 2007. It is also available from the BG website (Dissemination section, Presentations).

BG technical components' poster on JRA1 achievements – roll stand (200 x 80 cm). was prepared. It was displayed at the BG stand during the OGF20 / EGEE User Forum in Manchester, the 3rd BG AHM in Tallinn in May 2007 as well as during the EGEE'07 conference in Budapest.

The second, improved version of the Customer Feedback Form has been elaborated in April 2007. It consists of two parts - an introduction and a questionnaire - where potential users have the opportunity to express their needs concerning the use of the Grid infrastructure, adapting their application to the Grid, or join one of the BG SIGs. The new version of the Form is presented in the Appendix B. It has been distributed among participants of the OGF20/EGEE User Forum and EGEE'07 conference, who visited the Project stand.

A new BG technical brochure: "OCM-G - Grid-enabled OMIS-Compliant Monitoring system" has been prepared in April 2007. The brochure presents the introduction to the OCM-G, key features, examples of use as well as related projects. It was distributed during the OGF20 / EGEE User Forum in Manchester and the EGEE'07 conference in Budapest.

The new technical brochures dedicated to the BG pilot applications have been prepared in September 2007: "The SyntSpec Technical Brochure for BalticGrid" - describing the SyntSpec application and "Deformation calculations of composite structures by ANSYS & Grid" - outlining the gridification of the ANSYS software and adjustments of it for the calculations of Riga Technical University, Institute of Material Sciences. They were distributed during the EGEE'07 conference in Budapest, Hungary, in October 2007.

Three demos have been elaborated in September 2007, concerning: the ANSYS application, the Stellar Spectra Modeling and the BalticGrid Special Interest Groups.



Several posters have been elaborated in October 2007: “Recent Extensions in Application Monitoring System OCM-G”, “A Performance Visualization Tool – Candle”, “View on Site Efficiency with Batch System Analysis Tool”. They were presented during CGW’07 in Krakow.

Three new technical brochures: dedicated to the BG Grid Operations activity (SA1) and describing the next BG applications have been prepared in October 2007: “Grid Operations”, “Vilnius Parallel Shell Model Code (VPSM) for large-scale nuclear structure calculations“ and “Calculation of atomic characteristics with FAC and VMAS codes”. They are available at the following URL: <http://www.balticgrid.org/Dissemination/Brochures/>.

BG pens with the Project logo and Project website’s URL were distributed among the participants of the OGF20 / EGEE User Forum in Manchester, UK, in May 2007, 3rd BG AHM in Tallinn, Estonia, in May 2007 and EGEE’07 conference in Budapest, Hungary, in October 2007.

BG T-shirts with the Project logo were distributed among the participants of the 2nd BG Summer School in Riga, Latvia (in July 2007).

4.2.4. Building the BG corporate image

Another task of central dissemination was to continue the process of building a strong corporate image and style of BG in order for BG to be easily recognizable:

- A BG logo was used in all new and updated dissemination materials, ranging from websites to fact sheets, reports, brochures, posters and other promos.
- Several templates made available to all Project partners in the first year of the Project life were continuously being used in its second year – i.e. for PowerPoint presentations, technical brochures, news releases and posters, for adaptation of material to custom languages. Every Project participant has been using these elements while preparing local disseminative materials.

4.2.5. Maintaining a repository for BG publications, presentations and final versions of deliverables

A Dissemination section of the BalticGrid website were maintained and updated. It contains all kinds of BG publications together with presentations concerning the Project, delivered by its representatives at various events.

The final versions of the BG deliverables are available in the Results section.

4.2.6. Distributing information about Grid events and news

This kind of information was distributed using the following channels:

- the Events section on the BG website – it informs about European Grid events as well as BG events,
- the News section on the BG website – it contains BG news.

The most important news and events are advertised on the BG home as Highlights.



4.2.7. Participation and promotion of the Project at Grid events held outside of Baltic States

BalticGrid members have been present at the following Grid-related events during the second year of the Project:

The ADAS workshop, The University of Strathclyde, Abingdon, UK, 12-14 November, 2006

Zenonas Rokus Rudzikas (VU) took part in this event and gave a talk titled “Modelling of Thermonuclear plasma and GRID technologies”.

eIRG conference, Helsinki, Finland, 20 November 2006

Ilmars Slaidins (RTU) participated in this conference.

IST 2006 conference, Helsinki, Finland, 21 – 23 November 2006

RTU BG project team (I. Slaidins, J. Kulins, L. Cikovskis, Z. Strods, A. Steinbergs) participated in this event. During workshops of the conference they obtained important and useful information on EU FP7 projects and priorities.

Lecture at the Technical Open University AGH, winter semester 2006, computer science series, Krakow, Poland, 25 November 2006

Michal Turala (IFJPAN) gave a lecture titled “LHC Experiments and the World Wide Grid for Physics”.

CoreGRID Demo Case - Reliability in Production Grid Environments Achieved by Multi-level Check pointing, Nice, France, 27 November - 1 December 2006

Mirek Kupczyk (PSNC) participated in this event with a demo. Migrating Desktop Platform was demonstrated as the Grid User Interface in order to show Multi-level Check pointing. The guests were encouraged to use MD with its feature focusing on the running of grid jobs in the unreliable grid environment. More than 250 people watched the demonstration.

LHCb Week, National Computing Board meeting, Geneva, Switzerland, 28 November 2006

Mariusz Witek (IFJPAN) took part in this meeting and gave a talk titled “BalticGrid and LHCb”.

4th TERENA NRENs and Grids Workshop, Amsterdam, the Netherlands, 6 December 2006

Baiba Kaškina and Katrina Sataki (IMCS UL) took part in this event and gave talk titled “SLAs in the BalticGrid project”.

9th EUGridPMA meeting, Abingdon, UK, 15-17 January, 2007

Hardi Teder (EENet) participated in this meeting and represented Baltic Grid Certification Authority.

Information Day in Brussels, Belgium, 6 February, 2007

Olgerts Belmanis (RTU) took part in this event and presented a poster titled “RTU ETF Grid Cluster”.



“IT Technology Pioneers” session during the GridwiseTech Business Workshop, Krakow, Poland, 22 February 2007

Robert Pajak (IFJPAN) distributed the BG general brochure among the 170 participants of the “IT Technology Pioneers” session during the GridwiseTech Business Workshop.

Spanish Conference on e-Science Grid Computing, Madrid, Spain, 1-2 March 2007

Olgerts Belmanis (RTU) took part in this event and gave a talk titled “Baltic Grid for e-Science development in Baltics”.

Lecture at CERN, Geneva, Switzerland, 16 March 2007

Rolandas Naujikas (CERN) gave a lecture titled “The BalticGrid Project”. The talk covered the BalticGrid project and the technical activities of the author at CERN. It also included the status of the BalticGrid infrastructure and issues related to gLite and operations.

EGEE User forum, Manchester, UK, 8-10 May, 2007

Zofia Mosurska, Robert Pajak, Tadeusz Szymocha (IFJPAN) and Bartek Palak (PSNC) were managing the BalticGrid booth during the EGEE UF and OGF 20 exhibition. The following materials were presented: Project multimedia presentation, brochures, posters (Project general poster, and two technical ones: “Migrating Desktop Platform framework for grid Applications” and “JRA: Service Level Agreement - Markets and Dynamic Account Management”) and pens. About 500 persons visited the BG stand asking about the Project in general as well as looking for answers to some more technical questions. The stand was a great success of the Project and increased its visibility among other Grid projects and initiatives.

BG members were also visible on plenary sessions of EGEE UF:

- Kristaps Džonsons (IMCS UL) presented a poster titled “Prolog-MPI developments”,
- Algimantas Juozapavičius (VU) gave a talk titled “BalticGrid Special Interest Groups (SIG)”.

In addition, during this event a BOF meeting was co-organised by PSNC. The goal was to start a research group (called RISGE – “Remote Instrumentation in Grid Environment”) with engagement of BalticGrid community.

TERENA Networking Conference, Copenhagen, Lyngby, Denmark, 21 - 24 May, 2007

Baiba Kaškina, Jānis Ķikuts, Katrina Sataki (IMCS UL) took part in this event and presented a poster on BalticGrid which illustrated the achievements of the Project including the established infrastructure and Grid clusters, different application areas targeted and future plans as well as the contact details.

10th EUGridPMA meeting, Istanbul, Turkey, May 30 - June 2, 2007

Hardi Teder (EENet) participated in this meeting and represented Baltic Grid Certification Authority.

NorduGrid Conference, Copenhagen, Denmark, 24 - 28 September, 2007

Algimantas Juozapavičius (VU) took part in this event and gave a talk titled “LitGrid infrastructure and services”.



EGEE'07 Conference and Exhibition, Budapest, Hungary, 1-5 October, 2007

Robert Pajak (IFJ PAN), Baiba Kaskina (IMCS UL) and Bartek Palak (PSNC) were managing the BalticGrid booth during the EGEE'07 conference in Budapest (1 – 3 October, 2007). The following materials were presented: the Project multimedia presentation, the Project general poster, brochures and pens. Additionally, the ANSYS application of the BG project was displayed as an off-line demo presenting its integration with the Migration Desktop and visualization of the results. This demo was prepared by IMCS UL.

Many participants of the EGEE'07 conference visited the BalticGrid stand showing interest in this project in general as well as looking for answers to some more technical questions. The stand staff was asked by visitors about the middleware used in the Project, the Migrating Desktop user interface as well as applications developed within the framework of the Project.

Two BalticGrid applications have been accepted for a special DEMO session: “The Stellar Spectra Modeling as an example of data- and compute-intensive application running on the BalticGrid Project testbed” (presented by Bartek Palak (PSNC) and Sarunas Mikolaitis (ITPA)) and “BalticGrid Special Interest Groups” presented by Dr. Margarita Kazakeviciute (VU). The demonstrations took place on Tuesday, 2 October 2007, in the separate demo stand.

Altogether, the stand was a great success of the Project and increased its visibility among other Grid projects and initiatives.

Janis Kulins and Artis Steinbergs (RTU) also participated in this conference.

The Seventh Cracow Grid Workshop (CGW'07), Krakow, Poland, 15 – 17 October 2007

Olgerts Belmanis and Janis Kulins (RTU) took part in this event and presented a paper titled “Efficiency of Small Size Tasks Calculation in Grid Clusters Using Parallel Processing”.

Tomasz Duszka, Jakub Janczak, Tomasz Szepieniec (IFJ PAN) took part in this event and presented two posters: “Recent Extensions in Application Monitoring System OCM-G” and “A Performance Visualization Tool – Candle”.

Marcin Radecki, Michal Zajac (IFJ PAN) took part in this event and presented a poster titled: “A View on Site Efficiency with Batch System Analysis Tool”.

Additionally, during the conference a number of BalticGrid brochures have been distributed among the participants.

The eChallenges 2007 Conference & Exhibition, Hague, The Netherlands, 24 - 26 October 2007

M. Jankowski, N. Meyer (PSNC) took part in this event and presented a paper titled “Dynamic User Management in the BalticGrid Project”.

International ICFA Workshop on Digital Divide Issues for Global e-Science, Mexico City, Mexico, 24 - 27 October 2007

M. Turala (IFJ PAN) took part in this event and presented a paper titled “Networking and Grid in Poland and Eastern European Countries”.



4.2.8. Cooperation with related projects

To support educational and dissemination activities as well as developing concrete products in terms of Grid infrastructure and applications, the BalticGrid consortium continued to focus on strengthening collaborative links among the related projects.

Joint activity was principally planned with EGEE. Various activities were performed in the framework of cooperation between BalticGrid NA2 and the NA2 (Dissemination and Outreach) and NA3 (Training and Induction) of the EGEE project. In the framework of this cooperation BG NA2 provided materials for:

- the “Expanding the Reach of EGEE” poster (<http://egee-na2.web.cern.ch/egee-na2/files/material/RP-Infra-poster-1-0-final.pdf>) - it described the collaboration and interaction among the following projects – EGEE, BalticGrid, EELA, EUChinaGrid, EUIndiaGrid, EUMedGrid and SEE-GRID-2; it included the current status of the infrastructure in terms of the number of sites, the supported middleware, networks used, among many things; it was presented for the first time during the EGEE User Forum in Manchester, in May 2007,
- the “Achievements of projects collaborating with EGEE” booklet (<http://egee-technical.web.cern.ch/egee-technical/related-projects/docs/EGEE07-RPbooklet.pdf>) distributed during EGEE’07 conference in Budapest, in October 2007,
- “e-Infrastructure – Computer and Network Infrastructures for Research and Education in Europe” - set of brochures.

BalticGrid actively took part in EGEE II events:

- the EGEE User Forum in Manchester, May 8 - 10 , 2007 with Project stand and presentations,
- the EGEE’07 Conference in Budapest, October 1 - 3, 2007 with Project stand and demos.

Additionally, BG members were involved in Baltic States national Grid initiatives: LitGrid (<http://www.litgrid.lt/>), LatvianGrid (<http://grid.lumii.lv/>), EstonianGrid (<http://grid.eenet.ee/en/>) as well as participated in working groups’ meetings of international organizations (OGF) – more info in section 4.2.7.

4.3. LOCAL ACTIVITIES

4.3.1. Maintenance of Partners’ websites

During the second year of the Project life all Partners were continuously maintaining specific websites within their institutes to locally promote the Project. These websites are devoted for presenting the Partners’ role, their tasks in BalticGrid as well as announcing related events and results achieved by Partners.

4.3.2. Local promotion of the Project

To promote the Project in the Baltic countries, the BG partners have organized the following events:

- the Grid Open Day in Tallinn,
- the Grid tutorials in Tallinn, Kaunas and Vilnius,



- the Grid summer school in Riga,

as well as arranged:

- meeting with representatives of Lithuanian Universities to discuss the strategic question of NGI activities for the year 2007; discussions about BalticGrid project future were involved,
- meeting with representatives of Ministry of Science and Education to discuss the possibilities to support NGI activities for the year 2007,
- meeting to present BalticGrid infrastructure and activities to linguistic researches from Center of Computational Linguistic and Faculty of Philology of Vilnius University and to involve linguistic researches into SIG activities as well as to discuss about possibilities to use linguistic software in BalticGrid,
- meeting with ANSYS Inc. representatives in Lithuania in order to talk about possibilities to use ANSYS software in BalticGrid,
- meeting with researchers from Vilnius Gediminas Technical University to encourage scientists and researchers from this university to use BalticGrid infrastructure for solving their problems as well as to talk about further collaboration possibilities and VGTU participating perspectives in future BalticGrid2 project,
- meeting with researchers from Klaipeda University – to more encourage researchers to join BalticGrid SIG activities and to discuss how to grid enable their application,
- meeting with representatives from the Lithuanian Ministry of Science and Education to discuss the details of financial support NGI activities for the years 2007-2012,
- several meetings, courses and seminars in their local institutions to advertise the Project among local researchers, students and interested people.

In order to promote the Project, the Baltic States Partners also undertook the following activities:

- elaboration of articles concerning BG printed in local newspapers (see section 4.3.5);
- participation in interviews/auditions concerning BG presented in local radio stations and on Grid Café website (see section 4.3.5);
- maintenance of local BG websites (see section 4.3.1);
- elaboration of the certificate for participants of the 2nd BG Summer School held in Riga, Latvia, in July 2007 (see Appendix A).

4.3.3. Participation and promotion of the Project at Grid events held within the Baltic States

Grid users' workshop, Vilnius, Lithuania, 2 November 2006

Workshop was organized by Vilnius University for grid users in order to make usage of grid resources in more intensive way and to encourage users to gridify their applications. During the workshop main problems or the users were identified and possible solutions were found.



Day of Lithuanian Academy of Sciences in Panevėžys, Panevėžys, Lithuania, 9 November 2006

Zenonas R. Rudzikas (VU) took part in this event and gave a talk titled “Lithuanian Science and development of Regions”.

Meeting with representatives from Lithuanian Universities, Vilnius, Lithuania, 9 November 2006

The meeting was organized to discuss the strategic question of NGI activities for the year 2007. Discussions about BalticGrid project future were involved.

Meeting with representatives from Ministry of Science and Education, Vilnius, Lithuania, 15 November 2006

The meeting was organized to discuss the possibilities to support NGI activities for the year 2007. It was agreed, that Ministry will support project to obtain powerful cluster with 64 processors. It will be connected to BalticGrid infrastructure.

Meeting at Vilnius Gediminas Technical University, Vilnius, Lithuania, 23 November 2006

Dalius Mažeika (VU) took part in this event and gave a talk titled “LitGrid and BalticGrid projects”.

All-hands meeting of the VU ITPA, Vilnius, Lithuania, 27 November 2006

The all-hands meeting of Project participants from VU ITPA brought together all scientists, developers, activity leaders. There were a number of questions discussed: the results and ideas, from all-hands meeting in Riga and the PMB meeting in Geneva; actualities concerning new applications in GRID environment; possible technical solutions of available problems; achievements (increasing number of users and applications); possible ways for more efficient usage of GRID and CPU time; the future plans and aims.

Meeting at Vilnius Gediminas Technical University, Vilnius, Lithuania, 28 November 2006

Algimantas Juozapavicius (VU) took part in this event and gave a talk titled “LitGrid and BalticGrid projects”.

Meeting at Kaunas University of Technology, Kaunas, Lithuania, 11 December 2006

K. Paulikas (VU) took part in this event and gave a talk titled “LitGrid and BalticGrid projects”.

Plenary session of European Economic and Social committee, Vilnius, Lithuania, 12-14 December 2006

Zenonas R. Rudzikas (VU) took part in this event and gave a talk titled “Lithuanian research, development and innovation potential”.

ITMiS and LitNet Annual conference (Mykolas Riomeris University), Vilnius, Lithuania, 14 December 2006

Dalius Mažeika (VU) took part in this event and gave a talk titled “LitGrid and BalticGrid projects”.



Annual reporting meeting of grid activities in Lithuania (workshop), Vilnius, Lithuania, 15 December 2006

Workshop was organized as annual reporting meeting of grid activities in Lithuania. Representatives from 11 universities and research institutes participate in this workshop. All of them reported about their grid activities during 2006.

Meeting at Lithuanian Agency for International Science and Technology Development Programmes, Vilnius, Lithuania, 18 December 2006

Algimantas Juozapavicius (VU) took part in this event and gave a talk titled "LitGrid, BalticGrid and 7 Framework programme".

Meeting with computational linguistic researchers, Vilnius, Lithuania, 5 January 2007

Meeting was organized to present BalticGrid infrastructure and activities to linguistic researchers from Center of Computational Linguistic and Faculty of Philology of Vilnius University. One of the aims of this meeting was to involve linguistic researchers into SIG activities and to discuss about possibilities to use linguistic software in BalticGrid.

Application Development and Implementation in BalticGrid seminar, Vilnius, Lithuania, 17 January .2007

Igor Kuzmitshov (EENet) took part in this event and gave a talk titled "Bioinformatics application". Kalle Keskrand (EENet) also took part in this event and gave a talk titled "P-grade portal".

Application workshop with IFJ PAN representative, Riga, Latvia, 18 January 2007

Tomasz Szepieniec (IFJ PAN)) has visited IMCS UL and together with the IMCS UL employees a very productive workshop was held. Possibilities to use OCM-G were discussed as well as the best way to adapt several applications (ANSYS, Prolog MPI, etc.) to the Grid environment.

Lithuanian Science and Industry, Kaunas, Lithuania, 2 February 2007

The event was organised by Kaunas Technological university, Lithuanian academy of sciences, and Ministry of Education and Sciences. Zenonas R. Rudzikas (VU) took part in this event and gave a talk titled "Lithuanian science and industry".

65th conference of the University of Latvia, Section of the Grid technologies, Riga, Latvia, 14 February 2007

During the conference six different presentations about various Grid related issues were given to illustrate the achievements of the BalticGrid project and other projects, the users' perspective, the newest developments in the application area and the status of the monitoring infrastructure. The authors of one of them were: Guntis Bārzdiņš, Baiba Kaškina, Ināra Opmane, Katrīna Sataki (IMCS UL) and its title was "Grid in Latvia: achievements, problems and further development".



Meeting with ANSYS Inc. representatives in Lithuania, Vilnius University, Vilnius, Lithuania, 15 February 2007

The meeting was organized to talk about possibilities to use ANSYS software in BalticGrid. ANSYS has special licenses for academic and research institution but usage of ANSYS in grid environment has not regulation. So the aim of this meeting was to ascertain what must be done in order to use ANSYS in BalticGrid. There were few users from Lithuania and Latvia who intend to use ANSYS software in grid.

Meeting with linguistic researchers, Vilnius, Lithuania, 20 February 2007

It was a second meeting with linguistic researchers from the Faculty of Philology of Vilnius University. The aims of this meeting were once more to encourage linguistic researchers to join BalticGrid SIG activities and try to adopt their application to the grid environment.

Litexpo science and education fair, Vilnius, Lithuania, 22 February 2007

Zenonas R. Rudzikas (VU) took part in this event and gave a talk titled "Cooperation of the higher schools and business to promote innovative businessmen".

A lecture at Kaunas University of Technology, Kaunas, Lithuania, 9 March 2007

Dalius Mažeika (VU) made a lecture titled "HPC and GRID computing".

A lecture at Kaunas University of Technology, Kaunas, Lithuania, 10 March 2007

Algimantas Juozapavičius (VU) made a lecture titled "GRID computing and applications".

Meeting at the Academy of Sciences of Lithuania, Vilnius, Lithuania, 20 March 2007

Zenonas R. Rudzikas (VU) took part in this meeting and gave a talk titled "Annual Report of Lithuanian Academy of Sciences".

Meeting with researchers from Vilnius Gediminas Technical University, Vilnius, Lithuania, 23 March 2007

The meeting was organized to talk about further collaboration possibilities and VGTU participating perspectives in future BalticGrid2 project. Second part of the meeting was application centered discussion. VGTU is gridifying two applications (CFD and nanomaterials modeling) in order to use them in BalticGrid. Requirements of the computational resources and environment were ascertain.

Meeting with researchers from Vilnius Gediminas Technical University, Vilnius, Lithuania, 16 April 2007

Vilnius Gediminas Technical University (VGTU) is 3rd as big university in Lithuania. There is large research community that uses different commercial software (Matlab, ANSYS, MAPLE) on their researches. The meeting was organized to talk about possibilities to this software in BalticGrid and to discuss what interface would be most suitable and convenient for them to use this software on the grid.



Meeting with researchers from Klaipeda University, Vilnius, Lithuania, 18 April 2007

The aims of this meeting were to more encourage researchers to join BalticGrid SIG activities and to discuss how to make their application grid enabling.

GEANT and Grid Info day, Riga, Latvia, 24 April 2007

The annual Latvian Grid Info day was organised in conjunction with the GEANT event. The achievements of the BalticGrid project were presented including the overall project update and presentations about Grid usage in Latvia. The Migrating Desktop adaptation for the SentiKamols application was demonstrated and RTU developments were presented.

Internal workshop of RTU, Riga, Latvia, 27 April 2007

During the meeting a report about significant items and work done during last six months was given.

Conference "Science and research in the EU", Vilnius, Lithuania, 9 May 2007

The event was organized by the Parliament of Lithuania. Zenonas R. Rudzikas (VU) took part in this event and gave a talk titled "Do we exploit the opportunities opened for the development of science?"

Annual conference of PhD school of information and communication technology, Viinistu, Estonia, 11 May 2007

Andi Hektor (NICPB) took part in this conference and gave a talk titled "Some example applications of Grid technology".

The meeting of Vilnius Pedagogical university Senate and Council, Vilnius, Lithuania, 16 May 2007

Zenonas R. Rudzikas (VU) took part in this meeting and gave a talk titled "Future development of Science and Education".

Tartu University Institute of Computer Science Distributed Systems Department's seminar, Tartu, Estonia, 24 May 2007

Hardi Teder and Lauri Anton (EENet) took part in this meeting and gave a talk titled "OGF20/EGEE 2nd User Forum overview".

A lecture at Kaunas University of Technology, Kaunas, Lithuania, 8 June 2007

Dalius Mažeika (VU) made a lecture titled "HPC and GRID computing".

A lecture at Kaunas University of Technology, Kaunas, Lithuania, 9 June 2007

Algimantas Juozapavičius (VU) made a lecture titled "GRID computing and applications".

37-th Lithuania National Physics Conference, Vilnius, Lithuania, 12 June 2007

J. Tamuliene, R. Vaisnoras, G. Badenes, M.L. Balevicius (VU) took part in this event and presented a poster titled "Quantum chemical investigation of CO_2O_n ($n=1-7$)".



Tartu University BIIT group and Quretec joint scientific seminar and group retreat, Kiidi, Estonia, 12 June 2007

Igor Kuzmitšov (EENet) took part in this event and gave a talk titled “iSPEXS on Grid”.

Meeting at the Faculty of Physics of Vilnius University, Vilnius, Lithuania, 13 June 2007

The President of the Lithuanian Physical Society introduced his biannual report. He has presented as an example to follow the activity of Lithuanian physicists and astronomers in the use of modern informational technologies mainly grid technologies. The cooperation with CERN gave the possibility to implement powerful technologies in many Lithuanian institutions in the form of LitGrid and BalticGrid. It became recognized internationally.

BalticGrid SIG workshop, Vilnius, Lithuania, 18 June 2007

The workshop was arranged to introduce the features of SIG for users and application developers. Algimantas Juozapavičius (VU) has made introduction to SIG activities and explained the main services provided by SIG to grid users. Tomas Anbinderis (VU) made second presentation about gridcom (Grid Commander) and explained in detail how to adopt application in order to use from SIG environment. After presentation a long time discussion took place.

The inauguration of the President of Latvian Academy of Sciences to the foreign members of the Lithuanian Academy of Sciences, Vilnius, Lithuania, 21 June 2007

Zenonas R. Rudzikas (the President of Lithuanian Academy of Sciences) (VU) took part in this event and gave the welcoming speech, in which he has acknowledged the international cooperation of Lithuanian and Latvian scientists in the BalticGrid project.

The inauguration of the Latvian Ministry of Science and Education to the foreign members of the Lithuanian Academy of Sciences, Vilnius, Lithuania, 22 June 2007

Zenonas R. Rudzikas (the President of Lithuanian Academy of Sciences) (VU) took part in this event and gave the welcoming speech, in which he has acknowledged the international cooperation of Lithuanian and Latvian scientists in the BalticGrid project.

Meeting with researchers from Vilnius Gediminas Technical University, Vilnius, Lithuania, 3 July 2007

The meeting was held at Vilnius Gediminas Technical University to encourage scientists and researchers from this university to use BalticGrid infrastructure for solving their problems. During the meeting the discussion took place on what interface would be most suitable and convenient for them to use these software on the grid.

Tartu University Institute of Computer Science Distributed Systems Department's seminar, Tartu, Estonia, 3 July 2007

Hardi Teder (EENet) took part in this meeting and gave a talk titled “Development Tools for Grid applications”.



EENet's weekly seminar, Tartu, Estonia, 26 July 2007

Hardi Teder (EENet) took part in this meeting and gave a talk titled "User authentication with Mobile ID".

Meeting with representatives from Ministry of Science and Education, Vilnius, Lithuania, 27 July 2007

Meeting was organized to discuss the details of financial support NGI activities for the year 2007-2012. At date 2007.07.27 Minister of Science and Education has signed the document where LitGrid was approved as national program of Science and Education in Lithuania with budget 4.7 M LT.

Annual Estonian-Finnish EURATOM seminar, Tallinn, Estonia, 23 August 2007

Andi Hektor (NICPB) took part in this meeting and gave a talk titled "Grid for fusion research and applications".

Annual A. Jucys seminar, Vilnius, Lithuania, 12 September 2007

Zenonas R. Rudzikas (VU) took part in this meeting and gave a talk titled "Progress of Theoretical Physics in Lithuania".

Third Baltic conference "Human Language Technologies", Kaunas, Lithuania, 4-5 October 2007

Jānis Džeriņš and Kristaps Džonsons (IMCS UL) submitted a paper to this conference titled "Harvesting National Language Text Corpora from the Web".

Vilnius University, faculty of Mathematic and Informatics, BalticGrid and GridTechno local weekly seminar, Vilnius, Lithuania, 8 October 2007

Š. Mikolaitis (ITPA) took part in this meeting and gave a talk titled "The SyntSpec implementation within Migrating Desktop".

XI Baltic conference on international cooperation "Academic Veins on the national Development Strategies in the Baltic States", Riga, Latvia, 10 October 2007

Z. R. Rudzikas (VU) took part in this meeting and gave a talk titled "Challenges and Opportunities of International Scientific Co-operation".

IST4BALT workshop, Vilnius, Lithuania, 22 October 2007

Algimantas Juozapavičius (VU) took part in this meeting and gave a talk titled "Grid technologies for Science, Studies and Business".

Dalius Mažeika (VU) also took part in this meeting and gave a talk titled "Vilnius Gediminas Technical University. Projects and Innovative activity".



4.3.4. Organization of seminars

Each project Partner, in particular those from the Baltic States, delivered a series of seminars. Some of them were delivered in local languages and aimed at the general academic communities in their places of residence. Two types of seminars can be distinguished:

- for computing personnel,
- for potential end-users of BalticGrid.

Typical seminars involved lectures on subjects such as basic concepts of Grid computing, parallel and distributed computing, Grid applications and their gridification, Grid projects: EGEE, BalticGrid and LitGrid and other European Grid initiatives.

The following types of seminars were held during the 2nd year of the Project:

- lectures (courses) for BSc, MSc and PhD students concerning various aspects of Grid computing,
- local seminars presenting Grid computing and the BalticGrid project and its events to academic communities as well as to potential users of BG products: companies, hospitals, etc.,
- seminars for pupils to raise their interest in exact sciences,
- seminars organized with the aim to involve Lithuanian colleges into Grid activities,
- local seminars to discuss researchers' calculation needs, software they are using and opportunities that Grid can offer,
- local seminars presenting Grid projects: BalticGrid, EGEE and LitGrid and introducing information on how to become a participant of BalticGrid and LitGrid,
- seminars for researchers to discuss the applications they are using for different calculations and how they could be used in the Grid environment,
- seminars on possibilities to use external software in BalticGrid (e.g. ANSYS),
- seminars in which participated the partners of the Estonian-Finnish EFDA (European Fusion Development Agreement) association.

The total number of seminars was 26; a full list of all seminars (containing their short descriptions) conducted during the second year of the Project life is placed in Appendix D.

4.3.5. Press and media publications

The following publications on BG and related issues (LitGrid, LatvianGrid, Grid technologies in Baltic States) were delivered in press and media by the BG partners (see Fig.2 below for some examples):

- "The BalticGrid project celebrates first birthday", the internet magazine for electronics: Elektronika.lt, December 2006,
- "The BalticGrid project celebrates first birthday", the Virtual Society portal: Vtv.lt, December 2006,
- "The BalticGrid project celebrates first birthday", the journal New Communication portal: Nkm.lt, December 2006,
- "The BalticGrid project celebrates first birthday", the Science and Technology portal: Technologijos.lt, December 2006,



- “Latvian Grid network for the development of E-Science”, magazine “Sakaru pasaule” (Connection world), December 2006,
- “Will the computer do exams instead of Latvian pupil?”, newspaper “Vakara Ziņas” (“Evening News”), 5 December 2006,
- “Network wins computer”, Latvian magazine “Next”, January 2007,
- “The first BalticGrid birthday”, “The Scientific Lithuania” (the newspaper of Lithuanian scientists), 7 January 2007,
- “About Litgrid project”, newspaper “Inžinerija”, 9 January 2007,
- “Grid unites”, newspaper “Dziennik Polski”, 7 February 2007,
- “Latvian academic network - European component”, magazine “Sakaru pasaule”, March 2007,
- “The Activity of the Lithuanian Academy of Sciences in 2006”, the LAS book: “The Activity of the Lithuanian Academy of Sciences in 2006”, March 2007,
- “LitGrid presentation”, journal “Mokslas ir technika”, 12 March 2007,
- “GEANT and Grid possibilities presented to support scientists”, web portals: pcentrs.lv, reitingi.lv, fails.lv, boot.lv, tehnika.delfi.lv, tvnet.lv, 23 April 2007,
- “A quick walk through the stands: What is BalticGrid?” - an interview with Per Öster, Grid Café website, 9 May 2007,
- “Grid continues to develop”, magazine “Sakaru pasaule”, June 2007,
- “Scientists will learn how to use Grid”, web portals: apollo.lv, db.lv, reitingi.lv, rtu.lv and radio SWH, 29 June 2007,
- “The biggest scientific instrument of the world”, Estonian popular science magazine “Horisont”, 5 July 2007,
- “Science and Organized Civil Society”, Lithuanian science popularization journal “Mokslas ir gyvenimas”, October 2007



Fig. 2. Examples of BG press articles

More detailed information on the above mentioned press and media publications prepared during the second year of the Project is placed in Appendix D.

4.3.6. Establishment of contacts with local audiences

NA2 Partners from the Baltic States put a lot of effort into contacting various groups of people potentially interested in the Grid computing. Diverse methods and means have been used to attract interest, transfer necessary knowledge and convince potential users of the benefits of using the Grid.

The following audiences for the Project have been contacted:

- academic communities as well as other potential users of BG products (students and researchers from IMCS UL, lecturers, programmers and graduate students from Alytus College, Panevezys College and Marijampole College in Lithuania, PhD students from different Lithuanian universities, teachers from various Lithuanian colleges, researchers from the Institute of Materials and Structures of RTU, the Institute of Physics of University of Latvia, the Institute of Physics of VU, Šiauliai University, Vilnius Gediminas Technical University, Vilnius University, Kaunas University of Technology, Mykolas Riomeris University, University of Latvia, language technology research group at the Tartu University, Tartu University Institute of Environmental Physics and Estonian Meteorological and Hydrological Institute, BSc, MSc and PhD students from Tartu University), Vilnius Pedagogical University Senate and Council, Lithuanian parliament, Lithuanian Agency for International Science and Technology Development Programmes, Lithuanian Academy of Sciences, Lithuanian Ministry of Education and Sciences, President of Latvian Academy of Sciences, Latvian Ministry of Science and Education, participants of the Litexpo science and education fair, partners of the Estonian-Finnish EFDA (European Fusion Development



Agreement) association, Estonian business users, pupils from Latvia – **through seminars and presentations**;

- participants of the Project events – **through BG brochures and posters** distributed during these events;
- Latvian Minister of Science and Education and the members of Latvian parliament – **through information sent by e-mail**;
- Latvian and Estonian researchers from different institutions - **through conferences**;
- representatives of 11 universities and research institutes from Lithuania, Lithuanian Grid users and application developers, IMCS UL employees, Latvian researchers, network administrators and students of computer science - **through workshops**;
- researchers from Vilnius Gediminas Technical University and from Klaipeda University, representatives of Lithuanian universities, representatives of Lithuanian Ministry of Science and Education, linguistic researchers from Center of Computational Linguistic and Faculty of Philology of VU, representatives of ANSYS Inc. in Lithuania – **through meetings and discussions**;
- listeners of the Latvian SWH radio station;
- readers of The Scientific Lithuania (Lithuanian newspaper), Inžinerija (Lithuanian newspaper), Dziennik Polski (Polish newspaper), Sakaru pasaule (Lithuanian magazine), Elektronika.lt, Nkm.lt, Technologijos.lt and Vtv.lt (Lithuanian portals), Mokslas ir technika (Lithuanian journal), “Mokslas ir gyvenimas” (Lithuanian science popularization journal), precentrs.lv, reitingi.lv, fails.lv, boot.lv, tehnika.delfi.lv, tvnet.lv, apollo.lv, db.lv and rtu.lv (Latvian portals), Vakara Ziņas (Latvian newspaper), Next (Latvian magazine), Horisont (Estonian popular science magazine), the Lithuanian Academy of Science book: “The Activity of the Lithuanian Academy of Sciences in 2006”.

One of the results of the contacts with the above mentioned groups of potentially interested users of BalticGrid infrastructure is their participation in events organized by the BalticGrid Consortium during the second year of the Project life.

18 seminars on Grid computing issues, which comprised lectures, discussions and exercises on middleware, applications as well as distributed and parallel computing methods (conducted in the local languages in Estonia, Lithuania and Latvia) gathered altogether around 378 participants.

During several tutorials and the second BG Summer School more than 83 participants (users and developers of Grid applications) gained necessary basic Grid usage skills.

4.4. SUMMARY OF DISSEMINATION ACTIVITIES

Detailed information on all dissemination activities conducted in the framework of the BG project can be found in Appendix D.

The table below presents a numerical summary of these activities (the “unclassified activity” section includes contacts, meetings, discussions, feedback form and introductory letters).



Type of disseminative activity	Number
brochure	8
poster	11
conference	2 (with 1 Grid Open Day)
workshop	9
seminar	26 (18 in Baltic States)
tutorial	7 (including 1 summer school)
exhibition	2
scientific paper	14 (including 4 from the previous year, but not reported earlier)
MSc. (PhD) dissertation	1 (3 bachelor's theses)
newspaper article	18
radio interview	-
presentation (talk)	44
unclassified activity	37
web site	4

Table 1: Numerical summary of the dissemination activities conducted during the second year of the Project.

4.5. INTERNAL ACTIVITIES

4.5.1. Organization of internal meetings

BG partners have closely cooperated during the second year of the Project life to prepare and hold several internal meetings:

- 3rd BG All-Hands Meeting – in Tallinn, Estonia, 15 – 17 May 2007,
- PMB VRVS / EVO meetings – number of them have been organized almost every week since the beginning of the Project and chaired by the PD or by one of the ALs in case the PD had other commitments; the information on these meetings is available in the Internal section of the BG website, at the following URL:
<http://www.balticgrid.org/Internal/PMB/pmbmeetings/>
- PMB face-to-face meeting – it took place in Tallinn during 3rd BG All-Hands Meeting. PMB members meet together face to face, because it makes the work of the PMB more efficient and enables solving difficult issues. The various problems can be discussed thoroughly as the time for discussion is not limited to 1-2 hours as it is during the VRVS / EVO PMB.



4.5.2. Internal mailing lists

Several electronic mailing lists established for the BG project have been used during the second year. They aim to provide an additional mechanism for internal Project communication and interaction. Currently these lists refer to the Project Activities, the management and technical teams of the Project and include members of the consortium from various Partner sites.

The internal mailing lists of BG - set up and are maintained by the EENet - are as follows:

- BG Administrative Contacts – *balticgrid-admin*
- BG PMB – *balticgrid-pmb*
- BG Executive Board – *balticgrid-exec*
- BG External Advisory Committee – *balticgrid-eac*
- BG NA1,2,3,4 – *balticgrid-na1*, *balticgrid-na2*, *balticgrid-na3*, *balticgrid-na4*
- BG SA1,2 – *balticgrid-sa1*, *balticgrid-sa2*
- BG JRA1 – *balticgrid-jra1*

The email addresses of all BG mailing lists are available in the Internal section of the BG website.

4.5.3. Repository for BG documents

The Internal section created on the BG website has been maintained and updated. The following directories prepared in this section have been filled with new material:

- “Deliverables” – it contains the draft versions of Project deliverables,
- Activities’ folders (“NA1”, “NA2”, etc.) – they contain (among others) agendas and minutes of the Activities’ internal meetings,
- “PMB” – containing the action list for the weekly PMB meetings as well as ‘Meetings’ folder with agendas and minutes of the PMB VRVS and face-to-face meetings.

4.5.4. Activities’ web pages

Activity Leaders maintained and managed the Activities’ internal web pages. They contain documentation being elaborated, meetings’ minutes and other information useful for Activities’ members. The Activities’ web pages are available in the Internal section of the BG website.

4.5.5. Distributing news and announcements from the PD and the NA2 leader to Partners

PD announces any news concerning the Project matters either through the News section in the BG website or through emails sent to the NA2 members.

NA2 leader notifies the members of its team about current issues by sending emails containing e.g. the description of some problems which should be solved as well as information on upcoming work to be performed or the results of efforts made before by the whole NA2 team.



4.5.6. Collecting information on Partners' dissemination activities

IFJ PAN continued collecting the data on Partners' dissemination activities every month, through specially-prepared questionnaires. They were filled out and sent to the NA2 leader by dissemination contact persons. Data from the questionnaires received during the second year of the Project life is presented in Appendix D.



5. FULLFILMENT OF THE PLAN

In this section the activities planned in section 2.3.1 of [REVISION] for the second 12 months of the Project has been presented (in italics). Each activity is accompanied by a description of its fulfillment.

Months P13-P18 (Nov 2006-Apr 2007)

- *General BG brochure update – issue 2, A-4 form, 4 pages (electronic and printed version – 500 copies)*

The brochure was created and is available at the following URL: www.balticgrid.org/Dissemination//Brochures/. It has been presented for the first time during the 3rd AHM and Grid Open Day in Tallinn (15-17 May 2007); it was printed on glossy paper: 4 pages in A4 format.

- *Multimedia BG presentation*

A multimedia presentation showing the status and main achievements of the Project has been prepared in this period. The presentation (in MS PowerPoint) includes about 40 animated slides, two recorded demos and a voice narration. It is a general BG project presentation intended for a broad audience. It was displayed at the BG stand during the OGF20 / EGEE User Forum in Manchester, in May 2007 and during the EGEE'07 conference in Budapest, in October 2007. The presentation is available at the following URL: www.balticgrid.org/Dissemination/Presentation./.

- *BG technical components' poster on JRA1 achievements – roll stand (200 x 80 cm).*

The poster was prepared and is available at the following URL: www.balticgrid.org/Dissemination/Posters/. It was displayed at the BG stand during the OGF20 / EGEE User Forum in Manchester, during the 3rd BG AHM in Tallinn in May 2007 and during the EGEE'07 conference in Budapest, in October 2007.

- *Technical brochure on OCM-G - A-4 form, 2 pages (electronic and printed version)*

A new BG technical brochure: OCM-G – Grid-enabled OMIS-Compliant Monitoring system has been prepared in April 2007. The brochure presents the introduction to the OCM-G, key features, examples of use as well as related projects. It was distributed during the OGF20 / EGEE User Forum in Manchester, UK, in May 2007 and during the EGEE'07 conference in Budapest, in October 2007). The brochure is available at the following URL: www.balticgrid.org/Dissemination/Brochures/.

- *Improved version of the Customer Feedback Form – (electronic and printed version)*

The second version of the Customer Feedback Form has been elaborated in April 2007 and is available at the BG website at www.balticgrid.org/Feedback_Form/. It consists of two parts – an introduction and a questionnaire – where potential users have the opportunity to express their needs concerning the use of the Grid infrastructure, adapting their application to the Grid, or join one of the BG SIGs. The new version of the Form is presented in the Appendix B. It has been distributed among participants of the OGF20/EGEE User Forum and the EGEE'07 conference, who visited the Project stand.



○ *Dissemination Roadmap revision – P18 deliverable*

A revised version of the Dissemination Roadmap has been prepared in month 18. It determined the detailed plans for the second phase of the Project. It is available at the following URL: www.balticgrid.org/Results

Months P19-P24 (May 2007 – Oct 2007)

○ *3rd BG AHM in Tallinn, Estonia*

The 3rd BG All-Hands Meeting and Grid Open Day were held in May 2007 in Tallinn, Estonia. Hosted by the Estonian Academy of Science and National Institute of Chemical Physics and Biophysics (NICPB). The event was arranged by the high energy physics group at the NICPB. The school has 54 participants from the Baltic States, Poland, Sweden and CERN mainly from the project partners, but also from other research institution and industry, for example, Kaunas University of Technology, Sun Inc., Egeen AS etc. More information on this event is available at the following URL: www.balticgrid.org/Dissemination/Events/3rdAHM/

○ *2nd Summer School in Riga, Latvia*

The second BalticGrid Summer School took place in the Faculty of Telecommunications and Electronics of Riga Technical University in Riga, Latvia from 2 to 6 July 2007. It was organized in collaboration of both BalticGrid project partners from Latvia: RTU ETF and IMCS UL. The summer school programme was 5 days long and consisted of lectures and practical work. The first day lectures and hands-on tutorial were dedicated to the general introduction and presentation of the Grid Computing opportunities. Lectures and exercises on various aspects of applications grid-enabling covered the next 3 days. The last day of the school was devoted to significant Grid security issues. More information on this event is available at the following URL: www.balticgrid.org/Dissemination/Events/2nd_BG_SummerSchool/

○ *Technical brochure on BG pilot applications - A-4 form (electronic version)*

The following two technical brochures have been prepared in September 2007:

- “The SyntSpec Technical Brochure for BalticGrid”, elaborated by ITPA - the brochure describes the SyntSpec application; it contains two parts: the first part popularly describes the idea of stellar spectra modeling and aims of stellar astrophysics; the second part gives an impression how the application is running on the BalticGrid infrastructure,
- “Deformation calculations of composite structures by ANSYS & Grid”, elaborated by IMCS UL – the brochure outlines the gridification of the ANSYS software and adjustments of it for the calculations of Riga Technical University, Institute of Material Sciences.

They were distributed during the EGEE’07 conference in Budapest, Hungary, in October 2007). They are available at the following URL: www.balticgrid.org/Dissemination/Brochures/.

The following two technical brochures have been prepared in October 2007:

- “Vilnius Parallel Shell Model Code (VPSM) for large-scale nuclear structure calculations“, elaborated by ITPA,



- “Calculation of atomic characteristics with FAC and VMAS codes”, elaborated by ITPA.

They are available at the following URL: www.balticgrid.org/Dissemination/Brochures/.

- o *Cracow Grid Workshop - CGW'07*

The Seventh Cracow Grid Workshop (www.cyfronet.pl/cgw07/) was held on 15-17 October 2007). It was organized jointly by the Academic Computer Centre CYFRONET, IFJ PAN, the Institute of Computer Science AGH and Jagiellonian University, Collegium Medicum, Kraków in the framework of EU IST grid projects: EGEE, Int.eu.grid, GREDIA, CoreGRID, K-WfGrid, BalticGrid, EUChinaGrid and ViroLab. About 150 participants representing many EU countries took part in the Workshop. During the event several keynote lectures were given. Almost 100 contributed papers, accepted for presentation during the Workshop, provided a very good overview of the research activity in the area of Grid computing. This international meeting covered current advances in research in Grid systems and Grid applications, overviews of research in the main European Grid projects, overviews of national Grid projects and the Chemomomentum Tutorial.

- o *Technical brochure dedicated to Grid Operations - A-4 form (electronic version)*

The technical brochure titled “Grid Operations” has been prepared in October 2007. It was elaborated by IFJ PAN, EENet and NICPB. It is available at the following URL: www.balticgrid.org/Dissemination/Brochures/

- o *Dissemination Report - P24 deliverable*

This deliverable was elaborated and published on the website in month 24 of the Project. It is available at the following URL: <http://www.balticgrid.org/Results/>

Table 2 presents measures foreseen in [REVISION] and dissemination activities conducted during the second 12 months of the Project’s lifetime.

	Planned	Done
Number of Scientific papers	-	4*+10
Number of Newspaper articles/Radio interviews	24	18
Number of Presentations (talks)	39	44
Public Website visits (page views) (average per month)	10000	10320
Number of information brochures and leaflets	4	8

* Prepared in the 1st year of the Project, but not reported earlier



Number of posters	3	11
Number of tutorials organized	5	7 (including Summer school)
Number of summer schools organized	1	1
Number of conferences, workshops, Grid Open Days organized	4	2+9+1
Number of exhibitions organized	3	2
Number of seminars (single ones and series) organized	32	26

Table 2: NA2 Measures – plans and results

Comments on the above table.

Number of scientific papers prepared by the BG members increased to a great extent in comparison with the activity in the first year of the Project life.

However number of seminars given during the second year is smaller then planned, number of tutorials and other events organized is much greater.

Also number of dissemination materials produced is again significantly greater than planned.

The number of exhibitions organized is just two instead of three, but the disseminative materials were distributed also at other Grid events, where there was no exhibition.



6. SUMMARY AND CONCLUSIONS

This document describes the dissemination activities that were carried out during the second year of the BalticGrid project. The NA2 Team leader planned and coordinated all these efforts; however suitable implementation of the plan required close cooperation of all BG partners. That resulted in many different well-done activities carried out at every level of dissemination - the central, local and internal ones, which contributed significantly to increasing of awareness and knowledge about the Project and Grid technology in the Baltics region.

BalticGrid tutorials, the 2nd BG Summer School and seminars held by BG partners helped administrators and users of the BG infrastructure acquire the necessary knowledge and experience with Grid computing.

The 3rd All-Hand Meeting accompanied by the Grid Open Day (GOD), organized in Tallinn, enabled participation in these event people from local scientific and research communities, interested in the BalticGrid project and in Grid technology in general. This event also spread awareness of the Project and its achievements to a wider community of users in the Baltic States, as GOD was broadly advertised by using various dissemination means.

The BalticGrid members were also present at the exhibitions during the OGF20 / EGEE User Forum in Manchester, in May 2007 and during the EGEE'07 conference in Budapest, in October 2007. The Project's results were advertised at the stands maintained by the dissemination team. Considering both events, the stands were a great success of the Project and increased its visibility among other Grid projects and initiatives.

Many articles in local newspapers as well as on web portals contributed to the promotion of the Project.

Updated Customer Feedback forms and event evaluation forms were distributed among participants of some of the above mentioned events. The fulfillment of most requests included in these forms will be considered. For example – according to the wishes of participants gathered after 1st BG Summer School the 2nd Summer School was arranged in different way.

Altogether, all dissemination activities described in this document helped inform various communities in the Baltic States and outside about the Project, its tasks and achievements. Many people interested in the Grid technology were also encouraged to try to use the BalticGrid infrastructure in order to learn about computational possibilities it provides.



Appendices



APPENDICES

APPENDIX A – LONG DESCRIPTIONS OF EVENTS ORGANIZED AT THE CENTRAL LEVEL

Events described below had been planned and coordinated centrally (by NA2 leader and PMB) and organized locally by the selected BG partner.

A1. Report from the 3rd All-Hands Meeting

The aim of the meeting

The meeting was the third meeting from the series of the All Hands Meetings (AHM) of the BalticGrid (BG) project. The AHM meetings are proposed to coordinate the project and to introduce to the Grid technology, the BG infrastructure and applications for the wider audience.

The third All Hands Meeting (AHM3) was held at the Estonian Academy of Science and National Institute of Chemical Physics and Biophysics (NICPB), Tallinn, Estonia, from May 15 to May 17 2007. AHM3 was arranged by the high energy physics group[†] at the NICPB.

Program

AHM3 covered 3 days. The first day had the general public introduction to the Grid, so called Grid Open Day. In the second half of the day the open Grid introduction tutorial followed. The second day was focused on the BG project itself, its infrastructure and main applications. A plenary session covers the first half of day and two parallel sessions covered the second half of day. The third day started with five parallel sessions, a session per the activity of the BG project. The joint conclusion meeting summarized the third day and AHM3. Appendix 1 presents the exact time schedule of the meeting.

Participants

The school has 54 participants from the Baltic States, Poland, Sweden and CERN mainly from the project partners, but also from other research institution and industry, for example, Kaunas University of Technology, Sun Inc., Egeen AS etc. Appendix 2 contents the full list of the participants of the meeting.

Acknowledgments

The organizers of the meeting would like to thank the BalticGrid project for the great support. Also, we thank Mirosław Kupczyk and Bartek Palak from PSNC, Poland to give the excellent tutorial session. Finally, we thank the Estonian Academy of Science for their great hospitality.

The program of the meeting

First day, May 15, Tuesday

Grid Open Day [Venue: EAS, Kohtu 6]

9:30-10:00 Registration for Grid Open Day

10:00-10:15 **Opening**

[†] <http://hep.kbfi.ee/>



- 10:15-10:45 **Per Öster** ([KTH](#), Stockholm): *BalticGrid and the Opportunities of e-Science*
- 10:45-11:00 Coffee break and discussions
- 11:00-11:30 **Mario Kadastik, Ilja Livenson** ([NICPB](#), Tallinn): *Live demo of the Baltic Grid*
- 11:30-12:00 **Algimantas Juozapavicius** ([VU](#), Vilnius): *Lithuanian Grid project*
- 12:00-12:15 **Algimantas Juozapavicius** ([VU](#), Vilnius): *SIG for BalticGrid Users - a Demo*
- 12:15-12:45 **Martti Raidal** ([NICPB](#), Tallinn): *Particle physics: a driving force of Grid technology*
- 12:45-13:15 **Kris Buggenhout** ([Sun](#), Copenhagen): *Grid technology for the business users*

Grid Tutorial [Venue: [TUT, Raja 15](#)]

- 14:00-15:30 **Basics of the Grid**
Mirosław Kupezyk, PSNC, Poland
- 15:30-15:45 Coffee break
- 15:45-18:15 **Advances of the Grid**
Bartek Palak, PSNC, Poland

Estonian Grid meeting [Restricted] [Venue: [Viru Conference Centre, the room Andante](#)]

- 14:00-15:30 **Estonian Grid meeting**

PMB meeting [Restricted] [Venue: [Viru Conference Centre, the room Andante](#)]

- 15:30-18:00 **PMB meeting**

Social events [Venue: [Restaurant "Elevant", Vene 5](#)]

- 19:00 **AHM 3 Welcome Reception**

Second day, May 16, Wednesday

BalticGrid meeting - Plenary session [Venue: [EAS, Kohtu 6](#)]

- 9:00-9:30 Registration
- 9:30-9:40 **Opening**
- 9:40-10:00 **Oleg Tchij** ([UIIP NAS](#), Minsk): *Development of cluster computers and Grid infrastructure in Belarus*
- 10:00-10:30 **NA2 Presentation(s)**
- 10:30-11:00 **NA3 Presentation(s)**
- 11:00-11:15 Coffee break and discussions
- 11:15-12:00 **SA1 Presentation(s)**
- 12:00-12:30 **SA2 Presentation(s)**



12:30-13:00 **JR1+NA4 Presentation(s)**

13:00-14:00 Lunch

BalticGrid meeting - Parallel sessions [Venue: [EAS, Kohtu 6](#)]

14:15-15:45 **Joint parallel sessions:** SA1+NA3 and SA2+JRA1

15:45-16:00 Coffee break and discussions

16:00-17:00 **Joint parallel sessions:** SA1+NA3 and SA2+JRA1

Meeting of Executive Board [Restricted] [Venue: [EAS, Kohtu 6](#)]

16:45-18:00 Meeting of Executive Board

Social events [Venue: [Restaurant "Basso", Pikk 13](#)]

19:00 Conference Dinner

Third day, May 17, Thursday

BalticGrid meeting - Parallel sessions [Venue: [NICPB, Rävåla pst 10](#)]

9:00-10:30 **Parallel sessions:** SA1, SA2, NA2, NA3, NA4+JR1

10:30-10:50 Coffee break and discussions

10:50-12:30 **Parallel sessions:** SA1, SA2, NA2, NA3, NA4+JR1

12:30-13:30 Lunch

13:30-14:15 **Joint session:** All Activities

14:15-14:45 **Closing remarks** by Per Öster

PMB meeting [Restricted] [Venue: [NICPB, Rävåla pst 10](#)]

14:45-17:00 PMB meeting



A2. Report from the 2nd BalticGrid Summer School

The aim

The main aims of the 2nd BG Summer School were to gather potential Grid users with their own applications, present them basic Grid computing principles and encourage porting their applications to the Grid. The event brought together young and bright scientists from the Baltic Sea region academia and research field and spread knowledge about the current development status and capacity of the Grid in the region.

The school took place in the Faculty of Telecommunications and Electronics (ETF) of Riga Technical University in Riga, Latvia from 2 to 6 July 2007. It was organized in collaboration of both BalticGrid project partners from Latvia: RTU ETF and IMCS UL.

The program

The summer school program was 5 days long and consisted of lectures and practical work. The first day lectures and hands-on tutorial were dedicated to the general introduction and presentation of the Grid Computing opportunities. Lectures and exercises on various aspects of applications grid-enabling covered the next 3 days. The last day of the school was devoted to significant Grid security issues.

The total time spent by the Summer school participants' on five-day lectures and practical exceeded 30 hours of which 29% were general lectures about the Grid computing, data management, security and MPI applications, 27% - lectures about various issues of application grid-enabling and the largest part, i.e., 44% – practical exercises in the computer room. The complete program with the schedule is attached at the end of this chapter.

The participants

The total number of the pre-registered participants to the 2nd BG Summer School was 20, but only 18 of them arrived and participated. There were 6 participants from Latvia, 6 from Lithuania, 3 from Belarus, 2 from Poland and 1 from Estonia.

The lecturers

The 2nd BG Summer School organizers would like to say special thanks to all 8 lecturers who gave their excellent lectures and tutorials in Riga:



Pär Öster

BalticGrid project coordinator, KTH PDC, Stockholm, Sweden



Bartek Palak

lecturer from BG partner institution PSNC, Poznan, Poland



Tadeusz Szymocha lecturer from BG partner institution IFJ PAN, Krakow, Poland



Tomasz Szepieniec lecturer form BG partner institution IFJ PAN, Krakow, Poland



Marcin Radecki lecturer from BG partner institution IFJ PAN, Krakow, Poland



Rolandas Naujikas lecturer form BG partner institutions VU MIF (Vilnius, Lithuania) and CERN (Geneva, Switzerland)



Guntis Bārzdīņš professor, lecturer and BalticGrid project Network manager, IMCS UL, Riga, Latvia



Syed Naqvi lecturer on Grid Security from CETIC, Charleroi, Belgium

The evaluation by the participants

The school participants were given evaluation forms to express their opinion about the event (the scale was from 1 to 5). 13 forms were collected at the end of the school of which 7 were filled anonymously. The statistical results of the filled forms gave the total rate 4,23 (with 0,76 variance of the rate) – taking into account various subjects under evaluation. The most common suggestions from the school participants were:

1. The hotel for the school participants should be nearer to the main venue of the event and also city centre
2. There could be done the differentiation of the school participants depending on their level of knowledge about the Grid and skills.



Acknowledgements

Many thanks to all people involved in the organizing and managing the successful process of the 2nd BG Summer School in Riga. The organizers thank the BalticGrid project for the main support of the school.

Program of the school

Venue: Riga Technical University Faculty of Electronics and Telecommunications (RTU ETF), Riga, Latvia

Monday, 2 July 2007

12:00-12:15 Opening, technical issues, organisation of work
12:15-14:00 Grid computing presentation by *Per Öster, KTH PDC, Sweden*
14:00-15:15 Lunch
15:15-16:45 Introduction to Grid computing. Hands-on tutorial
All day conducted by *Bartek Palak, PSNC, Poznan, Poland*
16:45-17:15 Coffee break
17:15-18:30 Introduction to Grid computing. Hands-on tutorial (continued)
18:30-18:50 Coffee break
18:50-20:00 Introduction to Grid computing. Hands-on tutorial (continued)
20:00-23:20 **Social event: welcome reception in room 1A, RTU**

Tuesday, 3 July 2007

08:30-09:00 Coffee break – breakfast
09:00-11:00 Plenary session– Gridification of BG Linguistic applications
lectures and exercises by *Guntis Barzdins, University of Latvia*
11:00-11:30 Coffee break
11:30-13:00 Gridification of BG Linguistic applications (continued)
13:00-14:30 Lunch
14:30-16:00 Application grid-enabling: Part I - Basic techniques
Tuesday to Thursday conducted by *Tomasz Szepieniec and Marcin Radecki, IFJ PAN, Poland*
16:00-16:30 Coffee break
16:30-18:00 Parallel sessions – Exercises on application grid-enabling

Wednesday, 4 July 2007

08:30-09:00 Coffee break – breakfast
09:00-10:00 Plenary session – Data Management by *Tadeusz Szymocha, IFJ PAN*
10:00-11:00 Application grid-enabling: Part II - Beyond limits of gLite
lecture by *Tomasz Szepieniec - IFJ PAN*
11:00-11:30 Coffee break
11:30-13:00 Parallel sessions – Exercises on application grid-enabling (continued)
13:00-14:30 Lunch
14:30-16:00 Parallel sessions – Exercises on application grid-enabling (continued)
16:00-16:30 Coffee break
16:30-18:00 Parallel sessions – Exercises on application grid-enabling (continued)

Thursday, 5 July 2007

08:30-09:00 Coffee break – breakfast
09:00-09:45 Application grid-enabling: Part III - Managing large experiments
lecture by *Rolandas Naujikas, VU and CERN*
09:45-11:00 Plenary session–MPI in BalticGrid environment by *Rolandas Naujikas*
11:00-11:30 Coffee Break



11:30-13:30 Exercises on applications in MPI environment by Rolandas Naujikas

13:30-14:30 Lunch

14:30-16:00 Parallel session - Exercises on application grid-enabling (continued)

16:00-16:30 Coffee Break

*16:30-18:00 Plenary session - **SUMMARY**, conclusions of three day work*

*18:00 **Bus from RTU** to gala dinner venue*

*19:00-22:30 **Social event: gala dinner***

Venue: "Priedes krogs", The Latvian Ethnographic Open Air Museum

Friday, 6 July 2007

08:30-09:00 Coffee break – breakfast

09:00-11:00 Grid security - Principles and Practices by Syed Naqvi, CETIC, Belgium

11:00-11:30 Coffee break

11:30-13:00 Grid security - Principles and Practices (continued)

13:00-14:00 Lunch

14:00-15:00 Closing session

The school certificate

All participants of the school have been given a specially prepared certificate. Its example is appended below.



BalticGrid Summer School Certificate

This is to certify that

Rafal Staszewski

has attended the Grid Summer School covering five days of lectures and practical work, which comprised:

1. Introduction to Grid computing
2. Application grid-enabling
3. Grid security

The school was organized by the BalticGrid Consortium
in Riga, Latvia from July 2 to July 6, 2007

On behalf of the BalticGrid Consortium

Prof. Ilmārs Slaidiņš

BalticGrid Project Manager from RTU

Per Öster

BalticGrid Project Coordinator

Riga, Latvia, 6 July 2007





APPENDIX B – UPDATED BG CUSTOMER FEEDBACK FORM

The Baltic Grid project is of high strategic importance to the Baltic States and is designed to give a rapid build-up of a Grid infrastructure, contributing to the enabling of the new member states participation in the European Research Area. The project involves 10 leading institutions in Estonia, Latvia, Lithuania Poland, Sweden and Switzerland. The Baltic Grid infrastructure and services will be validated through several pilot applications from the material science (quantum chemistry), bioinformatics (Motif Finding Algorithm) and High Energy Physics (modeling of Large Hadron Collider experiments).

This Customer Feedback Form is an initiative undertaken in the framework of the dissemination of the European BalticGrid project, with the mission of distributing information about available Grid resources and pilot applications developed within the project. It also aims at finding the new users who will be willing to adapt their own applications to the Grid environment.

In that context, we would like to address you with the purpose of sounding out your interest in Grid potential in general and the BalticGrid project in particular. We kindly ask you to fill in the enclosed form if you are interested in cooperation with the BalticGrid Project Consortium.

On behalf of the BG Consortium
BG Education Training Dissemination and Outreach Team

BalticGrid Customer Feedback Form

- Organization name
- Web site address
- Name
- Specialisation
- E-mail/phone

My point of interest:

- Technical support and consultancy in adaptation of application for Grid infrastructure
- Using of BalticGrid resources
- Assistance in registration to BalticGrid Virtual Organization and obtaining a certificate for using BG infrastructure
- Participation in seminars/workshops/tutorials on Grid technologies, tools and applications;
- Obtaining general BalticGrid dissemination materials - brochures, posters, presentations,
- Your other needs concerning the Grid technology

We kindly ask you to send the filled form electronically to the BalticGrid Dissemination Leader: z.mosurska@cyfronet.krakow.pl

(The form is also available at the following url: http://www.balticgrid.org/Feedback_Form/)



Support of Developers' Applications

Application Support is a specific BalticGrid activity aiming to organize and initiate communication between application experts and Grid experts through formation of an Application Expert Group. This group analyzes applications and identifies useful grid technologies, specifies steps in gridification process and provides consulting services to application developers.

Additionally, some tools - that support application in grid

environment - are developed by Application Supports Activity. They are: the Migrating Desktop - enabling GUI-based, application-specific access to the BalticGrid infrastructure and OCM-G - an interactive monitoring system, that - besides features to study performance bottlenecks in application (visualized by G-PM tool) - provides possibility to interactive control of grid applications. The Application Support Procedure and tools are available on the Project website:

www.balticgrid.org/Application_Support

BalticGrid Special Interests Groups

The task of special interest groups (SIG) aims to improve communication among many separate research groups, having similar or related R&D interests. The development and implementation of SIGs is a relatively new idea in grid computing infrastructure. Based on semantics representation

methods and tools it leads to an enhancement of services and applications with knowledge and semantics. More information about research areas under consideration for BalticGrid SIG development and implementation is available on the following website:

<http://sig.balticgrid.org/>

Currently, SIG areas are:

- Baltic Sea Eco-System Modeling
- Text Annotation Service
- Text-to-Speech Service
- Stellar Spectra Computation
- Atomic and Nuclear Computations



BalticGrid Infrastructure

The Project supports and manages a production quality Baltic Grid infrastructure making its resource available across the Baltic Region and Europe to various user communities and virtual organisations in a consistent way according to agreed access management policies and service level agreements. Today BalticGrid network is connected to GEANT 2.5 Gbps backbone in Estonia, Latvia and Lithuania via the 1 Gbps infrastructure of their national network infrastructures: EENet, LATNET, LITNET.

The BalticGrid infrastructure support production jobs. Currently, the following resources of the BalticGrid project are available for usage for application developers and other users interested in Grid computing: number of sites: 26 total CPUs: > 900 processors storage capacity: > 55 TB

To access the resources one should apply for a personal certificate and membership in a Virtual Organization (VO). Instructions on how to apply are available on the Project website:

www.balticgrid.org/SAI_Activity/bgvoregistration

User Access and Support Tools

Migrating Desktop

The Migrating Desktop is a framework, graphical user interface for application management, grid and job monitoring, data and metadata management.

OCM-G and G-PM

OCM-G is an on-line monitoring system and G-PM is a performance analysis tools for grid applications.

Software component

Service Level Agreements (SLA) based QoS management.

User account management system

In the research activity of the BalticGrid a dynamic, non-intrusive, standards based user account management system has been proposed and developed. Its implementation is based on the Virtual Account System that extends the gLite Gatekeeper service by allowing to run the job on a virtual account. Later on, integration with gLite DGAS accounting system is planned.



BalticGrid educational area comprises

- Introductory and advanced tutorials for Grid sites administrators and application developers
- Grid Summer School (4-8 July 2007, Riga, Latvia)
- Grid seminars organized by Partners of the Project in various cities in the Baltic States

The dissemination materials offered by BalticGrid

General information about the Project and its achievements as brochures, posters and presentations are available on the website.

www.balticgrid.org



We would like you to take an interest in the BG activities described below

BalticGrid Pilot Applications

BG develops several pilot applications for validation and demonstration of successful scientific use of the BalticGrid infrastructure.

Examples

High Energy Physics Applications

CMS - Compact Muon Solenoid applications that are used to generate Monte Carlo datasets, simulation of these events with the detector, reconstruction of particles and analysis (the application will be implemented by joining the corresponding VO of EGEE)

Full simulation and reconstruction programs for LHCb experiment to produce and analyze Monte Carlo data. The processing chain consists of physics generator of proton-proton collisions.

simulation of particles passage through the detector material and the reconstruction of collision products. To be executed on LHCb VO enabled clusters of EGEE.

Statistical Data Analysis applications to study the sensitivity of physics measurements using simplified models. The applications are built with help of RooFit package (ROOT framework) which provides necessary statistical tools to mimic the physics measurement procedure (predefined PDFs, minimization and fitting algorithms).

Material Sciences Application

An example of the BalticGrid material sciences applications is GAMESS - a software to research the geometric structure of various organic, metal-organic and inorganic materials; understanding

optical and magnetic properties of molecular derivatives; predicting new technology and creation of new materials with specified characteristics.

Bioinformatics Application

Bioinformatics applications giving tools and computing procedures for sequence pattern discovery and gene regulatory network reconstruction, for the refinement of 3D biological macromolecule models. Motif Finding Algorithm is

used within iSPEXS application which is elaborated in cooperation with the Bioinformatics and Data Mining Institute of Computer Science at the University of Tartu in Estonia.

more info: www.balticgrid.org/Applications_on_BalticGrid



APPENDIX C – BG EVENT EVALUATION FORM

The example form below is the event evaluation form, which the participants of the 2nd BG Summer School were given.

2nd BalticGrid Summer School Evaluation Form

2-6 July 2007, Riga, Latvia

Event organized in the framework of the BalticGrid project

Please fill this form and leave it at the school reception desk
Evaluate giving a rating from 1 to 5 (1=bad, 2=sufficient, 3=good, 4=very good, 5=excellent)

About You (do not fill this section if you want to remain anonymous!)

Name:
Affiliation:
Email:

Program:

- Day 1 1 2 3 4 5
Day 2 1 2 3 4 5
Day 3 1 2 3 4 5
Day 4 1 2 3 4 5
Day 5 1 2 3 4 5

- Tutorials rooms and facilities 1 2 3 4 5
Information prior to the event 1 2 3 4 5
Information during the event 1 2 3 4 5
Materials 1 2 3 4 5
Tutors' skills and knowledge 1 2 3 4 5
Social events 1 2 3 4 5

Comments/Suggestions/Complaints



DISSEMINATION REPORT

We are very interested in your suggestions about how to improve next BalticGrid events, either in the program content or in organization:

.....
.....
.....

Thank you for cooperation!



APPENDIX D – BG DISSEMINATION ACTIVITIES DELIVERED BY THE BG PARTNERS

D1. Brochures

Activity/Task: NA2

Title: Lithuanian GRID - LitGrid

Name(s) of author(s): Dalius Mažeika

Description of content (maximum about 500 words): Brochure gives an overview of Litgrid and Balticgrid projects: goals, computational problems, results of calculations are presented as well.

Date of publication: 8.11.2006

Place of publication (city, country, event): Vilnius, Lithuania, Seminar presenting LitGrid and Balticgrid projects.

Primary language(s) used: Lithuanian

Intellectual property rights (e.g. public, ©IFJ PAN): VU

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.litgrid.lt/informpra/folder.2006-11-08.2329789421/>

Activity/Task: NA2

Title: General BG Brochure update – issue 2

Name(s) of author(s): Zofia Mosurska, Robert Pajak, Milena Zajac, Per Öster

Description of content (maximum about 500 words): An updated version of the general project brochure. It was distributed during the 3rd AHM and Grid Open Day in Tallinn (15-17 May 2007).

Date of publication: 1.04.2007

Place of publication (city, country, event): Krakow, Poland

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): public

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

Activity/Task: NA2

Title: OCM-G – Grid enabled OMIS Compliant Monitoring

Name(s) of author(s): Tomasz Szepieniec

Description of content (maximum about 500 words): The brochure presents the introduction to the OCM-G, key features, examples of use as well as related projects. It was distributed during the EGEE UF / OGF20 in Manchester, UK (8-10 May 2007).

Date of publication: 1.04.2007

Place of publication (city, country, event): Krakow, Poland

Primary language(s) used: English



Intellectual property rights (e.g. public, ©IFJ PAN): public

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

Activity/Task: NA2

Title: The SyntSpec Technical Brochure for BalticGrid

Name(s) of author(s): G. Tautvaišienė, E. Puzeras, Š. Mikolaitis

Description of content (maximum about 500 words): The brochure describes the SyntSpec application. It contains two parts: the first part popularly describes the idea of stellar spectra modeling and aims of stellar astrophysics; the second part gives an impression how the application is running on the BalticGrid infrastructure.

Date of publication: 31.08.2007

Place of publication (city, country, event): Vilnius, Lithuania

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

Activity/Task: NA3/NA2

Title: Brochure “Deformation calculations of composite structures by ANSYS & Grid “

Name(s) of author(s): Kaspars Kalnins, Baiba Kaskina

Description of content (maximum about 500 words): This brochure outlines the gridification of the ANSYS software and adjustments of it for the calculations of Riga Technical University, Institute of Material Sciences. In everyday praxis ANSYS code has been applied by RTU IMS to design the composite structures, which by its nature is time demanding process.

Date of publication: 27.09.2007

Place of publication (city, country, event): Riga, Latvia. Used at the EGEE'07 conference in Budapest, Hungary

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): IMCS UL

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

Activity/Task: NA3

Title: Technical brochure “Vilnius Parallel Shell Model Code (VPSM) for large-scale nuclear structure calculations “

Name(s) of author(s): A. Juodagalvis (ITPA)

Description of content (maximum about 500 words): This brochure presents Vilnius Parallel Shell Model Code (VPSM). VPSM, developed at VU ITPA, is a parallel, distributed-memory shell model code for large-scale nuclear structure calculations. It allows computing low-energy excitation spectra and strength distributions of Gamow-Teller excitations. It is not restricted to specific regions of the



nuclear chart, however, computational feasibilities are different. Larger model spaces provide room for more nuclear configurations and, consequently, demand more resources. The code is developed having in mind possibilities provided by the grid. Multi-computer clusters are an ideal setting for such a resource-demanding application as our program. The development of the BalticGrid infrastructure was a great motivation for work on the code.

Date of publication: 23.10.2007

Place of publication (city, country, event): BalticGrid website

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): © ITPA VU

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

Activity/Task: NA3

Title: Technical brochure “Calculation of atomic characteristics with FAC and VMAS codes“

Name(s) of author(s): Grazina Tautvaisiene

Description of content (maximum about 500 words):

Date of publication: 24.10.2007

Place of publication (city, country, event): BalticGrid website

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

Activity/Task: SA1

Title: Technical brochure “Grid Operations “

Name(s) of author(s): Robert Pajak, Zofia Mosurska, Lauri Anton, Mario Kadastik

Description of content (maximum about 500 words): This brochure presents the status and activities performed within the framework of the Project SA1 activity.

Date of publication: 31.10.2007

Place of publication (city, country, event): BalticGrid website

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Brochures/>

D2. Posters

Activity/Task: NA2

Title: RTU ETF Grid Cluster



Name(s) of author(s): Olgerts Belmanis, RTU

Description of content (maximum about 500 words): A BG poster describing the RTU Grid cluster, presented during the Information Day in Brussels, on 6 February, 2007

Date of publication: 6.02.2007

Place of publication (city, country, event): Brussels, Belgium

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): public

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Materials/Posters>

Activity/Task: NA2

Title: Expanding the Reach of EGEE

Name(s) of author(s): F. Estrella, Z. Mosurska, EGEE NA2, Dissemination contacts from several Infrastructure projects

Description of content (maximum about 500 words): The “Expanding the Reach of EGEE” poster describes the collaboration and interaction among the following projects – EGEE, BalticGrid, EELA, EUChinaGrid, EUIndiaGrid, EUMedGrid and SEE-GRID-2. It includes the current status of the infrastructure in terms of the number of sites, the supported middleware, networks used, among many things.

Date of publication: 7-11.05.2007

Place of publication (city, country, event): First posted at the EGEE UF at Manchester, May 2007.

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): public

Availability (e.g. on request, via email, in printed form, on Web):
<https://edms.cern.ch/file/840150/1/RP-Infra-poster-1-0-final.pdf>,
<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: NA2

Title: “Migrating Desktop Platform framework for grid Applications” – roll stand

Name(s) of author(s): Bartek Palak, Marcin Płóciennik, Mirosław Kupczyk, Norbert Meyer, Paweł Wolniewicz

Description of content (maximum about 500 words): The poster presents in the graphical form some details about Migrating Desktop usage. It also contains information related to its exploitation in several projects, especially in BalticGrid.

Date of publication: 8-10.05.2007

Place of publication (city, country, event): Manchester, UK, EGEE User forum

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): PSNC

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Posters/>



Activity/Task: NA2

Title: Technical components poster: “JRA: Service Level Agreement - Markets and Dynamic Account Management”

Name(s) of author(s): Michał Jankowski

Description of content (maximum about 500 words): It contains some basic data about SLAs and Dynamic Account Management in the grid environment. It explains the goal of the extension of gLite: Virtual User System, which has been developed by PSNC. More than 200 visitors were able to see it during the sessions.

Date of publication: 8-10.05.2007

Place of publication (city, country, event): Manchester, UK, EGEE User forum

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): PSNC

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: NA3/NA2

Title: Poster about Prolog-MPI developments.

Name(s) of author(s): Kristaps Džonsons

Description of content (maximum about 500 words):

Prolog-mpi provides an abstract distributed-computing interface to operators of the Prolog computer language. Prolog is a popular language in a variety of fields, especially in the mathematical fields of provability, artificial intelligence, and optimisation. The prolog-mpi primary executable, pl-mpi, is an extension of the familiar SWI-Prolog interpreter that operates upon custom predicates in order to distribute instructions and data to a network of compute nodes. The system uses MPI as the distribution mechanism.

Date of publication: 9-11.05.2007

Place of publication (city, country, event): Manchester, UK, EGEE User forum

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): IMCS UL

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: NA2

Title: “Migrating Desktop Platform framework for grid Applications” – roll stand

Name(s) of author(s): Bartek Palak, Marcin Płóciennik, Mirosław Kupczyk, Norbert Meyer, Paweł Wolniewicz

Description of content (maximum about 500 words): The poster presents in the graphical form some details about Migrating Desktop usage. It also contains information related to its exploitation in several projects, especially in BalticGrid.

Date of publication: 15-17.05.2007

Place of publication (city, country, event): Tallinn, Estonia, Grid Open Day



Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): PSNC

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: SA2/NA2

Title: Poster at TNC

Name(s) of author(s): Guntis Barzdins, Mārtiņš Freivalds, Baiba Kaškina, Jānis Ķikuts, Katrina Sataki

Description of content (maximum about 500 words): BalticGrid started in 2005 with its main goals to extend the European Grid by integrating new partners from the Baltic States (Lithuania, Latvia and Estonia) into the European Grid research community and to foster the development of Grid infrastructure in these countries.

Another important task of the project is to bring the knowledge of Grid technologies and use of Grids in the Baltic States to a level comparable to that in the EU member states with a longer experience in the development, deployment and operation of Grids.

In the first 18 months of the project BalticGrid consortium has:

- installed 26 EGEE-certified clusters with more than 900 CPUs in total and 95 TB of storage space;
- concluded Service Level Agreements between the BalticGrid project and three NRENs of the Baltic countries to provide reliable network connectivity for the Grid clusters;
- developed and adapted to the Grid environment several applications for different areas of science, and has established Special Interest Groups: Baltic Sea Eco-System Modelling, Text-to-Speech, Text Annotation, Stellar Spectra Computing, Atomic and Nuclear Computing, Computer Modelling;
- organised many interesting events including Grid Open Days, BalticGrid All-Hands Meetings, and summer schools to raise awareness and education of the grid users.

The poster illustrates the achievements of the BalticGrid project including the established infrastructure and Grid clusters, different application areas targeted and future plans as well as the contact details.

Date of publication: 21-24.05.2007

Place of publication (city, country, event): Copenhagen, Lyngby – Denmark, TERENA Networking Conference 2007

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN): IMCS UL

Availability (e.g. on request, via email, in printed form, on Web):

<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: NA2

Title: Poster: Quantum chemical investigation of Co_2O_n ($n=1-7$)

Name(s) of author(s): J. Tamuliene, R. Vaisnoras, G. Badenes, M.L. Balevicius

Description of content (maximum about 500 words): In the poster we present our investigation results that were obtained using BalticGrid facilities. Electronic and geometrical structures of Co_2O_n



(n=1-7) derivatives have been studied using the density functional theory. Structural differences to the corresponding clusters are presented. It is found that the most stable CoO derivatives are Co_2O_3 and Co_2O_6 in which oxidation state of metal is +3 and +5, respectively.

Date of publication: 12.06.2007

Place of publication (city, country, event): 37-th Lithuania National Physics Conference, held in Vilnius, Lithuania

Primary language(s) used: Lithuanian

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):

Abstract book of the conference

Activity/Task: NA2

Title: Recent Extensions in Application Monitoring System OCM-G

Name(s) of author(s): Tomasz Duszka, Jakub Janczak, Tomasz Szepieniec

Description of content (maximum about 500 words):

Date of publication: 15-17.10.2007

Place of publication (city, country, event): Krakow, Poland, CGW'07

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):

<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: NA2

Title: A Performance Visualization Tool – Candle

Name(s) of author(s): Tomasz Duszka, Jakub Janczak, Tomasz Szepieniec

Description of content (maximum about 500 words):

Date of publication: 15-17.10.2007

Place of publication (city, country, event): Krakow, Poland, CGW'07

Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):

<http://www.balticgrid.org/Dissemination/Posters/>

Activity/Task: NA2

Title: A View on Site Efficiency with Batch System Analysis Tool

Name(s) of author(s): Marcin Radecki, Michal Zajac

Description of content (maximum about 500 words):

Date of publication: 15-17.10.2007

Place of publication (city, country, event): Krakow, Poland, CGW'07



Primary language(s) used: English

Intellectual property rights (e.g. public, ©IFJ PAN):

Availability (e.g. on request, via email, in printed form, on Web):
<http://www.balticgrid.org/Dissemination/Posters/>

D3. Workshops

Activity/Task: NA2

Title: Grid users' workshop

Name(s) of organizing institution(s): VU

Start date: 2.11.2006

End date: 2.11.2006

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): Workshop was organized by Vilnius University for grid users in order to make usage of grid resources in more intensive way, to encourage users to gridify their applications. During workshop main problems of the users were identified and possible solutions were found.

Web page of the event:

Primary language(s) used: Lithuanian

Number of participants (approximately): 30

Activity/Task: NA2

Title: All hands meeting of the Institute of Theoretical Physics and Astronomy of Vilnius University

Name(s) of organizing institution(s): Institute of Theoretical Physics and Astronomy of Vilnius University

Start date: 27.11.2006

End date: 27.11.2006

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): The all hands meeting of project participants from VU ITPA brought together all scientists, developers, activity leaders. There were a number of questions discussed:

1. The results and ideas, from all hands meeting in Riga and the PMB meeting in Geneva.
2. Actualities concerning new applications in GRID environment.
3. Possible technical solutions of available problems.
4. Achievements (increasing number of users and applications).
5. Possible ways for more efficient usage of GRID and CPU time.

The future plans and aims.

Web page of the event: <http://balticgrid.itpa.lt/?p=46>

Primary language(s) used: Lithuanian

Number of participants (approximately): 20



Activity/Task: NA2

Title: Annual reporting meeting of grid activities in Lithuania (workshop)

Name(s) of organizing institution(s): VU

Start date: 15.12.2006

End date: 15.12.2006

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): Workshop was organized as annual reporting meeting of grid activities in Lithuania. Representatives from 11 universities and research institutes participate in this workshop. All of them reported about their grid activities during 2006. During workshop new VU cluster (84 CPU AMD Opteron) and SMP supercomputer SGI Altix4700 were presented.

Web page of the event: <http://mif.vu.lt/balticgrid>; <http://www.litgrid.lt>

Primary language(s) used: Lithuanian

Number of participants (approximately): 30

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Students, researchers, professors, representative from IT company "BGM".

Activity/Task: NA2/NA3

Title: Application workshop with IFJPN representative

Name(s) of organizing institution(s): IMCS UL, IFJPN

Start date: 18.01.2007

End date: 18.01.2007

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): Tomasz Szepieniec has visited IMCS UL and together with the IMCS UL employees a very productive workshop was held. Possibilities to use OCMG were discussed, as well as the best way to adapt out applications (ANSYS, Prolog MPI, etc.) to the Grid environment.

Web page of the event:

Primary language(s) used: English

Number of participants (approximately): 18

Audience (students, researchers, etc.; higher education, industry, general public, etc.): IMCS UL employees

Activity/Task: NA2/NA3

Title: GEANT and Grid Info day

Name(s) of organizing institution(s): IMCS UL

Start date: 24.04.2007

End date: 24.04.2007

Venue (city, country): Riga, Latvia



Description of content (maximum about 500 words): The annual Latvian Grid Info day was organised in conjunction with the GEANT event. The achievements of the BalticGrid project were presented including the overall project update and presentations about Grid usage in Latvia. The Migrating Desktop adaptation for the SentiKamols application was demonstrated. Riga Technical University developments were presented, as well as some innovative presentations about the Data Grid were given.

Web page of the event: <http://grid.lumii.lv/section/show/35>

Primary language(s) used: Latvian

Number of participants (approximately): 50

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Researchers, Network administrators, Students of Computer Science

Activity/Task: SA1

Title: Internal workshop

Name(s) of organizing institution(s): RTU

Start date: 27.04.2007

End date: 27.04.2007

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): Report about last six month significant items and works was given:

- WMS server was installed and tested and is ready to use.
- RTU according to time schedule monitoring BG ticketing watching.
- Slaidins and Belmanis successfully participated in Spanish conference on science grid computing with BG project and RTU presentation.
- It is decided to participate in OGF in Manchester.

Web page of the event:

Primary language(s) used:

Number of participants (approximately): 9

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Project participants from RTU.

Activity/Task: NA2

Title: BOF: "Remote Instrumentation in Grid Environment"

Name(s) of organizing institution(s): PSNC, NICPB

Start date: 7.05.2007

End date: 11.05.2007

Venue (city, country): Manchester, UK

Description of content (maximum about 500 words): "BOF meeting co-organised by PSNC at OGF20 - RISGE - Remote Instrumentation in Grid Environment" - goal to start a research group with engagement of BalticGrid community.

Web page of the event: http://www.ogf.org/OGF20/events_ogf20.php

Primary language(s) used: English



Number of participants (approximately): 30

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers, higher education, industry.

Activity/Task: NA2

Title: BalticGrid SIG workshop

Name(s) of organizing institution(s): Vilnius University

Start date: 18.06.2007

End date: 18.06.2007

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): Seminar was arranged to introduce the features of SIG for users and application developers. Algimantas Juozapavičius has made introduction to SIG activities and explained the main services provided by SIG to grid users. Tomas Anbindeeris made second presentation about gridcom (Grid Commander) and explained in detail how to adopt application in order to use from SIG environment. After presentation a long time discussion started.

Web page of the event: <http://mif.vu.lt/balticgrid/newsandevents/>

Primary language(s) used: Lithuanian

Number of participants (approximately): 50

Audience (students, researchers, etc.; higher education, industry, general public, etc.): users and application developers

Activity/Task: NA2

Title: Cracow Grid Workshop 2007 (CGW'07)

Name(s) of organizing institution(s): Academic Computer Centre CYFRONET, IFJ PAN, the Institute of Computer Science AGH, Jagiellonian University, Collegium Medicum

Start date: 15.10.2007

End date: 17.10.2007

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): During the event several keynote lectures were given, among others by Norbert Attig, Carole Goble, Dieter Kranzlmüller, Peter Sloot and Hai Zhuge. Almost 100 contributed papers, accepted for presentation during the Workshop, provided a very good overview of the research activity in the area of Grid computing. This international meeting covered current advances in research in Grid systems and Grid applications, overviews of research in the main European Grid projects, overviews of national Grid projects and the Chemomentum Tutorial.

Web page of the event: <http://www.cyfronet.pl/cgw07/>

Primary language(s) used: English

Number of participants (approximately): 150

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers, higher education, industry



D4. Conferences

Activity/Task: NA2

Title: 65th conference of the University of Latvia, Section of the Grid technologies

Name(s) of organizing institution(s): University of Latvia, IMCS UL

Start date: 14.02.2007

End date: 14.02.2007

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): Six different presentations about various Grid related issues were given to illustrate the achievements of the BalticGrid project and other projects, the users' perspective, the newest developments in the application area and the status of the monitoring infrastructure.

Web page of the event: <http://grid.lumii.lv/section/show/34>

Primary language(s) used: Latvian

Number of participants (approximately): 20

Audience (students, researchers, etc.; higher education, industry, general public, etc.):

Researchers from different institutions

Activity/Task: NA2

Title: 3rd BalticGrid All-Hands Meeting and Grid Open Day

Start date: 15.05.2007

End date: 17.05.2007

Full report of this event is placed in Appendix A

D5. Tutorials

Activity/Task: SA1

Title: Grid tutorial (job submission, gLite, info system – on bgtut VO)

Name(s) of organizing institution(s): Institute of Nuclear Physics PAN, Academic Computer Centre CYFRONET AGH

Start date: 19.12.2006

End date: 19.12.2006

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): The tutorial was designed for an introduction to potential users of EGEE infrastructure who want to get familiar with Grid Computing. It covered introduction to basic grid concepts and gaining user experience from interacting with the Grid. The focus was aimed at the current version of EGEE middleware - gLite. The first part was an introduction to obtain and understand how use grid certificates. Second part was a guide with practical examples on



how to submit and then control jobs on the Grid and how to provide data control using gLite. Users made some exercises on dedicated user interface (fwe01.ifj.edu.pl) on BG-TUT VO.

Web page of the event:

Primary language(s) used: Polish

Number of participants (approximately): 12

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students of the universities in Krakow

Activity/Task: SA1

Title: Grid tutorial (file management, Ganga using, ATHENA installation problems - on bgtut VO

Name(s) of organizing institution(s): Institute of Nuclear Physics PAN, Academic Computer Centre CYFRONET AGH

Start date: 17.01.2007

End date: 17.01.2007

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): The tutorial was designed for an introduction to potential users of EGEE infrastructure who want to get familiar with Grid Computing. It covered introduction to basic grid concepts and gaining user experience from interacting with the Grid. First part was a continuation of previous tutorial, with focus was aimed at using current version of EGEE middleware - gLite.

That part guides participants covered the data management issues. Second part was a simple demonstration how to install and use GANGA - python based "interface" to use grid. Third part was a demonstration what problems user can be faced with while installing big "gridified" software packages - like ATHENA - software used in LHC ATLAS experiment. Users made some exercises on dedicated user interface (fwe01.ifj.edu.pl) on BG-TUT VO.

Web page of the event:

Primary language(s) used: Polish

Number of participants (approximately): 10

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students of the universities in Krakow

Activity/Task: NA2

Title: HPC (high performance computing) and grid tutorial

Name(s) of organizing institution(s): Kaunas University of Technology

Start date: 9.03.2007

End date: 9.03.2007

Venue (city, country): Kaunas, Lithuania

Description of content (maximum about 500 words): D. Mažeika made a HPC and grid tutorial for PhD student. Configuration and usage of user interface, main commands and CA were explained. Some examples of jdl files and C program code were presented. Before D. Mazeika had a lecture about HPC and grid computing (*See report below*).

Web page of the event:



Primary language(s) used: Lithuanian

Number of participants (approximately): 10

Audience (students, researchers, etc.; higher education, industry, general public, etc.): PhD students

Activity/Task: NA2

Title: Integration of Grid applications with the Migrating Desktop

Name(s) of organizing institution(s): Institute of Theoretical Physics and Astronomy of Vilnius University

Start date: 24.04.2007

End date: 26.04.2007

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): The aim of the tutorial was to provide the basic understanding of integration and usage of applications with the Migrating Desktop (MD). General issues of integration between MD and applications were presented. Examples of "plug-ins" and explanation how the "plug-ins" should be written were discussed and exercises provided.

The parallel work with users and developers of applications GRASPO, DARC, VMAS, SYNSPEC, GAMESS, ATOM, VPSM, KOPaQGP took place. The aims of the tutorial was to clarify the following tasks:

- The current submission of applications to gLite;
- The necessary special requirements for the applications;
- The possibilities of integration within Migrating Desktop;

Main difficulties and frequently asked questions in using MD.

Lecturer was Bartek Palak (Poznan).

Web page of the event:

Primary language(s) used: English

Number of participants (approximately): 15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): users and developers of applications

Activity/Task: NA2

Title: Tutorial: "Basics and Advances of the Grid gLite and Migrating Desktop"

Name(s) of organizing institution(s): PSNC, NICPB

Start date: 15.05.2007

End date: 15.05.2007

Venue (city, country): Tallinn, Estonia

Description of content (maximum about 500 words): The first part of the tutorial is designed for new users willing to get familiar with grid processing. It covers introduction to basic grid concepts, grid middleware components. The focus is aimed by the use of gLite middleware via command line and Migrating Desktop as GUI, which is fully utilized in the BalticGrid infrastructure. During the hands-on exercises some practical examples will be trained (using gLite commands and Migrating Desktop simultaneously):



- What are the personal credentials for?
- Login to the Grid.
- How to run any job.
- Basic file management.
- How to control my jobs .

The second part of the tutorial concerns the follow up features of gLite and Migrating Desktop respecting user grid requirements. Additionally the user will be guided how to manage the file replicas, and interactive jobs over the grid. Some guidelines about possible integration of applications within Migrating Desktop will be discussed. After the tutorial the participant will be able to:

- To manage files.
- Run a parallel/distributed job
- Run a sequential and MPI application
- Run an interactive job.
- Prepare and run a workflow under gLite.

Web page of the event: <http://hep.kbfi.ee/index.php/AllHands/Main>

Primary language(s) used: English

Number of participants (approximately): 20

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers, higher education

Activity/Task: NA2

Title: HPC (high performance computing) and grid tutorial

Name(s) of organizing institution(s): Kaunas University of Technology

Start date: 8.06.2007

End date: 8.06.2007

Venue (city, country): Kaunas, Lithuania

Description of content (maximum about 500 words): D. Mažeika made a HPC and grid tutorial for teachers from different Lithuanian colleges. Configuration and usage of user interface, main commands and CA were explained. Some examples of jdl files and C program code were presented. Before D. Mažeika had a lecture about HPC and grid computing.

Web page of the event:

Primary language(s) used: Lithuanian

Number of participants (approximately): 20

Audience (students, researchers, etc.; higher education, industry, general public, etc.): teachers from different Lithuanian colleges

Activity/Task: NA2

Title: Baltic Grid 2nd Summer School

Start date: 2.07.2007

End date: 6.07.2007

The 2nd BalticGrid Summer School was organised in Riga by two Latvian Project partners – IMCS UL and RTU. This summer school was devoted mainly to application users and developers who want to



exploit grid resources. It covered five days of lectures and practical work. The first day included a lecture and an introductory course on Grid Computing. Lectures and exercises on various aspects of applications grid-enabling were covered the next three days. The last day of the school focused on Grid security issues.

Full report of this event is placed in Appendix A

D6. Seminars

Activity/Task: NA2/NA3

Title: Seminar about Grid opportunities for the Institute of Materials and Structures

Name(s) of organizing institution(s): IMCS UL

Start date: 2.11.2006

End date: 2.11.2006

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): A seminar has been organised for people from the Institute of Materials and Structures, Riga Technical University to discuss their calculation needs, software they are using and opportunities that Grid can offer.

ANSYS software was presented and a plan was designed on how to adapt this software for the Grid environment.

Primary language(s) used: Latvian

Number of participants (approximately):10

Audience (students, researchers, etc.; higher education, industry, general public, etc.): higher education, researchers

Activity/Task: NA2

Title: UNESCO Seminar for pupils to raise interest in exact sciences

Name(s) of organizing institution(s): UNESCO, IMCS UL, other scientific institutions

Start date: 6.11.2006

End date: 10.11.2006

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): UNESCO in cooperation with different scientific institutions including IMCS UL organised series of events where pupils visited scientific institutes. IMCS UL was visited by three groups of pupils on 7.11.2006. and 10.11.2006., in total approximately 90 people. Different presentations about the IMCS UL activities were organised including presentations about Grid technologies and the BalticGrid project.

Primary language(s) used: Latvian, Russian

Number of participants (approximately):90

Audience (students, researchers, etc.; higher education, industry, general public, etc.): pupils



Activity/Task: NA2

Title: Architecture of a Distributed Environment for Organization and Execution of Experiments in Virtual Laboratory (Lukasz Czekierda, CYFRONET)

Name(s) of organizing institution(s): IFJPAN, CYFRONET

Start date: 9.11.2006

End date: 9.11.2006

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): Remote control of real devices is a quite popular activity these days. Fast and quite reliable computer networks seem to be suitable to perform such activities for scientific research, training and entertainment. There are many environments called virtual laboratories, which allow people to use real devices (as well as their simulators) and perform experiments.

One of the most important disadvantages of majority of contemporary virtual laboratories is the fact that the features available to the users are extremely limited; they are not able to make a full use of the accessible equipment. The reason is a lack of a correct architecture of these laboratories.

The goal of the lecture is to present the architecture of the Virtual Laboratory created in Distributed Systems Research Group at Department of Computer Science of AGH-UST. The important issue of the platform is the usage of the most complex and sophisticated component technology "CORBA Component Model (CCM)" and its integration with workflow and portal environments into one consistent multilayer architecture. Remote users of the Virtual Laboratory can develop, configure, deploy and execute both batched and interactive experiments by themselves. The concept and architecture were practically verified by creating a prototype instance of the Laboratory: "Multimedia Virtual Laboratory".

Primary language(s) used: English, Polish

Number of participants (approximately):15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2

Title: Parallel and Distributed Computing

Name(s) of organizing institution(s): Alytus College (lecture by Jelena Tamuliene from ITPA)

Start date: 15.11.2006

End date: 15.11.2006

Venue (city, country): Alytus, Lithuania

Description of content (maximum about 500 words): The lecture aims at providing the basic understanding on how problems can be solved on a distributed multiprocessor system and what is grid.

There were introduced the following concepts :

- Why the parallel computing is promising;
- The common problems followed parallel and distributed computing. How the problems are solved;
- EGEE project;
- BalticGrid project;



- LitGrid project;
- How to become a participant of the BalticGrid and LitGrid projects.
- Number of participants – about 20 lecturers and graduate students.

Web page of the event: <http://balticgrid.itpa.lt/kolegijos.pdf>

Primary language(s) used: Lithuanian

Number of participants (approximately):20

Audience (students, researchers, etc.; higher education, industry, general public, etc.): lecturers and graduate students

Activity/Task: NA2

Title: Component-based grid environment for programming scientific applications (Maciej Malawski, CYFRONET)

Name(s) of organizing institution(s): IFJPAN, CYFRONET

Start date: 16.11.2006

End date: 16.11.2006

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): Programming grid applications still remains a challenging problem due to distributed and heterogeneous environment, which is not under single administrative control. Key means for building an environment which will facilitate programming of grid application are choosing the programming model and a virtualization mechanism.

After analysis of possible programming models, the component model was chosen, and specifically CCA standard as most appropriate for scientific applications. As a virtualization layer the H2O resource sharing platform was selected. H2O provides a Java-based lightweight access to shared resources featuring dynamic code deployment, communication library and security solutions.

Requirements for the component environment were identified, such as scalability to environments of various level of coupling, facilitated deployment on shared resources, multiple programming language support, enabling declarative and imperative programming paradigms, adaptivity to unreliable environment and interoperability with other existing and emerging standards such as Web services and GCM.

These requirements were starting point for development of a concept of component-based approach to programming and deployment of grid applications, and next it was implemented as a grid environment. The proposed environment was verified by a prototype implementation called MOCCA and tested on sample applications in real grid environment.

Primary language(s) used: English, Polish

Number of participants (approximately):15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2

Title: Parallel and Distributed Computing

Name(s) of organizing institution(s): Marijampole College (lecture by Jelena Tamuliene from ITPA)

Start date: 16.11.2006



End date: 16.11.2006

Venue (city, country): Marijampole, Lithuania

Description of content (maximum about 500 words): The lecture aims at providing the basic understanding on how problems can be solved on a distributed multiprocessor system and what is grid.

There were introduced the following concepts :

- Why the parallel computing is promising;
- The common problems followed parallel and distributed computing. How the problems are solved;
- EGEE project;
- BalticGrid project;
- LitGrid project;
- How to become a participant of the BalticGrid and LitGrid projects.
- Number of participants – about 20 lecturers and graduate students.

Web page of the event: <http://balticgrid.itpa.lt/kolegijos.pdf>

Primary language(s) used: Lithuanian

Number of participants (approximately):20

Audience (students, researchers, etc.; higher education, industry, general public, etc.): lecturers and graduate students

Activity/Task: NA2

Title: Parallel and Distributed Computing

Name(s) of organizing institution(s): Panevezys College (lecture by Jelena Tamuliene from ITPA)

Start date: 21.11.2006

End date: 21.11.2006

Venue (city, country): Panevezys, Lithuania

Description of content (maximum about 500 words): The lecture aims at providing the basic understanding on how problems can be solved on a distributed multiprocessor system and what it is GRID.

There were introduced the following concepts :

- Why the parallel computing is promising;
- The common problems followed parallel and distributed computing. How the problems are solved;
- EGEE project;
- BalticGrid project;
- LitGrid project;
- How to become a participant of the BalticGrid and LitGrid projects.
- Number of participants – about 20 lecturers and graduate students.

Web page of the event: <http://balticgrid.itpa.lt/kolegijos.pdf>

Primary language(s) used: Lithuanian

Number of participants (approximately):20



Audience (students, researchers, etc.; higher education, industry, general public, etc.): lecturers and graduate students

Activity/Task: NA2/SA1

Title: Seminar about connecting a new cluster with Institute of Physics, University of Latvia

Name(s) of organizing institution(s): IMCS UL

Start date: 24.11.2006

End date: 24.11.2006

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): A seminar has been organised for people from the Institute of Physics, University of Latvia to discuss the possibilities to install a new cluster at their premises and to connect it to the BalticGrid network. Various technical challenges were presented and discussed, including the hardware, software, premises, middleware, certification, etc.

Primary language(s) used: Latvian

Number of participants (approximately):10

Audience (students, researchers, etc.; higher education, industry, general public, etc.): higher education, researchers

Activity/Task: NA2

Title: Seminar “Grid computing for HEP”

Name(s) of organizing institution(s): Institute of Physics, Vilnius University

Start date: 2.12.2006

End date: 2.12.2006

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): Meeting with the aim to present Litgrid and Balticgrid project was organized at Institute of Physics. BalticGrid and LitGrid infrastructure, main goals and applications were presented in presentation:

“GRID technology and open source software for HEP” (D. Germanas)

After seminar new cluster at Institute of Physics was introduced.

Web page of the event: <http://mif.vu.lt/balticgrid>; <http://www.litgrid.lt>

Primary language(s) used: Lithuanian

Number of participants (approximately): 20

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers, professors

Activity/Task: NA2

Title: The review of the Grid projects of FP6.

Name(s) of organizing institution(s): IFJPAN, ACC CYFRONET AGH

Start date: 11.12.2006

End date: 11.12.2006



Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): The seminar concerned Grid projects in which IFJPAN and ACC CYFRONET AGH participate. Among other EU FP6 projects the description of the BalticGrid has been presented by Michal Turala (IFJPAN) to participants of this meeting. The aims, structure and achievements of this Project were introduced.

Web page of the event:

Primary language(s) used: Polish

Number of participants (approximately): 25

Audience (students, researchers, etc.; higher education, industry, general public, etc.): higher education, researchers

Activity/Task: NA2

Title: Component Provisioning of services in distributed systems with variable resources availability configuration (Piotr Nawrocki, CYFRONET)

Name(s) of organizing institution(s): IFJPAN, CYFRONET

Start date: 14.12.2006

End date: 14.12.2006

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): The rise of systems utilizing wireless communications (mobile systems, among others) has forced a new approach to the service provision problem. Existing systems that offered access to distributed resources did not meet all the requirements for systems operating in mobile environments.

The project concerns the issue of architecture design that makes it possible to provide services in distributed systems with variable resource availability configuration. The layer model of the system developed, comprising the locations of devices and services, the activation of services and monitoring of the entire system, enabled the design and implementation of a prototype application operating in a variable resource availability configuration environment and enabling the provision of services. The system, when implemented, enabled the validation of the architecture designed and made it possible to carry out appropriate environment performance tests for various test scenarios, accounting for, inter alia, the complexity of the query concerning the service, the simultaneous operation of multiple client applications and the impact of dynamic service parameter notification on the test environment.

Primary language(s) used: English, Polish

Number of participants (approximately): 15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA3

Title: Seminar on application Gridification

Name(s) of organizing institution(s): IMCS UL with Institute of Physics, University of Latvia

Start date: 15.12.2006

End date: 15.12.2006

Venue (city, country): Riga, Latvia



Description of content (maximum about 500 words): Researchers from the Institute of Physics UL met with specialists of IMCS UL to discuss the applications they are using for different calculations and how they could be used in the Grid environment. Also possibilities to create new cluster and join it with the existing infrastructure were outlined.

Web page of the event:

Primary language(s) used: Latvian

Number of participants (approximately): 10

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers

Activity/Task: NA2

Title: Seminar “E-science in the north region of Lithuania”

Name(s) of organizing institution(s): Šiauliai University, Vilnius University

Start date: 20.12.2006

End date: 20.12.2006

Venue (city, country): Šiauliai, Lithuania

Description of content (maximum about 500 words): Seminar was organized with the aim to discuss about grid computing and spread information about Litgrid and Balticgrid project in the north region of Lithuania. 3 speakers made presentations with the titles:

1. What is grid? (A. Voroneckas)
2. Grid for scientists (V. Giedrimas)
3. How to use grid (A. Vladyka)

After seminar a new cluster at Šiauliai University was introduced.

Web page of the event: <http://mif.vu.lt/balticgrid>; <http://www.litgrid.lt>

Primary language(s) used: Lithuanian

Number of participants (approximately): 15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Students, researchers, professors

Activity/Task: NA2

Title: The future of concurrent programming: alternatives to critical sections (Michal Kapalka, LPD, EPFL, Switzerland)

Name(s) of organizing institution(s): IFJPAN, CYFRONET

Start date: 21.12.2006

End date: 21.12.2006

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): Major chip manufacturers are close to reaching the limit of increasing the speed of individual processor cores, and are shifting towards parallel processing capabilities (multiprocessor systems and multi-core processors). This means that future applications will rely more and more on concurrent computing in some form. Unfortunately, although creating a number of threads is easy, synchronizing their access to shared data in an efficient



manner is a major task. Commonly used lock-based techniques (critical sections, monitors, etc.) do not scale well and pose a number of engineering problems, like deadlock or priority inversion.

The aim of the seminar is to give an overview of alternative techniques for managing concurrency. We will focus on transactional memory, which has recently gained much attention from major companies and research communities worldwide. Although a number of problems has not been solved yet, transactional memory is already perceived an important alternative to hand-crafted fine-grained locking. We will present transactional memory, and some other thread synchronization techniques, from both a theoretical and a practical perspective.

Primary language(s) used: English, Polish

Number of participants (approximately): 15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2, NA3

Title: Application Development and Implementation in BalticGrid

Name(s) of organizing institution(s): VU

Start date: 16.01.2007

End date: 18.01.2007

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): The seminar was arranged to discuss the state-of-the-art and practical issues of applications in BalticGrid. Questions discussed: GAMESS application, MPI on clusters, possibilities to use ANSYS software in BalticGrid, statistics with Monte Carlo has an attraction to some potential users, SIG concept and software were introduced and discussed in details, P-grade portal was introduced and discussed, applications for Computer modelling SIG were introduced and discussed, applications for Stellar spectra SIG, Atom and nuclear computing SIG, Baltic Sea computing SIG were introduced and discussed. This seminar was a very good possibility for new users to obtain deeply knowledge about BalticGrid applications.

Web page of the event: <http://mif.vu.lt/balticgrid>; <http://www.litgrid.lt>

Primary language(s) used: English

Number of participants (approximately): 60

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Students, researchers, professors from Lithuania, Latvia, Estonia

Activity/Task: NA2

Title: Seminar "Grid for Lithuanian colleges"

Name(s) of organizing institution(s): VU

Start date: 19.01.2007

End date: 19.01.2007

Venue (city, country): Vilnius, Lithuania

Description of content (maximum about 500 words): Seminar was organized with the aim to involve Lithuanian colleges in to Grid activities. It is expected that colleges might be a potential users



of services provided by SIG of BalticGrid. During seminar LitGrid and BalticGrid infrastructure and applications was introduced and discussed how Grid can be useful to colleges.

New special section for colleges was created in Litgrid web site. <http://www.litgrid.lt/kolegijos/>

Web page of the event: <http://mif.vu.lt/balticgrid>; <http://www.litgrid.lt>

Primary language(s) used: Lithuanian

Number of participants (approximately): 14

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Lectures from Alytus college, Marijampole college, Panevezys college, programmers

Activity/Task: SA1

Title: Course: Basics of Cluster and GRID Computing course (ECTS 6)

Name(s) of organizing institution(s): Tartu University, EENet

Start date: 5.02.2007

End date: 14.06.2007

Venue (city, country): Tartu, Estonia

Description of content (maximum about 500 words): Recent direction in distributed computing - the GRID-technology is introduced. Its basic concepts and applications are considered. Main GRID development resources (Globus Toolkit, gLite, Condor etc.) are being studied. Examples of working GRID systems (BalticGrid, Estonian Grid etc.) are being introduced. Further development is being discussed. For practical exercises were used BalticGrid infrastructure

Web page of the event: <http://uuslepo.it.da.ut.ee/~eero/GTLA/>

Primary language(s) used: Estonian

Number of participants (approximately): 17

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Students (BSc, MSc, PhD)

Activity/Task: NA2

Title: From simple software test to the automated release production (using and extending ETICS) (Marian Zurek, CERN)

Name(s) of organizing institution(s): IFJPAN, CYFRONET

Start date: 12.04.2007

End date: 12.04.2007

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): Providing the reliable and tested software packages in the grid world became a more and more challenging task. Especially the testing aspect became a corner stone of the good release, not to mention the compatibility and interoperability aspects. The testing (especially manual) activity consumes majority of the time of the certification and preproduction teams. Currently the missing bits are the automated test frameworks. The most simple static ones: unit, regression, coverage can be performed during the build process. The aim of my work is to propose the framework for the system test. In other words starting from the developers code pass all the way up to the certified and functioning software release. Testing: starting from the client-server interaction, scalability, DoS, etc. tests and finishing on the automated components deployment



(installation and configuration) interoperating between. Another challenge are the test run in the administrator space as the majority of the software require root access for its installation and configuration together with private/public/isolated resource allocation. Solution based on the Condor/NMI toolkits and private development has been identified / implemented for such scenarios and will be presented.

Primary language(s) used: English, Polish

Number of participants (approximately):15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2

Title: Mobile Agent Based Query Processing on the Grid (Prof. Peter Brezany, Institute of Scientific Computing, University of Vienna)

Name(s) of organizing institution(s): IFJ PAN, CYFRONET

Start date: 24.05.2007

End date: 24.05.2007

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): The trend of Grid computing is strongly oriented towards data intensive applications, accessing more and more relational databases, domain specific scientific databases and other types of data repositories. The benefits accruing from the joint application of database and grid technologies have been recognized by many fields of science and technology.

The tasks associated with these issues have driven the Grid database research in the last five years. In this effort, distributed query processing is especially challenging research topic.

Because Grid represents a highly volatile distributed environment, dynamic query processing able to sense the query execution status and Grid status in specified time intervals and appropriately adapt the query execution workflow, plays an important role. So far, to the best of our knowledge, only one research effort, the U.K. Grid database project OGSA-DQP, addressing this issue has been reported in the literature. The project responded to the needs of e-Science applications, especially life-science ones, running long-time queries to distributed databases integrated into the Grid. In this project, the researchers developed a solution based on centralized control of dynamic optimization processing, which is a bottleneck in large-scale applications.

To avoid it, this talk presents a novel approach to dynamic query processing on the Grid, which is based on integration of mobile agent optimization, cost models and monitoring methodology, and agent-oriented Grid architectures to one coherent framework.

Primary language(s) used: English, Polish

Number of participants (approximately):15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2

Title: The BalticGrid Project (Mariusz Witek and Tomasz Szepieniec, IFJ PAN)

Name(s) of organizing institution(s): IFJ PAN, CYFRONET



Start date: 31.05.2007

End date: 31.05.2007

Venue (city, country): Krakow, Poland

Description of content (maximum about 500 words): The BalticGrid project has been running for almost 20 months. The main features of the project will be presented: its structure, objectives, present status and the future. The emphasis will be put on the contribution of polish partners, in particular dissemination and training, applications, infrastructure and technical software developments.

In the frame of operations activity and application support activity of BalticGrid, several tools are being developed in IFJ PAN. First is BAT which supports the site administrators in analysis of resources usage at their sites. The tool can also be useful for VO administrators to inspect if the site is providing the resources as declared. Second, the application monitoring system OCM-G - a product of CrossGrid Project, are extended facing requirements from projects' application as well as adapted to current versions of grid middleware. Finally, CANDLER - the successor of performance analysis tool G-PM is designed and developed. In the proposal of BalticGrid for Science, we propose additionally to develop RAP - Resource Allocation Portal that will simplify contract negotiations between resource providers and VO managers in grids.

Primary language(s) used: English, Polish

Number of participants (approximately):15

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2/NA3

Title: A Gentle Introduction to Concurrent Computing

Name(s) of organizing institution(s): IMCS UL

Start date: 4.07.2007

End date: 5.07.2007

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): "A Gentle Introduction to Concurrent Computing" explores the computer science and mathematics of concurrency. The domain of concurrent environments was surveyed and considered how they relate in theory and in practice to problem classes. The seminar was conducted by Kristaps Džonsons.

Primary language(s) used: English

Number of participants (approximately):12

Audience (students, researchers, etc.; higher education, industry, general public, etc.): students, researchers

Activity/Task: NA2

Title: Annual Estonian-Finnish EURATOM seminar

Name(s) of organizing institution(s): Tartu University, NICPB, VTT in Helsinki

Start date: 23.08.2007

End date: 23.08.2007

Venue (city, country): Tallinn, Estonia



Description of content (maximum about 500 words): The seminar is the annual meeting of the partners of the Estonian-Finnish EFDA association. EFDA (European Fusion Development Agreement) is a branch of EURATOM devoted to fusion research and applications. The seminar summarize the annual results and it attempts to find new collaboration topics between the Finnish and Estonian partners in fusion research. The Grid is an usable tool for large scale modeling in plasma physics and material science in the field.

Primary language(s) used: English

Number of participants (approximately): 30

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers

Activity/Task: NA2

Title: Grid for business users

Name(s) of organizing institution(s): NICPB, Boson OÜ

Start date: 7.09.2007

End date: 7.09.2007

Venue (city, country): Tallinn, Estonia

Description of content (maximum about 500 words): The seminar was devoted to introduce the Grid environment for the business users. The main focus of the seminar was on possible synergy between computer-generated imagery (CGI) producers and the BalticGrid project.

Primary language(s) used: Estonian

Number of participants (approximately): 6

Audience (students, researchers, etc.; higher education, industry, general public, etc.): industry

Activity/Task: NA2

Title: Grid for language technology

Name(s) of organizing institution(s): NICPB

Start date: 12.09.2007

End date: 12.09.2007

Venue (city, country): Tartu, Estonia

Description of content (maximum about 500 words): The main objective of seminar is to share ideas between the Grid experts at NICPB and the language technology research group at the Tartu University. The group is a leading research group in the field in Estonia headed by prof. Mare Koit. The methods in language technology are very computation and data intensive. Usually, the algorithms are naturally parallel, thus the Grid is an excellent environment for computations and data analysis.

Primary language(s) used: Estonian

Number of participants (approximately): 8

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers

Activity/Task: NA2



Title: Seminar on ANSYS gridification

Name(s) of organizing institution(s): IMCS UL

Start date: 26.09.2007

End date: 26.09.2007

Venue (city, country): Riga, Latvia

Description of content (maximum about 500 words): IMCS UL organised a seminar for researchers of IMCS UL and Riga Technical University, Institute of Material Sciences to discuss gridification issues of the ANSYS software, usage of this software in the Grid environment and problems encountered.

Primary language(s) used: Latvian

Number of participants (approximately):10

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers

Activity/Task: NA3

Title: Introduction to Grid in weather forecast

Name(s) of organizing institution(s): EENet, University of Tartu

Start date: 19.10.2007

End date: 19.10.2007

Venue (city, country): Tartu, Estonia

Description of content (maximum about 500 words): The seminar was organized for Tartu University Institute of Environmental Physics and Estonian Meteorological and Hydrological Institute weather forecast people.

Primary language(s) used: Estonian

Number of participants (approximately):6

Audience (students, researchers, etc.; higher education, industry, general public, etc.): researchers

D7. Exhibitions

Activity/Task: NA2

Title: BalticGrid project stand during the EGEE UF / OGF 20

Name(s) of organizing institution(s): IFJ PAN, PSNC

Description of content (maximum about 500 words): Zofia Mosurska, Robert Pajak, Tadeusz Szymocha (IFJ PAN) and Bartek Palak (PSNC) were managing the BalticGrid booth during the EGEE UF and OGF 20 with help of EENet's people who were also involved in introducing BalticGrid project on the event. The following materials were presented: Project multimedia presentation, brochures, posters and pens. About 500 persons visited the BG stand asking about the Project in general as well as looking for answers to some more technical questions. The stand was a great success of the Project and increased its visibility among other Grid projects and initiatives.



Start date: 8.05.2007

End date: 10.05.2007

Venue (city, country): Manchester, UK

Web page of the event: <http://www.ogf.org/OGF20/events.php>

Number of visitors (approximately): 500

Audience (students, researchers, etc.; higher education, industry, general public, etc.): Students, researchers, professors, industry, general public

Primary language(s) used: English

Activity/Task: NA2

Title: BalticGrid project stand during the EGEE'07 conference

Name(s) of organizing institution(s): IFJ PAN, PSNC

Description of content (maximum about 500 words): Robert Pajak (IFJ PAN), Baiba Kaskina (IMCS UL) and Bartek Palak (PSNC) were managing the BalticGrid booth during the EGEE'07 conference. The following materials were presented: the Project multimedia presentation, the Project general poster, brochures and pens.

Additionally, the live demo titled: "The Stellar Spectra Modelling as an example of data- and compute-intensive application running on the BalticGrid Project testbed" was shown. The Stellar Spectra Modeling package SYNTSPEX was presented – the gridified tool for stellar spectra analysis – as an example of data- and compute-intensive application running on the testbed of the EU BalticGrid Project – interoperable with EGEE resources and complementary with the EGEE infrastructure. A live-demo of SYNTSPEX lifecycle was shown, starting from definition of input files and computing parameters, submission of the job to the BalticGrid testbed, job monitoring, and ending with visualization of results. It was demonstrated how stellar spectra change because of the resolving power, because of stellar rotation and other parameters. The application was run within "The Migrating Desktop" (MD) – advanced graphical user interface similar to a window-based operating system that hides the complexity of the grid middleware and makes access to the grid resources easy and transparent.

Algimantas Juozapavičius and Margarita Kazakevičiūtė from VU have also participated in EGEE'07 conference. Dr. Margarita Kazakevičiūtė has presented BalticGrid Special Interest Groups (SIGs) at a special demo session. SIGs in BalticGrid bring together people working on the design, evaluation, implementation and study of BalticGrid. SIGs provide an international, interdisciplinary forum for the exchange of ideas about the field of BalticGrid. Margarita Kazakevičiūtė has demonstrated SIG possibilities for shared interdisciplinary work in the grid, GUI advantages and main research groups. On-line demonstration of SIG has been made. Many visitors have interested in SIGs. Several visitors from universities proposed to use SIG as tool for educating students to use grid.

The other application of the BG project (ANSYS) was displayed as an off-line demo presenting its integration with the Migration Desktop and visualization of the results.

Many persons visited the BG stand asking about the Project in general as well as looking for answers to some more technical questions. The stand was a great success of the Project and increased its visibility among other Grid projects and initiatives.

Start date: 1.10.2007

End date: 3.10.2007

Venue (city, country): Budapest, Hungary



Activity/Task: NA2

Title: CMS Physics TDR 8.1 Volume I: Detector Performance and Software

Type (MSc/PhD, paper): scientific paper

Name(s) of author(s): Della Negra, M.; ... Hektor, A.; Kadastik, M.; Kannike, K.; Lippmaa, E.; Müntel, M.; Raidal, M. et al.

Name(s) of supervisor(s) (only for MSc/PhD):

Description of content (e.g. abstract, maximum about 500 words): Although the Standard Model (SM) of particle physics has so far been tested to exquisite precision, it is considered to be an effective theory up to roughly one TeV. The prime motivation of the Large Hadron Collider (LHC) is to elucidate the nature of electroweak symmetry breaking for which the Higgs mechanism is presumed to be responsible. The experimental study of the Higgs mechanism can also shed light on the mathematical consistency of the SM at energy scales above about 1 TeV. However, there are alternatives that invoke more symmetry such as super symmetry or invoke new forces or constituents such as strongly-broken electroweak symmetry, technicolour, etc. An as yet unknown mechanism is also possible. Furthermore there are high hopes for discoveries that could pave the way toward a unified theory. These discoveries could take the form of super symmetry or extra dimensions, the latter often requiring modification of gravity at the TeV scale. Hence there are many compelling reasons to investigate the TeV energy scale. The document gives a technical summary of the performance and software of the CMS detector. The contribution of the NICPB includes many thousands CPU-hours computations on BalticGrid.

Date of publication: June 2006

Date of submission:

Name of institution of submission: NICPB/CERN (CMS experiment)

Name of journal/periodical/institution/conference/workshop... of submission: CERN Publication

Place of publication (city, country): Geneva, Switzerland

Web page for information (if any):
<http://doc.cern.ch/archive/electronic/cern/preprints/lhcc/public/lhcc-2006-001.pdf>

Language used: English

Intellectual property rights (e.g. public, ©IFJ PAN): ©CERN

Availability (e.g. via email, or in printed form): on the web

Activity/Task: NA2

Title: MS Physics TDR 8.2 Volume II: Physics Performance

Type (MSc/PhD, paper): scientific paper

Name(s) of author(s): Della Negra, M.; ... Hektor, A.; Kadastik, M.; Kannike, K.; Lippmaa, E.; Müntel, M.; Raidal, M. et al.

Name(s) of supervisor(s) (only for MSc/PhD):

Description of content (e.g. abstract, maximum about 500 words): Although the Standard Model (SM) of particle physics has so far been tested to exquisite precision, it is considered to be an effective theory up to roughly one TeV. The prime motivation of the Large Hadron Collider (LHC) is to elucidate the nature of electroweak symmetry breaking for which the Higgs mechanism is presumed to be responsible. The experimental study of the Higgs mechanism can also shed light on the mathematical consistency of the SM at energy scales above about 1 TeV. However, there are



alternatives that invoke more symmetry such as super symmetry or invoke new forces or constituents such as strongly-broken electroweak symmetry, technicolour, etc. An as yet unknown mechanism is also possible. Furthermore there are high hopes for discoveries that could pave the way toward a unified theory. These discoveries could take the form of super symmetry or extra dimensions, the latter often requiring modification of gravity at the TeV scale. Hence there are many compelling reasons to investigate the TeV energy scale. The document gives the summary of the physics performance of the CMS detector. The contribution of the NICPB includes many thousands CPU-hours computations on BalticGrid.

Date of publication: September 2006

Date of submission:

Name of institution of submission: NICPB/CERN (CMS experiment)

Name of journal/periodical/institution/conference/workshop... of submission: CERN Publication

Place of publication (city, country): Geneva, Switzerland

Web page for information (if any):
<http://doc.cern.ch/archive/electronic/cern/preprints/lhcc/public/lhcc-2006-021.pdf>

Language used: English

Intellectual property rights (e.g. public, ©IFJ PAN): ©CERN

Availability (e.g. via email, or in printed form): on the web

Activity/Task: NA2

Title: Les Houches physics at TeV colliders 2005 beyond the standard model working group: Summary report

Type (MSc/PhD, paper): scientific paper

Name(s) of author(s): Accomando, E.;... Hektor, A.; Kadastik, M.; Kannike, K.; Lippmaa, E.; Müntel, M.; Raidal, M. et al.

Name(s) of supervisor(s) (only for MSc/PhD):

Description of content (e.g. abstract, maximum about 500 words): The work contained herein constitutes a report of the "Beyond the Standard Model" working group for the Workshop "Physics at TeV Colliders", Les Houches, France, 2-20 May, 2005. We present reviews of current topics as well as original research carried out for the workshop. Super symmetric and non-super symmetric models are studied, as well as computational tools designed in order to facilitate their phenomenology. The contribution of the NICPB includes usage of the computation resources of BalticGrid.

Date of publication: September 2006

Date of submission:

Name of institution of submission: NICPB (Les Houches Beyond Standard Model Workgroup)

Name of journal/periodical/institution/conference/workshop... of submission: Proceeding, Les Houches:

<http://lappweb.in2p3.fr/conferences/LesHouches/Houches2005/>

Place of publication (city, country): Geneva, Switzerland

Web page for information (if any): <http://arxiv.org/ps/hep-ph/0604120>

Language used: English

Intellectual property rights (e.g. public, ©IFJ PAN): public



Availability (e.g. via email, or in printed form): on the web

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**Activity/Task:** NA2

**Title:** Solving Parallel Tasks In The Grid Network LCG Interface

**Type (MSc/PhD, paper):** bachelor's thesis

**Name(s) of author(s):** Giedrius Mackevičius

**Name(s) of supervisor(s) (only for MSc/PhD):** Dalius Mažeika

**Description of content (e.g. abstract, maximum about 500 words):** The objective of this bachelor's thesis is to describe and analyze GRID history, architecture and examples in Lithuania and Europe. The job tells about created computer cluster – GRID.vtu.lt and the packages needed to create it. It shows the main steps of building LCG-2 middleware interface, and all packages needed to configure for proper work. A computer network was created and connected to LITNET academic network, so the cluster became a part of Lithuanian GRID. This job analyzes parallel job solving on the local network and GRID applications. To build the cluster I used such programmes as "pbs", "mpich2" and other more.

Structure: introduction, GRID network, GRID architecture, Packages needed to build GRID network, installing the GRID network and preparing it for parallel job solving, Parallel job solving and experiments on the GRID based network, conclusions and suggestions, references.

Thesis consists of: 60 p. texts without extras, 20 pictures, 3 tables, 28 bibliographical entries.

**Date of publication:** 19.11.2006

**Date of submission:**

**Name of institution of submission:** Vilnius Gediminas Technical University

**Name of journal/periodical/institution/conference/workshop... of submission:**

**Place of publication (city, country):** Vilnius, Lithuania

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VGTU

**Availability (e.g. via email, or in printed form):** e-mail

**Activity/Task:** NA2

**Title:** Monitoring of  $L_{2,3}$  X-ray emission of transition element atoms near 2p threshold

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** Aušra Kynienė, Sigitas Kučas, and Romualdas Karazija

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** The variation of the  $L_{2,3}$  emission spectra in dependence on photo excitation energy is considered and interpreted for atoms of three elements Sc, Fe, and Ni correspondingly at the beginning, at the middle, and at the end of 3d transition group. The population of levels after the resonant photo excitation and the subsequent radiative transitions have been calculated in configuration mixing approximation.

**Date of publication:** 30.11.2006



**Date of submission:**

**Name of institution of submission:**

**Name of journal/periodical/institution/conference/workshop... of submission:** Lithuanian Journal of Physics, 2006, Vol. 46, No. 4, 425-431

**Place of publication (city, country):**

**Web page for information (if any):**

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** ©Lithuanian Physical Society, ©Lithuanian Academy of Sciences

**Availability (e.g. via email, or in printed form):**

<http://www.itpa.lt/%7EIfd/Lfz/464/Ljp46415.pdf>

**Activity/Task:** NA2

**Title:** Geometrical structure of small Co nanoparticles

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** J. Tamuliene, R. Vaisnoras, M.L. Balevicius, L. Rasteniene

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** In the paper we present our results of investigation that were obtained using BalticGrid facilities. Electronic and geometrical structures of  $Co_n$  ( $n=4, 6, 8$ ) particles have been studied using both density functional theory and Hartree-Fock calculations. Structural differences to the corresponding clusters are presented. Four-fold coordination of the Co atoms is a particularly preferable coordination environment in structures of small  $Co_n$  species. The key element of the Co particle is suggested.

**Date of publication:** published online 25.01.2007

**Date of submission:**

**Name of institution of submission:** ITPA VU

**Name of journal/periodical/institution/conference/workshop... of submission:** Proceedings of SPIE

**Place of publication (city, country):**

**Web page for information (if any):**

<http://spiedl.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=PSISDG0065960000165961G000001&idtype=cvips&gifs=yes>

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** ©2007 COPYRIGHT SPIE--The International Society for Optical Engineering

**Availability (e.g. via email, or in printed form):** via email

**Activity/Task:** NA2

**Title:** Global Characteristics of Atomic Spectra and Their Use for the Analysis of Spectra. VI. Transition Arrays in the Relativistic Dirac-Breit Approximation

**Type (MSc/PhD, paper):** paper



**Name(s) of author(s):** Valdas Jonauskas, Sigitas Kučas, Romualdas Karazija and P. H. Norrington

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** Method of unrestricted transition arrays successfully applied for the interpretation of spectra of high temperature plasma is grounded on a usage of the explicit expressions for the main global characteristics of spectra. In this work it is presented the expressions for the first three global characteristics in the relativistic Dirac-Breit approximation. As an example of their application the asymmetry of spectrum for various ions of tungsten is investigated.

**Date of publication:** 26.01.2007

**Date of submission:**

**Name of institution of submission:**

**Name of journal/periodical/institution/conference/workshop... of submission:** Physica Scripta, 2007, Vol. 75, 237-244

**Place of publication (city, country):**

**Web page for information (if any):**

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** Institute of Physics Publishing

**Availability (e.g. via email, or in printed form):** <http://www.iop.org/EJ/abstract/-search=17191448.1/1402-4896/75/3/001>

**Activity/Task:** NA2

**Title:** On the interpretation of the intense emission of tungsten ions at about 5 nm

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** V. Jonauskas, S. Kučas and R. Karazija

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** The origin of the intense emission band at about 5 nm, dominating the emission spectra of tungsten ions in the ASDEX Upgrade tokamak and EBIT is discussed. It is shown that the emission spectra of various ions calculated taking into account only the excitations from the ground level agree fairly well with the results obtained in the collisional-radiative model; thus, the contribution of the excitations from the other levels is small. Though the excitation spectrum for all sequence of ions  $W^{29+} - W^{37+}$  corresponds to the same transitions  $4p^6 4d^N - 4p^5 4d^{N+1} + 4p^6 4d^{N-1} 4f$ , its energetic width essentially changes going on from the charge of ion  $q=34$  to  $q=35$ . It is caused by the appearance of the excitations  $4p_{1/2} - 4d_{3/2}$  to the open  $4d_{3/2}^N$  subshell, which are not quenched by configuration mixing. The satellite line at about 4.5 nm is explained by the transitions of the same type, although between configurations with one spectator  $5s$  electron. The existence of one more group of intense lines in the region of 2 nm, corresponding to  $5s - 4p$  transitions, is predicted.

**Date of publication:** 24.05.2007

**Date of submission:**

**Name of institution of submission:** Institute of Theoretical Physics and Astronomy of Vilnius University, A. Goštauto 12, 01108 Vilnius, Lithuania

**Name of journal/periodical/institution/conference/workshop... of submission:** JOURNAL OF PHYSICS B: ATOMIC, MOLECULAR AND OPTICAL PHYSICS, vol. 40, (2007), 2179-2188



**Place of publication (city, country):** UK

**Web page for information (if any):** <http://stacks.iop.org/JPhysB/40/2179>

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** © 2007IOP Publishing Ltd

**Availability (e.g. via email, or in printed form):** V.Jonauskas@itpa.lt

**Activity/Task:** NA2

**Title:** Theoretical investigation of energy spectra of tungsten  $W^{29+}$ - $W^{34+}$

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** P. Bogdanovich, R. Karpuskiene

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** From 2007 VU TFAI participates in the international project on thermonuclear fusion investigation ITER. Tungsten is one of the constructional materials used to cover the inner walls of tokamaks. In the framework of ITER project the task of both theoretical and experimental research of spectral characteristics of various tungsten ions was posed. The ground configuration of the investigated ions  $W^{29+}$ ,  $W^{30+}$ ,  $W^{31+}$ ,  $W^{32+}$ ,  $W^{33+}$ ,  $W^{34+}$  is  $[Ni]4s^24p^64d^N$ , here N (number of d-electrons) is from 9 to 4.

The preliminary calculations of energy spectra of highly charged tungsten ions with filling 4d-shell reveal, that the task of obtaining the characteristics of resonant transitions with account of relativistic and correlation effects will not be very complicated, since only two excited configurations  $4s^24p^54d^{N+1}$ ,  $4s^24p^64d^{N-1}4f$  are strongly interacting. The emission band of the resonant transitions intersects with the multiplex emission lines, which correspond to the transitions from the excited configurations of the same parity as the ground one to the mentioned two configurations. It will be essentially more difficult to obtain the transition characteristics in this case, since the initial configurations form the group with very large number of levels.

**Date of publication:** June 2007

**Date of submission:**

**Name of institution of submission:** PSNC

**Name of journal/periodical/institution/conference/workshop... of submission:** Lithuanian Journal of Physics

**Place of publication (city, country):** Vilnius, Lithuania

**Web page for information (if any):**

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** ©Lithuanian Physical Society, ©Lithuanian Academy of Sciences

**Availability (e.g. via email, or in printed form):** <http://www.itpa.lt/%7EIfd/Lfz/464/Ljp46415.pdf>

**Activity/Task:** NA2

**Title:** Active monitoring system for GRID

**Type (MSc/PhD, paper):** bachelor's thesis

**Name(s) of author(s):** Emilis Stančikas

**Name(s) of supervisor(s) (only for MSc/PhD):** Remigijus Kutas and Dalius Mažeika



**Description of content (e.g. abstract, maximum about 500 words):** Brief overview of parallel computing systems and grids are overviewed in the bachelor thesis. Grid architecture, technologies and middleware are overviewed as well. Ganglia monitoring system is analyzed as local monitoring system of the cluster. New monitoring system was adapted and implemented in VGTU GRID cluster, the statistical results obtained from monitoring system are discussed.

Structure: introduction, parallel computing, GRID networks, VGTU GRID monitoring system, conclusions and suggestions, references.

Thesis consists of: 55 p. text without appendixes, 27 pictures, 1 tables, 21 bibliographical entries.

**Date of publication:** 12.06.2007

**Date of submission:**

**Name of institution of submission:** Vilnius Gediminas Technical University

**Name of journal/periodical/institution/conference/workshop... of submission:**

**Place of publication (city, country):** Vilnius, Lithuania

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VGTU

**Availability (e.g. via email, or in printed form):** e-mail

**Activity/Task:** NA3

**Title:** Metamodels for the optimization of damage-tolerant composite structures

**Type (MSc/PhD, paper):** paper (extended abstract)

**Name(s) of author(s):** Kaspars Kalnins, Chiara Bisagni, Rolands Rikards

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** The research here presented regards the development of an optimization technique for the design of damage-tolerant stiffened composite structures subjected to combined compression and shear loading. Some techniques are already presented in literature regarding the optimization of composite stiffened panels.

All samples were analyzed in parallel exploring the BalticGrid ([www.balticgrid.org](http://www.balticgrid.org)) computing capabilities, therefore reducing the training time per sample point.

**Date of publication:**

**Date of submission:** August 2007

**Name of institution of submission:**

**Name of journal/periodical/institution/conference/workshop... of submission:** ICAS 2008 – 26th Congress of International Council of the Aeronautical Sciences

Anchorage, Alaska, USA, 14-19 September 2008

**Place of publication (city, country):**

**Web page for information (if any):**

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form):** e-mail

**Activity/Task:** NA3**Title:** Testing neutrino masses in little Higgs models via discovery of doubly charged Higgs at LHC.**Type (MSc/PhD, paper):** paper**Name(s) of author(s):** A. Hektor, M. Kadastik, M. Muntel, M. Raidal, L. Rebane**Name(s) of supervisor(s) (only for MSc/PhD):****Description of content (e.g. abstract, maximum about 500 words):** We have investigated the possibility of direct tests of little Higgs models incorporating triplet Higgs neutrino mass mechanism at LHC experiments. We have performed Monte Carlo studies of Drell-Yan pair production of doubly charged Higgs boson  $\Phi^{++}$  followed by its leptonic decays which branching ratios are fixed from the neutrino oscillation data. We propose appropriate selection rules for the four-lepton signal, including reconstructed taus, which are optimized for the discovery of  $\Phi^{++}$  with the lowest LHC luminosity. As the Standard Model background can be effectively eliminated, an important aspect of our study is the correct statistical treatment of the LHC discovery potential. Adding detection efficiencies and measurement errors to the Monte Carlo analyses,  $\Phi^{++}$  can be discovered up to the mass 250 GeV in the first year of LHC, and 700 GeV mass is reachable for the integrated luminosity  $L=30 \text{ fb}^{-1}$ .**Date of publication:****Date of submission:** August 2007**Name of institution of submission:** NICPB**Name of journal/periodical/institution/conference/workshop... of submission:** Nuclear Physics B, 787 (2007) 198-210**Place of publication (city, country):****Web page for information (if any):** <http://arxiv.org/abs/0705.1495>**Language used:** English**Intellectual property rights (e.g. public, ©IFJ PAN):** © 2007 Elsevier B.V. All rights reserved.**Availability (e.g. via email, or in printed form):** <http://arxiv.org/abs/0705.1495>**Activity/Task:** NA2**Title:** Linear Algebra Algorithm Analysis and GRID Technologies**Type (MSc/PhD, paper):** Master degree thesis**Name(s) of author(s):** Gediminas Šaltenis**Name(s) of supervisor(s) (only for MSc/PhD):** Tadas Meškauskas**Description of content (e.g. abstract, maximum about 500 words):** Brief overview of parallel computing systems and grids are overviewed in the bachelor thesis. Grid architecture, technologies and middleware are overviewed as well. Linear Algebra algorithms for distributed and grid computing are analyzed and tested on Balticgrid.**Date of publication:** 2.08.2007**Date of submission:****Name of institution of submission:** Vilnius University**Name of journal/periodical/institution/conference/workshop... of submission:****Place of publication (city, country):** Vilnius, Lithuania**Web page for information (if any):**



**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, or in printed form):** e-mail.

**Activity/Task:** NA2

**Title:** Analysis and Implementation of the Corpus of Lithuanian Language

**Type (MSc/PhD, paper):** Bachelor degree thesis

**Name(s) of author(s):** Darius Zebleckis

**Name(s) of supervisor(s) (only for MSc/PhD):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** Corpus of Lithuanian language is a major resource of authentic language data for cross-linguistic and cross-cultural research, interdisciplinary studies, lexicographical practice, terminology in theory and practice, translation theory and practice, reference book publishing. The compilation of the corpus will follow the most important criteria: methods, balance, representative, sampling, etc. The corpus contains two sub-corpora. The first sub-corpus is a collection of 'similar' original texts in Lithuanian and English. The second sub-corpus is a parallel (aligned) sub-corpus of texts in translation.

In bachelor's thesis principles and methods of corpus usage on the grid environment was analysed and tested.

**Date of publication:** 2.08.2007

**Date of submission:**

**Name of institution of submission:** Vilnius University

**Name of journal/periodical/institution/conference/workshop... of submission:**

**Place of publication (city, country):** Vilnius, Lithuania

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, or in printed form):** e-mail.

**Activity/Task:** NA3/NA2

**Title:** Harvesting National Language Text Corpora from the Web

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** Jānis Džeriņš, Kristaps Džonsons

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):** When developing linguistic applications, a quality text corpus is indispensable. Hand-selected literary texts from various domains are predominantly used. An additional difficulty for smaller languages, such as Latvian, is that balanced, high-quality corpora are either not available or of very limited size.

In our paper, we consider these problems and show solutions implemented in our system. The SemTi-Kamols project's NLP tool has turned out to be a very computationally intensive challenge, and the BalticGrid infrastructure was used to sort the first raw corpus of approximately 1 Billion words.

**Date of publication:** October 2007



**Date of submission:**

**Name of institution of submission:**

**Name of journal/periodical/institution/conference/workshop... of submission:** Third Baltic conference "Human Language Technologies", 4-5 October 2007, Kaunas, Lithuania

**Place of publication (city, country):** Kaunas, Lithuania

**Web page for information (if any):** <http://conference.vdu.lt/index.php?cf=7>

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** IMCS UL

**Availability (e.g. via email, or in printed form):**

**Activity/Task:** NA2

**Title:** Dynamic User Management in the BalticGrid Project

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** M. Jankowski, N. Meyer

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):**

**Date of publication:** 24.10.2007

**Date of submission:**

**Name of institution of submission:** PSNC

**Name of journal/periodical/institution/conference/workshop... of submission:** The eChallenges e-2007 Conference & Exhibition, Hague, 24-26.10.2007

**Place of publication (city, country):** Hague, the Netherlands

**Web page for information (if any):** <http://www.echallenges.org/e2007>

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** PSNC

**Availability (e.g. via email, or in printed form):** e-mail. After the conference – printed.

**Activity/Task:** NA2

**Title:** Networking and Grid in Poland and Eastern European Countries

**Type (MSc/PhD, paper):** paper

**Name(s) of author(s):** Michal Turala

**Name(s) of supervisor(s) (only for MSc/PhD):**

**Description of content (e.g. abstract, maximum about 500 words):**

**Date of publication:** 24-27.10.2007

**Date of submission:**

**Name of institution of submission:**

**Name of journal/periodical/institution/conference/workshop... of submission:** International ICFA Workshop on Digital Divide Issues for Global e-Science, Mexico City, 24-27 October 2007

**Place of publication (city, country):** Mexico City, Mexico



**Web page for information (if any):** <http://fismat.uia.mx/HEP/ICFADDW2007/>

**Language used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form):**

## D9. Newspaper articles

**Activity/Task:** NA2

**Title:** The BalticGrid project celebrates first birthday

**Name(s) of author(s):** Gražina Tautvaišienė, Elena Tamulienė, Šarūnas Mikolaitis.

**Description of content (a summary, maximum about 500 words):** The main idea of the paper is to tell about experience, which was collected through all the year of project lifetime. Also it is really important to talk about the successful examples of Grid usage by Lithuanian scientists in many fields of science: astrophysics, atomic, particle and nuclear physics. The paper was shared to the internet community by major internet magazines.

**Date of publication:** December 2006

**Name(s) of newspaper(s)/radio station/TV channel of publication:** The internet magazine for Electronics: Elektronika.lt

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, or in printed form):** [http://balticgrid.itpa.lt/?page\\_id=47](http://balticgrid.itpa.lt/?page_id=47)

**Activity/Task:** NA2

**Title:** The BalticGrid project celebrates first birthday

**Name(s) of author(s):** Gražina Tautvaišienė, Elena Tamulienė, Šarūnas Mikolaitis.

**Description of content (a summary, maximum about 500 words):** The main idea of the paper is to tell about experience, which was collected through all the year of project lifetime. Also it is really important to talk about the successful examples of Grid usage by Lithuanian scientists in many fields of science: astrophysics, atomic, particle and nuclear physics. The paper was shared to the internet community by major internet magazines.

**Date of publication:** December 2006

**Name(s) of newspaper(s)/radio station/TV channel of publication:** The Virtual Society Portal: Vtv.lt

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, or in printed form):** [http://balticgrid.itpa.lt/?page\\_id=47](http://balticgrid.itpa.lt/?page_id=47)



**Activity/Task:** NA2

**Title:** The BalticGrid project celebrates first birthday

**Name(s) of author(s):** Gražina Tautvaišienė, Elena Tamulienė, Šarūnas Mikolaitis.

**Description of content (a summary, maximum about 500 words):** The main idea of the paper is to tell about experience, which was collected through all the year of project lifetime. Also it is really important to talk about the successful examples of Grid usage by Lithuanian scientists in many fields of science: astrophysics, atomic, particle and nuclear physics. The paper was shared to the internet community by major internet magazines.

**Date of publication:** December 2006

**Name(s) of newspaper(s)/radio station/TV channel of publication:** The journal New Communication portal: Nkm.lt

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, or in printed form):** [http://balticgrid.itpa.lt/?page\\_id=47](http://balticgrid.itpa.lt/?page_id=47)

**Activity/Task:** NA2

**Title:** The BalticGrid project celebrates first birthday

**Name(s) of author(s):** Gražina Tautvaišienė, Elena Tamulienė, Šarūnas Mikolaitis.

**Description of content (a summary, maximum about 500 words):** The main idea of the paper is to tell about experience, which was collected through all the year of project lifetime. Also it is really important to talk about the successful examples of Grid usage by Lithuanian scientists in many fields of science: astrophysics, atomic, particle and nuclear physics. The paper was shared to the internet community by major internet magazines.

**Date of publication:** December 2006

**Name(s) of newspaper(s)/radio station/TV channel of publication:** The Science and technology portal: Technologijos.lt

**Web page for information (if any):**

**Language used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, or in printed form):** [http://balticgrid.itpa.lt/?page\\_id=47](http://balticgrid.itpa.lt/?page_id=47)

**Activity/Task:** NA2

**Title:** Latvijas Grid tīkls E-Zinātnes attīstībai (Latvian Grid network for the development of E-Science)

**Name(s) of author(s):** Bruno Martuzāns, Jānis Ķikuts

**Description of content (a summary, maximum about 500 words):** An article to inform about the status of the Latvian Grid network, what is already possible there and on which developments IMCS UL is working now. The need for fast infrastructure is outlined as well.

**Date of publication:** December 2006

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Magazine "Sakaru pasaule" (Connection world)



**Web page for information (if any):** <http://www.sakaru-pasaule.lv/>

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

General public, interested in computer science topics

**Intellectual property rights (e.g. public, ©IFJ PAN):** IMCS UL

**Availability (e.g. via email, or in printed form):** Printed, on-line:

<http://grid.lumii.lv/uploads/NA2/gridraksts.jpg>

**Activity/Task:** NA2

**Title:** Vai dators gatavosies eksāmeniem arī Latvijas skolēna vietā? (Will the computer do exams instead of Latvian pupil?)

**Name(s) of author(s):** Ieva Valtere

**Description of content (a summary, maximum about 500 words):** An article about usages of the Latvian Grid network, particularly about the Semantic web application, developed by Semti-Kamols project. The Latvian Grid infrastructure is described, other potential usages featured and future developments illustrated.

**Date of publication:** 5.12.2006

**Name(s) of newspaper(s)/radio station/TV channel of publication:** newspaper “Vakara Ziņas” (“Evening News”)

**Web page for information (if any):** <http://grid.lumii.lv/uploads/NA2/vakarazinas.jpg>

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

General public

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form):** Printed, on-line

<http://grid.lumii.lv/uploads/NA2/vakarazinas.jpg>

**Activity/Task:** NA2

**Title:** “Tīkls uzvar datoru” (Network wins computer)

**Name(s) of author(s):** Jānis Riņķis

**Description of content (a summary, maximum about 500 words):** General article about the concept of Grid, the Grid infrastructure in Latvia and the opportunities it is offering to the scientists and others.

**Date of publication:** January 2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Magazine “Next”

**Web page for information (if any):** <http://www.sk.lv/next.php>

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

General public

**Intellectual property rights (e.g. public, ©IFJ PAN):** Next

**Availability (e.g. via email, or in printed form):** on-line



**Activity/Task:** NA2

**Title:** The first BalticGrid birthday

**Name(s) of author(s):** Gražina Tautvaišienė, Elena Tamulienė, Šarūnas Mikolaitis

**Description of content (a summary, maximum about 500 words):** The main idea of the paper is to tell about experience, which was collected through all the year of project lifetime. Also it is really important to talk about the successful examples of Grid usage by Lithuanian scientists in many fields of science: atomic, particle, nuclear, physics and astrophysics. The paper was published in the newspaper of Lithuanian scientists "The Scientific Lithuania".

**Date of publication:** 7.01.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** "The Scientific Lithuania" – The newspaper of Lithuanian scientists

**Web page for information (if any):** <http://mokslasplius.lt/mokslo-lietuva/>

**Language used:** Lithuanian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**  
scientists

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, or in printed form):** [http://balticgrid.itpa.lt/?page\\_id=47](http://balticgrid.itpa.lt/?page_id=47)

**Activity/Task:** NA2

**Title:** About Litgrid project

**Name(s) of author(s):** D. Mažeika, A. Kačeniauskas

**Description of content (a summary, maximum about 500 words):** Article in the newspaper "Inžinerija" gives an overview of LitGrid and BalticGrid projects. Results of applications achieved using Grid computing infrastructure are discussed shortly.

**Date of publication:** 9.01.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Newspaper "Inžinerija"

**Web page for information (if any):** <http://www.vgtu.lt/upload/ziniaskl/Inz-01-2007-SC.pdf>

**Language used:** Lithuanian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**  
student, researchers, professors, lectures

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU, VGTU

**Availability (e.g. via email, or in printed form):** e-mail, printed form

**Activity/Task:** NA2

**Title:** "Grid laczy" ("Grid unites")

**Name(s) of author(s):** M. Nowy, Michal Turala, Zofia Mosurska, Henryk Pałka and Tomasz Szepieniec

**Description of content (a summary, maximum about 500 words):** The article gave a short description of Grid technology and the reasons for its use. The process of creating the Grid in Krakow was also presented. Professor Michal Turala (of BalticGrid) was quoted together with Zofia



Mosurska, Henryk Pałka and Tomasz Szepieniec. The article also mentioned the BalticGrid initiative and its goals. The plans for the next project with other partners (from Belarus, Ukraine and Russia) were also introduced.

**Date of publication:** 7.02.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Newspaper "Dziennik Polski"

**Web page for information (if any):**  
[http://www.balticgrid.org/Dissemination/Press\\_and\\_Media/Sources/Dziennik\\_Akademicki\\_299.pdf](http://www.balticgrid.org/Dissemination/Press_and_Media/Sources/Dziennik_Akademicki_299.pdf)

**Language used:** Polish

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

Higher education, general public

**Intellectual property rights (e.g. public, ©IFJ PAN):** Dziennik Polski, IFJ PAN

**Availability (e.g. via email, or in printed form):** online

**Activity/Task:** NA2

**Title:** Latvijas akadēmiskais datortīkls – Eiropas sastāvdaļa (Latvian academic network – European component)

**Name(s) of author(s):** Jānis Ķikuts, Rihards Balodis

**Description of content (a summary, maximum about 500 words):** An overview about 7FP opportunities, situation in Latvia regarding the academic networking and its users, including grid, the most demanding users. Overview of the 65<sup>th</sup> conference of the University of Latvia, where for the first time a grid dedicated section was organised.

**Date of publication:** March 2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** magazine "Sakaru pasaule" (Connection world)

**Web page for information (if any):**

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

general public interested in technology

**Intellectual property rights (e.g. public, ©IFJ PAN):** Sakaru Pasaule

**Availability (e.g. via email, or in printed form):** will be on-line in the Grid webpage

**Activity/Task:** NA2

**Title:** The Activity of the Lithuanian Academy of Sciences in 2006

**Name(s) of author(s):** Z. R. Rudzikas

**Description of content (a summary, maximum about 500 words):** Causing to the international agreement with CERN, two very successful IT projects LitGrid and BalticGrid financed by Lithuanian and EU were launched. Lithuanian Academy of Sciences has successfully integrated a large number of universities and research institutes to learn about these technologies and usage for the solving complex scientific problems.

**Date of publication:** March 2007



**Name(s) of newspaper(s)/radio station/TV channel of publication:** The LAS book: “The Activity of the Lithuanian Academy of Sciences in 2006”

**Web page for information (if any):**

**Language used:** Lithuanian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**  
general public interested in technology

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, or in printed form):**

**Activity/Task:** NA2

**Title:** LitGrid presentation

**Name(s) of author(s):** A. Kačeniauskas, D. Mažeika

**Description of content (a summary, maximum about 500 words):** Paper in the popular scientific journal “Mokslas ir technika” gives an overview of LitGrid and BalticGrid projects. Grid computing resources in Lithuania are overviewed. Applications and results achieved using Grid computing infrastructure are discussed.

**Date of publication:** 12.03.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Journal “Mokslas ir technika”

**Web page for information (if any):** <http://neris.mii.lt/mt/archyvas.htm#200702>

**Language used:** Lithuanian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**  
student, researches, professors, lectures, Lithuanian academic society

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU, VGTU

**Availability (e.g. via email, or in printed form):** e-mail, printed form

**Activity/Task:** NA2

**Title:** Press release “Zinātnieku atbalstam prezentēs GEANT un "Grid" iespējas” (GEANT and Grid possibilities presented to support scientists)

**Name(s) of author(s):** Jānis Riņķis

**Description of content (a summary, maximum about 500 words):** A press release was written about the upcoming GEANT and Grid Info day event. It focused on the upgrade of the GEANT connectivity and the main user of that – Latvian Grid clusters. The release was published in various portals.

**Date of publication:** 23.04.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** various portals

**Web page for information (if any):** <http://www.prcentrs.lv/article/?id=1206>

<http://www.reitingi.lv/reit.php?a=r&act=jaun&cat=2&id=11002>

<http://fails.lv/modules/news/article.php?storyid=1160>

[http://www.boot.lv/index.php?pg=202&news\\_id=4093&new=1](http://www.boot.lv/index.php?pg=202&news_id=4093&new=1)

[http://tehnika.delfi.lv/index.php?pg=202&news\\_id=4093](http://tehnika.delfi.lv/index.php?pg=202&news_id=4093)



<http://www.tvnet.lv/zinas/tehnologijas/popsci/article.php?id=494983>

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

general public interested in technology

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form):** will be on-line in the Grid webpage

**Activity/Task:** NA2

**Title:** Grid continues to develop (Grid tīkls turpina attīstīties)

**Name(s) of author(s):** Bruno Martuzāns

**Description of content (a summary, maximum about 500 words):** The article reviewed the Latvian Grid day event which took place on 24 April in Riga organised by IMCS UL. The most important speeches and authors are mentioned, many pictures are published.

**Date of publication:** June 2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** magazine "Sakaru pasaule" (Connection world)

**Web page for information (if any):**

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

general public interested in technology

**Intellectual property rights (e.g. public, ©IFJ PAN):** Sakaru Pasaule

**Availability (e.g. via email, or in printed form):** will be on-line in the Grid webpage

**Activity/Task:** NA2

**Title:** Press release "Zinātniekus gatavos darbam ar "Grid"" (Scientists will learn how to use Grid)

**Name(s) of author(s):** Jānis Riņķis

**Description of content (a summary, maximum about 500 words):** A press release about the upcoming BalticGrid Summer School. The content of the school and the benefits are described shortly. The release was published in various portals and mentioned in Radio SWH.

**Date of publication:** 29.06.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** various portals, radio SWH

**Web page for information (if any):** <http://www.apollo.lv/portal/news/articles/103173>

<http://www.db.lv/Default2.aspx?ArticleID=222b2b91-c1d7-47fd-bce1-538e4324b968>

<http://www.reitingi.lv/reit.php?a=r&act=jaun&id=12562>

<http://www.rtu.lv/aktualitates/notikumi/aktualitate.php?identifikators=1996>

**Language used:** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form):** will be on-line in the Grid webpage



**Activity/Task:** NA2

**Title:** Maailma suurim teadusaparaat (The biggest scientific instrument of the world)

**Name(s) of author(s):** Andi Hektor, Kristjan Kannike

**Description of content (a summary, maximum about 500 words):** The paper gives an overview of LHC experiment at CERN and the Grids around the experiments. Also, the BalticGrid project is described in the paper.

**Date of publication:** 5.07.2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Popular science magazine "Horisont"

**Web page for information (if any):** <http://www.horisont.ee/node/164>

**Language used:** Estonian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form):** <http://uusweb.er.ee/utoim/live/viker.ram>

**Activity/Task:** NA2

**Title:** "Science and Organized Civil Society" (translation to English)

**Name(s) of author(s):** Z. R. Rudzikas

**Description of content (a summary, maximum about 500 words):** In the article, dedicated to the 50-th anniversary of the main Lithuanian science popularization Journal "Mokslas ir gyvenimas" (Science and Life) Z. R. Rudzikas describes the present situation in education and science in Lithuania, underlines the role of international cooperation, also describes the newest modern informational technologies, presents the LitGrid and BalticGrid projects as characteristic examples of such activities.

**Date of publication:** October 2007

**Name(s) of newspaper(s)/radio station/TV channel of publication:** Science popularization Journal "Mokslas ir gyvenimas" (Science and Life), Lithuania

**Web page for information (if any):** <http://ausis.gf.vu.lt/mg/>

**Language used:** Lithuanian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJ PAN):** Journal "Science and Life"

**Availability (e.g. via email, or in printed form):** Email and printed

## D10. Presentations (talks)

**Activity/Task:** NA2

**Title:** Lithuanian Science and development of Regions

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas



**Description of content (e.g. abstract, maximum about 500 words):** New situation and opportunities were renewed after accession of Lithuania to EU. Main attention paying to research and development as well as its contribution to economic growth of relevant regions and the country. Special discussions were devoted to the possibilities to joint LitGrid and BalticGrid projects by scientific and educational institutions of Panevėžys, thus enlarging the number of institutions involved. The authorities of Panevėžys were very positive as concerns participation in these projects. There were about 200 participants (mainly students and lecturers).

**Date of talk:** 9.11.2006

**Place of talk (city, country):** Panevėžys, Lithuania

**Name of institution/conference/workshop...:** “Day of Lithuanian Academy of Sciences in Panevėžys“

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Modelling of Thermonuclear plasma and GRID technologies

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** Talk at the international seminar was aimed at theoretical modeling and thermonuclear plasma. Such modeling requires extremely large computer power. Exploiting distributed and parallel computing is very promising from this point of view. That is why the BalticGrid experience was met very positively. Further development of BalticGrid and LitGrid, their future and extension to cover wider regions and number of users is highly desirable.

**Date of talk:** 12-14.11.2006

**Place of talk (city, country):** Abingdon, UK

**Name of institution/conference/workshop...:** The ADAS workshop, The University of Strathclyde

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** LitGrid and BalticGrid projects

**Name(s) of speaker(s)/author(s):** Dalius Mažeika

**Description of content (e.g. abstract, maximum about 500 words):** Meeting with the aim to present Litgrid and Balticgrid project was organized at Vilnius Gediminas Technical University. BalticGrid and LitGrid infrastructure, main goals and applications were presented. After presentation, discussions between participants started. The aim of the discussion was to clarify is gLite middleware is suitable and convenient for parallel computing.

**Date of talk:** 23.11.2006



**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Vilnius Gediminas Technical University

**Web page for information (if any):** [www.litgrid.lt](http://www.litgrid.lt), [mif.vu.lt/balticgrid](http://mif.vu.lt/balticgrid)

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** e-mail, printed form

**Activity/Task:** NA2

**Title:** LHC Experiments and the World Wide Grid for Physics

**Name(s) of speaker(s)/author(s):** Michal Turala

**Description of content (e.g. abstract, maximum about 500 words):** The status of our present understanding of the Universe was briefly presented and the opened issues addressed; a big question mark is the missing mass and energy .... New research programme is under development at CERN, which will allow study collisions at very high energies, with a hope to find some answers. There are many experimental challenges, and one of them is an enormous amount of data to be studied (in the Petabytes range) by the distributed, worldwide, collaborations. A system, called Worldwide LHC Computing Grid (WLCG), has been designed; it will integrate more than hundred computing centers all around the world, with different capabilities and functions. The system is under evaluation, performing tests of data transfer (sustainable data flow of 1.6 GBps has been achieved) and distributed computations (millions of Monte Carlo events have been produced using LCG/ EGGE and OSG infrastructures). Polish teams from Cracow, Poznan and Warsaw are part of WLCG, providing computing power and storage.

The issues related to the operation of large, distributed infrastructure have been addressed.

**Date of talk:** 25.11.2006

**Place of talk (city, country):** Krakow, Poland

**Name of institution/conference/workshop...:** lecture at the Technical Open University AGH, Cracow, winter semester 2006, computer science series

**Web page for information (if any):** <http://www.tuo.agh.edu.pl/>

**Primary language(s) used:** Polish

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):** Michal.Turala AT ifj.edu.pl

**Activity/Task:** NA2

**Title:** LitGrid and BalticGrid projects

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavicius

**Description of content (e.g. abstract, maximum about 500 words):** Meeting with the aim to present Litgrid and Balticgrid project was organized at Vilnius University. BalticGrid and LitGrid infrastructure, main goals and applications were presented. After presentation, discussions between participants started. The aim of the discussion was to identify main problems and its solutions in grid usage.

**Date of talk:** 28.11.2006



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**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Vilnius University

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** e-mail, printed form

**Activity/Task:** NA3

**Title:** BalticGrid and LHCb

**Name(s) of speaker(s)/author(s):** Mariusz Witek, IFJPAN

**Description of content (e.g. abstract, maximum about 500 words):** Information about BalticGrid based on slides from official presentation. Role of the LHCb applications in the validation of BalticGrid infrastructure. Production of MC data on selected BalticGrid sites.

**Date of talk:** 28.11.2006

**Place of talk (city, country):** Switzerland, Geneva

**Name of institution/conference/workshop...:** LHCb Week, National Computing Board meeting

**Web page for information (if any):** <http://indico.cern.ch/conferenceDisplay.py?confId=8969>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** <http://www.balticgrid.org/Dissemination/Presentations/>

**Activity/Task:** SA2/ NA2

**Title:** SLAs in the BalticGrid project

**Name(s) of speaker(s)/author(s):** Baiba Kaskina, Katrina Sataki

**Description of content (e.g. abstract, maximum about 500 words):** A presentation about the BalticGrid network, needs of the users and applications, available resources and mechanisms how to ensure sufficient quality of service with limited resources. Special attention was paid to the SLA management process and two types of SLAs – ART management and over provisioning.

**Date of talk:** 6.12.2006

**Place of talk (city, country):** Amsterdam, the Netherlands

**Name of institution/conference/workshop...:** 4th TERENA NRENs and Grids Workshop

**Web page for information (if any):** <http://www.terena.org/activities/nrens-n-grids/workshop-04/agenda.html>, [http://grid.lumii.lv/uploads/NA2/SLAs\\_in\\_BalticGrid.pdf](http://grid.lumii.lv/uploads/NA2/SLAs_in_BalticGrid.pdf)

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** On-line: [http://grid.lumii.lv/uploads/NA2/SLAs\\_in\\_BalticGrid.pdf](http://grid.lumii.lv/uploads/NA2/SLAs_in_BalticGrid.pdf)

**Activity/Task:** NA2



**Title:** LitGrid and BalticGrid projects

**Name(s) of speaker(s)/author(s):** K. Paulikas

**Description of content (e.g. abstract, maximum about 500 words):** K. Paulikas presented Litgrid and Balticgrid project at Kaunas University of Technology. BalticGrid and LitGrid infrastructure, main goals and applications were presented.

**Date of talk:** 11.12.2006

**Place of talk (city, country):** Kaunas, Lithuania

**Name of institution/conference/workshop...:** Mo&St VO implementation in grid project supported by EU programmes (Kaunas University of Technology)

**Web page for information (if any):** [www.litgrid.lt](http://www.litgrid.lt) ; [mif.vu.lt/balticgrid](http://mif.vu.lt/balticgrid)

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** e-mail, printed form

**Activity/Task:** NA2

**Title:** Lithuanian research, development and innovation potential

**Name(s) of speaker(s)/author(s):** Zenonas Rokus Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** While discussing the document "European research, development and innovation potential" I have stressed the role of merging technologies, potentially new information technologies and grids included. LitGrid and BalticGrid are excellent examples of implementation of new innovative technologies, based of an international collaboration.

**Date of talk:** 12-14.12.2006

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Plenary session of European Economic and Social committee

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** LitGrid and BalticGrid projects

**Name(s) of speaker(s)/author(s):** D. Mažeika

**Description of content (e.g. abstract, maximum about 500 words):** ITMiS and Litnet conference was organized as annual reporting meeting of national science and education development programmes and NREG Litnet. Strategic national research and education programmes for 2007-2012 years were discussed during the conference as well.

D. Mazeika had poster presentation about grid activities in Lithuania and presented LitGrid and BalticGrid projects. Active discussions with participants of the conference were at the poster.

**Date of talk:** 14.12.2006



**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** ITMiS and LitNet Annual conference (Mykolas Riomeris University)

**Web page for information (if any):** [www.litgrid.lt](http://www.litgrid.lt) ; [mif.vu.lt/balticgrid](http://mif.vu.lt/balticgrid)

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** e-mail, printed form

**Activity/Task:** NA2

**Title:** LitGrid, BalticGrid and 7 Framework programme

**Name(s) of speaker(s)/author(s):** A. Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** Meeting was organized by Lithuanian Agency for International Science and Technology Development Programmes that is responsible for information dissemination about 6 and 7 Framework programmes.

A. Juozapavičius was invited to present Litgrid and Balticgrid projects and to discuss about possibilities and ideas to extend BalticGrid project to BalticGrid-2 in as 7 Framework projects. After presentation, discussions and remarks have been given by participants of the meeting.

**Date of talk:** 18.12.2006

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Lithuanian Agency for International Science and Technology Development Programmes

**Web page for information (if any):** [www.itpa.lt](http://www.itpa.lt)

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):**

**Activity/Task:** NA3

**Title:** Bioinformatics application

**Name(s) of speaker(s)/author(s):** Igor Kuzmitshov

**Description of content (e.g. abstract, maximum about 500 words):** An overview of the current status of Bioinformatics applications in BalticGrid.

**Date of talk:** 17.01.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Application Development and Implementation in BalticGrid seminar

**Web page for information (if any):** <http://www.litgrid.lt/naujienos/gridification>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** <http://www.litgrid.lt/naujienos/files/BI-on-grid2.1.ppt>



**Activity/Task:** NA3

**Title:** P-grade portal

**Name(s) of speaker(s)/author(s):** Kalle Keskrand

**Description of content (e.g. abstract, maximum about 500 words):** Introduction about P-grade portal for BalticGrid users.

**Date of talk:** 17.01.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Application Development and Implementation in BalticGrid seminar

**Web page for information (if any):** <http://www.litgrid.lt/naujienos/gridification>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** [http://www.litgrid.lt/naujienos/files/P-GRADE\\_parandatud2.ppt](http://www.litgrid.lt/naujienos/files/P-GRADE_parandatud2.ppt)

**Activity/Task:** NA2

**Title:** Lithuanian science and industry

**Name(s) of speaker(s)/author(s):** Zenonas Rokus Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** As one of the chair persons of the event in my introductory speech I have underlined importance of the complex interdisciplinary research, merging of science technologies and informational technologies. Among other achievements I presented the rapid growth of grid technologies, successful implementation of LitGrid and BalticGrid projects, activities in the further development in the both projects, widening the applications and number of participants.

**Date of talk:** 2.02.2007

**Place of talk (city, country):** Kaunas, Lithuania

**Name of institution/conference/workshop...:** Lithuanian Science and Industry, organised by Kaunas Technological university, Lithuanian academy of sciences, Ministry of education and sciences.

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2/SA2

**Title:** "Grid Latvijā: panākumi, problēmas un tālākā attīstība" (Grid in Latvia: achievements, problems and further development)

**Name(s) of speaker(s)/author(s):** Guntis Bārzdiņš, Baiba Kaškina, Ināra Opmane, Katrīna Sataki

**Description of content (e.g. abstract, maximum about 500 words):** An overview about the Grid developments in Latvia was given and the newest achievements demonstrated, including the usage of Migrating Desktop with the Latvian Grid clusters.



**Date of talk:** 14.02.2007

**Place of talk (city, country):** Riga, Latvia

**Name of institution/conference/workshop...:** 65.conference of the University of Latvia, Section of Computer networks

**Web page for information (if any):**

**Primary language(s) used:** Latvian

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):**

**Activity/Task:** NA2

**Title:** Cooperation of the higher schools and business to promote innovative businessmen

**Name(s) of speaker(s)/author(s):** Zenonas Rokus Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** Talk was dedicated to the discussions of opportunities for young graduates to start a new business, to found new small company and to start producing something. I presented some new developments in informatics in Lithuania as very promising direction. LitGrid and BalticGrid projects are excellent examples of the success story. Producing modern software does not require starting capital, just knowledge of the subject. Therefore maybe attractive for young innovative people.

**Date of talk:** 22.02.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Litexpo science and education fair.

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Baltic Grid for e-Science development in Baltics

**Name(s) of speaker(s)/author(s):** Slaidins Ilmars, Belmanis Olgerts, Per Öster

**Description of content (e.g. abstract, maximum about 500 words):** Presentation was submitted together with article. There are abstract of the article. Full text will be available after publication in Proceedings of the conference. Abstract: Latvia, Estonia and Lithuania as new members of European Union now are involved in e-Science projects. The Baltic Grid project is first step to infrastructure development for e-Science grid computing projects. Together with Baltic states universities some neighboring countries universities are involved in BG project to disseminate experience and management skills. Purpose of this presentation is to highlight Latvia and other Baltic states as well as Riga Technical University achievements in e-Infrastructures development.

**Date of talk:** 1-2.03.2007

**Place of talk (city, country):** Madrid, Spain

**Name of institution/conference/workshop...:** Spanish Conference on e-Science Grid Computing. The Conference was held on 1st and 2nd March 2007 in Madrid. The event is hosted by CIEMAT

**Web page for information (if any):** <http://webtr.ciemat.es:8000/e-science/index.html>



**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):**  
<http://webrt.ciemat.es:8000/e-science/index.html>

**Activity/Task:** NA2

**Title:** HPC and GRID computing

**Name(s) of speaker(s)/author(s):** Dalius Mažeika

**Description of content (e.g. abstract, maximum about 500 words):** D. Mažeika made a lecture at Kaunas University of Technology. HPC systems, architecture of the clusters and grids were overviewed. OGSA and OSGI frameworks were overviewed as well. BalticGrid and LitGrid infrastructure were presented. Audience of the lecture were PhD students from different Lithuanian Universities. Approximately 15 students participate in the lecture. At the end of the lecture HPC and tutorial was organized.

**Date of talk:** 9.03.2007

**Place of talk (city, country):** Kaunas, Lithuania

**Name of institution/conference/workshop...:** Kaunas University of Technology

**Web page for information (if any):** <http://www.elgrid.ktu.lt/>

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):**  
<http://webrt.ciemat.es:8000/e-science/index.html>

**Activity/Task:** NA2

**Title:** GRID computing and applications

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** A. Juozapavičius made a lecture at Kaunas University of Technology about BalticGrid and LitGrid infrastructure, main goals, middleware, applications were presented. Most significant grids of the world were overviewed. Audience of the lecture were PhD students from different Lithuanian Universities. Approximately 15 students participate in the lecture.

**Date of talk:** 10.03.2007

**Place of talk (city, country):** Kaunas, Lithuania

**Name of institution/conference/workshop...:** Kaunas University of Technology

**Web page for information (if any):** <http://www.elgrid.ktu.lt/>

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):**  
<http://webrt.ciemat.es:8000/e-science/index.html>

**Activity/Task:** NA2



**Title:** The BalticGrid Project

**Name(s) of speaker(s)/author(s):** Rolandas Naujikas

**Description of content (e.g. abstract, maximum about 500 words):** The talk covered the BalticGrid project and the technical activities of the author at CERN. It also included the status of the BalticGrid infrastructure and issues related to gLite and operations.

**Date of talk:** 16.03.2007

**Place of talk (city, country):** Geneva, Switzerland

**Name of institution/conference/workshop...:** CERN

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):**  
<http://indico.cern.ch/getFile.py/access?sessionId=1&resId=1&materialId=0&confId=13898>

**Activity/Task:** NA2

**Title:** Annual Report of Lithuanian Academy of Sciences

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** Presenting the implementation of the agreement between Lithuania and CERN, the activities of Lithuanian universities and research institutes implementing the new informational technologies, were discussed. They were illustrated by emblems of LitGrid and BalticGrid and photo of a number of leaders of abovementioned projects taken at the Lithuanian supercomputer. The participants of General Assembly were asked to encourage new institutions to join such kind projects.

**Date of talk:** 20.03.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Academy of Sciences of Lithuania

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** BalticGrid Special Interest Groups (SIG)

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** A. Juozapavicius has made a presentation about SIG activities in BalticGrid framework. BalticGrid Special Interest Groups (SIGs) bring together people working on the design, evaluation, implementation, and study of BalticGrid. BalticGrid SIGs provide an international, interdisciplinary forum for the exchange of ideas about the field of BalticGrid. Members of a SIG cooperate to effect or to produce solutions within their particular area, and often meet regularly particularly during computing conferences.

**Date of talk:** 7-11.05.2007



**Place of talk (city, country):** Manchester, UK

**Name of institution/conference/workshop...:** EGEE User Forum and Open Grid Forum (OGF20)

**Web page for information (if any):** <http://egee-intranet.web.cern.ch/egee-intranet/User-Forum/>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** e-mail, printed form

**Activity/Task:** NA2

**Title:** Do we exploit the opportunities opened for the development of science?

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** For the 50-th anniversary of the EU the Parliament of the Republic of Lithuania organized a series of conferences to discuss the opportunities provided by the European Union. I was invited to present a talk at the conference "Science and research in the EU". I presented the BalticGrid project as a very good example of the European integration.

**Date of talk:** 9.05.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** The Parliament of Lithuania

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Some example applications of GRID technology

**Name(s) of speaker(s)/author(s):** Andi Hektor

**Description of content (e.g. abstract, maximum about 500 words):** The presentation introduces some Grid applications for IT specialists. Three examples are described: data analysis and modeling in high energy physics, modeling in material research and computer-generated imagery.

**Date of talk:** 11.05.2007

**Place of talk (city, country):** Viinistu, Estonia

**Name of institution/conference/workshop...:** Annual conference of PhD school of information and communication technology

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):**  
<http://iktdk.ioc.ee/courses.html>

**Activity/Task:** NA2



**Title:** Lithuanian GRID project

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** Presentation gives overview of grid infrastructure and architecture in Lithuania. National GRID project - LitGrid project was presented, main goals, applications and results of the projects was given at the presentation.

**Date of talk:** 15.05.2007

**Place of talk (city, country):** Tallinn, Estonia

**Name of institution/conference/workshop...:** Grid Open Day (3 AHM BalticGrid)

**Web page for information (if any):** [www.baltcgrid.org](http://www.baltcgrid.org)

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** e-mail, printed form

**Activity/Task:** NA2

**Title:** Future development of Science and Education

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** I presented the BalticGrid and LitGrid projects during the meeting of Vilnius Pedagogical university Senate and Council. I described these projects as examples of the institutional communication and asked the university to pay much more attention to the modern technologies as the possibility to create a base for effective research.

**Date of talk:** 16.05.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Vilnius Pedagogical University.

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** OGF20/EGEE 2<sup>nd</sup> User Forum overview

**Name(s) of speaker(s)/author(s):** Hardi Teder and Lauri Anton

**Description of content (e.g. abstract, maximum about 500 words):** The presentation was given on Tartu University Institute of Computer Science Distributed Systems Department's seminar. The presentation contained the most important and interesting topics from OGF/EGEE user forum at our point of view

**Date of talk:** 24.05.2007

**Place of talk (city, country):** Tartu, Estonia

**Name of institution/conference/workshop...:** Tartu University Institute of Computer Science Distributed Systems Department's seminar

**Web page for information (if any):** <http://wiki.cs.ut.ee/atiwiki/Main/DistributedSystemsSeminar>



**Primary language(s) used:** Estonian

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):** via email

**Activity/Task:** NA2

**Title:** HPC and GRID computing

**Name(s) of speaker(s)/author(s):** Dalius Mažeika

**Description of content (e.g. abstract, maximum about 500 words):** D. Mažeika made a lecture at Kaunas University of Technology. HPC systems, architecture of the clusters and grids were overviewed. OGSA and OGSF frameworks were overviewed as well. BalticGrid and LitGrid infrastructure were presented. Audience of the lecture were teachers from various Lithuanian colleges. Approximately 20 students attended the lecture. At the end of the lecture HPC and tutorial was organized.

**Date of talk:** 8.06.2007

**Place of talk (city, country):** Kaunas, Lithuania

**Name of institution/conference/workshop...:** Kaunas University of Technology

**Web page for information (if any):** <http://www.elgrid.ktu.lt/>

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):**

**Activity/Task:** NA2

**Title:** GRID computing and applications

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** A. Juozapavičius made a lecture at Kaunas University of Technology about BalticGrid and LitGrid infrastructure, main goals, middleware, applications were presented. Most significant grids of the world were overviewed. Audience of the lecture were teachers from different Lithuanian colleges. Approximately 20 teachers participated in the lecture.

**Date of talk:** 9.06.2007

**Place of talk (city, country):** Kaunas, Lithuania

**Name of institution/conference/workshop...:** Kaunas University of Technology

**Web page for information (if any):** <http://www.elgrid.ktu.lt/>

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):**

**Activity/Task:** NA3

**Title:** iSPEXS on Grid

**Name(s) of speaker(s)/author(s):** Igor Kuzmitšov



**Description of content (e.g. abstract, maximum about 500 words):** iSPEXS is an application for Bioinformatics. Igor introduced how to use iSPEXS on Baltic Grid infrastructure.

**Date of talk:** 12.06.2007

**Place of talk (city, country):** Kiidi, Estonia

**Name of institution/conference/workshop...:** Tartu University BIIT group and Quretec joint scientific seminar and group retreat at Kiidi

**Web page for information (if any):** <http://biit.cs.ut.ee/events/2007>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):**

**Activity/Task:** NA2

**Title:** Report of the President of the Lithuanian Physical Society

**Name(s) of speaker(s)/author(s):** Report of the President of the Lithuanian Physical Society

**Description of content (e.g. abstract, maximum about 500 words):** The president of the Lithuanian Physical Society in his biannual report has presented as an example to follow the activity of Lithuanian physicists and astronomers in the use of modern informational technologies mainly grid technologies. The cooperation with CERN gave the possibility to implement powerful technologies in many Lithuanian institutions in the form of LitGrid and BalticGrid. It became recognized internationally.

**Date of talk:** 13.06.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Faculty of Physics of Vilnius university.

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Welcome speech of inauguration of foreign members at the Lithuanian Academy of Sciences

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** In the welcoming speech, dedicated to the inauguration of the President of Latvian Academy of Sciences to the foreign members of the Lithuanian Academy of Sciences, the President of Lithuanian Academy of Sciences has acknowledged the international cooperation of Lithuanian and Latvian scientists in the BalticGrid project.

**Date of talk:** 21.06.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Lithuanian Academy of Sciences, Vilnius University

**Web page for information (if any):**

**Primary language(s) used:** English



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**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Welcome speech of inauguration of foreign members at the Lithuanian Academy of Sciences

**Name(s) of speaker(s)/author(s):** Zenonas R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** In the welcoming speech, dedicated to the inauguration of the Latvian ministry of Science and Education to the foreign members of the Lithuanian Academy of Sciences, the President of Lithuanian Academy of Sciences has acknowledged the international cooperation of Lithuanian and Latvian scientists in the BalticGrid project.

**Date of talk:** 22.06.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Lithuanian Academy of Sciences, Lithuanian Ministry of Education and Sciences.

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** SA1

**Title:** Development Tools for Grid applications

**Name(s) of speaker(s)/author(s):** Hardi Teder

**Description of content (e.g. abstract, maximum about 500 words):** A brief overview about available tools for grid application developers. The most interesting tools were gEclipse and GPE4Unicore (Grid Programming Environment)

**Date of talk:** 3.07.2007

**Place of talk (city, country):** Tartu, Estonia

**Name of institution/conference/workshop...:** Tartu University Institute of Computer Science Distributed Systems Department's seminar

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):** via email

**Activity/Task:** SA1

**Title:** User authentication with Mobile ID

**Name(s) of speaker(s)/author(s):** Hardi Teder

**Description of content (e.g. abstract, maximum about 500 words):** The talk was introducing Estonian Mobil ID project. The Mobile ID uses certificates for authentication and signing documents. So maybe in the future it can be used for authenticating Grid users.



**Date of talk:** 26.07.2007

**Place of talk (city, country):** Tartu, Estonia

**Name of institution/conference/workshop...:** EENet's weekly seminar

**Web page for information (if any):**

**Primary language(s) used:** Estonian

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):** via email

**Activity/Task:** NA2

**Title:** Grid for fusion research and applications

**Name(s) of speaker(s)/author(s):** Andi Hektor

**Description of content (e.g. abstract, maximum about 500 words):** Some of the gridified applications for material science of fusion research are described.

**Date of talk:** 23.08.2007

**Place of talk (city, country):** Tallinn, Estonia

**Name of institution/conference/workshop...:** Annual Estonian-Finnish EURATOM seminar

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available via email

**Activity/Task:** NA2

**Title:** Progress of Theoretical Physics in Lithuania

**Name(s) of speaker(s)/author(s):** Zenonas Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** During the annual seminar dedicated to the founder of the contemporary theoretical physics in Lithuania, academician A. Jucys, I described the progress of this scientific area. To a large extent the progress is caused by a rapid development in computing facilities. A. Jucys was among the first in Lithuania who raised the idea to use modern computers available at the time for the theoretical modeling of many electron systems. Thus, the physicists were among the first Lithuanian scientists who used modern GRID technologies to improve the accuracy of modeling. I have emphasized that nowadays physicists-theoreticians are among most active users and developers of the LitGrid and BalticGrid infrastructures.

**Date of talk:** 12.09.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Annual A. Jucys seminar, Institute of Theoretical Physics and Astronomy of Vilnius University

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request



**Activity/Task:** NA2

**Title:** LitGrid infrastructure and services

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** Invited talk on NorduGrid 2007 conference was done presenting BalticGrid and LitGrid projects i.e. main goals, applications and intermediate results of the projects activities are overviewed. New BalticGrid Second phase project proposal was introduced as well.

**Date of talk:** 22.09.2007

**Place of talk (city, country):** Copenhagen, Denmark

**Name of institution/conference/workshop...:** NorduGrid 2007 conference

**Web page for information (if any):** <http://www.nordugrid.org/>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** The SyntSpec implementation within Migrating Desktop

**Name(s) of speaker(s)/author(s):** Š. Mikolaitis

**Description of content (e.g. abstract, maximum about 500 words):** Š. Mikolaitis has presented the real time on-line demonstration of the SyntSpec application calculations on the BalticGrid infrastructure within Migrating Desktop interface. He shared his impressions about the EGEE conference held in Budapest.

**Date of talk:** 8.10.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** Vilnius University, faculty of Mathematic and Informatics, BalticGrid and GridTechno local weekly seminar.

**Web page for information (if any):**

**Primary language(s) used:** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Challenges and Opportunities of International Scientific Co-operation

**Name(s) of speaker(s)/author(s):** Z. R. Rudzikas

**Description of content (e.g. abstract, maximum about 500 words):** It was the invited plenary talk on the international scientific co-operation. Several slides demonstrated the successful Scientific Co-operation of Baltic and Scandinavian countries in the informational technologies and applications. As example were presented LitGrid and BalticGrid projects. There we 90 participants at this conference.

**Date of talk:** 10.10.2007

**Place of talk (city, country):** Riga, Latvia



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**Name of institution/conference/workshop...:** Latvian Academy of Sciences, XI Baltic conference on international cooperation “Academic Veins on the national Development Strategies in the Baltic States”

**Web page for information (if any):**

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):** Available on request

**Activity/Task:** NA2

**Title:** Efficiency of Small Size Tasks Calculation in Grid Clusters Using Parallel Processing

**Name(s) of speaker(s)/author(s):** Olgerts Belmanis, Janis Kulins

**Description of content (e.g. abstract, maximum about 500 words):** Riga Technical University is one of Baltic Grid project partners. The presentation shows results of investigation obtained using RTU cluster connected to BG VO.

**Date of talk:** 16.10.2007

**Place of talk (city, country):** Krakow, Poland

**Name of institution/conference/workshop...:** CGW'07

**Web page for information (if any):** <http://www.cyfronet.pl/cgw07/index.html>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, in printed form, on request, on a web site):**

**Activity/Task:** NA2

**Title:** Grid technologies for Science, Studies and Business

**Name(s) of speaker(s)/author(s):** Algimantas Juozapavičius

**Description of content (e.g. abstract, maximum about 500 words):** Algimantas Juozapavičius has participated in IST4BALT workshop “ICT in 7<sup>th</sup> Framework Programme: Possibilities and Benefits” where he made a presentation about grid infrastructure in Lithuania, presented Litgrid and BalticGrid projects. IST4BALT is FP6 project. IST4BALT workshop has the aim to stimulate the wide participation of organizations and companies from Baltic States in ICT related research within FP7.

**Date of talk:** 22.10.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** IST4BALT workshop

**Web page for information (if any):** <http://www.ist4balt.lt>

**Primary language(s) used:** English, Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** <http://www.ist4balt.lt>

**Activity/Task:** NA2

**Title:** Vilnius Gediminas Technical University. Projects and Innovative activity



**Name(s) of speaker(s)/author(s):** Dalius Mažeika

**Description of content (e.g. abstract, maximum about 500 words):** Dalius Mažeika has participated in IST4BALT workshop “ICT in 7<sup>th</sup> Framework Programme: Possibilities and Benefits” where he made a presentation about international and local projects at Vilnius Gediminas Technical University. LitGrid project was overviewed and activity of VGTU in this project was described.

**Date of talk:** 22.10.2007

**Place of talk (city, country):** Vilnius, Lithuania

**Name of institution/conference/workshop...:** IST4BALT workshop

**Web page for information (if any):** <http://www.ist4balt.lt>

**Primary language(s) used:** English, Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, in printed form, on request, on a web site):** <http://www.ist4balt.lt>

**Activity/Task:** NA2

**Title:** Networking and Grid in Poland and Eastern European Countries

**Name(s) of speaker(s)/author(s):** Michal Turala

**Description of content (e.g. abstract, maximum about 500 words):**

**Date of talk:** 24-27.10.2007

**Place of talk (city, country):** Mexico City, Mexico

**Name of institution/conference/workshop...:** International ICFA Workshop on Digital Divide Issues for Global e-Science

**Web page for information (if any):** <http://fismat.uia.mx/HEP/ICFADDW2007/>

**Primary language(s) used:** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** IFJ PAN

**Availability (e.g. via email, in printed form, on request, on a web site):**

## D11. Unclassified activities

**Activity/Task:** NA2

**Title:** Latvian Grid webpage updated

**Name(s) of responsible institution(s)/person(s):** Baiba Kaskina, IMCS UL

**Name(s) of contributing institution(s)/person(s):**

**Type of activity or material:** web page update

**Description of content (maximum about 500 words):** The Grid website has been updated and maintained on daily basis. Information about new events and publications has been added.

**Significant date(s):** November 2006

**Significant location (institution, city, country):** Riga, Latvia



**Place of publication:**

**Web page for information (if any):** <http://grid.lumii.lv/>

**Language(s):** Latvian, English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form) of relevant products:** On-line

**Activity/Task:** NA2

**Title:** Meeting with representatives from Lithuanian Universities

**Name(s) of responsible institution(s)/person(s):** VU, A. Juozapavicius

**Name(s) of contributing institution(s)/person(s):**

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** Meeting with representatives of Lithuanian Universities was organized to discuss the strategic question of NGI activities for the year 2007. Discussions about BalticGrid project future were involved.

**Significant date(s):** 9.11.2006

**Significant location (institution, city, country):** Vilnius University, Vilnius, Lithuania

**Place of publication:**

**Web page for information (if any):** [www.litgrid.lt](http://www.litgrid.lt)

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity/Task:** NA2

**Title:** Meeting with representatives from Ministry of Science and Education

**Name(s) of responsible institution(s)/person(s):** VU, A. Juozapavicius

**Name(s) of contributing institution(s)/person(s):**

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** Meeting with representatives of Ministry of Science and Education was organized to discuss the possibilities to support NGI activities for the year 2007. It was agreed, that Ministry will support project to obtain powerful cluster with 64 processors. It will be connected to Balticgrid infrastructure.

**Significant date(s):** 15.11.2006

**Significant location (institution, city, country):** Vilnius University, Vilnius, Lithuania

**Place of publication:**

**Web page for information (if any):** [mif.vu.lt/balticgrid](http://mif.vu.lt/balticgrid)

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJ PAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**



**Activity/Task:** NA4

**Title:** Participation in the eIRG conference

**Name(s) of responsible institution(s)/person(s):** RTU, Ilmars Slaidins

**Name(s) of contributing institution(s)/person(s):**

**Type of activity or material:** participation in the conference

**Description of content (maximum about 500 words):** Regular e-IRG Delegates Meeting took place in Helsinki on November 20, 2006 in the premises of Ministry of Education of Finland.

Leif Laaksonen (Finland) was elected as a permanent chair of e-IRG group for 2 years. It will strengthen role of e-IRG in determining EU policy in development of e-Infrastructure. Last version of the e-Infrastructures Roadmap was presented. Most of e-IRG endorsements from Finnish Presidency related to Authentication and Authorisation, GRID usage policies, Education and Training, GRID Economy and High Performance Computing Taskforce were approved but recommendation on Networking postponed.

It was stressed that more effective usage of existing e-Infrastructure (GRIDs) must be achieved providing different services for potential users.

For promotion of existing GRID infrastructure is created Education and Training Task Force of the e-IRG (ETTF) under the chair of professor Malcolm Atkinson. Ilmars Slaidins is included in this Taskforce.

For further development of e-Infrastructures in FP7 National Grid Initiatives (NGI) must be supported and these efforts coordinated at European level. This shows importance of Baltic Grid project as a catalyst for development of NGI in the region.

**Significant date(s):** 20.11.2006

**Significant location (institution, city, country):** Helsinki, Finland

**Place of publication:**

**Web page for information (if any):** <http://grid.etf.rtu.lv/>

**Language(s):** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity/Task:** SA1

**Title:** Participation in the IST 2006 conference

**Name(s) of responsible institution(s)/person(s):** RTU BG project team (I. Slaidins, J. Kulins, L. Cikovskis, Z. Strods, A. Steinbergs)

**Name(s) of contributing institution(s)/person(s):**

**Type of activity or material:** participation in the conference

**Description of content (maximum about 500 words):** RTU BG project team (I. Slaidins, J. Kulins, L. Cikovskis, Z. Strods, A. Steinbergs) visited IST 2006 in Helsinki Nov 21-23, 2006. During conference workshops we obtain important and useful information on EU FP7 projects and priorities. ICT development is driving force to increase EU economics. EU Commissioner Viviane Reding stressed importance of education. ICT exhibition shows results of last investigations on ICT. We obtain new vision on Next Generation GRIDs.

**Significant date(s):** 21-23.11.2006



**Significant location (institution, city, country):** Helsinki, Finland

**Place of publication:**

**Web page for information (if any):** <http://grid.etf.rtu.lv/>

**Language(s):** English

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** CoreGRID Demo Case - Reliability in Production Grid Environments Achieved by Multi-level Check pointing

**Name(s) of responsible institution(s) / person(s):** Mirek Kupczyk (PSNC)

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** Participation in the conference with a demo

**Description of content (maximum about 500 words):** Migrating Desktop Platform was demonstrated as the Grid User Interface in order to show Multi-level Check pointing. The guests were encouraged to use MD with its feature focusing on the running of grid jobs in the unreliable grid environment. More than 250 person watched the demonstration.

**Significant date(s):** 27.11-1.12.2006

**Significant location (institution, city, country):** Nice, France

**Place of publication:**

**Web page for information (if any):**  
<http://www.etsi.org/plugtests/Upcoming/GRID2006/GRID2006.htm>

**Language(s):** English

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity/Task:** NA2

**Title:** Interview for the Polish journalist, M. Nowy

**Name(s) of responsible institution(s)/person(s):** IFJ PAN/ M. Turala

**Name(s) of contributing institution(s)/person(s):** Z. Mosurska, H. Palka, T. Szepleniec, M. Turala

**Type of activity or material:** interview

**Description of content (maximum about 500 words):** The interview was focusing on the development of new computer technology, the Grid. The historical overview was given, starting from the Grid origin in USA (I. Foster and C. Kasselmann) and Europe (Eurogrid and Data Grid EU projects); the Cracow involvement started in 2000, as the result of contacts with CERN. The CrossGrid project, lead by ACC CYFRONET AGH, laid the ground for the development of grid computing clusters in Poland and demonstrated their usefulness for interactive computations. Examples included: support for medical diagnosis, flood and pollution predictions, analysis of particle physics data. Five Polish institutes participated in this project, including ACC CYFRONET AGH and IFJ PAN, with M. Bubak as a chief architect and M. Turala as a project coordinator. Based on this experience several other EU projects followed: GridStart, EGEE1 and EGEE2, KWf-Grid, ViroLab



and Baltic Grid. In the last one, IFJ PAN plays a role of an experienced partner, being responsible for “education, training, dissemination and outreach”.

**Significant date(s):** 28.11.2006

**Significant location (institution, city, country):** IFJ PAN, Krakow, Poland

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Polish

**Intellectual property rights (e.g. public, ©IFJ PAN):**

**Availability (e.g. via email, or in printed form) of relevant products:** an article is expected in December 2006

**Activity / Task:** NA2

**Title:** Meeting with computational linguistic researches

**Name(s) of responsible institution(s) / person(s):** VU, A. Juozapavicius

**Name(s) of contributing institution(s) / person(s):** Center of Computational Linguistic (Vytautas Magnus University)

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** Meeting was organized to present BalticGrid infrastructure and activities to linguistic researches from Center of Computational Linguistic and Faculty of Philology of Vilnius University. One of the aims of this meeting was to involve linguistic researches into SIG activities and to discuss about possibilities to use linguistic software in BalticGrid.

**Significant date(s):** 5.01.2007

**Significant location (institution, city, country):** Vilnius University

**Place of publication:**

**Web page for information (if any):** [mif.vu.lt/balticgrid](http://mif.vu.lt/balticgrid)

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task :** SA1

**Title:** 9<sup>th</sup> EUGridPMA meeting

**Name(s) of responsible institution(s) / person(s):** Rutherford Appleton Laboratory

**Name(s) of contributing institution(s) / person(s):** Hardi Teder

**Type of activity or material:** participation in the meeting

**Description of content (maximum about 500 words):** The EUGridPMA is the international organisation to coordinate the trust fabric for e-Science grid authentication in Europe. Hardi Teder was representing Baltic Grid Certification Authority at the meeting.

**Significant date(s):** 15-17.01.2007

**Significant location (institution, city, country):** Abingdon, UK

**Place of publication:**



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**Web page for information (if any):** <https://www.eugridpma.org/meetings/2007-01/>

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):** Grid Certification Authorities' representatives

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2/NA3

**Title:** Participation in the BalticGrid application workshop

**Name(s) of responsible institution(s) / person(s):** delegation from IMCS UL

**Name(s) of contributing institution(s) / person(s):** Center of Computational Linguistic (Vytautas Magnus University)

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** IMCS UL delegation participated in the BalticGrid NA3 application workshop which was held in Vilnius, Lithuania on 16-18 January 2007. Our activities regarding the ANSYS application and text recognition applications, as well as Prolog MPI were presented and discussed, the respective SIGs were created.

**Significant date(s):** 16-18.01.2007

**Significant location (institution, city, country):** Vilnius, Lithuania

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task: :** SA1

**Title:** EGEE Operations Workshop

**Name(s) of responsible institution(s) / person(s):** EGEE

**Name(s) of contributing institution(s) / person(s):** Tõnu Raitviir

**Type of activity or material:** participation in the workshop

**Description of content (maximum about 500 words):** This workshop covered:

For each LHC experiment, detailed plans / requirements / timescales for 2007 activities. Exactly what (technical detail) is required where (sites by name), by which date, coordination & follow-up, responsables, contacts, etc.

**Significant date(s):** 24-27.01.2007

**Significant location (institution, city, country):** Geneva, Switzerland

**Place of publication:**

**Web page for information (if any):** <http://indico.cern.ch/conferenceDisplay.py?confId=3738>

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**



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**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Meeting with ANSYS Inc. representatives in Lithuania

**Name(s) of responsible institution(s) / person(s):** VU, D. Mažeika

**Name(s) of contributing institution(s) / person(s):** Representatives of ANSYS Inc. in Lithuania (JSC AGA-CAD [www.aga-cad.lt](http://www.aga-cad.lt))

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** The meeting was organized by intention to talk about possibilities to use ANSYS software in BalticGrid. ANSYS has special licenses for academic and research institution but usage of ANSYS in grid environment has not regulation. So the aim of this meeting was to ascertain what must be done in order to use ANSYS in BalticGrid. There are few users from Lithuania and Latvia who intended to use ANSYS software in grid. Technically it is possible.

**Significant date(s):** 15.02.2007

**Significant location (institution, city, country):** Vilnius University, Vilnius, Lithuania

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Meeting with linguistic researches

**Name(s) of responsible institution(s) / person(s):** VU, A. Juozapavicius

**Name(s) of contributing institution(s) / person(s):** Faculty of Philology of Vilnius University

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** It was second meeting with linguistic researches from Faculty of Philology of Vilnius University. The aims of this meeting was once more encourage linguistic researches join BalticGrid SIG activities and try to adopt their application to the grid environment.

**Significant date(s):** 20.02.2007

**Significant location (institution, city, country):** Vilnius University, Vilnius, Lithuania

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**



**Activity / Task:** NA2

**Title:** Information about IMCS UL and the BalticGrid project sent to the Minister of Science and Education

**Name(s) of responsible institution(s) / person(s):** Bruno Martuzāns

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** Written information

**Description of content (maximum about 500 words):** IMCS UL was asked to prepare information about the institute and the projects it is currently involved in, including the BalticGrid project, for the Minister of Science and Education, Mrs. M. Bundule. The information was used to prepare for the visit of the EC commissioner of Science, J. Potocnik.

**Significant date(s):** 20.02.2007

**Significant location (institution, city, country):** Riga, Latvia

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

Government

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Distribution of the BG general brochure during the GridwiseTech Business Workshop

**Name(s) of responsible institution(s) / person(s):** Robert Pajak, IFJPAN

**Name(s) of contributing institution(s) / person(s):** GridwiseTech, Krakow

**Type of activity or material:** Distribution of disseminative material

**Description of content (maximum about 500 words):** The BG general brochure was distributed among the 170 participants of the "IT Technology Pioneers" session during the GridwiseTech Business Workshop.

**Significant date(s):** 22.02.2007

**Significant location (institution, city, country):** Krakow, Poland

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):** The audience was ranging from Krakow's leading IT businesses, as well as administration, to academic staff, students and local IT professionals.

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** : SA1



**Title:** European Grid Initiative Workshop

**Name(s) of responsible institution(s) / person(s):**

**Name(s) of contributing institution(s) / person(s):** Lauri Anton

**Type of activity or material:** participation in the workshop

**Description of content (maximum about 500 words):** Goals of the workshop: to inform interested parties (NGIs) about the planned EGI proposal, to discuss the status of the different NGIs in Europe with respect of their involvement in EGI, to ask the NGIs for their support in the EGI efforts.

**Significant date(s):** 26-28.02.2007

**Significant location (institution, city, country):** Munich, Germany

**Place of publication:**

**Web page for information (if any):** <http://www.eu-egi.org/events/workshops/feb07/>

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Information about IMCS UL and the projects it is involved, prepared for the members of parliament

**Name(s) of responsible institution(s) / person(s):** Bruno Martuzāns, IMCS UL

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** Written information

**Description of content (maximum about 500 words):** IMCS UL was asked to prepare information about the institute and the projects it is currently involved in, including the BalticGrid project, for the Minister of Science and Education, Mrs. M. Bundule. The information was presented for the members of Latvian parliament.

**Significant date(s):** March 2007

**Significant location (institution, city, country):** Riga, Latvia

**Place of publication:**

**Web page for information (if any):** <http://webrt.ciemat.es:8000/e-science/index.html>

**Language(s):** Latvian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**  
Government

**Intellectual property rights (e.g. public, ©IFJPN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Participation in a Spanish Conference on e-Science Grid Computing

**Name(s) of responsible institution(s) / person(s):** Olgerts Belmanis

**Name(s) of contributing institution(s) / person(s):**



**Type of activity or material:** participation in a conference

**Description of content (maximum about 500 words):**

**Significant date(s):** 1-2.03.2007

**Significant location (institution, city, country):** Madrid, Spain

**Place of publication:** Madrid, Spain

**Web page for information (if any):** <http://webrt.ciemat.es:8000/e-science/index.html>

**Language(s):** English

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Meeting with researches from Vilnius Gediminas Technical University

**Name(s) of responsible institution(s) / person(s):** VU, D. Mazeika

**Name(s) of contributing institution(s) / person(s):** Vilnius Gediminas Technical University

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** Meeting was organized to talk about further collaboration possibilities and VGTU participating perspectives in future BalticGrid2 project. Second part of the meeting was application centered discussion. VGTU is gridifying 2 applications (CFD and nanomaterials modeling) in order to use its in BalticGrid. Requirement of the computational resources and environment were ascertain.

**Significant date(s):** 23.03.2007

**Significant location (institution, city, country):** Vilnius Gediminas Technical University

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Narration for the BalticGrid presentation

**Name(s) of responsible institution(s) / person(s):** Baiba Kaškina

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** Recorded voice narration

**Description of content (maximum about 500 words):** Baiba Kaskina did the narration for the BalticGrid presentation which will be used in all kind of dissemination activities in the future.

**Significant date(s):** April 2007

**Significant location (institution, city, country):**

**Place of publication:**

**Web page for information (if any):**



**Language(s):** English

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Meeting with researches from Vilnius Gediminas Technical University

**Name(s) of responsible institution(s) / person(s):** VU, D. Mažeika

**Name(s) of contributing institution(s) / person(s):** Vilnius Gediminas Technical University

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** Vilnius Gediminas Technical University (VGTU) is 3<sup>rd</sup> as big university in Lithuania. There is large research community that uses different commercial software (Matlab ANSYS MAPLE) on their researches.

The meeting was organized to talk about possibilities to this software in BalticGrid and to discuss what interface would be most suitable and convenient for them to use these software on the grid.

**Significant date(s):** 16.04.2007

**Significant location (institution, city, country):** Vilnius Gediminas Technical University

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Meeting with researchers from Klaipeda University

**Name(s) of responsible institution(s) / person(s):** VU, A. Juozapavicius

**Name(s) of contributing institution(s) / person(s):** Klaipeda University

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** The meeting was organized with the researches from Klaipeda University. The aims of this meeting was more encourage researches join BalticGrid SIG activities and to discuss how to make their application grid enabling.

**Significant date(s):** 18.04.2007

**Significant location (institution, city, country):** Vilnius University

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Lithuanian

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2



**Title:** Participation in GEANT and Grid Info day

**Name(s) of responsible institution(s) / person(s):** RTU

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** participation in the info day organized by IMCS UL

**Description of content (maximum about 500 words):** Riga Technical University developments were presented, as well as some innovative presentations about the Data Grid were given.

**Significant date(s):** 24.04.2007

**Significant location (institution, city, country):** Riga, Latvia

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Latvian

**Intellectual property rights (e.g. public, ©IFJPN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task :** NA4/SA1/NA2

**Title:** The 20th Open Grid Forum/ EGEE 2nd User Forum

**Name(s) of responsible institution(s) / person(s):** EGEE

**Name(s) of contributing institution(s) / person(s):** Lauri Anton, Hardi Teder, Kalle Keskrand and Igor Kuzmitšov

**Type of activity or material:** participation in the event

**Description of content (maximum about 500 words):** Goals of the workshop: to inform interested parties (NGIs) about the planned EGI proposal, to discuss the status of the different NGIs in Europe with respect of their involvement in EGI, to ask the NGIs for their support in the EGI efforts.

**Significant date(s):** 7-11.05.2007

**Significant location (institution, city, country):** Manchester, UK

**Place of publication:**

**Web page for information (if any):** <http://egee-intranet.web.cern.ch/egee-intranet/User-Forum/>, [http://ogf.org/OGF20/events\\_ogf20.php](http://ogf.org/OGF20/events_ogf20.php)

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** "A quick walk through the stands: What is BalticGrid?" - an interview with Per Öster

**Name(s) of responsible institution(s) / person(s):** Grid Café representative

**Name(s) of contributing institution(s) / person(s):** Per Öster

**Type of activity or material:** interview

**Description of content (maximum about 500 words):** An interview concerning the BalticGrid project, made with Per Öster, during the EGEE UF / OGF 20 in Manchester, UK.



**Significant date(s):** 9.05.2007

**Significant location (institution, city, country):** EGEE UF / OGF 20, Manchester, UK

**Place of publication:** Grid Café website

**Web page for information (if any):** [http://gridcafe.web.cern.ch/gridcafe/temp/BalticGrid\\_NEW.mov](http://gridcafe.web.cern.ch/gridcafe/temp/BalticGrid_NEW.mov)

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task :** NA2/SA2/NA3

**Title:** Participation in the 3AHM

**Name(s) of responsible institution(s) / person(s):** Baiba Kaškina, Guntis Bārzdiņš, Ināra Opmane, Dana Ludviga, Kārlis Podiņš, Edgars Znots

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** participation in the meeting

**Description of content (maximum about 500 words):** Six people from IMCS UL participated in the Grid Open Day and 3AHM meeting in Tallinn, Estonia, organised by NICPB and EENet. IMCS UL achievements and progress in various activities were presented during the whole event.

**Significant date(s):** 15-17.05.2007

**Significant location (institution, city, country):** Tallinn, Estonia, NICPB

**Place of publication:**

**Web page for information (if any):** <http://hep.kbfi.ee/index.php/AllHands/Main>

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** SA1

**Title:** 10<sup>th</sup> EUGridPMA meeting

**Name(s) of responsible institution(s) / person(s):** Certification Authority of National Grid Initiative of Turkey

**Name(s) of contributing institution(s) / person(s):** Hardi Teder

**Type of activity or material:** participation in the meeting

**Description of content (maximum about 500 words):** The EUGridPMA is the international organisation to coordinate the trust fabric for e-Science grid authentication in Europe. Hardi Teder was representing Baltic Grid Certification Authority at the meeting.

**Significant date(s):** 30.05-2.06.2007

**Significant location (institution, city, country):** Istanbul, Turkey

**Place of publication:**

**Web page for information (if any):** <https://www.eugridpma.org/meetings/2007-05>



**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):** Grid Certification Authorities' representatives

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task: :** NA2

**Title:** Meeting with researches from Vilnius Gediminas Technical University

**Name(s) of responsible institution(s) / person(s):** VU, D. Mažeika

**Name(s) of contributing institution(s) / person(s):** Vilnius Gediminas Technical University

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** The meeting was held at Vilnius Gediminas Technical University to encourage scientist and researches from this university to use BalticGrid infrastructure for solving their problems. During the meeting we have discussed what interface would be most suitable and convenient for them to use these software on the grid.

**Significant date(s):** 3.07.2007

**Significant location (institution, city, country):** Vilnius Gediminas Technical University

**Place of publication:**

**Web page for information (if any):**

**Language(s):** Lithuanian

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task: :** NA2

**Title:** "Policy of formation of informational society"

**Name(s) of responsible institution(s) / person(s):** Zenonas Rokus Rudzikas, Member of the JRC Board Governors (BoG)

**Name(s) of contributing institution(s) / person(s):** oral intervention

**Type of activity or material:** A discussion on preparation of document "Opinion" by EESC

**Description of content (maximum about 500 words):** The oral intervention has been made for the members of the BoG and directors of the institutes belonging to the BoG and directors of the activities of the number of research institutions in Lithuania while developing methods of the work using GRID infrastructure. The efficiency of this new technology has had to be mentioned program BalticGrid (EU project) and LitGrid (Lithuanian project). They both are excellent examples to follow.

**Significant date(s):** 5.07.2007

**Significant location (institution, city, country):** Wroclaw university, Wroclaw, Poland.

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English



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**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPN):** public

**Availability (e.g. via email, or in printed form) of relevant products:** available on request

**Activity / Task :** NA2

**Title:** Preparation of the document: “The contribution of informational technologies to sustainable development”

**Name(s) of responsible institution(s) / person(s):** Zenonas Rokus Rudzikas, European Economic and Social Committee group III (EESC)

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** A discussion on preparation of document “Opinion” by EESC

**Description of content (maximum about 500 words):** The document will be presented to the plenary section of EESC and will be published under the title “Opinion”. In many presentations I suggested to include a paragraph on a new generation of computing facilities based on quantum mechanics and new informational technologies such as the Grid concept. As an illustration of the progress in this domain I presented the BalticGrid and LitGrid projects.

**Significant date(s):** 13.07.2007

**Significant location (institution, city, country):** EESC Brussels, Belgium

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPN):** public

**Availability (e.g. via email, or in printed form) of relevant products:** available on request

**Activity / Task :** NA2

**Title:** Meeting with representatives from Ministry of Science and Education

**Name(s) of responsible institution(s) / person(s):** VU, A. Juozapavicius

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** meeting

**Description of content (maximum about 500 words):** Meeting with representatives of Ministry of Science and Education was organized to discuss the details of financial support NGI activities for the year 2007-2012.

At date 2007.07.27 Minister of Science and Education has signed the document where LitGrid was approved as national programme of Science and Education in Lithuania with budget 4.7 M LT.

**Significant date(s):** 27.07.2007

**Significant location (institution, city, country):** Vilnius University

**Place of publication:**

**Web page for information (if any):** [mif.vu.lt/balticgrid](http://mif.vu.lt/balticgrid)

**Language(s):** Lithuanian



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**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** : NA2

**Title:** Preparation of the material for BG movie

**Name(s) of responsible institution(s) / person(s):** Vilnius University

**Name(s) of contributing institution(s) / person(s):** Dalius Mažeika

**Type of activity or material:** photos and movie

**Description of content (maximum about 500 words):** Photos of the VU cluster, computer labs have been made. Interview with NA3 leader Algimantas Juozapavičius was prepared for BG movie.

**Significant date(s):** 1.08.2007

**Significant location (institution, city, country):** Lithuania

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPAN):** VU

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task:** NA2

**Title:** Preparation of the Abstract of the SyntSpec application demo to be showed at the exhibition of EGEE'07

**Name(s) of responsible institution(s) / person(s):** EGEE

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:**

**Description of content (maximum about 500 words):** We present The Stellar Spectra Modeling package SYNTSPEC – the gridified tool for stellar spectra analysis – as an example of data- and compute-intensive application running on the testbed of the EU BalticGrid Project (<http://www.balticgrid.org>) – interoperable with EGEE resources and complementary with the EGEE infrastructure. The application brings the new quality to the research in the field of astrophysics in the Baltic States and accelerates the integration of science in EU.

**Significant date(s):** 31.08.2007

**Significant location (institution, city, country):** Lithuania

**Place of publication:**

**Web page for information (if any):** <http://www.eu-egge.org/egge07/>

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**



**Activity / Task:** NA2

**Title:** Preparation of the movie about gridification of the ANSYS software

**Name(s) of responsible institution(s) / person(s):** Baiba Kaskina

**Name(s) of contributing institution(s) / person(s):** Kaspars Kalnins, Matiss Kulis, Solvita Rovite

**Type of activity or material:** movie

**Description of content (maximum about 500 words):** This movie shows the gridification of the ANSYS software and adjustments of it for the calculations of Riga Technical University, Institute of Material Sciences. In everyday praxis ANSYS code has been applied by RTU IMS to design the composite structures, which by its nature is time demanding process.

**Significant date(s):** 31.08.2007

**Significant location (institution, city, country):** produced by IMCS UL, Latvia

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJPAN):** IMCS UL

**Availability (e.g. via email, or in printed form) of relevant products:**  
[http://grid.lumii.lv/ansys/helikoptera\\_aste.mpg](http://grid.lumii.lv/ansys/helikoptera_aste.mpg)

**Activity / Task:** NA2

**Title:** Meeting with the group of scientists in Spain - Exchange of experience on R&D

**Name(s) of responsible institution(s) / person(s):** Prof. Z. R. Rudzikas

**Name(s) of contributing institution(s) / person(s):** Prof. Gerardo D. Barrio

**Type of activity or material:** meeting and discussion

**Description of content (maximum about 500 words):** On September 3 2007 I have participated in Spain in the meeting with the group of scientists and playmakers from Spain, among which there was the director of the Institute of Mathematics and Fundamental Physics Prof. Gerardo D. Barrio. The purpose of the meeting was to exchange our experience in R&D. I emphasized the role of the international cooperation, participation in large scale international projects. This is particularly important for relatively small countries like Lithuania. I presented the LitGrid and BalticGrid projects as positive examples of such development.

**Significant date(s):** 3.09.2007

**Significant location (institution, city, country):** Consejo Superior de Investigaciones Cientificas, Santander, Spain

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**  
researchers, industry

**Intellectual property rights (e.g. public, ©IFJPAN):**



**Availability (e.g. via email, or in printed form) of relevant products:** Available on request

**Activity / Task:** NA2/NA4/SA1

**Title:** EGEE'07

**Name(s) of responsible institution(s) / person(s):** EGEE

**Name(s) of contributing institution(s) / person(s):** Lauri Anton

**Type of activity or material:** participation in the conference

**Description of content (maximum about 500 words):**

**Significant date(s):** 1-4.10.2007

**Significant location (institution, city, country):** Budapest, Hungary

**Place of publication:**

**Web page for information (if any):** <http://www.eu-egee.org/egee07>

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):** Grid Certification Authorities' representatives

**Intellectual property rights (e.g. public, ©IFJAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

**Activity / Task: :** NA2/SA1

**Title:** Participation in the EGEE'07 conference

**Name(s) of responsible institution(s) / person(s):** Janis Kulins, Artis Steinbergs

**Name(s) of contributing institution(s) / person(s):**

**Type of activity or material:** participation in the conference

**Description of content (maximum about 500 words):**

**Significant date(s):** 1-5.10.2007

**Significant location (institution, city, country):** Budapest, Hungary

**Place of publication:**

**Web page for information (if any):**

**Language(s):** English

**Audience (students, researchers, etc.; higher education, industry, general public, etc.):**

**Intellectual property rights (e.g. public, ©IFJAN):**

**Availability (e.g. via email, or in printed form) of relevant products:**

## D12. Web sites

**Activity/Task:** SA1



**Title:** BalticGrid Infosite

**Name(s) of web designer(s):** Kalle Keskrand

**Name(s) of contributor(s):**

**Description of content (maximum about 500 words):** Grid resources monitor for grid user and administrator. The monitor publish and visualize information about sites, VOs, installed applications and more.

**Date of launch:** 18.12.2006

**Location of server (city, country):** Tartu, Estonia

**URL:** <http://infosite.balticgrid.org/>

**Language(s) used (separated by commas):** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** public

**Accessibility (public/private):** public

**Activity/Task:** SA2/NA2

**Title:** BalticGrid Monitoring portal

**Name(s) of web designer(s):** Matīss Kūlis, Solvita Rovite, Janis Džerīnš

**Name(s) of contributor(s):** Katrina Sataki, Ervins Gailišs

**Description of content (maximum about 500 words):** The BalticGrid Monitoring portal will aggregate monitoring data about the network usage in all three Baltic States from other monitoring sites, have detailed schemes how the Grid clusters are connected and will provide access to e2emonit data showing various network characteristics among the Grid clusters.

**Date of launch:** May 2007

**Location of server (city, country):** Riga, Latvia

**URL:** <http://gridomons.latnet.lv/>

**Language(s) used (separated by commas):** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** IMCS UL

**Accessibility (public/private):** public

**Activity/Task:** NA2

**Title:** BalticGrid 2<sup>nd</sup> Summer School website

**Name(s) of web designer(s):** Matīss Kūlis, Solvita Rovite, Janis Džerīnš

**Name(s) of contributor(s):** Katrina Sataki, Baiba Kaskina

**Description of content (maximum about 500 words):** This webpage provides all necessary information for the 2<sup>nd</sup> BalticGrid Summer school including the programme of the school, registration page, logistics and travel information.

**Date of launch:** May 2007

**Location of server (city, country):** Riga, Latvia

**URL:** <http://bgss2007.lumii.lv/>

**Language(s) used (separated by commas):** English

**Intellectual property rights (e.g. public, ©IFJ PAN):** IMCS UL



**Accessibility (public/private):** public

**Activity/Task:** NA2

**Title:** New design and layout for Latvian Grid portal

**Name(s) of web designer(s):** Solvita Rovite, Matiss Kulis, Agris Dzilna

**Name(s) of contributor(s):** Katrina Sataki, Baiba Kaskina

**Description of content (maximum about 500 words):** In July and August 2007 a major update for Latvian Grid portal was done. Design and layout was changed, more information for general public and beginners was added in Latvian. Latvian was also made as a primary language in this portal to focus on local users.

**Date of launch:** 15.08.2007

**Location of server (city, country):** Riga, Latvia

**URL:** <http://grid.lumii.lv/>

**Language(s) used (separated by commas):** Latvian, English

**Intellectual property rights (e.g. public, ©IFJ PAN):** IMCS UL

**Accessibility (public/private):** public