



Join major European grid projects, policy makers and researchers at:

# European Leadership in Grids and e-Science

The Hague, 18-26 november 2004

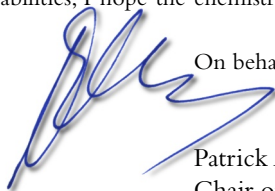
Dear Participant,

On behalf of all organisers I want to wish you a warm welcome. Together with the massive support from EGEE and EC staff members, the local organisers - TERENA, SARA, NIKHEF, NWO and NCF - have worked hard to prepare an interesting programme for you in the coming weeks. With nine events in all - two workshops on e-infrastructures, four project meetings (EGEE, DEISA, SEE-GRID and DILIGENT), a plenary event, a closed meeting (of the e-IRG) and a public EU concertation event - you will have plenty on your hands for the rest of this month.

The IT enhanced world brings us such modern phenomena as e-Science, e-Business, e-Health, e-Commerce and a lot more. The relationship with the developments in high performance computing, computational and computer science, the developments in massively parallel and distributed computing, networking and present day communications (instant messaging, filesharing networks, to name but a few) surely work both ways. The Grid is one of the more impactful instruments to this e-enhancement. It offers us new ways to collaborate. Some of you may have noticed the ant that featured as a logo on the conference bags, the posters, websites and on the front of this booklet. We chose that because ant communities are a perfect example of how the grid can function: as a collective of individual little workers with specialised tasks, prepared to work for the common good. Each worker selfishly does what it needs to do to survive, and contributes selfishly to a larger whole. It is the proven power of many. Without the group the species would vanish, so the use is obvious. Yet each individual ant is expendable - even the queen ant that outweighs the rest by a factor of 10,000 can be replaced by an ordinary female ant over time.

Together ants achieve grand results, which is what we hope the grid will enable us to do too. So, how much better must we be able to achieve what ants can. We can cope with diversity, from supercomputer to laptop PC, from high resolution MRI scanner to low frequency radiation antennas. The health of the community depends on a healthy internal ecosystem (the quality of the infrastructure and 'the usage policies')- and the way we interact with other communities. Let's hope we can achieve a well balanced world wide grid like the way the web has come to life in the past decade.

I leave you with a thought: when ants walk outside they leave a trail of chemicals. The more ants have passed a certain point, the more likely a future ant wandering about is to head there because of this smell. With ants it is chemistry that makes them coordinated far beyond their own intellectual capabilities; I hope the chemistry of all the paths that will cross here will have the same effect.



On behalf of all the organisers,

Patrick Aerts  
Chair of the e-IRG

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## Important contact and location details

### GENERAL EMERGENCY

(Life threatening situation that requires immediate police assistance, medical assistance or in case of fire etc.)

Tel. 112

### POLICE

Tel. 0900 8844

(charged at local rate)

### HOSPITAL

Medical Center Haaglanden Westeinde

Lijnbaan 32, 2512 VA The Hague

(070) 330 20 00, [info@mchaaglanden.nl](mailto:info@mchaaglanden.nl)

### TAXI

*Algemene Taxi Centrale:*

(070) 317 88 77, [info@atc-taxi.nl](mailto:info@atc-taxi.nl)

*Haagse Taxi Mobilfoon Centrale*

(070) 390 77 22, [htmc@wanadoo.nl](mailto:htmc@wanadoo.nl)

*Haagsche City Tax*

(070) 383 08 30, [info@city-tax.nl](mailto:info@city-tax.nl)

### PHONE NUMBER ENQUIRY

Telephone: 118

Web: [www.detelefoongids.nl](http://www.detelefoongids.nl)

Or SMS 'Initial Name City' to 1313

(so: 'E Presley Amsterdam') to 1313

55 cent per sms.

### EMERGENCY NUMBER LOCAL

#### ORGANISATION:

Tel: +31 (0)6 27050947

### CONFERENCE VENUES:

*Nieuwe of Littéraire Sociëteit De Witte*

Plein 24

2502 AN The Hague

Tel: +31 (0)70 360 79 33

Fax: +31 (0)70 360 69 67

Email: [info@societeitdewitte.nl](mailto:info@societeitdewitte.nl)

*Netherlands Conference Center*

Churchillplein 10

2517 JW The Hague

Tel: +31 (0)70 - 306 63 66

Fax: +31 (0) 306 64 43

Email: [info@congresscentre.com](mailto:info@congresscentre.com)

*Opening reception (22 november 2004)*

Brasserie Berlage

Gemeentemuseum

President Kennedylaan 1, The Hague

Tel: +31 (070) 338 7622

Fax: +31 (070) 338 7728

Mail: [info@brasserieberlage.nl](mailto:info@brasserieberlage.nl)

The conference dinner will be held at  
the *Netherlands Conference Center*.

# Museums

## Escher in The Palace

Permanent museum and virtual attraction dedicated to the work of the famous designer M.C. Escher (now with temporary extra exhibit: work by Hungarian designer Istvan Orosz).

Lange Voorhout 74, Den Haag  
Phone: (070) 4277730  
Open: Tuesday-Sunday 11:00-17:00

## Gemeentemuseum City Museum for Modern Art

The museum exhibits one of the most famous paintings of the 20th century (Victory Boogy Woogy by Piet Mondriaan) and many other interesting modern paintings - including many works from the world-renowned artist movement De Stijl.

Stadhouderslaan 43, Den Haag  
Phone: (070) 3381133  
Open: Tuesday-Sunday 12-20 o'clock

Website: <http://www.gem-online.nl>

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*Special exhibits:*

"Hanging Aroun"

Solo exhibit by RICARDO BREY (Cuba)

"Constant Permeke"

Overview of the work of this Flemish expressionist.

## Madurodam

Miniaturised version of the Netherlands and famous locations from around the world. From the oldfashioned windmills to the canals of Amsterdam, Madurodam has it all.

George Maduroplein 1, Den Haag  
Phone: (070) 4162400  
Opened: monday to Sunday 9-18 o'clock

## Panorama Mesdag

Get into the middle of the largest painting in the Netherlands (total surface of the canvas is 1600 m<sup>2</sup>) to experience the illusion of the complete view (360°) from a Schevingen dune, painted by Hendrik Willem Mesdag in 1881.

Zeestraat 65, The Hague  
Phone: (070) 3106665  
Opened: Monday to Saturday 10-17,  
Sunday 12-17 uur

## Sculptures at the sea

Permanent large collection of statues by sculpters like Rodin, Mitorau, Tagiri, Kollwitz and Zadkine, currently a special outdoors exhibit by Tom Otterness uit New York.

Harteveldstraat, Scheveningen  
Phone: (070) 358 58 57  
Open: Tuesday to Sunday 11.00-17.00

Website: [www.beeldenaanzee.nl](http://www.beeldenaanzee.nl)

## About the city of The Hague

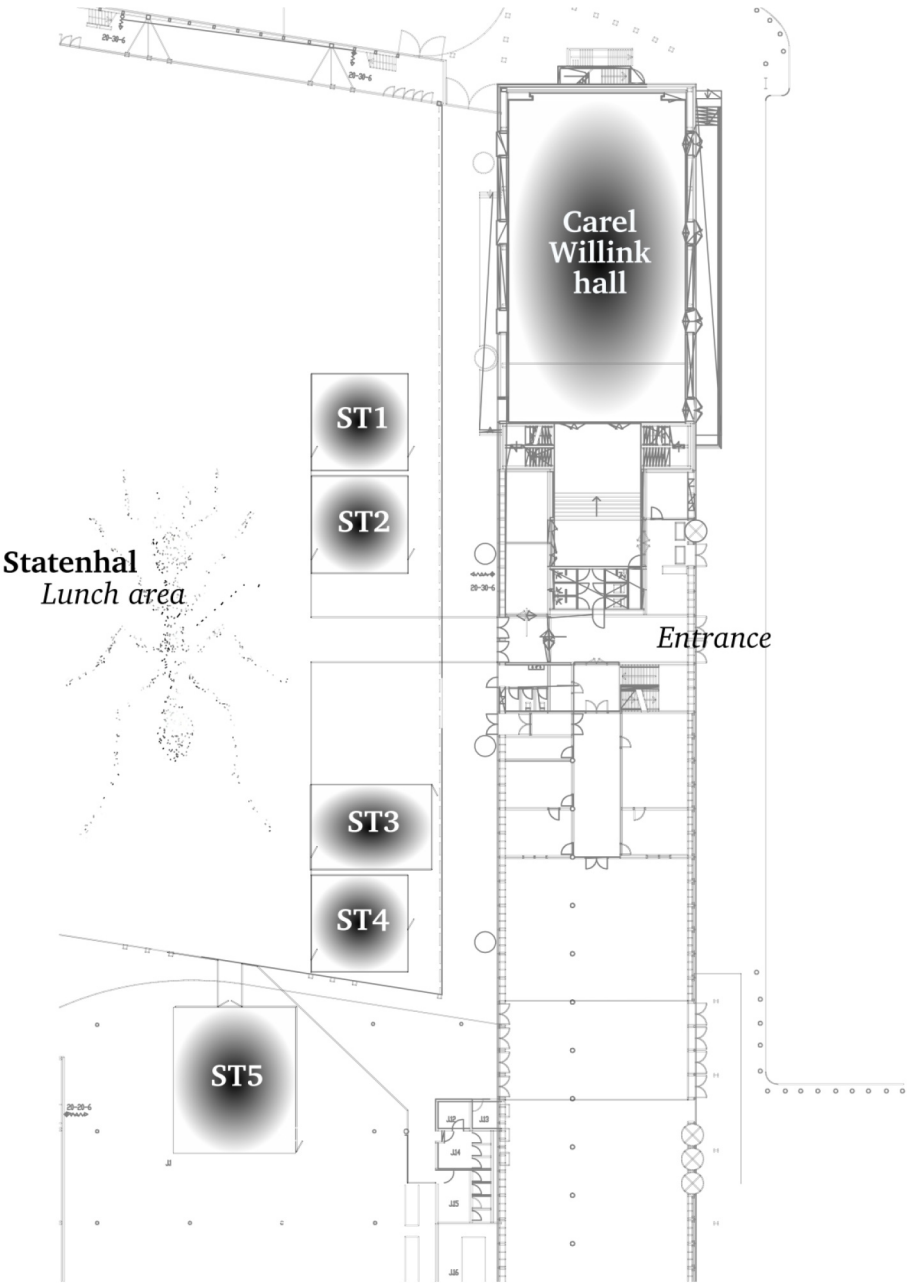
The Hague (population 465,000, Dutch: Den Haag, or, officially, 's-Gravenhage) is the administrative capital of the Netherlands. Originally a hunting location, the counts of Holland used it as their administrative center; all cities had their rights and 'kapsones'. 'Des Graven Hage' literally means "The counts' hedge" or "The count's private enclosure". The stork is the symbol of Den Haag. The region however has a long history, many archeological findings date back 5000 years old.

The Hague was formally named a city by the French occupation force as late as 1806, centuries after other Dutch cities had received similar rights. The Dutch monarch Beatrix lives in The Hague, her position is ceremonial however as the Netherlands is a parliamentary democracy. The Hague hosts the "Eerste Kamer" and the "Tweede Kamer", respectively the Senate and the House of Representatives, forming the Dutch parliament (Staten Generaal). All foreign embassies and government ministries are located in the city, as well as the Supreme Court and many lobby organisations. As one of the capitals of the United Nations, The Hague is host to several institutions of the UN, such as The International Court of Justice, located in the Peace Palace (Vredespaleis, its construction was financed by Andrew Carnegie) and The International Criminal Court.

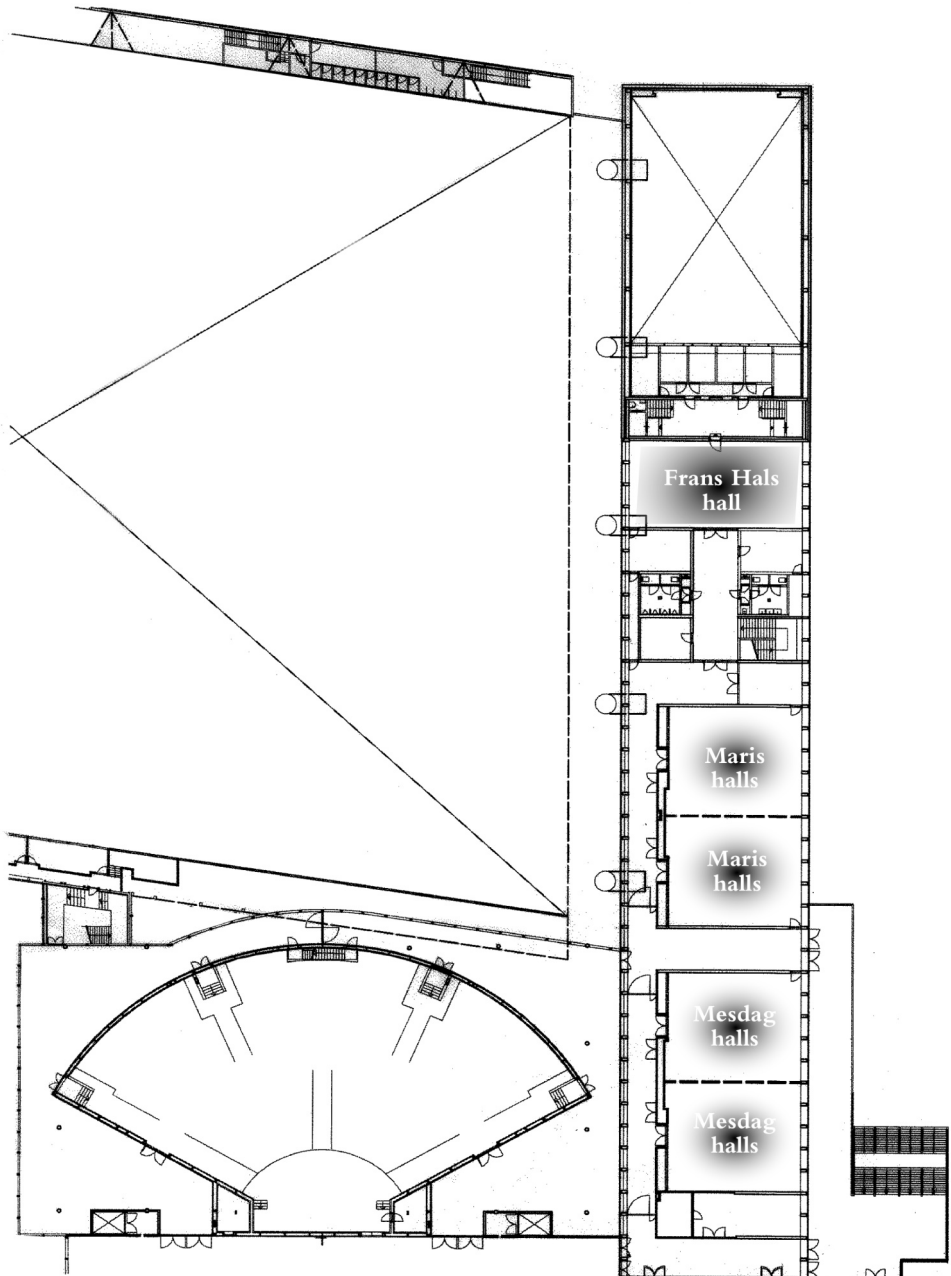
Professional life in the city is dominated by the large number of civil servants working there, and there is no university contrary to what one might expect of the capital of the country (this is mainly because the nearby city of Leiden has a famous university dating back to 1575). Government ministries and public organizations are almost all located in The Hague. In the city itself you will find interesting culture. The city is known for its great jazz climate, several excellent sculptural collections, and also harbours many paintings by Johannes Vermeer, Rembrandt van Rijn and famous "modern" works in the various museums.

The Netherlands is a small country, you can be in Amsterdam, Utrecht or Rotterdam in less than an hour. So in case you want to venture out, just use the excellent trains that go around the 'Randstad' 24 hours a day! Or go to the sea side, and enjoy the North Sea.

Conference center floor plan: ground floor NCC



# Conference center floor plan: first floor NCC





# e-Infrastructures workshop

18 NOVEMBER 2004 - 09:00 -17:30

Littéraire Sociétéit De Witte

*Plein 24, The Hague, The Netherlands*

The e-Infrastructures Workshop is organised before every meeting of the e-IRG (eInfrastructures Reflection Group).

09.00-09.45	Opening/Introduction PATRICK AERTS (e-IRG) ULF DAHLSTEN (EU) EMIEL BROESTERHUIZEN (Ministry of OC&W)
09.45-10.10	ERIK-JAN BOS (SURFnet)
10.10-10.35	FRANK SIEBENLIST (ANL-US): Grid accounting
10.35-10.50	RUEDIGER KRAHL (DLR)
10.50-11.00	CEES DE LAAT (UvA)
11.00-11.30	Break
11.30-11.50	YOSHIO TANAKA: Connecting grids worldwide - a perspective from Grid developments in the APR
11.50-12.10	VASILIS MAGLARIS: Global Research and Education Networks - The role of GEANT
12.10-12.30	MARCO DE VOS (ASTRON/LOFAR) LOFAR and a Grid for European Astronomy
12.30-13.30	Lunch break
13.30-13.45	Plenary explanation of the workshop process
13.45-14.45	Workshop Sessions I
14.45-15.15	Break
15.15-16.00	Workshop Sessions II
16.00-16.30	Drinks
16.30-17.30	Plenary wrap up

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## *Workshop sessions I*

- \* Usage Policies (DAVE KELSEY)
- \* Authorisation (DAVID GROEP)
- \* User support (TORSTEN ANTONI)
- \* Accounting (KIMMO KOSKI)
- \* General purpose versus disciplinary grids (JULES WOLFRAT)

## *Workshop sessions II*

- \* Usage Policies (BOB COWLES)
- \* Authorisation (DIEGO LOPEZ)
- \* User support (JEFF TEMPLON)
- \* How to bridge grids worldwide (MARY SPADA)
- \* General purpose versus disciplinary grids (ANDERS YNNERMAN)

## Ulf Dahlsten

Ulf Dahlsten (Sweden, 1946) is Director of 'Emerging Technologies and Infrastructures Applications' at the Directorate-General Information Society of the European Commission. Prior to joining the Commission, Ulf Dahlsten was Director of SECCOM AG and President and CEO of Icon Medialab International, an internet consultancy offering solutions in ecommerce, ebusiness and internet banking among others. Previously, from 1988 to 1999, Ulf Dahlsten worked with the Swedish Postal Services, first as Director-General and then as President and CEO of Posten AB. From 1982 to 1988, Mr. Dahlsten occupied various posts with the Swedish government, including State Secretary for Energy and then for Communications as well as State Secretary and Chief of Cabinet of the Prime Minister's Office. Ulf Dahlsten started his career as a teacher in Mathematics at the Royal Institute of Technology. He holds a Civil Engineer's degree from the Royal Institute of Technology and a Bachelor of Science in Economics from the Stockholm School of Economics.

## Emil Broesterhuizen

Emil Broesterhuizen (1947) is deputy director Research and Science Policy at the Ministry of Education, Culture and Science since January 2000. He got his masters degree in chemistry at Leiden State University in 1972. After having been research assistant and lecturer in chemistry at Leiden State University he joined the Ministry of Education and Science in July 1978. He worked there in the field of research and science policy since then, with the exception of the period between January 1987 and March 1989, when he was at the Directorate for Agricultural Research at the ministry of Agriculture, Nature Management and Fisheries. Between early 1989 and March 1992 he was a (part-time) private consultant on science policy issues.

## Erik-Jan Bos

Erik-Jan Bos holds a Master of Science degree from Delft University of Technology, where he graduated Cum Laude in 1987 at the Faculty of Electrical Engineering. As of 1989, Erik-Jan is working at SURFnet, the national computer network for higher education and research in the Netherlands, in the Department of Network Services which is responsible for the transmission infrastructure all the way up to and including the routing layer. Erik-Jan is head of Network Services as of September 2000. In the context of the GigaPort Project, Erik-Jan was heading the group that was responsible for the design and building of SURFnet5 which is today among the world's most advanced research networks. Also, during the GigaPort Project, Erik-Jan played a key role in setting up the research into the next generation optical Internet exchange point in Amsterdam, called NetherLight, in close collaboration with researchers in Amsterdam and Chicago. Erik-Jan is an active member of the IETF, the IEPG, RIPE and he is a founding member of ISOC.

*"Next generation networks will not be an extrapolation of those networks that are around today. In GigaPort, a Bsik project to strengthen the knowledge infrastructure in The Netherlands, SURFnet is working on realizing this ambition together with industry partners Nortel, Avici Systems, and Telindus. The new network, named SURFnet6, will be a hybrid optical and packet switching network. Besides the full range of IP services, the optical possibilities of the network will be brought to the researchers and applications in the laboratories giving them worldwide access through NetherLight, the Open Optical Exchange in Amsterdam, and the Global Lambda Integrated Facility (GLIF). With this new paradigm, the network is becoming a part of scientific instruments. This talk will address SURFnet's vision on next generation networks and SURFnet's ambition to create SURFnet6."*

## Frank Siebenlist

Frank Siebenlist is a senior software architect in the Distributed Systems Laboratory (DSL), in the Mathematics and Computer Science Division at Argonne National Laboratory, and is part of the Globus Alliance team. He spends his time on the development of the Open Grid Services Architecture (OGSA), on the design of the Globus Toolkit, and on how to make all that work in real-world Grid applications. Frank has a Ph.D. in Physics from the University of Amsterdam. He has extensive experience with distributed computing and security. He has worked for major financial institutions (VP at Citibank and Senior Consultant at J.P. Morgan) in Hong Kong and New York. He has also worked for a number of technology companies, including start-ups in Silicon Valley (Chief Architect at DASCOS and Chief Security Architect at Eazel), and at IBM as a Senior Security Architect. Furthermore, Frank authored a number of security related standards at X/Open (Open Group), and influenced and contributed to numerous others at the IETF, OMG and OASIS.

## Vasilis Maglaris

Dr. Vasilis Maglaris is Chairman of the National Research & Education Networks Policy Committee (NREN), and Professor at the National Technical University of Athens (NTUA). The NREN PC harmonizes policies amongst the 30 NRENs in the extended European Research Area and is responsible for planning and managing the Pan-European advanced network platform GEANT. Maglaris received the Diploma in Mechanical & Electrical Engineering in 1974, the M.Sc. in Electrical Engineering from the Polytechnic Institute of Brooklyn in 1975 and his Ph.D. degree in Electrical Engineering & Computer Science from Columbia University, New York in 1979. From 1979 to 1981 he was a research engineer at the Network Analysis Corp., New York, a leading firm in designing the ARPANET (the predecessor of Internet). Apart from teaching and performing research on Computer Networks, he was responsible for developing the NTUA Campus LAN and for the establishment of GRNET (the Greek NREN). He served as GRNET's Chairman from its inception in 1995 until June 2004. Since 1994 he has served on the board of the Greek National Regulatory Authority on Communications and Posts. He authored more than 100 research papers and regularly delivers lectures on the advances in Internet Technologies.

# Rüdiger Krah

Dr. Rüdiger Krah is head of the unit "Internet - Technologies and Services" at the Federal Ministry of Education and Research (BMBF). The main funding area of his unit is "Grid and e-Science". He studied Mathematical Methods of Operations Research at the Technical University Merseburg and graduated with a Doctor degree in Mathematical Optimization. He started working at BMBF in 1994 as a project officer at the Project Management Organization (PMO), working on projects in High Performance and Parallel Computing, Computational Science and Engineering, Grid Computing, Human Machine Interaction, Virtual and Augmented Reality. Before that that he was Senior Researcher in Applied Mathematics and Optimization at TU Merseburg and Senior Researcher in parallel and distributed computing at the Institute for Informatics and Computer Science Berlin. Later he became a researcher at the German National Research Center for Information Technology (GMD).

*"In 2003 the German D-Grid-Initiative was founded to concentrate all grid activities in Germany. The aim of this initiative is to establish a grid- based German network for e-science and experimental applications. The long- term vision of e-science in Germany consists in the creation of new forms of collaboration, cooperation and communication in scientific core areas connected with extensive information and knowledge processing. As the most essential result integrated scientific working environments should be developed. They ought to allow the transparent use of broad spectra of e- science-services made available by different providers. In a first step, "community grids" will be realized driven by advanced application communities. The funding is being focused on the development of application specific and generic middleware components and net-based services (start: 2005). In parallel, a "Grid Middleware Integration Platform" should be established to generalize middleware components developed by community grids and to make them available to all interested users."*

## Cees de Laat

*"In this talk I will present the current SURFnet and NetherLight developments. My talk explores some thoughts about the different usage models of optical networks. Different classes of users are identified. The services, required by the Internet traffic from those different classes of users, are analyzed and a differentiated Internet architecture is proposed to minimize the cost per transported packet for the whole architecture and to create the most economical network in terms of throughput and extensibility. Recent developments in the Global Lambda Integrated Facility (GLIF) will be presented."*

Dr. Cees de Laat is associate professor at the Informatics Institute of the University of Amsterdam. De Laat received a PhD in Physics from the University of Delft. He has been active in data acquisition systems, heavy ion experiments and virtual laboratories. Over the past seven years he has been investigating applications for advanced research networks. Current projects include optical networking, lambda switching and provisioning, policy-based networking and Authorization, Authentication and Accounting architecture research. He participates in the research on the Lambda switching facility ("NetherLight"), which is operating in Amsterdam as a peer to StarLight in Chicago. He collaborates in the OptIPuter project. He implements research projects in the GigaPort Networks area in collaboration with SURFnet. He currently serves as Grid Forum Steering Group (GFSG) member, Area Director for the P2P and semantic area and GGF Liaison towards the IETF. He was co-chair of the IRTF Authentication, Authorization and Accounting Architecture Research group and member of the Internet Research Steering Group (IRSG).

# Yoshio Tanaka

Dr. Yoshio Tanaka is currently the team leader of the Grid Infracore Team at Grid Technology Research Center, AIST. He obtained a Ph.D. in mathematics from Keio University in 1995. His research theme was performance evaluation of parallel systems and development of programming models for cluster of SMPs. He worked at Real World Computing Partnership from 1996 to 1999. In 2000, he joined the Electrotechnical Laboratory in Japan. In 2001, the Electrotechnical Laboratory was re-organized as the National Institute of Advanced Industrial Science and Technology (AIST). His current research interests include Grid programming tools, developments and managements of Grid Testbed, federation of virtual organizations, and performance evaluation of parallel systems. He is in particular leading the Ninf project being developed as a reference implementation of current GridRPC GGF standard draft and the Asia Pacific Grid Partnership. He is the chair of the Asia Pacific Grid Policy Management Authority and is a member of the steering committee of Japan Grid Consortium.

*"Grid is a hardware and software infrastructure that clusters and integrates high-end computers, networks, databases and scientific instruments from multiple sources to form a virtual supercomputer on which users can work collaboratively. Grid enables resource sharing between sites those dynamically create a virtual organization and cross-site authentication and access control are essential to implement Grid environments. This talk reports on experiences and future directions on cross-site authentication and access control in Grids in Japan and Asia Pacific. ApGrid is a partnership for Grid computing in the Asia Pacific region. One of the most important objectives of ApGrid is building an international Grid testbed called the ApGrid Testbed.*

*ApGrid is not a single-source funded project and the ApGrid Testbed is based on contributions, i.e. participating organizations each provide computing resources to the ApGrid Testbed. This talk reports an overview of the technical aspects, operational policy, and development guidelines for the ApGrid Testbed as well as lessons learned from the testbed development. We faced some difficulties in constructing the ApGrid Testbed. The difficulties came from sociological problems rather than technical problems. The talk also includes recent activities on Asia Pacific Grid Policy Management Authority that coordinates a public key infrastructure in Asia Pacific for use with Grid authentication and brief introduction of Japanese major Grid projects and activities in AIST."*

## Dave Kelsey

Dr. David Kelsey has a PhD in experimental particle physics and spent his research years working on various experiments at CERN (Geneva, Switzerland) and at the Stanford Linear Accelerator Center (California, USA). Since 1987 he has been working in computing for physics at the Rutherford Appleton Laboratory in the UK where he is now head of particle physics computing. For the last 4 years, he has been coordinating Grid security activities for the EU DataGrid project, the CERN LHC Computing Grid (LCG) and GridPP in the UK. He currently chairs the Joint Security Policy Group of the EU project EGEE and LCG.

## David Groep

Dr. David Groep is senior technical researcher at NIKHEF in Amsterdam. He obtained a PhD in physics from the University of Utrecht, and worked on software frameworks for electron-scattering experiments. He has since worked on grid-computing in the context of various Dutch and international projects. He is the chair of the EUGrid-PMA for authentication, and the architect of authorisation services for the EGEE project. He established the authentication infrastructure for Grid computing in the Netherlands and established the technical DutchGrid Platform. He was also a founding member of the European Grid-CA coordination group and the DataGrid security team. He is active in various GGF security groups on trust management and site authorisation. He also leads the scaling and roll-out programme of the Dutch Virtual Laboratory for e-Science project.



## Torsten Antoni

Dr. Torsten Antoni (Karlsruhe, 1971) studied physics specializing in astroparticle physics at Karlsruhe University. He graduated with a diploma thesis on experimental cosmic ray physics. Subsequently, he did his PhD with a thesis on muons in cosmic ray air showers at the University Heidelberg, Germany, earning his degree in 2003. Since 2004 he is working at Forschungszentrum Karlsruhe, Germany in the field of user support in the grid environment in the framework of the LCG and EGEE projects.

## Kimmo Koski

Dr. Kimmo Koski is Managing Director of CSC. Kimmo Koski was employed by CSC for the first time on July 1, 1989. He had completed his Master's degree in Engineering and was hired as a System Manager. Later on Koski and his group was responsible of CSC's technical computing environment for several years. He continued his studies alongside his job and defended his doctoral thesis 1996. The title of his dissertation was Development of Metacomputing Technology. The period 1996 - 97 passed at CERN, the European Organization for Nuclear research, attending to development of telecommunication, after which Dr Koski returned to CSC to lead a group responsible for computing and data systems. He continued at CSC until 2000 and then took a position to manage the global IT services at Nokia Research Center. He spent a total of 4.5 years at Nokia, attending also to strategic planning of Nokia Technology Platform Engineering Environment.

## Jules Wolfrat

Dr. Jules Wolfrat has a PhD in Physics from the University of Amsterdam. For the past 20 years he has been working for SARA Computing and Networking Services in the Netherlands where he has been active in different roles in the management of compute facilities for scientific and technical applications.

He has led several projects for the introduction of new compute facilities at SARA. He also participated in software development projects and he has experience in high performance networking in supercomputer environments. In recent years he was involved in the European DataGrid project and currently he is devoting most of his time to grid activities in which SARA participates. For the EGEE project he is responsible for operations and support in the NE (Northern Europe) federation and he is leader of the security activity of the European DEISA project.

## Bob Cowles

Bob Cowles has over 35 years of experience with computers and networking technologies. For over 20 years he has given lectures covering topics ranging from mainframes to personal computers, from databases to distributed and grid computing, and from web architecture to internet security and cryptography. He is heavily involved in grid computing and the problem of providing adequate security for scientists using multi-site, multi-national grids. For the last seven years he has worked in the USA as the Computer Security Officer at the Stanford Linear Accelerator Center, experiencing the challenge of maintaining a secure but open computing environment that maximizes scientific creativity.

## Diego Lopez

Dr. Diego R. Lopez is the responsible for Middleware and Applications of RedIRIS (the Department of RED.ES in charge of the management of the Spanish NREN). Dr. López earned his BSc in Physics at the University of Granada in 1985 and his PhD in Physics at the University of Seville in 2001. He is the chairman of the TF-EMC2 group of TERENA and one of the main architects of TACAR, the Academic CA repository used by the EUGridPMA. Dr Lopez is also one of the European representatives at the MACE (Middleware Architecture Committee for Education) of Internet2.

## Jeff Templon

Dr. Jeff Templon is the leader of the Physics Data Processing project at NIKHEF (The Dutch National Institute for Nuclear and High-Energy Physics) in Amsterdam. He received his PhD in experimental nuclear physics in 1993 from Indiana University, and after postdoctoral stints at NIKHEF and MIT, was assistant professor of physics at the University of Georgia (Athens USA) for several years. Jeff was almost always involved in computing for the various experiments in which he participated; he made it official in 2001 when coming to NIKHEF to work on Grids. He participates in many different Grid communities, among them serving as official high-energy physics representatives to the EDG and EGEE architecture teams, helping part-time as one of the NIKHEF grid operations team members, and continually testing new grid software releases.

## Mary Spada

As part of the Mathematics and Computer Science Division of Argonne National Laboratory, Mary Spada performs the role of Program Manager, Strategic Initiatives under a Guest Appointment. Her responsibilities include managing and facilitating outreach, corporate partner development and other strategic planning activities for diverse project efforts such as those in the bulleted list above. Argonne National Laboratory is managed by the University of Chicago, where Ms. Spada is also involved in similar activities working with the Computation Institute.

Noteworthy projects she has contributed to in this role include: I-WAY, Globus-World, TeraGrid and Global Grid Forum (GGF). Prior to her current role at Argonne, Ms. Spada was a Partner with Mercer Management Consulting, the strategic management consulting practice of Marsh & McLennan. Earlier in her career, Ms. Spada spent over five years as President and CEO of Global Growth Strategies, Inc., a strategic planning and consulting firm advising global Fortune 500 organizations in the creation of business cases for emerging technology investment.

## Anders Ynnerman

Dr. Anders Ynnerman received his PhD in 1992 from the University of Gothenburg. His work in Gothenburg involved large scale numerical calculations of problems in Atomic Many Body theory using the Coupled Cluster approach. He was at the Clarendon Lab. in Oxford during 1992-1993 on a Postdoctoral Fellowship. Thereafter he accepted a Research Fellowship in the Computer Science Dept. at Vanderbilt, USA, 1993-1995, where he continued to work on the development and application of large scale massively parallel codes to many body systems. After his return to Sweden in 1995 Ynnerman has been involved in the build-up of an infrastructure for High Performance Computing in Sweden. He holds the position of Scientific Director at NSC, since 1998 and was director of the Swedish National Graduate School in Scientific Computing between 1996 and 2001. He was appointed professor of scientific visualisation 1999 at Linkopings universitet in Sweden and is also the director of the Norkoping Visualisation and Interaction Studio (NVIS).

# e-Infrastructures Working Group meeting

FRIDAY 19 NOVEMBER 2004 - 9:00-17:00

Littéraire Sociëteit De Witte

*Plein 24, The Hague, The Netherlands*

The e-Infrastructure Reflection Group (e-IRG) Meeting coordinates on a high European level the introduction of a (grid based) infrastructure for e-Science. e-IRG also coordinates activities with international initiatives outside of Europe.

## MISSION OF THE E-IRG

The main objective of the e-IRG is to support on the political, advisory and monitoring level, the creation of a policy and administrative framework for the easy and cost-effective shared use of electronic resources in Europe (focusing on Grid-computing, data storage, and networking resources) across technological, administrative and national domains.

## STRUCTURE

The e-IRG consists of official delegations from the ministries of Education of the various European countries (including Accession and Associated states) plus EU officials. e-IRG has a rotating Presidency with the scheme of a troika of past, current and future EU presidencies. e-IRG is supported by a Technical Support Group, via resources from EU flagship projects such as EGEE, DEISA and GN2. Every meeting a white paper is produced.

## CURRENT TROIKA:

Dr. PATRICK AERTS (Netherlands) - chair  
Prof. BRIAN COUGHLIN (Ireland)  
THÉO DUHAUTPAS (Luxemburg)

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## OBJECTIVES

- ★ To identify the fundamental fabric, services and resources needed to enable pan-European e-Science
- ★ Recommend resource sharing policy guidelines to:
  - ★ *National Grid initiatives*
  - ★ *Regional & European – wide e-Infrastructure projects*
  - ★ *Contribute to International policy fora*
  - ★ *Give input to other policy drafting bodies e.g. ESFRI, NREN PC etc.*
- ★ Focus first on eScience application user groups (as enablers of novel architectures) but also address wider application domains (e.g. e-Learning, e-Government, e-Health, e-Culture, e-Business, etc.) within the ERIA (European Research and Innovation Area)
- ★ Identify, inform and promote GRID awareness among communities who can benefit from sharing resources
- ★ Address Governance issues of Grid deployment
- ★ Draw upon the experience of the NREN community (Structure, Operations, AUPs)

# Grid Summit

MONDAY 22 NOVEMBER 2004, 9:00 - 18:00  
Nederlands Congres Centrum, Willink hall  
*Churchillplein 10, The Hague, The Netherlands*

09:00 - 09:15	Welcome PATRICK AERTS, FABRIZIO GAGLIARDI
09:15 - 09:45	MARK LINESCH Chair of Global Grid Forum (GGF)
09:45 - 10:15	"Future Designing Machine" Professor TETSUYA SATO
10:15 - 10:45	"The On Demand World: Toward an Information-based Society" Dr. IRVING WLADAWSKY-BERGER, Vicepresident of IBM
10:45 - 11:20	Coffee Break (Statenhall)
11:20 - 11:40	"LOFAR: Adding sensor networks to the GRID" Dr. HARVEY BUTCHER, Director of LOFAR
11:40 - 12:00	"e-Science and VL-e (Virtual Lab for e-Science) approach" Prof. L.O. HERTZBERGER, Director of Virtual Lab e-Science (VL-e)
12:00 - 12:20	ULF DAHLSTEN European Union
12:20 - 12:40	MARIA VAN DER HOEVEN Minister of Education, Culture and Science (The Netherlands)
12:40 - 14:00	Lunch (Statenhall)
AFTERNOON: DAY I OF FIRST EU CONCERTATION MEETING ON E-INFRASTRUCTURES	
14:00 - 14:20	Introduction to the Event: "Goals and Challenges"
14:20 - 15:00	Presentations on Projects Providing eInfrastructures EGEE, GN2, DEISA and SEE-GRID
15:00 - 15:30	Panel discussion
15:30 - 16:00	Coffee Break (Statenhall)
16:00 - 16:50	Presentations on Projects Benefitting from the e-Infrastructures DILIGENT, COREGRID, SIMDAT and GRIDCC
16:50 - 17:10	Panel discussion
17:10 - 17:25	"IST Grid Research - status and vision"
17:25 - 17:40	Presentations Grid Research Concertation Efforts GRIDSTART, NEXTGRID and AKOGRIMO
17:40 - 18:00	Panel discussion
18:30 - 19:30	Opening Reception (Gemeentemuseum, see page 44)

# Mark Linesch

Mark Linesch was elected the second chair of the Global Grid Forum (GGF) earlier in 2004, following in the footsteps of Charlie Cattlett (Argonne) who had been chair since the inception of GGF five years before. Originally from Ohio, Linesch graduated with highest honors from the University of Cincinnati and is a recipient of the University of Cincinnati Scholarship Award for academic excellence. Before his election as chair of GGF he was responsible for leading the HP Adaptive Enterprise strategy for Hewlett-Packard. Prior to that, Mark was the Vice President of Internet and eCommerce Solutions for Compaq Computer Corporation. With over 20 years in the industry, Mark has held positions in strategic planning, business development and product/solutions marketing, solutions and software engineering.

*"Grid computing, based on open, industry standards is providing the distributed computing platform for research collaboration, and new scientific discovery throughout the world today. The work of the grid community is also enabling exciting new business opportunities for grid related products and services."*

*"Grid is a hardware and software infrastructure that clusters and integrates high-end computers, networks, databases and scientific instruments from multiple sources to form a virtual supercomputer on which users can work collaboratively. Grid enables resource sharing between sites those dynamically create a virtual organization and cross-site authentication and access control are essential to implement Grid environments. This talk reports on experiences and future directions on cross-site authentication and access control in Grids in Japan and Asia Pacific. ApGrid is a partnership for Grid computing in the Asia Pacific region. One of the most important objectives of ApGrid is building an international Grid testbed called the ApGrid Testbed. ApGrid is not a single-source funded project and the ApGrid Testbed is based on contributions, i.e. participating organizations each provide computing resources to the ApGrid Testbed. This talk reports an overview of the technical aspects, operational policy, and development guidelines for the ApGrid Testbed as well as lessons learned from the testbed development. We faced some difficulties in constructing the ApGrid Testbed. The difficulties came from sociological problems rather than technical problems. The talk also includes recent activities on Asia Pacific Grid Policy Management Authority that coordinates a public key infrastructure in Asia Pacific for use with Grid authentication and brief introduction of Japanese major Grid projects and activities in AIST."*

Prof. Tetsuya Sato (1944) holds a PhD in Engineering. He is Director-General of the Earth Simulator. He is an Emeritus of Theory and Computer Simulation Center, National Institute for Fusion Science. Before that he held positions at the Institute for Fusion Theory and the Department of Physics (both Kyoto University). Additionally, during this period, he has held visiting positions at NOAA, Max Planck Institute, Princeton University and Bell Laboratories. He was the winner of the 1975 Tanakadate Memorial Awards from the Society of Geomagnetism and Earth, Planetary and Space Sciences. In 1986 his work studies on Nonlinear Dynamics of Dissipative Magnetohydrodynamic was awarded by the Nishina Memorial Foundation.



## Irving Wladawsky-Berger

Dr. Irving Wladawsky-Berger is vice-president Technology and Strategy for IBM. In that capacity, he leads IBM's companywide e-business on demand initiative. In conjunction with this, Dr. Wladawsky-Berger leads IBM's participation in the movement toward open standards and open source software like Linux; and guides the company's Next Generation Internet efforts. He began his IBM career in 1970 at the Thomas J. Watson Research Center where he started technology transfer programs. In 1985 he joined IBM's product development organisation, leading IBM's initiatives in supercomputing and parallel computing including the transformation of IBM's large commercial systems to parallel architectures. He has managed a number of IBM's businesses, including the large systems software and the UNIX systems divisions. Dr. Wladawsky-Berger is a member of the University of Chicago Board of Governors for Argonne National Laboratories and the Technology Advisory Council for BP International. He was co-chair of the President's Information Technology Advisory Committee, as well as a founding member of the Computer Sciences and Telecommunications Board of the National Research Council. He is a Fellow of the American Academy of Arts and Sciences. Dr. Wladawsky-Berger holds an M.S. and a Ph. D. in physics from the University of Chicago.

# Harvey Butcher

*"The LOFAR project aims to place a wide-area network of sensors across the northern Netherlands and to couple these sensors directly to an IBM BlueGene/L research computer adapted for streaming data processing.*

*Applications will range from imaging the radio sky to precision agriculture. Users will access the facility remotely from around the world."*

## **LOFAR: Adding sensor networks to the GRID**

Dr. Harvey Butcher is Executive Director of ASTRON. He studied at the California Institute of Technology, receiving a B.Sc. in Astrophysics (Honors) in 1969. In addition to his studies he worked on the first survey of the sky at infrared wavelengths (the Two Micron Sky Survey project). From 1970 to 1974 he held the position of research scholar at the Mt Stromlo and Siding Spring Observatory, receiving his PhD from the Australian National University in 1974. His dissertation research involved the construction of one of the first operational high resolution echelle spectrographs in astronomy. As Bart Bok Fellow at the Steward Observatory of the University of Arizona from 1974 to 1976 he worked on the development of a Cassegrain echelle spectrograph for the 90-inch telescope on Kitt Peak. From 1975 he worked with early CCD detectors, and during his tenure from 1976 to 1983 as Astronomer at the Kitt Peak National Observatory, Tucson, he worked to develop general purpose CCD systems for use both at Kitt Peak and at Cerro Tololo Inter-American Observatory in Chile. In 1983 he became Professor of Observational Astronomy at the University of Groningen and Director of the Kapteyn Observatory, Roden. In 1991 he became Executive Director of ASTRON. He is currently working on the Lofar and Square Kilometer radio telescope (SKA).

# Bob Hertzberger

Prof. Louis Otto (Bob) Hertzberger is general director of the Virtual Lab for e-Science and a professor of Computer Science at the University of Amsterdam. He received his masters degree in experimental physics in 1969 and finished his Ph.D. in 1975 at the University of Amsterdam. From 1969 till 1983 he worked as a staff member in the High Energy Physics group, later the NIKHEF-H (Dutch Institute for Nuclear and High Energy Physics). In 1983 he became professor in Computer Science at his alma mater. His current research interests are in the field of parallel computing, intelligent autonomous robotics and their application in industrial automation.

*The Virtual Lab for e-Science was started in 2004. The VL-E project was granted a budget of 41.3 Million Euro from a special government fund, BSIK, and is meant to develop the necessary knowledge for the e-Science infrastructure in the Netherlands.*

## Ulf Dahlsten

Ulf Dahlsten (Sweden, 1946) is Director of 'Emerging Technologies and Infrastructures Applications' at the Directorate-General Information Society of the European Commission. Prior to joining the Commission, Ulf Dahlsten was Director of SECCOM AG and President and CEO of Icon Medialab International, an internet consultancy offering solutions in ecommerce, ebusiness and internet banking among others. Previously, from 1988 to 1999, Ulf Dahlsten worked with the Swedish Postal Services, first as Director-General and then as President and CEO of Posten AB. From 1982 to 1988, Mr. Dahlsten occupied various posts with the Swedish government, including State Secretary for Energy and then for Communications as well as State Secretary and Chief of Cabinet of the Prime Minister's Office. Ulf Dahlsten started his career as a teacher in Mathematics at the Royal Institute of Technology. He holds a Civil Engineer's degree from the Royal Institute of Technology and a Bachelor of Science in Economics from the Stockholm School of Economics.

## Maria van der Hoeven

Maria van der Hoeven is Minister of Education, Culture and Science of The Netherlands since 2002. Maria Josephina Arnoldina van der Hoeven was born in Meerssen on 13 September 1949. From 1969 she worked as a teacher and later became a school counsellor. Until 1987 she was head of the Adult Commercial Vocational Training Centre in Maastricht, after which she served as the head of the Limburg Technology Centre until 1991. From 1991 to 2002 Ms Van der Hoeven was a member of the House of Representatives of the States General for the Christian Democratic Appeal (CDA). She has held a variety of social and cultural posts, including membership of the governing board of the the Maastricht College of Higher Professional Education and of the Southern Dutch Opera Association, and chairmanship of the St Nicholas Catholic Association of Bargees.

# First EU Concertation Event on e-Infrastructures

MONDAY 22 - TUESDAY 23 NOVEMBER 2004

Nederlands Congres Centrum  
*Churchillplein 10, The Hague, The Netherlands*

## **Day I (22 november 2004)**

**14:00 - 18:00, Willink hall**

- |               |  |
|---------------|--|
| 14:00 - 14:20 | Introduction to the Event:<br>KYRIAKOS BAXEVANIDIS<br>"Goals and Challenges"   |
| 14:20 - 15:00 | Presentations on Projects Providing e-Infrastructures<br>FABRIZIO GAGLIARDI (EGEE)<br>VASSILIS MAGLARIS (GÉANT2)<br>VICTOR ALESSANDRINI (DEISA)<br>NIKOS VOGIATIS (SEE-GRID)         |
| 15:00 - 15:30 | Panel discussion   |
| 15:30 - 16:00 | Coffee Break (Statenhall)  |
| 16:00 - 16:50 | Presentations on Projects Benefitting from the eInfrastructures<br>DONATELLA CASTELLI (DILIGENT)<br>MARTIN HOFMANN (SIMDAT)<br>ROBERTO PUGLIESE (GRIDCC)<br>THIERRY PRIOL (COREGRID) |
| 16:50 - 17:10 | Panel discussion   |
| 17:10 - 17:25 | MAX LEMKE<br>"IST Grid Research - status and vision"   |
| 17:25 - 17:40 | Presentations Grid Research Concertation Efforts<br>MARK PARSONS (GRIDSTART)<br>MARK SAWYER (NEXTGRID)<br>FEDERICO ROSSI (AKOGRIMO)  |
| 17:40 - 18:00 | Panel discussion   |

## **Day II (23 november 2004)**

**9:00 - 12:30, Willink hall**

- |               |  |
|---------------|--|
| 09:00 - 11:30 | Technical Sessions                             |
| 11:30 - 12:30 | Panel Discussion/Road Map<br><i>What Next?</i> |

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Please note that there is a welcoming reception on Monday and a dinner on Tuesday where you can participate. More details on page 44.

## Kyriakos Baxevanidis

Kyriakos Baxevanidis works as scientific officer of the European Commission for the Directorate-General Information Society Technologies. His co-ordinates the Grid related efforts of the Research Infrastructures EU-RTD Programme including the monitoring of big European Grid initiatives like DataGrid (EDG) and EGEE. One of his most recent involvements is in the shaping, implementation and further evolution of the EU eInfrastructure concept. He previously served in the areas of Services Engineering, Communications Management and Security of IST and of previous EU-RTD programmes. Before joining the Commission, he worked for several years in Siemens in the field of telecommunication systems as an engineer and leader of a development group. He holds degrees from the Aristotle University of Greece and from Carnegie--Mellon University, US.

## Fabrizio Gagliardi

Dr. Fabrizio Gagliardi is Project Director of EGEE (Enabling Grids for E-science), a Research Infrastructure project with over 70 partners distributed throughout 27 countries globally, which started in April 2004. He graduated with a Doctor degree in Computer Science at the University of Pisa in 1974. He joined CERN in 1975 and has held several technical and managerial positions in computing applied to particle physics experiments. He currently holds the title of senior scientist at CERN. From 2001 to 2003, he was the Leader of the EU DataGrid project with 21 international scientific institutes and founding industry. He is a founding member of the International Advisory Committee of the Global Grid Forum.

## Vasilis Maglaris

## Victor Alessandrini

Dr. Vasilis Maglaris is Chairman of the National Research & Education Networks Policy Committee (NREN), and Professor at the National Technical University of Athens (NTUA). The NREN PC harmonizes policies amongst the 30 NRENs in the extended European Research Area and is responsible for planning and managing the Pan-European advanced network platform GEANT. Maglaris received the Diploma in Mechanical & Electrical Engineering in 1974, the M.Sc. in Electrical Engineering from the Polytechnic Institute of Brooklyn in 1975 and his Ph.D. degree in Electrical Engineering & Computer Science from Columbia University, New York in 1979. From 1979 to 1981 he was a research engineer at the Network Analysis Corp., New York, a leading firm in designing the ARPANET (the predecessor of Internet). Apart from teaching and performing research on Computer Networks, he was responsible for developing the NTUA Campus LAN and for the establishment of GRNET (the Greek NREN). He served as GRNET's Chairman from its inception in 1995 until June 2004. Since 1994 he has served on the board of the Greek National Regulatory Authority on Communications and Posts. He authored more than 100 research papers and regularly delivers lectures on the advances in Internet Technologies.

Dr. Victor Alessandrini is director of IDRIS since 1993, Research Director at CNRS since 2002, director of the DEISA project and Chairman of the DEISA Executive Committee. He obtained a PhD in Theoretical Physics, University of Buenos Aires, in 1965. He was visiting Scientist at Lawrence Radiation Laboratory, Berkeley, USA and CERN Theory Division in the late 60's and early 70's. Later, from 1972 to 1976, he was an Associate Member at the International Centre for Theoretical Physics, Trieste, Italy. He was also Professor of Theoretical Physics at the University of Paris XI (Orsay) from 1976 until 2002.

## Nikos Vogiatzis

Dr. Nikos Vogiatzis holds a Dipl.-Ing. in Electrical and Computer Engineering and a Ph.D. in Communication Electronics and Information Systems (both from NTUA, Athens, GR), and a Masters Certification in Program/Project Management (Stevens Institute of Technology, NJ, USA). Since November 2003 he is with the Greek Research and Technology Network (GRNET, Athens, GR) in the function of European & Regional Networking Applications Manager, where he is deeply involved in the coordination and execution of the 6FP project SEE-GRID. Previous professional experience includes a Senior R&D Coordinator position in Lucent Technologies Bell Laboratories (Hilversum, The Netherlands, 1998-2003), a Senior Technical Consultant position in OTE-Consulting (Athens, GR, 2003), and a Researcher/Scientist position in NTUA's telecommunication lab (Athens, GR, 1996-1998). He has been a member of the Fixed Wireless Access issue group of European Communication and Technology Industries Association (EICTA) Radio and Spectrum Policy Committee (RSPC), has numerous publications in international journals and conferences, and has acted several times as an invited reviewer for technical publications in several scientific conferences and magazines.

## Donatella Castelli

Dr. Donatella Castelli is Scientific Coordinator of DILIGENT. She is a member of the research staff of the "Istituto di Scienza e Tecnologie della Informazione" "A. Faedo" (ISTI) of the Italian National Research Council (CNR) since 1987. Here she has worked on formal aspects of database modelling and database design. From 1998 she is a member of the Multimedia Networked Information System Laboratory. Since then she has participated actively in several EU projects on Digital Libraries. She has co-designed the ERCIM Technical Reference Digital Library (ETRDL) and now she is leading the development of the OpenDLib (<http://www.opendlib.or.>) digital library service system. Her current research interests include Metadata Models and Digital Libraries.



## Martin Hofmann

Dr. Martin Hofmann is Head of the Department of Bioinformatics at Fraunhofer Institute for Algorithms and Scientific Computing (SCAI) that coordinates the IST Integrated Project SIMDAT. He studied Biology and holds a PhD in Genetics from the University of Tuebingen. During his career he worked in academic as well as in industrial research groups and got involved in different functional genomics projects. Driven by the need to analyse large amounts of e.g. gene expression data he migrated more and more from experimental laboratory work into applied bioinformatics. Research in his department is focusing on semantic text analysis and information extraction, applied chemoinformatics and GRID computing. The Department of Bioinformatics at Fraunhofer Institute SCAI is involved in teaching at the Bonn-Aachen International Centre for Information Technology (B-IT); currently, the group comprises 9 researchers and 10 students.

## Roberto Pugliese

Dr. Roberto Pugliese (Gorizia, 1964) is coordinator of the Human Computer Interaction work-package of GRIDCC. He received the Laurea degree in Information Technology on 1990 at the University of Udine with the grade 110/110 and laude. Since 1994 he is a technologist at Sincrotrone Trieste, responsible for Unix Systems and High Level Software. He worked on many strategic projects for the company (i.e. Elettra Virtual Users Office, Elettra Virtual Collaboratory) in various technical and management functions. Since Oct. 2002 he is professor of E-Commerce at the University of Udine. His research interests include: Uncertain reasoning in Knowledge Based Systems, Image processing e Machine vision, Multisensorial integration and fusion, Intelligent Control System, Machine Learning, Web Based Virtual Collaboratories. He is a member of the International Scientific Advisory Committee of International Conference NOBUGS since 1998. Since October 2003 Roberto Pugliese is a member of the International Committee for Future Accelerators (ICFA) in the working group of Remote Experiments in Accelerator Physics.

## Thierry Priol

Dr. Thierry Priol is scientific coordinator of CoreGRID, the only Network of Excellence in the area of Grid and P2P. Dr. Priol is senior scientist (Directeur de Recherche) at INRIA and is the head of the PARIS research group, a joint group with INRIA, the CNRS, ENS-Cachan, the University of Rennes 1 and INSA Rennes. Dr. Priol holds a PhD degree in computer science from the University of Rennes I and a "Habilitation à diriger des recherches" from the same university. Since 1989, he has held a researcher position at INRIA and in 1995, he was promoted to a senior position in the same institute. His research fields are Parallel Rendering, High Performance Computing and Grid Computing. Since January 2004, he is the Director of the the French National Programme in Grid Computing (ACI GRID). Concerning Grid Computing, his contribution concerns advanced programming models based on software component models. He published more than 60 scientific papers in these areas. He was one of the founding members of the EGRID initiative (a forum of European researchers involved in Grid Computing) and was later merged into the Global Grid Forum (GGF). He was also co-chair of the Advanced Programming Model working group.

## Max Lemke

Dr. Max Lemke is Deputy Head of Unit of the Unit "Grid Technologies" in the Information Society Directorate-General of the European Commission. Since 1995, he has worked as scientific officer for the Commission responsible for research and technology transfer initiatives. He has been active in the domains "High Performance Computing and Networking", "Communication, Computation, Networking" as well as "Trust and Security". Before joining the Commission, Max Lemke has worked in research and industry in Germany, the US, the UK, and Belgium. With a Doctorate in Natural Sciences from the University of Düsseldorf and a Diploma in Mathematics from the University of Bonn, Max Lemke has a scientific background in numerical mathematics, parallel computing, and software engineering.

## Mark Parsons

Dr Mark Parsons is the Project Leader of the GRIDSTART Accompany Measure Project and Project Chairman of the NextGRID Project. Dr Mark Parsons has a PhD in Particle Physics from the University of Edinburgh for work undertaken on the Large Electron Positron (LEP) accelerator at CERN in Geneva. He joined EPCC (formerly known as Edinburgh Parallel Computing Centre) in 1994 as a software developer working on several industrial contracts before becoming the Centre's Commercial Manager in 1997 and latterly the Commercial Director. He has been closely associated with Grid developments in Europe and now combines the function of Commercial Director of EPCC with the role of Commercial Director of the National e-Science Centre (NeSC) at The University of Edinburgh. Within NeSC dr. Parsons is responsible for the industrial strategy, project generation, and advice to the Regional Centres on technology transfer.

## Mark Sawyer

Mark Sawyer is the Technical Manager of the NextGRID Project. NextGRID seeks architectural solutions that streamline all aspects of Grid operation: installation and maintenance of the infrastructure, development and deployment of Grid applications, user orchestration of the resulting resources, and operation of business models and processes through which the use of Grid technology can be made economically viable. Mark Parsons graduated from Oxford University in 1985 with an honours degree in Engineering Science. Mark then worked at the BritishTelecom Research Laboratories in Martlesham Heath, Ipswich. He returned to study an MSc in Computer Systems Engineering at The University of Edinburgh, and joined EPCC in 1991. Mark Parsons has extensive experience in the management of European RTD Projects in a diverse range of IT sectors. He couples his NextGRID management role with business development for EPCC.

## Federico Rossi

Federico Rossi will present AKOGRIMO (Access to Knowledge through the Grid in a mobile World). He is Sales and Business Development Director in the area of Environment, Meteorology and Grid for DATAMAT S.p.A.. He has extensive experience in EC R&D Projects in the areas of environment, natural risks, emergency management, grid infrastructure and application. For several years he worked with the European Space Agency in advanced information systems for Spacecraft Operations (Space Station) and Engineering (Attitude and Orbit Control, Engineering Data bases), Earth Observation (Multi mission systems, grid applicability). For his company he has been involved with turnkey systems for Italian Civil Protection (Weather radars network) and Italian Air Force (Weather Forecast Centre). Mr. Rossi holds a university degree in physics.

EGEE 02 Conference  
TUESDAY 22 – FRIDAY 26 NOVEMBER 2004  
Netherlands Congres Centrum, The Hague  
*Churchillplein 10, The Hague, The Netherlands*



The EGEE project is integrating current national, regional and thematic Grid efforts to provide a seamless Grid infrastructure for the support of the European Research Area and the wider international scientific community. This infrastructure builds on the EU research network GÉANT and exploits Grid expertise that has its roots in projects such as the EU DataGrid project, other EU supported Grid projects and national Grid initiatives such as the UK e-Science, INFN Grid, NorduGrid and the US Trillium (cluster of projects). The EGEE acronym, which originally stood for Enabling Grids for E-Science in Europe, now simply stands for Enabling Grids for E-Science, in recognition of the truly inter-continental reach of this exciting project.

The vision of EGEE is for this Grid infrastructure to provide international researchers in academia and industry with a common pool of computing resources, independent of geographic location, enabling round-the-clock access to major computing resources. The EGEE infrastructure will support distributed research communities, which share common Grid computing needs and are prepared to integrate their own distributed computing infrastructures and to agree on common access policies. The resulting infrastructure will surpass the capabilities of local clusters and individual supercomputing centres in many respects, providing a unique tool for collaborative compute-intensive science ("e-Science").

New Grid applications also bring new requirements for the Grid infrastructure. Arguably the most challenging new requirement is security, which EGEE is actively engaged in fulfilling.

This challenging project was originally proposed by experts in Grid technologies representing the leading Grid activities in world. The project now includes more than 70 project partners organised in twelve partner regions or "federations". Furthermore, with the deployment of the EGEE project structure, several of these partners have begun integrating regional Grid efforts in order to provide coordinated resources to the EGEE project.

The EGEE Grid production service is growing every day and currently combines nearly 10,000 CPUs at more than 80 sites. This unequalled service has already provided more than 3,700 years of compute time corresponding to a single PC since the start of the project in April 2004.

**Visit these websites for  
more information:**

*<http://public.eu-egee.org>*

*<http://www.eu-egee.org> (not public)*

# DILIGENT working meeting

WEDNESDAY 24 NOVEMBER 2004

Netherlands Congres Centrum, Staten hall 1

*Churchillplein 10, The Hague, The Netherlands*



## Diligent

A **D**igital **L**ibrary  
Infrastructure on **G**rid  
**E**Nabled **T**echnology

Research work today is often a collaborative effort carried out by groups of individuals belonging to different organizations remotely spread worldwide. Motivated by a common goal and funding opportunities, these groups dynamically aggregate into virtual research organizations that share their resources e.g. knowledge, experimentation results, instruments, etc., for the duration of their collaboration, creating a rich and powerful research environment.

exploiting this infrastructure a virtual research group will be able to dynamically create a DL that satisfies its needs by specifying a number of requirements on the information space and on the services. A reliable and secure DL that satisfies the given requirements will be transparently instantiated and made accessible to authorized users through a portal. Many DLs, serving different virtual research groups, will be active on the same resources at the same time.

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The DILIGENT project aims at supporting this new research operational by providing a knowledge infrastructure that manages a network of shared resources, e.g. archives, database, software tools and enables the creation of on-demand Digital Libraries (DLs). By

From the technical point of view, the DILIGENT infrastructure will be composed by a set of interacting services that will provide: i) a number of typical DL functions, like search, annotation, personalization, document visualization; ii) the access to

information sources and applications provided by third-parties; iii) the necessary features for handling the shared content and application resources; and iv) the support for the creation and operation of the on-demand, transient digital libraries. These services will exploit the high computational and storage capabilities of the Grid infrastructure released by the EGEE project in order to support complex and time consuming functionalities.

The DILIGENT infrastructure will be demonstrated and validated by two complementary real-life application scenarios: one from the environmental e-Science domain and the other one from the culture heritage domain. The DILIGENT consortium expects that the developed infrastructure will be adopted and extended by several other communities in order to serve different application areas. Some of these communities have already been registered as project observers. Regular training sessions and workshops will be conducted to disseminate the experience and results of the DILIGENT project to both scientists and potential other users.

#### MORE INFORMATION

Information on how to become a DILIGENT observer and about the DILIGENT activities and events can be found on the project website:

*<http://www.diligentproject.org>*



# SEE-GRID Policy Workshop

## "A roadmap for establishing National Grid Initiatives"

WEDNESDAY 24 NOVEMBER 2004, 09:00-13:00 HOURS

Nederlands Congres Centrum, Statenhof 2

*Churchillplein 10, The Hague, The Netherlands*



**SEE-GRID**

South Eastern European GRid-enabled  
Infrastructure Development

This open workshop (accessible to all) will address issues related to establishing National Grid Initiatives (NGIs) in "greenfield" regions through presentations/lectures and round-table Q&A sessions that will be given by experts with accumulated experience in advancing NGIs and shaping relevant policies. The event is organized under the supervision of the SEE-GRID project, with the support and endorsement of the European Commission Information Society Directorate-General Research Infrastructures, and FP6 project EGEE.

As a member of the international eInfrastructures community, you should not miss this unique event and benefit from the wealth of experience of international Grid leaders! By attending the SEE-GRID Policy Workshop you will have the opportunity to listen and exchange ideas with world-class eInfrastructure-experts about setting-up, developing, and sustaining National Grid Initiatives!

The Policy Workshop will be a highly informative session to help provide input for formulating a roadmap for establishing NGIs in any greenfield region around the world, including the one of SE Europe which is of direct interest to the SEE-GRID project. Specifically, the desired outcome of the Policy Workshop should be:

- ★ to provide key members of NGIs with in-depth information about the structural and organizational strategies needed to build, sustain, maintain and develop a National Grid Initiative
- ★ to provide input to the agenda of national governments and funding bodies for the support of eScience
- ★ to raise awareness about the role of NGIs and their contribution to the research and education community, as well as to the national economy
- ★ to exchange success stories for the impact of NGIs to the progress of regional and/or global economies.

# SEE-GRID workshop speakers:

*(in alphabetical order):*

- ★ KYRIAKOS BAXEVANIDIS  
European Commission, Information Society DG, Research Infrastructures
- ★ ALEXANDAR BELIC  
Deputy Minister, Ministry of Science, Technology and Development of Serbia
- ★ MICHEL BENARD  
Hewlett-Packard EMEA Director for Technology Programs and University Relations
- ★ FABRIZIO GAGLIARDI  
EGEE Project Director
- ★ NEIL GEDDES  
Director of the Operations Support Centre, UK National Grid Service
- ★ HANS HOFFMANN  
CERN Director for Technology Transfer and Scientific Computing
- ★ SPYROS KONIDARIS (CHAIR)  
Adviser European Commission, Information Society DG
- ★ VASILIS MAGLARIS  
NREN PC Chairman
- ★ MIRCO MAZZUCATO  
INFN Director of Research, INFN Grid Project
- ★ ANDERS YNNERMAN  
Director, Swedish National Infrastructure for Computing

# SEE-GRID

## SEE-GRID Project Steering Committee (closed meeting)

WEDNESDAY 24 NOVEMBER 2004, 14:00-17:00

Statenhal 2, Nederlands Congres Centrum

*Churchillplein 10, The Hague, The Netherlands*



## SEE-GRID

South Eastern European GRid-enabled  
eInfrastructure Development

The SEE-GRID project (South Eastern European GRid-enabled eInfrastructure Development) is an initiative co-funded and carried out within European Commission's Sixth Framework Programme under Research Infrastructures.

42 The SEE-GRID project aims to provide specific support actions for the participation of SE European states to the pan-European and worldwide Grid initiatives by establishing a seamless and interoperable pilot-Grid infrastructure that will expand and support the European Research Area (ERA) in the region. The interconnection of the regional infrastructure to the pan-European and worldwide Grid initiatives will translate into benefits for the smaller, less-resourced sites in SE Europe to access computing power that would otherwise be unaffordable.

In this perspective, the SEE-GRID initiative will ease the digital divide and release the scientific & productive talents of the region and will allow equal participation of the targeted countries in pan-European Grid efforts in the immediate future. The project involves representatives of the National Grid Initiatives of Albania, Bosnia-Herzegovina, Bulgaria, Croatia, FYR of Macedonia, Greece, Hungary, Romania, Serbia-Montenegro, and Turkey.

More info:

<http://www.see-grid.org>

# DEISA Conference

TUESDAY 23 - WEDNESDAY 24 NOVEMBER 2004

Netherlands Congress Centrum  
*Churchillplein 10, The Hague, The Netherlands*



DEISA is a consortium of leading national supercomputing centres that intends to deploy and operate a persistent, production quality, distributed supercomputing environment with continental scope. The purpose of this FP6 funded research infrastructure is to enable scientific discovery across a broad spectrum of science and technology, by enhancing and reinforcing European capabilities in the area of high performance computing.

Grid technologies are used to strongly integrate national supercomputing platforms, and to provide to scientific users transparent access to a European pool of computing resources. The joint and coordinated operation of this environment is tailored to provide

enhanced computing power and resources to end users, and to enable new, ground breaking research activities in science and technology.

DEISA operates as a virtual European supercomputing centre. Human competences are also pooled, to provide first class, high added value services to computational sciences. A number of research activities are supported, aimed at reinforcing the impact of the infrastructure on leading applications and facilitating the incorporation of new, emerging Grid technologies.

# Welcoming reception & conference dinner

**Welcoming reception**  
**Monday 22 November 2004**  
**From 18.30 until 19.30 hours**

**Brasserie Berlage**  
**Gemeentemuseum**  
**President Kennedylaan 1**  
**The Hague**

## DIRECTIONS FROM NCC

Brasserie Berlage can be easily reached by foot from the conference venue (<5 min). Turn right when you leave the entrance of the NCC. Walk along the Johan de Wittlaan, and again turn right at the first possibility. You will already see the brasserie of the Gemeentemuseum on your right hand.

## DIRECTIONS FROM ELSEWHERE:

### *Public transport*

From Central Station (CS) you can take tram line 17 (stop Statenplein) or bus 4 (stop Gemeentemuseum/Museon). From Station Holland Spoor (HS) take tram line 10 (stop Gemeentemuseum /Museon). From Scheveningen take bus 14 (stop Statenplein).

### *By Road*

Enter The Hague on the Utrechtsebaan (A12). Follow the road until you reach the first traffic light, drive on the left (on your left you will see "Malieveld"). At the next crossing turn right (direction Scheveningen Zeehaven and Madurodam) and follow the "Johan de Wittlaan". On your right you will see BelAir Hotel. Directly after the BelAir Hotel, turn right and enter the parking area. Brasserie Berlage is next to the "Omniversum".

Please bring the invitation along that you got at registration.  
Dress code: *Tenue de ville*.

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**Conference dinner**  
**Tuesday 23 November 2004**  
**From 20.30 until 22.30 hours**

**Netherlands Conference Center**  
**Paulus Potter Hall (souterrain)**  
**Churchillplein 10**  
**2517 JW The Hague**

The conference dinner is included in several conference packages (such as full week package). Tickets are also sold separately.

## Sponsors

*Main sponsor*



*Sponsors*



Hogeschool  
van Utrecht



# Calendar

18 November 2004:

**workshop e-Infrastructures**

*Sociëteit De Witte, The Hague*

19 November 2004:

**e-IRG meeting**

*Sociëteit De Witte, The Hague*

22 November 2004:

**Plenary day 'European Leadership in Grids and e-Science'**

*Sociëteit De Witte, The Hague*

22-23 November 2004:

**First EU Concertation event on Grid Infrastructures**

*Netherlands Conference Center, The Hague*

22-26 November 2004:

**EGEE 02 conference**

*Netherlands Conference Center, The Hague*

22-24 November 2004:

**DEISA conference**

*Netherlands Conference Center, The Hague*

24 November 2004:

**SEE-GRID workshop**

*Netherlands Conference Center, The Hague*

24 November 2004:

**SEE-GRID Project Steering Committee meeting**

*Netherlands Conference Center, The Hague*

22-23 November 2004:

**Diligent working group meeting**

*Netherlands Conference Center, The Hague*

## About the local organisers

NATIONAL INSTITUTE FOR NUCLEAR  
PHYSICS AND HIGH ENERGY PHYSICS

NIKHEF is the National Institute for Nuclear and High Energy Physics, in which the physics funding agency FOM and four universities (two in Amsterdam, one in Utrecht and one in Nijmegen) collaborate. In The Netherlands NIKHEF plays a leading role in the development of grid technology. NIKHEF was one of the principal contractors of the European DataGrid project and is now one of the contractors of the follow up EU-project EGEE (Enabling Grids for E-Science in Europe). NIKHEF houses a large grid infrastructure. It hosts the Dutch Certificate Authority service and other essential services for the grid test beds.

*[www.nikhef.nl](http://www.nikhef.nl)*

STICHTING ACADEMISCH  
REKENCENTRUM AMSTERDAM

SARA Computing and Networking Services is an advanced center of expertise that supplies since more than 30 years a complete package of high-performance computing, high-performance networking and infrastructure services. Among SARA's customers are the business community and scientific, educational, and government institutions. SARA is an independent organization with offices in Amsterdam and Almere, and collaborations with many partners.

*[www.sara.nl](http://www.sara.nl)*

NETHERLANDS NATIONAL COMPUTING  
FACILITIES FOUNDATION (NCF)

Supercomputers and grids emerge everywhere in modern scientific life. In the interest of the quality and competitiveness of their research, Dutch scientists should have access to the most advanced computing and networking facilities available. NCF is responsible for the nationale high-end computing infrastructure for the Dutch scientific community. NCF (in Dutch: Stichting Nationale Computerfaciliteiten) is an independent foundation under the umbrella of the Netherlands Science Foundation (NWO) and was founded in 1990.

*[www.nwo.nl/ncf](http://www.nwo.nl/ncf)*

TRANS-EUROPEAN RESEARCH AND  
EDUCATION NETWORKING ASSOCIATION

TERENA was formed in October 1994 by the merger of RARE (Reseaux Associes pour la Recherche Europeenne) and EARN (European Academic and Research Network). Its mission is "...to promote and participate in the development of a high quality international information and telecommunications infrastructure for the benefit of research and education." TERENA carries out technical activities and provides a platform for discussion to encourage the development of a high-quality computer networking infrastructure for the European research community.

*[www.terena.nl](http://www.terena.nl)*



# Train schedule

Trains leave from The Hague Central Station (Den Haag CS) every ten minutes. It will take you about half an hour to get to Schiphol, prices for a single fare are 6,50 euro (standard class) and 10,40 euro (first class).

In the daytime there are three types of connection:

- ★ a direct train ("sneltrain") which leaves at .29 and .59 each hour from platform 11 at The Hague CS
- ★ if you take the intercity train at .21 or .51 from platform 2 or 3 (going to Rotterdam, Dordrecht, etc.) you have to change at the other large railwaystation in The Hague, called Hollands Spoor on track 6. Beware: it takes only four minutes from Central Station to Hollands Spoor, so don't forget to get off.
- ★ you can also go via Leiden Central Station (platform 11, time of departure .10 and .40 every hour), and get on the Intercity Train in Leiden going to Schipholat platform 5a.

Trains from Hollands Spoor typically take you there slightly faster than the trains from Central Station (the Thalys train can do it in 20 minutes, but you need a special ticket for this).

At night there is a special night train that runs on the trajectory Utrecht Centraal - Amsterdam Centraal - Schiphol - Leiden Centraal - Den Haag Centraal - Delft - Rotterdam Centraal and vice versa.

These trains go every hour, every day. Tickets are the same price as during the day. Your ticket is valid from midnight to the next day at 4:00 (so 28 hours). In the special night trains the ticket from yesterday is still valid until the normal schedule starts again in the morning.

e-IRG  
EGEE  
DEISA  
DILIGENT  
SEE-GRID  
+ e-Infrastructures workshop  
+ EU Grid Infrastructure concertation event

SEE-GRID  
DILIGENT  
DEISA  
EGEE  
e-IRG

<http://www.arcade-eu.org>

SEE-GRID  
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EGEE  
e-IRG