

Under the Patronage of Hís Majesty Kíng Abdullah II íbn Al Husseín

Together We Shape the Future of Research and Education Networks

Four Seasons, Amman - Jordan 12-4 December, 2011



Partners





www.asrenorg.net

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"Investing in e-Infrastructures will advance inter-Arab research and education and promote cooperation with Europe"



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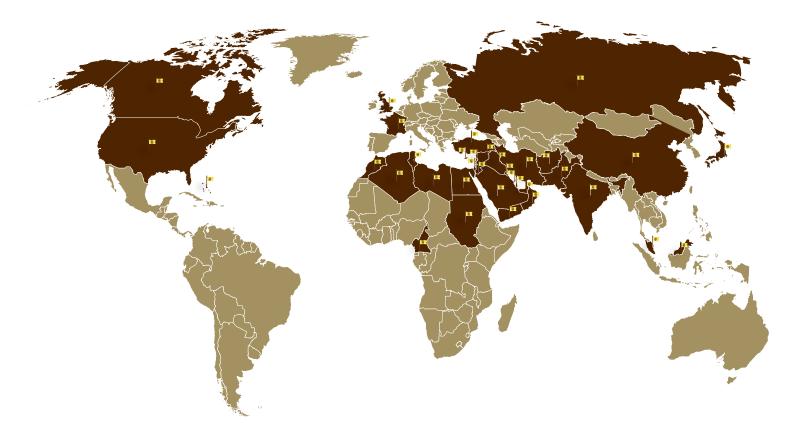
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Contents

Forward	5
ASREN Overview	6
e-AGE 2011	11
AGENDA	12
Panelist and Speakers	20
Sponsors & Partners	56
Platinum Sponsors	56
Gold Sponsors	60
Sponsors	64
Official Carrier	66
Media Partners	67
Partners	68



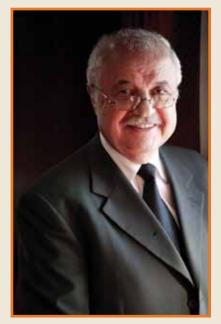
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We work hard to stay first

Forward



"Investing in e-Infrastructures will advance inter-Arab research and education and promote cooperation with Europe"

ASREN is now founded and strives to become the future Pan-Arab e-Infrastructure network. Our goal is to expand and connect all Arab research and education (R&E) institutions in a unified network that provides scientists, academics, students, and researchers with state-of-the-art connectivity. Through the unified e-Infrastructure, ASREN will provide its users with services, applications, and means for joint research collaboration. It will also allow for a wider access to educational content and efficient computing facilities. However, financing, political instability, scattered geographical landscape, and lack of expertise are the main challenges. With EUMEDCONNECT funding, EUMEDGrid Support, and other regional initiatives, ASREN will be able to sustain the existing R&E network in a number of Arab Mediterranean countries and expand to the Arab Gulf countries, Sudan, Iraq, Somalia, and Mauritania.

While still the subject of debate, there is now a growing consensus for the concept of ASREN Arab regional R&E network with main nodes possibly originating in Egypt, UAE, Qatar, Saudi Arabia, Jordan, and Morocco and connecting to the regional networks in Europe, Asia, Africa, and North America. ASREN will continue to join efforts with its European counterpart to bring new technology means and services to the Arab research and education communities and to provide hope to our future scientists towards enhanced educational environments equipped with better tools, connectivity, and services.

ASREN hopes to take advantage of the series of new cables laid in the region to become more economical to connect the Arab national R&E networks to the world and to evolve as a R&E link between the East and the West.

Chairman of ASREN H.E. Dr Talal Abu-Ghazaleh In June 2011, the Arab States Research and Education Network (ASREN) was born as the association of the Arab region National Research and Education Networks (NRENs) and strategic partners, a non-profit company with limited liability (GmbH) and officially registered in Germany. ASREN GmbH aims to implement, manage and extend sustainable Pan-Arab e-Infrastructures dedicated for the Research and Education communities and to boost scientific research and cooperation in member countries through the provision of world-class e-Infrastructures and E-services.

ASREN aims to advance all aspects of Arab research and education networking. This encompasses e-infrastructure network, a range of network support and access services for users, initiatives to address the digital divide of research and education networking around the Arab world, and technological research to ensure ASREN continues to be at the forefront of networking on a global scale.

ASREN builds on EUMEDCONNECT project to develop a pan-Arab backbone to interconnect National Research and Education Networks (NRENs) in the Arab countries, which will be supported by a range of multi-domain performance and monitoring tools. A suite of advanced end user services will be developed and made available for NRENs to incorporate into their service portfolios, for Arab research and education community. This creates the pan-Arab ASREN Service Area, a collaboration of interconnecting networks, enabling users across the Arab world to benefit from simple, secure "any place" access to high performance data communication capabilities. ASREN will focus on service delivery to NRENs and to end user institutions and research centers.

History and Current Status

The first intention of forming the Consortium of Arab Mediterranean Research and Education Networks (CAMREN) was first declared in 2006 by the seven Arab partners of the EUMEDCONNECT project that connect over 2 million academic users and researchers in 400 research centres and educational establishments. The partner countries, Algeria, Egypt, Jordan, Morocco, Palestine, Syria, and Tunisia, are represented by their national research and education network organisations (NRENs) and co-finance the network infrastructure and management costs, a substantial investment of around 1.5 million Euros each year.

In December 2009 the idea was refined and the proposed new regional association is now the Arab States Research and Education Network, under the patronage of the League of Arab States and the United Nations Global Alliance for ICT and Development. This replaces the CAMREN proposal and enables a wider participation throughout the Arab region (U.A.E. and Qatar organisations have joined the discussion process). Since then, with the support of EUMEDCONNECT2 funded by the European Commission and managed by DANTE (UK), three strategic planning workshop have been held in Cairo (January 2010) and Brussels (March 2010) and Algiers (July 2010), to finalize all the agreements on the organisation's mission, objectives, structure and strategic plan.



Formal announcement of ASREN



The first formal announcement of the creation of ASREN was made at the EU-Med Conference on e-Infrastructures across the Mediterranean (Event 3) on March 31st 2010 in Brussels, by Dr Talal Abu-Ghazaleh, chairman of the Global Alliance for ICT and Development of the United Nations Department of Economic and Social Affairs (UN-GAID). Since then TAG-Org has provided key technical and financial support in addition to political lobbying for the creation of ASREN. TAG-Org has lead the registration process of ASREN as a non-profit organization in Germany and has made all its resources available to meet the legal and financial requirements for a legally registered ASREN in Europe and operational in the Arab region. Jordanian Universities Network (JUNet) has also contributed to the process of developing ASREN.

In July 2010, His Excellency Mr Amre Moussa, Secretary General of the League of Arab States, endorsed the creation of ASREN, and announced the formal ASREN Launching Event to be held under the League of Arab States aegis in December 2010 in Cairo, Egypt. Also several regional bodies as the League of Arab States Secretariat Department in charge of Science and Research, the Arab Education, Science, Culture Organization (ALESCO) and the Arab Union of Scientific Research Councils were invited to join ASREN. The creation process aimed at finalizing all arrangements, the legal registration, hiring a CEO and selection of secretariat location, during a fourth strategic planning workshop in Rome in November 2010. The formal launch of ASREN took place at the League of Arab States in Cairo on December 8th 2010. In April 2011, ASREN GmbH was registered in Dusseldorf – Germany as a non-profit company with limited liability and shareholders of Abu-Ghazaleh & Co Consulting GmbH, Jordan JUNET, and Morocco CNRST.

Need for ASREN

Academic groups and scientists in Universities and research centers in the Arab world, need high-speed research networks to be able to carry out innovative scientific studies and data intensive research. These networks are designed with dedicated bandwidth to accommodate transfer of huge amount of data produced and shared between researchers in different countries and in real time. Research increasingly becomes dependent on large scale databanks and massive processing power, especially in areas related to complex data analysis, weather prediction and simulation, economic and stock exchange analysis, genome analysis, etc. The Internet is not efficient and does not support research and information intensive delivery service requirements. ASREN is meant to facilitate research with high performance and cost-effective communication networks.

Benefits of ASREN

ASREN high-speed network allows researchers in the Arab countries and the world to cooperate as if they work in the same research laboratory. Research results and data produced can be made available instantaneously for peer review and analysis. ASREN provides access to remote resources that are expensive for a single country to develop and helps to facilitate research cooperation and sharing that can bring benefits to our societies. Through ASREN network, researchers around the globe can cooperate to find solutions to complex problem analysis in medicine, physics, environment, climate change, natural disasters, and economics. The diversity of use and project applications is immense.

ASREN links to the world regions

ASREN will connect to the world regions via:

- European GEANT via EUMEDCONNECT3
- Turkey via ULAKBIM
- Africa via UbuntuNet Alliance and WACREN
- North America and The US via Internet2 and CANARI
- Asia via APAN
- South America via CLARA

Description

The overall objective of ASREN is to support and further improve the mutually beneficial Information Society cooperation between Arab Countries and the globe at large, building on the achievements of EUMEDCONNECT, and other EUMEDIS projects and other regional initiatives.

ASREN aims to continue and further develop research and education networking in the Arab region, successfully established by the EUMEDCONNECT project in a number of Arab countries (Morocco, Algeria, Tunisia, Egypt, Jordan, Syria, and Palestine). In cooperation with Arab-NRENs, ASREN will be able to setup a very high performance, advanced pan-Arab e-infrastructure network interconnecting R&E services. It will support the development activities of the Arab research and education community, including the development of new advanced applications and the exploitation of new networking capabilities.

The more specific objective (purposes) is to:

- Maintain and develop the research networking infrastructure to allow Arab Countries to participate in regional and EU collaborative programmes and provide a 'level playing field' for the user communities in these countries
- Ensure long term sustainability of the Arab research networking infrastructure through setting up viable organizational structures and maximizing the synergies of bilateral and regional Information Society projects.
- Promote the use of the infrastructure by existing applications projects and encourage increased participation by users in Arab countries in EU and world supported programmes.
- Support the development of Arab e-Infrastructure formed by the Arab-NRENs to foster regional level co-ordination and development



Partners and beneficiaries

The shareholders/ founding members of ASREN are:

- Abu-Ghazaleh & Consulting GmbH
- Jordan University Network
- Moroccan CNRST

ASREN shareholder participation is also open to all Arab National Research and Education Networks.

The main beneficiaries of ASREN are: Universities, researchers, students, academic institutions, public and private R&D organizations etc.

Main activities

The main activities of ASREN are:

- Maintaining and developing the Arab regional R&E network infrastructure. Re-designing the existing network interconnection, setting-up new operational procedures, testing the network and migrating user traffic, managing ongoing operations.
- Conducting network usage rationalization studies.
- Technical assistance to: (a) prepare case studies on network usage and showing impact on national development, to achieve increased support to cover the network operation and promotion costs (b) Promoting R&E network applications and collaboration opportunities to the stakeholders.
- Secure additional funding by preparing and submitting project proposals to the national budgets, bilateral cooperation funds and other donors.
- Capacity building and training for the Arab NREN partners networks
- Institutional and financial sustainability of ASREN in the long term

The expected result of ASREN is to setup a A sustainable Arab regional research and education network to enable greater level of collaborative research and education activities.

Marketing and Promotion

ASREN will focus on the following strategic elements in marketing and promoting ASREN services and reach out to Arab research and education communities:

- Prioritize Arab NREN development needs
- Reach out plan to hold workshops in developing NRENs and identifying needs and requirements
- Develop relationships with NRENs and create a portfolio of service applications of benefits and use to R&E communities
- Reach out mechanisms will include face-to-face communication, email, website, and through NREN participants
- Promote and support reach out channels by communicating with NREN customers/ government bodies and by building region-wide recognition and awareness of ASREN benefits and services
- Provide promotional material including brochures, leaflets, reports, and website.
- Plan for promotional activities on quarterly basis and identifying countries of target for NREN development and participation
- Revise forecasts of activities and services quarterly or annually,
- Install a customer relationship management (CRM) software to maintain a database on NREN details, generate reports, disseminate information, conduct campaigns, etc.
- Establish a marketing/ promotion department with portfolio of accessible promotional material, standard contracts, and proposal forms. Intensive training will be conducted to promotional team on ASREN services and R&E market knowledge as well as promotional skills.
- Monitor and drive progress in supportive, weekly one-to-one meetings, and measuring performance with detailed annual or quarterly analysis on effective promotional activities, potential NRENs, network usage and needs, etc.

Development

An efficient organizational structure will be set up to develop, manage, promote, support the setup, help in the organizational management, and acquire knowledge and expertise. The items of the development plan include:

- Create a strategic plan covering the Vision, Strategy, implementation model and promotion for ASREN
- Participate to build and setup systems for the delivery of network services to NRENs and end users at Universities and research centers
- Establish the appropriate methodologies, frameworks and best practice processes and standards to be applied in the building, implementation, and operation of ASREN and networking services
- Define and create an organization structure with clear roles and responsibilities, and a solid collaboration system
- Establish a financial scheme to operate ASREN and cover its implementation costs and operations
- Establish a knowledge base through a method of knowledge sharing, and set up the frameworks to enable a collaborative environment for knowledge dissemination and knowledge management. This will effectively assist in building up capacity and expertise to deliver top-quality networking services according to international standards and best practices
- Establish a service delivery model that ensures a high level of quality for service delivery

The strategic objective of ASREN is to contribute to boost the scientific research, innovation and education levels in the Arab countries by uplifting efficiency and productivity of research and education communities. The overall expected result of the strategic plan implementation is that after 3 years, there is in place and sustainable a Pan-Arab Research and Education Network dedicated to support Research and Education communities and to boost scientific research and cooperation through the provision of world-class e-Infrastructures and E-services. More specific result, after three years, are that:

- **Result 1:** ASREN is a sustainable regional organization
- Result 2: Are Built, maintained regional e-Infrastructures dedicated to e-Science and education across the Arab Countries
- Result 3: ASREN contributed to create and sustain NRENS
- **Result 4:** ASREN facilitated the collaboration and cooperation among the researchers and academicians in the Arab region

With Dante, ASREN is developing the EUMEDCONNECT 3 project proposal with a co-funding scheme of up-to 3.29 Million Euro EC funding from ENPI regional budget at a 35.6% of total eligible costs for 3 year terms, beginning of tentative October 2011.

Operations

To realize ASREN objectives, four major work activity/operation areas will be undertaken:

- Maintain and develop existing regional network and transition its operation and management to ASREN
- Ensure the network infrastructure is well utilized for research and education by a) demonstrating its benefits to stakeholders; b) providing application support to academic groups and scientists; and c) promoting the network's dedicated bandwidth and high-speed communication capabilities
- Enhance transfer of knowledge through capacity building, conference attendance, trainings and support of the development of expertise
- Set up a sustainable funding structure that will allow the regional network to continue on a long term basis, and allow the partners to focus more on the directly beneficial activities of supporting collaborative applications

Integrating Arab e-Infrastructures in a global environment is meant to be the launching pad for R&E connectivity and cooperation. It brings together the ASREN, EUMED, GEANT, and INTERNET 2 stakeholders and region's foremost innovators, leaders, scientists, and businesses to discuss and debate new models of innovation, integration of R&E networks, policies for sustainable development in education, means of knowledge sharing and dissemination, capacity building programs, and region-wide e- infrastructure deployment to tackle today's crises in climate change, global economy, food and water scarcity, alternative energy, and threatening environmental issues. The forum lays the foundation for a dream of many of today's leaders towards a global e-infrastructure for R&E based on real life broad inclusiveness beyond any political protocols.

Theme

Following launching and officially registering ASREN, and building on the success of the previous EUMED Events, and in conjunction with the Internet2 SIG, e-AGE 2011 is planned to present the status and future opportunities to develop Pan- Arab R&E network integration models and beyond to Europe, the US, and the globe at large. e-AGE 2011 includes three regional events that focus on research and education e-Infrastructures:

- EUMED Event 4
- Internet2 SIG Middle East Meeting
- ASREN 1st Annual Meeting

Monday - December 12, 2011

08:00-09:30	Registration
09:30-10:30	Inauguration
	Welcoming remarks – (5' each)
	- HE Dr Talal Abu-Ghazaleh, Chairman of ASREN
	- HE Mrs Joanna Wronecka, Head of the EU Delegation to Jordan
	- HE Mr Basem Al Rousan Minister of Information and Communications Technology, Jordan
	e-Infrastructure video presentation – (3')
	Invited – (15' each)
	- HE Dr Khaled Toukan, "e-Infrastructure based research: SESAME Case Study", Chairman of JAEC, Jordan
	- Mr Kostas Glinos, Head of GEANT e-Infrastructures Unit, DG Information Society & Media-
	European Commission
10:30-11:30	Opening Address – (5' each)
	- Dr Faeqa AlSaleh, Director, Directorate of Education and Research, League of Arab States
	- Dr Sultan Abu-Orabi, Secretary General, Association of Arab Universities
	- HE Dr Rowayda Almaaytah, Minister of Higher Education and Scientific Research, Jordan
	Invited – (15' each)
	- Mr Dave Lambert, "Highlights on the US Internet 2 advanced networking consortium", Internet2, USA
	- Mr Niels Hersoug, "Experiences of Delivery of Advanced Network Technology to Europe",UK
	Signing Ceremony – (10')
	- Mr Ahmad Hanandeh, CEO ZAIN – Platinum sponsor
	- Mr Sangsuk Roh, President SAMSUNG Electronics Levant CO. Ltd – Platinum sponsor
	- ASREN new shareholders: TunisianCCK, SudREN, SomaliREN, PalestineREN
11:30-12:00	Coffee Break
12:00-13:30	Trends in e-Infrastucture – Panel seated (10' each)
	- Dr Robert Klapisch, "ASREN as a tool to scientific cooperation in the Arab World", SKF, Geneva (Chair)
	- Dr Anna Paolini, "Towards an era of e-Infrastructure", Head of UNESCO office, Jordan
	 Ms Samia Melhem, "Best practice cases of eGovernment projects", Chair of e-Development, ICT Sector, World Bank
	- Mr Ayman El-Sherbiny, "Regional Backbone Initiatives", Chief of ICT Policies, United Nations - ESCWA, Lebanon
	- Mr Leonardo Flores, "e-Infrastructures in a regional context", European Commission
	 Dr Fabrizio Gagliardi, "Cloud computing technology impact on e-Infrastructure for science", Microsoft, Geneva

- Dr Khédija Ghariani, "Trends in Communication infrastructure in the Arab region", Arab ICT Organization, Tunis

Discussions (20')

13:30-14:30 Lunch

14:30-16:00 Perspectives on regional e-Infrastructure – Panel seated (10' each)

- Mrs Margaret Ngwira, "Enabling Researchers & Research Collaboration in Africa", UbuntuNet Alliance, Malawi (Chair)
- Dr Florencio Utreras, "RedCLARA2: An Advanced Collaboration Tool for Latin America", CLARA, Chile
- Dr Johnathon Chapman, "Enabling Inter-Institution Scientific Research", Internet2 Emerging NREN Middle East SIG, Qatar
- Mr John Dyer, "Future of National Research and Education Networks", TERENA, Netherlands
- Mr Yves Poppe, "R&E Networking: essential for e-AGE nations and economies", CANARIE, Canada
- Dr Emad Al Huseini, "trends of e-infrastructures and research in Iraq", IC commission, Iraq
- Dr Salem Al-Agtash, "Towards a Pan Arab e-Infrastructure", ASREN/ German-Jordanian University, Jordan

Discussions (20')

16:00-16:30 Coffee Break

16:30-18:00 EUMEDCONNECT3, an enabler – Panel seated (10' each)

- Mr Daniel Weiss, "EC activities and support in ICT in the Mediterranean region", Economic Cooperation, EC (Chair)
- Mr David West, "Regional network for Research and Education", DANTE, UK
- Mrs Federica Tanlongo, "Enabling Research collaboration: NRENs experiences in Europe and challenges ahead", GARR, Italy
- Mrs Aouaouche El-Maouhab, "Algerian research and education network", CERIST perspective, Algeria
- Dr Amjad Abu Zaid, "Palestinian research and education network", Ministry of ICT, Palestine
- Mr Redouane Merrouch, "Moroccan Research and Education Network, CNRS experiences", Morocco Discussions (30')

Closing remarks

Tuesday - December 13, 2011

09:00-10:40

0 Research Networking – Panel seated (10' each)

- HE Dr Khaled Elshuraydeh "Priorities and Trends in Research", HCST, Jordan (Chair)
- Dr Sultan Abu-Orabi, "Overview on R&D efforts at Arab Universities", SG, Association of Arab Universities
- Dr Paul Lefrere, "Emerging Technologies and Infrastructures anticipating user needs", Open University, UK
- Dr Anton Mangstl, "KM, ICT's for development and e-learning initiatives in the agricultural sector", GJU, Jordan
- Dr Jomana Amara, "Energy Security in a Turbulent World", Naval Postgraduate School, USA
- Mr Baher Esmat, "Internationalized domain names: opportunities for the Arab world", ICANN
- Dr Husam Al Olama, "Role of National Research Foundation in promoting research capacity", National Research Foundation, UAE

Discussions (30')

10:40-11:10 Coffee break

11:10-12:50	e-Intrastructure technologies and applications – Panel seated (10 ⁻ each)
	- HE Dr Isam Zabalawi, "The Role of e-Infrastructure in Reshaping Higher Education", AABFS, Jordan (Chair)
	 Dr Antonella Fresa, DCNET,INDICATE Coordinator, "Towards a Digital Cultural Heritage e- Infrastructure", Italy
	 Dr Mubarak Al Magzoub, "Research trends in the Arab Region", Federation of Arab Research councils, Sudan
	 Dr Rainer Herpers, "Towards Open Source Software Communities", Bonn-Rhein-Sieg University, Germany
	- Dr Mohamad Saraireh, "Center of Excellence for Library Services: Experiences", Yarmouk University, Jordan
	 Dr Reinhold Poppek, "Sponsorship from companies for research and education in Germany", Poppek law firm, Germany
	- Mr Aiman Mazahreh, "Integration of ICT services to build a better economy", STS, Jordan
	Discussions (30')
12:50-13:40	LinkSCEEM-2 and High Performance Scientific Computing – Panel seated (10' each)
	- Dr Constantia Alexandrou, "Developing Computational Science in the EastMediterranean region", Cyprus Institute
	- Dr Tryfon Chiotis,,"HCP and Cloud Technologies in Greece and South Eastern Europe", GRNET, Greece
	- Dr Fotis Karagiannis,"Towards Sustainable Computing e-Infrastructures across the Mediterranean ", e-Fiscal
	Discussions (20')

13:40-14:40 Lunch

14:40-16:10 EUMEDGRID-Support & CHAIN - Sustainability of e-Infrastructures Panel seated (10' each)

- Dr Federico Ruggieri, "e-Infrastructure as means for advancing research and education", INFN, Italy (Chair)
- Dr Roberto Barbera, "Science Gateways and Identity Federations for wider use of e-Infrastructure", U Catania, Italy
- Dr Yousef Nusseir, "Regional Integration for Building the Information Society", Former Director, ESCWA
- Dr Ognjen Prnjat, "CHAIN elnfrastructure sustainability recommendations and existing sustainability guidelines", GRNET, Greece
- Mr Serkan Orcan, "Perspectives on the Turkish Research and Education Network, ULAKBIM Experience", Turkey
- Dr Mohamed Jemni, "e-Infrastructure for Inclusion of People with Disabilities", University of Tunisia, Tunisia

Discussions (40')

16:10-16:40 Coffee breaks

16:40-18:30 ASREN: Towards developing Arab Regional e-Infrastructure – Panel seated (10' each)

- Mr Yousef Torman, "the Jordanian Universities Network", JUNET/ ASREN, Jordan (Chair)

- Mr Dahir Hassan, "Perspectives on the Somalian Research and Education Network", Somalia

- Mr Sa'ed Awienat, "e-Infrastructure in Qatar", Qatar Foundation, Qatar
- Dr Ahmad Dabbagh, "ANKABUT experiences in the United Arab Emirates", UAE
- Dr Ayman Bahaa, "Experiences in Egypt University Network", Egypt
- Dr Mohamed Awad, "Perspectives on the Sudanese Research and Education Network", Sudan
- Mr Radi Fassed, "ASREN: Towards developing Arab Regional e-Infrastructure" ZAIN, Jordan
 Discussions (30')
 Closing remarks (10')

Wednesday - December 14, 2011¹

09:00-11:00 EUMEDCONNECT3/ASREN Meeting

- EUMEDCONNECT3 Project Manager's Report Project Overview David West
- ASREN Progress Report Salem Alagtash/Yousef Torman
- Partner presentations:
 - o Algeria Mme Aouaouche El-Maouhab
 - o Morocco Redouane Merrouch
 - o Palestine Amjad Abuzaid
 - o Jordan Yousef Torman

11:00-11:20 *Coffee break*

11:20-13:00 EUMEDCONNECT3 Activity Reports – status and plans

- Activity 1 Network Development and Transition David West
- Activity 2 Applications support and promotion David West/ASREN
- Activity 3 Capacity Building and Training ASREN
- Activity 4 Financial Sustainability ASREN

13:00-14:00 Lunch

14:00-16:10 EUMEDGRID Support Meeting I

- Introduction & Administrative Assessment F. Ruggieri F. Ruggieri/INFN (EUMEDGRID-Support Project Director) (30')
- News from the Partners (round table) (40')
- EUMEDGRID-Support Detailed Work-Plan Update M. Reale/GARR (Technical Manager) (30')
- CHAIN and ASREN (30) S. Al-Agtash/Y. Torman (ASREN)

16:10-16:30 *Coffee Break*

1. Meetings will be held at ASREN oces – 104 Mecca Street, Talal Abu-Ghazaleh Graduate School of Business Administration

16:30-17:30 - WP2 - Communication & awareness creation - S. Garavelli/TRUST-IT (30') - WP3 - Supporting technical application developments and users - R. Barbera/R. Bruno/COMETA (30')

Thursday- December 15, 2011²

09:00-10:30 EUMEDGRID Support Meeting II

- WP4 - Supporting EUMEDGRID e-Infrastructure sustainability – M. Reale/GARR (30')

- Plans for the Final Review (60')
- 10:30-11:00 *Coffee Break*

11:00-12:30 - Next Meeting and follow-up activities (30') - AoB (30')

12:30-14:00 Lunch

Tuesday - December 13, 2011³

08:00-10:50 Internet2 SIG Meeting

- John Chapman, "Introduction of Internet2 and Emerging NREN Middle East Special Interest Group", Georgetown University in Qatar
- David Lambert, "Internet2", USA
- Yousef Torman, "ASREN Developments", JUNet
- Alaa Al-Din Al-Radhi, "IPv6 & NREN", IPv6 Forum Jordan Chapter
- Sa'di Aweinat, "Qatar Foundation REN", Qatar Foundation
- Ahmed Dabbagh, "ANKABUT Update", ANKABUT

10:50-11:10 *Coffee break*

11:10–13:00 - Hatem Hamad, "Enhancing Shibboleth to Access Web Educational Resources More Securely", Islamic University of Gaza

- Said Al-Mandhari, "Research and Network Activities in Oman", The Research Council Oman
- Yves Poppe, "Will 2012 be the year of Regional NREN connectivity?", Tata Communications
- Anil Srivastava, "Cancer Collaboratory and role of RENs in Middle East", Open Health Systems Laboratory, Johns Hopkins
- JJ Jamison, "GLORIAD: Middle East and North Africa", NREN Consulting
- John Chapman, Closing remarks

2. Meetings will be held at ASREN oces – 104 Mecca Street, Talal Abu-Ghazaleh Graduate School of Business Administration 3. Meetings will be held at Four Season, 5th oor Room: FS I



Recreates the Big Bang

EUMEDCONNECT3 allows high-energy physicists in the Mediterranean to participate in ground-breaking experiments to discover the origins of the universe.

EUMEDCONNECT3 provides e-Infrastructure giving high-capacity connectivity for research and education communities in the southern and eastern Mediterranean region, enabling researchers and academics to collaborate with their counterparts in the Arab and European Research and Education communities.



chain co-ordination & harmonisation of advanced e-Infrastructures

The project

The CHAIN project aims to coordinate and leverage the efforts made over the past years to extend the European e-Infrastructure (and particularly Grid) operational and organisational principles to a number of regions in the world. CHAIN uses their results with a vision of a harmonised and optimised interaction model for e-Infrastructure and specifically Grid interfaces between Europe and the rest of the world. The project will elaborate a strategy and define the instruments in order to ensure coordination and interoperation of the European Grid Infrastructure with those emerging in other regions of the world (Asia, Mediterranean, Latin America and Sub-Saharan Africa). The CHAIN consortium, consisting of leading organisations in all the regions addressed by the project, will ensure global coverage and most efficient leveraging of results with respect to preceding regional initiatives.

Objectives

The objectives of CHAIN project can be divided into three main areas:

- **Define a strategy and a model for external collaboration** which will enable operational and organisation interfacing of EGI and external e-Infrastructures.
 - Validate this model by supporting the extension and consolidation of worldwide Virtual Research Communities which work on common areas and/or increasingly require distributed facilities across the regions for trans-continental research.
 - **Propose and explore concrete steps** forward towards the coordination with other projects and initiatives

KnowARC

EUMEDGRID-Support

DEISA

Globalisation of Grid Infrastructures

SEE-Grid-SCI

EUIndiaGrid 2

NKN & Garuda

chain co-ordination & harmonisation of advanced e-Infrastructures

Why?

To extend the European Research Area

e-Infrastructures support wide geographically distributed communities, enhance international collaboration of scientists and promote collaboration in other fields.

Grids and networks allow the access of many researchers to scientific resources (laboratories and data) reducing disparity and encouraging larger participation and contributing to high quality research.

The e-Infrastructures stimulate scientific and technical development of countries contributing to fight the digital divide and brain drain.

Who?

Collaboration among Grid infrastructures of differents continents: Africa, Asia, Europe and Latina America

CHAIN will leverage on the cross-region communities and applications and promote inter-regional, e-Infrastructure based, research collaborations.

CHAIN favours the transfer of the knowledge and the experience in deploying and managing large e-Infrastructures between advanced and emerging countries.

The activity aims to promote the continuity of support to the large spectrum of communities that are already supported by the existing regional projects.

How?

Gather the existing experience and propose a model for the interoperation

The project aims to seek, identify, and support e-Science communities and deploy their applications.

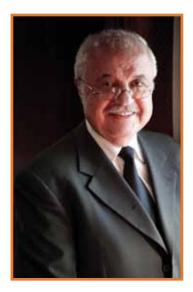
A task of CHAIN is the dissemination, both "bottomup" and "top-down", of the e-Infrastructure paradigm for long term sustainability of e-Science.

In this framework, it will be provided a training for users and site administrators to use and operate an e-Infrastructure based on the European best practices.

PARTNERS



Panelist and Speakers



HE Dr Talal Abu Ghazaleh

HE. Dr Talal Abu-Ghazaleh, Chairman of Talal Abu-Ghazaleh Organization (TAG-Org) and President of Talal Abu-Ghazaleh School of Business, wideranging interests and contributions in professional services, intellectual property, education, knowledge economy, and information technology. Founded in 1972 (TAG-ORG) is an international professional services group, employing over 2000 professionals and operates out of its 71 offices covering the Arab region, Afghanistan, China, India, Pakistan, and Turkey. It has representative offices in Europe and North America and non-exclusive strategic alliance agreements with various networks and individual firms thus enabling it to choose a firm best suited to its clients needs in virtually every country in the world. TAG-Org currently offers a composite range of professional services covering Accounting; External Audit; Internal Audit; Corporate Governance; Taxation; Educational Consultancy; Economic and Strategic studies; Management Advisory Services; Professional and Technical Training; Technology Transfer Project Management; Real Estate Management; Investors and Business Advisory Services; Human Resources and Recruitment Services; E-Government; E-Commerce; E-Education; IT and Security Audit; Web Design; Professional Interpretation and Translation; Website Arabization: Domain Names Registration; ICT Strategic Planning; ERP Consulting Services; IT and Internet Skills Training and Examinations; Intellectual Property News Agency; IP Business and Asset Valuation and Branding Services; IP Registration and Protection; Intellectual Property Renewals; IPR Protection and Management; Legal Services; and Public Offering.

On a glance at Dr Abu-Ghazaleh's past leadership roles reveals a long and engaging career with business-related international development organisations, and forward-thinking business projects in the Arab world. He quickly rose to a position of regional and international leadership, serving as a member of the board of the International Auditing Practices Committee (IAPC) of the International Federation of Accountants (1987-1990) and as member of the board of the International Accounting Standards Committee (1988-1990). During the same decade, Abu-Ghazaleh formed the Arab Society of Certified Accountants (ASCA). He later created the Arab Society for Intellectual Property, Arab Knowledge Management Society, Licensing Executives Society - Arab Region, and other regional organisations providing educational and regulatory support to Arab professions. Dr Abu-Ghazaleh's business empire has developed in parallel with his commitments to Arab socioeconomic development, and the two tracks of development and business and have closely tracked and cross-pollinated each other. He had created a unique hybrid, a for-profit, private firm with a mission statement to "contribute to the socioeconomic development of the Arab world." Abu-Ghazaleh also served on the board of the U.N. Global Compact and chairman of the U.N. Global Alliance for ICT and Development



HE Dr Khaled Toukan

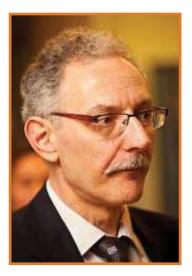
Dr Khaled Toukan was appointed by a Royal Decree as the Minister of Energy & Mineral Resources 9 Feb. 2011. Dr Toukan held the position of the Chairman of Jordan Atomic Energy Commission on March 17, 2008, and the position of Minister of Education for the Hashemite Kingdom of Jordan from 2000 to 2007. He previously served as Minister of Higher Education (2001-2002) and (2005-2007) and President of Al-Balga Applied University (1997-2001). Dr Toukan's academic career includes the positions of Dean of Faculty of Engineering & Technology and Professor of Industrial Engineering at the University of Jordan, Research Scientist at Kernforschungszentrum Karlsruhe, and Associate Research Scientist at the University of Petroleum and Minerals, Saudi Arabia. Dr Toukan holds a Ph.D. in Nuclear Engineering from the Massachusetts Institute of Technology (1978-1982), an M.Sc. degree in Nuclear Engineering from University of Michigan (1976-1978), and a B.E. degree in Electrical Engineering from The American University of Beirut (1971-1976). Dr Toukan's awards include the UNESCO Ghandi Medal of Peace (2003), the Royal Grand Gordon of Alkukab Al-Urduni (2003), the Theos J. Thompson Fellowship (1980-81) in the Department of Nuclear Engineering at M.I.T., Legion de Honore from the French Republic (2004), and Commanders Cross of the Order of Merit from the Federal Republic of Germany (2006) and King Hussein's Medal of Excellence (2008). Born in Amman in 1954, Dr Toukan is married with three children. He is a Member of the International High Level EFA Group, a member of H.M. King Abdullah II Economic Consultative Council and presently is Director of SESAME.

Title of Presentation:

STATUS OF SESAME PROJECT

Abstract:

The main event is the extraction of the beam from the Microtron, at full energy of 22 MeV obtained on November 28th. The Booster upgrade plan is in progress; all the bending magnets vacuum chambers will be replaced by new ones, 7 BPM Libera Electronics have been purchased, and a new control system based on EPICS is under development as well as a new timing system and new electronics for tune measurement. The site acceptance test of the new power supplies of the Booster took place in October 2011. The tunnels are ready and the Booster will soon join the Microtron. The commissioning with beam of the Booster is foreseen to take place before the end of next year. On the other hand, the Storage Ring magnet system has been reviewed and the technical specifications are ready for a call for tender as well as the vacuum system. The main water and air cooling systems are under installation. Hoping that the construction budget of the Storage Ring will be secured soon by a few of SESAME Members, the schedule is to have the first experiment in 2015. The phase I scientific program has been finalized and it foresees 7 beamlines from Infra-Red to hard X-rays.



Mr Kostas Glinos

Kostas Glinos has been with the European Commission since 1992. He leads the GÉANT & e-Infrastructures unit of the Directorate General for Information Society and Media since 1 January 2009. From 2003 to 2008 he was Head of the Embedded Systems and Control unit and interim Executive Director of the ARTEMIS Joint Undertaking. Previously he was deputy head of Future and Emerging Technologies. Before joining the Commission Kostas worked with multinational companies and research institutes in the U.S., Greece and Belgium. He holds a diploma in Chemical Engineering from the University of Thessaloniki, a PhD from the University of Massachusetts and a MBA in investment management from Drexel University.



Ambassdore Faeqa Saeed ALSALEH

- She is currently Advisor to the Secretary General of the League of Arab States (LAS). She is also Director of Education and Scientific Research at LAS and in charge of the Arab Economic and Social Council Secretariat.
- Before taking her current position at the LAS, she was the Assistant Undersecretary for Planning and Information at the Ministry of Education in the Kingdom of Bahrain and held several positions in statistics and educational planning for 25 years.
- She holds Master degree in Library and Information Studies (University College London, 1991) and International Postgraduate Diploma in Educational Planning and Management (UNESCO / International Institute for Educational Planning, Paris 2001) as well as other postgraduate diplomas in Advanced Management and Education.
- She is a member of several regional and international councils such as: EFA Global Monitoring Report (GMR) Advisory Board, International Institute of Educational Planning's (IIEP) Council of Consultant Fellows and Council of the Arab Organization for Quality Assurance in Education (AROQA), Council of Arab Scientific Research and Education Network (ASREN)
- She also been a member in many councils and higher committees such as: G8/BMENA on Education Task Force, Arab Planning Institute Council, Public Administration Institute Council and the Education Committee of the Supreme Council of Women.
- She also held key positions in many projects such as national coordinator of Education For All (EFA), project coordinator of the Education and

Training Reform in Bahrain and project manager of enhancing the quality of education in the Kingdom of Bahrain.

- Research interests focus on education reform and development and comparative education. She published a number of books in Arabic within the Education System in the World Series. She is also in charge of producing national reports on education in the Kingdom of Bahrain and Chief Editor of the "Educational Information Journal".
- She participated in several conferences, seminars..etc, and presented a number of papers and lectures in education, management, librarianship, information and educational planning.



Dr Sultan Abu-Orabi

Dr Sultan Abu-Orabi is an Organic Chemist who obtained his PhD from the University of Michigan, USA. He is President of Yarmouk University, Jordan's second largest public university and President Elect of the Association of Arab Universities which has its headquarters in Amman, Jordan. Dr Abu-Orabi previously served as President of Irbid National University and Tafila Technical University in Jordan. He is also President of the Jordanian Chemical Society and Secretary General of the Arab Union of Chemists. He was Visiting Professor at Bahrain University and the King Fahd University of Petroleum and Minerals, Saudi Arabia. Dr Abu-Orabi is Editor-in-Chief of two international chemistry journals, and is member of the Editorial Board of four. He has organized, served on Advisory Boards, and presented lectures at numerous international conferences. He has also received several research fellowships and awards and published over fifty papers throughout his career spanning twenty-six years.



Mr Niels Hersoug

Résumé: Niels Hersoug joined DANTE as General Manager in 2011. A Certified Project Manager and Master of Science and Business Administration, Niels is highly experienced in management and technology. Prior to DANTE, Niels worked in a number of senior management roles in a range of technology driven companies.

Title of Presentation:

Experiences of Delivery of Advanced Network Technology to Europe", UK

Abstract:

DANTE is Delivering Advanced network Technology to Europe by being instrumental in building and managing GÉANT, the World's largest and most advanced Research and Education Network. GÉANT has a very diversified European footprint serving 40 million European users over 8000 institutions. More than 1,000 Terabytes of data are transferred via the GÉANT IP backbone, every day.

GÉANT also has a rich suite of connections to many other parts of the World with 62 NRENs outside Europe from the Middle East, the Americas, Asia and the Oceania all directly connected to GÉANT, making GÉANT to the best connected network in the world.

DANTE would like to continue stimulating interests of Arab countries to become part of R&E regional network and e-infrastructure to help researchers and young scientist to benefit from integration with the international research communities. DANTE would like to continue supporting ASREN's objectives in building a regional REN and communities of practice, by facilitating their use of the large bouquet of options offered by the European Commission.

DANTE has experience in the region and with the challenge of establishing physical links between neighbouring countries. Such links are connecting institutions and making use of economies of scales in international links.

The vision for GÉANT is to serve the scientists when Data that are dominating the future of research and innovation needs to be Discovered, Deposited, Determined, Deduced and Distributed.

The vision of GÉANT is to meet the needs of all Research disciplines by building, operating and maintaining the most advanced and efficient network infrastructure, services and testing facilities available. GÉANT will provide equal opportunity of access to the whole European research community and connect Europe to other world regions to support Global Collaboration and advancement to address the Global Challenges that we all face.

DANTEs management and the continued solid support from the European Commission of GÉANT has created a world class, better than carrier class network characterized by very high availability, very high bandwidths and an equal opportunity of access for all European Researchers. GÉANT is not about hero experiments, GÉANT is about solid and reliable services managed and monitored around the clock.



Dr Robert Klapisch

Résumé:

Robert Klapisch (PhD), a French physicist, was Director of Research at CERN (1981-1987) and adviser (1989 to1993) to the Director General Carlo Rubbia (Nobel Laureate 1984). He co-authored with Rubbia the proposal for the Energy Amplifier (a.k.a. "Rubbiatron"), a new approach at nuclear energy (1993-1997).

In 2002, he was appointed by President Chirac to the Committee preparing the "Charte de l'Environnement' that has since been voted to be an addendum to the French Constitution.

As President of the French Association for the Advancement of Science (2000 to 2003), he advocated a North-South Scientific Dialogue and started in 2004 the "Sharing Knowledge" series of conferences. This led him to set up in 2006 a dedicated "Sharing Knowledge Foundation" < www.sharing-knowledge.org> which he chairs.

The Sharing Knowledge Foundation (SKF) aims at encouraging a dialogue between scientists coming from Europe and those from Less Developed Countries from the Mediterranean shores and the African Continent. The goal is to act towards the realization of concrete projects contributing to the reduction of disparities and imbalances between nations. In particular, SKF considers Broadband Internet and advanced forms such as Computation Grids as the tool of choice for the development of Centres of Scientific excellence emerging on the African Continent and the Middle East and for their integration into the international arena.

President Sarkozy promoted him Officier de la Legion d'Honneur in 2007.

Title of Presentation:

ASREN as a tool to scientific cooperation within the Arab World

Abstract:

Morocco (MARWAN) and Jordan (JU-Net) are two outstanding examples of successful NRENs. It is thanks to the Grid that Moroccan physicists have won an enviable position in the ATLAS experiment at CERN. This is about to be enhanced by the gift by CERN of some 300 reformed servers, enabling Marwan to host a Tier 2 node of the LHC Grid, which will also benefit other scientific disciplines (earthquake prediction, bio-informatics, etc..). Similarly, in Jordan (as announced by K. Toukan), the advent of SESAME Science will usher-in a major upgrade in e-infrastructure. Presently, the remarkably high-bandwidth link (1Gig/s) among all 15 Universities already allows advances in e-learning, videoconferencing etc..

This high bandwidth link within Jordan, inevitably draws attention to the benefits that ASREN would bring if there was a similar link (CAMREN) all across North Africa. This would be a unique instrument to foster scientific collaboration among Arab States. Starting by education: there could be lectures by Egyptian or Algerian professors that could be followed (in English or Arabic) by Jordanian students. Coming to research: Moroccan physicists presently meet their Egyptian peers through CERN; if they could

communicate directly they could prepare joint proposals which would be much more effective. But in addition, there are specific joint researches of regional interest, such as agriculture in arid zones, exploitation of solar and wind energies etc.. where research programs between two (or more) Arab states could lead to progress of world level knowledge



Ms Samia Melhem

Samia Melhem chairs the eDevelopment Community of Practice and leads ICT unit's knowledge and learning program at the World Bank Group. She is an international expert on egovernment. Her projects focus on improving Public sector delivery, and outreach to citizens and businesses; and on creating the enabling environment for societal transformation, using ICTs as a tool for governance, accountability and transparency (GAC), employment and inclusion. Samia contributes to research on eGovernment policies, innovation, business, and results, and has led the eProcurement Reference guide and capacity building efforts in ICT unit, the Gender and ICT toolkit as well as the Telecoms Regulatory toolkit during her years of service at Infodev. One of her eGovernment projects, eRwanda, just won the Technology in Government Award (TIGA) sponsored by UN, Economic Commission for Africa, and the Government of Finland. In her 20+ years in international development. Samia worked in different regions (Africa, ECA & MNA), in several sectors (financial management, public service delivery, tax and cusoms, education, health, agriculture, etc.) and on more than forty countries. She holds degrees in Electrical engineering (BSEE); Computer Sciences (MS), and Finance (MBA), and had taken several self-development programs in international development and economics.

Title of Presentation:

Best practice cases of eGovernment projects



Mr Ayman El-Sherbiny

Mr Ayman El-Sherbiny, the Chief of ICT Policies Section in the United Nations Economic and Social Commission for Western Asia (ESCWA), has more than 20 years background in the region, with sound experience as a development strategist and a former senior management executive. Prior to joining UN ESCWA, El-Sherbiny has been highly recognized as one of the renowned Telecom sector young business leaders during the nineties, building and leading several successful ICT companies. As a CEO and Managing Director, he effectively transformed emerging technologies into sound business innovations and hundreds of sustainable job opportunities. One year before the World Summit on the Information Society (WSIS), he became one of the founding experts that started-up the newly created ICT Division (ICTD) in ESCWA, where he participated in setting objectives, strategies and work plans aiming at building the Arab Information Society, before, during and after the WSIS process. El-Sherbiny has done extensive work related to Internet governance, Broadband for development, Entrepreneurship and Venture capital. He spearheaded the establishment of several regional and global working-groups on the use of Arabic script in Internet Domain Names. He has recently led the development of an Arab Regional Roadmap for Internet Governance as well as the strategic conception of the Arab Top Level Domain Names Registry Project ".arab", in close cooperation with the League of Arab States. His recent research work focused on Knowledge Economy and on Online Social Media. El-Sherbiny has a Masters Degree in International Business Administration and a Bachelors Degree with Honors in Telecommunications Engineering.

Title of Presentation:

Regional Backbone Initiatives



Mr Leonardo Flores Añover

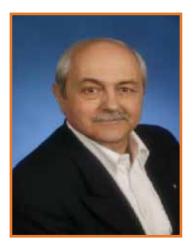
Leonardo Flores Añover is a Computer Scientist from the Polytechnic University of Madrid and worked in Industrial R&D in the fields of Telecommunication & Space before joining the European Commission in 1995.

In the EC, he had several positions as Project Officer in the areas of distributed systems, Computer Science, Embedded Systems. He was also responsible for establishing the Artemis Joint Undertaking.

He currently works in Géant & e-Infrastructure Unit, where he is in charge of Exascale Computing and International Cooperation with Latin America, Mediterranean Area & Africa.

Title of Presentation:

e-Infrastructures in a regional context



Dr Fabrizio Gagliardi

In the present position since July 2008. In this position leading an EMEA team responsible for MSR Connections in EMEA. Based in Geneva with main office at the MSR research centre in Cambridge UK.

As part of this job supporting and contributing to MSR Cloud computing strategy in Europe, including the incubation of a major EU project (www. venus-c.eu), and with 3 direct engagements with major national funding agencies (EPSRC in the UK, INRIA in France and HLRS in Germany). Responsible for the strategic planning of the Cloud Computing team at EMIC in Germany.

He joined Microsoft in November 2005, when after the last EGEE conference in his home town of Pisa, Fabrizio Gagliardi took responsibility for the company Technical Computing Initiative in Europe, Middle East, Africa and Latin America.

Before then and starting at the end of the 90' he was among the pioneers in developing and introducing Grid computing in Europe with early collaboration with Ian Foster and Carl Kesselman in the US, this led to projects like EU-DataGrid and EGEE, of which he was Principal Investigator and Director from 2000 till 2005.

In 2004-2005 while still Director of EGEE (www.eu-egee.org) he contributed to the incubation and launch of more than 10 other Grid EU projects all inspired and supported by the EU EGEE flag-ship.

Title of Presentation:

Cloud Computing technology impact on e-Infrastructure for science

Abstract:

Cloud Computing is the latest development of distributed computing, emerging as commercial offering from most of the major IT vendors, which is becoming attractive not only for commercial customers but also for the wider scientific community. Many scientific users, traditionally excluded by HPC and Grid computing solutions, are now adopting Cloud Computing essentially because of the reduced cost and ease of use. Scalability and virtualisation of the IT infrastructure could also suggest to national and international funding agencies new ways to procure computing resources to the projects selected for funding. Distribution of data and long term preservation are additional value propositions which Cloud Computing offer.



Ms Margaret Ngwira

Mrs Margaret Ngwira holds a Bachelors Degree in English and Economics and Masters Degree in Library and Information Science from the University of British Columbia. She is a member of CILIP, the Chartered Institute of Library and Information Professionals in UK. Since the 1980s she has pursued ICT innovation, developing information products to assist in service delivery especially to the growing post graduate student population. In the late 80s, with Rockefeller funding, working with CDS/ ISIS she developed several databases backed by full text documents in critical areas such as soil fertility. Then 1990, still with Rockefeller funding she developed a pre-html hypertext system, Development-Related Information for Malawi (DRIM) using GUIDE software. These were, of necessity, stand-alone systems. In the late 90s she led a team developing e-learning materials for environmental information specialists for IUCN - VeSATS (Virtual Environment, a Southern Africa training system). She is a founding member of MALICO, the Malawi Library and Information Consortium www.malico.mw. But the coming of the packages that provided low cost access to electronic journals through the work by INASP, AGORA, HINARI and eIFL brought infrastructure issues into focus - World class journal content available but no infrastructure to access them effectively. This led to her involvement in the installation of a VSAT system through MALICO for a string of 4 academic institutions from north to south of Malawi. This provided access but at a price vastly beyond what the institutions could afford – hundreds of times what equivalent bandwidth would cost in the west. This then led to the pursuit of fibre from 2005 initially as part of the SARUA Fibre Study. She is a founding member of MAREN www.malico.mw/maren and also of UbuntuNet Alliance for Research and Education Networking of which she has been a Director since its founding. www.ubuntunet.net. Within UbuntuNet she represents the Alliance as a consortium member of the GLOBAL EU FP7 project. She is a Board Member of the Malawi National Library Service and a member of the International Advisory Committee of the Institute of Development Studies, University of Sussex. She has led consultancy teams for Rockefeller Foundation, Ford Foundation /World Bank, IUCN, EU / CTA and Norwegian Church Aid among others. She has carried out a great deal of capacity-building training mainly in Malawi but also externally in places such as Gaza and Mali. She has served on several editorial boards.

Title of Presentation:

Enabling Researchers and Research Collaboration in Africa

Absract:

Established in 2006, UbuntuNet Alliance, the Regional Research and Education Network for Eastern and Southern Africa brings together thirteen established and emerging NRENs in the region, with several more at various stages of preparedness. One of the core hypotheses of the Alliance is that "Improved and affordable connectivity will enable African researchers to produce proportionate intellectual output and generate a proportionate amount of intellectual property goods." The presentation describes the UbuntuNet Alliance. It then looks at recent research carried out in three member NRENs on researcher behavior in order to be able to measure the impact of increased access will have on researcher behavior. One area where it is hoped that there will be increased activity is in utilization of advanced e-infrastructures for research. To this end, the Alliance participates in EU FP7 projects : last year, ERINA4Africa where pent up demand and current applications were documented and currently the CHAIN project. The implementation of EU AfricaConnect, in which UbuntuNet is a partner, should make a dramatic difference to what researchers in the region can achieve through vastly improved access regionally and globally and the collaborative opportunities that will unfold.



Dr Florencio Utreras

Dr Florencio I. Utreras is the Executive Director of CLARA, the Latin American Cooperation of Research Networks. Graduated in Mathematical Engineering from the University of Chile (1975), he got the Doctor of Engineering degree from Université de Grenoble, France (1979). Before joining CLARA, Dr Utreras was the Executive Director of REUNA (the Chilean Research Network) since 1992 and previously he had been full professor of Applied Mathematics at the University of Chile and Visiting Professor at several universities and research centers in Europe (France, Italy) and the United States. Dr Utreras has been involved in Research Networking since 1987. Awards: Annual Prize of ACTI (Chilean IT Companies) for Innovation, 2000. Recognized by CNN as one of the 18 most important Latin American Leaders of Internet Development, 2000. Explora-CONICYT Prize for the promotion of science, 2003

Title of Presentation:

RedCLARA2: An Advanced Collaboration Tool for Latin America



Mr Johnathon Chapman

Résumé:

Johnathon Chapman is Chief Information Officer for Georgetown University in Qatar. He is also active in Internet2, the US national research and education network, chairing the Internet2 Emerging NRENs Middle East Special Interest Group. Mr Chapman's career spans more than 20 years in the field of information technology as an administrator, consultant, teacher, and technologist. For the past 11 years he has lived in the Arabian Gulf where he has worked in higher education, government, and private industry. Mr Chapman has degrees in business and computer science. He has special interests in global education networks and the management of service organizations in culturally diverse environments.

Title of Presentation:

Enabling Inter-Institution Scientific Research"

Abstract:

Research is no longer a solitary occupation. It is a collaboration involving participants around the campus, in the region, or around the globe. Our presentation will give a short summary on national research and education networks in the region and their peering arrangements with other global NRENs.



Mr John Dyer

John Dyer is the Business and Technology Strategist at TERENA. He is responsible for strategic issues and for overseeing development of new initiatives. His tasks include supporting the Task-Force on the Management of Service Portfolios (TF-MSP), developing the Compendium of national research and education networks in Europe and creating TERENA's longterm strategy for middleware. His main interests are looking at the more business oriented aspects of networking including Identity Management, Security, Business Processes, Risk Assessment and Management and making the case for NRENs.

Title of Presentation:

The future of NRENs

Abstract:

The Nation:al Research and Education Networks (NRENs) pioneered the development of computer networking and services in Europe over the last 25 years. During this period the Internet has become an essential infrastructure supporting many aspects of everyday life which in turn is leading to the commoditization of many services. John Dyer will explore the European trends and potential future e-infrastructures.



Mr Yves Poppe

Representing Teleglobe on the Canarie (Canadian R&E network) Policy Board, Yves Poppe supported the early deployment of high speed intercontinental R&E connections and the next generation internet protocol IPv6 efforts. He represents the Corporation at the IPv6 Forum and is steering committee member of the North American IPv6 taskforce. He also chaired the Canadian IPv6 Task Group that in March 2010 issued a set of recommendations for IPv6 deployment and transition in Canada,

Yves Poppe is very active in the Research and Education Networking Community and represents Tata Communications in R&E organizations including TERENA, Internet2 and APAN; he is also currently a member of Canarie's Technical Advisory Committee. Yves is a frequent presenter on the evolution of telecommunications, the internet and the key role of IPv6. He regularly covers the evolution of subsea communication capacity and international telecommunications at sessions of TEMIC (Telecommunications Executive Management Institute of Canada).

VSNL international, part of the Tata Group acquired Teleglobe in February 2006 and since February 2008 the Company operates under the name Tata Communications.

Title of Presentation:

R&E Networking: essential for e-AGE nations and economies

Mr Daniel WEISS

Abstract: The European Commission's Development and Cooperation (DEVCO) Directorate General, also known as EuropeAid, is responsible for designing EU development policies and delivering aid through programmes and projects across the world. Its Neighbourhood Policy (ENP) provides a coherent approach that ensures that the whole of the EU is committed to deeper relations with the Arab countries. At the same time, it allows to develop tailor-made relations with each country. The European Neighbourhood and Partnership Instrument (ENPI) is the financial instrument which supports the ENP through concrete assistance actions. One of these concrete actions is EUMEDCONNECT, which is in its 3rd phase and co-sponsor of this conference and ASREN. Besides this flagship project the European Commission also finances other interventions in the ICT sector in the region - and as a matter of fact in many other sectors. More details are to be provided in the presentation.

Title of Presentation:

EC activities and support in ICT in the Mediterranean region



Mr David West

David West is the project manager at DANTE for the regional network projects EUMEDCONNECT2, TEIN3 and CAREN in the southern Mediterranean rim, Asia-Pacific and Central Asia, respectively. Since its inception he has lead and managed the EUMEDCONNECT programme, which has provided a regional research and education network for North African and Middle Eastern countries since 2004. He joined DANTE in 2001, after spending 15 years at BT where he was a senior manager responsible for a number of international product and business development programmes. Mr West has extensive experience in the telecommunications field of managing and supporting new projects, and in establishing supplier and partner relationships. He is educated to postgraduate degree level and spent the earlier part of his career in the UK urban development industry.

Title of Presentation:

Regional network for Research and Education



Ms Federica Tanlongo

Federica Tanlongo holds an ICT master degree in New Media and Communication. She joined GARR, the Italian Research and Academic Network in 2004, where she works as External Relations and Communications manager at GARR. In this role, she has been involved in a number of European and international projects, of which several ones focus on the Arab-Mediterranean area, including EUMEDCONNECT, EUMEDGRID and their successors.

Title of Presentation:

NRENs and their role in enabling Research collaboration: experiences in Europe and challenges ahead

Abstract:

National Research and Education Networks were created all across Europe and worldwide since 20 years in order to meet the needs of the Scientific and Academic community in terms of data communications and ICT and quickly became a success model, because of their high technical profile, cost-effectiveness, and flexibility.

They have become the funding blocks of Regional Networking organizations and have substantially contributed to advance ICTs and to enable a truly global dimension of cooperation. Together with their key stakeholders, the Academic & Research community, NRENs have changed the way research is performed worldwide, creating a new paradigm commonly known as e-Science. However advancements in ICTs and the extension of this paradigm to all domains, the uptake of new powerful

applications and the consequent growth of the amount of data available to scientists calls for further and dramatic transformations in this field: new challenges that NRENs must be prepared to confront.

In this presentation these themes will be discussed with the 20-years experience gained by GARR in mind.

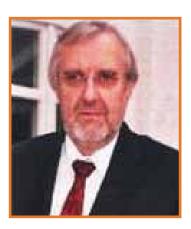


Dr Paul Lefrere

Dr Paul Lefrere is a Professor of eLearning at the UK Open University's Institute of Educational Technology. He has been Microsoft's Executive Director for eLearning, in which role he served on various European and national advisory groups concerned with professional learning and related topics, and also on Europe's e-learning Industry Group, eLIG. Until 2003 he was Policy Adviser at the Open University, where he was also Academic Director of a number of international multi-university projects concerned with e-skills and knowledge management Dr Paul has been engaged in a number of development and consultancy activities in many countries of the world including the Middle East and Pakistan. His main interests are in Educational Technology Rapid competence, development, cognitive augmentation, serious games, simulations, Open Innovation, OER

Title of Presentation:

Emerging Technologies and Infrastructures - anticipating user needs



Dr Anton Mangstl

Anton Mangstl has a Ph.D. in Crop Science and is a specialist in agronomy and information management. He is now the Vice President of the German-Jordanian University. Prior to joining the German-Jordanian University, He was the Director of the Knowledge Exchange and Capacity Building Division for the Food and Agriculture Organization (FAO) of the UN since 1996. Dr Mangstl has guided the transition of its information services into the internet age. He was the Director of the Central German Center for Agricultural Documentation, the Director of the Centre for Agricultural Documentation and Information (ZADI) Bonn, Germany, and the Deputy to the Head of the Working Group on Crop Production and Informatics, Center for Life and Food Sciences in Agriculture, Freising-Weihenstephan (Germany).

Title of Presentation:

KM, ICT's for development and e-learning initiatives in the agricultural sector



Dr Hussam Sultan Al-Ulama

Dr Al-Ulama was born in Dubai-United Arab Emirates in 1963. He graduated from UAE University with a BA in Geography. In 1989, he was appointed as a teaching Assistant at the College of Humanities and Social Sciences at the UAE University. Dr Ul-Ulama completed his postgraduate studies at Durham University in the UK and obtained a PhD Degree in Political Geography in 1994. After that he became a faculty member at UAE University. In 1996, he was appointed as Assistant to the Dean of Faculty of Humanities and Social Sciences at the UAE University, with a focus on Student Affairs. He continued to do so until 2000, when he became Dean of Libraries of the UAE University. A position he maintained until mid-2010. By mid-2010, Dr Al-Ulama was appointed as the Cultural Attaché of the UAE Embassy in Washington, D.C. In October 2011, Dr Al-Ulama was appointed as Director of the UAE's National Research Foundation (NRF). NRF is a research capacity building and funding agency within the Ministry of Higher Education and Scientific Research, U.A.E.

Dr Hussam Sultan Al-Ulama is a member of many local, regional and International Committees and Organizations and is an active attendee of many conferences, forums and workshops. He is also very active as a guest speaker for lectures.

Title of Presentation:

Energy Security in a Turbulent World



Dr Jomana Amara

Jomana Amara, Ph.D., P.E., is assistant professor of economics at the Defense Resources Management Institute at the Naval Postgraduate School in Monterey, California and a Fulbright Scholar. Dr Amara was a project leader with Shell Oil before joining the Naval Postgraduate School. She currently researches and publishes on international economics, defense economics, health economics, and the economics of the public sector. Dr Amara is the author of the forthcoming book Economic Development and Post Conflict Reconstruction and co-editor of Military Medicine: From Pre-Deployment to Post-Separation. She has published in numerous peer-reviewed journals. Dr Amara is a member of the American Economic Association (AEA) and the International Institute of Strategic Studies (IISS).

Title of Presentation:

Energy Security in a Turbulent World

Abstract:

As a result of two related and compelling issues: volatile and rising energy prices and increasing global concern about climate change, threats to energy security and adverse effects of energy usage on the global climate, have emerged as key issues in national energy security policy. Energy security which translates to national concerns about the security of energy supplies is a driver of international relations and has the potential to create conflict over scarce energy supplies.

Nations need to be secure in terms of the source, flow and distribution of energy. One proposed method for improving energy security is the adoption of distributed power systems. Distributed power systems are a combination of distributed power generation and electricity storage technologies. Distributed power systems have the potential to become a major part of electricity infrastructure due to the drop in key technology costs. But in this rapidly advancing field, the great progress on the technological front has yet to be fully matched by progress in policy making. Major questions of affordability, integration, and security remain to be answered before the role of distributed energy sources is defined.



HE Dr Isam Zabalawi

Dr Zabalawi was born in Amman, Jordan (1950). He received his B.Sc. honors with distinction in electrical engineering (communications) in 1974 from Cairo University (Egypt), and his M.Sc. with distinction in Microwave Communication Engineering form Leeds University (England) in 1976, and his Ph.D. in Electrical and Electronics Engineering from Leeds University (England) in 1979. He was granted The Leeds University award for graduate studies for three years 1976-1979. Dr Zabalawi is specialized in analog and digital signal processing and communication techniques. His interests include: communication industry, information technology, and technology transfer and higher education development Dr Zabalawi is currently the president of The Arab Academy for Banking & Financial Sciences since 2009, Dr Zabalawi Was the President of International University for Science And Technology (IUST) 2005-2007. Was a higher education Consultant for several companies (Trans middle east Int. distribution Co - Eduhouse Int.Co) 2005-2007. Dr Zabalawi became the Minister of Higher Education and Scientific Research – Jordan 2003-2005. Was the Chancellor of the University of Sharjah from 1999-2003. In 1999 he became the Chairman of the Higher Education Accreditation Council of Jordan. In 1996 he became the Vice-President (Scientific and Medical Faculties) of the University of Jordan. In 1994 he headed the Electrical and Electronics Engineering Dept. of the College of Engineering at Sultan Qaboos University, Sultanate of Oman. Between 1989-1993, he served as the Dean of the Faculty of Engineering and Technology, University of Jordan, Amman, Jordan. Prior that he chaired the Department of Electrical and Electronic Engineering at the University, where he taught a number

of courses in his field at the undergraduate and graduate levels and he supervised a number of graduate theses. Dr Zabalawi has organized and chaired a number of regional and international conferences and workshops. He is a well-published research scholar. He was a research fellow with the German Academy of Exchange (DAAD) at the University of Karsruhe, the Technical University of Hamburg, and the University of Erlangen, Germany. In addition he was a Research fellow, Electrical Engineering Dept., University of Victoria, Victoria, Canada and Research Fellow with Telenokia, Helsinki, and University of Tampere in Finland. Furthermore, he is a higher education expert with EU Dr Zabalawi served (1993-1997) as the UK Engineering Council Representative for Jordan and Gulf States.. He is a Chartered Engineer and a senior member at the IEEE (Institute of Electrical & Electronics Engineers, New York, U.S.A., Fellow (FIET), Institute of Engineering and Technology, (IET) UK. And member of Jordan Engineering Association, 1974. Dr Zabalawi is a member in: The Arab Thought Forum, World Affairs Society. And the Jordanian Academicians Association.

Title of Presentation:

The Role of e-Infrastructure in Reshaping Higher Education(HE)

Abstract:

Technology has often been cited as the major driving force behind innovation in HE and reform. E-Infrastructure is reshaping and eventually revolutionizing both our society and our educational institutions. Innovations in technology and the invention of the Internet are having a major impact on education and are bound to change the traditional university into what is called the "hyper " or the "virtual " university which in no way resembles the contemporary physical university. These technologies have vastly increased our capacity to know, to do things and to communicate and collaborate with others. They allow us to transmit information quickly and widely, and link to distant places and diverse areas. Within the context of HE ; the presentation demonstrates the role of e-l in reshaping the:

- university model, mission and environment.
- teaching and learning facilities, material, and processes
- the instructor role
- programs structure and degrees awarding
- graduates competencies
- globalization and commercialization of HE services
- import and export of HE services.
- research and development activities

Finally, concluding remarks and recommendations are presented.



Dr Antonella Fresa

ICT expert, working on European cooperation projects and policy development frameworks. Member of the Concertation Table of the Italian Ministries of Culture and Research, about the implementation of the Joint Programming Initiative on Cultural Heritage. Technical Coordinator of Linked Heritage Best Practice Network for Digital Libraries, DC-NET ERA-NET for Digital Cultural Heritage e-Infrastructures, INDICATE Coordination Action for pilots and use case studies on digital cultural heritage in the Mediterranean region, MINERVA series (Ministerial network for valorising digitisation activities in Europe) and MICHAEL series (Multilingual inventory of cultural heritage in Europe). Since 2002 advisor of the Italian Ministry of Cultural Heritage and Activities. General Manager and Administrator of Promoter, ICT consultancy & development company established in Pisa, Italy. Project Officer at the European Commission between 1999 and 2002. Previously: policy advisor for the High Technology Network of the Tuscany Region (1994-1998), product manager at Tower Tech engineering company in Pisa (1989-1994), video controller development manager at Olivetti Advanced Technology Center in Cupertino-California (1987-1989), system engineer at the research centres of Olivetti in Pisa and Ivrea (1980-1987).

Title of Presentation:

Towards a Digital Cultural Heritage e- Infrastructure



Dr Mohammad Saraireh

Education:

BA: English Language and Literature, Yarmouk University (1980), MA in Linguistics: Indiana University-Bloomington, USA (1984), MA in Linguistics: University of Wisconsin-Madison, USA (1986), Ph.D. in Linguistics/Translation: University of Wisconsin-Madison (1990).

Teaching Experience: Teaching English language, linguistics, and translation courses at BA and MA levels in the Department of English Language and Literature and the Translation Department at Yarmouk University and Irbid Private University, Jordan since 1990.

Administrative Experience:

Chairman of the Department of English Language and Literature, Vice Dean, and Acting Dean at Irbid Private University (1996-1997); Director of the Library Department at Yarmouk University (1999-2011).

Research interest:

Linguistics and language studies: syntax, phonology, computational linguistics, discourse analysis, language acquisition; Translation: theory, machine translation.

Title of Presentation:

Center of Excellence for Library Services in Jordanian Public Universities: A Story of Success

Abstract:

This document illustrates the stages of establishing the Center of Excellence for Library Services in Public Universities in Jordan. It delineates the different services this Center has been providing to the member universities. Moreover, it also shows the peripheral services that are not possible without the existence of this center. The document also provides evidence of the financial benefits that member universities gain, especially in subscriptions to electronic resources. Finally, the document outlines the potential services and some of the obstacles.



Dr Constantia Alexandrou

Résumé:

Constantia Alexandrou received a BA degree in Physics from the University of Oxford in 1980 and a PhD in Theoretical Nuclear Physics from the Massachusetts Institute of Technology, USA in 1985. She held research positions at the Paul Scherer Institute, Switzerland and at Erlangen University, Germany.

Dr Alexandrou is Professor at the Physics Department of the University of Cyprus, where she leads the Lattice Quantum Chromodynamics (QCD) Computational Lab. She is coordinator of several research programs, has numerous scientific publications and invited talks at international meetings and has organized several workshops in Cyprus and abroad. She is the representative of Cyprus at IUPAP and PRACE.

For The Cyprus Institute, she served as Vice-Chair of the Interim Governing Board (IGB) and as Chair of the IGB of the Computational-based Science and Technology Research Center (CaSToRC). In July 2010, the Board of the Institute bestowed her with the title of 'Institute Professor'.

Research Interests:

Theoretical Strong Interaction Physics: Lattice Quantum Chromodynamics, Stochastic techniques for many fermion systems, Quark models, Variational methods in quantum field theories

Title of Presentation:

Developing Computational Science in the Eastern Mediterranean region

Abstract:

Scientific research in a growing and diverse number of disciplines is becoming increasingly dependent on large-scale computational resources. It also requires development of appropriate algorithms and efficient codes. LinkSCEEM (Linking Scientific Computing in Europe and in the Easterm Mediterranean)recognizes that to remain competitive, scientists in the Eastern Mediterranean area must be provided with High Performance Computing (HPC) recourses sustained by technical expertise and know-how. The objectives of LinkSCEEM are presented together with the roadmap of the implementation of the project.

The infrastructure project LinkSCEEM is a joint collaborative effort of 11 Institutions in Europe, the Eastern Mediterranean and the US, funded in part by the European Commission's 7th Framework Programme.



Dr Tryfon Chiotis

Résumé:

Tryfon Chiotis is working for the Greek Research and Technology Network (GRNET), which provides advanced internet & computing services to Greek universities and research institutes, under the General Secretariat of Research & Technology. He is the Chief Technical Officer of GRNET since 1999. He is a member of the NREN - Policy Committee of the Pan-European Research Network GEANT, as well as a member the TERENA General Assembly and the e-IRG (e-Infrastructure Reflection Group).

Title of Presentation:

High Performance Computing and Cloud Technologies in Greece and South Eastern Europe

Abstract:

High Performance Computing and Cloud Technologies in Greece and South Eastern Europe "

We focus on Greek national and South-East European regional developments in areas of HPC and cloud computing, and show how they complement each other. Regarding cloud computing, the cloud and storage services for Greek research and education community will be presented, including the Virtual Private Servers (VPS) VIMA service offering persistent volumes/longevity/nonvolatile VMs (RACKSPACE style); a Public Cloud Service OKEANOS (VM, volumes) offering short lived/volatile instances (high churn rate, Amazon (AWS) style); and the Online File Storage Service PITHOS (Amazon S3 like) offering files, groups, REST API. Next, the SEERA-EI project's Pilot Joint Call in cloud computing

will be presented, demonstrating SEE regional collaboration regarding dedicated cloud programmes. Regarding HPC, the plans for Greek HPC procurements will be presented, as well as the HP-SEE project results in setting up the regional distributed HPC infrastructure.



Dr Fotis Karagiannis

Résumé:

Dr Fotis Karagiannis (http://www.linkedin.com/in/fotisk) has 17 years of experience in the ICT research area, focusing mainly in research networking and computing e-Infrastructures. He received his PhD in 1998 in the fields of Integrated Communications and Management of Broadband Networks from the National Technical University of Athens (NTUA). He participated in multiple European research projects working for commercial or research entities such as OTE Consulting (now OTEPlus), GRNET, CERN, CESNET, Microsoft Research Cambridge, Microsoft Innovation Center Greece, ATHENA Research Center, and Athens University of Economics and Business. He has worked for major e-Infrastructure and policy projects such as the GEANT, EGEE series, EGI Design Study, PRACE, and the e-IRG support projects. From 2010 he is involved in the Global Research Data Infrastructures 2020 (GRDI2020) with ATHENA research center, in the VENUS-C project on Cloud Computing for Research with the Microsoft Innovation Center in Greece and in the Eumedgrid-Support project with Trust-IT Services. Since August 2011 he is coordinating the e-FISCAL project entitled "Financial Study for Sustainable Computing e-Infrastructures".

Title of Presentation:

Towards Sustainable Computing e-Infrastructures across the Mediterranean", e-FISCAL

Abstract:

Over the last ten years countries across the Mediterranean and in particular the EC have made significant investments in e-Infrastructures for scientific computing, notably High Throughput Computing (HTC), i.e. Grids and High Performance Computing (HPC) services including the Eumedgrid and LinkSCEEM project series. Sustainability of such services is crucial, as the research supported by them is becoming more and more essential– and sustainability can be planned better if the costs are known. The emerging commercial offerings (Cloud-based HTC and HPC solutions) pose additional challenges and opportunities for sustainability. Similarly energy saving and green computing are also increasingly relevant. It is thus vital to understand the cost of the dedicated computing related e-Infrastructures. The calculation of such costs is not trivial; keeping detailed accounting data for the evolving mix of capital (hardware) and operational (personnel, energy) expenditures is only one of the challenges. The scope of the e-FISCAL project is to analyse such costs, facilitated by national entities (NGIs and HPC centres), compare them with equivalent commercial leased or on-demand offerings and provide an evaluation report. The execution of the survey builds on a small-scale survey conducted by the e-IRGSP2 project that proved the complexity of the issue and provided tacit knowledge valuable for the e-FISCAL project.



Dr Federico Ruggieri

Federico Ruggieri, is a senior physicist and Director of Research at INFN (Italian National Institute for Nuclear Physics). He spent most of his professional life working on On-Line and Off-line Computing Systems for High Energy Physics experiments at CERN and at Frascati, INFN National Laboratory. He promoted the first GRID project approved and funded by the European Commission: EU-DataGRID and started the Tier1 of INFN-CNAF in Bologna where he was the Director from 1998 to 2004. Since 1980 he played an important role in the development of the Communication Networks for Research and Education in Italy and GARR the Italian National Research and Academic Network. From 2006 onward he led projects co-funded by the European Commission's VI Framework Program EUChinaGRID and EUMEDGRID and he is presently the coordinator of EUMEDGRID-Support and CHAIN projects in the VII FP. He is also professor of Data Acquisition and Control of Experiments in the Department of Physics of the University of Roma TRE.

Federico Ruggieri has a list of more than 340 articles and publications in the domains of Physics, Data Acquisition and ICT.

Title of Presentation:

e-Infrastructure as means for advancing research and education



Dr Yousef Nussier

Graduated from England, worked with the Royal Scientific Society -Jordan 1977-1993, and was the Director of Information Technology and Training Centre, and Dean of Princess Sumaya College for Informatics. 1990-1991 worked with UNESCO as Chief Technical Advisor on Informatics in Education. Established the National Information Technology Centre in 1993 and became its President until 2006. Chaired and participated in several national, regional and international committees on ICT and the information society, and has designed and implemented several national ICT systems, set ICT policies and strategies and conducted institutional and national studies. Has been Internet Top Level Domain Administrator for (JO) domain from 1995 until 2006, and has many publications in ICT and related areas. In 2006 joined UN-ESCWA as Director of the ICT Division, planning, implementing and supervising regional initiatives, including analytical studies to meet the needs of member countries, and established the ESCWA Technology Centre for regional integration in Jordan.

Title of Presentation:

Regional Integration for Building the Information Society

Abstract:

One of the more important characteristics of the Information Society is its cooperative participatory approach. Various stakeholders from different sectors of society should coordinate and harmonize their respective activities in order to develop a sustainable integrated information society. This holds true across all fields; however, in this intervention the emphasis will be on selected areas of regional interest and importance, namely, the promotion of digital Arabic content to enhance multilingualism and cultural diversity in cyberspace, taking into consideration the shortage of Arabic content on the net.

The harmonization of cyber legislation is another area of extreme importance to the process of regional integration. Extensive efforts in this area have been initiated and implemented by the Economic and Social commission for Western Asia (ESCWA), in cooperation with other Arab regional and national organizations.

Although progress in building the Information Society (I.S) is being made in almost all the countries of our region, still monitoring progress and benchmarking it against progress made in other regions of the world is, again, an important aspect for building a viable competitive I.S. Measuring the I.S. initiatives are a major components of an integrated regional approach to development.

Finally, there are several important areas that should be considered and properly addressed in this regard, namely: infrastructure, accessibility, Internet governance, social media, security and trust issues, capacity building, not forgetting the Arab Region ICT strategy.



Dr Roberto Barbera

Dr Roberto Barbera was born in Catania (Italy) in October 1963. He graduated in Physics "cum laude" at the University of Catania in 1986 and since 1990 he holds a Ph.D. in Physics from the same University. Since beginning of 2005 he is Associated Professor at the Department of Physics and Astronomy of the Catania University. Since his graduation his main research activity has been done in the domains of Experimental Nuclear and Particle Physics. He has been involved in many experiments in France, Russia, United States and Sweden to study nuclear matter properties in heavy ion collisions at intermediate energies. He is author of about 90 scientific papers published on international journals and more than 150 proceedings of international conferences. He is editor of the International Journal of Distributed Systems and Technologies and referee of both Journal of Grid Computing and Future Generation Computer Systems. Since 1997 he is involved in the NA57 Experiment at CERN SPS and in the ALICE Experiment at CERN LHC. Within ALICE, he has been the coordinator of the Off-line software of the Inner Tracking System detector and member of the Off-line Board. Since late 1999 he is interested in Grid Computing. He is member of the Executive Board of the Italian INFN Grid Project, of the Executive Committee of the Italian Grid Infrastructure (the Italian National Grid Initiative) and of the Scientific & Technical Committee of GARR (the Italian National Research and Education Network). Between 2005 and 2009 he has been the Director of two big Grid Projects (TriGrid VL and PI2S2) funded by the Sicilian Regional Government and by the Ministry of University and Research, respectively. At European level, he has been involved with managerial duties in many EU funded projects and he is currently the Coordinator of the EPIKH project. Since 2002 he is the responsible of the GENIUS Grid portal project and, in 2004, he created the international GILDA Grid infrastructure for training and dissemination that he coordinates since the beginning.

Title of Presentation:

Science Gateways and Identity Federations for a wider use of e-Infrastructures

Abstract:

Grid infrastructures are being built in several areas of the world but, despite the huge investments made by the European Commission and by other funding agencies, both at national and international level, the total number of users is much less than that of the users of the GÉANT network which has been funded more or less the same level of Grids. The reasons for this are the complex Grid security, the little adoption of standards, and the lack of general frameworks to build easily customizable high-level user interfaces.

Recently, interesting developments have been independently carried out by the Grid community with the Science Gateways and by the National Research and Education Networks with the Identity Federations to ease, from one side, the access and use of Grid infrastructures and, from the other side, to increase the number of users authorised to access networkbased services. This presentation will show the work done to develop a framework to easily and quickly build Science Gateways which can be configured as Service Providers of Identity Federations and then potentially accessible by huge numbers of users. The advantages to create Identity Federations and Science Gateways in the Mediterranean and the Middle-East will be outlined.



Dr Ognjen Prnjat

Dr Ognjen Prnjat holds the position of European and Regional eInfrastructure manager in the, where he is acting as the coordinator of the DG-INFSO HP-SEE project (High-Performance Computing Infrastructure for South East Europe's Research Communities) and coordinates sustainability work in the CHAIN project. In these roles he is responsible for organizing various aspects of electronic infrastructures in the SEE region and beyond, and their sustainability and seamless integration in pan-European eScience infrastructure. Ognjen also coordinates the DG-RTD SEERAEI (South East European Research Area for e-Infrastructures) project, which brings

together programme managers from 10 countries in the SEE region in common strategy planning and joint programming in the area of electronic infrastructures. Previously Ognjen was with the Department of Electronic and Electrical Eng., University College London, where as a Research Fellow he was leading technical and project management aspects of a number of EC ACTS/IST and UK EPSRC projects in diverse fields of computing and telecoms. He holds a Bachelor of Eng. Degree in Electronics and Electrical Eng. (First Class Honours) from University of Surrey, UK, 1995; MSc (Distinction), 1996, from University College London; and Ph.D. in Telecoms from UCL, 2001.

Title of Presentation:

"CHAIN eInfrastructure sustainability recommendations and existing sustainability guidelines"

Abstract:

The CHAIN project, started on the 1st of December 2010, aims to coordinate and leverage the efforts made over the past 6 years to extend the European e-Infrastructure (and particularly Grid) operational and organisational principles to a number of regions in the world. CHAIN uses these results with a vision of a harmonised and optimised interaction model for e-Infrastructure and specifically Grid interfaces between Europe and the rest of the world.

To support long-term Grid intercontinental collaboration, the issue of national-level sustainability of Grid infrastructures is paramount. This talk focuses on sustainability recommendations defined by the CHAIN project, with the focus on the recommendations for the Mediterranean region covered by ASREN. Moreover, the concrete sustainability guidelines systemized and provided by the project will be presented. The main vehicle for sustainability on the national level is the concept of a National Grid Initiative (NGI), and a clear step-wise approach to setting up NGIs, based on the model of the SEE-GRID project, will be also presented.



Mr Serkan Orcan

Serkan Orcan is the deputy director of Turkish Academic Network and Information Center (ULAKBİM) since June, 2005. He graduated from the Computer Engineering Department of Middle East Technical University. He also received his MS degree in Science and Technology Policy Studies of Middle East Technical University. His major areas of interest are national innovation systems, telecommunication, research and education networks. He also is Turkish member of e-IRG and NREN PC.

Title of Presentation:

"Perspectives on the Turkish Research and Education Network, ULAKBIM Experience"

Abstract:

National Research and Education Networks (NRENs) are organizations to serve research, learning and communication needs of universities and government R&D institutions. Established in 1996, National Academic Network and Information Center (ULAKBIM), has been operating Turkish Academic Network (ULAKNET) to build a nation-wide research network for the members of national innovation system for sixteen years. In presentation, after presenting overview of telecommunication sector and evaluating current performance of the ULAKNET, it will be focused on service/e-infrastructures provided through ULAKNET and future networking necessities of national innovation system. At the end, it will be presented some issues, including the e-infrastuctures entegration with Arap states, that need to be addressed by future efforts for Turkish research and education network.



Dr Mohamed JEMNI

Résumé:

Mohamed JEMNI is a Professor of ICT and Educational Technologies at the University of Tunis, Tunisia. He is the Head of the Laboratory Research of Technologies of Information and Communication (UTIC) of the University of Tunis (www.utic.rnu.tn). Since August 2008, he is the General chair of the Computing Center El Khawarizmi, the Internet services provider for the sector of higher education and scientific research in Tunisia. His Research Projects Involvements are Grid computing and e-infrastructure, tools and environments of e-learning and Accessibility of ICT to People with Disabilities. He is currently conducting three main projects in his laboratory:

- Development of a Tunisian National Grid for scientific research (www. tngrid.tn)
- Development of an e-learning environment for students with disabilities.
- Improving accessibility of deaf community by the use of ICT and sign language.

He published more than 150 papers in international journals and conferences and realized many studies for international organizations such as UNESCO, ITU and ALECSO.

His Web page : www.utic.rnu.tn/english/memb_jemni.htm

Title of presentation:

The use of e-infrastructure for inclusion of people with disabilities, the case of deaf people

Abstract:

WebSign is a project developed in UTIC Research Laboratory of the University of Tunis with the aim of improving communication with deaf people thanks to the ICT.

The objective of our project is to develop a Web-based interpreter of Sign Language (SL). This tool would enable people who do not know SL to communicate with deaf individuals and, therefore, contribute in reducing the language barrier between deaf and hearing people. Websign is based on the technology of avatar (animation in virtual world). The input of the system is a text in natural language. The output is a real-time and on-line translation in sign language. This translation is based on Statistical Machine Translation (SMT) approach. The SMT approach treats the translation of natural language as machine learning problem and needs, in particular, to apply a learning algorithm to a very large body of parallel corpus.

In this talk, we will present this project and in particular the use of e-infrastructure, for instance Eumedgrid platform, to obtain the biggest dictionary of sign language in the world i.e. a dictionary containing more than 52 millions words in sign language.

Mr Dahir Hassan

Chief Executive Officer Somali Research and Education Network (SomaliREN)

Title of Presentation:

Perspectives on the Somalian Research and Education Network

Abstract:

The Somali Research and Education Network (SomaliREN) was established to contribute to the improvement of the quality of higher education, but more importantly to serve as the link between the institutions themselves, facilitating research and collaboration among the member institutions, and with their international peers across the borders.

Since its establishment in November 2009, the organization was fending off the practical challenges shared across most of the NRENs and peculiar issues unique to the circumstances under which it exists. At the forefront of these challenges is the inexistence of network infrastructure to enable the NREN to establish virtual infrastructures upon, and focus more on the more critical aspects of fulfilling its mandate.

In terms of technical development, SomaliREN has completed the plans for its first generation network which is expected to go operational in mid-2011. Discussions with the telecom operators are also in progress to test the viability of shared infrastructure, especially for intercity connectivity. Other endeavors of the NREN include organizing multitopic academic symposiums as a way of generating academic-quality content, and initiating projects to revive research work in the country and to build a researcher network to collaborate on relevant research in the areas of agriculture and livestock, medicine, and social sciences.

This paper looks into the short history of SomaliREN, the challenges it faces mainly due to the current circumstances of the country, and tries to give a glimpse into the future of education and research networking in Somalia.



Dr Ahmed Dabbagh

Dr Ahmed Dabbagh is Manager of Technology & Services Development at the UAE Advanced Network for Research and Education "Ankabut". His main work is to enhance collaboration between the different Higher Education Institutions over UAE, by using the stat-of-the-art technology to connect and communicate and to create a common sense in research and education, like eLearning, eLibrary and Grid Computing. Dr Dabbagh is leading the UAE initiatives in Grid-Cloud Computing and the Certification Authority. Prior to joining Ankabut, Dr Dabbagh was the Director of the Academic e-Services Department at Ajman University of Science and Technology, UAE. Dr Dabbagh was working in France & Germany for several years in the domain of micro-controllers and a wide range of micro-processors architectures ranging from 16 bits up to 64 bit with the very known Semiconductors industry like STMicroelectronics, Siemens, Motorola,.... He is the inventor of several patents in this important field. Dr Dabbagh gained a Master of Science "D.E.A." in Images and Signal Processing from the University of Rennes in 1991 and a PhD in Telecommunications from the University of Rennes, France, in 1995.

Title of Presentation:

Ankabut C3: Connect – Communicate – Collaborate with Researchers and Educational Institutions

Abstract:

Ankabut is the United Arab Emirates' National Research and Education Network (NREN) offering academic institutions connectivity to other education networks around the world. In addition to connecting universities, Ankabut can connect schools and public institutions together across the UAE with an effective cost model. Ankabut also co-operates on a national, GCC, regional and international arena representing the UAE in conferences, exhibitions and forums. Ankabut aims to offer Quality of Services based networks with IPv4/IPv6, multicast and introduce advanced services on a "Closed Group Network" with "Public Interest Purposes".

The Ankabut Project is jointly funded by the TRA through the ICT fund and by Khalifa University.

Ankabut interconnects universities with a 10G backbone and 1G access links. It provides a closed community network that allows the transfer of real-time services such as converged IM, voice and video communication, time-critical services such as grid computing interconnect (cloud computing), non-real time services such as e-learning, email, library interconnect, off-site disaster recovery, global federated single-sign-on and Wi-Fi networking to name a few.

Ankabut supports initiatives in the e-learning environment, library content and distribution systems and research collaboration. Ankabut believes that identifying these initiatives and offering network, processing and storage support is the best way to develop a collective collaborative approach to research and education.

The presentation will clarify the current progress of Ankabut: the UAE's National Research and Education Network. Significant progress has been made in achieving fiber connectivity to the institutions, 53 Connections are either connected or in progress.

Early value added services are being deployed within Ankabut. This is seen as a maturing of the network infrastructure, even though challenges exist. To support Provider Independent addressing Ankabut has implemented ISP like services.



Mr Radi El Fassed

Radi El Fassed, currently holds the position of Enterprise Solutions Director at Zain Jordan. In this role he is responsible to develop and market, ICT products and services that serve the Enterprise and Government sectors. He managed to position Zain as true integrated operator serving Jordan's biggest enterprises in less than a year. Radi has more than 15 years experience in the international Telecommunications industry where he held various positions in the field of Product Development, Network Architectures, Network and Business Strategy, Marketing & Business Development.

Radi joined Zain Jordan in 2010 as Data Strategy Director, where he supported Zain's CEO to transform Zain from a mobile only to integrated operator. Before joining Zain, Radi worked for Palestinian Telecom Group as Marketing Director and has held various Product management and Business Development roles at AT&T and Lucent Technologies Europe Middle East and Africa. During his career he was involved in numerous projects where he advised and implemented next generation network transformation strategies for most major operator groups and was involved in proposals and designs of various NREN networks like Surfnet (Netherlands), Dante (Europe) and EUMEDCONNECT. Radi has a MSc. in Applied Physics from Delft University of Technology in the Netherlands.

Title of Presentation:

Interconnectivity trends and challenges in the Arab region

NCSA Statement

Around the globe, researchers and educators are addressing many of the same key problems. The complexity of these problems is increasing rapidly - so is the complexity of the cyber resources and tools we have been developing to find solutions to these problems. This trend will continue and likely accelerate in the foreseeable future. More and more, it is becoming the case that the world needs to come together to establish common and open cyberinfrastructure allowing different perspectives and areas of expertise to be synthesized for jointly tackling the problems that are not separated by national borders, cultural differences, and disciplinary foci (e.g., public health, emergency management, environmental management, other key areas). Cyberinfrastructure resources and services over expansive and high-speed networks need to be built and evolved with open international collaborations empowered, which will play increasingly important roles in resolving the most challenging problems facing our world and society.

As a community, we are still in the early stages of building collaborative and open cyber-frameworks that can effectively bring together the expertise and resources needed for solving large-scale complex problems. NCSA, the National Center for Supercomputing Applications, at the University of Illinois has been a world leader working in this context for 25 years, with partners in numerous fields from many different parts of the world. We would welcome new opportunities to interact with colleagues in Jordan, and in other parts of the Eastern Mediterranean to see how we can work together. Your objectives for e-AGE 2011 are very important to advancing science, education, and engineering not only among the Arab States, but also in connecting them productively with other parts of the world. We wish your workshop a great success!

Danny Powell Executive Director, NCSA



Mr Aiman Mazahreh

Aiman Mazahreh is the General Manager of STS/Jordan and President of Arab Academy for Microsoft Technologies.

A computer professional with more than 30 years of experience, graduated with a BS degree in electrical engineering from San Diego State University, California USA in 1981.

Upon graduation, Aiman worked for a year at Telecom Inc, in Washington DC but then decided to go back to Jordan and establish a career at home in Jordan. Immediately upon return to Jordan he worked at Jordan telecom as a communication engineer at the central Abdali Microwave station. Driven by his love for computer technology he left Jordan Telecom and joined a computer company in Amman called National Computer Systems (NCS). At NCS he started his computer engineering profession installing and maintaining Digital computers (DEC) and working with operating systems such as the very known at that time VAX VMS. During that period he attended many training courses in the UK and US on various Computer hardware machines and in 1987 he was appointed chief of engineers at NCS and continued on till end of 1989.

In 1990 he joined two of his friends to co-found STS. From 1990 till today, he helped grow STS from a 3 people company to a regional 320 employee company. Headquartered in Amman, Jordan with regional offices in Saudi Arabia, Bahrain, UAE and Palestine, STS is now recognized as one of the leading and most successful IT system integrators in Jordan and the region. Today Aiman is the General Manager of STS/Jordan overlooking the day to day operation of the organization.

And, in response to Jordan's need for specialized technical training, Aiman established in 2004 an STS Sister company named the Arab Academy for MS technologies. The Academy is a training institution that delivers high end training on various technologies such as MS and Cisco. Today Aiman leads both STS and the Academy.

Aiman was also chairman of the Board of (Intaj) the Association of Computer companies in Jordan for the period 2010-2011. Aiman is also one of the founding Board members Of OASIS 500 an ICT fund for startups.

Title of Presentation:

Integration of ICT services can help build better Economy.

Abstract:

Arab Countries and Jordan in particular have suffered in recent years from the impact of the Global Economic Crisis, which led to increased debt and huge budget deficit. Governments and Finance Ministers under increased pressure from World Bank and the public to improve conditions have opted to reduce capital expenditure across the economy including the ICT sector. While proper spending to integrate ICT services in to the various activities of the economy should actually help alleviate some of the problems and can build a stronger economy.



Dr Salem Alagtash

Salem Al-Agtash, got his Ph.D. in Electrical Engineering from the University of Colorado at Boulder in 1998. He is now an associate professor of Computer Engineering at the German Jordanian University and a Senior Advisor on ICT and Technology at Talal Abu-Ghazaleh Organization. Dr. Al-Agtash teaches classes in the fields of computer systems, electrical engineering, systems programming, and robotics at the undergraduate and graduate levels. His research interests are in the areas of electricity markets, agent based energy systems, education, innovation, and industrial linkages and international cooperation.

Beyond his academic work, he is a consultant and advisor on several technology and education related projects at Talal Abu-Ghazaleh Organization, European Commission, United Nations, University, and many national and international organizations. During his academic career, he served as a department chair, founding director, founding dean, and currently the managing director of the Arab States Research and Education Network, GmbH, a non-profit institution responsible for developing a sustainable Pan-Arab e-Infrastructure dedicated for research and education and connecting the Arab Universities and research centers.

Dr. Al-Agtash is fluent in Arabic, English, and Turkish, has devoted a large portion of his career towards research advancement, developing relevant and quality ICT educational programs, strengthening tri-partite links between university, private sector and government, and building international cooperation. He won several awards and grants and has published more than twenty refereed journal papers and about twenty five conference papers and working reports. He is a prominent speaker in many national and international conferences and meetings.

Title of Presentation:

Towards a Pan – Arab e-Infrastructure

Yousef Torman

Yousef Torman is currently working as Executive Director of the Jordanian Universities Network (JUNet). He is responsible for the management of Jordanian National Research and Education Network. He is a member of many national regional committees and initiatives that focus on research and education infrastructures. The main focus of Yousef is to promote and encourage the use of technology and networks for research and education. He also co-established and managed the Computer and Information Center at Jordan University of Science and Technology (JUST); one of the largest Universities in the region with focus on science and technology.

Yousef has played a prominent and key role in the efforts and initiatives that aim to establish a Pan Arab regional elnfrastructure for scientific research since more than 5 years.

Yousef is working also as a Managing Director at the Arab States Research and Education Network (ASREN) for Technology, Networking and Infrastructures.

Title of Presentation: the Jordanian Universities Network





EUMEDGRID-Support: Building Bridges across Borders, Scientific Domains and Gender.

Like a phoenix from the flames

The EUMEDGRID infrastructure has risen from the flames of the initiatives EUMEDCONNECT2, MIRA, CHAIN, SESAME, LinkSCEEM2, whose engagement towards a joint cooperation has been rekindled under the EUMEDGRID-Support umbrella. A new actor, ASREN was launched on December 2010, marking a new era for elnfrastructures in the South-Mediterranean area. Old websites were reestablished, additional help service tools were restored – i.e. xGUS, NAGIOS, wiki guides and technical specifications – and cross-checking activities were performed to ensure the correct working of the infrastructure and the access to resources.

A new geography of EUMEDGRID Certification authorities

Thanks to the valuable effort of EUMEDGRID-Support consortium and stakeholders' network, Certification Authorities have been set-up in countries where one and a half years ago, it would have been impossible to do so. This has been supported by a number of side events to ensure establish trust between the actors involved.

New Certification Authorities established thanks to EUMEDGRID-Support:



An easier gateway to science

While the infrastructure is being consolidated, building the community is a must. EUMEDGRID-Support training tools and schools, such as the EPIKH Application Porting Grid schools, shaped a new generation of EUMEDGRID users. The next step will be to introduce a Science Gateway to

A trustable team of Grid site administrators

Thanks to cooperation with the EPIKH training events and the Karlsruher Institut für Technologie (KIT) GGUS Team, the EUMEDGRID-Support project can rely on a support centre that actually maintains a ticketing system relying on xGUS. This is managed in collaboration with other international projects such as SAGrid (The South replace old training tools (gLite, command line and UI shell script). Users will not have to use personal certificates to access the Grid making it easier for users to access the grid environment and port applications and the development of new Virtual Research Communities.

African National Grid)and CHAIN (which coordinates international e-Infrastructure initiatives) which are involved in the Africa ROC initiative. This is an important target for the long-term sustainability of the Mediterranean e-Infrastructure.

EUMEDGRID-Support Co-funded under EC Framework Programme 7 Project No. 246589 Total cost: 870.000 € EC Contribution: 740.000€ Duration: 24 Months (Jan '10 - Dec '11)







"Building an eInfrastructure in the Mediterranean and Middle-East area is of fundamental importance for the countries involved. Nowadays high-guality and high-speed ICT infrastructures are responsible for a measurable part of the GDP increase of a country. Research and Education are forerunners of this process with elnfrastructures playing a key role in transforming the landscape by removing barriers, giving access to scientific data and providing resources to scientists, researchers, professors and, most importantly of all, to students. EUMEDGRID-Support and its infrastructure has successfully achieved a number of technical goals. It is also impacting on a policy level through the newly formed regional

entity ASREN (The Arab States Research and Education Network), and the interest solicited in other non-beneficiary countries (Lebanon, UAE, South Africa). Of course there is still a long way to go, and many opportunities to be explored; the more we explore the deployment of elnfrastructures the larger the horizon of opportunities and possible applications becomes."



Federico Ruggieri, EUMEDGRID-support Co-ordinator

The EUMEDGRID-Support Pillars

Training

Grid Schools for Site **Administrators** and Application Porting in collaboration with **EPIKH & CHAIN**

e-Training through www.eumedgrid.eu/

Creation The website www.eumedgrid.eu/

Awareness

The surveys surveys.healthgrid.org/ index.php?sid=63922& newtest=Y&lang=en

The events (EUMED3, ICT2010, IST Africa 2011, Role of e-Infrastructure for Climate Change, Workshop series on Fostering e-Infrastructures in Lebanon, HPCS2011, User Forum, EUMED4)

Application Support

20 Applications in several scientific domains (Computer Science & Mathematics, Heart Science, Life Science, Physics, Bioinformatics, Biomedicine..)

The Africa & Arabia Regional **Operation Centre** (Africa ROC) is the central hub for widely adopted grid operations tools for the regions roc.africa-grid.org/

2 levels support based on xGUS

The Science Gateway: an online community-oriented set of tools, applications and data providing a user-friendly approach to infrastructure use applications.eumedgrid.eu/sciencegateway

EUMEDGRID Infrastructure

38 sites (42 Computing Elements) in 15 countries Around 4000 core processors available 22 Storage Elements in II countries (around 600 TB)

Community



EUMEDGRID-Support Co-funded under EC Framework Programme 7

Project No. 246589 Total cost: 870.000 € EC Contribution: 740.000€ Duration: 24 Months (Jan '10 - Dec '11)



INFN

U 311

Istituto Nazionale di Fisica Nucleare (Italy)

sur

Centre de Calcul El Khawarezmi (Tunisia) Centre de Recherche





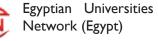
l'Information Scientifique et Technique (Algeria) Centre National pour la Recherche Scientifique et Technique (Morocco)







Cyprus Research and Academic Network (Cyprus)



GARR (Italy) GARR



Recherche Scientifique Institut de Grilles (France) Higher Institute for

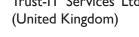
National

Ulusal

Applied Sciences and Technology (Syria)



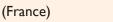
Jordanian Universities Network (Jordan) Trust-IT Services Ltd.







(Malta) HealthGrid





Islamic University of Gaza (Palestinian Territories)







e-infrastructure



ZAIN

Founded in 1995, Zain in Jordan was the first operator to introduce mobile phone services into the country. In just a few years, it earned its reputation as the most progressive telecom operator in the region in terms of competitiveness, readiness to adopt new technologies, deploy cutting-edge services and invest in community development through the most active and substantive corporate social responsibility (CSR) program in the country.

Since its inception, Zain in Jordan has tallied subscriber growth at an exponential rate, with the number of users currently around 3 million subscribers. Through more than 1,700 cell sites, Zain covers the entire populated area of the Kingdom.

In January 2003, the Zain Group acquired Zain in Jordan in what was considered the largest single acquisition in the Middle East area, and the largest private sector investment in Jordan. Today, Zain is the leading and the largest telecommunications network operator and services provider in the country. Since day one, Zain has deployed an advanced infrastructure and launched its services over a state-of-the-art network, one of the most developed networks in the region.

For more information, please go to www.jo.zain.com



10010

Zain SMART Business Solutions in your hands

Zain smart business solutions allow you to run your business simply and efficiently, saving you time, efforts and money. With the communication technology, IT management systems and meticulous electronic surveillance tools, your enterprise will grow steadily guaranteeing you peace of mind.

Ensure the future of your business with Zain's team of specialized experts in maintenance and continuous thorough follow-up, regardless of the size and requirements of your entity.

For more information please contact your Zain Account manager or call 079 750 9 750 or visit our website www.jo.zain.com



www.zain.com

A Wonderful World



SAMSUNG

Samsung Electronics Levant

Samsung Electronics Levant inaugurated its regional office in Jordan in 2009, the regional office covers (Jordan, Syria, Lebanon, Iraq and Palestine). Samsung brand leads the Jordan and the Levant market, where Samsung have an extensive network of partners, agents, representatives and distributors in the Levant region.

Samsung Electronics Co., Ltd. is a global leader in semiconductor, telecommunication, digital media and digital convergence technologies with 2010 consolidated sales of US\$135.8 billion. Employing approximately 190,500 people in 206 offices across 68 countries, the company consists of nine independently operated business units: Visual Display, Mobile Communications, Telecommunication Systems, Digital Appliances, IT Solutions, Digital Imaging, Memory, System LSI and LCD. Recognized as one of the fastest growing global brands, Samsung Electronics is a leading producer of digital TVs, semiconductor chips, mobile phones and TFT-LCDs.

And a proof for its success, Samsung Electronics advanced two ranks in the InterBrand list to rank 17th in the global list.

For more information, please visitwww.samsung.com.



دردىش!



Samsung GALAXY Tab

استكشف روائع أخف وأنحف وأسرع كمبيوتر لوحي في العالم. مع جالاكسي تاب ادخل في جُربة مثيرة وشيقة على شبكاتك الاجتماعية وتمتّع بألعابك المفضلة.





Jordan Telecom Group / Orange

Jordan Telecom Group (JTG) plays a prominent role in the information and communications technology sector. Its lineup of fixed, mobile, and internet services constitutes the real base for the Kingdom's telecommunications backbone and contributes to its integration with regional and world countries.

In the biggest integration of its kind in the market, JTG in 2006 combined its four companies under one umbrella, becoming the sole integrated operator in Jordan. In 2007, the Group adopted the Orange brand – the commercial brand of France Telecom Group –for all its fixed, mobile, internet and content services, marking another significant achievement for the ICT sector. This step aimed at providing the Jordanian market with the standardized world class services offered by the Orange brand, which has 190 million customers in 220 countries and territories worldwide.

Since then, Orange Jordan has made available the best telecommunications services for its customers by offering various and comprehensive services at affordable prices, – the most recent being the introduction of its 3G+ network, which made Orange Jordan the exclusive mobile operator in Jordan authorized to provide 3G+ services in the local market.

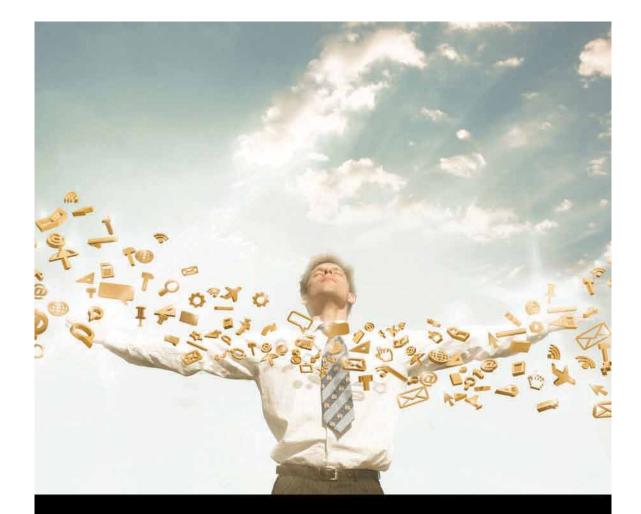
In 2009, Orange launched the Information Security Operation Center – a revolutionary project designed to provide imperative managed security services in accordance with international standards and with the capacity to compete with global security centers.

Orange Jordan Technocenter serve as a principal access for all the France Telecom –Orange affiliates in AMEA region that wish to acquire the high dedicated innovation streams, which include voice products and services, portal and multimedia in addition to broadband growth.

With its ability to call upon the vast expertise of its French partner and main shareholder, JTG continues to provide the market with all that the world telecom industry has to offer, supported by its state of the art digital network that extends to cover the Kingdom in its entirety.

With an unwavering commitment to its local community, JTG has established business goals that fall in line with sustainable development in the Kingdom, seeking to reconcile growth and competitiveness with its commitment to social development and the improvement of the quality of life for future generations.

The Group now serves more than 2.9 million customers with cutting edge technologies and world-class services offered at highly affordable prices.



كل ما يخطر ببالك من حلول اتصال متكاملة لإنجاح أعمالك

نحن في Orange ندرك طبيعة أعمالك؛ لذا نحرص على توفير كافة الحلول الملائمة لطبيعة متطلبات عملك؛ لتنجزها في أسرع وقت ممكن وبأقل جهد عبر:

- = خدمتي +3G و microwave لإتصال لاسلكي غير متقطع
- 🔳 حدمة Business Everywhere للتواصل مع أعمالك أينما كنت
- ا خدمة fleet management لمراقبة مركباتك ولتبقى على إتصال دائم معها
- مدمة IPVPN عبر شبكة الألياف الضوئية لتربط كافة فروع عملك مع بعضها بكل سهولة وأمان و بدون إنقطاع 🔳

التواصل مع أعمالك يتغيّر مع Orange

لزيد من العلومات يرجى الاتصال على 1215، أو بعدير البيعات التاص بلا أو تفضل بزيارة www.business.orange.jo

الأعمال تتغير مع <mark>"orange</mark>



Established in the kingdom in 2001, Microsoft has made impressive progress since its launch, founding close working relationships with 280 private companies in the IT and Communications Sectors to help them boost their competitiveness and grow. In order to achieve that Microsoft offers its partners programs which enable them to build their capacity, gain knowledge on Microsoft's new products and services, and transfer experience through Microsoft's experts. Microsoft Jordan is a leader not only in bringing innovative new technologies to the Jordanian market but also in its commitment to corporate social responsibility, playing a key role in developing local information and communications technology skills and capabilities.

Microsoft

Microsoft's . Commitment to Higher Education

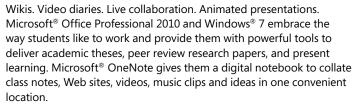
At Microsoft we're passionate about enabling faculty and students to learn, connect and collaborate.

We see education as the transforming force behind social and economic progress and students as humankind's greatest potential.

Our commitment to education is deep and ongoing. We've invested significantly in academic partnerships to foster research and development and breakthrough technologies.

We've inspired countless students with innovative software and opportunities to work through our Students 2 Business program. And we partner with Governments and inter-governmental agencies to imagine, deliver and support next generation learning.

Inspiring today's students



Microsoft[®] Live@edu, our complimentary cloud email and online collaboration tools, lets them collaborate easily across distances and connect to their academic and social network via SMS, text, email and video. And Imagine Cup, our international science competition, provides a world stage where they can apply technology to solve global challenges.

Moving into the future of learning

Regardless of whether your students use laptops, desktops, tablets or smartphones, Microsoft software provides a consistently great learning experience. We also support multiple languages, as well as speech, touch and stylus interfaces. And our ground-breaking Kinect[™] for Xbox[®] and Microsoft Surface[™] are revolutionising research and changing the way academics inspire and engage students.

Creating opportunities

Microsoft is the choice of companies the world over. So students who develop skills using our software fit easily to the workplace. To help those who select IT as a career, we offer tertiary institutions our IT Academy courseware, which has certified over 600,000 students to date. And through our Students 2 Business initiative we've connected a quarter of a million young people to internships and full-time jobs.

www.microsoft.com/education

LINKSCEEM

LinkSceem

Logo

The LinkSCEEM-2 project aims at the establishment of a high performance computing (HPC) eco-system in the Eastern Mediterranean region by interlinking and coordinating regional compute, storage and visualization resources to form an integrated e-infrastructure.

The main project objective is to enable scientific research in the region by engaging and supporting research communities with an initial emphasis in the fields of climate research, digital cultural heritage and synchrotron radiation applications.

To achieve its mission, the project will link e-resources, provide user support and training, carry out targeted networking activities, and, develop and implement a well-structured HPC resource allocation mechanism.

Three regional HPC centres, namely CaSToRC, BA and NARSS contribute computational resources to the integrated e-infrastructure of LinkSCEEM-2. Additional computational centres from the region may participate through integrating their resources during the course of the project.

Chain

The CHAIN project aims to further coordinate and leverage the experience of several e-Infrastructure projects and initiatives addressing various regions of the world and specifically those emerging in Asia and Africa, but also Latin America and the Mediterranean. CHAIN focuses on the harmonized and optimized interaction model for e-Infrastructure and specifically Grid interfaces between Europe and the rest of the world. The interoperation among regional infrastructures both at the management and organizational levels will be one of the major goals.

A questionnaire has been prepared to collect up to date information about the state of the art in all relevant regions. Sections are covering the existing infrastructure, deployed middleware, existing and anticipated interoperation with other regions/grids, organizational setup and policies and all the information that is considered relevant for the analysis. Two streams for collecting input (target audiences) are planned: a Regional level, a sort of a summary for the whole region (one per region) to be handled by the Regional Grid Representatives and a National level, requesting information about the NGI (if there is any), managed by NGI Representatives. The first results are expected to be available by end of July 2011. The full analysis will take more time and the plan is to have it finished by September 2011.





Farah Trading & Contracting Company

Founded in 1962 by the Farraj Family, the company is headquartered in Amman Jordan. It remains today a family owned and operated business.

Initsearly years the Farah Trading and Contracting Company developed into one of Jordan's largest contracting companies, responsible for the construction of many large buildings in and around Amman. Building on the business and management expertise gained in the original contracting business a decision was taken to redirect the company's resources and energies toward the manufacture and sale of circuit protection devices and electrical distribution technology. The developing electrical distribution systems throughout the Middle East provided a need for sophisticated products that would meet both local and international standards.

For 35 years, the Farah Trading & Contracting Company was the exclusive licensee of Westinghouse Electric and its successor company Cutler/Hammer (Eaton) for electrical distribution products in the Middle East, continually adding to their warehousing, manufacturing, modification and test facilities. In 2009, the license agreements with Eaton were terminated to allow Farah Trading to manufacture and market a proprietary brand of Circuit Protection Devices.

In February 2010, Farah Trading and Contracting Company reached an agreement to distribute GE General Electric (Electrical Distribution Products) in the UAE, Kuwait, Qatar, Oman and Jordan; to complement their own brand of

Circuit Protection Devices.

On October 2010 Qatar's first electrical equipment manufacturing facility was formally inaugurated, in Doah, by the Minister of State for Energy and Industry Affairs. It will manufacture and assemble GE General Electric's low voltage switchgear.

October 2005 FTC Becomes a Authorized Distributor for Microsoft

In response to the growing demand in the local market, Microsoft Eastern Mediterranean appointed Farah Trading and Contracting Company as its second distributor in Jordan.

This appointment is part of Microsoft on-going efforts to enhance the levels of service available to the local customers.

Since the appointment, Farah Trading has received recognition from Microsoft as:

2008 MICROSOFTCertified partner Gold2009 MICROSOFTCertified partner2010 MICROSOFTCertified partner2011 MICROSOFTDistributor2011 MICROSOFTVolume Licensing2011 MICROSOFTSoftware Asset Management2011 MICROSOFTMidmarket Solution Provider2011 MICROSOFTCountry Partner Of The Year – Jordan Winner



Royal Jordanian

One of the leading Public Shareholding Jordanian companies, Royal Jordanian was set up in 1963 as the national air carrier. Since its establishment, we have been committed to better connect the Levant with the whole world.

RJ operates its modern 32 aircraft to reach 60 direct destinations spread over four continents. Our route network is carefully studied, as we are keen to have a rational and robust route network with very good connectivity options. Additional 750 destinations are accessible through our partners in the oneworld airline alliance, including big names in the air transport industry.

We are distinguished to have one of the young and modern fleets of the world airlines; our fleet comprises diverse types of aircraft: Airbus A330, A340, A310, A321, A320, A319, Embraer 195 and Embraer 175 aircraft.

Under the airline's long-haul fleet modernization program, RJ will introduce 11 Boeing 787s which will operate to our current and future long-haul destinations. The first group of Dreamliners is to be delivered at the beginning of 2014, and the others will continue joining the fleet until 2017.

On our Crown Class, we provide optimum comfort and superior facilities for a seamless flying experience, combining luxurious seating arrangements with diverse entertainment options and scrumptious cuisine to ensure that all Crown Class traversers' desires are met.

As a Crown Class passenger, you will feel the difference not only onboard but also at the airport with exclusive check-in counters and lavish lounges for your utmost ease, ensuring that you arrive at your destination fully refreshed.

We also committed to provide optimal comfort to passengers on Economy Class, which incorporates space and comfort with distinguished facilities. With a wide selection of movies and programs, our personal screens to each traveler and attentive crew, we promise you a unique trip. Information Technologies and state-of-the-art electronic systems are of the most significant features of RJ; we have always been keen on applying the latest technologies in the air transport world to make it easier for passengers to reach and get the RJ services. With just one click, the RJ user-friendly website enables our customers to make a virtual tour through the airline's amenities that include booking their seats, printing their boarding passes from the comfort of their homes and many other services.

So, we advise you to relax your mind and fly RJ. Please visit our website to get more familiar with our services www.rj.com



OBG

Oxford Business Group (OBG) is a global publishing, research and consultancy firm, which publishes economic intelligence on the markets of the Middle East, Asia, Africa and Latin America.

OBG offers comprehensive analysis of macroeconomic and sectoral developments, including banking, capital markets, energy, infrastructure, industry and insurance.

OBG's acclaimed economic and business reports are the leading source of local and regional intelligence, while OBG's online economic briefings provide up-to-date in-depth analysis. OBG's consultancy arm offers tailor-made market intelligence and advice to firms operating in these markets and those looking to enter them.



وزارة الإتصالات وتكنولوجيا المعلومات

Ministry of Information and Communications Technology



Ministry of Information and Communications Technology

Established in 2002, the Ministry of Information and Communications Technology [MoICT] is at the heart of the Kingdom's transformation into a knowledge based economy that contributes to the socio-economic development of the Kingdom. MoICT is the policy maker of information technology, telecommunications, and post in Jordan. The ministry's policy calls for market liberalization, ending monopoly and withdrawal of the government from its majority ownership position in telecom & postal operators and public-private partnerships.

MoICT fosters ICT initiatives that promote the adoption of ICT by all segments of the society and stimulate local and foreign investments. The government's commitment to ICT as a catalyst to development, particularly through e-learning and e-government, is creating business opportunities.

Jordan's open, transparent and competitive environment, sophisticated communications infrastructure, strong regulatory reform and independent ICT regulator, technically skilled and growing competitivewage workforce, committed government and strong leadership support have established a dynamic and growing ICT sector that presents exciting investment opportunities

League of Arab States

League of Arab States, is a regional organisation of Arab states. It was formed in Cairo on 22 March 1945 with six members: Egypt, Iraq, Jordan, Lebanon, Saudi Arabia, and Syria. Yemen joined as a member on 5 May 1945. The Arab League currently has 22 members and four observers. The main goal of the league is to "draw closer the relations between member States and co-ordinate collaboration between them, to safeguard their independence and sovereignty, and to consider in a general way the affairs and interests of the Arab countries."

Through institutions such as the Arab League Educational, Cultural and Scientific Organization (ALECSO) and the Economic and Social Council of the Arab League's Council of Arab Economic Unity (CAEU), the Arab League facilitates political, economic, cultural, scientific and social programs designed to promote the interests of the Arab world It has served as a forum for the member states to coordinate their policy positions, to deliberate on matters of common concern, to settle some Arab disputes, and to limit conflicts. The League has served as a platform for the drafting and conclusion of many landmark documents promoting economic integration.

The Arab League has played a role in shaping school curricula, advancing the role of women in the Arab societies, promoting child welfare, encouraging youth and sports programs, preserving Arab cultural heritage, and fostering cultural exchanges between the member states. Literacy campaigns have been launched, intellectual works reproduced, and modern technical terminology is translated for the use within member states. The league encourages measures against crime and drug abuse, and deals with labour issues—particularly among the emigrant Arab workforce

Partners



Talal Abu-Ghazaleh Organization

Talal Abu-Ghazaleh Organization founded in 1972 (TAG-ORG) is an international professional services group, working through its 73 offices in the Middle East, North Africa, Pakistan, India, Cyprus, Russia and China. It has representative offices in Europe and North America and non-exclusive strategic alliance agreements with various networks and individual firms thus enabling it to choose a firm best suited to its clients needs in virtually every country in the world.

It currently offers a composite range of professional services covering Accounting; External Audit; Internal Audit; Corporate Governance; Taxation; Educational Consultancy; Economic and Strategic studies; Management Advisory Services; Professional and Technical Training; Technology Transfer Project Management; Real Estate Management; Investors and Business Advisory Services; Human Resources and Recruitment Services; E-Government; E-Commerce; E-Education; IT and Security Audit; Webmastering and Web Design; Professional Interpretation and Translation; Website Arabization: Domain Names Registration; ICT Strategic Planning; ERP Consulting Services; IT and Internet Skills Training and Examinations; Intellectual Property News Agency; IP Business and Asset Valuation and Branding Services; IP Registration and Protection; Intellectual Property Renewals; IPR Protection and Management; Legal Services (Solicitors and Attorneys); and Public Offering.



The Jordanian Universities Network

The Jordanian Universities Network Company (JUNet) is a nonprofit company with limited liability which has been founded and funded by the public universities to manage the network and provide services to these universities. JUNet is managed by a board of directors from the presidents of the public universities.

JUNet is considered as the National Research and Education Network. Currently, 11 Public Universities and 15 Community Colleges are connected to this network. JUNet is planning to connect the other Private Universities, National Research Centers to the network to participate in the national learning and research activities.

The specific objectives of the Jordanian University Research and Learning Network are:

- To provide the Jordanian Research and Learning (R&L) institutions with a first class TCP/IP network which will facilitate communications, collaboration, experimentation, and learning.
- To encourage students, faculty members, and researchers to use high speed networks to increase productivity and foster a culture of innovation.

- To develop a Jordanian Research and Learning community.
- To provide a platform for connecting the Jordan R&L community to the global R&L community.

In general, the main focus of JUNet is satisfying the common needs of the public universities.



Delivery of Advanced Network Technology to Europe

Based in Cambridge, UK, DANTE (Delivery of Advanced Network Technology to Europe) plans, builds and operates advanced networks for research and education. It is owned by European NRENs (National Research and Education Networks), and works in partnership with them and in cooperation with the European Commission. DANTE provides the data communications infrastructure essential to the development of the global research community.



EUMEDCONNECT

EUMEDCONNECT has provided a regional network for seven North African and Middle Eastern countries since 2004, serving two million users in 700 institutions, and connecting them to Europe and globally via GÉANT with EC funding. Researchers in Algeria, Egypt, Jordan, Morocco, Palestine, Syria and Tunisia in many fields including e-science, archaeology and e-learning have benefited from the high capacity and wide reach of this first and only Mediterranean research and education network. EUMEDCONNECT2 has strongly supported the establishment of ASREN and works closely with ASREN day to day and is an adviser to ASREN's Board. At an ASREN event in December 2010, the EC announced funding for a further three-year-phase of EUMEDCONNECT starting in the second half of 2011 to continue the existing regional research and education network and to support ASREN to become a selfsustaining organization.



The EUMEDGRID-Support

The EUMEDGRID-Support project aims at building on the successful outcomes of EUMEDGRID (2006-2008), and it spotlights Europe and the Mediterranean and Middle East regions through an open dialogue aimed at increasing stakeholder and community awareness on the fundamental importance of e-Infrastructures with the ultimate goal of ensuring long-term sustainability. The work already done in the EUMEDGRID project has led to a pilot Grid Infrastructure which covers almost all the Mediterranean area. EUMEDGRID-Support par

tners have also participated in the process of building the Arab States Research and Education Network (ASREN) that is going to become a reference institution for the development of sustainable e-Infrastructures in the region.

- Sustainability is one of the most relevant objectives of the project and here the activity has followed multiple paths converging into a list of coordinated actions:
- Widening the number and the variety of scientific domains enabled to make use of the e-Infrastructure and increasing their level of participation with schools and workshops organized in collaboration with the partners and the EPIKH Project.
- Awaking the interest of policy makers and stakeholders for e-Infrastructures and their sustainability through the organization of the 3rd EUMED Event targeted to these objectives.
- Disseminating the opportunities and benefits of e-Infrastructures in the region underlining the achievements of the European projects and specifically those of EUMEDGRID-Support and EUMEDCONNECT2.
- Creating the Africa ROC portal an initiative spawn by the project and supported also by SAGrid (South Africa Grid), CHAIN and EPIKH projects.
- Finally, coordinating the project's activities with those of other relevant projects such as MIRA, EUIndiaGrid2, LinkSCEEM, GENESI-DEC, etc. in order to obtain synergistic effects that may facilitate the sustainability process.

The success of these activities will be followed in the next months by an EUMEDGRID User Forum in September in Lyon co-located with the EGI Technical Forum and the support to schools and events joined with the tuning of infrastructure services and the improvement of the Africa ROC portal.

Partners



Internet2

Internet2 is an advanced networking consortium led by the research and education community. An exceptional partnership spanning U.S. and international institutions who are leaders in the worlds of research, academia, industry and government, the Internet2 community is developing breakthrough network technologies that support the most exacting applications of today—and spark the most essential innovations of tomorrow.

Led by its members and focused on their current and future networking needs since 1996, Internet2 blends its unsurpassed human, IP and optical networks to develop and deploy revolutionary Internet technologies. Activating the same partnerships that produced today's Internet, our community is forging the Internet of the future.

الحاد الحامعات العرسة

حاد الجامعات الغربية الأمانة العامة

The Association of Arab Universities

The Association of Arab Universities has (233) member Arab universities and its permanent headquarters is based in Amman. The Association has established a council for quality assurance and accreditation of Arab universities that aims to assist Arab universities to develop higher education and improve its quality through the dissemination of a quality culture and the provision of reference frameworks for higher educational institutions and programs.



CNRST

CNRST is the National Centre for Scientific and Technical Research, it is a public institution. Within the framework of the government's policy, the CNRST's assignment is to promote, develop, and value scientific research, according to the country's cultural and socioeconomic needs. It acquires a central role by providing universities and research centers with advanced tools and infrastructures that meet their needs.

The CNRST is providing several services to the Moroccan research community, among them are the following:

- Moroccan Academic and Research Wide Area Network (Marwan): it consists of providing, deploying and maintaining the necessary network infrastructure for universities and research centers.
- National Grid Infrastructure (MaGrid): In the framework of the government support to scientific research and to scientists, the CNRST was charged to build a national grid infrastructure dedicated to intensive computing and to data storage.

- Institut Marocain pour l'Information Scientifique et Technique (IMIST): It aims at providing the researcher and industrial communities with scientific and technical documentations to assist them in their activities. Several documentation databases were implemented for this purpose;
- Provision of a set of technical (hardware and software) infrastructure providing several services to the academic and industrial sectors (chemistry, material science, biology...).

The CNRST is also active in several international projects and collaborations, and is also involved in several worldwide cooperation contracts with several countries: Belgium, France, Spain, USA and many others.



DC-NET

DC-NET is an ERA-NET project aimed to promote programme coordination and cooperation for the eventual implementation of a research infrastructure in the digital cultural heritage field. The DC-NET infrastructure is foreseen in particular as an evolution of the MICHAEL service (www.michael-culture.org) that was developed by 21 European countries, between 2004 and 2008, with a total investment of over 90 million euros.

The final objective of DC-NET is to plan the deployment of a robust and comprehensive data infrastructure for the digital cultural heritage that include a wide range of end-to-end services and tools facilitating the integration and strengthening of the research capacities in the sector.

This objective is pursued through a set of short, medium and long terms plans. The first phase is the current ERA-NET, where several Ministries of Culture and of Research of the EU are working mainly on two directions: on the one hand, strengthening the dialog between culture, research and e-Infrastructures through specific instruments that can facilitate the reciprocal knowledge (publications, seminars and workshops); on the other hand, developing a priority list of new services that can be implemented by using the available e-Infrastructures

(NRENs, GRID, etc.). The results of this twofold work will be used to prepare a Joint Activities Plan, endorsed by the European programmes owners, which will be the basis for the implementation of a new data and service e-Infrastructure for the research (and later on service providing) in the field of the Digital Cultural Heritage. The next phase will be the actual implementation phase, with the participation of the widest possible European representation.

Partners



German Jordanian University

The German-Jordanian University (GJU) is a public university located in Mushaqar, Madaba. It was founded in 2005 by a Royal Decree, in accordance with a Memorandum of Understanding reached between the Ministry of Higher Education and Scientific Research of the Hashemite Kingdom of Jordan, and the Federal Ministry of Education and Research of the Federal Republic of Germany. In August 2004, a founding committee had taken up its activities in Jordan. The committee was in close cooperation with the Ministry of Higher Education and Scientific Research. At the same time, the German planning office opened at the University of Magdeburg-Stendal in close cooperation with the Federal Ministry of Education and Research BMBF and the German Academic Exchange Services DAAD, which is funding the university project for a period of four years.

The project is funded by the Federal Ministry of Education and Research (BMBF) and the German Academic Exchange Service (DAAD) under the "German Study Programmes Abroad" programme.

الجاهـهـــة الألهـــانـيـة الأردنـيــــة The German - Jordanian University



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Talal Abu-Ghazaleh Graduate School of Business

TAGSB was inaugurated in 2006 as one of the faculties of the German-Jordanian University (GJU), a public university formed in 2004 through the joint cooperation of the German and Jordanian governments. This unique partnership brings the business expertise of the Talal Abu-Ghazaleh Organization (TAG-Org) to the academic world of GJU.

Talal Abu-Ghazaleh Graduate School of Business Administration (TAGSB) is the first School of its kind that represents a partnership between the private and public sectors in the Arab world. It was founded to provide educational opportunities at the highest international standards. Our commitment to our students, to academic excellence and to the development of the region is reflected in our mission.

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