3rd EU-MED Event, 30-31 March 2010, Brussels, Belgium

Executive Summary

The 3rd EU-MED Event, 30-31 March 2010 in Brussels brought together over 90 participants ranging from ministers and high ranking government officials to experts in e-Infrastructures from across Europe and the southern Mediterranean rim. This two-day event kicked off with a networking cocktail leading into an intense dialogue on co-operation opportunities in networks and e-Infrastructures for research and education. Insights were delivered into current regional support, collaborative scientific and educational projects enabled by e-Infrastructures, as well as how to build sustainable institutions for the Mediterranean and the wider Arab world moving forward.

The EUMEDCONNECT2 network has gained interest from government departments for both communication and education in recognition of the need for excellent educational, research and training facilities. The network is an important and powerful link between these regions, which is gaining momentum in other Arab nations with representatives from Libya, Lebanon and Qatar in attendance for the very first time as well as from the Gulf Cooperation Council (GCC) countries and the United Arab Emirates Research and Education Network. As chair of the United Nations Global Alliance for ICT and Development, Talal Abu Ghazaleh, stressed that it is now time to broaden the region from Med to Arab and turn this collaboration from a vision into a reality.

The Networking Cocktail, sponsored by EUMEDCONNECT2, enabled attendants to explore commonalities as well as learn about the expected outcomes of the event from the Master of Ceremonies, David West, DANTE, Project Manager of EUMEDCONNECT2, and keynote speakers Kostas Glinos, Head of Unit 'GÉANT & Infrastructure Unit', DG INFSO, European Commission and Dr. Talal Abu Ghazaleh, Chair of the UN Global Alliance for ICT and Development.

Welcome Reception – A toast to the future and success of e-Infrastructures

The Workshop opened with a set of Welcome Addresses from Kostas Glinos; Pierre Deusy, External Relations DG, European Commission; and Mashhour Abudaka, Minister of Telecom and Information Technology, Palestinian National Authority leading into a Keynote Speech from Dr. Talal Abu Ghazaleh.

The Welcome Addresses conveyed the recognition by both the EC and Mediterranean partners of the importance of e-Infrastructures in the Mediterranean today and the necessity of its continuation. *"There's a political will to build together a common destiny"*, stated Deusy.

Distinguished Opening Panel Speakers

Dr. Ghazaleh announced the launch of the Arab States Research and Education Network (ASREN) as a legal entity under the auspices of the Arab League and the UN GAID marking an important step towards securing sustainable e-Infrastructures across the Arab world.

"We recognize that investing in science in general and in universities in particular needs to meet the ambitions of the Arab countries, hence, ASREN will act as an enabler and catalyst for creating investment in the scientific research and development in universities", said Dr Ghazaleh.

ASREN is chartered with fostering the collaboration between Arab and European researchers, developing regional/national e-Infrastructures and developing e-Services. Its aim is to ensure a powerful e-Infrastructure platform connecting Arab research and education to the rest of the world. It will showcase top R&D programmes and best practices as well as provide advisory services, networking opportunities and support for new initiatives in technology innovations. As ASREN facilitates the building of a regional ICT development community it will support the realization of Millennium Development Goals by 2015.

The ASREN initiative calls for wider collaboration with the whole Arab world representing a shift in both the approach and geographical terms moving eastward to areas such as the Gulf countries.

Looking out over the meeting auditorium

Regional Support

The first of three roundtable discussions, chaired by Kostas Glinos, provided an in-depth look into the regional support for e-Infrastructures as part of a strategic process to improve the quality of education through better access to information communications and resource management underpinned by partnerships with both public and private sectors.

Panel member, Hesham El Deeb, Advisor to the Minister of ICT in Egypt underscored the value of Egyptian involvement in the shift towards stronger focus on eEducation, eHealth and eContent. Egypt is currently ranked sixth in emerging countries in IT services and a top 10 global reformer. The Minister of Telecom and Information Technology from the Palestinian National Authority, Mashhour Abudaka, highlighted how they have doubled the budget dedicated to education, a clear sign of where top priorities lie. These are just some of the examples of how sound national policies may help unleash a developing country's potential in this context.

The Executive Director of Jordanian Universities Network, Yousef Torman, recalled the history of efforts towards establishing Arab regional networks, dating back to 2005 with the PAN design study for a Mediterranean fibre ring, the Rome Declaration in 2006, down to the announcement of the creation of ASREN. The road that these initiatives have paved exemplifies how far we have come in the establishment of a long-lasting Euro-Mediterranean (Arab) collaboration and the importance that EUMEDGrid-Support and EUMEDCONNECT2, reiterated by Maher Suleiman, Director of the National Agency for Network Services, Ministry for Telecommunications in Syria, in how they are responding to the pressing need for network access, computing power and storage capacity.

Exploiting e-Infrastructures

The second panel session drew on the experiences of projects exploiting existing Euro-Mediterranean e-Infrastructures to facilitate collaborative research and education activities. Chaired by Federico Ruggieri, INFN, EUMEDGRID-Support Project Coordinator, this session showcased a number of projects benefiting from e-Infrastructures and how each are effectively responding to real world benefits that are brought to both the science community and our daily lives.

One thing we all have in common is the need for daily food. Annamaria Marzetti from the Ministry of Agriculture, good and Forestry Policies in Italy showcased ARIMNET, the co-ordination of agricultural research in the Mediterranean, exploiting e-Infrastructure tools to focus on the challenges of food security and food safety, as well as climate change, emerging invasive diseases, health and nutrition, urbanisation and rural development by forming a common database for Mediterranean internet portal on agricultural research.

Other projects and initiatives offered their experiences in areas such as international co-operation on epilepsy surgery. Thanks to the teleconsulting available via the EUMEDCONNECT2 network, physicians between France and Tunisia are able to consult real-world issues such as Epilepsy aiming to reduce or eliminate seizures in patients told by Dr. Amel Mrabet, Department of Neurology, EPS Charles Nicolle Hospital in Tunisia. Similarly, the Libyan Board of Medical Specialities is at the forefront of e-Applications in Libya for e-Learning and Telemedicine elaborated by Mohamed Swehli, Vice President of the Libyan Board for Medical Specialities.

The Observatories and Research Facilities for European Seismology (ORFEUS) is bringing social benefits dedicated to earthquake seismology and earthquake hazard. The real time hazard and rapid warning technology enabled by the e-Infrastructure capabilities, demonstrated by Torild van Eck, ORFEUS Secretary General, could proactively change government policies to save lives in time of natural disasters.

One of the most advanced communities is High Energy Physics with the CERN Large Hadron Collider, which receives regional support all over Europe and beyond covered by Rajaa Cherkaoui El Moursli, University Mohammed V-Agdal in Morocco and their participation in the ATLAS experiment.

Ensuing discussions from the panel and floor highlighted the vitality of a seamless continuation of existing e-Infrastructures for emerging large-scale users in the region, including support projects like LinkSCEEM for the Eastern Mediterranean and SESAME in the Middle East.

The e-Infrastructure panel of users

Sustaining e-Infrastructures

A major theme of the event, eloquently demonstrated through a variety of the afternoon presentations, including Event Programme Chair, Valentino Cavalli on National Research and Education Networks (NREN) sustainability, was addressing top-level challenges to sustainable e-Infrastructures and how to overcome the barriers and concerns, such as financial, technical and political support, applications, services, promotion, bureaucracy and time.

NRENs provide national e-Infrastructures and eServices that can support a broad set of high-demand e-Science applications such as high-energy physics, earth and life science, and cultural heritage. In Europe, GÉANT provides the regional network backbone, while in the Mediterranean this role is played today by EUMEDCONNECT2.

It is essential for a country to have a modern, well-organised, well-resourced NREN to be competitive in research and education. Sustainability will succeed when NRENs are set up across all regions. This requires support from stakeholders, governments, other connected institutions and the EU in order to happen. All efforts need to be complemented by the creation of a separate, regionally organised legal entity, which decreases external funding through increased national support aimed at establishing a regional backbone interconnecting the Arab NRENs (e.g. ASREN).

The presentation by Spiros Livieratos, GRNET, illustrated the growing sea cable capacity that could be acquired to develop the regional eInfrastructure in the medium term, and to create a wider regional eInfrastructure including the Gulf region. From the Gulf perspective Steven Winstanley, of ANKABUT, UAE, welcomed the new opportunities for greater co-operation within the region and collaboration with Europe.

Reaching the Students of Today

ICT education in the globalised world of today proposes new challenges with the demand of more students, more jobs in the global market and rapid market shifts. New trends in brain power, basic learning in "how to think" and "how to learn" need to cover both technical and business skills. New students entering the job market need to meet a changing landscape and adapt quickly and appropriately as well as have basic knowledge in new technologies.

The TEMPUS project, presented by Associated Professor Salem Al-Agtash from Yarmouk University in Jordan, offers education and courses for students to take advantage of technology such as e-Infrastructures to learn new tools and new ways of learning in areas such as eLibrary, eLearning, eSkills, and eContent fostering multidisciplinary research and education.

Moving into the Future

Concluding with the final panel session, chaired by Dany Vandromme, RENATER, and moving towards the future from a short- to medium-term perspective regarding research networking development and building sustainable institutions for the Mediterranean, it is important to remember that the World Wide Web was pioneered in the world of research and universities. As we build a knowledge-base economy, innovation, research, science and technology will form the pillars of a competitive economy, driven by entrepreneurs in a business-friendly environment where public and private sectors form effective partnerships.

Advanced information and communication e-Infrastructures will network our businesses together and give them a leading edge as they interact with the world. Individual citizens will also reap the benefits of efficient connectedness in their digital lives as they search online for knowledge and the fulfilment of intellectual curiosity and first-rate education.

All regions of the world should have an equal opportunity and access to a first-rate education that allows them to develop into well-rounded individuals, enhance their educational attainment, and achieve their true potential, contributing positively to society, mentioned Johnathon Chapman, Georgetown University, School of Foreign Service in Qatar and how today, four out of five adults regard internet access as their basic right. Dr Ghazaleh confirmed that UN GAID has already started the process to formally recognise this.

A Common Mission

A general consensus from the panel including Dai Davies, General Manager, DANTE, emerged the need for relevant research instruments at a global level. Current regional networks are the building blocks for higher-level research and education that need to be maintained on a national basis through dedicated, operational organisations in place to achieve true sustainability. Saleh Hashem Mustafa Abdel-Razeq, Secretary General, Association of Arab Universities concluded, *"We will one day build the Arab Research Area"*.

Without these organisations all results achieved to date will fall by the wayside. This has been echoed by Leonardo Flores Añover from the European Commission, Information Society and Media Unit, on its continuous drive to enable the expansion of both the network and grid infrastructures. He confirmed that the funding of 'EUMEDCONNECT'3 through the EC's European Neighbourhood and Partnership Instrument Programme is under consideration, but underscored that this would need structures put in place allowing for progressively decreased dependency on EC funding, therefore the time to act is now.

Sustainability in the research community will be achieved through the creation of interest among user groups, who are the very drivers of this technology and the reason and justification for what we do. It is our job of those of us with invested interest to increase the visibility among users, university researchers and government officials who do not know RENs are available and demonstrate the benefits to the larger community.

The speakers of EU-MED Event 3

Conclusions & Moving Forward

The event clearly demonstrated the excellent spirit of cooperation and considerable efforts and commitment across Europe and Arab nations that testify to the successes achieved to date. The expanding network has evolved over the last decade and examples of the maturity from a variety of projects demonstrated how the network and e-Infrastructure is enabling both research and education.

Sustainability is currently bound with a number of challenges, spanning how to market the network and its potential users, as well as how to guarantee stable funding and organisation. A huge step forward has been made through the Arab States Research and Education Network. There is a substantial push and generated momentum with strong commitment from the European perspective to work with ASREN giving the best chances for sustainability to be achieved. This can build on the many European and Mediterranean collaborations already underway, including EUMEDCONECT2, EUMEDGRID-Support and the many user projects in place, and benefit from wider collaboration within the region.