

NEWSLETTER DECEMBER 2014

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- ↔ ASREN PARTICIPATES IN THE 3RD REGIONAL MEETING OF PIREN

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December 10th – 11th, 2014 | Muscat, Oman



Under the Patronage of His Highness Sayyid Taimur Bin As'ad Al Said, Assistant Secretary General for Communication at The Research Council, Sultanate of Oman, the Arab States Research and Education Networks (ASREN) will hold its Fourth International Platform on Integrating Arab e-Infrastructure in a Global Environment in Muscat during the period 10-11 December 2014. The event will be attended by more than two hundred and fifty participants from forty countries.

The event will be chaired by H.E. Dr. Talal Abu-Ghazaleh. Participants will include a number of Arab Ministers of Education and Ministers of Telecommunication, Ambassador of the European Union Commission, Assistant Secretary General of the League of Arab States, and representatives of national and international research and education networks and educational institutions from Europe, United States, Asia Pacific and the Arab world.

The Forum aims at expanding the effective participation of ASREN, integrating Arab e-Infrastructures in global environment, enhancing the role of research and education societies in the Arab World, supporting sustainable researches and education network in the Arab Region which are connected with other European, American, and regional networks all over the world. In addition, it aims at developing cooperation and coordination between Arab and non-Arab researchers, promoting joint scientific research projects that depend on the use of infrastructure between the countries, and developing e-applications and e-services for Arab research and education societies.

Dr. Abu-Ghazaleh stressed the importance of the annual Platform as a scientific and technical platform for researchers, academics, and decision makers to maintain the sustainability of Arab e-infrastructure, integrate it with other similar e-infrastructures all over the world, and launch harmonized research services that provide computing, software, and information resources, among others, through projects supported by the EU including the EUMEDCONNECT3 and CHAIN-REDS projects.

IMAN1, Jordan's first and fastest Supercomputer



Every success story starts with a great vision. IMAN1 project was born from His Majesty's King Abdullah II vision and his strong belief that his people could turn this vision into reality. The goal of the project was to build a High Performance Computing facility within the most economical parameters and to do it all in Jordan utilizing Jordanian innovation and ingenuity. That's why IMAN1 was completely designed, developed, and built in Jordan by Jordanian resources.

IMAN1 was built using 2260 PlayStation 3 devices with IBM Cell Processors connected together on a very fast fibre based network; basically, turning a video gaming console into a supercomputer powerhouse that is capable of performing up to 25 trillion mathematical operations per second. In addition to that, it has one of the world's best price-per-performance ratios in the High Performance Computing market.

Currently IMAN1 project is operated and utilized by JAEC (Jordan Atomic Energy Commission) and SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) supporting their critical operations and fulfilling their high-end computing needs. In addition to that, it is available to all the universities and scientific institutions in Jordan as an open platform to advance and support their research activities and development efforts in the areas of science, medicine, and engineering.

Key projects currently conducted at IMAN1:

- Jordan Research and Training Reactor Core Modeling and Simulation.
- Simulating the Beam Dynamics for the Synchrotron Light Storage Ring and Booster of SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East).



- High Performance Computing for Synchrotron Radiation (SR) Applications.
- Computer-Based Drug Discovery and Refinement of Protein X-ray Crystallography Data: several ongoing projects being carried out in IMAN1 aim at the discovery of novel promising drug molecules to treat diseases and epidemics of national and international interest, in particular, those diseases affecting the third-world countries.
- Medical Image Segmentation for early diagnosis and treatment of diseases.
- Oxygen Reduction on Transition Metal Chalcogenides: searching for new catalysts that could lower the cost of the electro-catalysts, thus lowering the cost of fuel cells which are considered to be the most promising products in the 21st century.
- Investigating the Structural, Electronic, Electrical and Mechanical Properties of Carbon Nano-Ribbons and Nano-Tubes for designing better nano-electronic transistors.
- Advanced Parallel Sorting Algorithms for Massive Data Sets.
- Water Nano-Particles and their Effects on the Thermal Hydraulic Behavior of a SMART Reactor.
- SMART Reactor Design Enhancements (Circular Fuel and Nano-Fluids).
- Simulating the Path and Effects of an Asteroid Hitting Planet Earth.

IMAN1 project embodies the Jordanian spirit "accomplishing great things with limited resources and making the impossible possible".

April 2^{7th}, 2014 | Bonn, Germany



The Kick-Off Meeting of OSSCOM, an EU Tempus Funded Project on Open Source Software Curricula Enhancement (OSSCOM) in Universities in Lebanon and Jordan was held in Germany. The meeting was hosted by the Department of Computer Science at the Germanbased Bonn-Rhine-Sieg University of Applied Sciences and attended by 10 partners from five countries (Germany, Spain, UK, Lebanon and Jordan).

The OSSCOM project has been selected for funding by the European Commission - EACEA (Education, Audiovisual and Culture Executive Agency). It aims to promote the use of Open Source Software (OSS) through building capacity, where graduates of universities in Jordan and Lebanon will be equipped with the essential skills in OSS to improve their chances in the job market and enable them to contribute to the diffusion of OSS in key sectors as an alternative solution to proprietary software as well as to enhance their entrepreneurship and ICT innovation capabilities. The German Jordanian University and Lebanese university will operate as centers for Open Source Software to provide support for local companies as well as the society at large in OSS technology solutions.

OSSCOM website: http://www.osscom.org

His Excellency Harb meets with the universities delegation: free software initiatives develops ICT sector

May 16th, 2014 | Beirut, Lebanon



Lebanese Communications Minister Mr. Boutros Harb met today in his office a delegation from the German, Jordanian and Lebanese universities participating in the project plans and educational partnership with the private sector in the free and open source software which is supported by the European Commission - the program "Tempus".

Harb said after the meeting: "There is no doubt that the free software initiatives, open source will contribute to the development of telecommunications and information technology sector in Lebanon and reduce the use of exchange volume on software licenses in many sectors and promote employment opportunities for graduates of communications software and information technology in the Lebanese universities in addition to contributing in the promotion of free software and the business sector on the market."

For his part, Dr. Rainer Herpers from Bonn-Rhein-Sieg University in Germany said "It is a pleasure to support such ambitions and contribute to the development of communication and free software in Lebanon and Jordan sector through knowledge and technology transfer project."

For his part, Dr. Salem Alagtash from the German Jordanian University in Amman said: "The project aims to set up a centres of excellence and accelerate business in the free and open source software to provide the necessary support for local companies in particular and society in general."

Dr. Walid Karam, a member of the executive body of the project and consultant of Minister of Communications said, "A key objective of this project is to improve cooperation between universities and institutions involved in addition to the establishment of a network of free software communities in Lebanon that can grow in the Arab region."

The Notre Dame University hosts delegation of public and private bodies from Jordan, Lebanon and the European Union that participate in the project, which aims to strengthen the university partnership with the private sector, develop study plans in line with the free software technology and open source, promote their use in both Jordan and Lebanon, and finally to provide graduates with necessary skills to improve their chances in the labor market and enable them to contribute to the process of modernization in the ICT sector, and the localization of their contributions to be entrepreneurial graduates manufacturers of business instead of being job seekers.

With the support of the European Commission - Tempus - and the participation of a number of universities and institutions of the private sector in Lebanon, Jordan, Germany, Spain and Britain in the development of free software and open source and the telecommunications sector and information technology in the participating universities; German Jordanian, Yarmouk, Notre Dame and the Lebanese University (CNAM), to contribute to the promotion of the use of free software and its societies.

AFREN 2014

June 2nd, 2014 | Djibouti



AfREN held its 2014 meeting in Djibouti on 2 June 2014, as part of the Af* annual meetings and conferences, known as African Internet Summit, with the usual support of the Association of African Universities (AAU).

More than 40 participants attended the meeting, which featured updates from the three regional RENs covering the continent, namely ASREN (www.asrenorg.net), the UbuntuNet Alliance (www.ubuntunet.net) and WACREN (www.wacren.net).

The updates showed that despite challenges, NRENs as well as the regional RENs are making good progress. On community and international outreach, knowledge and experience sharing, it was acknowledged that the UbuntuNet Alliance and ASREN have now well established and well-attended annual conferences (UbuntuNet Connect and eAGE); WACREN also organized its first annual conference earlier this year in Lomé, Togo.

Technical presentations covered issues related to capacity building strategies for RENs with the presentation on the WACREN-UbuntuNet Alliance joint African Training Initiative (ATI), to addressing end user needs with the experience sharing from the University of Agriculture, Abeokuta in Nigeria, to opportunities for setting up regional REN peering points on the continent presented by NSRC and to Africa's involvement in the Global Network Architecture for research and education (GNA), presented by NorduNet.

The presentations triggered lively and interesting discussions, especially on regional REN peering and Africa's involvement in the GNA initiative. On the latter, it was decided that

ASREN, the UbuntuNet Alliance and WACREN will designate representatives who will participate in the periodic online meetings of the GNA technical groups.

This year's AfREN meeting also witnessed the active participation of colleagues from Korea, namely from the Korea Advanced Institute of Science and Technology (KAIST), (C National University), Chungnam National University (CNU) and Seoul National University (SNU). Presentations were on APAN, the Asia-Pacific sister organization (done by its Chair), content-centric networking and Future Internet.

It was resolved that the Africa-Korea collaboration would be pursued and strengthened. AfREN Convener was asked to follow up on this with the Korean colleagues, with the objective of extending this initiative to an Africa-Asia collaboration.

The meeting also acknowledged the participation of ICANN's Vice-President for Stakeholder Engagement, Africa; he called for more involvement of African academia and researchers in the Internet governance process.

At the closing of the meeting, AAU as well as AfNOG and AfriNIC were commended for their continued support. It was suggested and welcomed that AfREN should revert to its 2-day meeting, instead of one day only.

RENs were encouraged to put the annual AfREN meeting in their agenda and to make provision for sponsorship for their members, in order to ensure wide participation in this important event.

Dr. Boubakar Barry WACREN CEO and AfREN Convener UbuntuNet has just been commissioned in Eastern and Southern Africa

July 28th, 2014 | Lilongwe, Malawi



UbuntuNet Alliance, the research and education network for Eastern and Southern Africa; and DANTE, the operator of GÉANT, the pan-European research and education network, today announce the commissioning of the UbuntuNet network, the regional high-speed Internet network connecting researchers, educators and students in Eastern and Southern Africa to their peers in the region and to Europe.

The African research and education community has for far too long carried the burden of slow Internet connectivity which has consequently widened the gap between the continent's researchers and their peers globally. The establishment of national research and education networks (NRENs), the regional UbuntuNet Alliance, and the kick off of the AfricaConnect are

milestones transforming the research and education landscape on the continent.

Says Cathrin Stöver, Chief International Relations Officer, DANTE: "Today through the collaboration with GÉANT, the UbuntuNet network is boosting EU-African collaboration, bringing research and educational opportunities unprecedented in Africa. The implications for socio-economic development go far beyond anything we could have dreamed of before, putting African research on the map and transforming the lives of millions. I am very proud that GÉANT is the first R&E network to connect to Africa!"

The rollout of the UbuntuNet network has been implemented in two phases based on country readiness to connect to the regional network. Block A, which was completed in February 2014, procured equipment to establish Points of Presence (PoPs) in Mtunzini, Maputo, Dar es salaam, Nairobi, Kampala and Kigali, and to upgrade the Ubuntunet Alliance PoP in London. High capacity cross border links interconnecting these PoPs to create a regional research network were also procured under this phase, as well as a transcontinental link between Nairobi and the Ubuntunet Alliance's PoP in Amsterdam. The first phase serves a total of six NRENs namely TENET (south Africa), MoRENet (Mozambique), TERNET (Tanzania), KENET (Kenya), RENU (Uganda) and RwEdNet (Rwanda), and forms the backbone on which the network to serve the entire Alliance region will be created.

Block B included procurement of equipment and installation of high capacity cross-border links connecting the NRENs including; Eb@le (Democratic Republic of Congo), MAREN (Malawi) and ZAMREN (Zambia). The link between Dar es Salaam in Tanzania and Lusaka in Zambia was completed at the end of May 2014 drastically reducing connectivity costs to nearly nothing for the Zambian research and education community. Links from Lusaka to Blantyre in Malawi, and from Cape Town to Moanda in DRC will be completed in the near future.

A major immediate impact of the network is that connectivity costs have dropped from a regional average of \$4000 per megabit per second per month to \$135per megabit per second per month indicating a 97 percent price reduction in just four years!

This shows that the progress of rolling out the UbuntuNet network has unfolded at an impressively good pace and Chief Executive Officer of UbuntuNet Alliance, Eng. Dr Tusu Tusubira does not hide his joy at this amiable stride in promoting research and education networking in the region.

"We are delivering international and regional bandwidth to NRENs in these counties at a consolidated price of \$135 per megabit per second per month. I find this exciting, because, at last we have eliminated one barrier to regional participation in global research and education collaboration," Said Dr Tusubira.

Apart, from lowering the cost of bandwidth, providing resilience is yet another benefit to the ZAMREN network. In addition, the new UbuntuNet circuit between Dar es Salam and Lusaka is expected to contribute significantly to improved health research in bioinformatics in Zambia says Bonny Khunga, ZAMREN CEO.

"As you know we have bioinformatics research currently being conducted in Zambia at the Copperbelt University, this is one of the research areas that will benefit from this link," Khunga added.

Impressively, through the AfricaConnect project, more countries have been connected to the UbuntuNet network than initially envisaged. The Alliance is grateful for the assistance rendered by the European Commission in helping to scale-up rollout of the regional component of the UbuntuNet network. These strides would also not have been possible without the partnerships and rapport between DANTE, UbuntuNet Alliance, WACREN and respective partner NRENs.

AfricaConnect has birthed a more resilient and secure high-speed network that offers greater connectivity between African countries, as well as high-speed links to the pan-European GÉANT. Economically, the UbuntuNet network is gradually pushing countries in Eastern and Southern Africa towards realizing the MDGs through improved ICT.

About UbuntuNet Alliance

UbuntuNet Alliance is the regional research and education network for Eastern and Southern Africa. It was established in 2005 as a not-for-profit regional association of National Research and Education Networking (NRENs) in Eastern and Southern Africa. Its current membership consists of 14 NRENs: DRC (Eb@le), Ethiopia (EthERNet), Kenya (KENET), Madagascar (iRENALA), Malawi (MAREN), Mozambique (MoReNet), Namibia (Xnet), Rwanda (RwEdNet), Somalia (SomaliREN), South Africa (TENET), SudREN (Sudan), Tanzania (TERNET), Uganda (RENU) and Zambia (ZAMREN). The Alliance works towards enabling collaboration in research and education over world class networks, and has the primary responsibility for the regional research and education data network, UbuntuNet. For more information, visit www.ubuntunet.net.

About GÉANT

GÉANT is the pan-European research and education network that interconnects Europe's National Research and Education Networks (NRENs). Together we connect over 50 million users at 10,000 institutions across Europe, supporting research in areas such as energy, the environment, space and medicine.

Operating at speeds of up to 500Gbps and reaching over 100 national networks worldwide, GÉANT remains the largest and most advanced research and education network in the world.

Co-funded by the European Commission under the EU's 7th Research and Development Framework Programme, GÉANT is a flagship e-Infrastructure key to achieving the European Research Area – a seamless and open European space for online research – and assuring world-leading connectivity between Europe and the rest of the world in support of global research collaborations.

The network and associated services comprise the GÉANT (GN3plus) project, a collaborative effort comprising 41 project partners: 38 European NRENs, DANTE, TERENA and NORDUnet (representing the 5 Nordic countries). GÉANT is operated by DANTE on behalf of Europe's NRENs.

About DANTE

DANTE (Delivery of Advanced Network Technology to Europe) is a non-profit organisation established in 1993 that plans, builds and operates large scale, advanced networks for research and education.

On behalf of Europe's NRENs, DANTE has built and operates GÉANT, a flagship e-Infrastructure key to achieving the European Research Area. Working in cooperation with the European Commission and in close partnership with Europe's NRENs and international networking partners, DANTE remains fundamental to the success of global research collaboration.

DANTE currently manages research and education networking projects serving the Mediterranean (EUMEDCONNECT), Sub-Saharan Africa (AfricaConnect) and Central Asia (CAREN) regions and Europe-China collaboration (ORIENTplus), as well as assisting the projects underway in Latin America (RedCLARA), Caribbean (CKLN) and Asia-Pacific (TEIN). For more information, visit www.dante.net.

About AfricaConnect

The AfricaConnect project aims to establish a high-capacity Internet network for research and education in Southern and Eastern Africa to provide the region with a gateway to global research collaboration. It is partly funded by the European Commission's DG Development and Cooperation – EuropeAid, in the framework of the 'ACP Connect' programme of the African, Caribbean and Pacific Group of States (ACP), which has injected €11.8M of the total €14.75M cost of the project through the AfricaConnect project. The remainder is being contributed by the African partners in the project.

The AfricaConnect is strongly collaborative, with DANTE coordinating the project and the UbuntuNet Alliance, DANTE's regional counterpart organisation in Africa covering Eastern and Southern Africa, implementing the infrastructure. Other parties participating include the West and Central African Research and Education Network (WACREN) – as well as the Association of African Universities; existing National Research and Education Networks (NRENs) in Africa (DRC, Ethiopia, Kenya, Malawi, Mozambique, Madagascar, Namibia, Rwanda, Somalia, Sudan, South Africa, Tanzania, Uganda and Zambia); and several European NRENs (Germany, Ireland, Italy, the Netherlands, Portugal and the UK). All of the organisations work to ensure that the project benefits all of sub-Saharan Africa. For more information visit www. africaconnect.eu

August, 2014 | Amman, Jordan



The Arab States Research and Education Network (ASREN), a nonprofit corporation, and the Asia Pacific Advanced Network Ltd (APAN), signed a Memorandum of Understanding (MoU) to identify opportunities for collaboration, sharing, and coordination for the benefit of the research and education communities within the regions.

The purpose of this MoU is to develop a framework for exploring opportunities to support the two parties' mutual interests through, among other things, leveraging the parties' advanced network infrastructures in support of science and education. A desirable outcome of this MoU is the development of synergies and interoperations between research and education networks in the Arab and Asian Pacific regions.

The MoU was signed by HE Dr. Talal Abu-Ghazaleh, Chairman of ASREN and Dr. Dae Young KIM, Chairman of APAN.

Accordingly, the two entities will actively develop opportunities to collaborate with each other, directly and with each parties' member NRENs as appropriate, regarding some or all of the following: Collaboration on International Research and Education Network (iREN) infrastructure; Collaboration on Service Offerings; Collaboration on Human Capital Development; Coordination on planning and governance and Coordination on Communications.

The Parties will explore additional opportunities to work together as necessary. Examples may include sharing intellectual property, brokering services, and working together to attract funding.

ASREN is the legal entity, which represents the association of Arab NRENs and was established in 2011 in Germany building on the success of the e-Infrastructure projects supported by the European Commission. It has been created with the aim to implement, manage and extend sustainable pan-Arab e-Infrastructures dedicated for Research and education. The goal is to connect Arab institutions between themselves and to the globe through dedicated highspeed data-communications networks. Such networks will enable sharing and access to a variety of research services and applications in addition to utilization of highly sophisticated and technologically advanced computing resources available only at very few institutions in the world.

The vision of ASREN is to facilitate Pan-Arab collaborative research and education projects and activities through high-speed networks, and to contribute to boosting scientific research, innovation and education across the Arab world by increasing efficiency and productivity of research and education communities. The objectives of ASREN are: to build, maintain and consolidate regional e-Infrastructures dedicated to e-Science and education across the Arab countries, contribute to create and sustain National RENS and facilitate the collaboration and cooperation among researchers and academicians in the Arab region.

APAN is a non-profit consortium established in 1996 and recently incorporated in Hong Kong. Its members include many of the National Research and Education Networks ("NRENs") across the Asia-Pacific region. APAN was established to provide a framework for the exchange of information, skills and other benefits across its members, and to collectively provide a coordinated shared peering network of international links. Its connectivity, both within the Asia-Pacific and from there to the rest of the world, underpins a rich community of research and education users, a mechanism for coordination around international standards for advanced internet-based infrastructures, and an environment for collaboration amongst its diverse base of users.

APAN is strongly focused on building infrastructure and on supporting application areas, from infrastructural layers to research areas including agriculture, biosciences, medicine, geosciences and environment, as well as education, amongst many others. It has a keen enthusiasm to establish and realize the social benefit of Internet technologies and to assist governments with informed policy formulation around and using such technologies. APAN works closely with governments, research and education communities, industry, international partnerships and particularly with like-minded agencies around the world to achieve mutually beneficial outcomes.

The CHAIN-REDS project exceeds its second review by the European Commission

September 9th – 11th, 2014 | Brussels, Belgium



Last September took place at the premises of DG-Connect from the European Commission the second revision of the project funded by the 7th Framework Programme CHAIN-REDS (Coordination and Harmonisation of Advanced e-Infrastructures for Research and Education Data Sharing, Coordination and harmonization of advanced electronic infrastructure for research and education through data exchange).

To this end, the Commission was assisted again by three independent external evaluators with those already collaborated on the first revision of CHAIN-REDS. They and the delegate of the Commission, discussed throughout the day with project members on the progress that had been achieved and how they the document that governs the development of CHAIN-REDS or Description of Work fit.

At the meeting, besides the evaluation committee and responsible for monitoring the project by the European Commission, representatives of all project partners: Istituto Nazionale di Fisica Nucleare (INFN) in Italy, Greek Research & Technology Network (GRNET) Greece, Czech Education and Scientific NETwork (CESNET) of the Czech Republic, Sigma Orionis, French, Arab States Research and Education Network (ASREN) Middle Eastern, Latin American CLARA, Centre for Development of Advanced Computing (C-DAC) of India, Institute of High Energy Physics (IHEP) of China, UbuntuNet Alliance for Research and Education Networking (UbunutuNet) Africa and the CIEMAT, Spain.

The final report on the outcome of the evaluation submitted by the Commission has been positive, encouraging the consortium to continue working on the same line and emphasizing the importance of the work being developed has a high scientific and social impact.

The next time discussion with the representative of the European Commission, external experts and members of CHAIN-REDS will be at the conference held in Brussels the project in mid-March 2015.

European Union, Jordan and Union for the Mediterranean (UfM) ministers in charge of the Digital Economy launch new digital cooperation initiatives

September 30th, 2014 | Brussels, Belgium



Digital Economy Ministers and representatives of ministries, the UfM Secretariat, telecoms regulators, development banks and EU institutions today pledged closer cooperation to reap the benefits of the digital economy for Euro-Mediterranean citizens, consumers and businesses.

Gathered in Brussels for today's Union for the Mediterranean (UfM) Ministerial meeting, participants agreed to forge closer ties on the use of open data and e-government, and to step-up dialogue between national telecoms regulators around the Mediterranean. They also agreed to improve connectivity between scientific and research communities and to work on a long-term eHealth cooperation strategy.

European Commission Vice-President Neelie Kroes said: "The European Commission aims to promote a fair, modern, open, competitive and transparent market for communications, a connected ICT research environment, an open and vibrant use of the internet for all and a diverse media environment. Today's agreement with our Southern Mediterranean neighbourhood and partner countries means we can share experiences and learn from each other in ways that are not always possible in other sectors."

H.E. Dr. Azzam Sleit, Minister of Information and Communication Technology, from the Hashemite Kingdom of Jordan and Co-President commented: "It is widely recognized that the growth of the digital economy has a far-reaching impact on the whole economy, and this is attributed to the influence of ICT services have on all IT sectors, such as transportation, health education, environment and financial services. Despite the promising potential that

digital economy holds for us, there remains a set of challenges for which we need to find solutions."

UfM Secretary General Mr. Fathallah Sijilmassi stated: "The Information and Communication Technologies (ICT) are a driving force for the modernization of both the private and public life, and thus, for the further development, integration and sustainable economic growth of the entire Mediterranean region. The UfM Secretariat stands ready to actively participate in the cooperative initiatives outlined today and to move forward the agenda for the advancement of the Digital Economy."

The Heads of Delegation adopted an achievable, forward-looking and focused declaration which responds to the rapid pace of digital change and the huge potential of the digital technologies for the economy and society. They committed to:

- Build closer ties to foster the use of open data and e-government, leaning on the principles already developed in the 2013 G8 Open Data Charter such as open data by default;
- Boost e-Infrastructures connectivity between scientific and research communities –also as a means of exploiting open data;
- Establish a regular recommendations-based dialogue between functionally independent telecoms regulators and Euro-Mediterranean ICT Ministries in order to create a harmonized, pro-competitive and investment-friendly environment in the sector, and to accelerate the development of the EU-Southern Mediterranean Information Society;
- Through the UfM, to promote more cross-border business through the use of electronic business transactions and eSignatures;
- Work on a long-term cooperation strategy for e-Health and to expand the deployment of e-Health solutions; and
- Support the current global discussions on Internet governance.

The UfM framework and ICT stakeholders

Ministerial representatives also welcomed the contribution that key stakeholders can make to ensure that the UfM is focusing and listening to the right issues and that it has the means to achieve results. As such, the UfM provides a stable and pro-active political framework for cooperation. Development banks can facilitate financial support and incentives in key areas. Regulators and ICT ministries can play their respective roles. Ministers also underlined the need to reach out more to include civil society, bloggers, young entrepreneurs, digital champions and ICT innovators both in the EU and in southern Mediterranean countries.

EU commitment

The EU is committed to helping its Southern and Eastern neighbours in their paths to peace, democracy and socio-economic development. Around €8.3 billion in EU funding is foreseen until 2020 for bilateral and regional programmes targeting southern Mediterranean countries.

Background

The previous Euro-Mediterranean Ministerial Meeting on Information and Communication Technology (ICT) was held in Cairo in February 2008. The UfM itself was created in 2008 as a platform for political dialogue, coordination, cooperation and consensus building. It currently encompasses 43 Members: 28 EU member states and 15 Southern and Eastern Mediterranean countries. The European Union assumed the permanent northern copresidency of the UfM in February 2012. Jordan assumed the southern co-presidency in June 2012.

The Secretariat of the UfM focuses on implementing regional cooperation projects and initiatives in cross-cutting areas such as energy, environment, education, transport, business development and social affairs. The Secretariat works in close collaboration with governments and with an active network of Euro-Mediterranean partners to assist project promoters throughout the entire project cycle.

October 10th, 2014



In response to the community of Europe's national research and education networking organisations' (NRENs') wishes, the GÉANT Association has been formed by re-organising TERENA and DANTE under a unified governance structure. The membership of TERENA and the shareholders of DANTE voted to proceed during meetings held in Berlin on 7 October. This restructuring marks a new phase in almost thirty years of collaborative research and education networking in Europe.

Pierre Bruyère, Director of Belnet, the Belgian national research and education networking organisation (NREN), was appointed as Chair of the interim board of the GÉANT Association following three years as president of TERENA. He says: "The GÉANT Association is the leading collaboration on network and related infrastructure and services for the benefit of research and education, contributing to Europe's economic growth and competitiveness."

The new Interim CEO of the GÉANT Association has been named as Bob Day, Executive Director of Janet, the United Kingdom's NREN. The association's board asked him, as he steps down as chair of DANTE, to take on this new role during the period of transition and integration. He says: "The restructuring will create a vehicle to coordinate the community's approach to the European Commission's Horizon2020 Programme".

Valentino Cavalli, long-term Acting Secretary General of TERENA agrees: "The main benefits will be simplified governance, more efficient management, more flexible use of resources and a more inclusive membership for the association."

There will be no service disruption while the process of integration is completed; in fact this will have a positive impact on how we serve our members and in our relationships with partners and the user community," says Niels Hersoug and Matthew Scott, the joint General Managers of DANTE. "Indeed we see this as strengthening the European research and education networking community as a whole."

Why have DANTE and TERENA joined forces?

The decision to restructure came from the community of European NRENs, which both DANTE and TERENA serve. In October 2012 the community agreed it needed a strategy in order to achieve its part in the European Commission's vision for the future of research and innovation, 'Horizon2020'. This agreement followed the presentation of a report by the Reykjavik Group, which had been formed in May 2012 to prepare a response to recommendations published in 2011 in the report 'Knowledge without Borders' - which was produced by the GÉANT Expert Group set up by the European Commission.

Under the present Horizon2020 call, a number of proposals have been submitted by the GÉANT Association in collaboration with other European e-Infrastructure providers. Past news about the restructuring process is available via the TERENA news item, 'TERENA General Assembly hears satisfaction results and adopts new statutes'.

Just the beginning...

A first website for the GÉANT Association is now available, which includes FAQs and a simple overview of the restructuring, membership, activities and governance of the association. While a longer term web presence is being developed, your patience and understanding are requested. In the meantime, please refer to the TERENA, DANTE, TNC and GÉANT Project websites for more detailed information about all services, network, news, events and other activities.

November 17th, 2014 New Orleans, USA

Internet2, NORDUnet, CANARIE and SURFnet, four advanced Research and Education (R&E) Networks from both sides of the North Atlantic Ocean, today announced the completion of a collaborative advanced network, called ANA-200G, that spans the North Atlantic, enabling R&E users to transfer data between North America and Europe at speeds that were previously only possible within the continents.

ANA-200G is a redundant 100 Gbit/s ring between four open exchange points spanning the North Atlantic. The ring nature of ANA-200G without single points of failure protects against an outage in the unprotected individual 100 Gbit/s transmission paths. ANA-200G builds on the success and the lessons learned in the pilot phase that started in June 2013 and ended last month, and was called ANA-100G.

This milestone opens up a new era for today's most advanced research, enabling scientists to take advantage of the ongoing wave of data being constantly created by sensor networks, research instruments, and people.

Before this milestone, intercontinental transmission speeds lagged behind one generation compared to the advanced networks on the continents. This brand new 100 Gbit/s ring enables clear channel 100 Gbit/s data transfers for R&E between researchers in the United States and Northern Europe. Demonstrations of ANA-200G will take place this week at SuperComputing (SC14) in New Orleans.

Dave Lambert, President and CEO of Internet2, says "Research and education are worldwide endeavours, with teams collaborating on single 'big science' projects across the globe. Likewise, leading R&E networks from around the world also partner on a global scale to jointly advance the state of the art for the benefit of the networks' users. With this major milestone in ANA-200G, we deliver on an important pathfinder for a novel Global Network Architecture for R&E that is just as robust as each of our domestic capabilities."

René Buch, CEO of NORDUnet, adds "ANA-200G advances not only subsea 100G technology and service roll-out, it also advances the way leading R&E networks work together. This achievement brings new insights to sharing links, sharing operations, and sharing costs. We are able to move quickly by always adhering to the Keep It Simple paradigm."

Data transfers in science disciplines such as high-energy physics, genetics, climate research, and radio-astronomy are ever increasing. Not only are datasets increasing rapidly in size, also the speed at which they can be generated and be processed is constantly increasing. Having

R&E Networks that push the envelope in advancing the state of the art of data networking remains as important as ever.

Jim Ghadbane, President and CEO of CANARIE, says "We are delighted to be a partner in this exciting collaboration. As Canadians are at the forefront in a range of data-intensive research disciplines, it is our role to work with global partners to advance the technology and the opportunities for collaboration that lead to groundbreaking discoveries and innovations."

Erik Huizer, CTO of SURFnet, adds "It is great to see that a team of dedicated network architects blueprinted ANA-200G, and in a short time frame converted the blueprint into reality, in time for supporting ground-breaking demonstrations for SC14."

The open exchange points that play a pivotal role in ANA-200G are MAN LAN in New York City, WIX in Washington, D.C., NetherLight in Amsterdam, and GÉANT Open in London. At these exchange points there is an open connection policy, enabling anyone to connect to the exchange fabric. It requires permission from the link owners, of course, to use the links.

This four-partner collaboration has delivered the 100 Gbit/s ring around the North Atlantic Ocean. They are dedicated to further advancing the collaboration, undertaking research into federated operations and admission control, ensuring that demanding science applications have dedicated and resilient data transmission paths, while the general purpose R&E data traffic continues to flow, also in circumstances of an outage.

The ANA-200G collaborators welcome other R&E networks to join the collaboration, on the way to new and innovative ways of sharing resources on a global scale, and are happy that discussions are underway with other organizations to have them partake in this collaborative initiative.

About Internet2

Internet2[®] is a member-owned advanced technology community founded by the nation's leading higher education institutions in 1996. Internet2 provides a collaborative environment for U.S. research and education organizations to solve common technology challenges, and to develop innovative solutions in support of their educational, research, and community service missions. Internet2 also operates the nation's largest and fastest, coast-to-coast research and education network, in which the Internet2 Network Operations Centre is powered by Indiana University. Internet2 serves more than 90,000 community anchor institutions, 260 U.S. universities, 65 government agencies, 40 regional and state education networks, 85 leading corporations working with our community and 65 national research and education networking partners representing more than 100 countries. Internet2 offices

are located in Ann Arbor, Mich.; Denver, Colo.; Emeryville, Calif.; Washington, D.C; and West Hartford, Conn. For more information, visit www.internet2.edu or follow @Internet2 on Twitter.

About NORDUnet

NORDUnet is a collaboration between the National Research and Education Networks (NRENs) of the five Nordic countries; Denmark (DeIC), Iceland (RHnet), Norway (UNINETT), Sweden (SUNET), and Finland (Funet). NORDUnet operates a world-class network and e-Infrastructure service for the Nordic R&E community. The five NRENs develop and operate the national research network infrastructures, connecting more than 400 research & education institutions with more than 1.2M users. NORDUnet and the Nordic NRENs continuously work to further develop leading edge services and to push the technology envelope. NORDUnet provides global network connectivity, and is a key contributor to international partnerships such as GÉANT, GLIF, and GLORIAD. For more information, please visit www.nordu.net.

About CANARIE

CANARIE designs and delivers digital infrastructure, and drives its adoption for Canada's research, education and innovation communities. CANARIE keeps Canada at the forefront of digital research and innovation, fundamental to a vibrant digital economy. CANARIE's roots are in advanced networking, and CANARIE continues to evolve the national ultra-high-speed backbone network that enables data-intensive, leading-edge research and big science across Canada and around the world. One million researchers, scientists and students at almost 2,000 Canadian institutions, including universities, colleges, research institutes, hospitals, and government laboratories have access to the CANARIE Network. CANARIE also leads the development of research software tools that enable researchers to more quickly and easily access research data, tools, and peers. In support of Canada's high-tech entrepreneurs, CANARIE offers cloud-computing services to help them accelerate product development and gain a competitive edge in the marketplace. Established in 1993, CANARIE is a non-profit corporation, with the major investment in its programs and activities provided by the Government of Canada. For more information, please visit: www.canarie.ca.

About SURFnet

SURFnet is the National Research & Education Network (NREN) organisation in The Netherlands. SURFnet ensures that researchers, instructors, and students can work together simply and effectively with the aid of ICT. SURFnet links ICT services, scientific instruments, and people with reliable ICT infrastructures, made up of a network infrastructure and a collaboration infrastructure. SURFnet also demonstrates what is possible by developing and testing innovative ICT services. SURFnet is part of SURF, the Dutch higher education and research partnership for ICT. More information about SURFnet: www.surfnet.nl/en.

ASREN launches the International Network for Research and Education in Jordan

Amman, 19th November, 2014 | Amman, Jordan



as part of its ongoing efforts of the Arab States Research and Education Network (ASREN), an agreement on the international connection of the national research and education (R&E) communication services and broadband solutions, under which a 155 Mbps link for research and education will be provided from Talal Abu Ghazaleh University in Amman to ASREN's POP that was recently established in London. This enables interconnection with the GÉANT network in Europe, Internet2 in the US as well as with other regional networks across the world.

The agreement was signed by ASREN Chairman Dr. Talal Abu Ghazaleh, and Mr. Eyad Abuo Zeid, CEO of DAMAMAX. On this occasion, Dr. Talal Abu Ghazaleh confirmed the Organization's interest in completing the establishment of the specialized technical Arab connection for research and education, providing R&E connectivity services in Jordan and connecting it with partner organizations around the world in order to represent it as part of the international R&E networking community. This will allow Jordanian researchers and teachers to utilize technical resources, software applications, high- performance cloud and educational computing, and research data available on advanced international R&E networks that could only be accessed through a dedicated and specialized research and education network.

Dr. Abu Ghazaleh added that it is a must to consider this national duty to connect Jordanian research and education institutions with its peers around the world to provide sources,

software applications, and research and educational data. HE also expressed his hope that Jordan will remain a hub for knowledge and a source of connection at the educational and technical level for neighboring countries.

On his part, Mr. Eyad Abou Zeid expressed his proudness of the partnership with ASREN which caters for the enhancement of the Arab e-Infrastructure technology and connecting it with similar networks from all over the world. Mr. Eyad also emphasized his praise for launching this national project which will certainly support the scientific research and technological development inside our dear Jordan, as well as the member countries.

He added "such accomplishment today will contribute to the participation of scientific research and education centers in Arab countries." He also thanked Dr. Talal Abu Ghazaleh for giving DAMAMAX the opportunity to take part in this significant strategic project.

David West, manager of the EU-funded EUMEDCONNECT3 project which provides a dedicated Internet network for R&E communities across the southern and eastern Mediterranean commented: "We welcome this significant step which enables Jordan to be a key player in the R&E networking community, across the Arab world and in scientific collaborations with Europe and other regions across the world. We now look forward to additional connections to ASREN's PoP in London".

November, 2014



Ankabut, the UAE's Advanced Network for Research and Education has officially and legally joined Arab States Research and Education Network (ASREN) as a shareholder and active member towards an integrated Arab e-infrastructure.

This comes as appreciation for the role of ASREN in order to create, manage, and operate the Arab regional network that links all Arab NRENs dedicated to research and education, connecting the academic institutions and research centers, and providing them with the appropriate services and connectivity in the fields of research, education, and knowledge within the Arab world.

"We look forward to working with ASREN to integrate Arab NRENs and support ASREN's goal in promoting research and education connectivity at the regional level and linking them to the global scientific research networks, while providing technical services and software applications to promote joint scientific research" Fahem Al Nuaimi, CEO of Ankabut, said.

Ankabut, the UAE's Advanced Network for Research and Education, also has been following up and supporting ASREN's developments since 2010 and now establishing the Arabian Global Education Open Exchange AGE-OX and Ankabut is glad to work with ASREN to make use of this unique regional R&E exchange.

Ankabut recently announced the Arabian Global Education Open Exchange AGE-OX to be the first exchange hub in the region for research and education. Ankabut will set all the necessary hardware and software to start this exchange. New York University of Abu Dhabi through Internet2 will be the first to connect to this exchange at 10 Gbps bandwidth connected to Singapore.

AGE-OX will be operated by Ankabut and will later be governed by ASREN. This will give ASREN great exposure and better selling and marketing force in the Gulf region and to bring Internet2, GÉANT, APAN and other regional research and education networks to the region.

November, 2014 | Islamabad, Pakistan

The Arab States Research and Education Network (ASREN) represented by its Managing Director, Yousef Torman, recently took part in the "3rd Meeting of Country Coordinators for Establishment of Pan-Islamic Research and Education Network (PIREN)" organized by the Islamic Educational, Scientific and Cultural Organization (ISESCO) and hosted by The Higher Education Commission (HEC).

PIREN aims to connect local research and education networks of Islamic Countries to enhance exchange and cooperation between researchers and education communities by promoting use of PIREN and its applications.

Speaking on the occasion, Dr. Mukhtar Ahmed, Chairman HEC said that PIREN will bring the Muslim countries closer for sharing their knowledge, adding that many good activities are taking place in different Muslim countries; the need is to share their experiences and achievements. He said that HEC will provide all possible facilitation for success of all initiatives taken under the auspices of PIREN.

Meanwhile, Torman presented the recent updates and achievements in the Arab region with special focus on the newly installed and operated PoP in London and the Arabian Global Educational Open Exchange (AGE-OX) created by Ankabut in Fujairah and invited PIREN and other NRENs in the Islamic world to make use of these connection points. He also presented the services started by ASREN including Science Gateways, eduroam and eduGAIN. Torman also confirmed the interest and support of ASREN to cooperate in the developments of NRENs in the Arab region as part of the Islamic world.

As additional activities, HEC organized field visits to the National Center of Physics, National University of Science and Technology, and the Higher Education Commission and met with Minister of Higher Education and Scientific Research of Pakistan.

About ASREN

Arab States Research and Education Network (ASREN) is the association of the Arab region National Research and Education Networks (NRENs), as well as their strategic partners, that 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.

April 26th-30th, 2015 | Washington DC, USA

In 2014, the Internet2 community ushered in a new era with our first-ever Global Summit. Our community has a long heritage of sparking innovation, collaboration and transformation for all of research and higher education. With the pressures ever increasing on higher education, together we must keep facing today's challenges head on. To truly lead the way, we must broaden our horizons, envisioning tomorrow's challenges and tomorrow's solutions.

Building on the success of the 2014 event, we are pleased to announce the 2015 Internet2 Global Summit. The theme for this year is "Community: Leading the way." The 2015 Internet2 Global Summit will showcase how we—as a community—are continuing to transform the way research and scholarship are conceived and conducted. Through strong academic leadership, perceptive global engagement, and applied innovations in networking and services, the Internet2 community continues its legacy of expanding the research and education (R&E) community's capabilities to advance research and academic excellence. The 2015 Global Summit will include a particular focus on the advancement of research capabilities through collaborative innovations in infrastructure and applications.

Once again, the 2015 Internet2 Global Summit will feature keynote addresses from top R&E leaders, presentations from noted experts, and sessions focused on partnerships and advanced technologies—all designed to inspire and equip our leaders as they transform the academy today and beyond.

Dr. Freeman Hrabowski will deliver the Presidential Keynote on Monday, April 27. Dr. Hrabowski has served as President of The University of Maryland, Baltimore County (UMBC) since 1992. Considered one of the top presidential leaders of this generation, Dr. Hrabowski's research and publications focus on science and math education, with special emphasis on minority participation and performance.

For more information: meetings.internet2.edu

June 15th – 18th, 2015 | Porto, Portugal

The Programme Committee of TNC15 has issued a Call for Proposals, exploring the theme 'Connected Communities'. This year there is more flexibility than ever before in the submissions process, so that interested people can contribute more ideas to help shape the conference.

In addition to the usual opportunity to submit presentation abstracts and - at a later date - full papers, lightning talks and posters, participants are also invited to propose entire sessions – and this is all possible now, and all through one unified submission system.

28 November 2014 is the first deadline - for submitting presentation abstracts and session proposals.

TNC15 will be held in Porto from 15-18 June 2015, hosted by FCT|FCCN, Portugal's unit for the operation of the National Research and Education Network (NREN) within the funding agency for science and research in Portugal.

All proposals must be submitted in English, the official language of the conference, and should be on subjects relevant to the spirit and objectives of the conference: to present, discuss and learn about the latest developments in networking technology and its uses in the research and education community. The topics described below are an indication of the scope of the conference, but are not meant to be restrictive.

Connected Communities

Today, NRENs find themselves at an exciting crossroads in society. Not only do they provide the basic network infrastructure on which big science and big data build, but they also address the requirements of ever-increasing and more diverse communities of Internet end users in the wider research and education areas. Many questions around cloud computing, software defined networking, mobility, 'over-the-top' and more remain unanswered, and their impact on the NREN landscape and their potential to address the needs of the users are still unclear. All of this in a time when privacy and security are not a given.

With the TNC15 Call for Proposals we invite you to explore the challenges the research and education networking community faces along the following themes:

- Success factors for NRENs
- Shining the light on Dark IT
- Connecting life, the universe and everything
- Control in the connected world
- Deconstructing the network
- The full details are included in the print version of the Call for Proposals (pdf). Please feel free to share this among your contacts!

Upload proposals

You can upload your proposals via the TNC15 submit page: https://tnc15.terena.org/submit

Other ways to participate

Sponsorship - For information please contact Gyöngyi Horváth: horvath@terena.org Demonstrations and exhibits - companies or projects wishing to participate should contact: tnc15@terena.org

Side meetings - If you wish to organise a meeting or workshop immediately before, after or around TNC15, please contact Gyöngyi Horváth before 15 January 2015 (horvath@terena. org)

About TNC

TNC) is the largest and most prestigious annual European research networking conference, with around 650 participants. TNC brings together decision makers, managers, networking and collaboration specialists, and identity and access management experts from all major European networking and research organisations, universities, worldwide sister institutions, as well as industry representatives.

Through keynotes speeches by renowned specialists, parallel sessions, demonstrations and presentations, the TNC presents participants with a unique overview of the latest developments in research and education networking, both in the technical field and in the area of application and management.

TNC15 website: tnc15.terena.org



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