ASREN
Arab States Research and Education Network

ASREN Newsletter
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*"**ASREN** is a non-profit company with limited liability (GmbH) and is officially registered in Germany, under the umbrella of the League of Arab States. The main goal is to connect Arab institutions among themselves and to the globe through high-speed data-communications networks. Such networks will enable sharing and access to a variety of R&E services and applications in addition to utilization of highly sophisticated and technologically advanced computing resources available only at very few institutions in the world."*

In this issue

ASREN to lead the engagements with research and education communities in Africa under the AfricaConenct3 project

The new AfricaConenct3 (AC3) project was signed in December 2019 in Brussels, with the objective to unlock the potential of education and research through increased access of African education and research institutions to digital infrastructures and technologies. The project consists of four agreements that have been signed between the European Commission and the three African Regional Research and Education Networks (ASREN, WACREN and Ubuntunet Alliance) in addition to the European regional network (GÉANT).

Engagement with research and education communities across Africa is one of the main activities of the AfricaConenct3 project. On behalf WACREN and Ubuntunet Alliance and in coordination with them, ASREN will be leading this activity with focus on Earth Observation communities in Africa, more specifically GMES (Global Monitoring for Environment and Security) in Africa and the AfriGEO (African Group on Earth Observation) communities to provide them with high-speed internet and advanced services.

Both AfriGEO and GMES in Africa will need higher bandwidth with high quality connectivity to be able to exchange, share and manipulate data provided through GMES and other resources. Representing UbuntuNet Alliance and WACREN, ASREN will coordinate closely with AfriGEO and GMES research centers for connectivity services. It will also engage the AUC, which is leading "GMES in Africa" through its HRST division- and with AfriGEO Secretariat for a broader collaboration. The objective is to connect AfriGEO and GMES sites and research centers to their corresponding NRENs in order to get access to high-speed networks. As a result, GMES and AfriGEOS communities will get a direct and secure access to resources on EU networks as well as other regional networks.

Furthermore, ASREN will promote the use of shared services that are available at RREN/ NREN networks such as eduroam, federated access and eduGAIN. Regional RENs together with respective NRENs will support the deployment of eduroam at GMES and AfriGEO sites and research centers.

ASREN plans also to approach other pan-African research and education communities like the Pan African Virtual University (PAVU) to promote and disseminate use of the research and education infrastructure services and to make use of the opportunities provided through AfricaConenct3.

SomaliREN driving digital transformation through research and education networking innovation

SomaliREN has launched its connectivity services in June 2018 and within a relatively short time-span has come up with initiatives aimed at harnessing the connectivity infrastructure and the organization's technical capabilities to address the most pressing challenges in the Somali higher education and research sector. From the limited access to research and education resources by the students and faculty to the exorbitant bandwidth prices in the country to insufficient availability of qualified professors and lecturers in the science and technology-related disciplines, the connectivity and network infrastructure already deployed by SomaliREN is enabling innovative sustainable solutions. One such initiative envisaged finding a lasting solution to financing the already subsidized international bandwidth costs has created additional opportunities for all the involved stakeholders.

SomaliREN has introduced the EduSpot project to further bring down the cost of connectivity while improving access to both the international connectivity and local content. The project specifically aims to deploy 'educational hotspots' at locations densely populated by the students and faculty of the universities, provide federated identity services which allow each of the member institutions to provide identity authentication for their respective students and staff members, and promote the curation and production of local educational and research content.

Secondary goals of the project include driving bandwidth consumption by the member institutions as a direct result of the reduced bandwidth costs, which is a self-fulling prophecy as the increased bandwidth consumption leads to lower bandwidth costs taking advantage of the increased volume purchase of capacity. The EduSpot project will also create opportunities for developing the ICT skills and technical competencies of the students and graduates as the operation and maintenance of the EduSpot network and services require human resources that are capable of fulfilling this task.

Read the full story on SomaliREN's website: http://somaliren.org/somaliren-driving-digital-transformation/

SESAME facilities in ever-increasing demand

	XAFS/XRF	IR	MS	TOTAL
Belgium		1		1
Cyprus	4	6		10
Egypt	11	21	2	34
Iran	12	13	9	34
Israel	3	1		4
Italy	2	1	1	4
Jordan	5	8	3	16
Kenya	1			1
Malta		1		1
Pakistan	7	4	4	15
Palestine	5	3	3	11
Qatar	1			1
South Africa	1			1
Turkey	12	3	2	17
United Kingdom		1		1
	64	63	24	151

No less than 151 proposals have been submitted in response to SESAME's third call (Call "2") for experiments on its three beamlines that closed on 27 January, thus confirming the ever-increasing demand for use of its facilities. This time, it has been 64 proposals for experiments on its XAFS/XRF beamline that have been received, and 63 proposals for experiments on its IR beamline, as opposed to 60 and 43 proposals respectively in the second call, and 36 and 19 respectively in

the first call. Added to this there have been 24 proposals for use of its MS beamline that comes into operation this year.

As in the first two calls in which there were not only proposals from the Members of SESAME but also from countries further afield (Colombia, France, Germany, Italy, Kenya, Mexico and Sweden), this time again they have not only originated from the Members of SESAME. There have again been proposals from Italy and Kenya, but also from Belgium, Malta, Qatar, South Africa and the U.K.

The large number of proposals and the variety of places from where they originate are excellent by any standards, and SESAME is greatly encouraged by the continuous upward trend in the number being received whether from users having already utilized SESAME's facilities who are seeking to return to carry out further measurements, or new users from both the SESAME Members and beyond. In the case of the first group, this demonstrates that SESAME's facilities are fully meeting users' expectations, while in the second, this is evidence of the sound reputation SESAME is gaining on the world stage as a state-of-the-art synchrotron light source.

Since SESAME started hosting users on its beamlines in July 2018, 86 experiments involving 62 groups from 12 different countries have been selected for beam time following review by the international Proposal Review Committee. Most of these experiments have already been performed, and the SESAME beamline scientists are waiting for the restart of operation of the machine in March to welcome the remaining users still to perform experiments. After this, and following completion of the evaluation process, it will be the turn of the users having submitted proposals in response to the third call to use SESAME's beamlines for their work.

The first peer-reviewed paper presenting results using data obtained at SESAME's beamlines was published in June 2019. Since then three other peer-reviewed papers have been published and two have been accepted for publication. In addition, six papers have been submitted to journals and more than fifteen are under preparation. Moreover, part of the results presented in one PhD thesis was based on data collected at SESAME's XAFS/XRF beamline.

Source: https://www.sesame.org.jo/news/sesame-facilities-ever-increasing-demand?fbclid=IwAR1yxvqJcjiLEOPhYl0ayJt0RPPsaIOmjlUZxuJVB6XlzFapZYAYWiSavG4

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