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

Call for papers is now open for e-AGE20

ASREN
10 Years
CELEBRATING A DECADE OF SUCCESS

e-AGE20

"Power of e-Infrastructures – Shaping the Future of Online Research and Education"

Tunis, Tunisia
14 - 15 December 2020

e-AGE20, the 10th edition of the International Platform on Integrating Arab e-Infrastructure in a Global Environment will be held in Tunis, Tunisia during 14-15 December 2020. Its focus will be on the role of e-Infrastructures in the crisis of the COVID-19 pandemic. e-AGE20 is also supported by the EU co-funded projects AfricaConnect3 and EUMEDCONNECT3.

e-AGE20 will be a forum to share practices and experiences that go beyond teaching online courses and sharing resources in today's unprecedented isolation. NRENs and e-Infrastructures provide essential means to stay connected and to meet the new challenges of research and education.

Renowned speakers, experts and scientists are invited to share their experiences and debate on the complex global phenomenon and scientific challenges of COVID-19 pandemic. Topics of interest include, but not limited to:

- Roles of NRENs in the COVID-19 crisis
- Resources for Research and Education in COVID-19 Outbreaks
- Scientific computing and data-intensive e-Science in COVID-19 pandemic
- NREN services challenges, sustainability and business models
- Problem-solving environments in a global research
- Online teaching and learning: technologies, content, collaboration and assessment
- Open access, repository and content and open science platforms and policies
- Software defined networks and emerging technologies in AI

For more information and submission guidelines please visit:

http://asrenorg.net/eage20/submission-guidelines

MARWAN boosts online learning during the coronavirus lockdown

Over 1.5 billion children and youth around the world have been affected by school closures due to the COVID-19 outbreak. To ensure the continuity of its students' academic education, the Ministry of Higher Education and Scientific Research in Morocco has decided to shift quickly to online learning.

Following the government's requirements of nonstop teaching and learning, most Moroccan universities have resorted to online education using digital technologies provided via their online learning portal. MARWAN, the Moroccan Academic and Research Network, has played a crucial role in supporting the remote delivery of higher education by providing the Moroccan universities with reliable high-capacity internet and access to resources equipping their online educational services with quality and efficiency.
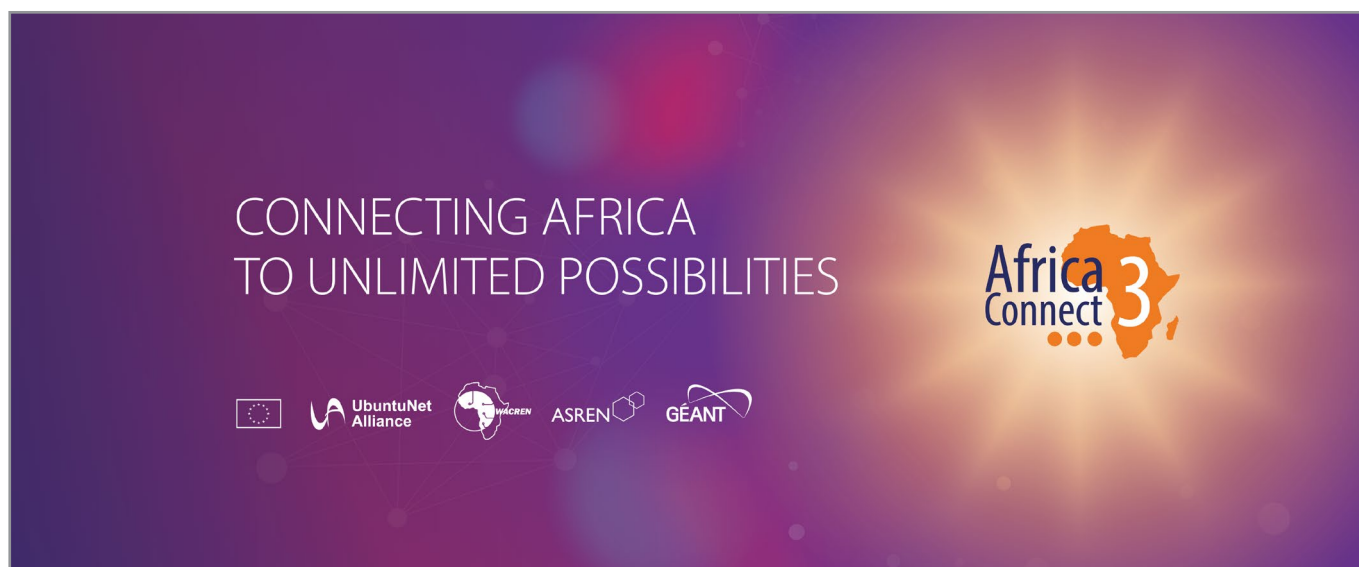
Furthermore, MARWAN has hosted the online learning platform launched by the Ministry of Education, TelmidTICE, which is used by over half a million Moroccan students daily. This platform has over 3000 courses covering a wide variety of subjects that are accessible to primary and secondary education students, which enables them to continue their education

The European Union has had a very positive impact on the evolution of MARWAN since 2005, largely within the framework of its co-funded projects EUMEDCONNECT and AfricaConnect, Africaconnect3 at present. These projects have provided MARWAN with the essential means to meet the new challenges of research and education in today's unprecedented isolation.

MARWAN's Head, Prof. Redouane Merrouch stated: "To meet the growing demand for seamless access to teaching resources, that was already well underway before COVID-19, MARWAN seeks to develop and extend its cloud services and capabilities to host more applications, content and services for the use of students and academics."

AfricaConnect: a past, present and future success story for African Research and Education

At the end of 2019and following the success of predecessor projects EUMEDCONNECT, AfricaConnect and AfricaConnect2, Africa's three Regional Research and Education Network organisations (RRENs): the UbuntuNet Alliance (UA) in Eastern and Southern Africa, the West and Central African Research and Education Network (WACREN) and the Arab States Research and Education Network(ASREN), in partnership with GÉANT, signed a €37.5 million contract agreement with the European Union (EU) for a successor project, AfricaConnect3. The project will extend the reach of RRENs and continue to provide high-speed internet connectivity and a broad range of e-services to NRENs and their communities across Africa. With Africa's 38 NRENs accounting for around a third of the world's total, the potential of AfricaConnect3 cannot be overestimated.

The EU's contribution of €30 million falls within the joint EU-Africa agenda. As Stéphanie Truillé-Baurens, International Cooperation Officer at the European Commission, said: "With AfricaConnect3, the European Union is proud to reaffirm its commitment to support NRENs in Africa. Since 2004, significant progress has been made in improving access of African higher education and research institutions to affordable and secure broadband connectivity. Under AfricaConnect3, the partners will further exploit the potential of digital technologies as transformation tools for quality education and science collaboration between the EU and Africa, in line with the EU Digital4Development strategy."

A continuing success story...
Between 2011 and 2014, the EU co-funded AfricaConnect project helped establish the UbuntuNet backbone, a regional gateway for collaborative research and education in Eastern and Southern Africa operated by the UbuntuNet Alliance.

In 2015, the successor project AfricaConnect2 supported the creation, development and use of high-capacity

Internet networks for research and development, adopting a pan-African approach including the two other regions, West and Central Africa, and North Africa, alongside Eastern and Southern Africa.

As a result of AfricaConnect and AfricaConnect2, 19 countries are currently connected to the three RRENs in Africa: Burundi, Kenya, Malawi, Mozambique, Rwanda, Somalia, South Africa, Tanzania, Uganda, Zambia and Zimbabwe as part of the UA; Côte d'Ivoire, Ghana, Nigeria and Togo, members of WACREN; as well as Algeria, Egypt, Morocco and Tunisia under the ASREN umbrella.

Since its start, AfricaConnect has changed the status of connectivity and enabled countries to be active members of research networks.
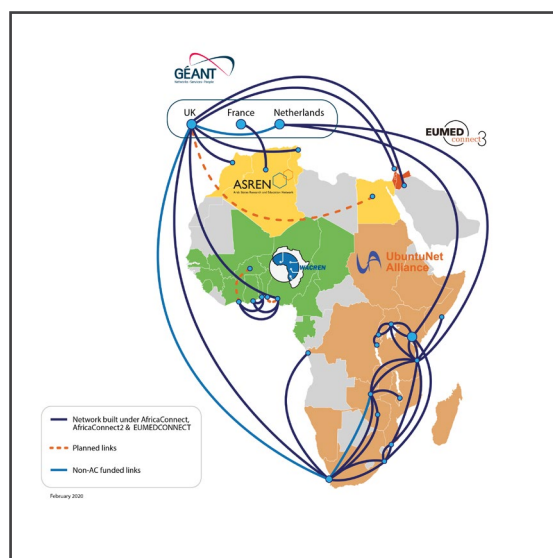
- In Uganda, it has enhanced academic services and the entrepreneurial skills of the country's youth.
- In Tanzania, it has connected university students and staff while enabling collaboration with sister higher education institutes (HEIs) around the world.
- In Kenya, AfricaConnect provided remote training and knowledge exchanges to strengthen geoinformatics expertise to support sustainable development.
- In Zambia it accelerated data-intensive modelling and mapping to monitor soil degradation and to develop sustainable land management. It enabled scientists to quickly monitor and notify asthma sufferers of sandstorms in Egypt and opened up career opportunities for women in STEM across Africa.
- AfricaConnect projects have made connectivity more affordable by decreasing bandwidth prices by 94% in Zambia and 60% in Somalia since 2011.

The achievements of AfricaConnect and AfricaConnect2 serve as a basis for the African partners to further expand the regional networks under AC3. As Boubakar Barry, CEO of WACREN says, "With AfricaConnect3 our target is to connect six more countries. At the end of the project, we aim at covering around 700 higher education and research institutions with approximately 5 million users".

WACREN is also leading two initiatives key to AfricaConnect's expanding community: Women-in-WACREN, which has seen 300 women trained in ICT-for-development, and the Library Support for embedded NREN Services and e-infrastructure (LIBSENSE) aimed at establishing frameworks for scholarly communication and research infrastructures.

As AfricaConnect3 calls for more collaborations worldwide, Leila Dekkar, GÉANT's AfricaConnect3 Project Manager, explains the organization's role in facilitating R&E community expansion: "GÉANT has been supporting and advocating for research and education networks globally for more than two decades, and we are pleased to contribute to the further expansion of our R&E community in Africa. Today's science breakthroughs are shifting and are more and more the result of international research collaborations. At GÉANT we firmly believe that by providing high quality, affordable and dedicated bandwidth and services to researchers in Africa, they will be able to contribute to the world greatest innovations."

The African partners have empowered NRENs through capacity-building, knowledge-sharing and participation in regional and international fellowship programmes, connecting 6.2 million researchers and students in North Africa, 3.5 million in Eastern and Southern Africa, and over 400,000 in Ghana and Nigeria. With the new phase of the project, "AfricaConnect3 will also create more opportunities to train more university campus and NREN engineers as well as facilitate NREN staff exchange visits to enhance the sharing of knowledge and best practices within the region", in the words of Matthews Mtumbuka, CEO of the UbuntuNet Alliance.

With all North African NRENs re-joining the international R&E networking community, ASREN sees AfricaConnect3 as an opportunity to allow a wider development of user and community-based services. Representing African RRENs, ASREN will continue leading the engagement with user communities in Africa with a focus on AfriGEO and GMES and African communities. As Yousef Torman, Co-Managing Director ASREN says, "We will pay more attention to the needs of national and regional communities in terms of connectivity, access and services. We will promote open science and open access in the region, make use of the European Open Science Cloud (EOSC) and coordinate with the African Open Science Platform".

AfricaConnect3 differs from the two previous phases of the project in that it introduces a novel aspect to the project: advocacy and donor engagement. GÉANT, UA, WACREN and ASREN collectively aim to support the project's regional partners in raising awareness around the benefits of NRENs and RRENs to various stakeholders and to simultaneously attract new donors and re-engage with previous ones. In previous phases of the project, the African partners received different level of support. This new aspect of the project seeks to tackle this hurdle and will priorities stakeholder engagement and outreach. Similarly, the project intends to reach out to European NRENs alongside other aid institutions in order to coordinate project funding. European NRENs and other organisations have previously shown their commitment to the development of NRENs in Africa, with CIRAD, DFN, NSRC, GARR, GRNET, RedIRIS, RENATER, CyNetand SURFnet being associate partners of in the AfricaConnect3 project. Above all, GÉANT will adopt a supportive role and will primarily seek to amplify the voices of its partners and their respective NRENs.

See also: *www.africaconnect3.net*

Source: *https://connect.geant.org/wp-content/uploads/2020/06/CONNECT-34-Web-PDF.pdf*

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