

EKO-KONNECT RESEARCH AND EDUCATION INITIATIVE

**2020 EKO-KONNECT USERS CONFERENCE:
DEVELOPING THE NATIONAL REPOSITORY FOR SCIENCE AND
HUMANITIES**

RADISSON BLU HOTEL, IKEJA LAGOS

27 – 29 JANUARY 2020

COMMUNIQUE

PREAMBLE:

The Eko-Konnnect Research and Education Initiative is a community-driven initiative established in 2009 to connect **research clusters** in geo-political zones across Nigeria via a high-speed backbone network that is essential for sharing, accessing and processing the large data volumes generated by research and education communities. Within the boundaries of a country, such networks are referred to as National Research and Education Networks – NRENs.

The primary goal is to provide a secure and inclusive collaboration platform for Nigerian researchers and students to realise their full potential. We deliver among other services, academic identity and management solutions for their increased visibility, secure world-wide wi-fi roaming, and access to globally dispersed resources for scholarly innovation and scientific output that contribute to national development.

A key challenge with the development of research and education in Nigeria is the availability and access to research outputs and content generated by our researchers. The cost of publishing is high and so the awareness of paradigms such as open access and open science and next-generation repositories needs to be promoted among the research community, librarians and repository managers.

Eko-Konnnect Research and Education Initiative (Eko-Konnnect) and Galaxy Backbone Limited signed a Joint Venture Agreement on 18 December 2019 to deploy an education content network backbone (ECBN) across Nigeria. The ECBN Platform intends to build upon the work undertaken in Nigeria by Eko-Konnnect and the West and Central African Research and Education Network (WACREN) over the last three years, to provide technological and social infrastructure including the Science Gateways and Identity Infrastructures that provide analytical tools and federated identity that enable optimal usage of the ECBN Platform.

OBJECTIVES OF THE EKO-KONNECT USERS CONFERENCE

The annual Eko-Konnect Users conference takes place annually in January. The 2020 edition of the conference took place with the following objectives:

1. Convene the Nigerian community to discuss and learn about the latest innovations and initiatives taking place within the global research and education space.
2. Hear from experts and practitioners about promoting open scholarship and preservation and access management of digital content research data.
3. Explore practical steps towards the immediate provision of contemporary national research infrastructure.

STRUCTURE OF THE EKO-KONNECT USER CONFERENCE

The theme of this year's conference - "Developing The National Repository for Science and Humanities" was chosen to provide the community with a platform to discuss the issues of generating and storing research outputs and scholarly content, and to deliberate on how the Eko-Konnect/Galaxy Backbone joint venture could be leveraged to deliver these objectives.

The conference also took advantage of the WACREN partnership with the National Institute of Informatics (NII) Japan on research infrastructures to host a pre-conference workshop on the Invenio-based WEKO3 multi-tenancy repository platform.

The pre-conference "Repository Workshop and eduID Policy Meeting" took place on Monday 27 January. The User Conference proper took place on Tuesday 28 and Wednesday 29 January and was structured into 5 sessions:

Session 1 Registration and Networking

Welcome Address – *Prof. Charles Uwadia, Chair of the Eko-Konnect Board*

Goodwill Message - *Dr Barry Boubakar, CEO, West and Central Research and Education Network (WACREN)*

Keynote Address - "**Towards Open Science and Open Collaboration -- The Way of Science in the 21st century**" - *Prof Miho Funamori, Strategy Manager, Research Center for Open Science and Data Platform, National Informatics Institute, Japan*

Session 2: Building a Sustainable and Robust Network for Research and Education

Development of ICT Infrastructure for National Education Research and Learning

Prof. Abubakar B. Muhammed CEO, Galaxy Backbone Limited (Represented by Mr Frank Ugbodaga, Group Head)

Role of the Internet Exchange Points in a Research and Education Network

Mr Muhammed Rudman CEO, Internet Exchange Point of Nigeria (IXPN)

Overcoming last-mile challenges and connecting rural education communities

Mr Wole Abu, CEO, Pan African Towers

Edge Data Centres for Industrial IoT and ensuring reliable content delivery
Mr Ike Nnamani CEO, Medallion Communications

Session 3 Research Collaboration, Funding and Communication

Promoting and Funding Research and Education in Nigeria

Prof. Olufemi Bamiro, Chair, National Research Fund, TETFund

The Eastern Research and Education Cluster: From Concept to Operation

Prof. Charles Esimone, Vice-Chancellor, Nnamdi Azikiwe University

The need for Open and publicly available Datasets in Nigeria: The case for Healthcare Research

Mr Felix Emeka Anyiam, Data Scientist, CHD, University of Port-Harcourt

Open Access for Digital Humanities in Nigeria

Prof. Tunde Opeibi, Chair of the Digital Humanities, University of Lagos

Science Communication and Collaboration: Tools and Platforms for Internationalizing Nigerian Research

Mr Idowu Adegbilero-Iwari, Scholarly Communications Librarian, Elizade University

Session 4: E-Infrastructures for Open Access and Open Science

The LIBSENSE Initiative

Mr Omo Oaiya, Chief Strategy Officer, WACREN

Establishing National Repositories: Experiences from Cote D'Ivoire

Cecile Coulibaly, Deputy Director in charge of Scientific Commissions, UVCI, Abidjan, Côte d'Ivoire

JPCOAR and JAIRO Cloud: A Case Study from Japan

Prof. Kazu Yamaji, Digital Content and Media Sciences Research Division, National Informatics Institute, Tokyo, Japan

Tooling for Open Access in Covenant University Library: Successes and Challenges

Dr Promise Ilo, Head Librarian, Covenant University, Ota.

Session 5: Persistent Identifiers, Researcher Visibility and Secure Access

The role of ORCID for the institution and the researcher

Nabil Ksibi, Engagement Lead, MEA/Partnership Liaison, EMEA, ORCID

Introducing the Federated Identity Management For Libraries Initiative (FIM4L)

Peter Gietz, CEO, DAASI International, Tübingen, Germany

RESOLUTIONS

Conference participants resolved that:

- 1. Establishment of National Repository Portal:** There is an urgent need to develop a national repository for science, social sciences and humanities research outputs based on open paradigms - open access, open science, open humanities, open journals. Eko-Konnnect should leverage the WACREN partnership with NII, Japan to deploy a demonstrator based on the technologies introduced during the conference, in collaboration with research organisations and library associations such as Nigerian Library Association (NLA), Association of University Librarians of Nigerian Universities (AULNU) and the Nigerian Coalition of Librarians for Open Research (NiCLOR).
- 2. Academic Identity:** The eduID.ng identity federation platform accompanied with awareness-raising and training should be made available to all institutions for the researcher and student identity critical to secure and trusted access to the national repository, as well as other repositories and scholarly content outside Nigeria is available for all researchers and students at no or little cost.
- 3. Funders:** TETFund and other funders should be made aware of the need for management interfaces into the research infrastructure for better analysis and management of their funding mechanisms. Such interfaces will enable funders to do the following:
 - a) Monitor the outputs and impact of funded research grants.
 - b) Better targeting of potential grant beneficiaries.
 - c) Improve research data management among grantees leading to greater efficiency.
 - d) Avoid duplication of research effort leading to better management of funding resources.
- 4. Government Ministries:** The Federal Ministry of Education (FME) and Federal Ministry of Science and Technology (FMST) should also have interfaces into the national repository portal to help enhance their role in the evolving education and science, technology and innovation ecosystem: mandating policies that drive the overall agenda, improve academic identity and verification of such identity with the consequent increased visibility of Nigerian research output and its application in national development. We envisage that the FME will also utilise the repositories and identity frameworks for better management of secondary and tertiary education in Nigeria including enumerate their students at different stages of their education in the life-long learning process, verification of examination results and access to e-learning content and platforms.
- 5. Private Sector:** The knowledge that will be created and disseminated through these platforms should be exploited to drive university-industry collaborations that employ new skills, processes, products and ways of working in a co-creation environment. The resulting strategic and commercial initiatives can then lead to the brokering and consultancy services required to tackle societal challenges, innovate in economic development and secure investments for longer-term sustainability.

RECOMMENDATION

Participants recommended that Eko-Konnect working with its regional partner WACREN, technical partners from Galaxy Backbone Limited and NII should propose a partnership with the Tertiary Education Trust Fund (TETFund), the Federal Ministry of Science and Technology, the Federal Ministry of Education and other relevant stakeholders to provide open access to research, teaching and learning materials in Nigeria through a national repository and related research infrastructure on the Education Content and Backbone Network (ECBN) Platform.

For more information, please contact Owen Iyoha, General Manager, Eko-Konnect Research and Education Initiative (Eko-Konnect).

The participant list is at <https://indico.wacren.net/event/87/registrations/participants>