# **Eko-Konnect Users Conference 2020 Report**

**Date:** 28 - 29 January 2020

Venue: Radisson Blu Hotel, Ikeja, Lagos State

Agenda & Presentations: <a href="https://indico.wacren.net/event/87/">https://indico.wacren.net/event/87/</a>

Pictures: <a href="https://drive.google.com/drive/u/0/folders/1KRjBk7lak9za5-1ijB1Cpaj8ka9Ltkxo">https://drive.google.com/drive/u/0/folders/1KRjBk7lak9za5-1ijB1Cpaj8ka9Ltkxo</a>

Event website: <a href="https://2020.eko-konnect.org.ng/">https://2020.eko-konnect.org.ng/</a>

Report prepared by: Uffa Modey

**Theme:** Developing a National Repository for Science & Humanities

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#### Introduction

# **Objective**

Eko-Konnect Users Conference brings together practitioners in the research and education networking community, librarians, researchers, policymakers, and service providers from across Nigeria and West Africa. The conference creates a platform for the research and education community in Nigeria to discuss common challenges and opportunities in developing the sector through information and communications technology.

This year's event addressed the steps to be taken towards delivering infrastructure and services for the development of a national research repository and better management of research data.

## **Executive Summary**

Around 150 stakeholders from the Nigerian research and education network community from 50 organisations convened at the Radisson Blu Hotel, Ikeja, Lagos to participate in the 2-day event. Representation from government, academia, private sector and technical community. The conference theme, "Developing National Repositories for Sciences and Humanities" raised awareness of the need to develop a national repository for research output and the role of each stakeholder in creating these repositories. Through the conference presentations and active interactions, the participants were engaged with the key issues in developing a national repository. These include infrastructure for telecommunication and connectivity, software and services for data management and identity and access management and skills development for academic staff. Funding for quality and impactful research was also a key topic of discussion during the conference. Participants were able to define various avenues for collaborations that could be fostered among themselves.

Research practitioners from Cote D'Ivoire shared their knowledge and experience on best practices for research data management, and the progress they were making with developing a national repository. At the end of the conference participants agreed that a communique outlining the recommendations and steps to be taken by the Eko-Konnect community be prepared. The Conference Communique can be downloaded here

Two side events also took place with the conference. These were the **Eko-Konnect Repository Workshop and edulD Policy meeting** and the **Eko-Konnect Youth in Technology** which took place on 27 and 30 January 2020 respectively.

## **Presentations**

# Opening Session

Prof. Charles Uwadia, Chair of the Eko-Konnect Board, opened the conference. with his welcome address. He urged participants to take action and support the development of their various institutional repositories as the first phase in developing a national repository.

In a goodwill message, Dr. Barry Boubakar, CEO, West and Central Research and Education Network (WACREN) expressed gratitude to Eko-Konnect for its continued efforts to grow the research and education network community in Nigeria.

The keynote address - "Towards Open Science and Open Collaboration -- The Way of Science in the 21st century" was delivered by Prof Miho Funamori, Strategy Manager, Research Center for Open Science and Data Platform, National Informatics Institute, Japan.

In the keynote speech, Prof. Miho discussed how social changes in the 21st century were now influencing the way science and research are undertaken and driven the need for relevant technology and open paradigms to deal with the explosive growth of knowledge and scholarly output and content that were residing in silos. She discussed in details the need for appropriate policy developments and the steps individual institutions could take to facilitate open science and open collaboration and research data management. She concluded that open paradigms would continue to drive the evolution of research output in the 21st century.

# Session II - Building A Sustainable And Robust Network For Research And Education

Moderator: Mr Gimba Mohammed, Main One

#### Development of National ICT Infrastructure for Education, Research and Learning

Mr. Frank Ugbodaga, Group Head, Customer Operations and Services, Galaxy Backbone Ltd

Mr. Frank Ugbodaga representing the MD/CEO of Galaxy Backbone Limited, Prof. Muhammad B. Abubakar explained the history, goals and objectives of Galaxy Backbone Ltd. He discussed Galaxy's role in the digital economy transformation strategy and their current imperatives in education, research and learning. He highlighted some similarities among digital platforms – Open Access, Science Gateways, Hybrid Clouds and Data Exchange Systems.

Galaxy's joint venture agreement with Eko-Konnect to support rapid development of ICT infrastructure for education research and learning involves;

• Promote rapid development of open access repositories and science gateways through re-use of digital platforms for govtech improved regional and global collaboration.

- Education and Research institutions use shared infrastructure and services, national-level policies formulated to create enabling framework for open access joined-up government intervention efforts of TETFUND, USPF etc., are pooled to fund expansion and integration.
- Common services for education, research and learning are developed by Galaxy Backbone, Eko-konnect and other knowledge and research clusters and content creators.

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

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

Mr Muhammed Rudman, discussed the role of IXPN to reduce traffic routing time and the cost of bandwidth in Nigeria. He highlighted the multiple locations of internet exchange points present in Nigeria.

In his presentation, Mr Muhammed Rudman explained some of the security and business implications for hosting content locally. These included data privacy and protection, avoiding phishing, legal issues, business continuity and redundancy.

# Overcoming Last-mile Challenges And Connecting Rural Education Communities

Mr. Wole Abu, CEO, Pan African Towers

Mr. Wole Abu highlighted some common last-mile challenges faced by Pan African Towers during operations, - capital, regulatory environment, power, vandalisation. He also mentioned some avenues for overcoming these challenges, - getting international long term funding, getting reasonable permits, updated EIA processes, critical national infrastructure bill should be engaged, renewable energy for power supply.

Mr Wole Abu also described Pan Africa Towers partnership with Eko-Konnect and WACREN as part of their corporate social responsibility to connect schools through community networks to foster education and research.

#### Edge Data Centres For Industrial IoT And Ensuring Reliable Content Delivery

Mr. Ike Nnamani CEO, Medallion Communications

In his presentation, Mr Ike Nnamani shared Medallions plans to further develop a minimum of 37 edge data centres in Nigeria (Port- Harcourt, Enugu, Asaba, Kano and Ibadan) in order to accommodate the growing needs of the Nigeria population for cloud services

### <u>Session III - Research Collaboration, Funding And Communication</u>

Moderator: Dr Boubakar Barry, WACREN

### Promoting and Funding Research and Education in Nigeria

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

Prof. Olufemi Bamiro discussed the major sources of funds for higher education institutions and their major expenses too. He stressed that Universities will continue to be underfunded if they rely solely on governments. Innovation can take place outside the research and education space and can utilize technological knowledge already in the public domain.

TETFUND is set to address the problem of being unable to commercialize research work.

#### The Eastern Research and Education Cluster: From Concept to Operation

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

ZIK-KONNECT is an initiative from the partnership with Eko-Konnect to connect institutions from the eastern part to improve the quality of research and education. It was established in 2015 when Eko-Konnect visited and assessed the network in UNIZIK.

ZIK-KONNECT is aimed at bridging the gap of technical infrastructure and services among institutions and providing high technical training for user groups. Prof Esimone urged the participants from the eastern region to embark on more local training and capacity building activities in order to develop the technical skills of their community.

# 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

Mr Felix Emeka Anyiam outlined the importance of data for Nigerian startups, predictive policing, healthcare and scientific research. He described scenarios or projects that went wrong due to inadequate use of data using the Rivers State Monorail Project as a case study.

In his presentation, he discussed various scenarios where data can be exploited for use in the health sector and the work being carried out by the Open Data Initiative to collect and share data electronically across the health care system in Nigeria.

#### **Open Access for Digital Humanities in Nigeria**

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

Prof. Tunde Opeibi was represented by Mr Felix. He described how digital technologies could be utilized to leverage humanities and conduct research and the objectives of the Center for Digital Humanities, University of Lagos - to promote computer-based approaches to research in humanities-based disciplines.

He introduced participants to the Corpus Of Nigeria New Media Discourse In English (CONNMDE) project which illustrates beneficial interactions between the humanities and computer science.

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

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

Mr. Idowu Adegbilero-Iwari outlined concepts to consider when discussing tools and platforms for internationalising Nigerian research - Science communications (science In-reach), Open Science and Internationalization.

He suggested the way forward for collaborations, support and digital infrastructure for research in Nigeria included:

- Government ministries/agencies e.g. TETFund backed hosting of infrastructure for internationalisation
- Government-backed Open Science initiatives and policies
- Rejigging the Library structure for scholcomm librarianship

# <u>Session IV - E-Infrastructures For Open Access And Open Science</u>

Moderator: Dr Oladipupo Ajeyalemi, University of Lagos, Distance Learning Institute

#### The LIBSENSE Initiative

Mr Omo Oaiya, Chief Strategy Officer, WACREN

Mr Omo Oiaya introduced the LIBSENSE Initiative as a European Commission sponsored that brings the librarians closer to the RENs. So far, the LIBSENSE Initiative has hosted three workshops that brought librarians together in focal points to talk about their issues. The outcome reports from all these workshops are available online.

The LIBSENSE Initiative has carried out surveys across the regions which have led to the following findings;

- Lack of policies on open access on the local levels
- No plan for funding or developing open access repositories
- No skills or expertise in the sector

Mr Oaiya urged the event participants to connect with Eko-Konnect to be involved in the project in Nigeria

#### Establishing National Repositories: Experiences from Côte D'Ivoire

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

Dr Cecile Coulibaly shared the experience of the Ivorian research and education community in establishing a national repository in Cote D'Ivoire. She described the process involved in setting up the repository listing all the key stakeholders involved; RITER, African Universities Association and others.

The objective of the national repository is to promote open access and open science and to develop partnerships in the Ivorian research and education sector.

## JPCOAR and JAIRO Cloud: A Case Study from Japan

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

Prof Kazu Yamaji introduced the event participants to JAIRO Cloud. It provides a shared instance of an IR system on the virtual server hosted by NII and solves the problem of implementing IRs especially in small universities due to lack of resources and less technical knowledge.

He explained the JAIRO Cloud service architecture and cloud fee. Japan Consortium for Open Access Repository (JPCOAR), was established in July 2016. It consists of 482 (as of May 1st 2017) Institutions and organizes 3 WGs (JAIRO Cloud Operation, Training and Promotion WGs) and 4 TFs (Metadata, Research Data, OA Policy, Researcher ID TFs)

# **Tooling for Open Access in Covenant University Library: Successes and Challenges**Dr Promise IIo, Head Librarian, Covenant University, Ota

Dr Promise IIo described the Covenant University Library as the support system for the vision of academics in research in the university. In the library's role as the centre for learning resources it provides services such as - Several rich online bibliographic and full-text databases, Provision of remote access to electronic resources, Teleconferencing facilities, WEBPAC, Institutional repository, Ensuring the integrity of faculty, and institutional scholarly outputs, Promotion of the University'sOpen Access Initiative.

Dr llo discussed the activities driven by the CU Open Access Initiative to support open access. She also shared some enabling factors, successes, challenges and coping mechanisms of the initiative.

#### **Session V - Persistent Identifiers, Researcher Visibility And Secure Access**

Moderator: Prof. Kazu Yamaji, Director Research Centre for Open Science and Data Platforms NII, Japan

#### The Role Of ORCID For The Institution And The Researcher

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

Mr Nabil Ksibi introduced ORCID as a non-profit organization helping create a world in which all who participate in research, scholarship and innovation are uniquely identified and connected to their contributions and affiliations, across disciplines, borders, and time. He urged the need for

institutions to increasingly realise and acknowledge the impact of all kinds of research and contributions.

Mr Nabil Ksibi explained how ORCID works, the ORCID principles and how organizations and researchers benefit from it. He also outlined the mechanism for ORCID implementation and getting started with ORCID.

#### Introducing the Federated Identity Management For Libraries Initiative (FIM4L)

Peter Gietz, CEO, DAASI International, Tübingen, Germany

Mr. Peter Gietz expressed the need for the Library to provide a private (virtual) place and to protect its users. For the library to operate as a digital content provider, there must be authenticated and authorized access to preserving privacy.

Mr. Peter Gietz highlighted the benefits of SSO (person (ID) based) authentication;

- tailored contracts: e.g. buy a subscription for one faculty.
- In case of abuse: just one user can be blocked, instead of all staff and students alike.
- better statistics

He also discussed the Authentication and Authorization for Research Collaboration (AARC) Project which is aimed at delivering production-ready architectural building blocks and best practices to enable research and e-infrastructures to build interoperable AAI.

## Closing Session

Mr Owen Iyoha, General Manager, Eko-Konnect stressed the importance of eduID and the eduID.ng federation as the academic identity glue that would allow the research and education community to produce content and share using the infrastructure and paradigms that had been discussed over the 3 days in the workshop and conference itself. He thanked all the contributors and participants of the conference and looked forward to big strides in 2020 for Eko-Konnect and the R&E as discussions and plans emerging from the conference were put into action. He predicted that next year's conference would be even bigger as members of the community find their roles and voices within the development of the research and education ecosystem.

#### **Conference Communique**

# **Conference Outcomes**

# Participants Inputs

- Mr. Idowu Adegbilero-Iwari, Elizade University Is Pan African Towers also thinking about security concerns for 5G networks?
- Dr. Boubakar Barry, WACREN Is Pan African Towers only present in Nigeria or are there plans to expand to outside the region?
- Dr. Oluwatoyin Enikuomehin, Lagos State University What is the process involved in making use of Pan Africa Tower resources to gather data for research?
- Representative, Afe Babalola University Why are private universities in Nigeria not sponsored by TETFUND?
- Mr. Owen Iyoha, Eko-Konnect Is it possible for TETFUND to contribute towards a national repository so they can measure research output and not redo research data?
- Prof. Olufemi Bamiro, TETFUND TETFUND has a call for research proposals. Researchers working on open data should submit well-articulated proposals.
- Mr. Samuel Osagie, University of Abuja How can local journals be sustained and how can we build capacity to ensure that scholarly publications are not just localised?
- Dr Promise IIo, Covenant University What has Elizade University been doing to ensure that faculty and staff are aware of the avenues to publish?
- Representative, Obafemi Awolowo University I was checking for NICLOR online yesterday but did not see it. How can we have training like this in grassroots? How to be a part of LIBSENSE?
- Mr. Omo Oaiya, WACREN Are the efforts in Nigeria similar to activities carried out by Dr Cecile and UVCI in establishing a national repository?
  - Dr. Chinwe Anunobi, Federal University of Technology Owerri Yes and no. The national operation of research and education networks is NGREN which is in NUC. The approach by Dr Cecile started from RITER and went to the ministry. But here NUC does not ask librarians what they want to do. It can happen because we have an association of university librarians but that is not being very effective.
  - Prof. Frederick Osaro Ekhaise, University of Benin We have so many associations. The university associations should sit down and discuss way forward
  - Representative, University of Benin We have DSpace. We tried to populate it
    and there was a problem. But with what we have learned in this conference we
    can come back alive. Take home from the conference under the same guidance
    to look for our next steps. If we all have our institutional repositories, we can send
    them all to become nationals
  - Dr. Promise IIo It was not happening before but because of Eko-Konnect, it will happen and is starting to happen. Last year after the WACREN conference, Dr. Stephen A. Akintunde, University Librarian - University of Jos, and I did a paper on national repo in Nigeria so that means I am optimistic that is is happening

- Dr. Chinwe Anunobi, Federal University of Technology Owerri Does UVCI have only digital resources in the national repository or can other databases be accessed through there. Is it open access? Do you have a national open access policy?
- Dr. Azubuike Aniedu, Nnamdi Azikiwe University How do community members aggregate their information in ORCID so they have information about their members that are in ORCID?
- Prof. Frederick Osaro Ekhaise, University of Benin How secure is the ORCID platform?
   What is the link between the platform and the national repository? And the benefits?

#### Next Steps

- 1. Future collaborations with NII, TETFUND and other stakeholder organizations present to build a national repository in Nigeria.
- 2. Identity is important. We cannot have a national repository if we do not know who we are. We need to engage our institutional management on this and set up a community mailing list for policy conversations and next steps to boost activities in this sector.
- 3. The community will collaborate to write a communique to adhere to developing and using the national repository and defining the method to access the national repository through identity federation.

# Attachments

# **Participants**

Number of participants Day 1 - 85

Day 2 - 65

# **Organizing Committee**

Owen Iyoha

Uffa Modey

Kafayat Adeoye

Olayiwola Lawal

Pius Effiom

Chiamaka Oziri

Ademola Seriki