# Progress of Nigerian National Open Science Roadmap and Infrastructure Development

### PRESENTED BY:

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# **BACKGROUND**



# Why A National Road Map?

- Nigeria is most populous country in Africa with over 200 million people
- Over 550 Higher Education Institutions including over 170 Universities
- Only 17 out of 5317 registered open access repositories in ROAR
- Only 23 journals out of 19,418 in Directory of Open Access Journals
- A national open science plan needed to increase scholarly and research output to have more impact on societal challenges



# Open Science Journey (2017 - )

- Strengthened REN collaboration with Library
  - Created framework for REN provided infrastructure and support for library and helped to refine service offerings to the R&E community
  - Open Science Cloud is guided by the principles in the LIBSENSE Open Science Africa Statement.
  - Contributing as Co-Chair of the LIBSENSE Infrastructure Working Group
- Provided toolkits and templates for open science policies and practice.
- Facilitated working relationships with regional and international open science stakeholders



# Library Support for Embedded NREN Services and E-infrastructure





# Nigerian Open Science Roadmap Overview

- Roadmap devised in 2021 as a result of workshops and templates developed by LIBSENSE between 2017 & 2020
- 3 Cadre of stakeholders identified within the Nigerian roadmap
  - National Policy Influencers
  - Chief Executives (and their ICT Directors)
  - Librarians and Researchers
- Tools and Resources for roadmap implementation
  - Webinars and Workshops
  - Users Conference
  - Community Open Science Cloud to establish pilot projects



# **Areas to Address in Roadmap Delivery**

Identify and bring stakeholders together to engage in a series of activities on:

### 1. Capacity Building:

Run a series of workshops to improve the digital literacy and skills of research and education practitioners

### 1. Infrastructure:

Identify infrastructure gaps, tools and platforms that can increase adoption

### 1. Policy:

Consultation meetings and a workshop to create working groups and document a national Open Science policy



# **Activities Towards Roadmap: 2021 - 2022**



# **Capacity Building...**

#### ACTIVITIES

- Digital literacy workshops for Librarians and Researchers
- Participation in LIBSENSE capacity building activities -
- Engage students in Open Access, Open Education, Citizen Science

#### OUTCOMES

- Open Science principles and practice reinforced within the R&E community
- Tools and infrastructure available to drive Open Science practice introduced
- Open Science Sessions at Eko-Konnect User Conference 2021 2023



# Capacity Building: Digital Literacy Webinars

- International Partnerships for capacity building.
- Digital literacy skills development
- E-learning platform support & services





# Policy: Nigerian Open Science Symposium

- Open Science Recommendations
- Policy Definition
- Policy Enactment
- Best Practices
- Community Development
- Awareness & Advocacy
- Call To Action





# Policy: Call To Action

- 1. Open Science Advocacy and Capacity Building Plan for Nigeria.
- Document National Open Science Policy and include in National Research Development Foundation (NRDF) Bill to National Assembly if possible.
- 1. Enhance infrastructure collaboration between TETFund, Service Providers and REN Community.



### **Eko-Konnect 2022 Users Conference**

- Held in January 2022 <a href="https://2022.eko-konnect.org.ng/">https://2022.eko-konnect.org.ng/</a>
- Sessions included:
  - Fulfilling Open Science Roadmap with Open Research
  - Growing the Nigerian eduID Federation
  - Improving Funding For Open Science
  - Spawning Open Science Communities on Campus
  - Using https:ren.ng Infrastructure and Services



# **INFRASTRUCTURE**



# **Open Science Infrastructure Developments**

- Consolidating on existing services for Open Science Cloud
  - Nigerian Identity Federation eduID.ng
  - Hybrid Learning and Collaboration
- Collaboration with Coko to pilot publishing platform Kotahi <a href="https://www.eko-konnect.org.ng/eko-konnect-adds-kotahi-to-community-open-science-cloud/">https://www.eko-konnect-adds-kotahi-to-community-open-science-cloud/</a>
- Research Data Management Platform based on InvenioRDM pilot
- Soft launch of Cloud Service Platform (ren.ng website) by end of 2021



# **Open Science Community Cloud**











https://ren.ng



### PID Roadmap Implementation

- Increase adoption & use of Persistent Identifiers PIDs
- Consortia are usually needed to bring PID stakeholder community together
  - develop appropriate community governance & sustainability models
- Effective involvement of RRENS & NRENs for strategy, governance & support
  - Leverage national and regional Identity Federations
- Adopt DOIs, ORCID, ARK at national and regional level
- Emphasis on complementarity of PIDs
- Improve the scale & depth of PID integration in every day workflows



# **Activities Towards Roadmap: 2023 -**



### **Eko-Konnect 2023 Users Conference**

- Open Science themed conference: <a href="https://2023.eko-konnect.org.ng">https://2023.eko-konnect.org.ng</a>
  - Using Open Science Infrastructure to expand scholarly & research outputs
  - Open Access Adoption In the Nigerian Context
  - Lifelong Identity For Education
  - Maximising PIDs for Global Research Visibility
  - Building EO GIS Capacity for Research and Education



# Partnership with AULNU

- Preparing an MoU with the Association of University Librarians of Nigerian Universities - AULNU
- Eko-Konnect to work on behalf of AULNU to strengthen Open
   Science practice of the Nigerian Library Community
  - Consortia initiatives
  - Open Science Policy Workshop
  - Develop a series of capacity building initiatives for library



# Open Access Policy & Infrastructure Workshop for VCs

- 2 day workshop Scheduled for July 2023 in Abuja: Facilitation
  - Sec. Gen Association of Vice-Chancellors of Nigerian Universities AVCNU
  - Open Access Coordinator of Covenant University
  - Eko-Konnect
- 28 'Open Science Friendly" VCs shortlisted for workshop
- Implementation of Open Access Policy at institutional level
- Open Infrastructure and PID adoption support
- Some Expected Outcomes Signing Draft MoU Commitment to Open Access
   Policy & PID consortium initiatives



# Open Science Workshops for Early Career Researchers

- Expecting to Schedule Campus Workshops in Q4
- Support from VCs as result of VC workshop and commitment
- ECRs more inclined to adopt open science practice to enhance careers
- More amenable to use Open Infrastructure and PIDs
- Workshops will look at ensuring closer collaboration of ECRs with librarians in promoting Open Science practice



# THANK YOU

