

SEGMENT 4

# Delivering the Infrastructure: Federated Services & Execution Model

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eduID.ng Assembly of Members



# Datasphir's Role in This Framework

Our focus is practical: helping institutions move from interest and pilots to **sustainable, production-ready services**.

## Infrastructure Investment

Datasphir provides dedicated capital and technical resources to power eduID.ng delivery at scale.

## Operational Delivery

Day-to-day platform management, monitoring, updates, and full lifecycle support — continuously.

## JPC Framework

Structured coordination with Eko-Konnect under the Joint Partnership Committee model — clear roles, no gaps.

# The Starting Point: Restoration & Modernisation (2024)

Datasphir's involvement began before this meeting — with hands-on infrastructure recovery.

01

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## Modernised Obsolete Components

Core federation software dependencies had become critically outdated and unsupported.

02

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## Restored eduGAIN Interoperability

Re-established Nigeria's connection to the global research and education trust framework.

03

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## Deployed Hosted Identity Provider

Institutions now access a managed IdP environment — no local infrastructure required.

04

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## Implemented Discovery & Metadata Services

Users can locate and authenticate with their home institution; metadata query supports production-grade federation.



# Why the Execution Model Matters

The technical and operational complexity of national federation can be **underestimated**.

## What This Requires

- Identity federation & metadata management
- Secure institutional onboarding
- Repository infrastructure & lifecycle
- Publishing systems & persistent identifiers
- Regional & global interoperability

## What the Model Provides

### Governance coordination

Eko-Konnect leads policy, member relations, and assembly facilitation.

### Operational delivery

Datasphir owns platform operations, infrastructure, and technical roadmap.

### Structured JPC coordination

A formal framework that keeps governance and delivery aligned.

# The Integrated Service Stack

Identity federation is the foundation — but institutions need a **coherent ecosystem** around it.

The logo for edulD.ng features the text "edulD.ng" in a green, sans-serif font. The "D" is significantly larger than the other letters. A green horizontal line is positioned below the text.

edulD.ng — Federation  
& Trust

The trust backbone enabling secure, federated identity across Nigerian institutions and into global frameworks.

The logo for eduroam consists of a series of blue, curved lines that resemble Wi-Fi signal waves, positioned above the text "eduroam" in a bold, blue, sans-serif font.

eduroam — Secure  
Campus Mobility

Wi-Fi roaming for staff and students across thousands of participating institutions worldwide.

The logo for ORCID features the text "ORCID" in a grey, sans-serif font. The letter "i" is stylized with a green dot above it.

ORCID Hub —  
Research Identity

Persistent researcher identifiers connecting institutional identity to global discovery and publication systems.

This block contains three stacked logos. The top logo is RUMBU, with "RUMBU" in green and a green icon of three horizontal bars to its left. The middle logo is BookHub, with "BookHub" in blue and a blue icon of an open book to its left; below it is the tagline "...your end-to-end publishing platform" in a smaller blue font. The bottom logo is JournalHub, with "JournalHub" in black and an orange icon of a book to its left.

RUMBU / BookHub /  
JournalHub —  
Repositories & Publishing

Open-access repository and publishing infrastructure supporting Nigerian research outputs at scale.

# Institutional Onboarding: A Structured Pathway

Designed to accommodate institutions at different levels of readiness — **practical, not prescriptive.**

1

## 01 Discovery

Objectives, readiness, and service priorities

2

## 02 Planning & Architecture

Deployment plan and integration needs

3

## 03 Deployment & Integration

Federation, eduroam, repos, and PIDs

4

## 04 Sustainability & Support

Monitoring, training, and lifecycle management



STAGE 01 / 04

## Stage 1 — Discovery

Initial engagement to understand institutional context *before* any deployment decision.

### Institutional Objectives

Research visibility, student mobility, access to global platforms — what matters most?

### Infrastructure Readiness

Existing identity systems, directories, and authentication infrastructure assessed.

### Policy Requirements

Data protection obligations, regulatory constraints, and federation policy alignment.

### Service Priorities

Which services are most urgent — eduroam, ORCID, repositories, or federated access?

# Stages 2–4: From Planning to Sustained Operation

## STAGE 02 / 04

### Planning & Architecture

- Deployment and integration planning
- Identity and repository architecture
- Support and escalation arrangements
- Timeline and milestone agreement

## STAGE 03 / 04

### Deployment & Integration

- Federation onboarding (eduID.ng / eduGAIN)
- eduroam network integration
- Repository deployment (RUMBU / BookHub)
- ORCID Hub & persistent identifier setup

## STAGE 04 / 04

### Sustainability & Support

- Operational monitoring and alerting
- Software updates and patching
- Staff training and knowledge transfer
- Lifecycle and roadmap management

 The objective is not simply deployment — it is **sustainable, well-supported institutional operation.**

# How Responsibilities Are Divided


The JPC framework creates **clear accountability** — no gaps, no overlaps.

## Eko-Konnect

- Institutional coordination & member relations
- Governance engagement & Assembly facilitation
- Ecosystem mobilisation
- Policy and regulatory alignment

## Datasphir

- Infrastructure investment & platform ownership
- Operational delivery & service management
- Technical lifecycle and platform roadmap
- Hosted service environments (IdP, RUMBU, BookHub)

 **Joint Partnership Committee (JPC)** — structured coordination between governance, operations, institutional engagement, and infrastructure delivery.

# Why Shared Services — The Institutional Case

The model is not about centralising control. It is about **removing barriers to participation**.



## Reduced Operational Burden

Production-grade infrastructure without the overhead of maintaining it independently — lower cost, lower risk.



## No Duplication of Investment

Shared platforms avoid parallel, incompatible builds. Every institution benefits from collective investment.



## Global Interoperability

Instant connection to eduGAIN, ORCID, and international services through established federation pathways.



## Consistent Security Posture

Centralised identity assurance, metadata management, and security standards applied uniformly across all members.



## Expertise on Demand

Federation, repository, and PID expertise reducing the need to sustain independently.



## Scalable Growth

Infrastructure built to scale — as more institutions join, per-institution cost and complexity decrease over time.

# Towards a Coherent National Trust Ecosystem

Nigeria's ecosystem is strongest when institutions align around **interoperable, coordinated frameworks** — not parallel silos.

## Coordinated, Not Centralised

Shared infrastructure does not remove institutional autonomy — it removes duplication and fragmentation.

## National → Regional → Global

Trust coordinated nationally connects naturally upward to eduID.africa and into the global eduGAIN trust fabric.

## Critical National Infrastructure

These environments increasingly resemble critical national digital infrastructure — not isolated IT deployments.



The technology is important — but **coordinated execution and institutional participation** are what make federations sustainable.

## Your Role in What Comes Next

1

### Participate in Governance

Engage actively in the Assembly and help shape the policies that govern shared infrastructure.

2

### Begin Onboarding Discussions

Reach out to initiate institutional discovery conversations — wherever your institution currently stands.

3

### Join a Technical Committee

Volunteer for the Technical Committee or Policy & Research Working Group (PRWG) to contribute expertise.

4

### Shape the National Ecosystem

Your institution's participation directly strengthens Nigeria's position in regional and global trust frameworks.