

# MOSIP

## Progress Report

Prof. S Rajagopalan, IIIT-Bangalore

Nagarajan Santhanam, CDO – MOSIP





8 years

29 Countries

185+ Million IDs generated

Thank you for your support and partnership





Happy to Announce!

# First Successful Brownfield Implementation

## Uganda

**30 M IDs Migrated into MOSIP-based ID System**





## Africa

19 Countries

**Morocco** (37.271 Million)

**Ethiopia** (126.5 Million)

**Guinea** (14.2 Million)

**Togo** (9.1 Million)

**Sierra Leone** (8.8 Million)

**Burkina Faso** (23.3 Million)

**Niger** (27.5 Million)

**Madagascar** (30.3 Million)

**Uganda** (48.6 Million)

**Nigeria** (223.8 Million)

**Congo** (6.1 Million)

**Zambia** (20.6 Million)

eSignet Adoption

**The Gambia** (2.7 Million)

**Côte d'Ivoire** (28 Million)

**Benin** (13.35 Million)

**São Tomé & Príncipe** (225,000)

**Lesotho** (2.3 Million)

**Senegal** (18.5 Million)

**South Africa** (63 Million)

## Asia Pacific

4 Countries

**Philippines** (117.3 Million)

**Sri Lanka** (21.9 Million)

**Cambodia** (16.9 Million)

eSignet Adoption

**Tonga** (107,000)

## LatAm & The Caribbean

6 Countries

**Peru** (34.4 Million)

**Belize** (405,000)

**Mexico** (128.5 Million)

**Trinidad & Tobago** (1.5 Million)

**Bolivia** (12.4 Million)

**SVG** (104,000)

### Map Key

- National Rollout
- Completed Pilot
- Ongoing Pilot
- Pilot to Begin

## MOSIP Adopting Countries

**185+ Million residents** received digital IDs on MOSIP-based systems across **14 national rollouts**.

Total reach of **970.8 Million residents** worldwide with **29** active country engagements.



# One Project, Multiple Flavours

## Green Field Implementation

Building a foundational digital identity system from the ground up.

## Brown Field Implementation

Integrating modular identity components into existing legacy national digital infrastructures.

## Only e-Signet Implementation

Deploying IDP layers for external, existing national identity systems.

## Only Inji Implementation

Deploying a digital credentialing solution for managing existing identity credentials.

## Vendor Driven Engagement

Commercial partners managing the technical implementation and maintenance of MOSIP.

## Scalable to any population size

Large populations >10 M, Medium populations >1 M, and Small populations <1 M

# Snapshot of Implementation



	Country	Category	Status/Comments
<b>Scale Accelerators</b>	Morocco	National Roll-out	<b>First country</b> to sign MoU with MOSIP. <b>88% enrollment completed</b> - 24 M/25 M IDs with 80 M cumulative Authentications
	Philippines	National Roll-out	<b>MOSIP's largest deployment with 98.6% enrollment completed</b> - 94 M/95.2 M IDs; 170 M cumulative authentications ; 118 RPs
	Ethiopia	National Roll-out	<b>32% enrollment completed</b> - 33 M/103 M IDs; 100+ agencies for services; 66 M cumulative authentications
	Togo	National Roll-out	<b>42% enrollment completed</b> – 3.5 M/8.3 M IDs; 1st country to adopt Rapid Pilot model
	Uganda	National Roll-out	<b>1st Brownfield Implementation; 30 M records of biometric data migrated</b> , 6 M new registrations
<b>Implementation Ready</b>	Nigeria	National Roll-out	<b>Largest Brownfield</b> implementation
	Niger	National Roll-out	Country is working on a RFP for the National Rollout.
	São Tomé & Príncipe	National Rollout	The <b>first, small, as well as Lusophone country</b> to implement MOSIP.
	Sri Lanka	National Roll-out	Country has earlier <b>completed two pilots with 2 use-cases</b> (bank account opening and sim card issuance).
	Tonga	National Roll-out	<b>SI driven</b> engagement
	Zambia	National Roll-out	Use case driving need for ID
	Burkina Faso	National Roll-out	Country is planning for national roll out. Pilot completed in August 2023.
<b>Inji &amp; eSignet Implementation</b>	Cambodia	National Roll-out	Using only eSignet module of MOSIP
	Peru	Pilot	eSignet and Inji were integrated with Peru's existing National ID system as a pilot.



# Snapshot of Implementation

	Country	Category	Comments
Learning & Transitioning to National Roll-out	Lesotho	Pilot	Pilot Completed
	Bolivia	Pilot	Pilot completed
	Saint Vincent and the Grenadines (SVG)	National Rollout	Small island engagement
	Mexico	Pilot	Extremely technical pilot completed so far. Integration of the RENAPO system with MOSIP.
	Benin	Pilot	Pilot planning underway
Early-Stage Exploration	Belize	Pilot	Pilot completed
	Madagascar	Pilot	Pilot completed
	Côte d'Ivoire	Pilot	Registration client data to be imported
	Guinea	Pilot	Lessons learnt paving the way for Rapid pilot model
	Trinidad & Tobago	National Roll-out	<b>SI driven</b> engagement
	Sierra Leone	Pilot	1st brownfield pilot
	The Gambia	Pilot	Yet to start
	Congo	Pilot	Yet to start
	South Africa	Pilot	Pilot in progress



# THE MOSIP VISION **A DPI approach**

MOSIP envisions a digital future that is **interoperable, inclusive, and trusted**





## MOSIP Pilot

### Rapid Deployment Model

A **quick and efficient pilot model**, developed by optimising **people, process, and technology**

- **OBJECTIVE:** Experience ALL the stages of MOSIP Implementation
- **SUCCESS FACTORS:** Understand MOSIP capability and process through successful registration of 1000 Residents
- **DURATION:** 2 – 3 months
- ABIS, biometric kits, and authentication devices **provided by MOSIP**
- **MOSIP COST:** \$ 0.00

## National Roll-Out Models

### 01 Greenfield Model: From the Ground Up

- Adopt MOSIP and join its ecosystem of technology partners.
- Customise modules from scratch to enable all processes

### 02 Brownfield Model: Embracing Existing Infrastructure

- Integrate the MOSIP platform with existing databases or identity systems
- Work with MOSIP and local experts to upgrade legacy infrastructure to modern digital identity systems

### 03 Use cases: Building on ID

- Build services on top of foundational ID systems
- Work with MOSIP and partner DPGs to build a robust digital transformation journey



# MOSIP Modules

## MOSIP Platform



### PRE REGISTRATION

- User-enabled data entry
- Appointment booking



### REGISTRATION

- Online or offline mode
- Fingerprint, iris & photo

Local/Multi Language Support



### ID ISSUANCE

- Credential Issuance
- Mobile ID/Card printing



### AUTHENTICATION

- Demographic & Biometric
- Yes or No & E-KYC services

Notification to residents at various stages



### RESIDENT SERVICES

- Lock your credentials
- Generate credentials on-demand



### PARTNER MANAGEMENT

- Manage relying parties
- KYC/data share policies

Tokenisation & Virtualisation of ID



# Global DPGs Local Impact



**MOSIP**

Identity Issuance  
and Verification



Identity Verification, Login  
& Consented Data Sharing

**Trusted Identity**



Credentials Wallet  
and Authenticator



Beneficiary Management  
and Benefits Delivery

**Trusted Data**



# Good Innovation is only meaningful with Good Adoption

MOSIP's approach to  
successful adoption:

- 01** Enable a vibrant ecosystem of partners
- 02** Build Capacity
- 03** Support Countries



# MOSIP'S

## Offerings to Countries



### MOSIP Technology

Offering core digital ID infrastructure



### Platform Support

Supporting countries in MOSIP adoption



### Advisory

Equipping countries with best practices to understand and operate MOSIP technology

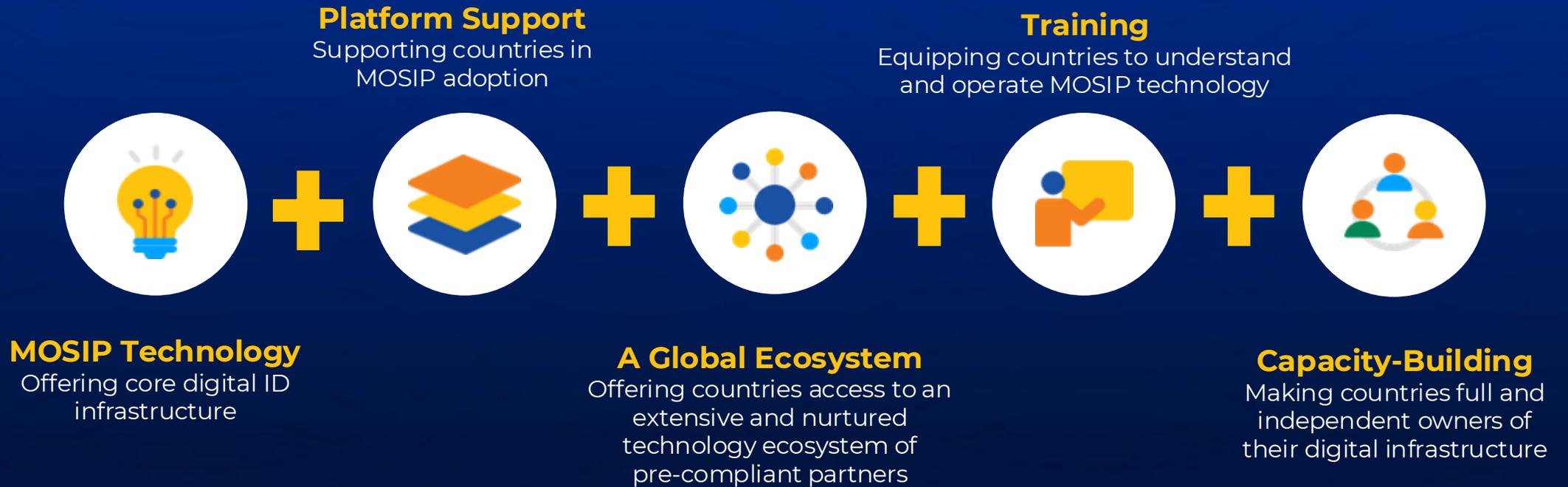


### Training & Capacity Building

Making countries full and independent owners of their digital infrastructure



# Recipe for success





## Capacity Building

### MOSIP Academy

Supporting Countries and Technology Partners

With a variety of learning models, MOSIP has trained **1740+** participants from over 85 countries around the world.

**225+** Personnel Trained across **10+** Countries

On going collaboration with **UM6P, Morocco | University of Philippines | UnRAF, Argentina**



## **01** MOSIP Partner Program

A framework to build capacity and engage as a community

## **02** Technology, Tools, and Sandboxes

To build, verify, and maintain compliance with MOSIP technology

**At the heart of  
MOSIP  
adoption is a  
vibrant  
ecosystem of  
partners.**

# Technology Solution Providers



# System Integrators





# Enabling Sustainability – **Empowering Ecosystem**

## **Building Runbooks**

Documenting platform operational workflows.

## **Robust Monitoring**

Developing better system observing metrics.

## **Better Estimations**

Coming up with methods for estimating infrastructure requirements for national digital identity systems.

## **Brownfield Implementation Support**

Supporting the modernisation of legacy national identity systems.

## **Trouble Shooting Guides**

Creating comprehensive documentation for resolving platform technical issues.

## **Advance Training and Regional Workshops**

Scaling technical capacity through advanced regional training workshops.

## **Use case Dedicated Team**

Assembling cross-functional experts to implement specific identity solutions.

## **DPG to DPG Integrations**

Integrating interoperable digital public goods to build national infrastructure.

## **Regional Teams**

Local teams will make operations efficient and round-the-clock

Support and Build Local Ecosystems





## Building a Community of Countries

- Contribute to MOSIP Technology Roadmap
- Cross-learning between countries
- Co-developing Technology for country usage



## ID is only as powerful as what it can enable.

MOSIP's robust identity platform enables countries to equip every resident with essential benefits and services.

- Financial Inclusion
- Social Registries
- Healthcare Delivery
- Benefits Delivery
- Departmental IDs
- Civil Registries



# Stories from the Field

## Morocco

ID and Social-Benefits Delivery



### ID for Benefits Delivery

**80+ million**

cumulative authentications

**Authentications: 42 million**

**eKYC: 38 million**

### 7 active use-cases on benefits delivery

1. National Social Register - RSU
2. Cash Transfer Programme
3. Free Healthcare - AMO  
TADAMON
4. Subsidised Healthcare - AMO  
ACHAMIL
5. Scholarship to School Students -  
MINHATY
6. School Canteen Program - MEN
7. Benefits Delivery to Disabled  
Population - MSPS



# Stories from the Field

## The Philippines

Putting ID to Use



#NationalID | eVerify

**170+ Million**

authentications for government services

**118 new Relying Parties under onboarding**

### MULTIPLE USE-CASES IN THE PHILIPPINES

**4Ps Programme (using OpenG2P):** Poverty reduction and amelioration programme, targeting households.

**eTravel:** A digital single data collection platform – border control, health surveillance, and economic data analysis

**VaxCert:** A digital vaccination certificate for COVID-19

**PhilHealth:** Health insurance for all residents of the Philippines

**eLGU:** A digital platform for local governments to provide benefits and services



# Stories from the Field

## Ethiopia

Putting ID to Use



Rolling out national ID system  
and use cases, simultaneously

**66+ Million**

authentications completed  
while national rollout is underway.

**33+ Million registrations till date**  
on the MOSIP-based Fayda ID system

100+ Integrated Agencies

MULTIPLE G2P USE-CASES  
IN ETHIOPIA – USING **OPENG2P**

1. The Farmer Registry (ATI)
2. The Returnee Programme (EDRMC)
3. The Emergency Relief Programme (EDRMC)
4. The Urban Destitute Programme (MoWSA)
5. Individual Displaced Individuals Programme (EDRMC)

# MOSIP

## Progress Report

Prof. S Rajagopalan, IIT-Bangalore

Ramesh Narayanan, CTO – MOSIP





It's been over 7 years since that first line of code

**1** Vision

**4** Digital Public Goods

**100+** repositories

**200+** collaborators

**200,000+** commits

**Thank you for your support!**



# Trusted Identity and Data

## Assurance & Verification



### **MOSIP** High Assurance ID

- Identity Proofing and Issuance
- Manage identity lifecycle
- Multiple methods of verification



### **eSignet** Digital Identity Online

- Unified login experience
- User consent and authorization
- Built-in support for biometrics



### **INJI** Add Trust To Data

- Convert data to credentials
- Share with convenience
- Verify and consume data



# Product Update - MOSIP

## Platform Maturity & Releases

- LTS support extended – long-term stability for country deployments
- 1.2.x (1.2.1 released) – current stable production line
- Java 21 upgrade – better performance, scale, and security fixes

## Deployment & Scale

- Rapid deployment model – faster PoCs, pilots, and early rollouts
- More modules GA – growing set of production-ready components
- DSL enhancements – improved automation and operational workflows

## Security & UX

- Enhanced cryptographic support – stronger crypto options for signing & key management
- Android Registration Client – mobile-first registration capability
- Partner Management UI revamp – refreshed UI (final beta) for partners





# Product Update - eSignet

## Standards & Security

- FAPI support (PAR, DPOP spec support added)  
– compliance in progress
- National ID security profile work with OpenID and DCI team started

## Configuration & Deployment

- Client-specific controls via APIs
- Simplified deployment scripts

## Identity Assurance & UX

- Video-based eKYC for signup to facilitate higher assurance
- Purpose-based UI rendering

## Developer Enablement

- Dynamic forms SDK for signup & KBI





# Product Update - Inji

## Selective Disclosure support using SD-JWT

- Issue SD-JWT using Inji Certity
- Present from Inji Mobile wallet

## Credential Revocation

- Inji Certity supports revocation of issued credentials using statuslist (bitstring)
- Inji Verify supports real time validity checks

## Protocol Support

- Pre-authorized code flow – support for QR-based credential offers
- OpenID4VP interoperability – smoother user presentation journeys

## Composability and Extensibility

- Embeddable verifier SDK components (Scan, Upload & OpenID4VP)
- Credential type via API – dynamic control of credential types
- External CA / CSR signing – plug in PKI for signing

## Enhancements

- Web Wallet login + cloud storage – persistent credential access
- Server-side proof verification – cryptographic & schema validation APIs
- Multi-lingual UI & rendering – better UX across languages in Inji Verify





# What Next - Removing Friction



## High Assurance and High Trust Identities

- Best practices
- Reliable Verification
- Global Interop

## Adoption of Credentials

- Sectoral use cases
- Digital sharing and consent
- Instant verification



# What Next - Unlocking Value



Mission: Accelerating usage

- Out of the box integrations
- Standards support for interoperability and choice
- Showcases by domain at MOSIP Experience Centers
- Deeper engagements with adopting countries



# What Next - Making MOSIP Sustainable

- Becoming the best in class
  - Powerful Featureset
  - High Product Maturity
- Increased Utility Value
  - Unbundling for reuse
  - Archetypes for solutions
- Broader Ownership
  - More collaborators
  - More contributions
  - Multiple stakeholders





# What Next - Go To Market

## Packaging and Certification

- Marketplace push

## Partner Program Revamp

- Skill Certifications, Tiers and Benefits, Renewal Processes
- New class of partners
- Programs for Inji

## Connecting the dots

- Solutioning and Showcases
- Addressing challenges from procurement to operational support





# Announcements

- General Body of Members
  - Pathway to participation
- Collaborations
  - Infosys - Inji
  - WSO2 - eSignet
  - Asian Institute of Technology, Simprints - MOSIP
- Showcases
  - “Fibre forward” pilot with Avans, Utrecht and MOSIP - Cotton supply chain traceability