



# Inside MOSIP Identity Trusted ID For All

Shrikant Karwa | Head – LATAM & Caribbean Dissemination





# The need for **Trusted ID**

## **MOSIP Identity**

### Platform for Trust

- Process
- Authority

### Platform for Service Delivery

- Inclusion
- Verification
- Uniqueness



# MOSIP enables the **digital transformation** of nations



Pre-Requisite  
Inclusion, Access, Scale



Flexibility  
Process, Issuance, Biometrics, Usage



Service Delivery  
Mode (Self, Assisted), Medium  
(Online/Offline)



ID as Infrastructure  
Simple, Multi-purpose, Enables  
Functional Registry





# Introducing MOSIP Identity

**Manage Foundational Identity Lifecycle**  
Issuance | Updates | Resident-Controlled Services

**Trusted Usage**  
Identity Verification APIs | Ease of Integration with Functional Registry  
(Wallets, Mobile ID, Single Sign-On, etc.)

**Key Modules**  
Issuance & Verification | Lifecycle Management | Partner Management



# How to Leverage MOSIP Identity

## Learn & Try

- Docs, GitHub, MOSIP Academy, MOSIP Community, Sandbox Experience
- Rapid Deployment Pilot, Experience Centre

## National Rollouts

Two implementation approaches,

- Greenfield: From scratch, all new registrations
- Brownfield: Leverage existing ID system, data-migrations.

## Ecosystem & Marketplace

- Offering solutions and support
- System Integrator, Biometrics.





# An Inside Look at eSignet

Empowering Secure Online Authentication

Resham Chugani | Product Manager – Use Cases, MOSIP





# What is Verification?

The process or action of verifying the identity of an individual.

## Why is it needed?

This process ensures only those authorised, gain access to services/secure systems.



## ID Verification Modes



Online API



Online IDP Service (  **Signet** )



QR Code offline/online



Decentralised biometric authentication (  **Inji** )

- Selfie

- 3rd Party Verification



# Envisioning a Digital Future

## 01 Interoperable

Modular and reusable  
infrastructure

## 02 Inclusive

User-centric perspective

## 03 Trusted

Standards-driven solutions





# eSignet

A simple yet powerful mechanism for end users to identify themselves, avail online services, and share profile information

- 01 Login with trusted ID
- 02 Support for multiple authentication factors
- 03 Frictionless inclusion of new authentication factors
- 04 Easy integration with relying parties
- 05 Collection of user consent
- 06 Avoids unwanted profiling
- 07 Provides multiple assurance levels
- 08 Integration with Digital Wallets
- 09 Single Sign On

**Standards  
Ensuring Security & Privacy**

- Oauth 2.0
- OIDC
- OpenID4VCI
- IEEE SA P3167 SBI



# Demo Video





# What's Different?

## Enhancing Verification Through Secure Standards

**Standards-Based:** OpenID Connect flows based on the **OAuth 2.0** framework

**Better Integration:** Integrated with **SBI** (Secure Biometric Interface) to facilitate secure biometric collection for **biometric-based user verification**

**Secure:** Support for secure options in **OpenID Connect**, e.g. authorization code flow and **better fraud prevention**

## User Centricity

**One ID:** Login to integrated government and private sector services using a single identity credential

**Consent Support:** User decides who can receive what credentials & information

**Sensitive Data Protected** – The login process takes place exclusively on eSignet platform – User's data is protected and not collected by/shared with relying parties, unless consented

**Multiple Modes of Authentication:** Support for various methods for identity verification to accommodate individual preferences, better liveness check

## Go Digital Quickly

**Fast and secure digital verification** across services

Verification with the **same level of assurance** as during registration (OTP, Biometric, Cryptographic key)

**Digital verification and e-KYC as a service**, enabling improved access to financial inclusion

**Easy integration - Standard-based protocols**, reducing time to market



# Road Ahead

## Road Ahead – Digital Identity Stack (eSignet)

### Long Term

- Federation or brokering support
- WebAuthN support
- FAPI compliance
- CIBA support
- Wallet integration on phones
- eSign support

### Plans for 2024

- SIOP, OpenID4VP wallet Handoff
- Multiple assurance levels
- Revocation support
- EDD and EC crypto enhancements
- Selective disclosure KYC with SDJWT
- Additional consent / re-consent





# What Next?

**01** Test it out or integrate your solutions with eSignet!

**02** Watch out for related sessions on

- **Handles in MOSIP:** 5th March | Abay 2 | 5:40 PM

- **Perspectives on Wallet Adoption:**  
6th March | Abay 1 | 2:45 PM

- **Country Use Case for Credentials:** 6th March | Abay 1 | 3:10 PM

**03** Meet us at the **MOSIP booth**, to know more & to see **e-Signet in action**.





# Inside INJI: Identity Wallet & Authenticator

Digital Empowerment  
through Robust Identity Verification

Harini Sampathkumar | Product Owner, MOSIP





# What is Inji?

A secure, trusted and inclusive mobile wallet & authenticator, that can be used to:

**Securely Download,  
Store and  
Share Verifiable Credentials (VC)**





## Inji as a **Wallet**

- **Securely download** VCs
- **Store** and **manage** VCs
- Seamless **access**
- **Offline sharing** over **BLE**
- Flexibility of **presentation**
- **Decentralised** ID verification
- **Backup & restore**
- Access digital services through **eSignet integration**
- Driven by **standards**

### STANDARDS USED:

W3C: Verifiable Credentials Data model  
W3C: JSON-LD | W3C: DID Web | W3C: Ed25519 Signature 2018  
OpenID4VC

## Inji as an **Authenticator**

- Receive VCs
- Verify residents, through offline face verification, ensuring user presence
- Audit credentials





# Credential Formats Supported

## 01 JSON-LD

VC format using open vocabularies like [schema.org](https://schema.org)



# Road Ahead

## Road Ahead – Digital Wallet (INJI)

### Long Term

- User profiles
- Query and predicates
- Cloud Wallet
- USSD Channel
- Attestation Module

### Plans for 2024

- Data backup
- Selective disclosure using SDJWT
- Revocation support
- Online sharing
- Update to OpenID4VCI drafts





# Road Ahead

Mobile Wallet & Beyond

Inji – Mobile Wallet, Web, Certify, Verify

Digital Credentials Stack



# Digital Credentials Stack

## INJI + e-Signet

### Long Term

- Revocation support
- Trust Network

### Plans for 2024

- Web download
- Issue without binding
- Pre-authorized code flow support
- Online sharing
- Online verification
- API + SDK
- Web interface





# Collaborate

with MOSIP

## **01 Community:**

Test the Inji wallet & authenticator

## **02 Countries:**

Use Inji as is or Integrate your existing apps with Inji libraries

## **03 Partner Ecosystem:**

Integrate your components (SDK) with Inji

**SOLUTION DISCOVERY**

Meet us at the MOSIP booth, to know more  
and to see INJI Wallet & Web in action!



# MOSIP

**MOSIP Homepage:** [www.mosip.io](http://www.mosip.io)

**MOSIP Source Code:** [github.com/mosip](https://github.com/mosip)

**MOSIP Documentation:** [docs.mosip.io](https://docs.mosip.io)

**MOSIP Community:** [community.mosip.io](https://community.mosip.io)

**eSignet Source Code:** [github.com/mosip/esignet](https://github.com/mosip/esignet)

**eSignet Documentation:** [docs.esignet.io](https://docs.esignet.io)

**eSignet Community:** [community.mosip.io/c/e-signet/15](https://community.mosip.io/c/e-signet/15)