Optimising MOSIP: Lessons Learnt

Maintaining & Sustaining MOSIP

Format: Presentation, Live integration, and Brainstorming

Date: 11th/12th February, 2026

Duration: 75 mins (Including Q&A)

Target Audience: Countries, SIs

Targeted Expertise/Roles: Software Development Technical Leads, Solution Architects, Technical Managers, Product Managers, Business Analysts, System Integrators

Max. no. of Participants: 40

Pre-requisites: Pre-registration for the session, Review pre-read material

Presenters: MOSIP Team

Objective:

MOSIP has been running successfully in production across multiple countries, providing rich operational experience across diverse environments and population scales. These real-world implementations have enabled the identification of proven approaches to optimise the complete identity lifecycle, from enrolment and data capture through processing, ID generation, updates, and card issuance.

The objective of this session is to share key lessons learnt and best practices for operating MOSIP efficiently and at scale. The session will focus on optimising identity creation and update journeys to enable faster ID generation with minimal manual intervention. It will cover best practices in data and biometric capture, quality checks, operator practices, and device considerations that help reduce downstream rejections and rework.

In addition, the session will highlight the technical configurations and operational controls required to achieve optimal throughput and smooth packet processing. This includes effective strategies for packet creation and processing, critical configuration and monitoring areas within the Registration Processor, capacity management, backlog reduction, and efficient handling of peak loads across the identity lifecycle to ensure reliable, timely, and scalable service delivery.

Pre-Read Links for Participants:

To get the most value from this session, it is recommended that participants review key MOSIP documentation in advance. A basic understanding of MOSIP's overall architecture, core components, and identity lifecycle processes will help you follow the optimisation and best practices discussion confidently. The following resources are suggested:

- **MOSIP Architecture Overview**: High-level view of MOSIP's modular design, microservices, and how different modules interact.Click here to learn more.
- **Registration Client**: Details on the client used for data capture at enrolment sites, its role in the identity lifecycle, and configuration basics. Click here to learn more.
- **Registration Processor**: Explanation of how packets are processed, staged workflows, deduplication, and processing logic that underpins scalable operations.Click here to learn more.
- **MOSIP GitHub Repository**: Central hub for all MOSIP modules, including Registration Client, Registration Processor, ID Repository, Authentication, and more.Click here to learn more.

Thank you. We look forward to your participation in the session!