



Modular Open Source Identity Platform (MOSIP) : A Global Digital Public Good

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Modular Open Source Identity Platform (MOSIP) is a robust and secure open source platform for building foundational identity systems.

It enables a country to provision unique digital identities for individuals and to authenticate them in a secure way



Platform Approach

- Open Source
- Security and Privacy as key principles
- Vendor neutral & standards compliant



System Integration

- Designed for easy integration
- Configuration based approach
- Rollout by System Integrator



Multiple Use Cases

- | Foundational | Functional |
|--------------|--------------------------|
| • Digital ID | • Food & Social Security |
| • Private ID | • Financial Services |
| | • Refugee Registration |
| | • Travel ID |

MOSIP Principles



Configurability



- Easy personalization
- Easy configuration

Open Source



- Uses **Open standards**
- Open source platform

Modular



- Independent & interchangeable modules
- API based implementation

Secure



- Security by design
- Secure devices, processes, data storage & data processing

Scalable



- Independently scalable components
- Tested for ~100 million population

Manageability



- Easy Auditing, monitoring, testing and upgrades

Private



- Privacy by design
- Data as a Service

MOSIP Modules



Pre Registration

User enabled data entry

Appointment booking



Registration

Online or offline mode

Fingerprint, iris & Photo

Field Configurability



Registration
Processor

UIN generation

Data enrichment

Modular de-duplication
engine



ID
Authentication

Yes/ No answer,
demographic, biometric

eKYC services

Tokenization &
virtualization, Online &
Offline mode



Resident
Controlled Privacy

Authentication On/off

Virtual ID

Authentication Log

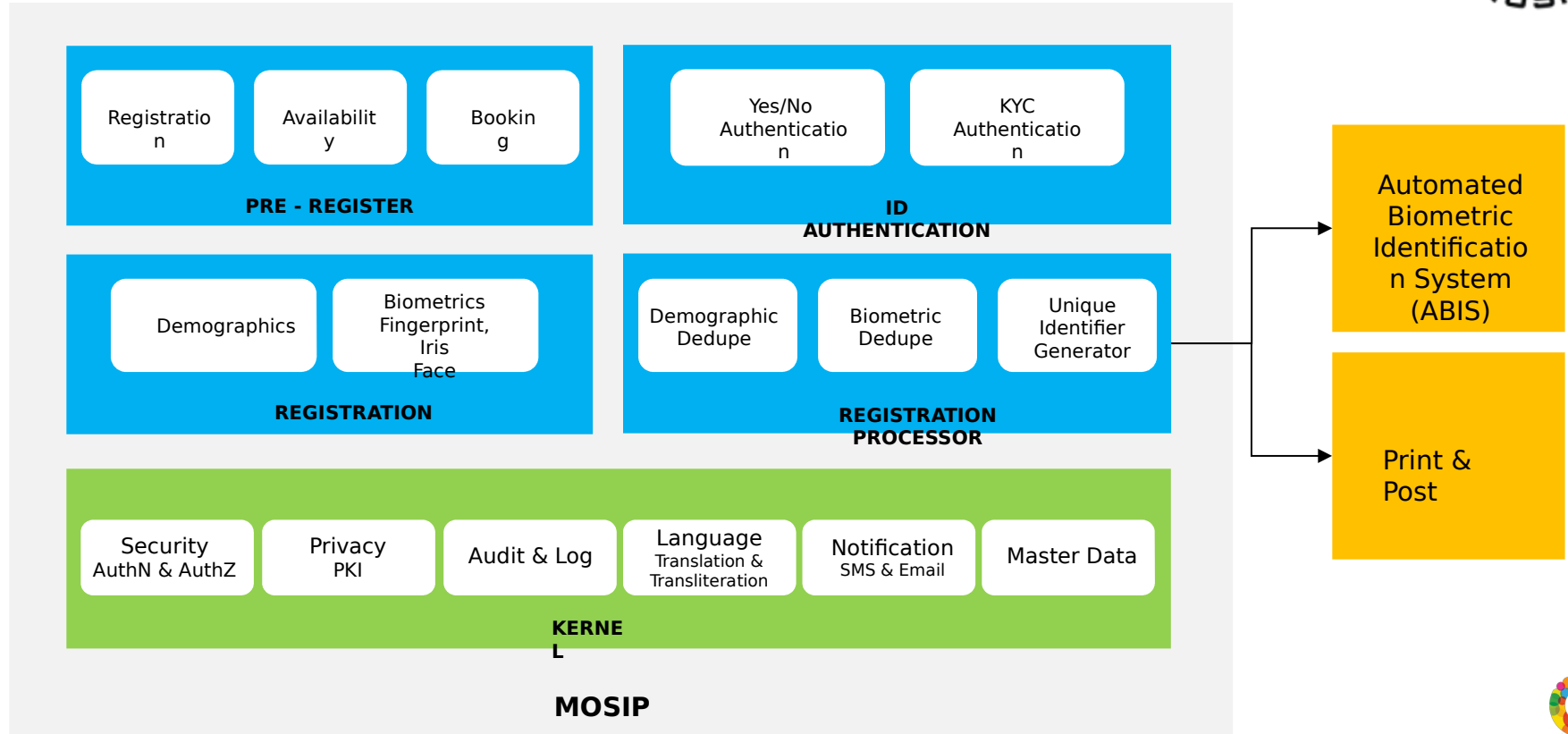
Local / Multi
Language Support

Notification to
residents at various
stages

Artificial Intelligence
Support

Machine Language
Support

Functional Architecture





TECHNOLOGY STACK

spring

spring
{ REST }

ANGULAR

TestNG

ceph

HDFS

Apache
Maven

Java

docker

PostgreSQL

Apache Derby



JavaFX



APACHE
Camel



MOSIP Partners will build on top of our core technology layer



Use Cases Layer: Country Specific ID-Linked Services

LINKAGES OF SERVICES WITH FOUNDATIONAL ID

- Work with services like finance, health, welfare etc. to incorporate unique foundational identifier

System Integrator Layer: for Country Customisation

CUSTOMISATION TO SUIT COUNTRY NEEDS:

- System Integrator (a vendor) to develop additional modules, configurations, and security if desired
- Commercial Service Providers created and nurtured by MOSIP will provide the Platform maintenance support to System Integrators

Core Technology Layer: MOSIP Platform

BASIC ARCHITECTURE OF THE ID SYSTEM

- Modular
- Country Agnostic
- Vendor Agnostic
- Ensures robustness & security



Partnership Approach



MOSIP Provides...

- The MOSIP kernel under an open-source license
- Comprehensive documentation
- Five years of enhancements, support, & maintenance of the kernel
- Training and education on MOSIP technology
- A Certified Service Provider program as a group of vetted service providers with experience of implementing MOSIP at a country level.

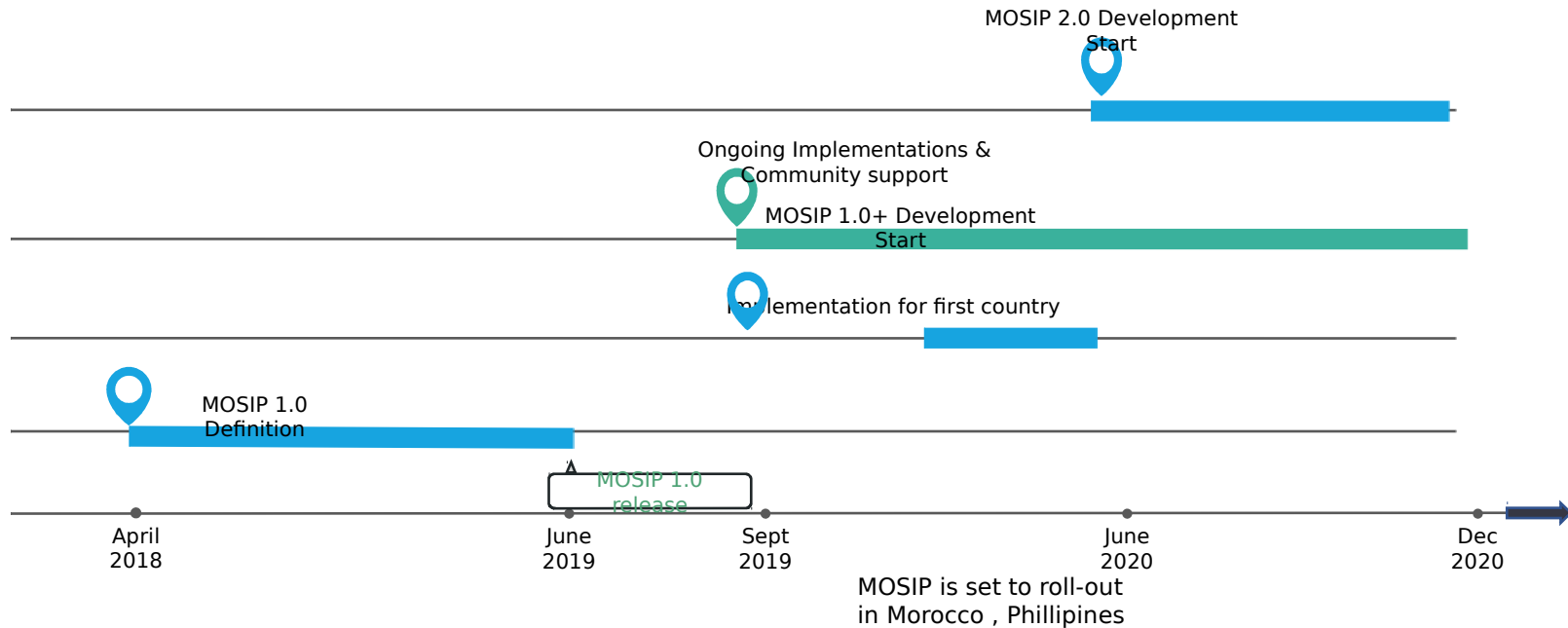
MOSIP Partners

- Customization and System Integration services
- Country level technology consulting
- Solutioning for public and private service delivery with MOSIP as foundation
- Support, maintenance and enhancement services to countries and other user organisations





MOSIP Product Roadmap





Open Source Community

- **For students, internship opportunities. 10 women engineers from Wardha and Nuzvid participated. 5 expected from Myanmar.**
- **For code developers , code available in Github. Download, test and improve.**
- **A number of suggestions have been received including blockchain implementation, analytics, fraud detection , etc . Community participation invited**



GET INVOLVED WITH MOSIP



github.com/mosip



info@mosip.io



[Groups.io](https://groups.io)

mosip-dev@groups.io



GITTER

<https://gitter.im/mosip-community>



MOSIP's current structure



SECRETARIAT



International
Institute of Information
Technology Bangalore

FUNDERS

BILL & MELINDA
GATES foundation



OMIDYAR NETWORK

TATA TRUSTS

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