Digital ID to enable DFS

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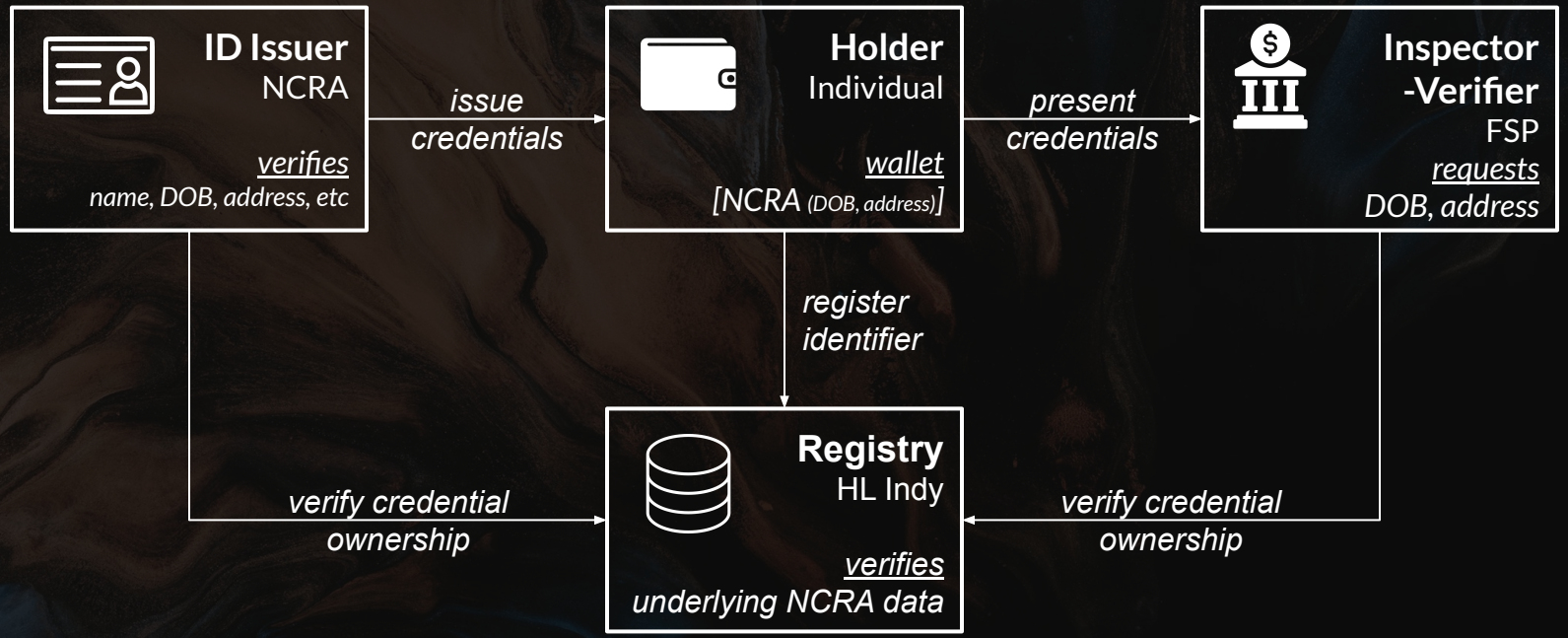
1.7 billion people are excluded


ID Issuer
NCRA
verifies
name, DOB, address, etc
issue
credentials
Holder
Individual
wallet
[NCRA (DOB, address)]
present
credentials
Inspector
-Verifier
FSP
requests
DOB, address
register
identifier
Registry
HL Indy
verifies
underlying NCRA data
verify credential
ownership
verify credential
ownership

TRUST Over IP FOUNDATION

Layer 4

Layer 3

Layer 2

Layer 1

Trust over IP Governance Stack

Ecosystem Governance Frameworks

Governance Authority — Publishes → Governance Framework

- ✓ Member Directory
- ✓ Auditor
- ✓ Auditor Accreditor

Credential Governance Frameworks

Governance Authority — Publishes → Governance Framework

- ✓ Credential Registry
- ✓ Authoritative Issuer
- ✓ Insurer

Provider Governance Frameworks

Governance Authority — Publishes → Governance Framework

- ✓ Hardware Provider
- ✓ Software Provider
- ✓ Agency

Utility Governance Frameworks

Governance Authority — Publishes → Governance Framework

- ✓ Transaction Author
- ✓ Transaction Endorser
- ✓ Steward

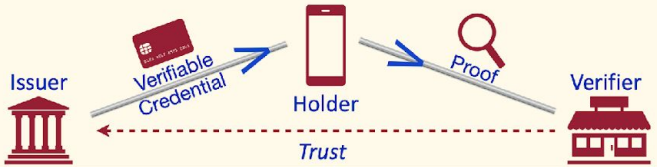
Trust over IP Technology Stack

Application Ecosystems

Digital Trust Ecosystem

Digital Trust Ecosystem

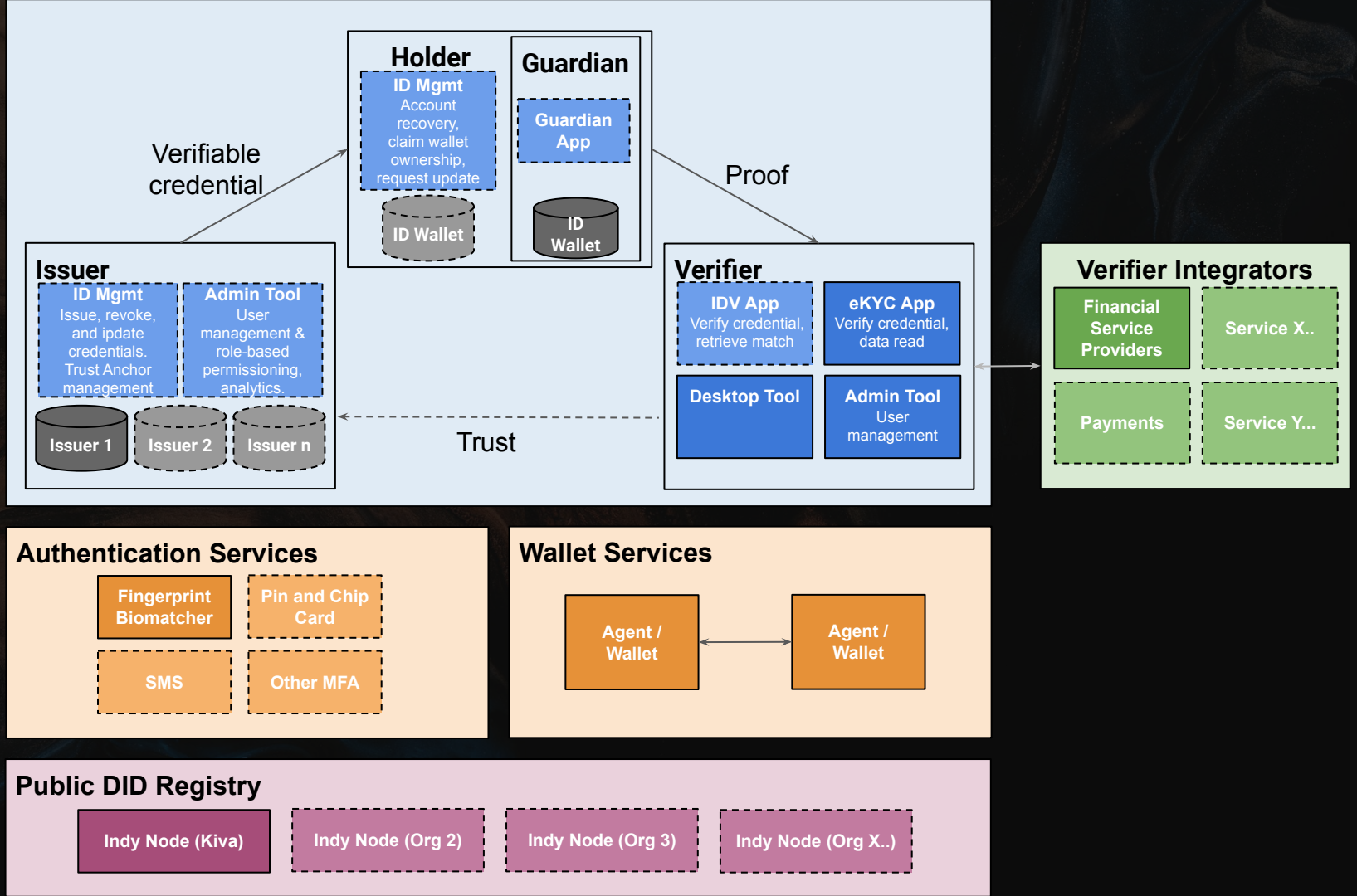
Data Exchange Protocols



DIDComm Peer to Peer Protocol

Public Utilities

DID Method	DID Method	DID Method
Utility	Utility	Utility


Application Ecosystem & Data Exchange
Holder
ID Mgmt
Account recovery, claim wallet ownership, request update
ID Wallet
Guardian
Guardian App
ID Wallet
Verifiable credential
Proof
Issuer
ID Mgmt
Issue, revoke, and ipdate credentials. Trust Anchor management
Admin Tool
User management & role-based permissioning, analytics.
Issuer 1
Issuer 2
Issuer n
Trust
Verifier
IDV App
Verify credential, retrieve match
eKYC App
Verify credential, data read
Desktop Tool
Admin Tool
User management
Verifier Integrators
Financial Service Providers
Service X..
Payments
Service Y...
Trusted connection
Authentication Services
Fingerprint Biomatcher
Pin and Chip Card
SMS
Other MFA
Wallet Services
Agent / Wallet
Agent / Wallet
Public Utilities
Public DID Registry
Indy Node (Kiva)
Indy Node (Org 2)
Indy Node (Org 3)
Indy Node (Org X..)

Citizens

Fast, cheap, and easy financial access

Financial Institutions

Fast, cheap, and simple compliance tools

Central Bank

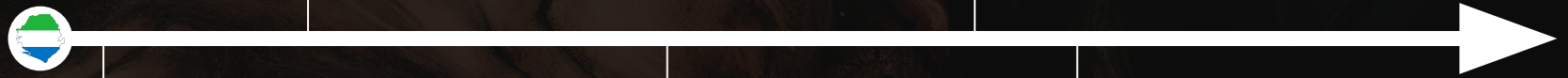
Regulatory compliance and financial inclusion

Government

Rapid deployment using existing systems

Multilaterals

Interoperability with direct programs



Jan 2019
Team deployment to Freetown

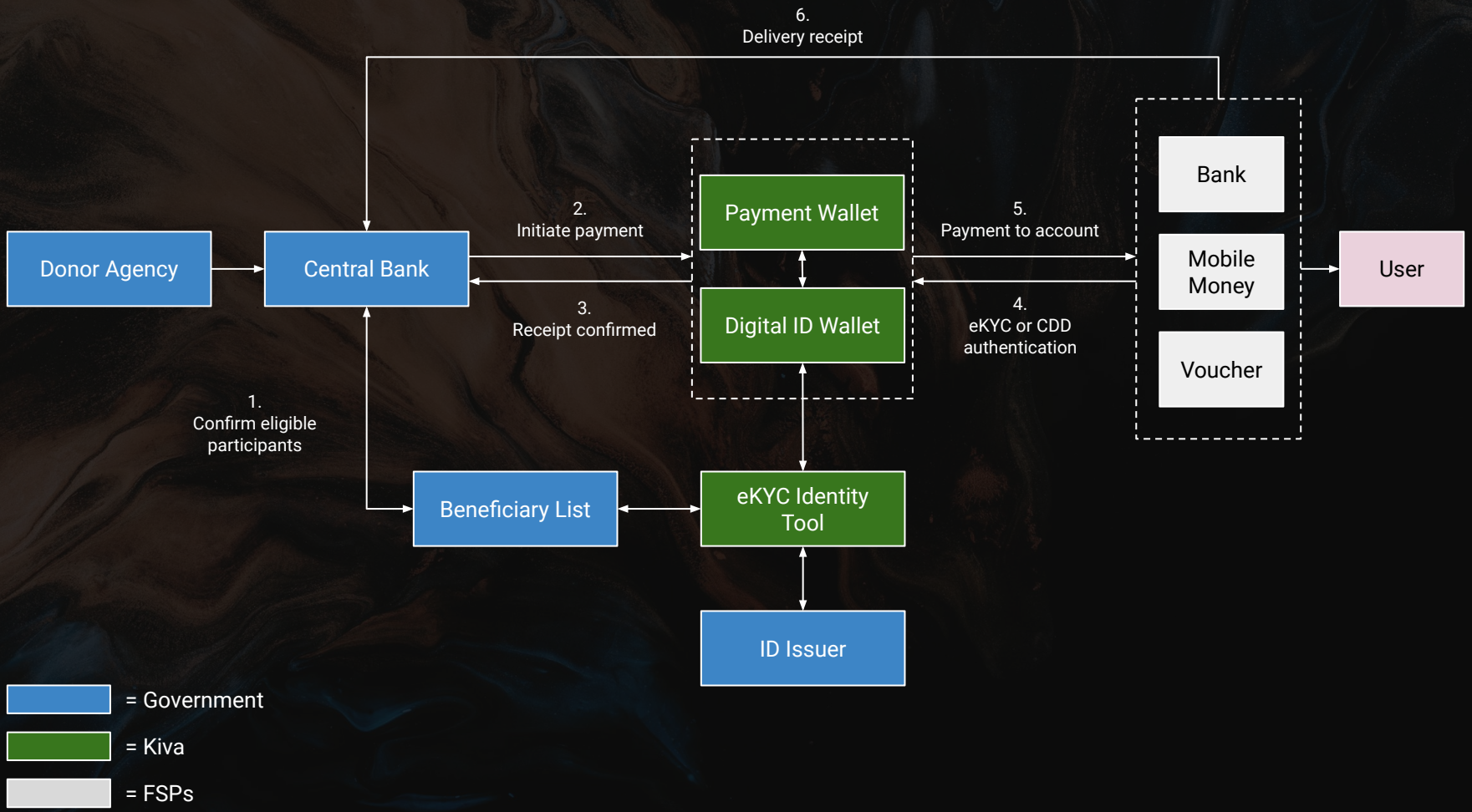
Feb 2020
eKYC production environment launched w/ 8 FSPs

Sept 2018
President Bio announces project at UN General Assembly

Aug 2019
eKYC beta launched, first ID verification by Nancy

Mar 2020
Pivot to support covit-19 response and relief efforts

Sierra Leone timeline


6.
Delivery receipt
Donor Agency
Central Bank
2.
Initiate payment
3.
Receipt confirmed
Payment Wallet
Digital ID Wallet
5.
Payment to account
4.
eKYC or CDD
authentication
Bank
Mobile
Money
Voucher
User
1.
Confirm eligible
participants
Beneficiary List
eKYC Identity
Tool
ID Issuer
= Government
= Kiva
= FSPs

kiva is a catalyst for change