Identity and Privacy Assurance

Dr. Colin Soutar

CSC

Enrollment

Entitlement Registration

Provisioning of User

Identity Proofing

Creation of Identifier

Issuance of credential

Transaction

Entitlement Provided

Authorization

Validation of Identifier

Authentication of Identifier
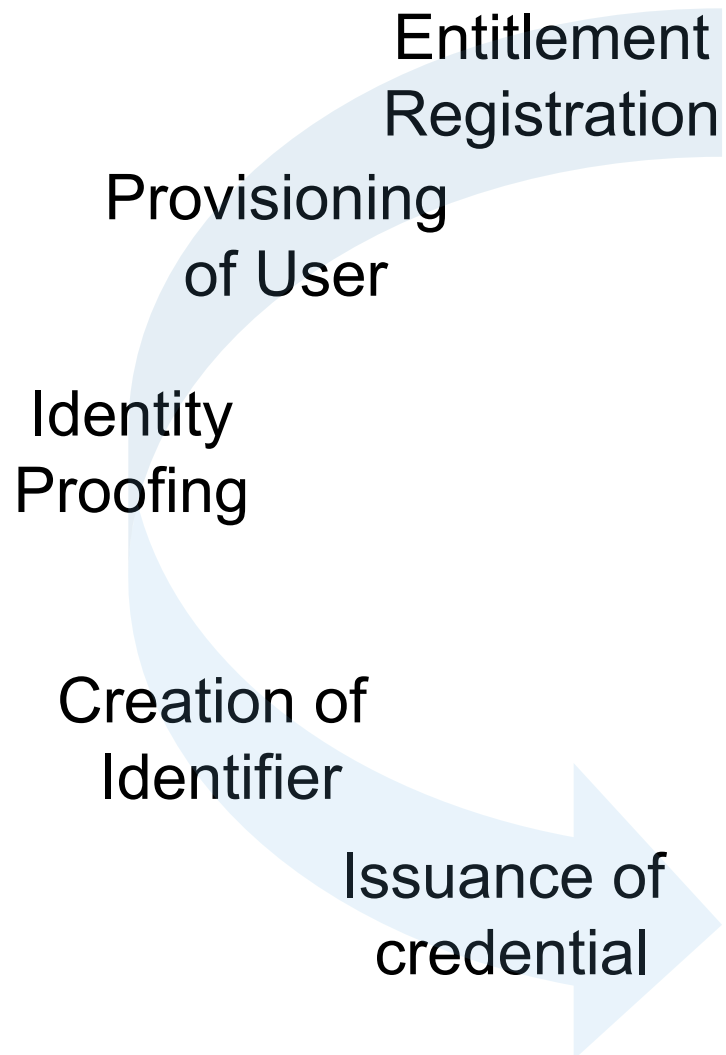
Presentation of credential
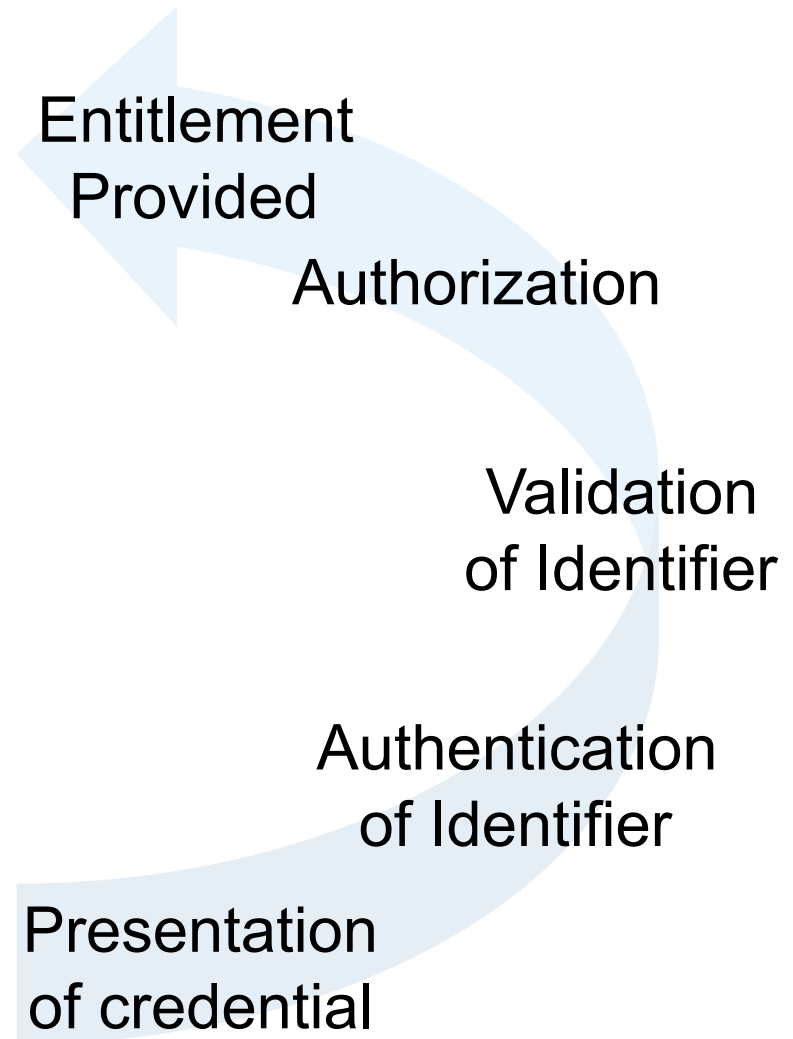
Identity Provider

Identity Proofing

Credential Provider

Creation of Identifier

Issuance of credential

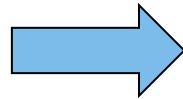**Authentication Service**

Authentication of credential

Validation of Identifier

Service Provider

Authorization

Entitlement Provided

Identity Assurance Frameworks

- Establish the trustworthiness of Services in Identity system
  - c.f. the delegation of trust
- Components
  - Identity Provider
  - Authentication Services
  - Service Provider
  - Federation Broker

  → *separation of identity from entitlement*

- Considerations
  - Operating Procedures
  - Identity Proofing (LoA)
  - Identity Authentication (LoA)
  - Privacy
- OMB 04-04/NIST SP 800-63
- Kantara Initiative, STORK, National Strategy for Trusted Identities in Cyberspace

Identity Assurance

$$\text{Identity Assurance (transaction)} = \text{Identity Authentication (transaction)} + \text{Identity Proofing (enrollment)}$$

Ability to Support Level of Assurance (LOA)	Strength of Function	Uniqueness of Identity
	Assurance of Conformance	Interoperability

Individual

Identifier

Levels of Identity Assurance
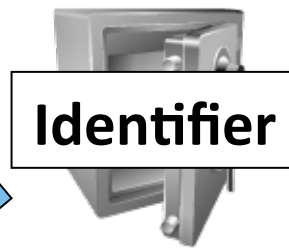
Safeguarding of Identity Data

Identity Assurance

Privacy Assurance