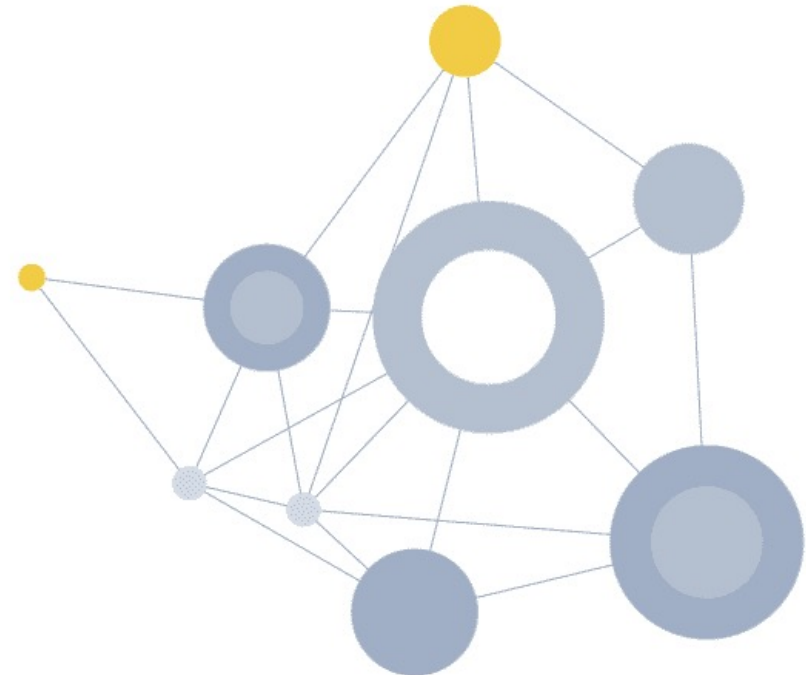


verifiable LEI (vLEI) Update and Progress Session

Internet Identity Workshop (IIWXXXIV)

April 26-28, 2022

GLEIF



Agenda



- vLEI Updates and Progress
 - Introduction to LEIs and vLEIs
 - Uses for the vLEI
 - How SSI will be adopted
 - vLEI Ecosystem Governance Framework
 - GLEIF-supplied vLEI software and infrastructure
 - Prepare for Launch

- Discussion/Questions

Introduction to LEIs and vLEIs



Expanding the use of LEIs using vLEIs



**Expand the use of the
LEI to become the
broad public good
envisioned and
endorsed by the G-20**

**Realize the GLEIF's vision statement:
A Legal Entity should have one global
identity and this should include a
digital identity**

The Legal Entity Identifier (LEI)

- The LEI is a life-long identifier **owned** by the respective legal entity.
- It points to the associated reference data.
- The LEI is an ISO standard ISO 17442.

Nestlé S.A.

LEI Code KY37LUS27QQX7BB93L28 [Hide](#)

(Primary) Legal Name	Nestlé S.A.
Transliterated Names	Nestle S.A.
Registered At	Commercial Register (Ministry of Justice) Handelsregister (Eidg. Amt für das Handels Switzerland, Switzerland RA000549
Registered As	CHE-105.909.036
Jurisdiction Of Formation	CH
Entity Legal Form	Aktiengesellschaft MVII
Entity Status	● ACTIVE
BIC Code	NESNCH22XXX

Level 2 Data: Who Owns Whom

Parents

NATURAL_PERSONS [🔗](#) (Direct Parent Exce

Direct children (69)

Nestlé S.A.

[Maggi-Unternehmungen AG](#) [🔗](#) (Direct)

[Nestle Marcas S.A.C](#) [🔗](#) (Direct)

[네슬레코리아 유한책임회사](#) [🔗](#) (Direct)

[Nestle Waters Brasil - Bebidas E Alimentos Ltda.](#) [🔗](#) (Direct)

[Nestle Brasil Ltda.](#) [🔗](#) (Direct)

[Nestle de Colombia S.A.](#) [🔗](#) (Direct)

[Nestle Türki ye Gıda Sanayi Anonî mşî rketi](#) [🔗](#) (Direct)

[Nestle Middle East FZE](#) [🔗](#) (Direct)

[Nestle Dubai Manufacturing L.L.C.](#) [🔗](#) (Direct)

[Nestle Middle East Manufacturing LLC](#) [🔗](#) (Direct)

[Nestle Lanka PLC](#) [🔗](#) (Direct)

Sections

- Empty fields ☐
- Entity details ☒
- Addresses ☒
- LEI Registration details ☒
- LOU details ☒
- Level 2 Data: Who Owns Whom ☒

Ultimate children (110)

[Maggi-Unternehmungen AG](#) [🔗](#) (Ultimate)

[Nestle Marcas S.A.C](#) [🔗](#) (Ultimate)

[Galderma Nordic AB](#) [🔗](#) (Ultimate)

[네슬레코리아 유한책임회사](#) [🔗](#) (Ultimate)

[CPW Brasil Ltda.](#) [🔗](#) (Ultimate)

[Chocolates Garoto SA](#) [🔗](#) (Ultimate)

[Nestle Waters Brasil - Bebidas E Alimentos Ltda.](#) [🔗](#) (Ultimate)

[Nestle Nordeste Alimentos E Bebidas Ltda.](#) [🔗](#) (Ultimate)

[Nestle Brasil Ltda.](#) [🔗](#) (Ultimate)

[Nestle de Colombia S.A.](#) [🔗](#) (Ultimate)

[Nestle Middle East FZE](#) [🔗](#) (Ultimate)

[Nestle Dubai Manufacturing L.L.C.](#) [🔗](#) (Ultimate)

[Nestle Middle East Manufacturing LLC](#) [🔗](#) (Ultimate)

[Nestle Lanka PLC](#) [🔗](#) (Ultimate)

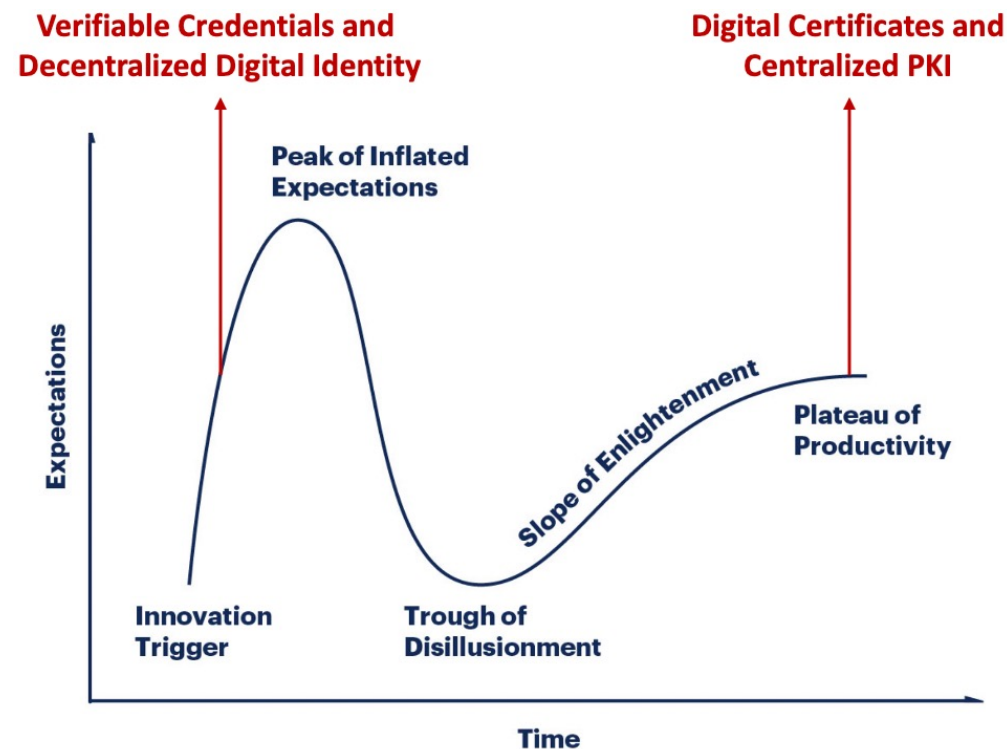
[Fondation Nestlé pour l'étude des problèmes de l'alimentation dans le monde](#) [🔗](#) (Ultimate)

[Nestle \(Thai\) Limited](#) [🔗](#) (Ultimate)

LEI Digital Strategy

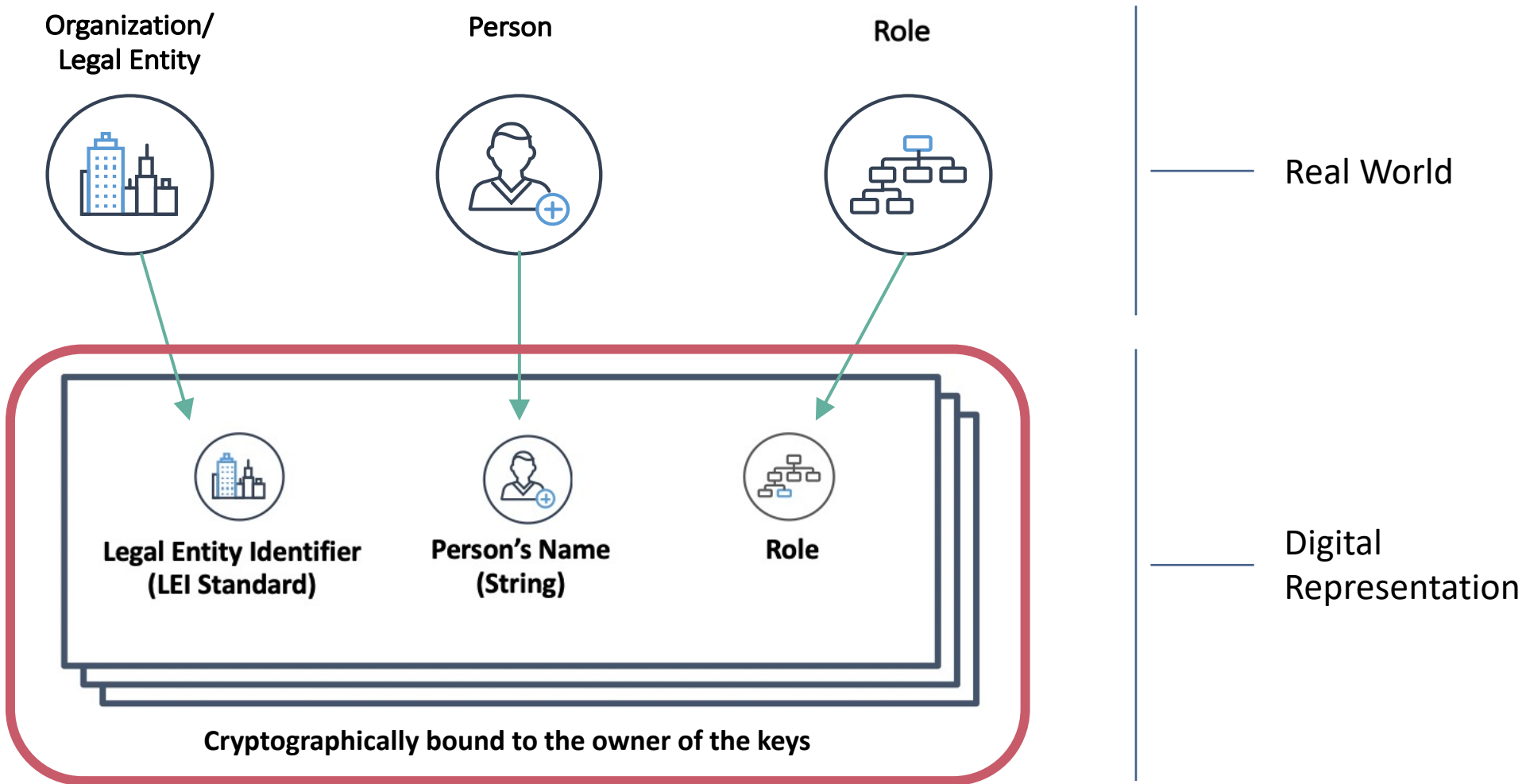
Digital Certificates as well as Self-Sovereign-Identity Networks

- The LEI has a critical role to play in today's digital world through its ability to provide organizations with unique, permanent identification globally. This especially is important in the context of **identifying legal entities involved in digital transactions**.
- LEI delivers value to both the more mature product - Digital Certificates - and the more recent innovation of **Verifiable Credentials**



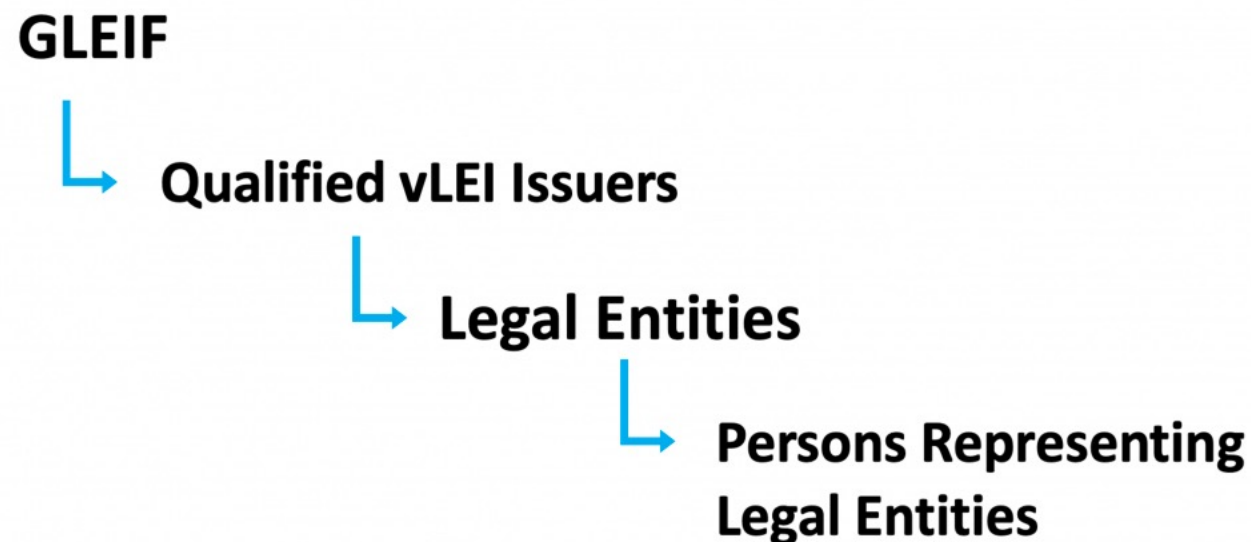
Embedding the LEI in digital tools

Representing Organizations, Persons and Roles

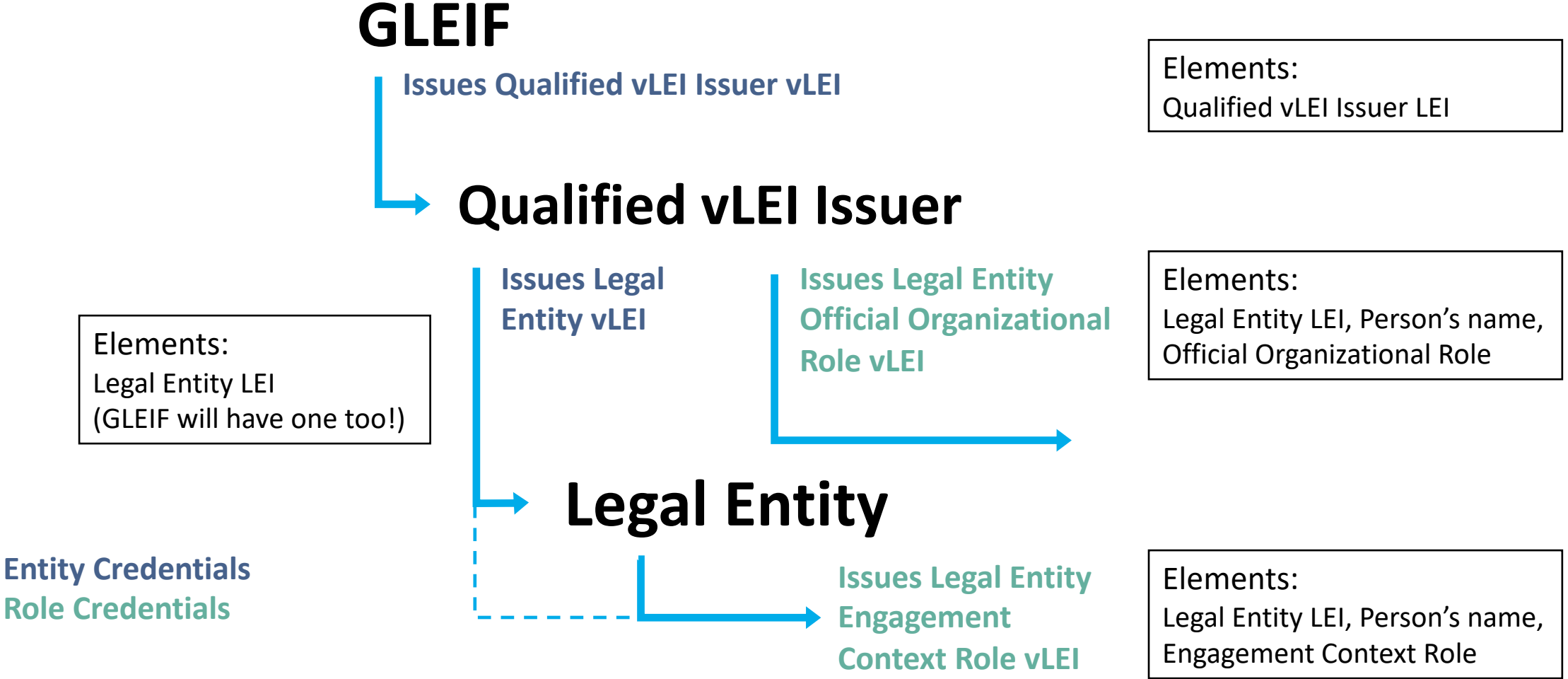


The LEI as a Verifiable Credential – the vLEI Trust Chain

- GLEIF is the Root of Trust
 - Root AID (Autonomic Identifier) to establish the Root of Trust
 - Delegated AIDs to issue Credentials
- GLEIF will establish a trusted network of Qualified vLEI Issuers (QVIs)
- QVIs are qualified to issue Entity and Role Credentials:
 - to Legal Entities
 - to Persons who represent Legal Entities either in official or functional roles



The vLEI Ecosystem Chain of Trust and vLEI Credentials



Uses for the vLEI



vLEIs across industries/domains/stakeholders

Broad interest still seen across industries, domains and stakeholders

- To satisfy the need for decentralized identification and verification for organizations as well as the persons who represent their organizations either in official or functional roles

Pilot interest

- Supply chain/trade/trade finance
- Telecom
- National identity solutions
- Industry solutions
- Financial sector services
- Private sector reporting to the public sector

Solutions for zero trust frameworks

Stakeholder engagement

- Users
- Qualified vLEI Issuers
- Software/solution providers

How SSI will be adopted



How SSI will be adopted

- SSI has a go to market problem
- 2-sided vs. 1-sided markets
- Top-down vs. bottom-up
- vLEI and organizational identity



vLEI Ecosystem Governance Framework



vLEI Ecosystem Governance Framework



- Public review of Framework by Trust over IP Foundation – completed December 2021 (ToIP Governance Framework Metamodel used for vLEI Framework)
- Publication of draft Framework - February 2022
 - As part of vLEI Communications campaign and release of KERI video
- Next steps
 - Include updates from Regulatory Oversight Committee, vLEI team and as a result of pilots
 - Plan for publishing of version 1.0 of Framework



GLEIF-supplied vLEI software and infrastructure

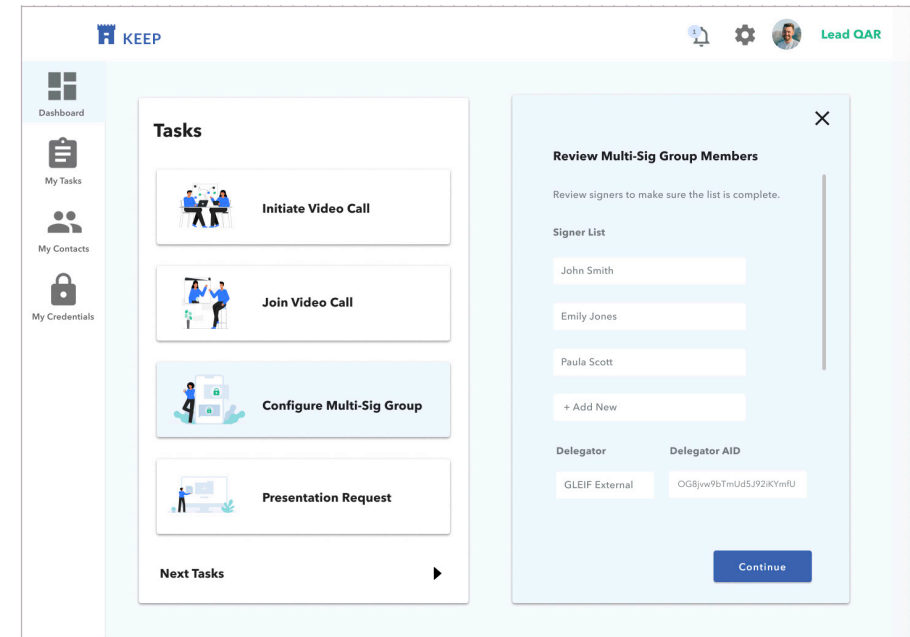


GLEIF-supplied vLEI software and infrastructure



- Current work
 - Hardening of GLEIF-supplied vLEI software including User Interface and User Experience capabilities for initial pilot in April 2022
 - Execution of initial pilot by June 2022

- Planned work for 2022
 - Development of initial KERI tunnel
 - Hyperledger Indy/Aries
 - Development of did:keri method interoperability
 - Development of ACDC interoperability



GLEIF-supplied vLEI software and infrastructure

- Technology standards work continues within Trust over IP
 - Including presentation of draft specifications to the Internet Engineering Task Force (IETF) for:
 - Key Event Receipt Infrastructure (**KERI**)
 - Authentic Chained Data Container (**ACDC**) vLEI Credentials
 - Composable Event Streaming Representation (**CESR**)
 - and other supporting technology specifications

<http://github.com/WebOfTrust/keri>

Prepare for launch



Launching the vLEI ecosystem and infrastructure

- Launch of Qualified vLEI Issuer Program
- Final hardening of production software, establishment of vLEI technical infrastructure
- What is needed: Development of tools such as wallets, mobile apps, key management software, enterprise credential management, additional witness services and watcher networks
- Live operations
- Expansion of industries, domains and use cases covered

Discussion/Questions



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