verifiable LEI (vLEI) Ecosystem Governance Framework Primary Document

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Ecosystem Governance
Framework

Primary Document

2020-12-15, V1.0 draft
Trust over IP Review

Introduction

The verifiable LEI (vLEI) Ecosystem Governance Framework is a Layer Four Ecosystem Governance Framework of the Trust over IP Foundation (ToIP). The Legal Entity Identifier (LEI) is used as a key component in building a trust layer for identification and verification of organizational identity that can be used in any other Governance Frameworks that requires organizational identity.

The LEI had its beginnings in the aftermath of the global financial crisis responding initially to a call by global regulators to establish a standard international identifier [1]and related reference data that could be accessed and used in regulatory frameworks and supervision.

The LEI and the Global LEI System were envisioned from the start as a public-private partnership that should bring transparency and benefits to both the public and the private sectors. And although the LEI was used initially to identify legal entities in financial services, the need for identification of legal entities is not limited to the financial services domain.

Now, years after the Global LEI System was established, which the Global Legal Entity Identifier Foundation (GLEIF) operates and maintains, this Governance Framework establishes GLEIF's role in digital identity and Verifiable Credentials to add trust to interactions in the global digital economy.

Terminology and Notation

ToIP Governance Requirements Glossary
- **Requirements** include any combination of Machine-Testable Requirements and Human-Auditable Requirements. Unless otherwise stated, all Requirements MUST be expressed as defined in RFC 2119.
    - **Mandates** are Requirements that use a MUST, MUST NOT, SHALL, SHALL NOT or REQUIRED keyword.
    - **Recommendations** are Requirements that use a SHOULD, SHOULD NOT, or RECOMMENDED keyword.
    - **Options** are Requirements that use a MAY or OPTIONAL keyword.
- **Machine-Testable Requirements** are those with which compliance can be verified using an automated test suite and appropriate scripting or testing software.
    - **Rules** are Machine-Testable Requirements that are written in a Machine-Readable language and can be processed by a Rules Engine. They are expressed in a structured rules language as specified by the GF.
- **Human-Auditable Requirements** are those with which compliance can only be verified by an audit of people, processes, and procedures.
    - **Policies** are Human-Auditable Requirements written using standard conformance terminology. For Policies used in ToIP Governance Frameworks, the standard terminology is RFC 2119 keywords. Note that all RFC 2119 keywords have weight from an auditing perspective. An implementer MUST

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[1] ISO 17442-1 Financial Services – Legal Entity Identifier (LEI) – Part 1: Assignment

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explain why a SHOULD or RECOMMENDED requirement was not implemented and SHOULD explain why a MAY requirement was implemented.

- **Specifications** are documents containing any combination of Machine-Testable Requirements and Human-Auditable Requirements needed to produce technical interoperability.

Localization

1. The official language of the vLEI Ecosystem Governance Framework SHALL be American English.
2. The Governance Framework Website SHALL include introductory remarks in the languages of the G20 countries.
3. For situations in which the vLEI Ecosystem Governance Framework MAY be needed in other language, GLEIF will consider these on a case-by-case basis.

Governing Authority

1. The Global Legal Entity Identifier Foundation (GLEIF), as Governing Authority, is responsible for the vLEI Ecosystem Governance Framework.
2. The LEI of GLEIF is 506700GE1G29325QX363.
3. The contact information for GLEIF is:

   St. Alban-Vorstadt 5, PO Box, 4002 Basel, Switzerland
   Contact: Karla McKenna, Head of Standards
   Karla.McKenna@gleif.org

Purpose

The purpose of the verifiable LEI (vLEI) Ecosystem Governance Framework is to deliver a global infrastructure that enables decentralized verifiable digital identity of legal entities in all use cases where it is required and can enable industry and participant benefits.

Scope

The following entities are stakeholders in the Trust Community:

- GLEIF – Global Legal Entity Identifier Foundation operates and manages the Global LEI System (GLEIS);
- LEI Issuer – An organization accredited by GLEIF to validate legal entity information and register new LEIs and reference data which are sent to GLEIF for inclusion in the GLEIS;
- Qualified vLEI Issuer (QVI) – An organization qualified by GLEIF to issue vLEI Legal Entity Credentials, Legal Entity Official Organizational Role vLEI Credentials (OOR vLEI Credentials and Legal Entity Engagement Context Role vLEI Credentials (ECR vLEI Credentials;

91   • Legal Entity – a legal person or structure that is organized under the laws of any
92   jurisdiction that meets the eligibility criteria for registering for a LEI.
93   • Official Organizational Role Persons (OOR Persons) – Persons who represent Legal
94   Entities in official roles
95   • Engagement Context Role Persons (ECR Persons) – Persons who represent Legal
96   Entities in functional roles
97   • vLEI User – any user of vLEI credentials in any applicable use case.
98

99   The scope of the vLEI Ecosystem Governance Framework is to enable these stakeholders to
100 issue, hold and verify vLEI Credentials using the GLEIF Controller Network and to ensure that
101 these activities take place in compliance with the vLEI Ecosystem Governance Framework.
102

103 Out of scope for the vLEI Ecosystem Governance Framework is the LEI governance processes
104 and rules which is managed separately by GLEIF with its own specification and documents.
105 In addition, although GLEIF encourages other governance frameworks to make use of the
106 vLEI Ecosystem Governance Framework and the vLEI Credentials, these governance
107 frameworks also are out of scope.
108

Objectives
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110
111 The objectives of the vLEI Ecosystem Governance Framework for a global infrastructure for
112 organizational digital identity based on the LEI are:
113

114 Drive LEI Adoption
115   • Expand the value LEIs can bring to the global economy by enabling cryptographically
116   verifiable vLEIs;
117   • Make it easy and profitable for a wide range of QVIs to begin issuing vLEIs;
118   • Attract developers to build vLEIs into applications that depend on digital trust;
119   • Assist regulators in understanding and incorporating LEIs and vLEIs so that they are
120   integrated into numerous critical business processes and workflows.
121

122 Establish GLEIF as a Global Root of Trust for Organizational Identifiers
123   • Position vLEIs as the simplest, strongest solution for any use case requiring digital
124   verification of the attributes, transactions, or attestations of a legal entity or its
125   official persons or persons in other functions;
126   • Enable a vLEI chain of trust: GLEIF, QVIs, Legal Entities, OOR Persons, ECR Persons;
127   • Support unlimited levels of delegated identifiers and associated Verifiable
128   Credentials to provide both horizontal and vertical scalability.
129

130 Enable New Uses for LEIs
131 A list of use-cases, including those identified through vLEI research, includes:
132

133 Verifiable corporate documentation and communications
134   • Company and signatory-specific documents and reports;
135   • Regulatory filing and reporting by a third-party filer on behalf of the filer/reporting
136   entity or by an auditor;

137 • Contracts and legal agreements;
138 • Private, secure, peer-to-peer communication with customers, employees, and other
139 stakeholders.
140
141 Counterparty verification supporting digital business interaction/automation
142 • Client/counterparty due diligence and Know Your Customer (KYC) compliance;
143 • Import/export, supply chain, customs/border control, payment for goods (e-
144 invoicing);
145 • Authorized signatory verification;
146 • e-invoice and e-payment instruction validation.
147
148 Licensing and corporate registration
149 • Trusted supplier/provider network membership and registration;
150 • Payment systems membership and registration;
151 • Business entity registration and licenses;
152 • Educational institutions - qualification certification and verification.
153
154 Other use cases
155 • Digital wallets, digital asset management, and decentralized finance;
156 • Verification of transacting parties;
157 • Employee and authorized agent ID for any organizational use-case;
158
159 Enhance Security, Reduce Fraud and Simplify Compliance
160 • Enhance security of Autonomic Identifiers, vLEIs, and Verifiable Credentials by
161 replacing an administrative root of trust with a cryptographic root of trust;
162 • Ensure complete, cryptographically verifiable auditability of transactions and other
163 interactions involving vLEIs and sub-identifiers;
164 • Resist quantum computer attacks;
165 • Combine with other verifiable factors to further increase security, such as:
166 o identity / biometrics
167 o delegated multi-signature capabilities
168
169 Enhance Independent Control, Efficiency, Scalability and Sustainability
170 • Eliminate dependence on any single SSI utility network by delivering the vLEI
171 infrastructure in an interoperable and technology agnostic approach;
172 • Reduce dependence on SSI utility network governance structures beyond the control
173 of GLEIF;
174 • Ensure highly performant global scalability;
175 • Establish global best practices for key management;
176 • Aid the development of a competitive market for all the software, tools, and services
177 necessary to implement vLEIs;
178 • Work with QVIs to ensure a sustainable commercial model for vLEIs for GLEIF, QVIs,
179 and Legal Entities and other vLEI Ecosystem Members.
180
181

Principles

1. The vLEI Ecosystem Governance Framework MUST enable GLEIF's role to support and contribute to unique global persistent organizational identity as a public good.

2. The vLEI Ecosystem Governance Framework MUST deliver on GLEIF's vision that every legal entity be able to be identified uniquely, having only one global identity and this identity should include a digital identity.

3. The vLEI Ecosystem Governance Framework MUST leverage the principle of free and open access and use of the data in the Global LEI System regarding legal entities and their entity-level and relationships.

4. The vLEI Ecosystem Governance Framework MUST support GLEIF's intention to deliver the vLEI infrastructure using a technology agnostic approach and to use open source whenever possible.

5. The vLEI Ecosystem Governance Framework MUST support GLEIF's use of open standards.

6. The vLEI Ecosystem Governance Framework MUST fulfill GLEIF's intention to make the vLEI infrastructure widely available and broadly useful as possible.

7. The vLEI Ecosystem Governance Framework MUST enable interoperability, for the digital identity data of an entity to be represented, exchanged, secured, protected, and verified interoperably using open, public, and royalty-free standards, as well as portability, the ability of identity rights holders to move or transfer a copy of their digital identity data to the agents or systems of their choice.

8. The vLEI Ecosystem Governance Framework MUST empower vLEI Credential Holders to secure their digital identity data at rest and in motion, to control their own identifiers and encryption keys, and to employ end-to-end encryption for all interactions and to protect the privacy of their digital identity data when applicable.

9. The vLEI Ecosystem Governance Framework MUST ensure verifiability and authenticity by empowering vLEI Credential Holders to provide verifiable proof of the authenticity of their digital identity data.

10. The vLEI Ecosystem Governance Framework MUST allow vLEI Ecosystem Member to be accountable to each other for conformance to the purpose, principles, and policies of the vLEI Ecosystem Governance Framework. All vLEI Ecosystem Members MUST be responsible and be able to demonstrate compliance with any other requirements of applicable law. Nothing in the vLEI Ecosystem Governance Framework SHOULD require vLEI Ecosystem Members to breach applicable law in order to perform its obligations under the vLEI Ecosystem Governance Framework.

General Requirements

1. All LEIs contained in vLEI Credentials MUST maintain an entity status of Active and an LEI registration status other than Lapsed, Retired, Duplicate, Annulled or Merged (will be deprecated in March 2022).

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2. All Issuers of vLEI Credentials MUST verify that a Holder's Autonomic Identifier (AID) is controlled by the Holder.

3. All QVIs MUST have executed a vLEI Issuer Qualification Agreement.

4. All QVIs MUST successfully complete Annual vLEI Issuer Qualification.

5. GLEIF MUST publish the vLEI Ecosystem Governance Framework on gleif.org and follow the policies in the Revisions section for all revisions of the vLEI Ecosystem Governance Framework.

6. vLEI Credentials MUST be revocable following the policies specified in vLEI Ecosystem Governance Framework.

7. QVIs MUST ensure that third-parties comply with the vLEI Ecosystem Governance Frameworks when providing vLEI services to a QVI.

Revisions

1. At a minimum, the vLEI Ecosystem Governance Framework MUST be reviewed annually.

2. Interim revisions to the vLEI Ecosystem Governance Framework to reflect necessary technical changes or updates also MAY be considered.

   2.1 These revisions MAY be triggered by changes to vLEI Ecosystem services, processes, operations, technical architecture and infrastructure, Identifer or Credential Governance Frameworks.

3. Revisions to the Primary Document are subject to the following policies:

   a. All revisions to the Primary Document MUST be identified with a revision number that is a sequential integer.
   b. Revisions to the Primary Document SHALL be subject to public review which will be conducted as community reviews by members of the Trust over IP Foundation for a period of at least 15 days.

4. Revisions to the Controlled Documents are subject to the following policies:

   a. All revisions to Controlled Documents MUST be identified with a revision number that is a sequential integer.
   b. Revisions to the vLEI Issuer Qualification Agreement, including all of its appendices, SHALL NOT be subject to public review and will be reviewed and approved by GLEIF only.
   c. All other Controlled Documents SHALL be subject to public review which will be conducted as community reviews by members of the Trust over IP Foundation for a period of at least 15 days.

5. All revisions to the vLEI Ecosystem Governance Framework MUST be approved by GLEIF using its Change Management Process.

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Extensions

1. GLEIF welcomes other Ecosystem Governance Frameworks to leverage the vLEI Ecosystem Governance Framework but does not anticipate the need for formal extensions of the vLEI Ecosystem Governance Framework at this time.

2. This vLEI Ecosystem Governance Framework is extended by the following GLEIF Identifier Governance Framework and 4 Credential Governance Frameworks:

GLEIF Identifier Governance Framework, [v]
 A document that details the purpose, principles, policies, and specifications that apply to the use of the GLEIF Root Autonomic Identifier (AID) and its GLEIF Delegated AIDs in the vLEI Ecosystem.

Qualified vLEI Issuer vLEI Credential Governance Framework, [v]
A document that details the requirements to enable this Credential to be issued by GLEIF to Qualified vLEI Issuers which allows the Qualified vLEI Issuers to issue, verify and revoke Legal Entity vLEI Credentials, Legal Entity Official Organizational Role vLEI Credentials and Legal Entity Engagement Context Role vLEI Credentials.

Legal Entity vLEI Credential Governance Framework, [v]
A document that details the requirements for a vLEI Credential, the entity level credential issued by a Qualified vLEI Issuer to a Legal Entity.

Legal Entity Official Organizational Role vLEI Credential Governance Framework, [v]
A document that details the requirements for vLEI Role Credentials issued to by a Qualified vLEI Issuer to official representatives of a Legal Entity.

Legal Entity Engagement Context Role vLEI Credential Governance Framework, [v]
A document that details the requirements for vLEI Role Credentials issued to representatives of a Legal Entity in other than official roles but in functional or other context of engagement.

Business Requirements

1. QVIs MAY charge fees for the issuance, verification and/or revocation of vLEI Credentials issued to Legal Entities and for Legal Enity Official Organizational Role vLEI Credentials.

2. Qualified vLEI Issuers MAY offer ancillary services to Legal Entities regarding vLEIs.

3. There MUST be availability targets defined for all vLEI services included in the Appendix 5 to the vLEI Issuer Qualification Agreement - Service Level Agreement (SLA).

4. The QVI MAY review its fee schedule annually and unilaterally determine new fees.

5. The QVI MUST be solely responsible for managing the revenue that is produced and costs that are incurred in the running of its vLEI operations.

6. The QVI MUST ensure that its operations regarding vLEIs are sustainably financed.

7. GLEIF MUST not contribute funds of any form whatsoever for QVI operations.

8. A Legal Entity MAY terminate its agreement with a QVI and contract with a new QVI at any time in accordance with the terms of their contract with the QVI.

Inclusion, Equitability and Accessibility Requirements

GLEIF MUST design the vLEI Ecosystem to be able to make vLEIs available to any Legal Entity issued a LEI in the Global LEI System.

Schedule of Controlled Documents

- MUST identify the exact version of each Controlled Document with a unique, permanent DID or DID URL.
- SHOULD include a Web link to each Controlled Document in the Web version of the EGF (these will will added added prior to public review)

Glossary

verifiable LEI (vLEI) Ecosystem Governance Framework Glossary, [v]
A document that lists all defined terms have been referenced in the vLEI EGF documents.

Risk Assessment

verifiable LEI (vLEI) Ecosystem Governance Framework Risk Assessment, [v]
A spreadsheet that assesses certain risk categories regarding the operation of the vLEI Ecosystem and Infrastructure.

Trust Assurance and Certification

verifiable LEI (vLEI) Ecosystem Governance Framework Trust Assurance Framework, [v]
This spreadsheet focuses on the 'MUST' statements within the other vLEI EGF documents and specifies the services/processes that will be used to evaluate compliance with these statements.

Governance Requirements

1. The governance of the Global Legal Entity Identifier Foundation (GLEIF) can be found at https://www.gleif.org/en/about/governance#

2. The Memorandum of Understanding between the GLEIF and the Regulatory Oversight Committee (ROC) can be found at https://www.gleif.org/en/about/governance/mou-between-gleif-and-lei-roc#

3. The Charter of the Regulatory Oversight Committee (ROC) can be downloaded as a pdf, LEI Regulatory Oversight Committee Charter

4. The Statutes of GLEIF can be downloaded as a pdf, GLEIF Statutes

5. The By-laws of GLEIF can be downloaded as a pdf, GLEIF By-laws

6. GLEIF has a Board of independent directors, https://www.gleif.org/en/about/governance/board-of-directors#

7. The LEI standard, ISO 17442-1:2020 Financial services – Legal entity identifier (LEI) – Part 1: Assignment can be found here: https://www.iso.org/standard/78829.html

The LEI standard, ISO 17442-2:2020 Financial services – Legal entity identifier (LEI) – Part 2: Application in digital certificates can be found here: https://www.iso.org/standard/79917.html

Technical Requirements

verifiable LEI (vLEI) Ecosystem Governance Framework Technical Requirements Part 1: KERI Infrastructure, [v   ]

verifiable LEI (vLEI) Ecosystem Governance Framework Technical Requirements Part 2: vLEI Credentials, [v   ]

Information Trust Requirements

verifiable LEI (vLEI) Ecosystem Governance Framework Information Trust Policies, [v   ]
A document that defines the information security, privacy, availability, confidentiality and processing integrity policies that apply to all vLEI Ecosystem Members.

Legal Agreements

vLEI Issuer Qualification Agreement, [v   ]
An agreement between GLEIF and an organization that has been qualified by GLEIF to operate as a Qualified vLEI Issuer. The vLEI Issuer Qualification Agreement will be the same for all Qualified vLEI Issuers.

Appendices to vLEI Issuer Qualification Agreement

Appendix 1: Non-Disclosure Agreement (NDA), [v]
An agreement that outlines requirements for handling confidential information.

Appendix 2: vLEI Issuer Qualification Program Manual, [v]
The document that describes the Qualification program.

Appendix 3: vLEI Issuer Qualification Program Checklist, [v]
The document that details the control and process requirements for Qualification

Appendix 4: vLEI Issuer Contact Details, [v]
A list of contact details of GLEIF and the Candidate vLEI Issuer during Qualificaiton and of GLEIF and the Qualified vLEI Issuer during ongoing operations.

Appendix 5: Service Level Agreement (SLA), [v]
A document that details the services to be provided by GLEIF and the Qualified vLEI Issuer Qualification Program as Appendix 5 to the vLEI Issuer Qualification Agreement.

For the purposes of v1.0 draft of the vLEI Ecosystem Governance Framework, an initial document, vLEI Services Catalog, has been prepared.

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435   Appendix 6: Qualified vLEI Issuer TrustMark Terms of Use, [v]

436   A document that details the terms of use of the TrustMark by the Qualified vLEI Issuer.

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438   Appendix 7: Qualified vLEI Issuer-Legal Entity Required Contract Terms, [v]

439   A document that specifies the contract terms that must be included in the agreement

440   between a QVI and a Legal Entity for vLEI services.

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443   **Identifier and Credential Governance Frameworks**

444

445   GLEIF Identifier Governance Framework, [v]

446   A document that details the purpose, principles, policies, and specifications that apply to

447   the useof the GLEIF Root Autonomic Identifier (AID) and its GLEIF Delegated AIDs in the vLEI

448   Ecosystem.

449

450   Qualified vLEI Issuer vLEI Credential Governance Framework, [v]

451   A document that details the requirements to enable this Credential to be issued by GLEIF to

452   Qualified vLEI Issuers which allows the Qualified vLEI Issuers to issue, verify and revoke Legal

453   Entity vLEI Credentials, Legal Entity Official Organizational Role vLEI Credentials and and vLEI

454   Credentials and Legal Entity Engagement Context Role vLEI Credentials.

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456   Legal Entity vLEI Credential Governance Framework, [v]

457   A document that details the requirements for a vLEI Credential, the entity level credential

458   issued by a Qualified vLEI Issuer to a Legal Entity.

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460   Legal Entity Official Organizational Role vLEI Credential Governance Framework, [v]

461   A document that details the requirements for vLEI Role Credentials issued to by a Qualified

462   vLEI Isuer to official representatives of a Legal Entity.

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464   Legal Entity Engagement Context Role vLEI Credential Governance Framework, [v]

465   A document that details the requirements for vLEI Role Credentials issued to

466   representatives of a Legal Entity in other than official roles but in functional or other context

467   of engagement.

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