



# **Organizational Identity**

Securely identify and verify organizations, people and roles with the LEI and vLEI

Presentation at Digital Reporting in Europe June 4, 2025

# **Agenda**

- 1. Overview of the Global LEI System
- Enabling secure, verifiable Organizational Identity
- 3. Organizational Identity in examples





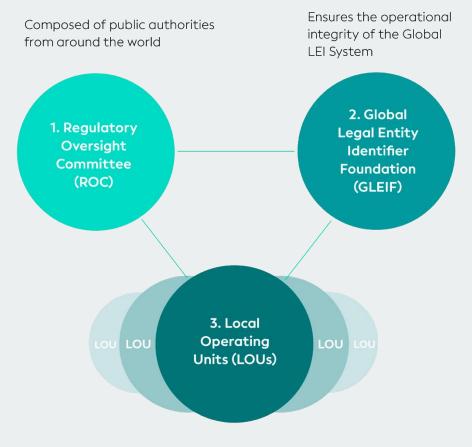


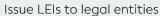


# **Overview of the Global LEI System**

# The Global LEI System

In 2011, the G-20 leaders supported "the creation of a global legal entity identifier (LEI) which uniquely identifies parties to financial transactions."







# Who is Global Legal Entity Identifier Foundation (GLEIF)

- GLEIF is a not-for-profit Swiss foundation, founded by the Financial Stability Board (FSB).
- GLEIF is overseen by the Regulatory Oversight Committee (ROC) with
  - 71 regulators and
  - 19 observers
  - from 50 countries
- GLEIF Board has 15 independent directors.
- 38 Partners for LEI issuing (LOUs) and growing
- > 2,900,000 issued LEIs to date





# **Global Regulatory Framework for the LEI**

### Canada

• Equity and debt securities reporting (starting from Oct. 2019)

### **USA**

- Home Mortgage Disclosure reporting
- Repo Market participants
- Swap data reporting
- Funds and investment firms reporting

### Mexico

 OTC Derivatives and repo market participants

### Chile

• OTC Derivatives market participants

### **South Africa**

• OTC Derivatives market participants

### EU

- MifID II, MMF Regulation, Solvency II, AIFMD, Market Abuse Regulation, CSD Regulation, Prospectus Regulation, Securitization Regulation
- SFTR EBA Recommendation, Credit Rating Agencies Regulation

### China

- China Customs requires LEI for imports from 29 countries
- Roadmap for LEI adoption published by PBOC

### Japan

OTC Derivatives market participants

### Singapore/Hong Kong

• OTC Derivatives market participants

### India

 OTC Derivatives market participants, corporate borrowers, non-derivative market and large-value payments participants

### Australia

- OTC Derivatives market
- ASIC Derivative Transaction Rules (Reporting)





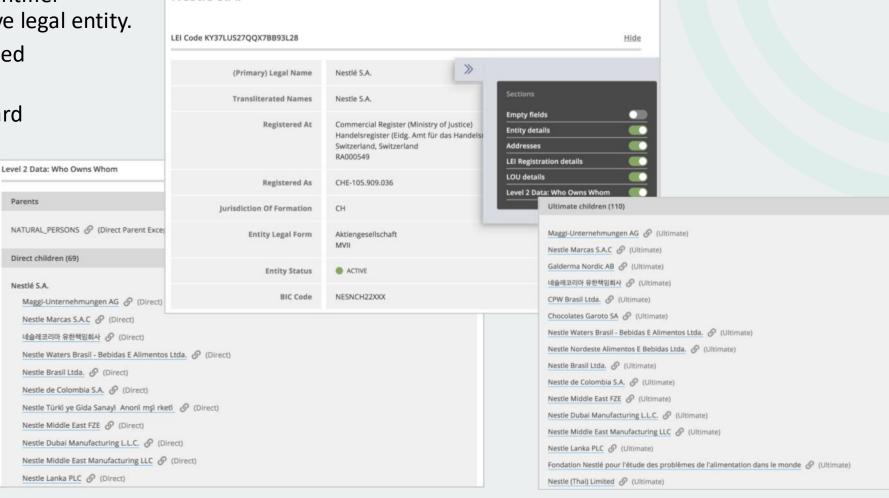


**Enabling secure, verifiable Organizational Identity** 

# Identifying organizations with the LEI

Nestlé S.A.

- 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 – Part 1.

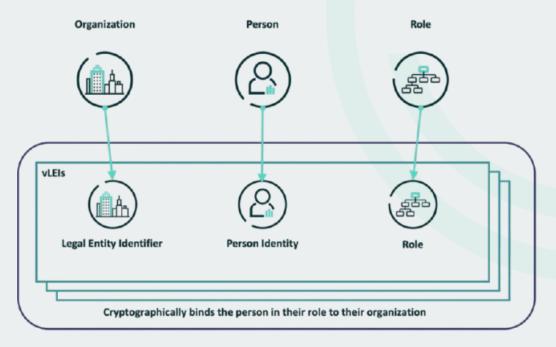




# A step further: the verifiable Legal Entity Identifier (vLEI)

With the LEI as a basis, GLEIF has developed Organizational Credentials, verifiable LEIs, or vLEIs, that are able to verify the identity of an organization as well as the people that represent the organization, both inside and outside the boundaries of that organization.

The vLEI is a digitally verifiable LEI that enables instant, secure, and automated identity verification for legal entities and their representatives.





### **Digital signing**

Digital sealing or signing (of documents, contracts, reports, invoices, data) by a legal entity or authorized representative





### **Permissioning**

Confirmation that a legal entity, or representative of this legal entity is authorized to access a system or to perform an action

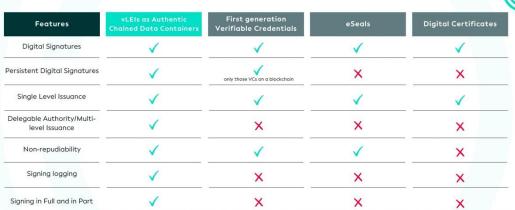


# **Coopetitive Analysis vLEI**

Horizontally-scalable Signing

Infrastructure

# Digital Tools Features Matrix: Signing



X

X

X

# Digital Tools Features Matrix: Security



# **Digital Tools Features Matrix: Verification**

GLEIF



Features	vLEIs as Authentic Chained Data Containers	First generation Verifiable Credentials	eSeals	Digital Certificates	
Verifiable Provenance to a Global Root of Trust	✓	×	×		
Instant Revocation State Verification	✓	<b>✓</b>	×	×	
Decentralized Revocation	✓	✓	×	×	
Privacy-respecting Revocation	<b>✓</b>	<b>✓</b>	×		
Revocation by Any Party within the Chain of Authority		×	×	×	

# Digital Tools Features Matrix: Global Applicability



<b>√</b>	C.		
	X	×	
×	×	×	
×	×	×	
×	×	X	
<b>✓</b>	<b>✓</b>	<b>✓</b>	
×	×	×	
_	×	× ×	







# **Organizational Identity in examples**

# Using vLEIs: signing content with vLEIs

## **GLEIF Annual Report signed using vLEIs**

### vLEI Credentials issued

 vLEI Credentials are issued to certain officers and employees/managers of the organization.

# Submission signed

- Specific sections/parts of a report, for example, can be signed by officers and employees/managers of the organization with their vLEIs.
- The same report also can be signed in its entirety by officers and employees/managers of the organization with their vLEIs.

### vLEI Credentials presented and signatures verified

 Status of the vLEI Credentials and the validity of the signatures on the submission are verified.



https://www.gleif.org/en/about/governance/annualreport (browser based, no plugin required)



# **LEI and vLEI in KYC: Simplifying Onboarding**

### **KYC** process

Customer provides LEI

Bank uses LEI to identify the organization with certainty and with access to validated reference data about the organization.

Customer obtains vLEI

The customer can use the vLEI to sign and submit documentation required by the bank during the initial KYC process.

Subsequent business and onboarding

The customer can reuse the vLEI to apply for additional bank services.

Permissioning

The vLEI can be used to permission access by the customer to banking services replacing traditional username and password and other forms of multifactor authentication.

### The vLEI also will:

Speed up transaction processes by eliminating the need to repeat KYC verification, allowing faster access to financial services.

Reduce information asymmetry, providing consistent and verified information across all transactions, which builds trust and accountability.

Lower operational costs by reducing the need for manual verification, saving on human resources and minimizing administrative work.



# **Application of vLEIs – ESG**

The platform gathers ESG data from various sources, including IoT and other digital inputs.

The platform analyzes the collected data to evaluate the SMEs' environmental, social, and governance (ESG) performance.

Based on the analysis, service partners produce comprehensive ESG reports for SMEs.

SMEs with strong ESG credentials can access green financing from banks, improving their financial opportunities.

SMEs may undergo an ESG audit conducted by a professional institution to validate their ESG performance.

The ESG reports are converted into verifiable credentials, backed by CAICT's blockchain for authenticity and integrity.

### How vLEI Will Help:

Each SME is issued a vLEI, which they use as a secure login credential to access the ESG platform.

The vLEI extracts the SME's Legal Entity Identifier (LEI), identifying the SME and linking it to supply chain and ESG information.

All ESG data for the SME is tagged under their LEI, ensuring that the data is accurately linked to the specific SME.

The platform successfully verifies and tags the ESG data using vLEI, ensuring its authenticity and traceability throughout the process.



# Why the LEI and vLEI in trade?

# Secure and reliable legal entity identification helps:

	Cross-border payment	Fraud and risk mitigation	Financial inclusion	Supply chain Efficiency	ESG stewardship		
Challenge	<ul><li>AML Screening</li><li>Realtime due diligence</li><li>Cost</li></ul>	<ul><li>Sanctions</li><li>Information in silos</li><li>Name matching ambiguity</li></ul>	<ul> <li>Access to trade and supply chain financing</li> </ul>	<ul> <li>Lack of interoperability</li> <li>Fragmentation</li> <li>Manual work prone to error</li> </ul>	<ul><li>Regulation compliance</li><li>Cost</li></ul>		
How can the (v)LEI help?	<ul> <li>Minimize false positives</li> </ul>	<ul> <li>Cross-border Identification of parties across the suply chain directly (e.g. buyer and seller) and indirectly (e.g. customs, insurance)</li> </ul>	<ul> <li>Validated again local public registers</li> </ul>	<ul><li>Unambiguous identification</li><li>Transparency and security</li><li>Minimize fraud</li></ul>	<ul> <li>Machine readable, open data, and easily integrated</li> <li>API to LEI Repository</li> </ul>		
LEI	Unique, accurate (high data quality), scalable, consistent (parent relationship data), users can challenge it.						
vLEI	Digital and cryptographic advancement of the traditional Legal Entity Identifier (LEI). vLEI enables <b>decentralized and automated validation</b> of an organization's identity.						



# **LEI in Supply Chains**

# LEI in Trade and Trade Digitalization

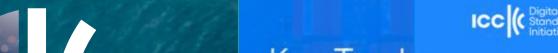












# Key Trade Documents and **Data Elements**

Digital standards analysis and recommendations— An integrated framework for digitalising the entire supply chain



# Trust in Trade

Verifiable Trust: A foundational digital layer underpinning the physical, financial, and information supply chain



# **Application of vLEIs - Digital Trade Documents Exchange Platforms**

Ensuring the authenticity and integrity of trade documents like e-bill of lading (eBL) and e-bunker delivery note (eBDN).

### Problem:

Proprietary certificates are employed for user authentication, which may limit flexibility and interoperability.

vLEI verifies the identity of entities involved, ensuring trust in the accuracy and legitimacy of document exchanges.

### Role of vLEI:

Supports secure document signing using standardized methods, improving reliability over proprietary certificates.

vLEI offers flexible signing methods (PDF embedded and segregated hash signing), making document exchanges more secure and efficient.



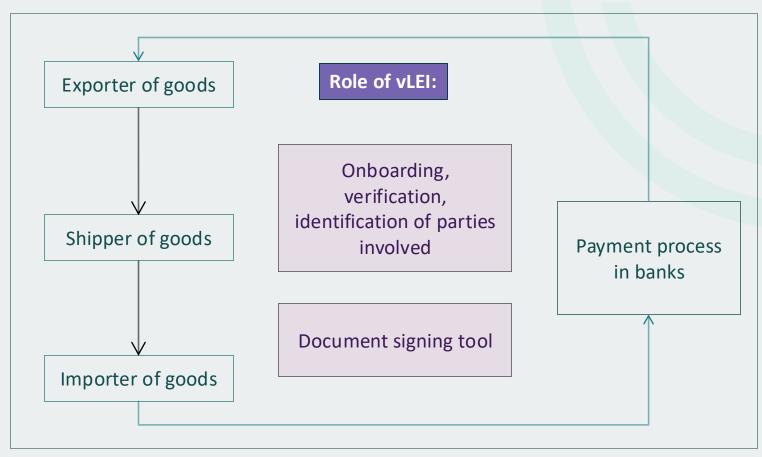
# **Application of vLEIs - E-bills of Lading**

# Large ports Shipping business

Transportation

business

### E-bills of lading has information about the entire transaction

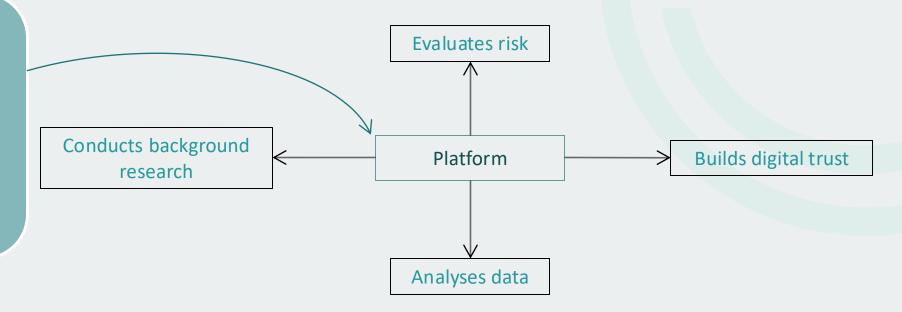


**E-bill of Lading**: Utilizes vLEI to identify enterprises and their employees on a digital trade platform, serving as both a unique identification and an online authentication and document signing tool.



# **Application of vLEIs - Supply Chain Finance Platforms**

Fintech Subsidiary offers a finance platform which can link open data to generate credit lines for enterprises within minutes based on the supply chain data for stakeholder financing. The platform currently supports 6,000 enterprises.



### Role of vLEI:

Identifies applicants and supports digital signatures.

Can connect to the digital trade platform from Use Case 1 and verify authenticity with bills of lading.



# **Application of vLEIs - Product Traceability**

Platform Function

Centralizes and tracks full life-cycle product data for financing and history verification.

Producer

Material

Platform gathers data about

Quality

Country of origin

Collected data available through barcodes and QR codes

### Role of vLEI:

**Identifies Legal Entities**: Confirms the identity of producers, shippers, and other entities involved in the product's journey.

**Verifies Data Size**: Ensures that the data package is accurate and complete.

**Signs Data Package**: Digitally signs the data to confirm its authenticity.

**Validates Trustworthiness**: Verifies the reliability and trustworthiness of the data package.



# **Application of vLEIs - Pharma Industry**

### **Problem:**

Uncertainty over the authenticity of prescriptions, hospitals, doctors, and patients involved.

Varying costs of medical procedures and consultations make it hard to verify which prescriptions are genuine.

Difficulty in securely sharing prescriptions across borders.

### Role of vLEI:

vLEI identifies hospitals, doctors, and patients to ensure authenticity.

vLEI digitally signs and verifies prescriptions, ensuring they are genuine and trustworthy.

Encapsulates medical information in verifiable credentials, making cross-border exchanges secure and reliable.



# Music Industry Use Case: Songwriting, Publishing, Recording Agreements

### Problem:

Creators do not have an easy way to document information needed by publishers and labels, or a way to delegate this work to authorized representatives.

Music companies receive data about new music via texts and emails.

Legal contracts are entered into catalog management systems manually.

Fraud and poor data security run rampant throughout the music industry.

### **Solution:**

Verified writer identities – cryptographically secure publisher connections and identity verification.

Verifiable compositions – machine readable writer and publisher data secured with digital signatures.

Secure workspaces – collaborative deal rooms for writers and their teams.

Role of the LEI & vLEI:

The combination of identity verification and legal authority verification, encapsulated in a cryptographic credential that detects tampering, leads to verification across databases.





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