

Legal Entity Identifier – the Global Identity behind every business

Legal Entity Identifier and its role in cross-border trust

Asia PKI International Symposium 2023 28 November 2023 Author: GLEIF

Overview of GLEIS History of the LEI

The collapse of Lehman Brothers in 2008, and the subsequent global financial crisis, exposed the interconnectedness of large financial institutions, in particular with respect to counterparty risk in derivative transactions

The G20 and FSB envisaged a universal legal entity identifier (LEI) that would:

- Identify participants in any financial transaction
- Overcome weaknesses in financial reporting
- Be a public good, offering collective benefits that are hard to capture by private market incentives alone
- Serve the public and private sector

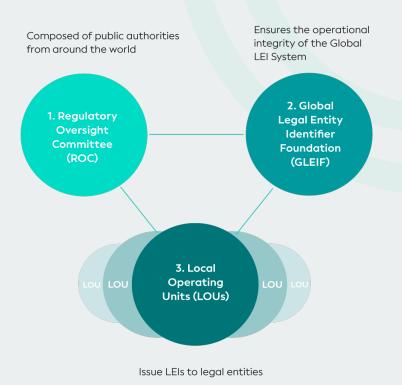




Who is Global Legal Entity Identifier Foundation (GLEIF)

- GLEIF is a not-for-profit Swiss foundation, founded by the Financial Stability Board (FSB).
- GLEIF is overseen by the <u>Regulatory Oversight Committee</u> (ROC) with
 - 71 regulators and
 - 19 observers
 - from 50 countries
- GLEIF Board has 18 independent directors
- 37 accredited Partners for LEI issuing (LOUs) and growing
- > 2,4 million issued LEIs to date, available as open data without IP or copyright protection

The Financial Stability Board (FSB) and the Group of Twenty (G2O) have endorsed the LEI, Global LEI System and GLEIF.





The LEI

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The LEI is a life-long identifier
owned by the respective legal entity.

National

Registration

Identification

information*

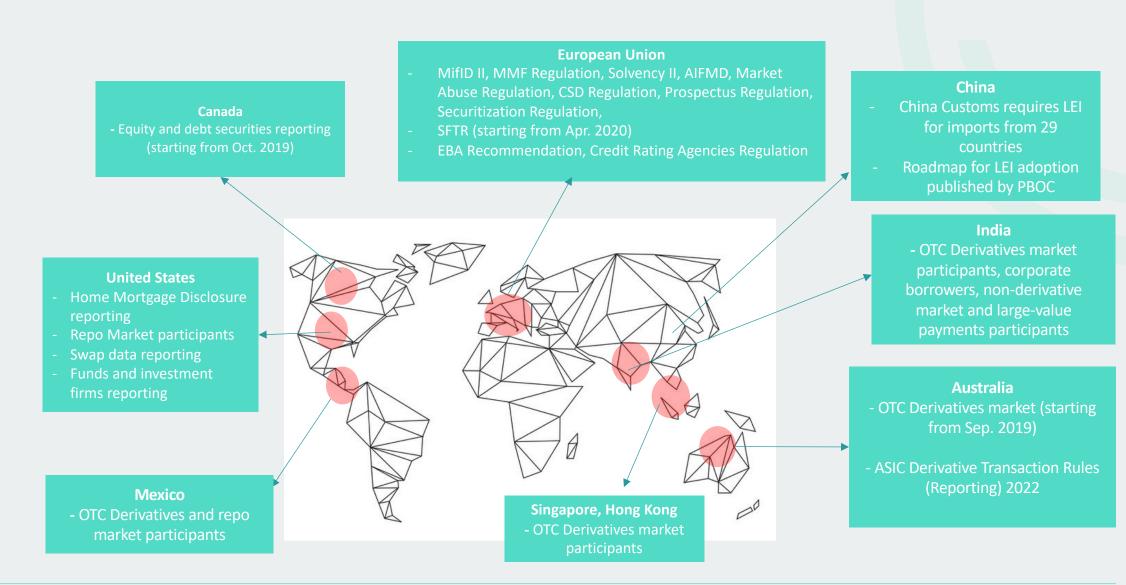
- It points to the associated reference data.
- The LEI is an ISO standard ISO 17442

EMUDHRA as of 2023-11-27T00:00								
Current Data	Events and Changes	Show XML	vLEIs					
LEI Code 3358000	2BB2DYL86WR53 ()					Hide		
(1	Primary) Legal Name	EMUDHRA LIMITED						
	Registered At	Companies Register (Ministry of Corporate Affairs) India RA000394						
	Registered As	L72900KA2008PLC060368						
Juris	Jurisdiction Of Formation							
	General Category	GENERAL			Parents 0			Hic
	Entity Legal Form	Public Limited Company (en) DDKQ		n)	Parents of Publish		O Lapsed Relationship O Rep	
	Entity Status Entity created at S&P Global Company ID		ACTIVE					
			30:00Z		Children 0			Hic
S&			585923683		Direct children (0)		🔗 Published Relationship 🌒 🔗 Lap	osed Relationship 🕚
					No direct child data available for EMUDHRA LIMITED			
					Ultimate children (0)		🔗 Published Relationship 🚯 🛛 🔗 Lap	osed Relationship 🚯

* GLEIF maintains a list of registration authorities globally.



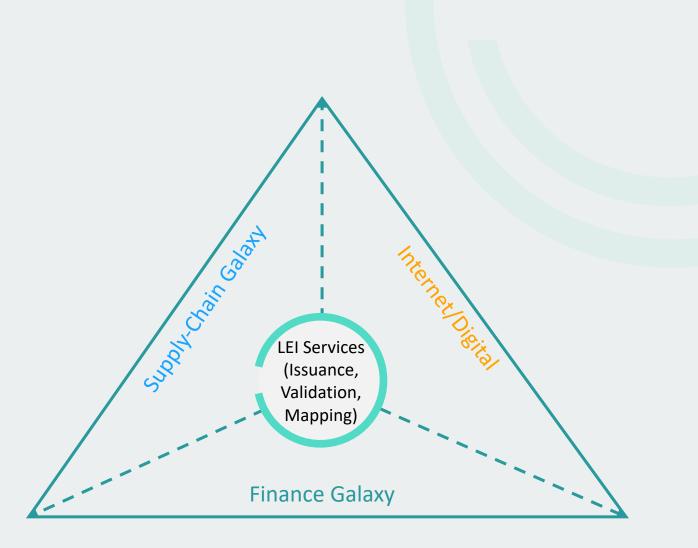
Global Regulatory Framework for the LEI





LEI services – a solution for a true digital ID management

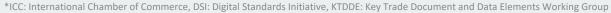
- The Global LEI System is the only regulatory mandated ID management system for legal entities globally.
- It has the potential to support all three "galaxies" via its standards for unique, global, universal, open, reliable and trusted services for issuance, validation and mapping.





International Supply Chain: What will drive activities in 2024? Promotion, Standards and Operations







Demo of embedded LEIs in certificates

with courtesy of CFCA (China Financial Certification Authority)



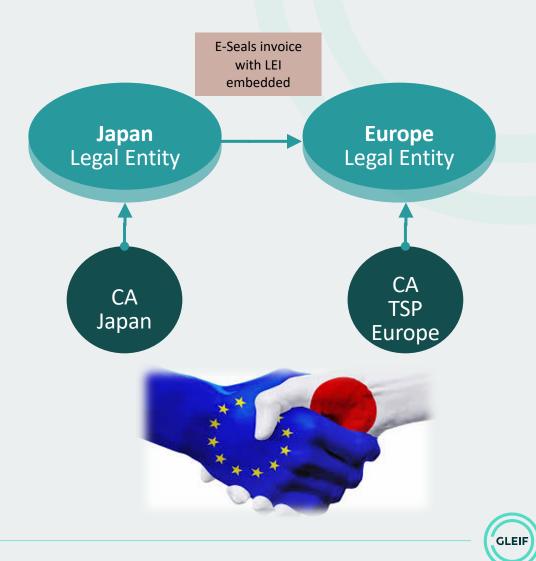
nature Properti	ies >							
	is VALID, signed by 041@N91110000759626025U@中金金融认证中 司@00000001.							
Details								
Signed by:	041@N91110000759626025U@中金金融认 Show Certificate							
LEI:	300300CQ 1FG 1K4KM7075							
Legal Name:	China Financial Certification Authority							
Registration ID:	91110000759626025U							
Country:	CN							
Legal Address:	Legal Address: NO. 1-7 、 1-9 、 1-10,Building20,PingYuanLi,Caishikou South Avenue							
Validity Summar	у							
1 The docum	ent has not been modified since this signature was applied.							
to The signer	's identity is valid.							
Signature is	s timestamped.							
Sign Date: 20	Sign Date: 2020/10/22 16:38:47 +08'00'							
TimeStamp Auth	ority: trialtimestamp001.cfca.com.cn Show Certificate							
	Close							

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GLEIF

JAPAN trade digitalization project: eSeal with LEI embedded into Certificates

- Japanese Cabinet of Science, Technology and Innovation approved the "Integrated Innovation Strategy 2020".
- The pilot project between Japan and Europe has been launched for the establishment of mutual recognition of trust services in order to facilitate easier cross-border trade verification for digital documents using eSeals with LEI embedded. ISO 17442-2 / ETSI TS 119 412-1
- Avoids developing business registry specific checks for each country:
 - Enables verification automation
 - Automates life cycle checks of the company
 - Lingua franca among different world regions
- Participants @ Japan: Hitachi Japan, SECOM/SEIKO CA.
- Participants @ Europe: SITA Europe, InfoCert CA.



LEI's inclusion into S/MIME certificates

- S/MIME stands for Secure/Multipurpose Internet Mail Extensions. This type of digital certificate enables users to secure the integrity and privacy of their emails.
- These certificates are linked to individuals and are used to encrypt and ensure digital identity when sending emails.
- Its encryption process authenticates the message and ensures that the email has not been tampered with by an outside party
- Inclusion of LEI codes into email Certificates

S/MIME certificates are evolving.

<u>Certification Authority Browser Forum</u>: has released the Baseline Requirements for the Issuance and Management of Publicly-Trusted S/MIME Certificates (PDF) containing LEI codes.

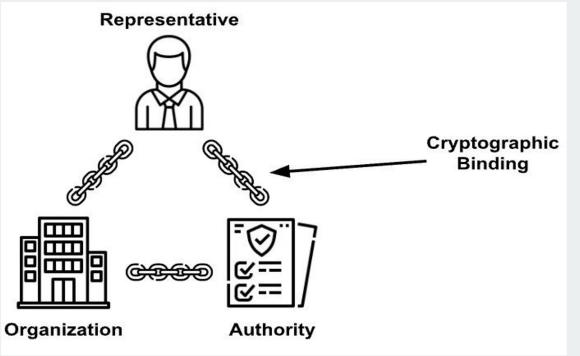
This is a great opportunity, by including the LEI codes, to add extra value to S/MIME certificates, providing this extra layer of authentication and helping on the vetting and renewal processes.





Organizational Identity (OI)

The ability for people and things to prove their authority to represent an organization outside the boundaries of that organization.



Example:

Name	Timothy Ruff		
Organization	Digital Trust Ventures LLC		
Employee ID	123ABC		
Role	General Partner		
Signing Authority	Full		



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Organizational Identity - the vLEI system

- Some examples:
- The CEO, CFO and the auditors make attestations on financial statements (annual report)
- A telecom provider uses a 3rd party call center as service desk. Each operator represents the telecom as proxy.
- In Healthcare, a digital leaflet must be authentic and tight to the producer of the medicine.
- In aviation, the bill of lading is shared by many organizations. Each entry must be authentic and assigned to a representative.
- In supply-chain, physical containers and goods within must be tight to sender, receiver and all intermediaries. Customs requires locations of firms and their facilities.
- And many more. The sky is the limit ...

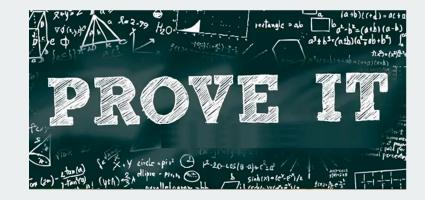




The verifiable LEI (vLEI)

Now we have:

- an identified representative,
- of an identified organization,
- with claimed **authority**,
- They are provably bound together using Public/Private Key Infrastructure and cryptography







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