

# **LEIs for Government**

# From Paper to Protocol: Enabling Cross-Border Digital Trust with LEI's – Legal Entity Identifiers

#### **Executive Summary**

Legal Entity Identifiers (LEIs), unique 20-character alphanumeric codes assigned to legal entities engaged in financial transactions, serve as a foundational pillar for the digital economy by promoting transparency, interoperability, and efficiency across global systems.

These identifiers enable precise identification of parties in digital transactions, which is critical for reducing fraud, building trust, and supporting robust regulatory oversight in increasingly complex digital markets.

By providing a standardized, globally recognized framework, LEIs facilitate seamless data exchange across jurisdictions and industries, from financial markets to supply chains, enabling efficient cross-border operations.



From Paper to Protocol: Enabling Cross-Border Digital Trust with LEI's – Legal Entity Identifiers	3
Role of LEIs in the Digital Economy	
Why Governments Should Have an LEI Adoption Strategy	. 4
vLEIs	5
Blockchain vLEIs	7
Digital Economy Platform	. 8
The Role of Government	8

# From Paper to Protocol: Enabling **Cross-Border Digital Trust with LEI's – Legal Entity Identifiers**

Legal Entity Identifiers (LEIs), unique 20-character alphanumeric codes assigned to legal entities engaged in financial transactions, serve as a foundational pillar for the digital economy by promoting transparency, interoperability, and efficiency across global systems.

These identifiers enable precise identification of parties in digital transactions, which is critical for reducing fraud, building trust, and supporting robust regulatory oversight in increasingly complex digital markets.

#### Role of LEIs in the Digital Economy

By providing a standardized, globally recognized framework, LEIs facilitate seamless data exchange across jurisdictions and industries, from financial markets to supply chains, enabling efficient cross-border operations.

Furthermore, LEIs enhance risk management and compliance by allowing regulators and businesses to track entities involved in financial activities, aiding in the monitoring of systemic risks, money laundering, and tax evasion.

In a digital economy characterized by rapid and intricate transactions, LEIs streamline compliance processes and support the integration of advanced technologies like artificial intelligence and blockchain, fostering innovation in areas such as automated Know Your Customer (KYC) processes and smart contracts.

As economies continue to digitize, LEIs provide an essential infrastructure for digital identity systems, underpinning secure and efficient interactions in e-commerce, digital payments, and decentralized finance.

# Why Governments Should Have an LEI Adoption **Strategy**

Governments have compelling reasons to develop a strategic approach to LEI adoption to harness these benefits and strengthen their digital economies.

By mandating LEI use in regulated sectors such as finance and trade, governments can streamline financial regulation, reduce administrative costs, and improve the accuracy of reporting, as demonstrated in frameworks like the EU's EMIR and the US's Dodd-Frank Act. Encouraging widespread LEI adoption also enhances a country's economic competitiveness by aligning with international standards, making it more attractive for global investment.

Additionally, LEIs contribute to financial stability by enabling better tracking of cross-border transactions and exposures, helping mitigate systemic risks in interconnected digital markets.

A national LEI strategy can further support innovation by embedding LEIs into digital identity systems, e-government platforms, and trade registries, creating a foundation for emerging technologies like blockchain and digital currencies.

To ensure broad adoption, governments could incentivize smaller entities through subsidies or tax benefits, reducing barriers to entry. By collaborating with the Global Legal Entity Identifier Foundation (GLEIF) and other jurisdictions, governments can harmonize LEI implementation, ensuring global interoperability.

In essence, a clear and proactive LEI adoption strategy positions governments to strengthen financial systems, drive innovation, and enhance their role in the global digital economy while addressing local economic priorities.

## **vLEIs**

The verifiable Legal Entity Identifier (vLEI), developed by the Global Legal Entity Identifier Foundation (GLEIF), represents a significant advancement in digital identity for legal entities, enhancing the standard LEI by embedding it within a cryptographically secure, machine-readable digital credential.

This innovative tool is designed to provide a tamper-proof, verifiable identity for legal entities, such as companies, governments, or trusts, by incorporating their LEI and associated reference data, like entity names or ownership details, into a digitally signed format based on World Wide Web Consortium (W3C) Verifiable Credential standards.

By leveraging cryptographic signatures, vLEIs ensure authenticity and integrity, allowing entities to securely prove their identity in digital transactions while maintaining control over how their data is shared, aligning with privacy and data minimization principles.

It enables instant verification of an entity's identity and attributes, making it a cornerstone for secure digital interactions in areas like financial transactions, supply chain management, and regulatory reporting.

By aligning with global standards, vLEIs facilitate seamless integration across diverse platforms and jurisdictions, supporting DPI's goal of creating inclusive, interoperable digital economies. For example, banks can use vLEIs to verify counterparties in cross-border payments, while businesses can authenticate partners in supply chains or sign digital contracts with guaranteed authenticity.

Additionally, vLEIs support role-based credentials, allowing entities to delegate specific authority, such as to a CFO or legal representative, with verifiable proof of authorization.

The operational framework of vLEIs is straightforward yet robust. GLEIF or accredited Local Operating Units (LOUs) issue vLEIs after verifying an entity's LEI and reference data, embedding these into a digitally signed credential.

Entities store their vLEIs in secure digital wallets, which they control, and present them during transactions. Recipients can verify the credential's authenticity using public key infrastructure (PKI) or decentralized identity protocols, ensuring the entity is legitimate and the credential is valid.

This process not only streamlines tasks like onboarding or compliance checks but also enhances security by preventing fraud and impersonation, which is critical for DPI applications like anti-money laundering (AML) and know-your-customer (KYC) processes.

The vLEI's contribution to DPI extends to its ability to drive financial inclusion and operational efficiency. By providing a globally scalable, standardized identity solution—building on the LEI system already adopted in over 200 jurisdictions—vLEIs enable smaller entities, such as SMEs, to participate in digital ecosystems with verified identities, reducing barriers to entry.

Their machine-readable nature automates processes like transaction verification and regulatory reporting, cutting costs and delays for both entities and DPI operators. Moreover, vLEIs are compatible with decentralized identity frameworks, making them adaptable to emerging DPI models like blockchain-based platforms, further enhancing their versatility.

Despite their potential, vLEIs face challenges that GLEIF is working to address. Widespread adoption requires collaboration with governments, businesses, and technology providers to integrate vLEI verification into existing systems.

Additionally, entities in less digitized regions may need support to access digital wallets or platforms to use vLEIs effectively.

GLEIF plays a central role in overcoming these hurdles by defining standards, accrediting issuers, and promoting vLEI adoption globally. Through its efforts, GLEIF ensures that vLEIs align with the broader LEI system and DPI principles, fostering a trusted, secure, and inclusive digital economy.

### Blockchain vLEIs

As Coindesk reported the Dubai Land Department launched Prypco Mint, the Middle East's first government-backed real estate tokenization platform on the XRP Ledger (XRPL).

The new platform lets investors buy fractional ownership in Dubai property, with title deeds tokenized on the XRP Ledger network.

This is part of a \$16 billion ambition to digitize 7% of Dubai's real estate market by 2033, and demonstrates how the deployment of Blockchain national platforms can play a direct enabling role in boosting the economy.

This scenario and technology also highlights the complementary role for 'LEIs', Legal **Entity Identifiers.** 

The integration of verifiable Legal Entity Identifiers (vLEIs) with blockchain technology is revolutionizing digital identity management for financial services, digital assets, and trade. By combining vLEIs' cryptographic security with blockchain's immutability, this synergy enhances trust and efficiency in digital economy systems.

vLEIs are cryptographically secure digital credentials based on the Legal Entity Identifier (LEI) standard from the Global Legal Entity Identifier Foundation (GLEIF).

They extend the 20-character LEI code with verifiable credentials and decentralized key management via the Key Event Receipt Infrastructure (KERI), enabling secure identity verification. Blockchain, a decentralized ledger, supports smart contracts and tokenized assets on platforms like Ethereum, making it ideal for vLEI integration to bridge traditional and decentralized finance.

For example TradeGo, a pioneer in vLEI issuance, supports digital trade in Asia-Pacific. and as described in this press release (PDF):

"Users of the TradeGo platform span industry players across bulk commodities, shipping, and finance. By embedding vLEI credentials across its blockchain-based solutions – which include electronic bills of lading (eBL), e-contracts, digital payments, and electronic bunkering – TradeGo aims to simplify cross-border commodity trading, shipping, and payments."

Chainlink's ACE automates compliance for digital assets, while Ubisecure's RapidLEI issues vLEIs. In this white paper Chainlink describes their partnership with the GLEIF and synergy with LEIs.

#### **Digital Economy Platform**

Blockchain-based Verifiable Legal Entity Identifiers (vLEIs) represent a transformative approach to enhancing trust, transparency, and efficiency in real estate transactions, as highlighted in the Dubai case study.

By leveraging the immutable and decentralized nature of blockchain technology, vLEIs provide a secure and verifiable means of establishing the identity and authority of parties involved in property transactions, significantly reducing the risk of fraud and errors. In the real estate sector, where trust and authenticity are paramount, vLEIs streamline processes such as title transfers, escrow agreements, and contract execution by ensuring that all parties are legitimate and their credentials are tamper-proof.

Furthermore, the integration of vLEIs with smart contracts enables automated, secure, and transparent workflows, minimizing intermediaries and expediting transaction timelines. As the real estate industry continues to embrace digital transformation, adopting blockchain vLEIs offers a robust foundation for building a future where property transactions are faster, safer, and more reliable, ultimately fostering greater confidence among buyers, sellers, and other stakeholders.

#### The Role of Government

Governments play a pivotal role in the adoption and implementation of blockchain-based Verifiable Legal Entity Identifiers (vLEIs) within the real estate sector. As stewards of public trust and regulatory frameworks, governments can facilitate the integration of vLEIs by establishing clear standards and legal recognition for these digital credentials.

This involves updating existing laws or creating new regulations to ensure that vLEIs are legally binding and interoperable across jurisdictions, thereby enabling seamless verification of identities and credentials in real estate transactions.

Governments can also act as issuers or overseers of vLEIs, ensuring that only authorized entities receive these credentials, which enhances the integrity of the system. By partnering with blockchain networks and organizations like the Global Legal Entity Identifier Foundation (GLEIF), governments can support the development of standardized protocols for vLEI issuance and verification, tailored to real estate use cases such as property title registries or escrow processes.

Additionally, they can incentivize adoption through pilot programs, grants, or tax benefits for real estate firms that implement vLEI-based systems, fostering innovation while maintaining oversight to prevent misuse. Moreover, governments can leverage blockchain vLEIs to enhance public services, such as maintaining tamper-proof land registries or streamlining property tax collection, which directly benefits the real estate ecosystem.

By ensuring data privacy, cybersecurity, and compliance with anti-money laundering (AML) and know-your-customer (KYC) regulations, governments can build public confidence in these systems. Ultimately, their active involvement ensures that blockchain vLEIs align with national and international legal frameworks, enabling secure, transparent, and efficient real estate transactions while protecting stakeholders from fraud and disputes.