Response of the Global Legal Entity Identifier Foundation (GLEIF) to the National Institute of Standards and Technology
August 18th, 2021

The Global Legal Entity Identifier Foundation (GLEIF) is pleased to provide comments to the National Institute of Standards and Technology (NIST) regarding Artificial Intelligence Risk Management Framework (Framework). GLEIF will focus its comments on how using the Legal Entity Identifier (LEI) in the Framework can enhance traceability and transparency. GLEIF will focus its comments on the use Legal Entity Identifier (LEI) in the context of the Framework.

First some background on the LEI:

The development of a system to uniquely identify legal entities globally had its beginnings in the 2008 financial crisis. Regulators worldwide acknowledged their inability to identify parties to transactions across markets, products, and regions for regulatory reporting and supervision. This hindered the ability to evaluate systemic and emerging risk, to identify trends, and to take corrective steps. Recognizing this gap, authorities, working with the private sector, have developed the framework of a Global LEI System (GLEIS) that will, through the issuance of unique LEIs, unambiguously identify legal entities engaged in financial transactions. Although the initial introduction of the LEI was for financial regulatory purposes, the usefulness of the LEI can be leveraged for any purpose in identity management for legal entities both by the public and private sectors. This includes but is not limited to supply-chain, trade finance, digital and emerging technologies, like artificial intelligence (AI).

The LEI initiative is driven by the Financial Stability Board (FSB) and the finance ministers and governors of central banks represented in the Group of Twenty (G20). In 2011, the G20 called on the FSB to take the lead in developing recommendations for a global LEI and a supporting governance structure. The related FSB recommendations endorsed by the G20 in 2012 led to the development of the Global LEI System that provides unique identification of legal entities participating in financial transactions across the globe and the subsequent establishment of the GLEIF by the FSB in 2014. The GLEIF is overseen by a committee of global regulators known as the Regulatory Oversight Committee (ROC).

The LEI itself is a 20-digit, alpha-numeric code based on the ISO 17442 standard developed by the International Organization for Standardization, developed specifically by ISO/TC 68, Financial services.

The LEI connects to key reference information that enables clear and unique identification of legal entities. Moreover, the LEI provides freely accessible look up (identification) of the parties to transactions as well as other business identification needs. The LEI offers both public and private sectors users a one-stop approach to identifying legal entities, which has the potential to take the complexity out of business transactions. Via the Global LEI Index, GLEIF makes available the largest online source that provides open, standardized, and high-quality legal entity reference data. No other global and open entity identification system has committed to a comparable strict regime of regular data verification.

The LEI in the AI Framework

GLEIF would like to highlight that each AI solution is a product of multiple components. Each algorithm develops its patterns based on the input and the parameter set. The lack of labeled data is one of the

most often encountered challenges when it comes to application of AI approaches. With the LEI code and the accompanying publicly available reference data, GLEIF offers a high quality labeled data set, that could be used for (i) different learning problems, (ii) as a benchmark data, or (iii) to be mapped to additional internal data to enhance the internal data and provide the data label.

For example, GLEIF is the Maintenance Agency for the ISO 20275 Entity Legal Form (ELF) Code List. The list contains legal forms/types in their native language, such as limited liability companies (Ltd), Gesellschaft mit beschränkter Haftung (GmbH) or Société Anonyme (SA). The ELF Code List assigns a unique code to each entity legal form. ISO points out that understanding the legal form of an entity "*is an important component of financial services transactions. Entering into a business relationship requires distinguishing the type of entity that is being transacted with. Parties (and their organizational structure) involved in financial transactions need to be identified within these transactions. Standardization of the legal or organizational construct will aid flexibility and provide greater understanding of exposure to risk and access to capital*." An ELF code is a data field in the LEI reference data. In the case of a financial institution, LEI reference data with an ELF code as a label can be used to develop an AI model to assign ELF codes automatically to new legal entities, based on the full legal name of the entity as it appears in a business registry where the entity is registered. This would facilitate (i) the mapping exercise for all type of businesses within the existing client/legal entity portfolio; and (ii) assign the right legal liability to the legal entity.

Regarding traceability and transparency discussions, GLEIF suggests that the algorithms' results would have to be traceable to the extent that government agencies can monitor them. In addition to performing comparisons with specific minimum standards that may need to be developed, government agencies could also determine the effectiveness of algorithms by benchmarking them against other providers' algorithms. Without the use of the global data standards as part of these specific minimum standards, comparison of data and benchmarking across agencies cannot be achieved.

The concentration risk, reliance on the same service providers or intermediaries, is highlighted as another challenge. GLEIF thinks that the clear identification of these service providers and clients with their LEI can help government agencies map service concentration and affected clients in a clear and unambiguous manner in case of an unexpected behavior. Mapping the concentration risk can help regulators take necessary measures timely, so these challenges do not become risk factors for financial stability.

As also highlighted by the Financial Stability Board, applications of AI and machine learning could result in new and unexpected forms of interconnectedness between financial markets and institutions based on the use by various institutions of previously unrelated data sources. Network effects and scalability of new technologies may give rise to third-party dependencies. The inclusion of the LEI in AI Framework will help designers, developers, and users of AI to resolve algorithms in a consistent manner to an entity represented by an LEI, when entity identification is required. For example, the financial marketplace has implemented a sub-section of AI, known as Named Entity Recognition (NER) within sentiment models used to support trading facilities. A newsworthy and relevant company, like GameStop, could be mentioned repeatedly in Reddit or Twitter. These technologies implement machine learning models to detect issuer or company names which are then mapped to entity identifiers, including the LEI, within data models. Emerging technologies like these could also be leveraged by government agencies for monitoring purposes.

In conclusion, within the Request for Information, NIST notes that a Framework should be "consensus-driven and developed and regularly updated through an open, transparent process. All stakeholders should have the opportunity to contribute to the Framework's development. NIST has a long track record of successfully and collaboratively working with a range of stakeholders to develop standards and guidelines." GLEIF thinks that the LEI, as an open, ISO standard developed by stakeholders and revisited accordingly, therefore is highly aligned with the interests of NIST for the development of the AI Framework.

Submitted by:

Stephan Wolf, CEO GLEIF