

May 3, 2011

To Parties Interested in the Legal Entity Identifier Solution:

The accurate and unambiguous identification of legal entities engaged in financial transactions is foundational and critically important towards the improved measurement and monitoring of systemic risk by regulators and supervisors. A global standardized Legal Entity Identifier (LEI) will help enable organizations to more effectively measure and manage counterparty exposure, while providing substantial operational efficiencies and customer service improvements to the industry. As the Financial Stability Board (FSB) has stated, “Indeed, the recent crisis has reaffirmed an old lesson—good data and good analysis are the lifeblood of effective surveillance and policy responses at both the national and international levels.”¹ The FSB has recognized that such analysis would need to be supported by legal entity specific data.

Consequently, the industry requirements document (available at www.sifma.org/LEI-Industry-Requirements) represents the current best thinking of the global financial community (the “Trade Associations”) with respect to setting out requirements for an LEI solution. The Trade Associations that have developed this document are comprised of financial services firms from a broad range of countries, representing many different types of financial industry participants. The document is intended to be a living solution that will continue to be refined as others participate in the discussion on the topic. The Trade Associations, however, believe it is critically important to release this current version of the requirements to facilitate continued dialog on establishing a global industry solution. Specifically, the Trade Associations seek the following:

- Near-term, continued socialization of the requirements with participants in the financial markets and regulators around the world
- Discussion, refinement and convergence of currently separate approaches by those developing potential solutions for the LEI standard
- Immediate engagement with potential solution providers as they prepare and present their proposed solutions for issuing and maintaining an LEI solution

The Trade Associations respectfully request that parties interested in submitting a proposal for providing services as part of the LEI solution contact LEIresponse@sifma.org for the details on the submission process. Proposals will be accepted through May 30, 2011.

The objective of the Trade Associations is to issue a final recommendation for the global LEI solution, including both the standard itself and the solution providers, by June 30, 2011.

¹ “The Financial Crisis and Information Gaps” (October 29, 2009).

Requirements for a Global Legal Entity Identifier (LEI) Solution

May 2011

The Trade Associations Global LEI Proposal



TABLE OF CONTENTS

1. DOCUMENT CONTROL	4
1.1. DISTRIBUTION.....	4
1.2. AUTHORS	4
2. CONTRIBUTORS	6
3. EXECUTIVE SUMMARY	7
3.1. BENEFITS OF A GLOBAL LEI SOLUTION	7
3.2. OBJECTIVES.....	7
3.3. APPROACH.....	8
3.4. GUIDING PRINCIPLES.....	8
3.5. DOCUMENT TOPICS	9
3.6. HIGHLIGHTS	9
4. CRITICAL DEPENDENCIES	14
5. SCOPE OF COVERAGE	16
DEFINITION	16
5.1. STATEMENT OF LEI ELIGIBILITY.....	16
5.2. GEOGRAPHICAL COVERAGE	16
5.3. INDUSTRY	16
5.4. ROLE	17
5.5. ASSET CLASS	17
5.6. TYPES OF LEGAL ENTITIES.....	18
5.7. MATERIALITY / SIGNIFICANCE	18
6. DATA MODEL	19
DEFINITION	19
6.1. IDENTIFIER DEFINITION.....	19
6.2. ATTRIBUTE DEFINITION.....	20
6.3. METADATA DEFINITION	21
6.4. OWNERSHIP	22
7. OPERATING MODEL	24
DEFINITION	24
7.1. REGISTRATION PROCESS	24
7.2. DATA MAINTENANCE PROCESS	25
7.3. DISTRIBUTION / ACCESS PROCESS.....	25
7.4. DATA CHALLENGE / ARBITRATION PROCESS.....	26

7.5. QUALITY ASSURANCE PROCESS	26
7.6. SERVICE LEVEL AGREEMENTS (SLAs).....	27
8. GOVERNANCE MODEL.....	28
DEFINITION	28
8.1. GOVERNANCE COMMITTEE	28
8.2. COMPLIANCE OF LEI SOLUTION PROVIDER	30
9. BUSINESS MODEL.....	32
DEFINITION	32
9.1. INITIAL FUNDING MODEL FOR LEI SOLUTION PROVIDER.....	32
9.2. FEES	32
9.3. COMMERCIAL TERMS	33
10. IMPLEMENTATION	34
DEFINITION	34
10.1. PHASING	34
10.2. IMPLEMENTATION MANAGEMENT	34
11. COMPLIANCE	35
DEFINITION	35
11.1. MANDATE	35
12. TECHNICAL PRINCIPLES	36
DEFINITION	36
12.1. GENERAL REQUIREMENTS	36
12.2. DATA ARCHITECTURE	36
12.3. TECHNICAL ARCHITECTURE.....	37
12.4. SOLUTION ARCHITECTURE	37
12.5. DEVELOPMENT LIFECYCLE	37
12.6. OPERATIONS ARCHITECTURE	38
12.7. NETWORK ARCHITECTURE.....	39
12.8. SECURITY ARCHITECTURE	39
12.9. TECHNOLOGY MANAGEMENT AND UTILIZATION	40
APPENDIX A: GLOSSARY	41
APPENDIX B: INFORMATION ABOUT TRADE ASSOCIATIONS.....	43

1. Document Control

1.1. Distribution

The requirements and standards presented herein are proposed to the following audiences:

- Global regulatory agencies
- Financial market participants
- A yet-to-be-established governance committee ("LEI Governance Committee")
- Potential global LEI Solution providers

1.2. Authors

The trade associations below, collectively referred to herein as the "Trade Associations", appreciate the opportunity to submit The Requirements for a Global LEI Solution¹.

Sincerely yours,

AFME

Mark Austen, Chief Operating Officer
mausten@afme.org

ASIFMA

Nicholas de Boursac, CEO and Managing Director
ndeboursac@asifma.org

British Bankers Association

Simon Hills, Executive Director, Prudential
simon.hills@bba.org.uk

CDMG (Customer Data Management Group)

PJ DiGiammarino; CEO, JWG IT
pj@jwg-it.eu

¹ Information about each of the trade associations is provided in Appendix B: Information about Trade Associations.

The Clearing House Association L.L.C.

Mark Zingale; Senior Vice President & Associate General Counsel
Mark.Zingale@TheClearingHouse.org

Enterprise Data Management (EDM) Council

Mike Atkin; Managing Director
atkin@edmcouncil.org

Financial Services Roundtable

Brad Ipema; Senior Counsel for Legal & Regulatory Affairs
Brad.Ipema@FSRound.org

Futures Industry Association

John M. Damgard, President
jdamdard@futuresindustry.org

GRIS (Global Regulatory Identifier Steering group)

PJ DiGiammarino; CEO, JWG IT
pj@jwg-it.eu

International Swaps and Derivatives Association (ISDA)

Robert Pickel; Executive Vice Chairman
rpickel@isda.org

Investment Company Institute (ICI)

Martin A. Burns; Director - Institutional Operations & Service
mburns@ici.org

SIFMA

Thomas Price, Managing Director; Operations, Technology and BCP
tprice@sifma.org

2. Contributors

The following organizations and associations were party to the discussions leading to the creation of this proposal:

Participating Firms (43)

- AllianceBernstein
- Bank of America Merrill Lynch
- Bank of New York Mellon - Pershing*
- Barclays Capital*
- BB&T
- BlackRock
- BNP Paribas*
- CIBC Wholesale Banking
- Citi
- CME Group
- Credit Suisse
- Deutsche Bank*
- E*Trade Financial
- Edward Jones
- Federated Investments
- Fidelity*
- GE Asset Management
- GE Capital
- Goldman Sachs*
- HSBC
- Janney Montgomery Scott LLC
- Jefferies
- JP Morgan Chase*
- JWG
- KeyBank
- Loomis Sayles
- Morgan Stanley*
- NASDAQ
- New York Life
- Nomura*
- Northern Trust
- NYSE Euronext
- Prudential
- RBC
- RBS*
- R-Cube
- Renaissance Technologies

- Societe Generale
- State Street
- T Rowe Price
- Tradeweb
- UBS
- Wells Fargo*

* Steering Committee Members

Trade Associations (16)

- Associations for Financial Markets in Europe
- Asia Securities Industry & Financial Markets Association
- British Bankers Association
- Customer Data Management Group
- EDM Council
- The Financial Services Roundtable
- Financial Information Services Division (FISD)
- Futures Industry Association
- Global Financial Markets Association
- Global Regulatory Identifier Steering Group
- International Swaps and Derivatives Association, Inc.
- Investment Company Institute
- Investment Industry Association of Canada
- Managed Funds Association
- Securities Industry and Financial Markets Association
- The Clearing House Association

Associations in Discussion (5)

- Australian Financial Markets Association
- Japan Securities Dealers Association
- Korea Financial Investment Association
- International Bankers Association of Japan
- Taiwan Securities Association

3. Executive Summary

3.1. Benefits of a Global LEI Solution

The accurate and unambiguous identification of legal entities engaged in financial transactions is foundational and critically important towards the improved measurement and monitoring of systemic risk by regulators and supervisors. A global standardized Legal Entity Identifier (LEI) will help enable organizations to more effectively measure and manage counterparty exposure, while providing substantial operational efficiencies and customer service improvements to the industry.

3.2. Objectives

The objective of the Trade Associations is to develop an international consensus-based proposal that identifies requirements and standards for a viable, uniform, and global LEI Solution. The LEI Solution is a capability that will help global regulators and supervisors better measure and monitor systemic risk. Equally important, the LEI Solution will help individual firms more effectively measure and manage their counterparty exposure and improve operational efficiencies.

The Trade Associations note that this is in line with Financial Stability Board (FSB) recommendations. "The Financial Crisis and Information Gaps" report published by the Financial Stability Board and International Monetary Fund (October 29, 2009) noted, "Indeed, the recent crisis has reaffirmed an old lesson—good data and good analysis are the lifeblood of effective surveillance and policy responses at both the national and international levels."² The FSB further recognized that such analysis would need to be supported by legal entity specific data, and recommended in its report of October 20, 2010 that firms maintain information on a legal entity basis where a systemically important financial institution (SIFI) has multiple significant legal entities. In addition, the G20's recommendations for the OTC derivatives market also drive towards the creation of a common LEI standard: "All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories."³

The Trade Associations have fully embraced the need for an LEI solution to be established and implemented by private industry and other relevant stakeholders through a consensus process. We are committed to working with regulators and supervisors globally to develop this essential LEI Solution as a key foundational tool to help promote industry and supervisory efforts to enhance financial stability.

²Available at http://www.financialstabilityboard.org/publications/r_091107e.pdf

³Progress report on the actions to promote financial regulatory reform; Issued by the U.S. chair of the Pittsburgh G-20 Summit (September 25, 2009)

3.3. Approach

Given the large number of organizations involved and the international scope of the effort, a formalized process was established to gather input and build consensus. The two-pronged process leveraged both in-person interviews and a weekly iterative, email and meeting-based content review and feedback cycle. This process provided all interested stakeholders (both market participants and trade associations) the opportunity to review the components of the proposal and provide feedback as they were being developed.

The weekly feedback cycle was one of the primary means by which broad-based consensus was reached. The other critical means of achieving consensus included two three-hour in-person workshops, consultations with international industry and regulatory representatives (including those based in Europe and Asia), and additional meetings with industry stakeholders around the world.

3.4. Guiding Principles

To ensure continued focus and alignment across the international stakeholder community, the following guiding principles underpin the global LEI effort:

Principle 1 - Help measure and monitor systemic risk

A primary objective of the LEI Solution is to help global regulators effectively measure and monitor systemic risk. Equally important, the LEI Solution will help individual firms more effectively measure and manage their counterparty exposure and improve operational efficiencies.

Principle 2 - Ensure global coordination

A globally consistent and coordinated LEI Solution is required to measure and monitor global systemic risk effectively, and to minimize regulatory arbitrage. Global cooperation will be necessary to establish an effective LEI Solution that will be workable across different types of legal entities and international jurisdictions. Local expertise is necessary for the LEI Solution to be accurate and comprehensive.

Principle 3 - Promote regulatory coordination

The Trade Associations promote a single, industry-wide LEI standard supported by all regulators globally. Incurring the extra cost and manpower burden from regulations that establish multiple LEIs for the same legal entities would be inefficient.

Principle 4 - Design a pragmatic, iterative solution

Define a practical, implementable solution that can be expanded (both in scope and scale) and revised over time.

Principle 5 - Encourage participation

The LEI Solution must have appropriate incentives to encourage legal entities to register for LEIs, to maintain high quality data, and to certify the accuracy of its LEI information on at least an annual basis. The regulatory community must mandate much of this.

Principle 6 - Make the data freely available

Easy and free access to LEI data ensures the data is a public good and does not unfairly benefit one party over another. In addition, broad access improves the data quality and its ultimate benefit to all users.

3.5. Document Topics

The standards and requirements contained herein are categorized into the following eight topics:

- 1 - Scope of Coverage
- 2 - Data Model
- 3 - Operating Model
- 4 - Governance Model
- 5 - Business Model
- 6 - Implementation
- 7 - Compliance
- 8 - Technical Principles

3.6. Highlights

Overview

The executive summary provides a brief overview of key requirements and standards by topic.

Scope of Coverage (page 16)

- **General Breadth:** LEI scope is intended to apply to all countries globally, all industry types, and all asset classes.
- **Principle of Eligibility:** For purposes of LEI eligibility, any "party to a financial transaction" shall be eligible to obtain an LEI, providing the entity meets the scope requirements highlighted below.
- **Individuals:** Individuals (i.e., natural persons) are excluded from LEI scope.
- **Roles:** A legal entity playing one or more of the following roles in a financial transaction will be in scope for the initial release of the LEI Solution:
 - Transacting entities
 - Issuing entities
 - Reference entities
 - Reporting entities
 - Ultimate parent entities
 - Other participants in financial transactions as deemed necessary in the future (e.g., exchanges, utilities, registrars, regulators, industry organizations).
- **Materiality:** The LEI scope will not apply a materiality threshold of any type to the issuance of LEIs (e.g., capitalization of legal entity, notional size of transaction).

Data Model (page 19)

- **International Data Standard:** The LEI Solution should serve as the internationally recognized data standard for the identification of legal entities, provided that standard includes at least the following characteristics: persistent; neutral; singular; unique; extensible; structurally fixed; reliable; and interoperable.
- **Attributes/Metadata**
 - The initial data model should include the following attributes and treat them as mandatory: LEI (i.e., the identifier itself); exact legal name; address; country of formation; legal form; ultimate parent LEI; LEI status (e.g., available, disabled); and other metadata (e.g., date LEI issued; last updated; date disabled).
 - The data attributes noted above may be specifically linked to the standard itself, or captured as part of the overall mandatory data model. The data attributes specifically linked to the standard should be kept as simple as possible to avoid the potential complication of having to update the standard if definitions are modified, (e.g., a changed status code).
 - Immediate parent will not be mandatory in the initial release but will be available to be populated in the data model.
- **Ownership Test:** Ownership shall be defined as "greater than 50% ownership". If there is no owner with greater than 50%, then the legal entity itself is entered as the ultimate parent.

Operating Model (page 24)

- **Self-Registration Model**
 - The LEI registration process intends to rely on a self-registration model whereby entities eligible for an LEI register at least the required information about themselves, and then certify that information periodically (no less than annually), or upon changes to such data.
 - The LEI Solution provider over time shall work with the global regulators and the LEI Governance Committee to fully require and enforce self-registration.
- **Extended Implementation:** During an extended implementation phase, the LEI Solution provider has the flexibility to offer both a self-registration process and an alternative mechanism for assigning LEIs to entities that are not required to have an LEI and choose not to self-register.
- **Data Quality**
 - Where required to obtain an LEI, the legal entity itself has the ultimate responsibility for maintaining the accuracy of the data associated with its LEI.
 - The LEI Solution provider shall implement a process whereby LEI consumers can challenge the accuracy of the LEI data (e.g., missing data, incorrect data) by initiating a "Request for Review".
 - The LEI Solution provider shall implement a comprehensive quality assurance process to facilitate accurate and up to date LEI data.

- **Data Access:** Access to LEI data should be unrestricted and freely available to all users (except where prohibited by jurisdictional law, rules or regulations).
- **Service Level Agreements (SLAs):** SLAs must be defined and implemented to manage the interactions between the LEI Solution providers and all LEI stakeholders.

Governance Model (page 28)

- **Data Governance:** The LEI (i.e., the identifier itself) shall be maintained and governed by a global voluntary consensus standards body.
- **LEI Solution Governance:** The LEI Solution provider requires a single global governance committee ("LEI Governance Committee") comprised of global market participants (e.g., trade associations, regulators and supervisors, utilities).
- **Accountability:** The LEI Solution provider(s) shall be accountable to the LEI Governance Committee.
- **Funding:** The LEI Solution shall be managed on a cost recovery basis. As such, the Trade Associations are agnostic to the overall structure of the LEI Solution provider (e.g., not-for-profit; private).
- **Intellectual Property:** The LEI Governance Committee shall provide oversight to ensure the appropriate treatment of any LEI intellectual property that is created as part of the LEI solution, including data, data model, industry facing interfaces, and to protect the openness of the solution, the stakeholders and the solution providers. The LEI Governance Committee shall also oversee contract rights to the services provided by the LEI Solution.
- **Regional Capability:** The Governance Committee will ensure that the LEI Solution provider has the capability to support regional conventions and regulations and provide local certification while maintaining a single global standard, centralized repository and issuance system.
- **Local Regulatory Requirements:** The physical location of the LEI database, as well as the access rights to the information contained within it, must consider and comply with local regulations related to data privacy and data access issues.

Business Model (page 32)

- **Financial Wherewithal:** The LEI Solution provider must demonstrate its financial capacity to deliver and maintain the LEI Solution, including its ability to meet expected initial start up requirements.
- **Fee Structure**
 - The LEI Solution shall be funded through a basic annual fee paid by each legal entity that obtains an LEI as well as other potential fees for customized services.
 - The basic annual fee structure is intended to cover the cost of issuing LEIs (including the validation and maintenance costs), as well as the interface that makes the data freely available to consumers.
 - The annual fee should also provide for a reasonable reserve fund intended to cover various expenses.

- Given expected varying levels of use and consumption, a reasonable fee structure for consumers requiring customized services beyond the free interface (e.g., a daily feed of new LEIs issued) should be established by the LEI Solution provider to cover the costs of such services. Such a fee structure should seek to ensure that the basic annual fee is kept to the lowest amount possible for LEI registrants that have limited financial market activity and have little or no need of services beyond obtaining an LEI.
- The LEI Governance Committee will oversee the fee structure to ensure it is being operated on a cost recovery basis and provides the lowest possible annual fee structure.

Implementation (page 34)

- **Phased Implementation:** The implementation of the LEI Solution should be phased and sequenced according to global regulatory requirements.
- **Grace Period:** For each implementation phase (both within and across regions), a reasonable grace period should be implemented during the registration period before enforcement begins.
- **Implementation Management:** The LEI Solution provider shall create and execute against a comprehensive implementation roadmap.

Compliance (page 35)

- **Mandate:** To be fully effective and avoid regulatory arbitrage, the LEI Solution is explicitly dependent upon global regulators consistently requiring the following:
 - in-scope legal entities register with the LEI Solution provider;
 - in-scope legal entities maintain the accuracy and completeness of their data with such provider;
 - in-scope transacting entities provide their LEI to counterparties with whom they are transacting (or otherwise make the LEI available where required for regulatory reporting by other financial market participants);
 - in-scope non-transacting entities (i.e., reference entities; issuing entities; reporting entities; and other entities) provide LEI information as required by regulators;
 - a consistent definition of eligibility criteria for the issuance of an LEI; and
 - a consistent definition of in-scope entities.

Technical Principles (page 36)

- **Principles:** The technical design, architecture, and support framework of the LEI Solution shall be capable of delivering the standards and requirements in this document, including but not limited to, the following:
 - globally consistent technology, operating, and support capabilities;
 - ability to support a single consolidated database in both a centralized and decentralized fashion;
 - interfaces (e.g., format of messages, communication protocols) required to communicate with the LEI Solution should adhere to non-vendor specific standards to ensure portability of the capabilities of the LEI Solution;

- support a range of messaging formats (e.g., XML and pipe delimited formats) and communication protocols (e.g., SFTP and HTTPS) to ensure that all market participants are technically capable of consuming and interacting with the LEI data;
 - current and historical LEI data must be retained and easily transferable to another LEI Solution provider;
 - meet the bi-directional data collection and data distribution requirements; and
 - adopt information security standards commensurate with the global financial and regulatory community, including protection of subscription and feed information (such data implies entities interested in / transacting with financial institutions).
- **Technical Evaluation:** The technical criteria identified in the proposal will form the basis for a comprehensive technical evaluation during a later phase.

4. Critical Dependencies

Success of this effort is defined as the implementation of a uniform, global LEI Solution that will help global regulators and supervisors consistently measure and monitor systemic risk as well as help individual firms more effectively measure and manage their counterparty exposure and achieve operational efficiencies. The success of the LEI Solution expressly depends upon the coordination and next steps of the regulatory community as well as members of the global financial services industry. The requirements set forth in the document represent the collaborative “best thinking” of the contributors towards a long-term solution that will help provide high-quality data to regulators and to the industry as a whole. The critical dependencies below (defined by participant) must be addressed to ensure the success of the LEI Solution.

Global Regulators

Dependency on a consistent, global mandate: The success of the LEI Solution relies on regulators from every part of the world requiring the use of the same LEI standard in their rulemaking and reporting requirements. Wherever a regulator requires the identification of a legal entity, we strongly urge that the new LEI global standard be leveraged. In addition, as reporting and monitoring requirements emerge in the future, we strongly encourage regulators to work together to create consistent definitions and requirements.

Dependency on rational integration of the LEI: In adopting the new LEI as the authoritative standard for legal entity identification in regulatory reporting requirements, we urge regulators to rationalize existing or emerging identifiers to ensure undue cost and reporting burdens are not being imposed as a result of overlapping or redundant mandates.

Dependency on a reasonable, phased implementation: Regulators globally should acknowledge that a phased approach to requiring use of the LEI standard in new and existing regulatory reporting will be necessary to ensure success. We urge regulators to cooperate and coordinate as to the timing of requirements for the use of the LEI standard in new and existing regulatory reporting within their respective jurisdictions to avoid undue cost burdens or the risk of regulatory arbitrage within or across jurisdictions.

Dependency on the regulators to enforce compliance: The consistent adoption and use of the new LEI standard will require the support of the regulators through their existing oversight and enforcement mandates. We urge the regulatory community to require reporting entities to provide accurate and timely legal entity data as part of new regulatory rulemaking. We also urge the regulators to require that in scope entities take ownership of their legal entity data by requiring self-registration and regular certification of the data provided. The LEI infrastructure is a system for providing unique identifiers; regulatory authorities retain their responsibility for substantive regulation of registered entities.

Dependency on transparent regulatory intent: The Trade Associations have drafted this proposal with the explicit intent that the LEI Solution is capable of expanding to meet future regulatory requirements. The more that regulators leverage this initial LEI release and openly

communicate with the industry, the increased likelihood that the LEI Solution can successfully respond to future regulatory requirements. When developing specific requirements and adoption timelines (e.g., adding the LEI to existing regulatory requirements such as reporting), regulators should consider, in coordination with the industry, the burdens of those specific requirements (e.g., requiring LEI at the moment of trade execution vs. post-trade reporting). In some cases this should include a cost-benefit analysis.

Financial Market Participants (represented by the Trade Associations)

Dependency on recommending a solution: The objective of this proposal is to determine the requirements for a global LEI solution, not to be prescriptive as to how they are ultimately satisfied. While industry consensus has been reached on the underlying standards and requirements, the Trade Associations must now develop detailed specifications, in coordination with the other LEI participants, to design and implement a viable LEI solution.

Dependency on participation: The Trade Associations recognize the benefits (e.g., operational and risk management efficiencies) inherent in a globally adopted and standardized LEI Solution and should encourage users to leverage and maintain the data, beyond regulatory compulsion, to ensure its usefulness expands over time.

Data Standards Organizations

Dependency on an agreeable standard: The creation and maintenance of a global data standard is critical to a viable LEI solution. Data standards organizations must coordinate with other LEI participants to design and publish a standard that meets the interests of the global financial and regulatory community.

5. Scope of Coverage

Definition

The Scope of Coverage section identifies legal entities that should be in scope for obtaining an LEI. For recommendations on implementation phasing and timing, please see section 10.

5.1. Statement of LEI Eligibility

Requirement

For purposes of LEI eligibility, any “party to a financial transaction” shall be eligible to obtain an LEI, providing the entity meets the scope requirements highlighted in sections 5.2 through 5.7.

Comments

The Trade Associations continue active discussions to define principles of LEI eligibility required to aid in systemic risk measurement, and have identified this subject as a key topic for regulatory consideration and future discussion. Principles considered to date include an “entity with the ability to enter a contract” and/or an “entity that is regulated in its own right”; “legal recourse” was rejected as a principle guiding eligibility.

The Trade Associations also agree that the location from which an entity acts in a financial transaction may be critical to systemic risk measurement; however, they have not yet concluded whether that would be a principle around which LEI eligibility would be defined as the location dimension may be made available via alternative methods.

5.2. Geographical Coverage

Requirement

This proposal is intended to apply to all countries globally.

Comments

Global coordination and agreement to a single LEI standard is required to measure and monitor global systemic risk effectively and minimize regulatory arbitrage.

5.3. Industry

Requirement

This proposal is intended to apply to all industry types.

Comments

The LEI Solution should be agnostic to industry type (e.g. Financial Services; Healthcare; Consumer Goods; Industrial).

5.4. Role

Requirement

A legal entity playing one or more of the following roles in a financial transaction will be in scope for the initial release of the LEI Solution:

- **Transacting Entities:** Legal entities playing the role of counterparty (also commonly referred to as principal, primary obligor, or beneficial owner) or guarantor.
- **Issuing Entities:** Legal entities acting as the issuer of a publicly traded security, or guarantor of such issued security.
- **Reference Entities:** Legal entities acting as the reference entity on an OTC derivative transaction (e.g., credit default swap).
- **Reporting Entities:** Legal entities that have a regulatory obligation to report their transactions using LEIs.
- **Ultimate Parent Entities:** A legal entity identified as the parent of another legal entity (as initially defined by greater than 50% ownership).
- **Other Participants in Financial Transactions:** Legal entities playing any role deemed necessary in the future (e.g., exchanges, utilities, registrars, regulators, industry organizations).

Comments

The “constituents” of a legal entity (e.g., partners in a partnership; shareholders in a corporation) need not obtain an LEI unless (i) any such constituent owns greater than 50% of another in scope legal entity, (ii) such constituent is the highest entity in the hierarchy owning greater than 50% of such legal entity, and (iii) meets all scope requirements as defined in Section 6 - Scope of Coverage.

The entity types above are not mutually exclusive. The “role” discussion is intended to define the legal entities that must obtain an LEI. The role played by any such legal entity will not be captured by the entity issuing LEIs (the “LEI Solution provider”), but rather by financial market participants.

Only one LEI will be created per legal entity.

5.5. Asset Class

Requirement

With respect to the financial transactions requiring participants to obtain an LEI, this proposal is intended to apply to all asset classes.

5.6. Types of Legal Entities

Requirement

Individuals (i.e., natural persons) are excluded from LEI scope.

Comments

While it is widely accepted that individuals can potentially pose systemic risk, they were excluded for the following reasons:

- A desire to focus on the entity types most likely to pose systemic risk; and
- A desire for a proposal that can be agreed to globally and that can be practically implemented in a reasonable timeframe.

Individuals may be covered under a separate initiative at a later date.

5.7. Materiality / Significance

Requirement

The LEI scope will not apply a materiality threshold of any type to the issuance of LEIs (e.g., capitalization of legal entity, notional size of transaction).

6. Data Model

Definition

The Data Model section documents the required data standards and data elements of the LEI Solution.

6.1. Identifier Definition

Requirement

The LEI Solution should serve as the internationally recognized data standard for the identification of legal entities, provided that standard includes at least the following⁴:

Persistent

The LEI should follow a legal entity through its life regardless of corporate actions or other business or structural changes.

Neutral

For the LEI to persist over time, it must be neutral. Identifiers with intelligence built in violate basic data management principles and best practices. Descriptive attributes should not be embedded into the LEI (e.g., no inclusion of country codes or legal forms).

Singular

There must be only one LEI per legal entity.

Unique

Every LEI must be unique, and never reused.

Extensible (Scalable)

To ensure that the LEI will be persistent and unique over time, the LEI must allow for growth in the volume of identifiers without having to reuse numbers or change the structure.

Structurally Fixed

The LEI should be structurally fixed in that it should remain static with respect to its format (e.g., alphanumeric) and character sets. Revising or expanding the LEI format (e.g., adding another character) over time can have significant negative impacts on systems relying on the existing LEI structure.

⁴ The Trade Associations agree with, and expanded upon, the LEI characteristics contained in the cross-regulatory whitepaper entitled "Creating a Linchpin for Financial Data: The Need for a Legal Entity Identifier" (Dec. 10, 2010) (the "Linchpin Report"). Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1723298.

Reliable (Quality)

The data to which each LEI refers must be reliable and of a high data quality.

Interoperable

The LEI should be compatible with existing systems and not conflict with other numbering or identification systems. The LEI must be usable in different computer environments to facilitate automating processes.

6.2. Attribute Definition

Requirement

The initial data model should require the following attributes:

- LEI (i.e., the identifier itself)
- Exact legal name
- Address
- Country of formation
- Legal form
 - Legal form should be based on an internationally recognized standard of legal forms by country (e.g., LLP; LLC; GmbH). If a standard does not exist, then a taxonomy should be defined and maintained by the LEI Solution provider.
- Ultimate parent LEI
- Ultimate parent indicator
- Immediate parent LEI*
- LEI Status (e.g., Available - Certified; Available - Uncertified; Disabled)
- Other metadata (e.g., Date LEI issued; Last Updated; Date Disabled)

* Immediate parent will not be mandatory in the initial release but will be available to be populated in the data model.

Please refer to Figure 1 - Illustrative Legal Entity Identifier Fields for detailed fields.

Figure 2 - Illustrative Attribute Use Cases provides greater detail on why the above attributes were selected.

The data model should be flexible and extensible in its application to allow for incremental data attributes in later phases, including those potentially required by regulators globally.

The data model should only capture externally verifiable reference data, the status of that reference data, and relevant metadata. Additional information about legal entities could be captured in the future by the LEI Solution or by a third party vendor or other body.

The data model should provide functionality for LEI lifecycle management, including LEI status (e.g., Available - Certified; Available - Uncertified; Disabled) and any required reason codes (e.g., Disabled - Error in issuance; Disabled - Duplicate). The LEI Solution should recognize the difference between status codes available for transacting (e.g., Available) and those

permanently quarantined from usage (e.g., Disabled). Further, assignment of a 'Successor ID' should be supported to create an audit trail of corporate actions and LEI history (see *Figure 1 - Illustrative Legal Entity Identifier Fields* for further explanation).

The data model should be based on internationally recognized standards and should meet provisions required for international usage, including, but not limited to, address provisions (e.g., two address lines are not sufficient, postal codes frequently exceed 5 characters); translation provisions; and international standards (e.g., ISO Country Codes, Unicode standards). As the solution is implemented across global jurisdictions, the data model should provide for the different requirements around international character sets.

Comments

Initially, the key guiding principle as to the scope of the data model is that it should include the minimum number of data elements required to assure the "uniqueness" of each legal entity. The greater the number of data elements, the increased likelihood that there will be errors and delays in the application process, as well as for errors caused by a failure to update.

The Trade Associations recognize the global regulatory community's desire to measure systemic risk in the near term, and recommend that the initial data model also require a minimum level of parent information. Specifically, the data model would make mandatory the entity's ultimate parent owner (i.e., "ultimate parent"). The incremental benefit of allowing for the collection of this base level of hierarchy information from the onset outweighs any incremental costs in the form of additional implementation complexity.

A simple, objective definition of "ownership" will provide the greatest chance for a successful implementation and is detailed further in Section 6.4 - Ownership.

6.3. Metadata Definition

Requirement

The data model will require metadata (including audit data), and should include, but not be limited to, the following classes:

- Creation data
- Update data
- Versioning data (e.g., as is; as was; as will be; as should have been)
- Status data
- Certification data (e.g., date of last certification; name of certifier)

Metadata should exist for every attribute in the data model with clear and concise definitions for each attribute.

6.4. Ownership

Requirement

While alternative definitions for ownership exist, for purposes of aiding implementation of the LEI Solution, ownership shall be defined as "greater than 50% ownership." If there is no owner with greater than 50%, then the legal entity itself is entered as the ultimate parent. It is widely agreed that additional ownership and control definitions may be required and would be implemented on an iterative basis.

Comments

For purposes of clarification, both 51% or 50.00001% meet the "greater than 50% ownership" requirement.

As part of the implementation phase, the "greater than 50% ownership" requirement needs to be defined for each type of global legal form (e.g., LLC; PIC; GmbH; Corp).

Figure 1 - Illustrative Legal Entity Identifier Fields

LEI Table Fields			
#	Field Name	Field Description	Sample Value(s)
1	LEI	Unique identification number assigned by LEI issuer	86438001
2	Exact Legal Name	Entity's name as it appears on any legal documentation	Newco Ltd.
3	Street 1	Street address	100 Maple Street
4	Street 2	Office number or floor	Suite 300
5	City	City where entity is located	Anytown
6	State / Ward	State where entity is located	NSW
7	Postal Code	Postal code where entity is located	2000
8	Country	Country where entity is located	Australia
9	HQ Indicator	Indicates if entity is also a headquarter	N
10	Legal Form	Entity's legal type	Ltd.
11	Ultimate Parent LEI	Identifier for ultimate parent	87439011
12	Ultimate Parent Indicator	Indicates if entity is the ultimate parent	N
13	Immediate Parent LEI	Identifier for immediate parent (Phase 2 requirement)	87439011
14	Country of Formation	Country where entity was formed	Australia
15	Request For Review Indicator	Indicates whether the entity has been requested for review	N
16	LEI Status	Indicates the registration and certification status of an LEI	Available - Certified
17	Reason Code	Indicates why an LEI has been disabled	Issued in error, Duplicate
18	Successor ID	Indicates which LEI is now used for entity (corporate actions)	86438001
19	Other Metadata (e.g., Date LEI Issued; Last Updated; Date Disabled)	Provides audit information about the data	Creation Date: 02-Apr-2011

Figure 2 - Illustrative Attribute Use Cases

Attributes		Attribute Use Cases					Phase
Attribute Class	Field	To Identify Unique Entity	To Analyze Systemic Risk	To Flag / Resolve Issues	To Maintain Data	To Perform QA / Verification	Implementation
LEI Attribute Class		✓	✓	✓	✓	✓	1
	LEI	✓	✓	✓	✓	✓	1
Exact Legal Name Attribute Class		✓	✓	✓	✓	✓	1
	Exact Legal Name	✓	✓	✓	✓	✓	1
Address Attribute Class			✓	✓	✓	✓	1
	Street 1			✓	✓	✓	1
	Street 2			✓	✓	✓	1
	City			✓	✓	✓	1
	State / Ward			✓	✓	✓	1
	Postal Code			✓	✓	✓	1
	Country			✓	✓	✓	1
	HQ Indicator		✓				1
Legal Form Attribute Class		✓					1
	Legal Form	✓					1
Hierarchy Attribute Class			✓		✓		1
	Ultimate Parent LEI		✓				1
	Ultimate Parent Indicator				✓		1
	Immediate Parent LEI		✓				2
Country of Formation Attribute Class		✓					1
	Country of Formation	✓					1
Request for Review Indicator				✓			1
	Request for Review Indicator			✓			1
LEI Status Attribute Class				✓	✓		1
	LEI Status			✓			1
	Reason Code			✓	✓		1
	Successor ID				✓		1
Metadata Attribute Class					✓		1
	Creation Data				✓		1
	Update Data				✓		1
	Versioning Data				✓		1
	Status Data				✓		1
	Certification Data				✓		1

7. Operating Model

Definition

The Operating Model defines the operational processes, including registration, maintenance, verification, notification, distribution, access to the data, required service level agreements, and data quality assurance.

7.1. Registration Process

Requirement

The LEI registration process intends to rely on a self-registration model whereby entities eligible for an LEI register at least the required information about themselves, and then certify that information periodically (no less than annually), or upon changes to such data. The LEI Solution provider over time shall work with the global regulators and the LEI Governance Committee to fully enforce self-registration, as discussed in Section 4 - Critical Dependencies.

During an extended implementation phase, the LEI Solution provider has the flexibility to offer both a self-registration process and an alternative mechanism for assigning LEIs to entities that are not required to have an LEI and choose not to self-register.

The self-registration process should include, but not be limited to, the following capabilities:

- **Bulk Upload Registration:** The LEI Solution provider should provide each registrant with the ability to bulk up-load many / all of the legal entities in its corporate hierarchy at one time. (i.e., firms with multiple transacting legal entities submit a single file with all required data attributes). Additionally, similar functionality should be provided to allow the registrant the ability to bulk upload ongoing data-maintenance changes and annual certification (discussed in Section 7.2 - Data Maintenance Process). Prior to publication, the LEI Solution provider should complete all defined quality assurance processes.
- **Intermediary Registration:** When requested by a legal entity (the “requestor”), an intermediary retained by the requestor can register for an LEI on behalf of such requestor on a one-off basis only; however, final submission and certification of information will still be required from the registrant (i.e., requestor).

Once a legal entity is registered with the LEI Solution provider, the LEI should be made available for immediate use.

Comments

Issuer and Reference Entity registration should take place as part of the underwriting process.

Registration for an LEI makes no suggestion that the registering entity (or its affiliates) is making a general solicitation of investors.

7.2. Data Maintenance Process

Requirement

Where required to obtain an LEI, the legal entity itself has the ultimate responsibility for maintaining the accuracy of the data associated with its LEI. In addition, the LEI Solution provider should take reasonable steps to facilitate accurate and up to date LEI data.

Corporate Actions

When legal entity information changes (i.e., corporate actions), the legal entity must update the relevant information in the LEI database within 24 hours after the change takes effect (i.e., effective date); however, the legal entity can populate the data change prior to the effective date using the "as will be" versioning functionality described above in Section 6 - Data Model.

Additionally, the LEI Solution provider should take reasonable steps to ensure corporate actions are proactively monitored and maintained.

Annual Certification Process

A legal entity is required to certify the accuracy of its holistic record on an annual basis. Therefore, if the legal entity updates a single data point during a 12-month period, it would still need to certify as to the accuracy of that data point and the rest of its LEI record at least every 12 months.

If the legal entity updates its data during the year, the registration interface should prompt and allow for the legal entity to complete its holistic annual certification at that time. If the legal entity completes such annual certification process, the certification calendar will reset 12 months from that point; if the entity declines to certify, then the annual certification date will remain the same.

If a legal entity does not certify its LEI within a reasonable timeframe (as defined by the LEI Governance Committee) of its review date and its LEI Status is "Available - Certified", then its LEI Status will be changed from "Available - Certified" to "Available - Uncertified" (pending certification).

An "Available - Uncertified" LEI would still be available to enter into transactions and be a party to open positions. Further, certification is only required for entities that continue to be in scope, as defined in 5 - Scope of Coverage. Entities that are no longer in scope are not required to certify. This is a topic for further regulatory consideration as enforcement principles for new rulemaking are established, as discussed in Section 4 - Critical Dependencies.

7.3. Distribution / Access Process

Requirement

Access to LEI data should be unrestricted and freely available to all users (except where prohibited by jurisdictional law, rules or regulations).

The LEI Solution should be capable of providing:

- LEI data to consumers on a push and a pull basis

- LEI data via intra-day file transfer and on-demand
- Update notifications to consumers in near real time
- Data feeds in multiple formats

For LEI registration and maintenance, the only required interfaces to access the LEI Solution are the internet as well as any required applications for bulk upload capabilities. Other services (e.g., daily feeds of new LEI issuance) may be provided by the LEI solution provider on a cost recovery basis.

Comments

Wide and free access to LEI data ensures the data is a public good and does not unfairly benefit one party over another. In addition, it improves the data quality and its ultimate benefit to all users.

7.4. Data Challenge / Arbitration Process

Requirement

The LEI Solution provider shall implement a process whereby consumers can challenge the accuracy of the LEI data (e.g., missing data; incorrect data) by initiating a "Request for Review" (RFR). The entity itself shall be considered the final authority on the accuracy of its data. If the legal entity itself cannot confirm the accuracy of its information (e.g., if it no longer exists), then the LEI Solution provider, as dictated by the LEI Governance Committee, is required to make a final decision in the arbitration process.

The LEI Solution shall have the capability to make challenged attributes transparent to other users.

The challenging party (i.e., consumer) cannot be penalized for a mistaken or otherwise inappropriate RFR, or for not raising an RFR upon becoming aware of incorrect information.

Comments

Challenges are solely related to data accuracy (not the status of the entity).

7.5. Quality Assurance Process

Requirement

The LEI Solution provider shall implement a comprehensive quality assurance process that considers and mitigates potential risks, including, but not limited to, the following:

- **Duplication:** Multiple LEIs created for a single entity.
- **Fraud:** Legal entity knowingly misrepresents its LE information.
- **Errors:** Legal entity unknowingly misrepresents its LE information.
- **Delayed Updates:** Legal entity knowingly or unknowingly does not update its information on time, resulting in inaccurate information (e.g., corporate actions are not reflected in system).
- **Reassignment:** The LEI must remain true to its original entity and cannot be reassigned.

- **"Take down" Attacks:** A situation where people or program flood the LEI Solution provider with a substantial volume of LEI requests in an effort to take down the system.
- **"Spoofing" Attack:** A situation in which a person or program seeks to create false LEIs with the intent to create confusion around valid LEIs (e.g., system generates 500 LEIs with Toyota in the name, making it difficult for LEI consumers to select the accurate Toyota entity).

The quality assurance processes should be adequately governed and auditable.

7.6. Service Level Agreements (SLAs)

Requirement

SLAs must be defined and implemented to manage the interactions between all LEI stakeholders, including but not limited to, the following:

- LEI Solution provider and Legal Entities (i.e., data providers)
- LEI Solution provider and LEI Consumers
- LEI Solution provider and LEI Governance Committee
- LEI Solution provider and Regulators (see Section 4 - Critical Dependencies.)
- LEI Governance Committee and Market Participants

Defined SLAs must meet the following criteria:

- Be specific and measurable
- Enforce accuracy so that data is processed without errors
- Enforce timelines so that operational processes do not impact normal course of business

Comments

SLAs must consider following key concepts:

- Access to the master identifier list and the issuance process for new identifiers must be made available at all times.
- Updates to the LEI reference data should be accomplished with minimal lag time.
- Issuance of LEIs must be timely and non-discriminatory.
- The process of issuing new LEIs must not materially hinder the normal course of a legal entity's business.

8. Governance Model

Definition

The Governance Model section documents the creation, objectives, and characteristics of the LEI Governance Committee, as well as the compliance requirements placed upon the LEI Solution provider.

8.1. Governance Committee

Requirement

The LEI (i.e., the identifier itself) shall be maintained and governed by a global voluntary consensus standards body.

The LEI Solution provider requires a single global governance committee (i.e., "LEI Governance Committee") comprised of global market participants. The LEI Governance Committee shall be managed by an international group of market participants. At least annually, an external auditor must certify that the LEI Governance Committee is performing its governance duties effectively.

The LEI Governance Committee shall include, some or more of the following, participants of the global financial services industry, such as:

- Buy-side participants (e.g., asset managers; hedge funds insurers)
- Sell-side participants (e.g., broker dealers; futures brokers; swaps dealers)
- Sovereigns
- Corporate secretaries (representing issuers)
- Exchanges
- Clearing and settlement organizations
- Global regulators and supervisors
- Trade associations
- Representation from the LEI Solution provider (ex officio & non-voting)

The Governance Committee should have representation from each of the membership groups noted above. The members of the LEI Governance Committee shall be subject to reasonable term limits, and may hold indefinite succeeding terms. The terms of the positions on the LEI Governance Committee will be staggered so that no more than half of such positions expire at the end of any given calendar year.

The LEI Governance Committee shall be responsible for leading the interests and ensuring the overall success of the LEI Solution. The responsibilities of the LEI Governance Committee include, but are not limited to, the following:

- Ratifies LEI Solution mission, principles, strategy and charter and monitors progress
- Directs and approves the annual budget
- Defines LEI Solution priorities

- Oversees the continued development and extensibility of the LEI data model (e.g., additional attributes)
- Defines the roles, responsibilities, and governing bodies of all LEI Solution participants
- Approves directives, standards, processes, and procedures under which the LEI Solution operates
- Represents the comprehensive LEI interests of both the global financial community and the global regulatory community
- Ensures that channels of communication exist for addressing any issues and concerns
- Ensures clear and complete definitions for all LEI Solution terms, and clear data quality performance criteria with defined methods to monitor and control such data quality
- Approves the LEI fee structures and funding models and ensures the LEI Solution is operating on a cost recovery basis
- Fills vacancies on the LEI Governance Committee, and all other LEI Solution governance
- Develops strategies to facilitate the uptake, promotion and use of the LEI Solution
- Oversees an annual audit, conducted either by an Audit Committee or an external auditor, to ensure the core functions are being performed consistent with LEI Solution providers mission

Terms of reference shall be drafted and approved by the LEI Governance Committee that include, but are not limited to, the following:

- Regular meeting schedule
- Special meeting policy
- Alternate members policy
- Guest policy
- Agenda creation
- Establishment of committees (e.g., Audit and Finance, Technology)
- Meeting conduct and decision-making standards
- Quorum policies
- Voting policies
- Proxies
- Meeting Minutes
- Mandatory and voluntary removal from LEI Governance Committee

Comments

Figure 3 - Illustrative Governance Structure provides a visual representation of the LEI governance model described above.

8.2. Compliance of LEI Solution Provider

Requirement

The LEI Solution provider shall be accountable to the LEI Governance Committee (defined above in Section 8.1).

The LEI Solution (including LEI creation, access, maintenance, and distribution) shall be managed on a cost recovery basis. As such, the Trade Associations are agnostic to the overall structure of the LEI Solution provider (e.g., not for profit; private).

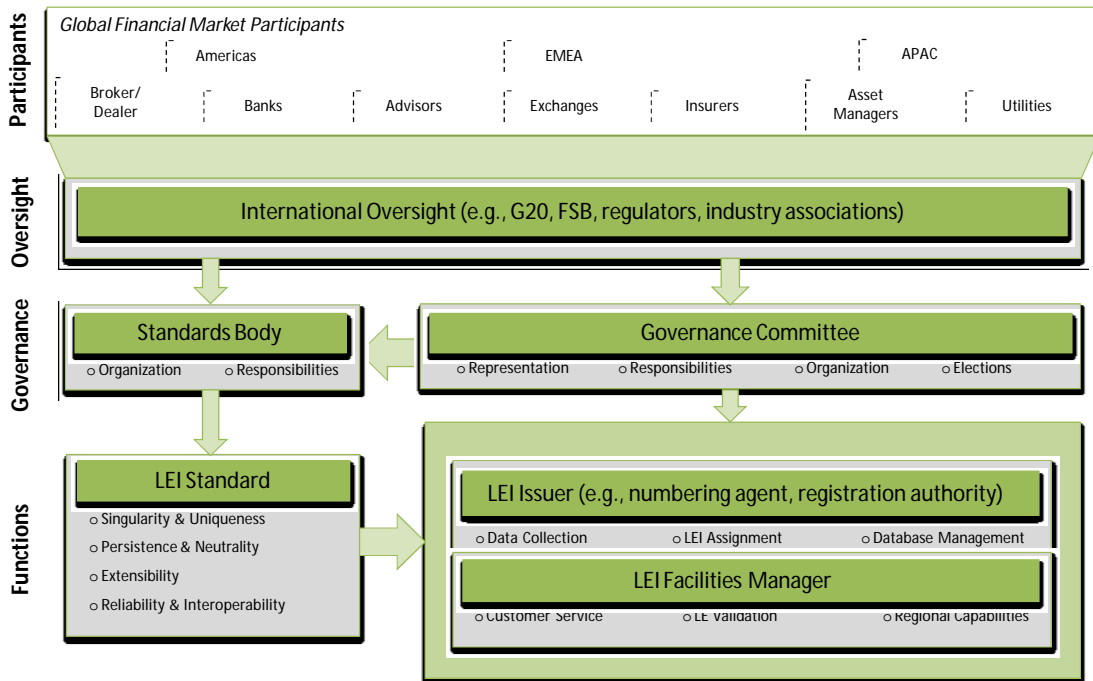
To ensure costs are efficiently managed, the LEI Solution provider shall be required to comply with regular technical and operational efficiency audits and to implement any resulting recommendations, as directed by the LEI Governance Committee.

The LEI Governance Committee shall provide oversight to ensure the appropriate treatment of any LEI intellectual property that is created as part of the LEI solution, including data, data model, industry facing interfaces, and to protect the openness of the solution, the stakeholders and the solution providers. The LEI Governance Committee shall also oversee contract rights to the services provided by the LEI Solution. As such, the LEI Solution capabilities must be portable and include provisions for early termination and a standard renewal process. Rights to issue shall last for a defined number of years initially (to be determined based on initial funding model) and then be reevaluated on a regular basis (as defined by the LEI Governance Committee) to ensure requirements are still being met.

The Governance Committee will ensure that the LEI Solution provider has the capability to support regional conventions and regulations and provide local certification while maintaining a single global standard, centralized repository and issuance system. The physical location of the LEI database, as well as the access rights to the information contained within it, must consider and comply with local regulations related to data privacy and data access issues. Recognizing the complexities of managing a single global standard across multiple jurisdictions, the LEI Solution provider must be capable of supporting a decentralized model that leverages a central repository so that a legal entity would only be required to register once (in any jurisdiction) to obtain an LEI that is captured and recognized globally.

Except as defined by the LEI Governance Committee, all entity information, oral or written, provided to the LEI Solution provider, including information related to 3rd parties is deemed confidential. The LEI Solution provider will not use such information for any purpose other than the purpose for which it was disclosed.

Figure 3 - Illustrative Governance Structure



9. Business Model

Definition

The Business Model section documents the funding model, including start up costs and recurring fees.

9.1. Initial Funding Model for LEI Solution Provider

Requirement

The LEI Solution provider must demonstrate its financial capacity to deliver and maintain the LEI Solution, including its ability to meet expected initial start up requirements.

Comments

Initial funding is likely required to subsidize the development and implementation effort in advance of registration fee revenue collection. The LEI Solution provider will need to demonstrate how it intends to cover the cost of initial implementation and start up.

9.2. Fees

Requirement

The LEI solution shall be funded through an annual fee paid by each legal entity that obtains an LEI. The annual fee structure is intended to cover the cost of issuing LEIs (including the validation and maintenance costs), as well as the interface that makes the data freely available to consumers. The annual fee should also provide for a reasonable reserve fund intended to cover various expenses, including: technology investment and analyses; research and development; operational capital expenditures; and unforeseen expenses. The LEI Governance Committee will oversee the fee structure to ensure it is being operated on a cost recovery basis and provides the lowest possible annual fee structure. Fees shall be analyzed and adjusted, as necessary, during the LEI Governance Committee's annual budgetary review.

Given expected varying levels of consumption, the LEI Governance Committee also requires the ability to approve a reasonable fee structure for consumers requiring services beyond the free interface to cover the costs of such services (e.g., daily feeds of new LEIs issued). Such a fee structure will be established to ensure the basic annual fee is kept to the lowest amount possible for LEI registrants that have limited financial market activity and have little or no need of services beyond obtaining an LEI.

Prior to commissioning a fee schedule, the LEI Governance Committee shall conduct an independent study or engage appropriate experts to confirm that a fixed annual or other fee structure is feasible and sustainable to cover the LEI costs.

9.3. Commercial Terms

Requirement

Beyond the annual registration fee and except where prohibited by regulation, all LEI information (including hierarchies) shall be free of charge and unrestricted in use. This includes the availability of LEI data to the public for storage, access, cross-referencing or redistribution without fees or contractual restrictions.

Value-added services based on the publically available database can be freely developed and commercialized by third parties, assuming these services are unbundled (i.e., separate from) and voluntary (i.e., not required to access and use LEI information).

10. Implementation

Definition

The LEI Implementation section discusses the phasing and program management for implementing and integrating the LEI Solution.

10.1. Phasing

Requirement

The implementation of the LEI Solution should be phased and sequenced according to global regulatory requirements. Regulatory agencies implementing the LEI should coordinate with the LEI Governance Committee and the LEI Solution provider to ensure the reasonableness of implementation timelines. The implementation plan should be coordinated globally so as not to introduce regulatory arbitrage. This topic is submitted for additional regulatory consideration, as documented in Section 4 - Critical Dependencies.

For each implementation phase (both within and across regions), a reasonable grace period should be implemented during the registration period before enforcement begins.

The LEI Solution should support the registration of any in-scope legal entity from the onset, even if not required.

Comments

Although the Trade Associations do not recommend a specific LEI implementation strategy, we believe that a phased approach is appropriate. We urge global regulators to consider an implementation that occurs over time, focusing on entities in those jurisdictions where the LEI Solution has been defined and embraced. Within those jurisdictions, sequencing of the implementation could focus on legal entities that trade certain asset classes (e.g., products subject to the CFTC swap data repository proposal).

For example, within the U.S., the Dodd–Frank Wall Street Reform and Consumer Protection Act (H.R. 4173) requires the CFTC and SEC to put in place requirements for reporting swaps and security-based swaps, respectively, to data repositories by July 15, 2011.⁵

The Trade Associations recognize the incentives inherent in globally adopted and standardized LEI solution, as such, should encourage market participants to self register.

10.2. Implementation Management

Requirement

The LEI Solution provider shall create and execute against a comprehensive implementation roadmap, and should manage the LEI implementation and integration process according to program management best practices (e.g., milestone-driven project plans; escalation logs; risk; issues; action items; steering committee).

⁵ 17 C.F.R. Part 45, 75 Fed. Reg. 76574 (Dec. 8, 2010).

11. Compliance

Definition

The Compliance section defines LEI mandates and enforcement mechanisms.

11.1. Mandate

Requirement

To be fully effective and avoid regulatory arbitrage, the LEI Solution is explicitly dependent upon global regulators require the following:

- in-scope legal entities register with the LEI Solution provider;
- in-scope legal entities maintain the accuracy and completeness of their data with such provider;
- in-scope transacting entities provide their LEI to counterparties with whom they are transacting (or otherwise make the LEI available where required for regulatory reporting by other financial market participants);
- in-scope non-transacting entities (i.e., reference entities; issuing entities; reporting entities; and other entities) provide LEI information as required by regulators;
- a consistent definition of eligibility criteria for the issuance of an LEI; and
- a consistent definition of in-scope entities.

Comments

Without a single global mandate, the potential for regulatory arbitrage could adversely impact the competitiveness of firms operating within LEI-mandated jurisdictions.

In line with current regulatory practices, the Trade Associations recommend that global regulators use their authority to enforce compliance with the LEI Solution, including imposition of fines or other penalties as needed. The legal entity is solely responsible for registering and maintaining its LEI information, and should be the only party fined for failure to do so. The Trade Associations defer to regulators on this topic, as documented in Section 4 - Critical Dependencies.

12. Technical Principles

Definition

The Technical Principles section documents the general requirements of the LEI Solution. Additionally, this section identifies a dimensional framework to conduct a comprehensive technical evaluation during a later phase.

12.1. General Requirements

Requirement

The technical design, architecture, and support framework of the LEI Solution shall be capable of delivering the standards and requirements in this document, including but not limited to, the following:

- globally consistent technology, operating, and support capabilities;
- ability to support a single consolidated database in both a centralized and decentralized fashion;
- interfaces (e.g., format of messages, communication protocols) required to communicate with the LEI Solution should adhere to non-vendor specific standards to ensure portability of the capabilities of the LEI Solution;
- support a range of messaging formats (e.g., XML and pipe delimited formats) and communication protocols (e.g., SFTP and HTTPS) to ensure that all market participants are technically capable of consuming and interacting with the LEI data;
- current and historical LEI data must be retained and easily transferable to another LEI Solution provider;
- meet the bi-directional data collection and data distribution requirements; and
- adopt information security standards commensurate with the global financial and regulatory community, including protection of subscription and feed information (such data implies entities interested in / transacting with financial institutions)

The technical criteria identified in the below dimensions will form the basis for a comprehensive technical evaluation during a later phase.

12.2. Data Architecture

Requirement

The following data architecture criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Implementation and management of business rules, data definitions, and metadata
- Open database architecture and distribution

- Distribution and redundancy, including data timeliness, consistency, and synchronization
- Data governance and control, including quality monitoring and data ownership
- Data security standards
- Robust data de-duplication controls

12.3. Technical Architecture

Requirement

The following technical architecture criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Hardware platforms
- Operating systems
- Presentation services
- Network operating system
- Messaging / integration services
- Bulk data distribution standards
- Authentication, Access and Authorization controls

12.4. Solution Architecture

Requirement

The following solution architecture criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Integration
- Open standards
- Platform interoperability
- Reliability and recoverability
- Security
- Distributed processing
- Processing separation
- Functional decomposition
- Application structure
- Scalability with respect to database size, volumes, and users

12.5. Development Lifecycle

Requirement

The following development lifecycle criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Testing capabilities (both functional and performance)
- Change management
- Configuration management
- Integration / staging environment
- Construction tools
- Development management
- Development methodology

12.6. Operations Architecture

Requirement

The following operations architecture criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Production scheduling
- Monitoring and event management
- Software distribution and management
- Service level management / operating level management
- Disaster recovery
- Business continuity planning
- Help desk and escalation
- Operations documentation and training for operations personnel
- Written policies and procedures updated annually
- Other operational processes
- Activity-based management, including unbundled cost attribution of each function

The LEI Solution's technical help desk and escalation support must be readily available on a 24-hour basis, 365 days a year.

Network performance and response times must be reasonable and in line with industry standards and best practices for both push and pull capabilities.

SLAs /OLAs will be defined for each of the interactions with the LEI Solution. The LEI Solution provider must be able to monitor and proactively report on SLAs / OLAs, as defined by the LEI Governance Committee.

The LEI Solution must adhere to technical audits, as defined by the LEI Governance Committee (i.e., annual disaster recovery and business continuity audit) to ensure compliance with the standards documented by the LEI Solution provider.

12.7. Network Architecture

Requirement

The following network architecture criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Infrastructure
- Management services
- Change and configuration management
- Performance management
- Platform interoperability
- Security management
- Fault tolerance and resiliency

12.8. Security Architecture

Requirement

The following security architecture criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Administration
- Physical
- Application development
- Network
- Data encryption
- Authentication, Authorization and Access Controls
- Regular risk analysis and threat assessment

The LEI Solution provider shall implement controls to ensure that individuals (both internal and external) cannot determine which firms are searching for, or subscribing to, which LEIs. Access to this information shall never be available externally, and shall be available on a 'need to know' basis only internally. Proper data protection safeguards shall be in place, including indemnification in case of a breach of these controls/safeguards. This information should be considered strictly confidential and is the property of the participating financial market participants. Internal access to this information must be done via documented and approved processes and procedure.

The LEI Solution provider shall implement a rigorous background check process for internal personnel who can access the data. The LEI Solution provider must have the ability to implement flexible entitlements to the data in the event local regulations restrict access to components of the database.

12.9. Technology Management and Utilization

Requirement

The following technology management criteria will form the basis of a comprehensive technical evaluation during a later phase:

- Technology lifecycle maintenance, including software versioning updates
- Software escrow

Appendix A: Glossary

Term	Definition
BCP	Business Continuity Planning
Custodian	A financial institution that has the legal responsibility for a customer's securities. This implies management as well as safekeeping
DR	Disaster Recovery
Guarantor	A person or legal entity that contractually obligates itself to pay for another's legal obligation.
Issuer	A legal entity that develops registers and sells securities for the purpose of financing its operations. Issuers include domestic or foreign governments, corporations or investment trusts. Issuers are legally responsible for the obligations of the issue and for reporting financial conditions, material developments and any other operational activities as required by the regulations of their jurisdictions. The most common types of securities issued are common and preferred stocks, bonds, notes, debentures, bills and derivatives.
LEI	Legal Entity Identifier
Metadata	Data about data
PMO	Program Management Office
RA	Registration Authority
Reference Data	Reference data is any kind of data that is used solely to categorize other data found in a database, or solely for relating data in a database to information beyond the boundaries of the enterprise.
Reference Entity	One of the underlying parties involved in a credit-derivative contract. The reference entity bears the credit risk of the contract, and can be a corporation, government or other legal entity that issues debt of any kind. If a credit event such as a default occurs and the reference entity is unable to satisfy the conditions of the bond, the buyer of the credit default swaps receives payment from the seller.
RFR	Request for Review
SIFI	Systemically Important Financial Institution
SLA	Service Level Agreement

Term	Definition
Systemic Risk	A development that threatens the stability of the financial system as a whole and consequently the broader economy, not just that of one or two institutions

Appendix B: Information about Trade Associations

ASIFMA

ASIFMA is a broadly based professional advocacy organization that seeks to promote the growth and development of Asia's debt capital markets and facilitate their orderly integration into the global financial system.

AFME

AFME (the Association for Financial Markets in Europe) advocates stable, competitive and sustainable European financial markets, which support economic growth and benefit society. On behalf of our members, we:

- Offer a single voice for the European capital markets participants and advocate their views at national, European and global levels;
- Develop a constructive dialogue on market and regulatory policy with legislators and regulators;
- Contribute policy and advocacy expertise to help achieve a balanced and stable regulatory environment; and
- Promote the contribution of the financial sector to society.

For more information please visit the AFME website, www.afme.eu

British Bankers Association

The BBA is the leading trade association for the UK banking and financial services sector. We speak for over 200 member banks from 60 countries on the full range of UK and international banking issues.

CDMG

The Customer Data Management Group (CDMG) is a special interest group established by JWG in 2008 to improve customer data management practices in financial services. The group's membership is drawn from senior operations, risk and compliance officers from major financial institutions. The CDMG's wholesale guidelines have been developed to assist firms aspiring to comply with data regulations. JWG Group Limited (JWG) is a financial services think-tank which works with regulators, investment firms and their information technology supply chain to help determine how the right regulations can be implemented in the right way.

The Clearing House Association L.L.C.

Established in 1853, The Clearing House is the nation's oldest banking association and payments company. It is owned by the world's largest commercial banks, which collectively employ 1.4 million people in the United States and hold more than half of all U.S. deposits. The Clearing House Association L.L.C. is a nonpartisan advocacy organization representing—through regulatory comment letters, amicus briefs and white papers—the interests of its owner banks on a variety of systemically important banking issues. Its affiliate, The Clearing House Payments Company L.L.C., provides payment, clearing, and settlement services to its member banks and other financial institutions, clearing almost \$2 trillion daily and representing nearly half of the automated-clearing-house, funds transfer, and check-image payments made in the U.S. See The Clearing House's web page at www.theclearinghouse.org.

EDM Council

The EDM Council is a non-profit trade association of financial institutions, data originators, financial industry vendors and market authorities organized to address the requirements for managing data content as an operational priority. The Council focuses on standards for identification of instruments and entities, the development of a common semantic framework for describing the contractual structure of financial contracts and best practices associated with EDM implementation.

Financial Services Roundtable

The Financial Services Roundtable represents 100 of the largest integrated financial services companies providing banking, insurance, and investment products and services to the American consumer. Member companies participate through the Chief Executive Officer and other senior executives nominated by the CEO. Roundtable member companies provide fuel for America's economic engine, accounting directly for \$74.7 trillion in managed assets, \$1.1 trillion in revenue, and 2.3 million jobs.

Futures Industry Association

The Futures Industry Association is the leading trade organization for the futures, options and OTC cleared derivatives markets. It is the only association representative of all organizations that have an interest in the listed derivatives markets. Its membership includes the world's largest derivatives clearing firms as well as leading derivatives exchanges from more than 20 countries.

As the principal members of the derivatives clearinghouses, our member firms play a critical role in the reduction of systemic risk in the financial markets. They provide the majority of the funds that support these clearinghouses and commit a substantial amount of their own capital to guarantee customer transactions.

FIA's core constituency consists of futures commission merchants, and the primary focus of the association is the global use of exchanges, trading systems and clearinghouses for derivatives transactions.

FIA's regular members, who act as the major clearing members of the U.S. exchanges, handle more than 90% of the customer funds held for trading on U.S. futures exchanges.

GFMA

The Global Financial Markets Association (GFMA) joins together some of the world's largest financial trade associations to develop strategies for global policy issues in the financial markets, and promote coordinated advocacy efforts. The member trade associations count the world's largest financial markets participants as their members. GFMA currently has three members: the Association for Financial Markets in Europe (AFME), the Asia Securities Industry & Financial Markets Association (ASIFMA), and, in North America, the Securities Industry and Financial Markets Association (SIFMA).

GRIS

The Global Regulatory Identifier Steering Group (GRIS) is a collaborative initiative bringing together European sell-side trade bodies. It represents the European sell-side perspective, whilst creating a global dialogue between, and amongst, policymakers and the industry. It is managed by the Association for Financial Markets in Europe (AFME), the British Bankers' Association (BBA) and the Customer Data Management Group (CDMG).

ICI

The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$13.0 trillion and serve over 90 million shareholders.

ISDA

ISDA is the largest global financial trade association, by number of member firms. ISDA was chartered in 1985, and today has over 800 member institutions from 56 countries on six continents. These members include most of the world's institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end users that rely on over-the-counter ("OTC") derivatives to manage efficiently the financial market risks inherent in their core economic activities.

SIFMA

The Securities Industry and Financial Markets Association (SIFMA) brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA's mission is to develop policies and practices which strengthen financial markets and which encourage capital availability, job creation and economic growth while building trust and confidence in the financial industry. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA).