Legal Entity Identifier (LEI)

Project Scope & Preliminary Implementation Plan

SUMMARY

DTCC
SWIFT
ISO
ANNA

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Introduction

The lack of an international standard identification system for financial counterparties makes it difficult for financial firms to develop a consistent and integrated view of their exposures, such as in the case of default of a counterparty. This is a challenge not only for firms, but also creates an obstacle for regulators to aggregate and share information effectively across borders.

Although no common entity ID convention exists in the market today, a range of regulatory initiatives is driving the creation of a universal Legal Entity Identifier (LEI) standard for financial markets.

An LEI is a unique ID associated with a single legal entity. At its core, the LEI is simply a reference data tool to standardize how a counterparty is identified on financial transactions. Its goal is to help improve the measuring and monitoring of systemic risk, and support more cost-effective compliance with regulatory reporting requirements.

For regulators, a standard identifier will allow them to conduct more accurate analysis of global, systemically important financial institutions (or other firms with regulatory reporting obligations) and their transactions with all counterparties across markets, products and regions, providing them with a new tool for better identifying concentrations and emerging risks. For risk managers in all financial institutions, the LEI will similarly increase the effectiveness of tools aggregating their exposures to counterparties across the globe.

This document is intended to provide a summary overview of the global coordination underway to develop a global LEI standard and implement an LEI Utility infrastructure.

A Global Drive to Adopt a Universal Standard

The LEI project is a global effort involving countries and counterparties around the world.

Regulators and financial firms globally have been exploring ways to overcome the current fragmented system and create a common identifier. The importance of creating a global system of identifiers has been recognized by the Group of Twenty (G-20) Leaders, Finance Ministers and Central Bank Governors¹, and the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions (CPSS-IOSCO)².

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In the United States, the Dodd-Frank Act created the Financial Stability Oversight Council (FSOC) and its data and research arm, the Office of Financial Research (OFR). Almost immediately, the OFR recognized that adopting a global standard LEI was an essential tool that the OFR would need to aggregate information from all reporting firms regarding activity with their common counterparties. As a result, the OFR issued a Policy Directive in November 2010 citing the criticality of the global LEI and stating its preference to adopt, through rulemaking, a universal standard for identifying parties to financial contracts. According to the OFR, the standard should be established and implemented by private industry and other relevant stakeholders through a consensus process.

The global financial industry has been actively working together to identify, propose, and gain broad consensus towards a global LEI solution. In May 2011, a coalition of international financial industry associations and their member organizations released “Requirements for a Global Legal Entity Identifier (LEI) Solution,”3 which outlined the industry’s views of the requirements for the LEI system. They launched a Solicitation of Interest (SOI) process to identify and evaluate potential solution providers for the LEI infrastructure.

After extensive dialogue and due diligence, the coalition of trade associations finalized its recommendations4 to the global regulatory community in July 2011 as follows:

- **Standards body**: The International Organization for Standardization – that is ISO’s proposed standard, ISO 17442 – is recommended as the new, authoritative legal entity identification standard. Created through the robust ISO process, this standard meets the characteristics set forth by the Trade Associations; specifically, that the identifier be persistent, neutral, singular, unique, extensible, structurally fixed, reliable, and interoperable.

- **Registration Authority and Facilities Manager**: The Depository Trust & Clearing Corporation (DTCC) and The Society for Worldwide Financial Interbank Telecommunication (SWIFT), along with DTCC’s wholly-owned subsidiary Avox Limited, are recommended as key partners to operate the core LEI utility as the central point for data collection, data maintenance, LEI assignment, and quality assurance. DTCC and SWIFT are member/user-owned industry cooperatives whose missions include reducing risks and costs for the financial services industry. The firms are user-governed and have non-profit or cost-recovery business models.

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3 The Trade Associations Global LEI Proposal: [www.sifma.org/lei-industry-requirements/](http://www.sifma.org/lei-industry-requirements/)

• SWIFT, as the Registration Authority, is recommended to register and assist entities with self-registration.

• DTCC, as Facilities Manager, is recommended to, working through a new LEI Utility, collect requests for new LEIs to be created, validate the information provided by leveraging Avox's capabilities, maintain and store the reference data associated with each LEI, and maintain the public distribution of the LEI database.

• **Federated Registration**: The Association of National Numbering Agencies (ANNA), through its network of 82 national numbering agencies (NNAs), is recommended as a key partner in the solution for registering, validating and maintaining LEIs for issuers, obligors, and other relevant parties in the 118 home markets they serve. The NNAs are envisioned as the “face” of the LEI Utility to those markets, while leveraging the functionality of the centralized LEI Utility for the assignment, further validation and global distribution of LEIs.

**Global Coordination Effort**

Momentum is building for the development of an LEI standard, and implementation of a global LEI system. The effort is being pushed forward on a number of parallel fronts involving solution providers, regulators, and market participants, as follows:

DTCC and SWIFT have been working closely with market participants around the world to better understand the specific requirements of the LEI Utility. To foster this idea exchange, four industry-led working groups made up of more than 40 global financial institutions have been meeting since the third quarter 2011 to focus on four areas of the requirements:

- Business model
- Data quality
- Technical requirements
- Unique identification issues related to various types of investment funds

The working groups were instrumental in defining a phased implementation plan, and in particular, determining the functions which are planned for the initial phase to meet reporting requirements for OTC derivatives regulatory reporting. In all phases, the solution providers will rely on the global ISO 17442 LEI standard, which is in the process of being finalized.

The initial phase relies on the code structure and data record for the proposed ISO standard for LEI (see “LEI Phase 1 Components” section later in this document), as well as enhancements to the existing infrastructure. Future phases will require a new “utility strength” global infrastructure, which will have similar robustness, reliability, and business continuity capabilities as other financial market infrastructures, such as securities settlement systems and trade repositories.
The recommended solution providers have begun to define how the LEI Utility should be initially delivered. The specific actions taken include:

- The drafting of the business requirements for the initial phase, including self and third-party registration, validation against publicly available information, record states providing full transparency as to the sources and timeliness of the information, distribution of the database and customer support, some of which is summarized in this document.

- The process to include local jurisdictional input and support from NNAs participants to provide the most accurate information on entities

**Regulators and the FSB Process**

The global regulatory community continues to focus on achieving consensus around LEI, especially about how the LEI Utility should be governed. In the summer of 2011, the FSB launched its process for gaining consensus around LEI, and held a workshop in September 2011 of more than 50 private sector experts and 60 representatives from the international financial regulatory community. The result of the workshop was the preparation of a roadmap that will lead to recommendations regarding the implementation of a global LEI system.

At the G-20’s November 2011 summit in Cannes, the G20 declared support for the LEI:

“We support the creation of a global legal entity identifier (LEI) which uniquely identifies parties to financial transactions. We call on the FSB to take the lead in helping coordinate work among the regulatory community to prepare recommendations for the appropriate governance framework, representing the public interest, for such a global LEI by our next Summit.”

As a result of the G-20 mandate, the FSB is overseeing this consensus-building around key topics, including implementation and phasing:

- The governance and oversight model for the Global LEI representing the needs of regulators, firms and the public interest.

- The confidentiality/privacy and access issues relating to publishing data about legal entities across borders, especially relating to data regarding ownership, particularly each entity’s immediate and ultimate parent. This latter data is critical to achieve a long-term objective of the LEI initiative: to allow regulators and financial services firms to construct accurate ownership/affiliation hierarchies among firms they are counterparties with in order to more accurately depict the totality of their counterparty risk.
• The operational and funding models for the Global LEI system and Utility.

• The implementation phasing of the LEI initiative among countries, regions, asset classes and expansion of the scope of reference data beyond the basic descriptive data.

The industry and recommended solution providers are participating in this process. They have made proposals for consideration concerning global governance and oversight, a funding model and revenue model for self-registration and self-validation and the corporate and legal structure of the LEI Utility itself. This work is preliminary and designed to provide input to the industry and global regulatory community.

The FSB has formed an FSB LEI Expert Group of key stakeholders from the global regulatory community to take forward this work on the LEI. The FSB expects to deliver recommendations for these issues to the FSB Plenary in April 2012 and then, in turn, to the G-20 prior to its next Summit in June 2012.

Importantly, regulators in many jurisdictions including Hong Kong, Canada, Australia, as well as IOSCO, have all recognized the importance of developing a unique, international LEI.

ISO Process

ISO has developed a standard that meets the requirements for a global LEI standard, ISO 17442. At the conclusion of the latest stage in international consensus building on December 14, 2011, ISO reported that that the draft standard received unanimous support from the ISO Member Bodies. This now places ISO in a very strong position to be able to proceed towards final publication of the ISO LEI standard in 2012.

Federated Registration – Role of NNAs

The NNAs are envisioned as the “face” of the LEI Utility for validating and maintaining LEIs for issuers, obligors, and other relevant parties in the 118 home markets they serve. This includes providing on-the-ground support for entities seeking LEIs. The various NNAs may play one of the following four roles, working with the central LEI Utility that will be responsible for publishing the LEI record in the LEI database:

• **Web-link:** The NNA provides a link on its website to the LEI Utility where registration and validation is accomplished.

• **Data collection:** The NNA collects the core data elements required and passes these to the LEI Utility for validation.

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5 FSB Call for members of the FSB Legal Entity Identifier (LEI) Initiative Industry Advisory Panel: [http://www.financialstabilityboard.org/meetings/cfm_120112.pdf](http://www.financialstabilityboard.org/meetings/cfm_120112.pdf)
**Data and document collection:** The NNA collects the core data elements required plus any publicly-available supporting documentation and passes these to the LEI Utility for final validation.

**Data, document, and payment collection:** The NNA collects the core data elements, relevant documentation, and implements a payment process to collect the self-registration fee and passes all of this information to the LEI Utility for final validation.

**Scope of Coverage**

**What entities will be eligible for an LEI?**
Any legal entity that enters into a financial transaction will be eligible for an LEI. For example:

- Transacting entities
- Issuing entities
- Reference entities
- Reporting entities
- Ultimate parent entities

Other participants in financial transactions (including exchanges, utilities, registrars, regulators, and industry organizations) will obtain LEIs as deemed necessary in the future. Individuals (i.e., natural persons) are excluded from LEI’s scope.

No threshold of any type will apply to the issuance of LEIs (e.g., capitalization of legal entity, notional size of transaction).

**What will the LEI look like?**
The LEI is a unique 20-character alphanumeric code that would be assigned to all entities that are counterparties to financial transactions through the newly developed ISO standard, namely ISO 17442. The LEI itself will be neutral, with no embedded intelligence or country codes, which would create unnecessary complexity for users.

**What core principles will guide the LEI infrastructure?**

- LEI data is freely available, easy to access, without restrictions on redistribution or licensing.
- All LEI data accepted through the web portal and file upload will be published. The LEI Utility will make all of its LEI reference data available in the public domain.
- Global coordination between regulators so that all endorse the same LEI standard for regulatory reporting.
- At-cost business model, global governance representing the public interest and transparent standards-setting process.
• Clearly defined responsibilities for obtaining an LEI, with self-registration by the entities themselves as the targeted end state.
• Limited list of data elements, including core hierarchy data needed for systemic risk analysis.

What are the attributes of the LEI?
The initial data model will include the following mandatory attributes:

• LEI (i.e., the identifier itself)
• Exact legal name
• Address
• Country of formation
• Legal form
  - During Phase 1, legal form will be captured upon registration in a free-form text field and will not be validated by the LEI Utility through publicly available authoritative sources. In most cases, the exact legal name also includes reference to legal form, and this will be validated by the LEI Utility.
• LEI status (e.g., available, disabled)
• Other metadata (e.g., date LEI issued; last updated; date disabled)
• Ultimate Parent
  - Ultimate Parent is not a part of the data record in the ISO 17442 standard; however during Phase 1, the LEI Utility will require the Ultimate Parent field to be filled in by the self-registrant, unless restricted by law. In the initial phase, a record submitted without the Ultimate Parent field completed will, nonetheless, be processed. Various percentage ownership conventions promulgated by national regulators for determining who the ultimate parent of the entity is will be supported by the LEI Utility.

LEI Usage and Impact – A Preliminary View

Today, market participants use many codes to identify counterparties and issuers – marketplace identifiers, company registration numbers, tax reference IDs, vendor identifiers, and firms’ own internal numbering systems.

The LEI will not necessarily replace these codes. Instead, the LEI will be the authoritative entity identifier for regulatory reporting and will be mapped by firms with reporting obligations (and likely by the reference data vendor community) to existing codes. This is a far more cost-effective method of introducing LEI, rather than changing the existing identifiers used in multiple internal business and compliance applications across the industry.
Today’s entity data itself may be collected and stored by market participants in multiple systems, including client master and security master databases, and transaction capture, customer relationship management, financial analytics, risk management systems and more. This means that the LEI ultimately will need to be mapped to a wide range of identifiers within many different databases – including internal legacy systems and vendor data feeds. Firms should consider whether the implementation of LEI is an opportunity to improve such complex mapping schemes.

In preparation for the anticipated regulatory usage of the LEI, firms that seek to gain the benefits of this broad global industry initiative should start to actively consider how the LEI can be incorporated into their reference data models and mapped to other identifiers.

**Phased Implementation**

The global LEI solution will be rolled out in phases. Full implementation of the LEI Utility is being driven by a broad group of global regulators, trade associations and financial services firms who are striving to achieve consensus regarding the use of the LEI to support regulatory reporting and systemic risk monitoring (see “Regulators and the FSB Process” section earlier in this document).

This group will determine the implementation phases related to countries, regions, asset classes and expansion of the scope of reference data beyond the basic descriptive data. The ISO LEI Standard 17442 will be leveraged across asset classes for all phases of the implementation.

The timeframes have been developed in response to recently enacted and impending regulations related, in particular, to the reporting of data on OTC derivatives to trade repositories.

The phased-in approach in terms of records and asset classes follows:

<table>
<thead>
<tr>
<th></th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeframe</strong></td>
<td>Now – June 2012</td>
<td>Full-year 2012</td>
<td>Beyond 2012</td>
</tr>
<tr>
<td><strong># of Records</strong></td>
<td>Up to 50k</td>
<td>400k+</td>
<td>1.5mm</td>
</tr>
<tr>
<td><strong>Asset classes</strong></td>
<td>OTC derivatives (CDS, IRS mainly)</td>
<td>Other derivatives, some non-derivative</td>
<td>All</td>
</tr>
</tbody>
</table>

The U.S. Commodity Futures Trading Commission (CFTC) became the first regulator to mandate the use of the LEI in regulatory reporting. CFTC Rule 17 CFR Part 45 – Swap Data Recordkeeping and Reporting Requirements – beginning in mid-2012, will require dealers executing OTC derivatives transactions with their global counterparties to report
those transactions subject to CFTC oversight to Trade Repositories, identifying themselves, their counterparties and the reference entities of the contracts with LEIs.

The Hong Kong Monetary Authority (HKMA), the Canadian Securities Administrators (CSA) and the Australian Securities & Investment Commission (ASIC) have also recognized, and some cases indicated their intention to apply, a global LEI regime.

**LEI Phase 1 Initial Business Model**

All long-term decisions regarding the funding model, revenue model, governance and oversight models will be finalized in conjunction with ongoing discussions with the FSB Expert Group. However, at the request of the industry and OTC Derivatives regulators, ISO, DTCC, SWIFT and ANNA are working together to deliver Phase 1, targeted for June, 2012 and the interim business model will be based on principles endorsed by the coalition of trade associations:

- The LEI Utility will be an industry utility, operated on an at-cost model basis. As a preliminary step, DTCC and SWIFT are planning to form a joint venture company, and that company will contract for service provision with SWIFT, DTCC and any individual NNAs that provide services to the LEI Utility. DTCC and SWIFT will work with the industry and regulators to determine the appropriate interim governance model for the first phase, prior to establishment of formal governance and regulatory oversight framework by the FSB.
- The LEI Database will be available free of charge to all users, including commercial data vendors, without licensing, and with no restrictions on usage.
- Funding of the investments in new functionality, legal set-up work, documentation and all other components of the first phase have been made by DTCC and SWIFT. These investments are being tracked for inclusion in the full funding model agreed by the industry and FSB.
- In order for the Utility, once in operation, to recover its costs and over time, return the initial funding for the full build out of the LEI Utility back to the funding firms, a small registration/certification fee is to be charged via the web portal. This is envisioned to be $200 per entity for initial registration/certification and $100 for annual maintenance certification by the entity. Once the LEI Utility Governance body is formed, that body will review financials of the Utility and will be in position to change the pricing at any time, including lowering it as appropriate.

**LEI Phase 1 Components**

Working with the industry working groups, the recommended solution providers have developed data models and workflow models needed to support Phase 1 – all with the goal of providing timely and accurate entity records.
This first phase leverages DTCC/Avox’s knowledge of global entity validation, and SWIFT’s capabilities as an existing ISO Registration Authority. To supplement these existing capabilities, a new web portal, available through the LEI Utility’s web site, is necessary to support:

- Self-registration by the entities themselves.
- Third-party registration of entities by trade repositories, vendors and other intermediaries that can help validate the information.
- Assignment of provisional legal entity identifiers, or after the draft ISO 17442 Standard is finalized, assignment of LEIs within minutes of self-registration or third-party registration.
- Self-certification by the entities of information entered about them by third parties.
- Near real-time availability of LEIs and their corresponding legal entity data within the LEI Utility database after LEIs are assigned.
- Web-based, database search capability.
- Credit card processing through selected providers for registration/certification fee payment.
- A download capability of the full LEI database via industry standard interfaces to be determined (e.g., secure FTP). This full database snapshot will be provided at least once daily. A download capability of changes made the prior business day to the LEI database via industry standard interfaces to be determined (e.g., secure FTP).

The availability of this initial free, public, validated database by mid-2012, fully aligned with the draft ISO 17442 standard, is viewed as essential to help the global community prepare for a broader implementation of legal entity identifiers, which may grow in later phases to more than a million in number. The table below describes the basic components that are required for the LEI Utility, and how these components will be supported for Phase 1 and beyond. Phase 1 is primarily predicated on time-to-market concerns, namely being on-line by June 2012.

While the industry has provided guidance with regard to phasing, discussions are continuing among the industry and global regulators as part of the FSB process.

Chart A (see Appendix) shows the main components/types of support envisioned for the LEI Utility, and what is expected to be implemented during the first phases and in future phases.

**LEI Phase 1 Details**

While many of the components that comprise the LEI Utility will be improved and enhanced over time, there is general agreement regarding the basic data model and
processing scenarios for supporting LEI requests and providing information in the publicly-available database.

Considerable work with industry working groups defined the following:

1. Field Classifications, including which fields are required to be compliant with the draft ISO 17442 standard and other fields that the industry believes are either mandatory or optional.
2. Process Scenarios, defining the workflows associated with validating and assigning LEIs to requesting parties, and the nomenclature surrounding that workflow.
3. Record States, describing for database users where in the validation workflow a particular entity record is, and what the results of the validation are.

Field classifications and process scenarios for Phase 1 and beyond are detailed in Charts B, C and D (see Appendix).

**LEI Future Phases**

The industry working groups have provided considerable input into potential future phases of the LEI Utility, some of which was described in the “Phased Implementation” section earlier in this document. There are many other elements that will require constant review and planning as the LEI Utility expands in scope.

Some considerations identified for future phases include:

- Multiple language and character set support
- User registration improvements, including contact information support
- Bulk registration improvements
- Address field linked to jurisdictions
- Enhanced security and privacy capabilities
- Additional billing and payment options
- Enhanced duplicate and anomaly detection procedures
- Enhanced data sharing capabilities
- Multiple data centers/database locations based upon regulatory requirements

In addition, the ultimate corporate structure and governance/oversight and business model of the LEI Utility, including the involvement of regulators, funding of the LEI Utility and broader financial industry participants, is still under discussion.

While considerable progress is being made on the LEI project, the effort remains in the formative stage. To be sure though, support for the LEI initiative is strong in both the
public and private sectors, and coordination and cooperation continues toward the implementation of a global LEI solution.
### Appendix

#### Basic components of the LEI Utility

<table>
<thead>
<tr>
<th>Component</th>
<th>Type of Support</th>
<th>Phase 1 Means of Support</th>
<th>Future Phase Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entity Registration</strong></td>
<td>Web Self-Registration, Certification, Self-Update</td>
<td>New Web Portal</td>
<td>Web Portal</td>
</tr>
<tr>
<td></td>
<td>Web Third-Party Registration</td>
<td>New Web Portal</td>
<td>Web Portal</td>
</tr>
<tr>
<td></td>
<td>File Transmission Self-Registration, File accepted but uploaded manually by Utility staff</td>
<td>Automated upload</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Transmission Third-Party Registration</td>
<td>File accepted but uploaded manually by Utility staff</td>
<td>Automated upload</td>
</tr>
<tr>
<td><strong>Registration Payment</strong></td>
<td>Credit card through selected provider</td>
<td>New Web Portal</td>
<td>PayPal, credit cards, direct invoicing, other providers</td>
</tr>
<tr>
<td><strong>Entity Processing</strong></td>
<td>De-duplication</td>
<td>DTCC/Avox capabilities</td>
<td>Utility-enhanced processes</td>
</tr>
<tr>
<td></td>
<td>Initial Entity Validation</td>
<td>DTCC/Avox capabilities</td>
<td>Utility-enhanced processes</td>
</tr>
<tr>
<td><strong>LEI Assignment</strong></td>
<td>SWIFT as RA for the ISO LEI Standard (provisional legal entity identifiers or final LEI)</td>
<td>SWIFT as RA for the ISO LEI Standard (final LEI upon standard finalization)</td>
<td></td>
</tr>
<tr>
<td><strong>Entity Challenge</strong></td>
<td>New Web Portal using existing DTCC/Avox capabilities</td>
<td>Utility-enhanced processes</td>
<td></td>
</tr>
<tr>
<td><strong>On-going maintenance</strong></td>
<td>New Web Portal using existing DTCC/Avox capabilities</td>
<td>Utility-enhanced processes</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Type of Support</td>
<td>Phase 1 Means of Support</td>
<td>Future Phase Support</td>
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<td>-----------------</td>
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</tr>
<tr>
<td>Data Services</td>
<td>Database Search</td>
<td>New development but using Avox processes</td>
<td>Utility-enhanced processes</td>
</tr>
<tr>
<td></td>
<td>Database FTP Delivery</td>
<td>New development but using DTCC/SWIFT processes</td>
<td>Utility FTP site</td>
</tr>
<tr>
<td>Operations and Support</td>
<td>Quality assurance, data analysis, BCP</td>
<td>DTCC/SWIFT/Avox operations staff</td>
<td>Utility staffing</td>
</tr>
<tr>
<td></td>
<td>Help desk/legal/customer support</td>
<td>DTCC/SWIFT/Avox operations staff</td>
<td>Utility staffing augmented by NNA staffing</td>
</tr>
<tr>
<td></td>
<td>User Authentication</td>
<td>Basic user ID/password methodology</td>
<td>Requirements to be defined</td>
</tr>
<tr>
<td></td>
<td>Data Privacy</td>
<td>Separation of publicly available information and user information</td>
<td>Requirements to be defined</td>
</tr>
<tr>
<td>Corporate Structure</td>
<td>Corporate oversight</td>
<td>Separate LEI Utility to be established</td>
<td>Requirements to be defined</td>
</tr>
</tbody>
</table>

**Chart A Explanations**

**Entity Registration**

During the first phase, the Utility will support self-registration and third party registration via the new web portal described in the “LEI Phase 1 Components” section above. The Utility will also provide support for accepting a Bulk File upload of entities, by a registering entity and its subsidiaries, as well as a group of unrelated entities submitted by a third party to meet a regulatory requirement. This process will initially be managed on a manual basis. Priorities and turnaround time will take into account the needs of the OTC derivatives industry to meet new regulatory reporting requirements. LEIs for entities processed via Bulk File upload will be assigned after validation through publicly available authoritative sources.
Registration Payment

The fees to be charged for registration will be processed via the web portal, via a payment provider/credit card mechanism to be determined. The initial options will be limited. In phase two, the selection of methods will be broadened.

Entity Processing

The Utility will address duplication, which is the same entity receiving two different LEIs. In the first phase this will be performed by providing close matches to the registrant on the web portal and prompting them to ensure that they are registering a different entity, as well as after LEI assignment, by Utility staff using processes currently in place at Avox. These processes are expected to be enhanced in future phases when the full Utility platform is implemented.

Initial Entity Review by LEI Utility Against Public Authoritative Sources (Referred to in the chart as “Initial Entity Validation”)

This refers to the process, after LEI assignment, that the Utility will use to review or “validate” the information using publicly available authoritative sources in over 200 jurisdictions around the world. During Phase 1, the Utility will use the current processes in place at Avox, which have been developed over a decade of performing such legal entity validation work. It is anticipated that these processes will be enhanced during future phases via new methodologies, standards, and conventions suggested by experts from the global industry and regulatory communities.

LEI Assignment

In the case of web portal registration, LEIs will be assigned within minutes of registration. During the first phase, if the draft ISO standard is not yet finalized, then the assigned number will be referred to as a provisional legal entity identifier. At such time the standard is finalized, the number will be called an “LEI” and it is not expected to change in any way. While the Utility assigns the number via the web portal, SWIFT plays the role of Registration Authority for ISO.

Entity Challenge

Anyone will be able to challenge an existing record contained in the public database. Such a challenge will not cause the record to change, but will prompt an investigation and re-validating via publicly available authoritative sources by Utility staff. In Phase 1, this process will be based on the process Avox employs today on its free, open internet site. Enhanced processes will be developed for future phases.
On-going Maintenance

Upon self-registration or self-certification by an entity of a record registered by a third party, the Utility will collect e-mail addresses for the entity and will use this information to prompt the entity to maintain the record by certifying that the information is correct or updating it if it has changed. In addition, the Utility will maintain the record itself by re-validating against publicly available sources in response to news, corporate actions, and challenges, and in the absence of any of these prompts during a calendar year, at least annually. In Phase 1, these procedures will be based on current Avox capabilities but will be enhanced in future phases.

Database Distribution

The web portal will provide new search capabilities, in addition to the current capabilities of Avox. During Phase 1, there will be a download capability of the full LEI Database via a widely utilized interface to be determined (e.g., secure FTP). This full database will be as of prior day close of business. In addition, there will be a download capability of changes made the prior business day to the LEI database, via a widely utilized interface to be determined (e.g., secure FTP). These processes will be enhanced in future phases.

Operations and Support

The Utility will provide quality assurance, data analysis and business continuity capabilities. During Phase 1, these will be outsourced to DTCC and Avox. In future phases, these types of services may be delivered by the Utility itself.

User Authentication during Phase 1, will be via basic user ID/password methodologies employed via secure web sites, although it is anticipated that additional methods will be employed in future phases. Any information collected from users in order to issue these IDs and passwords and to send e-mail notifications will be kept private and separate from the entity information contained in the Utility Database. During Phase 1, the Utility will only collect public reference data, and it will publish it all in the Utility database. The Utility will not be collecting confidential entity data in any form or database.

Corporate Structure

For Phase 1, a separate LEI Utility organization will be created. How that organization evolves for future phases will be guided by the tenets and approaches under discussion through the FSB’s efforts.
### Field Classifications

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<thead>
<tr>
<th>ISO 17442 Data Record</th>
<th>Core Fields of Industry</th>
<th>Optional Fields</th>
<th>Internally Generated Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Entity Identifier (LEI)</td>
<td>Legal Entity Identifier (LEI)</td>
<td>Immediate Parent LEI</td>
<td>LEI Assignment Timestamp</td>
</tr>
<tr>
<td>Legal Name</td>
<td>Legal Name</td>
<td>Registered Language Legal Name</td>
<td>Update Timestamp</td>
</tr>
<tr>
<td>Address (Includes Country)</td>
<td>Address (Includes Country)</td>
<td>Alternative Names</td>
<td>Disabled Timestamp</td>
</tr>
<tr>
<td>LEI Assignment Timestamp</td>
<td>LEI Assignment Timestamp</td>
<td>Source URLs</td>
<td>Initial Request Timestamp</td>
</tr>
<tr>
<td>Last Update Timestamp</td>
<td>Last Update Timestamp</td>
<td>Alternative Identifier Type</td>
<td>Validation Timestamp</td>
</tr>
<tr>
<td>Disabled Timestamp</td>
<td>Disabled Timestamp</td>
<td>Alternative Identifiers</td>
<td>Next Validation Timestamp</td>
</tr>
<tr>
<td></td>
<td>Entity Status</td>
<td></td>
<td>Processing Timestamp</td>
</tr>
<tr>
<td></td>
<td>Ultimate Parent LEIs</td>
<td></td>
<td>Review Timestamp</td>
</tr>
<tr>
<td></td>
<td>Legal Form</td>
<td></td>
<td>Previous Names</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Record State</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Certification State</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Successor LEI *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Predecessor LEI *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Fields that will be available for the first phase of development

* Fields that will be considered out of scope for the first phase of development

### Chart B Explanations

Chart B defines the data fields that envisioned for entity registration and creation. Those fields intended in the initial phase of the Utility are shaded in black and the fields under review for implementation at a later date are shaded in gray.

**ISO 17442 Data Record**
The draft ISO 17442 standard defines a required set of attributes for entity creation. As noted in the chart, all fields required in the draft standard are included in the initial phase of the LEI Utility.

Core Fields of Industry

The industry-led business requirements definition initiative has defined additional fields for entity registration. This includes all of the fields required by the ISO 17442 Data Record, in addition to others. Three additional fields identified by the industry are to be included in Phase 1.

Optional Fields

During discussions with industry working groups, regulators, and other interested parties, a list of optional fields that can be provided during entity registration have also been developed. These items will be reviewed with the LEI Utility Governance Committee for inclusion in future phases.

Internally Generated Fields

Additional fields, e.g., status information, will be populated by the Utility to ensure adequate transparency and support auditing of the LEI records.
## Process Scenarios for Phase 1

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Process</th>
<th>Submitter Type</th>
<th>Submission Mechanism</th>
<th>LEI Assignment Period</th>
<th>Initial Certification State</th>
<th>Initial Record State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>Registration</td>
<td>Primary Party</td>
<td>Web</td>
<td>Prior to Review</td>
<td>Certified</td>
<td>Under Review</td>
</tr>
<tr>
<td>Registration</td>
<td>Registration</td>
<td>Primary Party</td>
<td>File</td>
<td>After Review</td>
<td>Certified</td>
<td>TBD</td>
</tr>
<tr>
<td>Registration</td>
<td>Registration</td>
<td>Third-Party</td>
<td>Web</td>
<td>Prior to Review</td>
<td>Not Certified</td>
<td>Under Review</td>
</tr>
<tr>
<td>Registration</td>
<td>Registration</td>
<td>Third-Party</td>
<td>File</td>
<td>After Review</td>
<td>Not Certified</td>
<td>TBD</td>
</tr>
<tr>
<td>Certification</td>
<td>Certification</td>
<td>Primary Party</td>
<td>Web</td>
<td>-</td>
<td>Certified</td>
<td>Under Review</td>
</tr>
</tbody>
</table>

### Chart C Explanations

Chart C outlines the process scenarios for submission of information to the LEI Utility along with a set of variables based on the submission method.

**Process**

A user can submit information for a new record, which is termed a registration request. *Registration* indicates the creation of a new entity record by the entity themselves (self-registration) or a third-party (third-party registration). If a record already exists, the user can also take action on its own legal entity or a legal entity that their firm is related to via a certification request. Certification is the process of advising the LEI Utility of the accuracy of a record registered via a third-party and the ongoing periodic maintenance of that record.

**Submitter Type**

Under self-registration or validation, a party can submit information on behalf of the entity they represent, or related entities within their corporate structure for which they are the responsible party. Under third-party registration, a party can take action on a legal entity that their firm is not related to.
Submission Mechanism

The two methods of submitting information to the LEI Utility are via a web-based registration portal, or providing a Bulk File that includes numerous entities that the Utility will take action on. During Phase 1, the Utility will provide support for accepting a Bulk File upload of entities by a registering entity and its subsidiaries, as well as a group of unrelated entities submitted by a third party to meet a regulatory requirement. This process will initially be managed on a manual basis. Priorities and turnaround time will take into account the needs of the OTC derivatives industry to meet new regulatory reporting requirements. LEIs for entities processed via Bulk File upload will be assigned after validation through publicly available authoritative sources.

LEI Assignment Period

The timeframe and process in which a legal entity identifier is assigned to the submitted record is dependent upon the use case and the veracity that can be placed upon the submission. In certain cases, LEIs can be assigned prior to internal review by the LEI Utility operations. Other cases require a review of the submitted data prior to assignment. In both cases, once the identifier has been assigned, the legal entity will be listed on the registration portal. Initial Certification State

Information being submitted by a party within the legal entity themselves is noted within the record for that legal entity. Self-registration and certification requests will be marked as Certified while third-party submissions are marked as Not Certified (meaning the entity itself has not yet reviewed and validated that the information is correct). Records marked as Not Certified can be updated by the entity themselves via the certification process.

Initial Record State

The entity record also has an attribute to indicate the review being done on a record. Based upon the operational review that is required prior to assignment of an LEI, this Record State attribute can vary when the LEI record is first published. Under Review denotes that the entity has been assigned to the LEI Utility for operational review, although the record is published prior to this review taking place. Validated indicates that the record has undergone operational validation prior to the file being assigned an LEI. These states are clarified further in the text accompanying Chart D.
## Chart D

### Record State as a Result of Review

<table>
<thead>
<tr>
<th>Public Information (PI) is…</th>
<th>Process</th>
<th>Process</th>
<th>Process</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent</td>
<td>Validated</td>
<td>Validated</td>
<td>Validated</td>
<td>Validated</td>
</tr>
<tr>
<td>Consistent Except for Minor Errors (Misspelling, Punctuation, etc.)</td>
<td>Validated (Resolve to Public Information)</td>
<td>Validated (Resolve to Public Information)</td>
<td>Validated (Resolve to Public Information)</td>
<td>Validated (Resolve to Public Information)</td>
</tr>
<tr>
<td>Not Available</td>
<td>Inadequate Sources (Resolve to Registrant Data)</td>
<td>Inadequate Sources (Resolve to Registrant Data)</td>
<td>Inadequate Sources (Resolve to Registrant Data)</td>
<td>TBD</td>
</tr>
<tr>
<td>Conflicting</td>
<td>Conflicting Sources (Resolve to Registrant Data)</td>
<td>Conflicting Sources (Resolve to Public Information)</td>
<td>Conflicting Sources (Resolve to Registrant Data)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Record States of *Removed by Request*, and *Under Review* happen as the result of specific events, and do not conflict/overlap with other Record States.

### Chart D Explanations

Chart D outlines the state of an LEI record as a result of the review by the LEI Utility operations. Their review of publicly available sources may determine that information submitted by the registrant or certifier falls into four possible categories:

- The submitted information is *consistent* with what is found via public sources.
• The submitted information is **consistent with minor errors** that could be due to issues like misspelling or punctuation inconsistencies.
• The submitted information is **not available** in the public realm.
• The submitted information is **conflicting** with the information found via public sources. (Note that since public sources may not always immediately reflect new information or changes, this is not necessarily indicative of an error.)

Depending upon the method used to submit the information to the LEI Utility, the resulting entity Record State may change or the record may be returned to the submitter. These Record States are made public along with the record.

**Validated**

Indicates the record has been reviewed by the LEI Utility, and contains information that is consistent with publicly available sources.

**Inadequate Sources**

Indicates that there is not enough information in the public domain to verify the record.

**Conflicting Sources**

Conflicts occur when information from publicly available sources conflicts with the submitted information.

When the information for an entity is not consistent with that found in publicly available sources, the LEI Utility must display the record using information either from the submitter or the public sources. Chart D indicates which of these choices is followed by the Utility, based on the Record State and the type of registration/submission. The information source used for display in the LEI database is shown in the chart as the source *resolved to*. 