



LEI

GLOBAL
LEGAL
ENTITY
IDENTIFIER
FOUNDATION

The Concept of the Legal Entity Identifier (LEI)

Usage of LEI in payments

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Who is GLEIF



- GLEIF is a Swiss foundation inaugurated in June 2014 and founded by the Financial Stability Board (FSB). It is overseen by 70 regulators from 40 jurisdictions in the Regulatory Oversight Committee (ROC).
- GLEIF Board has 18 independent directors from 16 jurisdictions
- GLEIF in numbers:
 - Revenue 2015 – 6,1 m USD
 - Number of employees – 25 from 11 countries
 - Partners for LEI issuing (LOUs) – 28 and growing
 - Registered LEIs (August 2016) – 460.000
 - Website www.gleif.org – 14 languages of the G20



GLEIF Mission Statement



Each business should have one and only one
identity:

GLEIF manages a **network of partners** to provide
trusted services and open, reliable data for unique
legal entity identification worldwide.

GLEIF Core Competencies



The fundamental capabilities that set us apart and enable us to uniquely serve our constituents.

- GLEIF is a recognized and trusted partner in **Identification Management** for legal entities.
- GLEIF as **Accreditation Agency** runs a leading quality management system for its network of partners.
- GLEIF supplies a defined and growing range of value added **services** to the public / private sector.



Strategic Objectives



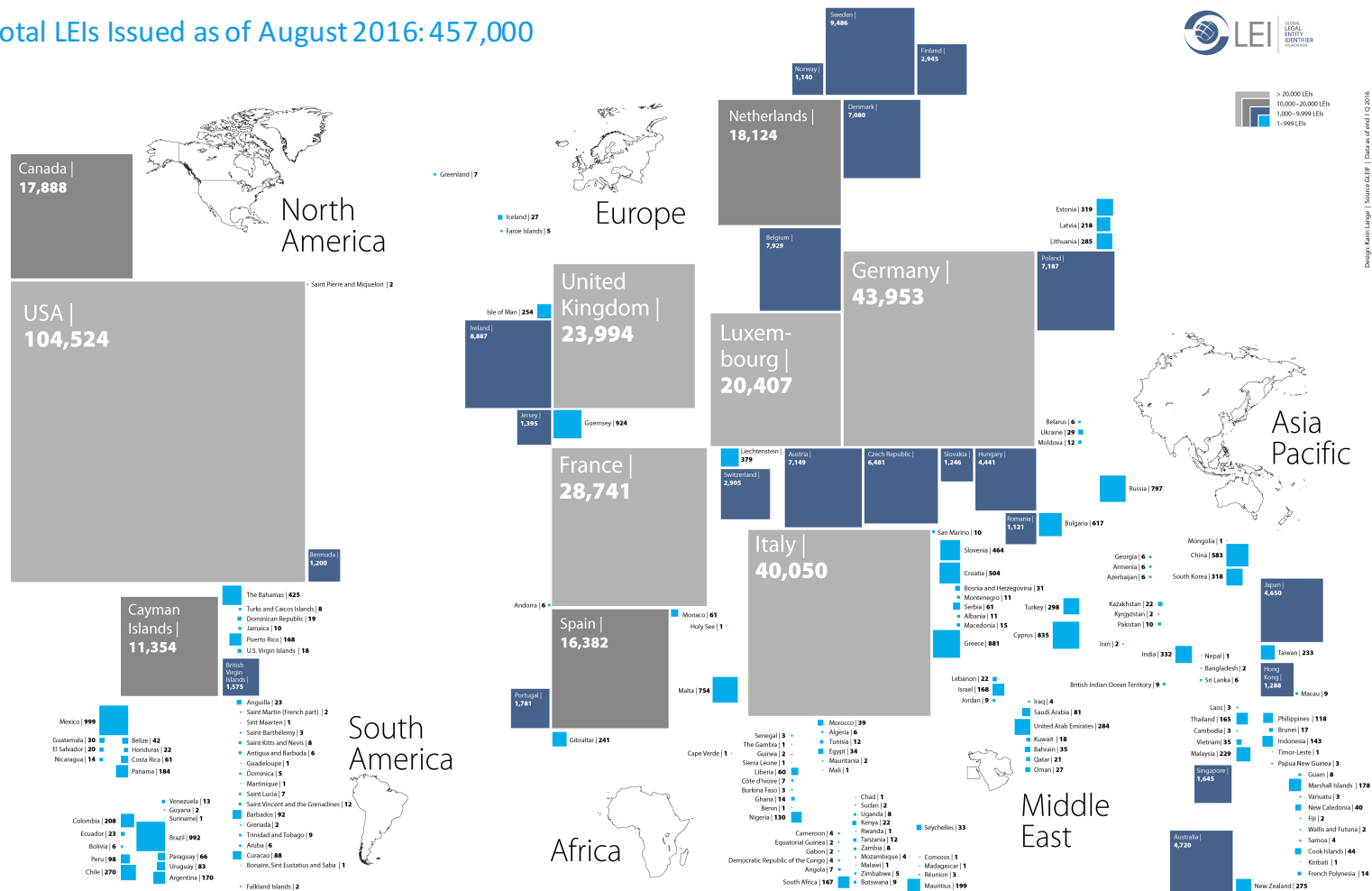
- Reach and maintain an overall **data quality** level, meeting expectation of the LEI users
- Grow the total **LEI population** to cover all mandated use cases
- Manage the GLEIS effectively and efficiently so as to achieve **lowest costs** for the industry
- Provide high quality **services** to all users of the public and private sectors



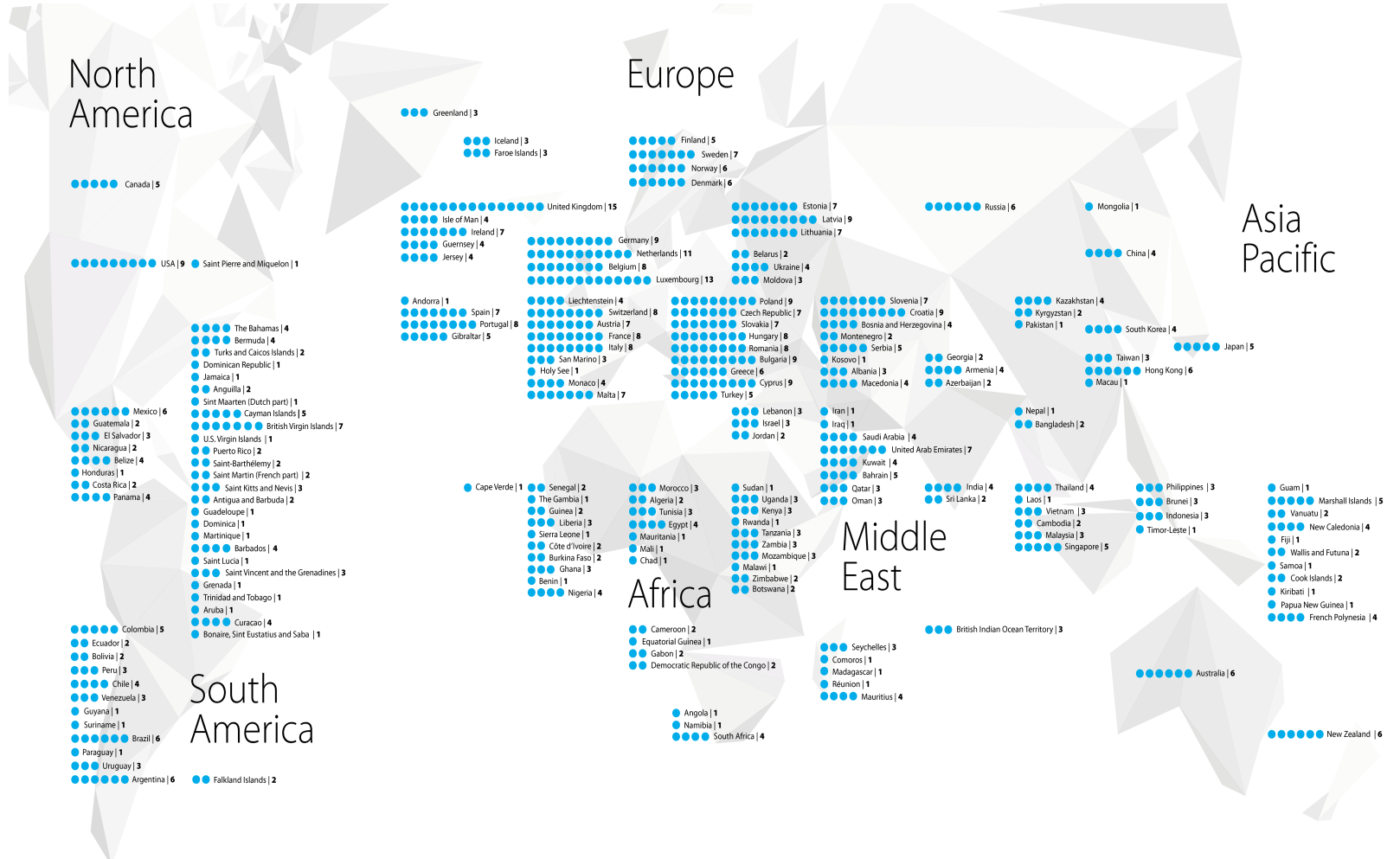
Number of LEIs per Country



Total LEIs Issued as of August 2016: 457,000

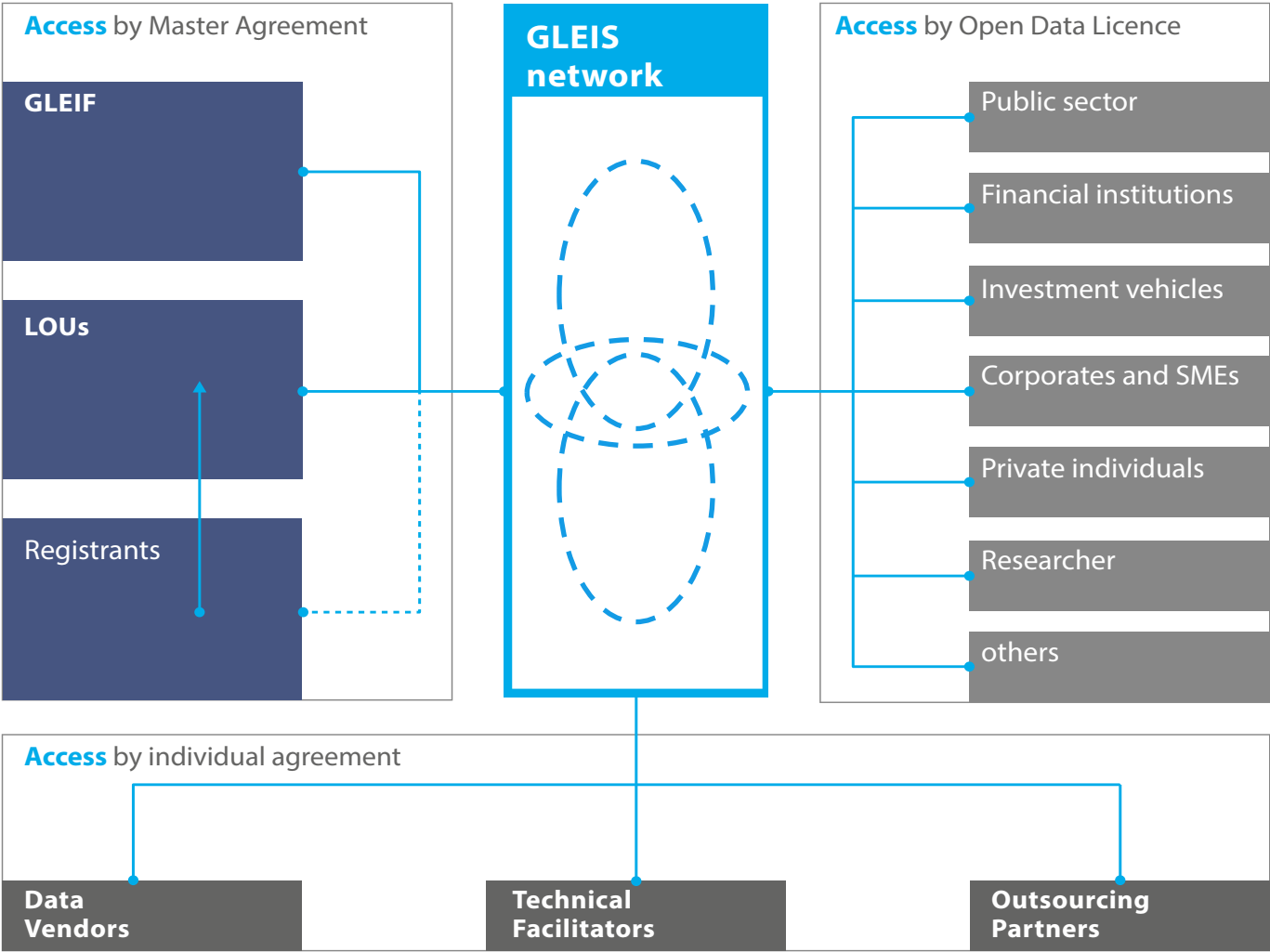


Number of LOUs serving a Country

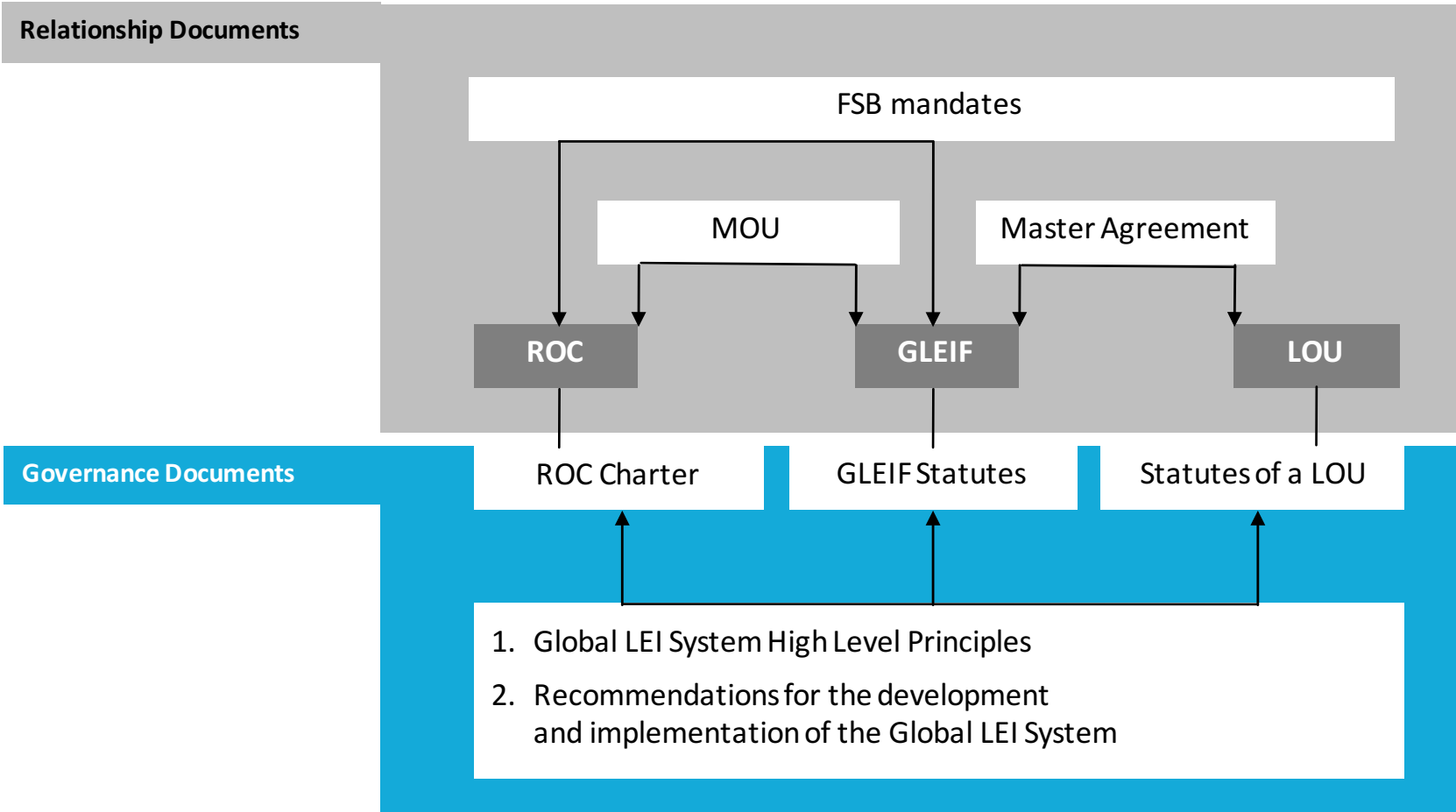


Source: GLEIF | Data as of end-4 Q 2015

Global LEI System: Partners and Beneficiaries



Global LEI System Relationship and Governance



Important Use Cases for the LEI

Benefits of LEI Adoption for Users in the Public Sector



- **Risk assessment, market surveillance and enforcement**
 - Reporting to regulators to
 - derivatives regulators
 - securities regulators
 - central banks
 - insurance regulators
 - pension funds regulators
 - Reporting to regulators on AML (anti money laundering), CFT (combating the financing of terrorism) and sanction regimes
 - Rulemaking

Other needs of the public sector

- Public procurement
- International tax programs (such as the BEPS program)
- Provision of statistical research such as for the CMFB partners
- Collateral management central banks
- Reliable sourcing

Benefits of LEI Adoption for Users in the Private Sector

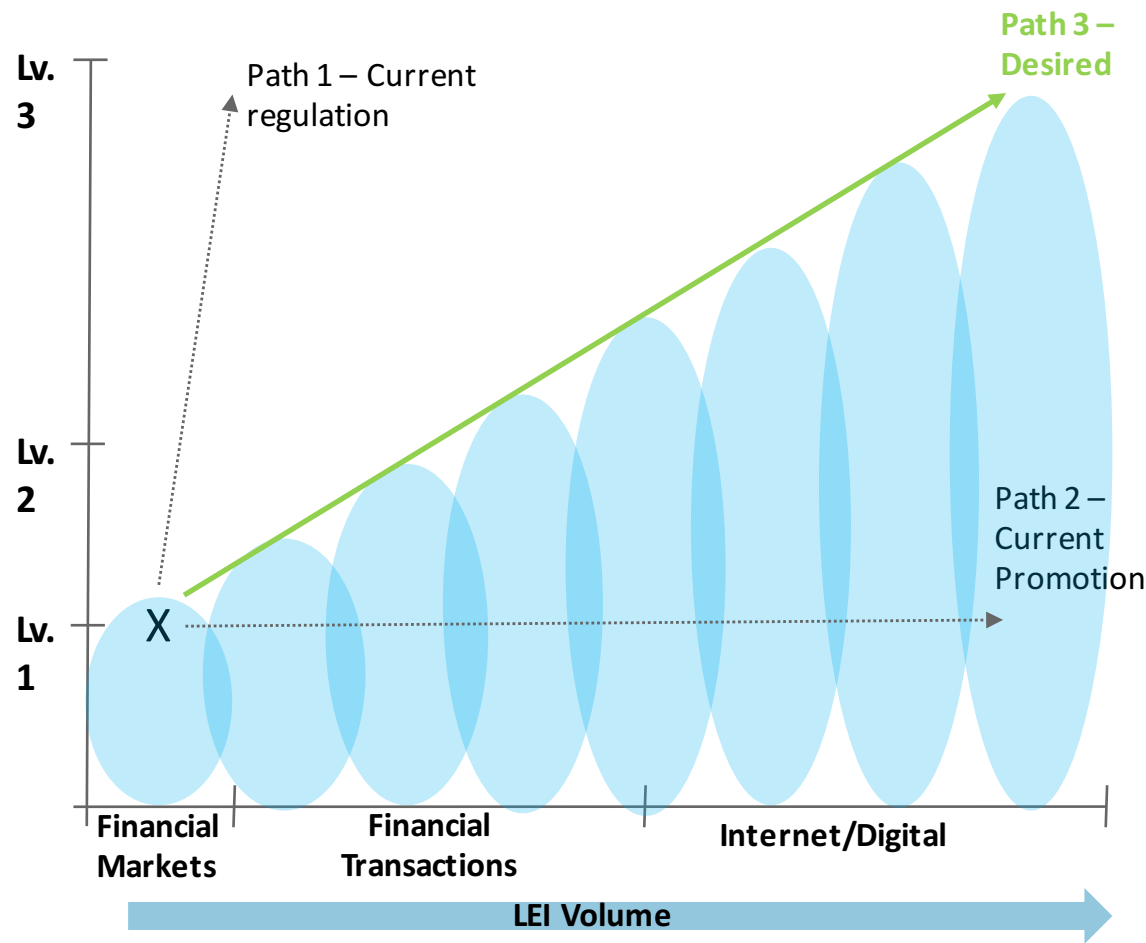


- **LEI adoption responds to business needs with regard to identification management in the following areas**
 - Know your customer utilities (KYC)
 - Unified data management
 - Correspondent Banking (buy side and sell side)
 - Trade finance (UCP 600)
 - Cash management corporates
 - Distributed ledger solutions, e.g. blockchain
 - SBR (XBRL) reporting
 - Asset management for (pension) funds
 - Payment schemes
 - Card payment schemes (merchant data)
 - E-invoicing schemes
 - Trading, clearing and settlement rulebooks
 - Collateral management
 - Credit rating

Ideal Growth Path of LEI



One coherent and persistent business strategy to achieve an optimized objective through mapping chain with other alternative ID organizations



- Path 1) *Growth within regulations:* Focus on current regulation & enhance data quality service management
- Path 2) *Grow LEI Volume:* Active Partnership* with other identifier and industry organizations by developing promotion plan
- Path 3) *Go beyond:* Become a leader in global identity management across the industries through regulatory implementation and private partnerships.

* GLEIF -> Partners
(Global federated ID system)
Partners -> GLEIF
(Local Knowledge)

Business Strategy Summary



Activity

Result

1. Enhance usability and accessibility of LEI and Legal Entity Reference Data (LE-RD)

- Level 1 Data enhancements :
Business Register List
Implementation & Entity Legal Form
- Level 2 Data implementation
- Relationships
- Mapping



Deepen the use of the LEI within the Finance Sector

2. Improve Efficiencies in LEI Issuance



Meet market demand for LEIs

3. Position GLEIF as a leader in Identity Management



GLEIF as a recognized leader in helping industries manage the digital transformation of identity management

Identity Management as a main Focus

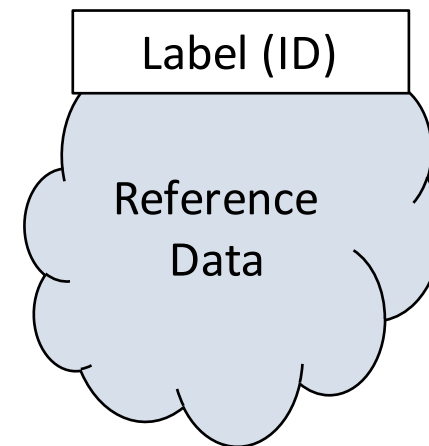
What problem do we want to solve?

- Represent identity in virtual systems, e.g. IT applications
- Support the processes of identification, authentication and authorization in a secure, efficient and unambiguous way

Identity is a unique label to individuals or groups of individuals such as

- Natural persons
- Legal entities (e.g. corporates)
- Organizations (e.g. public administrators, associations, NGOs, etc.)

Identity labels are subject to definitions, often in a certain context.



Identity Management Requirements



- Administration of identities:
 - Capture
 - Verify and validate
 - Update and retire
 - Distribute
 - Address space should be large enough for scale
 - No single point of failure
 - Speed

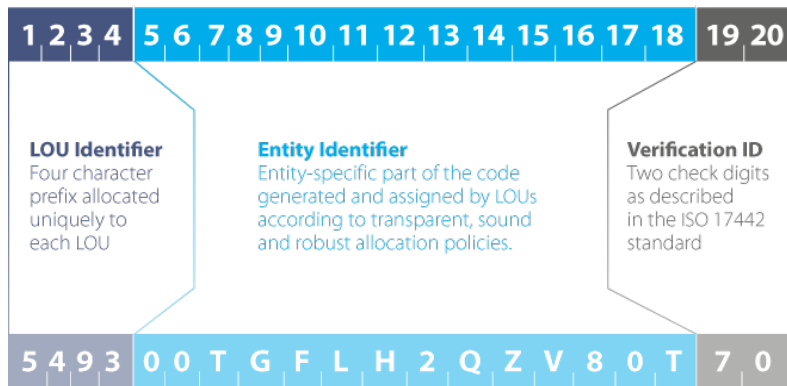
- Identity and reference data:
 - Data model
 - Integrity and referential integrity
 - Challenges and other services

- Supporting technology for review:
 - Files (digitally signed)
 - Relational databases and related systems
 - Non-SQL databases such as key-value stores and graph databases
 - Permissioned distributed ledger and public distributed ledger
 - Digital certificates following the X.509 standard

Case Study: the LEI as an Identity Label



- The LEI is a unique 20 digit alphanumeric code without embedded intelligence based on ISO 17442 standard assigned to legal entities



Example: ABB Sécheron S.A., Switzerland

- The LEI comes with standardized basic business card information

LEI Data Record [1..*]		
LEI	LEI	[0,1]
Entity Entity [1]		
LegalName	Name	[1]
OtherEntityNames	OtherEntityName	[0..n]
LegalAddress	Address	[1]
HeadquartersAddress	Address	[1]
OtherAddresses	OtherAddress	[0..n]
BusinessRegisterEntityID	BusinessRegisterEntityID	[0,1]
LegalJurisdiction	JurisdictionCode	[0,1]
LegalForm	Name	[0,1]
AssociatedEntity	Associated	[*]
EntityStatus	EntityStatusEnum	[1]
EntityExpirationDate	DateTime	[0,1]
EntityExpirationReason	EntityExpirationReasonEnum	[0,1]
SuccessorEntity	Successor	[0,1]
Registration Registration [1]		
InitialRegistrationDate	DateTime	[1]
LastUpdateDate	DateTime	[1]
RegistrationStatus	RegistrationStatusEnum	[1]
NextRenewalDate	DateTime	[1]
ManagingLOU	LEI	[1]
ValidationSources	ValidationSourcesEnum	[0,1]
Extension Extension [0,1]		

Summary



- Real world and digital entities require an identity management approach independent of a specific application or domain.
- Each entity should have one – its own – identity.
- Validation and verification of the mapping between the entity and its virtual digital ID should be based on open, available standards for legal, organizational and technical aspects.
- The LEI system and digital certificates should be reviewed as candidates.
- The industry should embrace these standards, authentication and authorization are required
- New software platforms for managing these IDs will emerge.

Business Strategy: How to broaden the Market Scope?

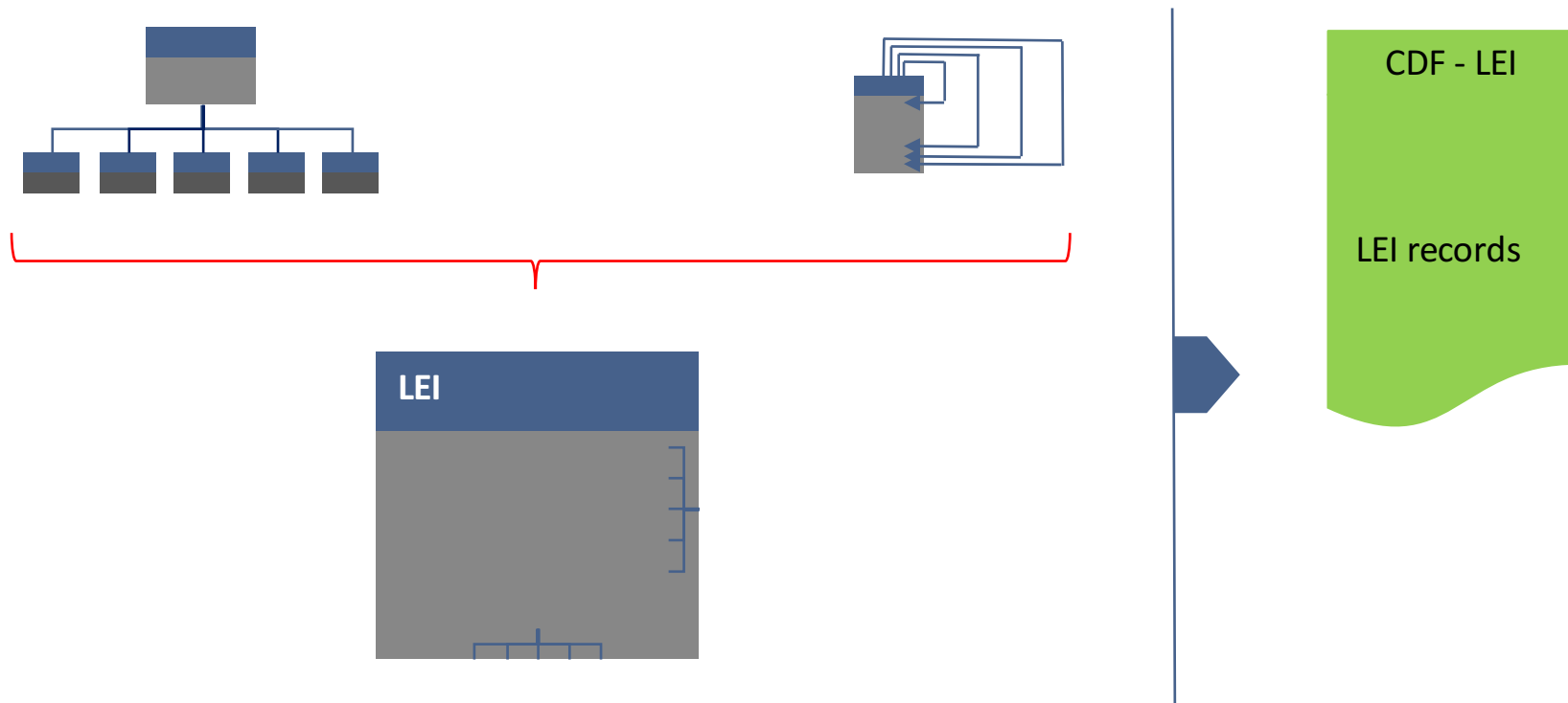
1. Market Requirements: Relationships

Legal Entities – Relationships III



Based on the different entity types and already existing relationship types result a certain complexity in data management and quality assurance.

GLEIF collects and disseminates the data. To monitor and ensure quality is a major service of GLEIF.

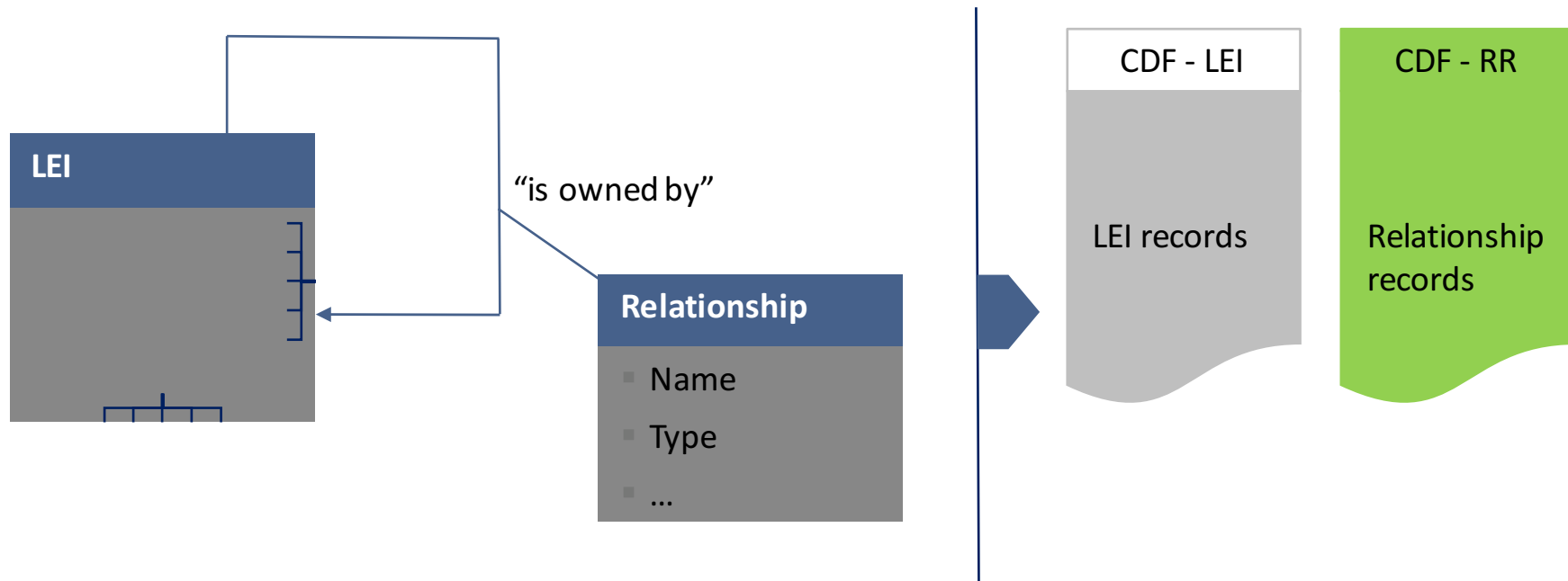


Legal Entities – Relationships



Next step in the evolution of the GLEIS is the introduction of relationships between Legal Entities and their Direct and Ultimate Parents.

Out of several optional relationship types the ROC policy defines “Accounting Consolidation” as first implementation (full consolidation in parent balance sheet). The relation itself shall be designed as “object” coming with certain attributes.

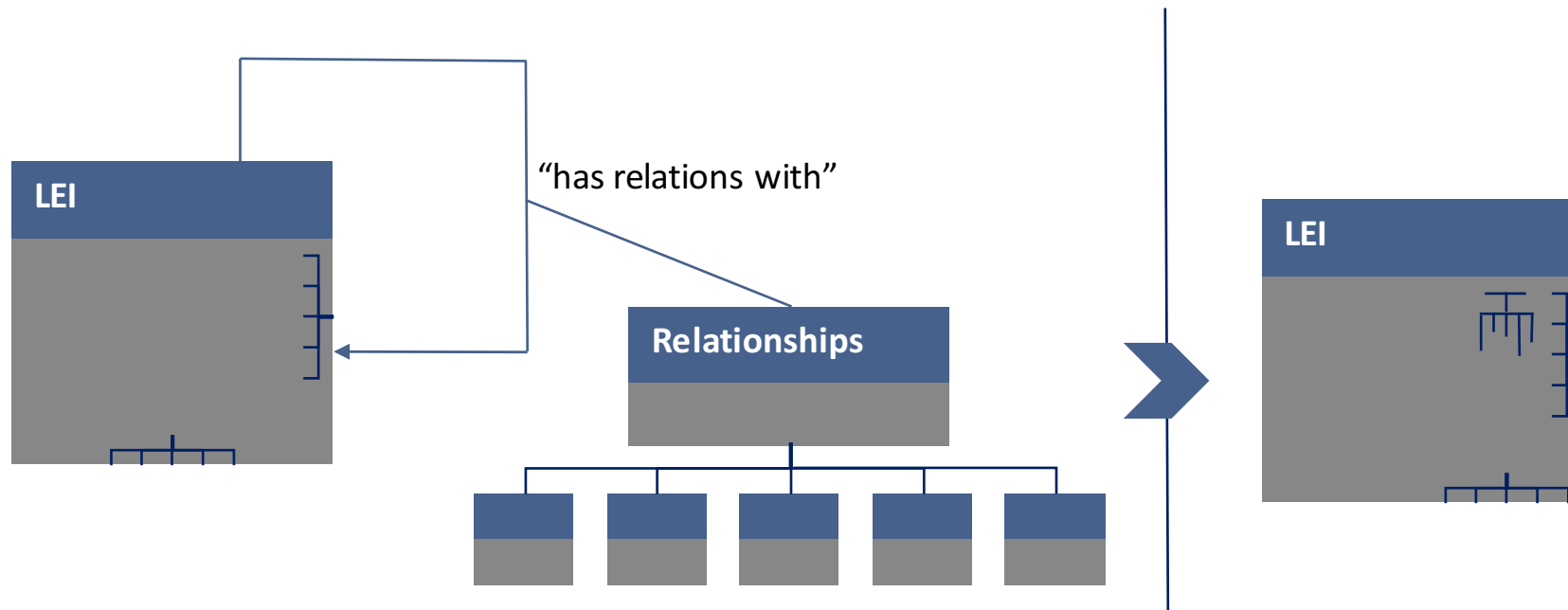


Legal Entities – Regulatory Mandate for Relationships



In coming years the evolution of the GLEIS coverage of relationships will expand beyond Direct and Ultimate Parents, e.g.:

- Joint ventures
- Partial ownership and control
- Executives and Members of Boards
- Credit securities and collaterals



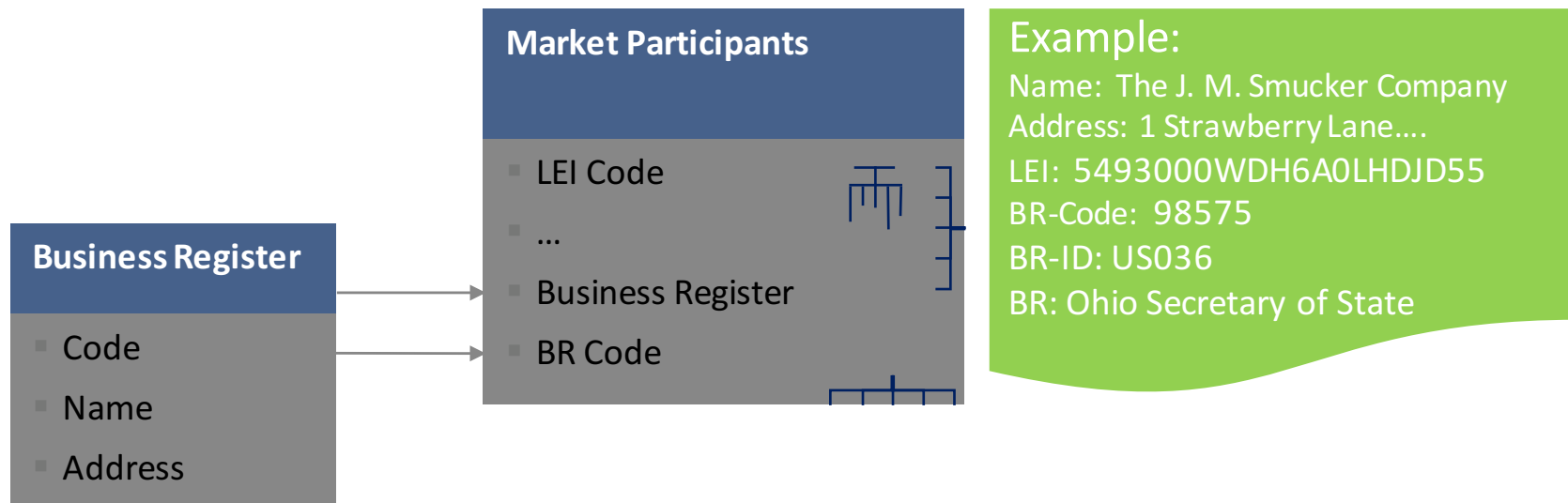
Business Strategy: How to broaden the Market Scope?

1. Market Requirements: Relationships
- 2. Mapping to 3rd Party ID-Systems**

Additional Requirements



- The LEI ROC mandated the development and use of a Registration Authority Code List mainly for two purposes:
 - Specification and optional use of a 3rd party validation source for LEI-RD.
 - Linking of LEIs with codes of official registers

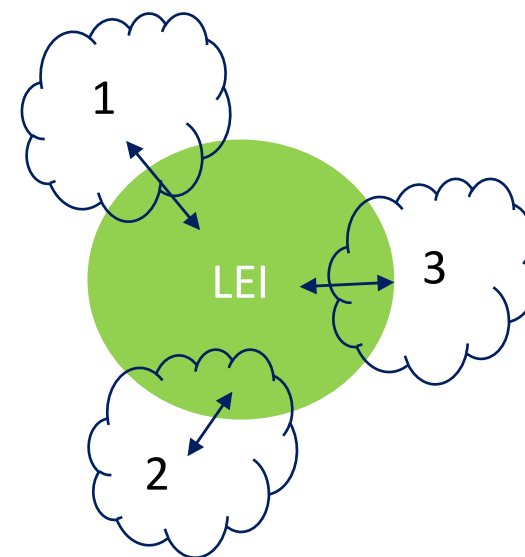


Additional Requirements



- There are multiple strategic issues with this approach:
 - Sometimes validation requires more than one 3rd party validation source.
 - Linking of LEIs with other reference data codes requires mapping. Mapping is either manual and/or automatic. Both approaches can lead to errors.
 - In most cases mapping with Business Registers will not help to link LEI and LE-RD to other sources. This makes it often hard for data management to use LEI and LE-RD in regulatory and non-regulatory use cases.
- The recommended solution is to provide standard linkages to industry driven identification systems.
 - Links to industry systems requires complex mapping algorithms and dedicated staff.
 - Any mapping is an ongoing exercise. This requires contractual frameworks and quality assurance programs.

Mapping => Process
Links => Result



Additional Requirements – 3rd Party Links



Example:

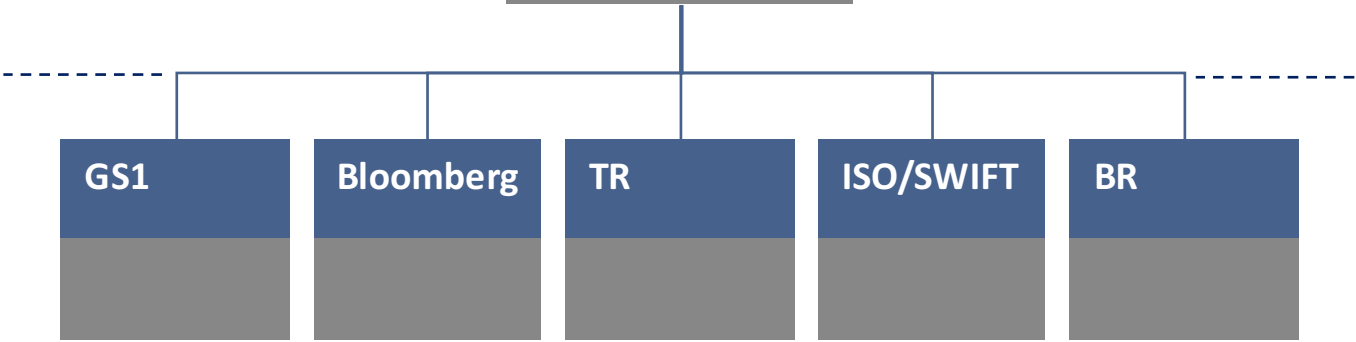
Name: The J. M. Smucker Company
Address: 1 Strawberry Lane...
LEI: 5493000WDH6A0LHDJD55
BR: 98575
BIC: N/A
BI: 399432474437
GLN:0051500000007
XBRL CIK: 0000091419

Additional ID Systems

- Code
- Name
- Address

Market Participants

- LEI Code
- ...
- Business Register
- BR Code
- Other Systems
- Other Codes

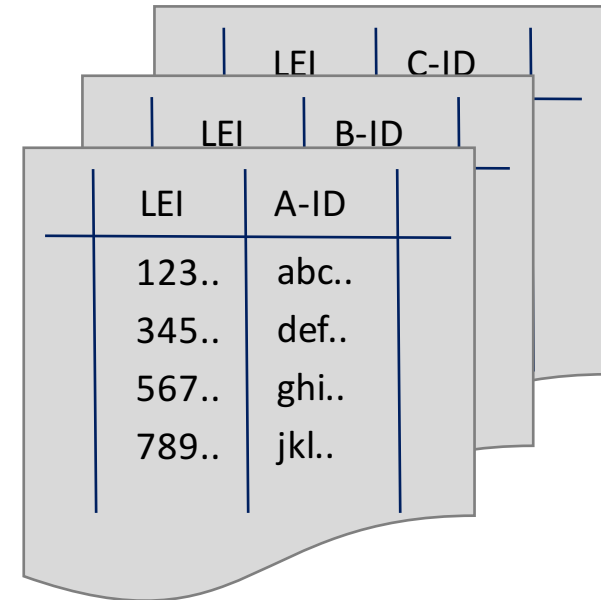


Relationships as 3rd Party Links



The initial focus on links to Business Registers is not sufficient for effective and efficient use of the LEI:

- Market Data and Know-Your-Customer (KYC) platforms combine multiple source for entity data.
- The LEI has the potential for allowing interoperability across multiple ID platforms.
- GLEIF is seeking to partner with ID platform providers for providing linkage as service and as open, public good.

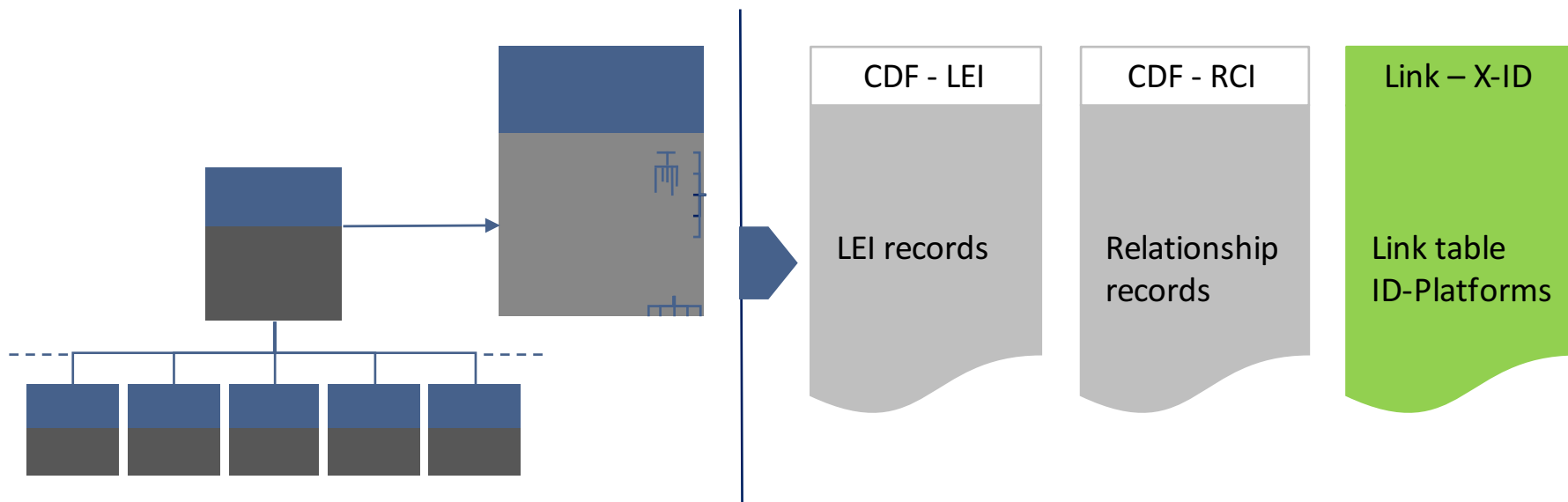


3rd Party Links – Market Demand



Multiple LEI users have expressed vital interest in a GLEIF-certified LEI-Link-table:

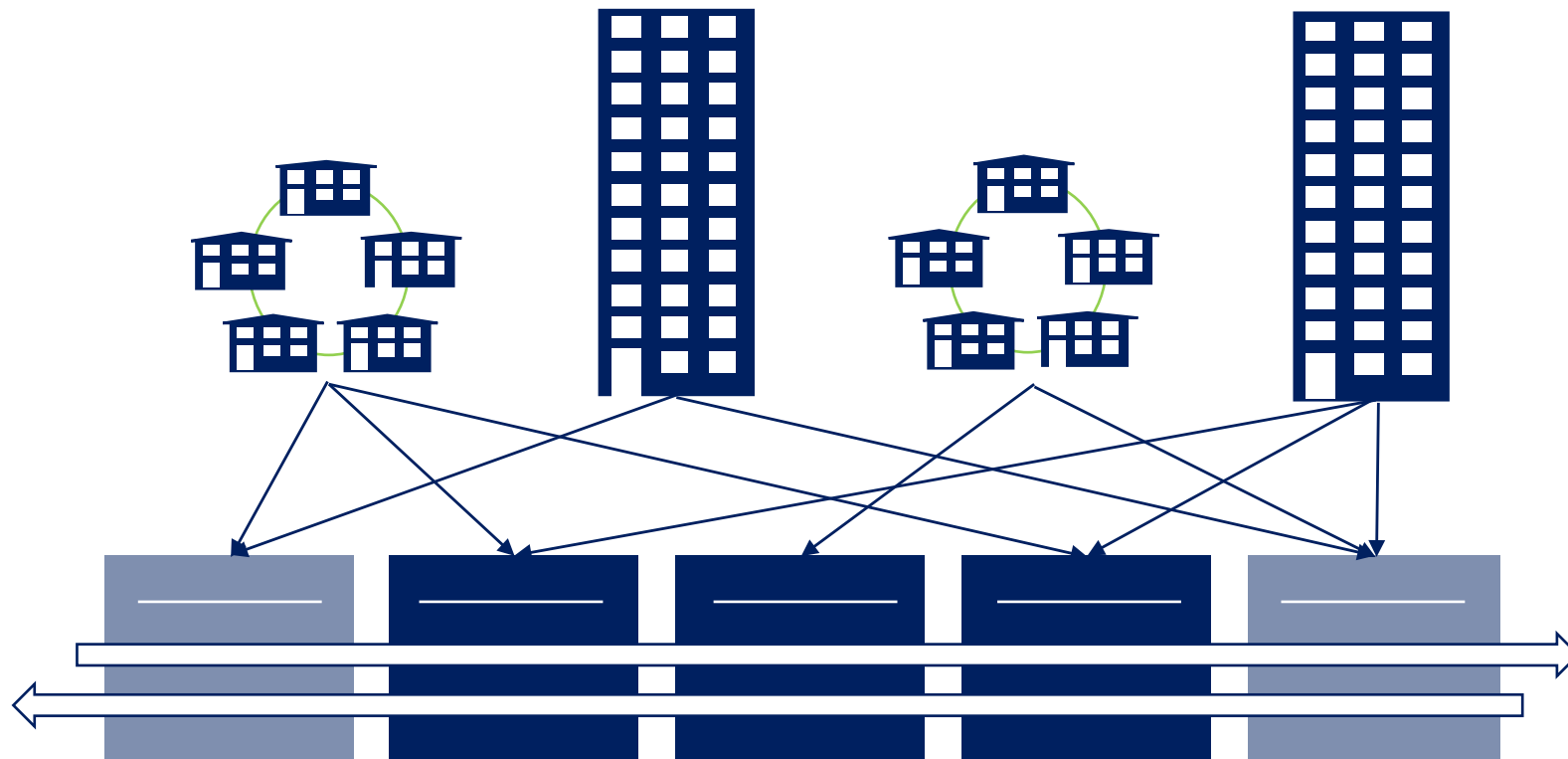
- G-SIBs and mid-sized banks
- Statistical user groups
- Data and technology vendors



ID Management in other Areas – Real World



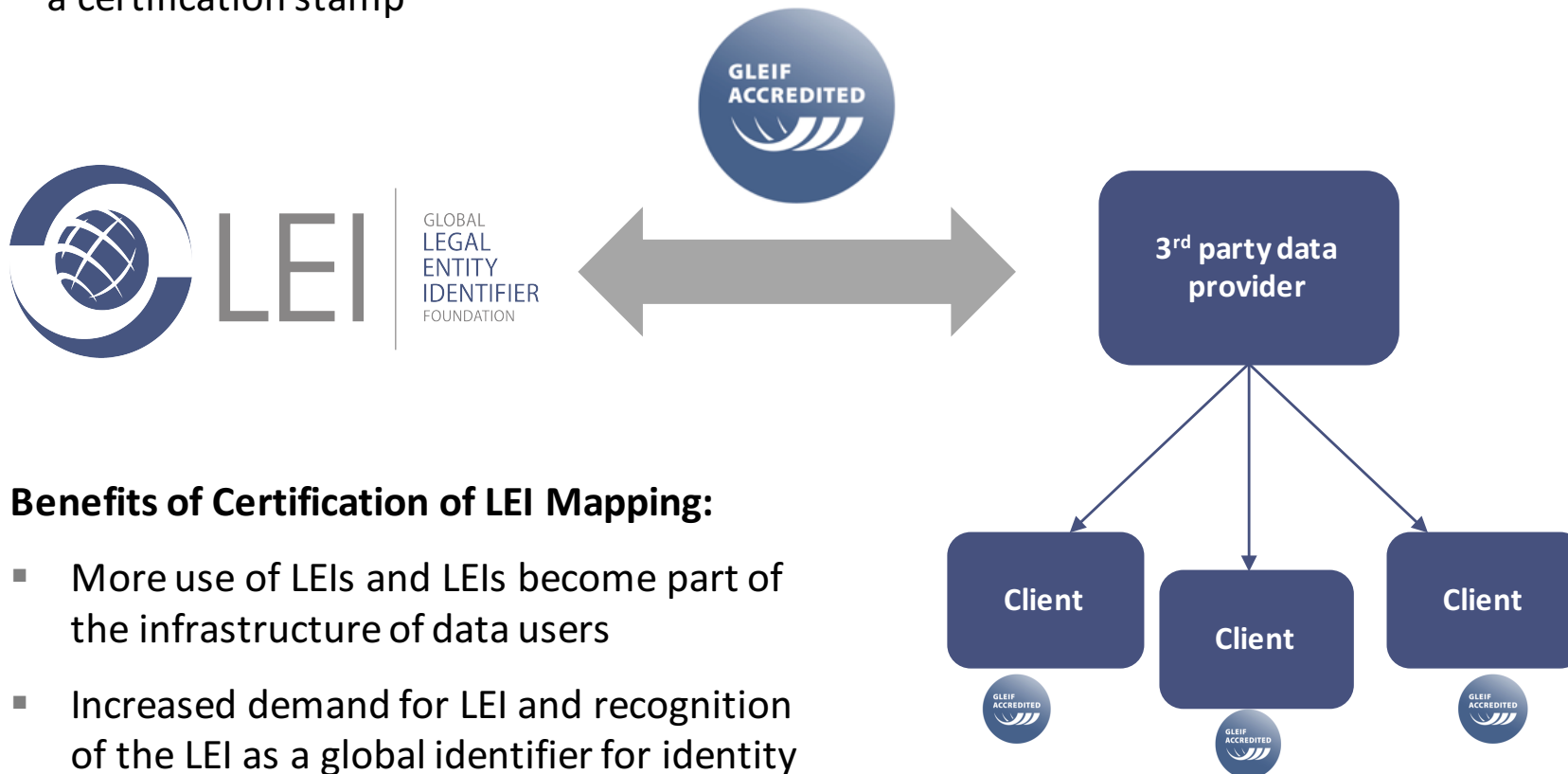
Financial sector companies, e.g. Banks, Brokers, Insurance companies, and Fintechs provide multiple products and services from simply account management, processing of payments, credits to capital market access.



Mapping



- Work together with 3rd party data providers to map the LEI with their identifiers and publish this mapping openly
- After successful mapping, GLEIF will provide the 3rd party with a certification stamp



Benefits of Certification of LEI Mapping:

- More use of LEIs and LEIs become part of the infrastructure of data users
- Increased demand for LEI and recognition of the LEI as a global identifier for identity management

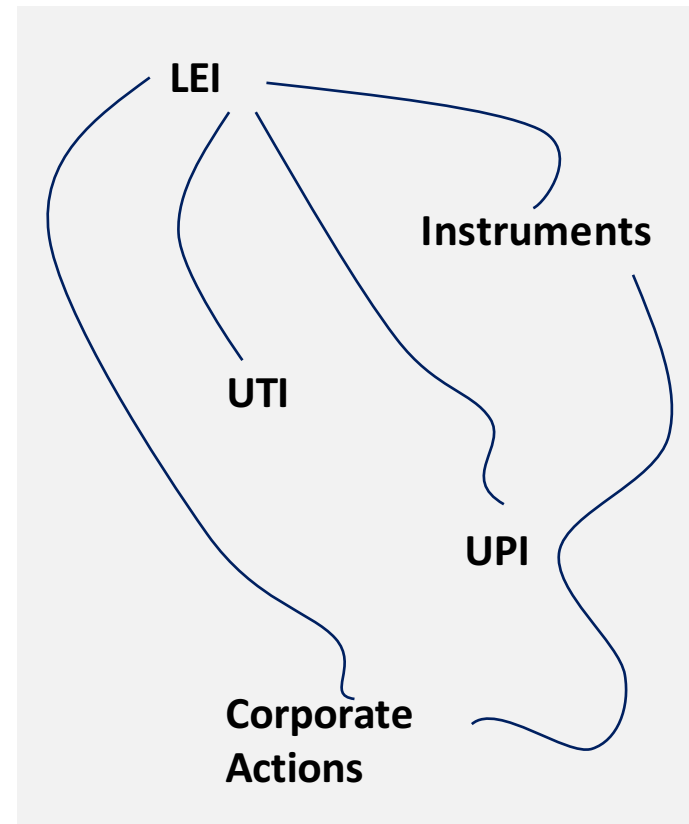
Business Strategy: How to broaden the Market Scope?

1. Market Requirements: Relationships
2. Mapping to 3rd Party ID-Systems
- 3. Embedding the LEI deeper into the Financial Markets**

Risk Management in Financial Markets



- The LEI was created as vehicle to provide more transparency about market participants
- The LEI contributes to and facilitates many financial stability objectives , including:
 - improved risk management
 - better assessment of micro and macro-prudential risks
 - facilitation of orderly resolution
 - containing market abuse and curbing financial fraud
 - higher overall quality and accuracy of financial data
- In order to help achieving these objectives the LEI should be embedded deeply in the financial markets.



Link to Financial Reports – Market Demand



- Linking to financial reporting information through XBRL for evaluation of investment opportunities and for monitoring of financial condition and analysis
- XBRL International and GLEIF have formed a working group to jointly develop and promote a XBRL-Taxonomy for embedding the LEI consistently in any financial reporting using XBRL



XBRL Example



NOTE 4 INFORMATION BY OPERATING SEGMENT

For internal reporting purposes the Group is structured into the following four business units based on the type of products and services provided:

- Automotive Seating (design of vehicle seats, manufacture of seating frames and adjustment mechanisms, and assembly of complete seating units);
- Emissions Control Technologies (design and manufacture of exhaust systems);
- Interior Systems (design and manufacture of instrument panels, door panels and modules, and acoustic components);

- Automotive Exteriors (design and manufacture of front ends and safety modules).

These business units are managed on an independent basis in terms of reviewing their individual performance and allocating resources. The tables below show reconciliation between the indicators used to measure the performance of each segment - notably operating income - and the consolidated financial statements. Borrowings, other operating income and expense, financial income and expense, and taxes are monitored at Group level and are not allocated to the various segments.

4.1 Key figures by operating segment

2014

<i>(in € millions)</i>	Automotive Seating	Emissions Control Technologies	Interior Systems	Automotive Exteriors	Other	Total
Sales	5,318.9	6,749.6	4,737.0	2,069.7	337.3	9,212.5
Inter-segment eliminations	(9.8)	(2.2)	(27.7)	(6.6)	(337.3)	383.6
Consolidated sales	5,309.1	6,747.4	4,709.3	2,063.1	0.0	18,828.9
Operating income (loss) before allocation of costs	238.6	260.8	134.1	55.7	(15.9)	673.3
Allocation of costs	(4.5)	(4.2)	(5.2)	(2.0)	15.9	0.0
Operating income (loss)	234.1	256.6	128.9	53.7	0.0	673.3
Other non-operating income						5.1
Other non-operating expense						(91.6)
Finance costs, net						(183.1)
Other financial income and expenses						(60.5)
Corporate income tax						(115.1)
Share of net income of associates						(0.8)
Net income of continued operations						228.9
Net income from discontinued operations						0.0
NET INCOME (LOSS)						228.9
Segment assets	2,721.3	2,250.2	1,859.9	675.7	85.5	7,592.6
Net property, plant and equipment	551.9	639.0	755.1	258.8	24.9	2,229.7
Other segment assets	2,169.4	1,611.2	1,104.8	416.9	60.6	5,362.9
Investments in associates						94.7

Inline XBRL

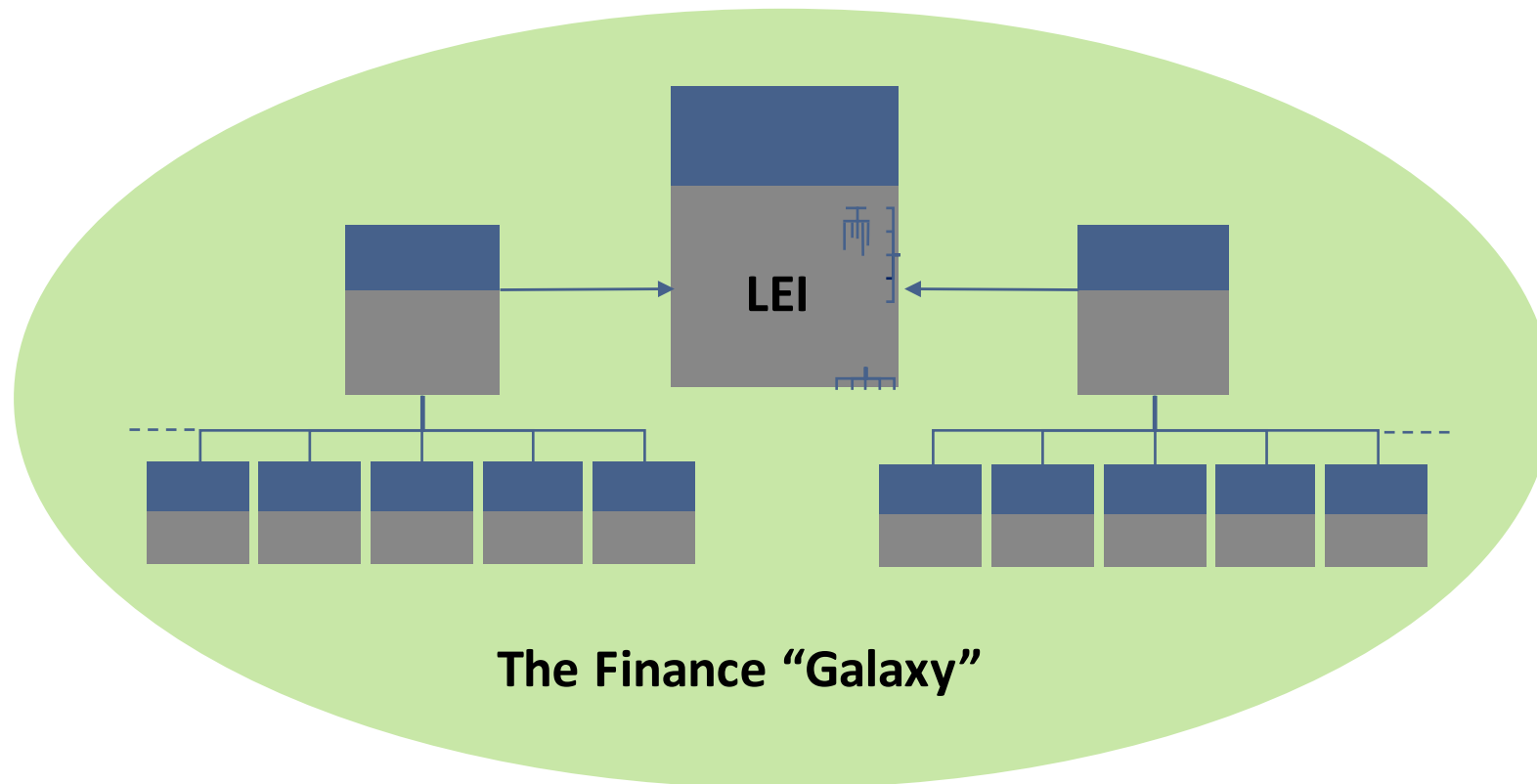
- Highlight all tags

Line item	ifrs-full:Revenue
Value	€ 5,318,900,000.00
Period	2014-01-01 to 2014-12-31
ifrs-full:SegmentConsolidationItemsA	ifrs-full:OperatingSegmentsMember
ifrs-full:SegmentsAxis	faurecia:AutomotiveSeatingMember
Units	iso4217:EUR
Entity	969500F0VMZL12IULV85



These samples have been prepared by XBRL International as a technology demonstration, and the accuracy of figures and information contained within this sample should not be relied upon for any purpose whatsoever.

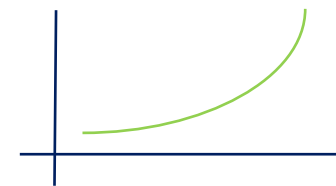
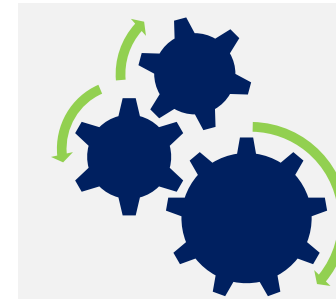
The LEI linked to ID-Platforms and financial products is essential for almost all applications in the financial sector.



Summary: LEI in Financial Markets



- The LEI has the potential to serve as prime identification vehicle for legal entities in the public and private sector.
- Making the LEI “easy to use” requires embedding it into financial applications from risk management to increased sales opportunities and KYC.
- Embedding requires linking the LEI to other ID-Platforms as well as investment products.
- All of this would help growing the LEI population to the forecasted 1,5 million LEIs in GLEIF’s 5 years financial projections and beyond.



Similar concepts would apply for linking the LEI for counter party exposure and credit risk as well as many other statistical applications. This could result in many more legal entities qualifying for an LEI. See following slides ...

GLEIF's Vision (under Development)



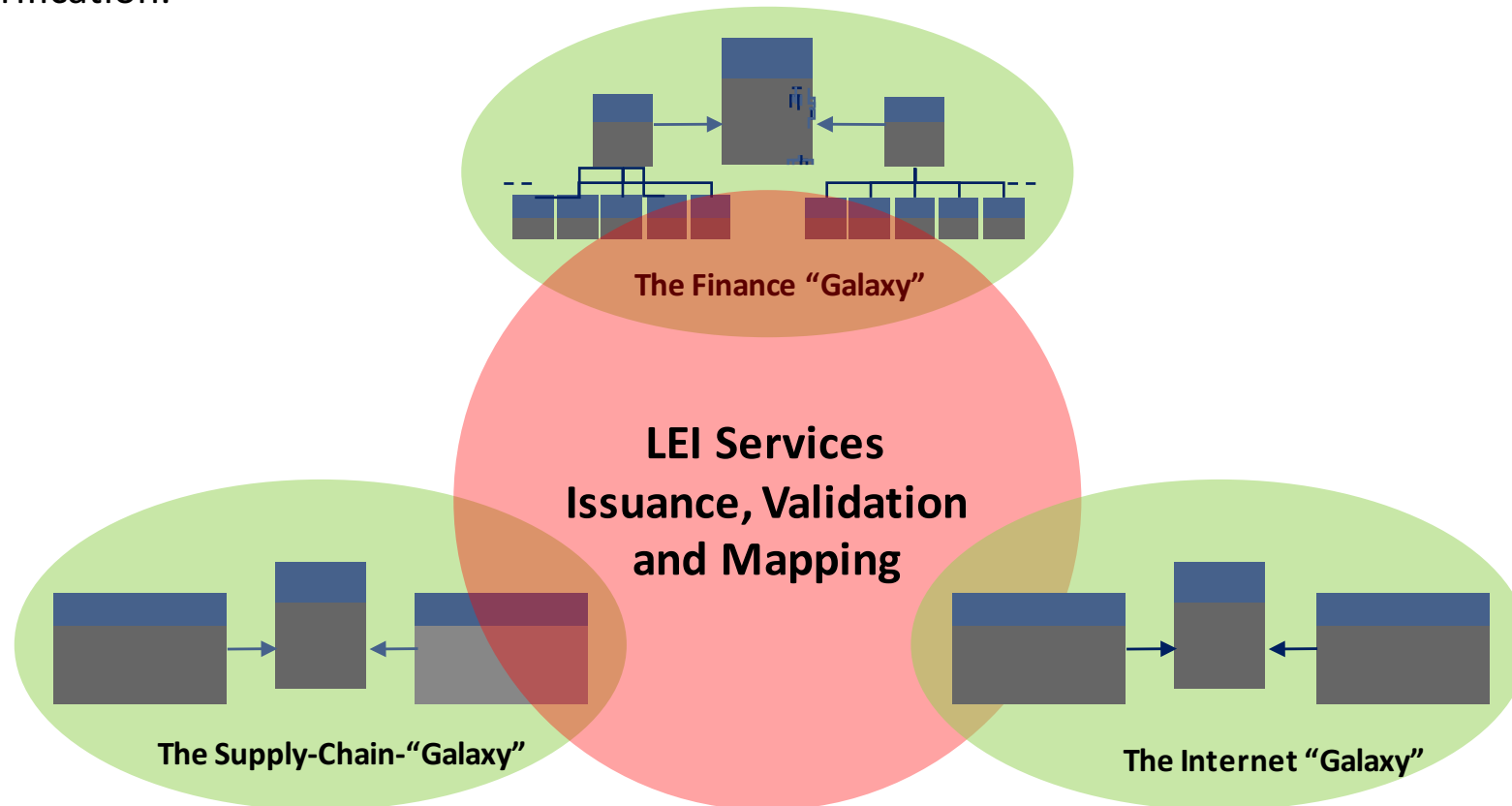
“There should be an LEI behind every business –
in Finance, in the Real World or Digital.

Why? There is only one Identity!”

Solution for true ID Management



The LEI is the only regulatory mandated Identification Management System for Legal Entities. It has the potential to support all three “galaxies” via its standards for unique, global, open, reliable and trusted services for issuance, validation and verification.



Limitations



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