a standard for the data age

The Global Legal Entity Identifier System

Francis Gross
DG Statistics, External Statistics Division
A simple model

The Control Cycle

- Measurement pictures the world,
- Pixels make up the pictures.
- How do we make the pixels?
Complexity shock ...

- **Moore’s law & internet: within 20 years, a new world.**
  - Real-time, long-range interactions among people & machines: networked !!
  - Space & time are annihilated: we have grown into a single system, very fast

- **Globalisation, complexity and speed**
  - Organisations are now more complex and nimble, use global supply chains
  - The world accelerates, turbulence can emerge and spread fast
  - More information and people are now relevant to control a situation,
  - More agreement needed for shared perception and action: we slow down !!

- **Human senses don’t perceive finance**
  - To know, we must build pictures from data; data generated by many others

- **A fast, global system? Measure it fast, at global scale!**
  - Measurement and data practices must grow to scale and speed.

... some practices will need to adapt
Strategies for control at higher complexity

- As complexity grows, our ability to stay in control is challenged
- We must improve our capabilities to widen the safe zone

1. **Better Measurement**
   - Knowing well what goes on, at the scale and speed of the system, i.e.
   - Global, fast, accurate, flexible

2. **Better Analysis**
   - Fast, precise, versatile (surprises!)
   - Nimble, flexible, large scale IT

3. **Better Decision-Making**
   - Ability to test & calibrate ideas faster

4. **Better Execution**
   - Faster & more accurate

5. **Better Infrastructure**
   - To enable the above

- The LEI is a first steps towards Goals 1 and 5: Better Data

* for environment: speed of events, for humans: reaction speed

---


**EUROPEAN CENTRAL BANK**
Sharing the same basic data has benefits

- Measurement of basic facts should be done once only, the data used by all
- Standardised basic data as a shared commodity are a good first step:
- Much will be simplified, leaving us to solve real problems
Reality? See the CSDB Data Supply Chain

Prospectus
“perfect”, public data source, but no common language

Commercial data sets
error prone, selective, costly production, duplicate efforts, proprietary formats

Candidates
for compounding; a costly collection

Compounding
a costly process

Data Quality Management & defaulting
Costly, burdensome, often just palliative

Compound
first shot

Duplication and non-standardisation in data capture hamper the whole downstream value chain, for authorities & industry.

Golden Copy
after DQM & defaulting, still not back to perfect - and not standard.
Data standards in finance; what philosophy?

- Each one of us needs it;
- No one can do it for themselves;
- There can only be one of it; hence
- We must do it together!

*J.C. Trichet, 10 Sep 2010, speaking of the Reference Data Utility (now LEI)*
The LEI

- Design concept
- Data model
- Where we stand
The global LEI ROC Charter

The ROC
(Regulatory Oversight Committee)

Executive Committee

The COU
(Central Operating Unit)

Board of Directors

LOU 1
(Local Op. unit)

LOU 2
(Local Op. unit)

LOU n
(Local Op. unit)

- Endorsed by G20 on 5 Nov 2012
- ROC established on 24 Jan 2013
- Governs the global LEI System
- Plenary makes decisions
- ExCom steers the ROC’s work
- Authorities only

- Central operational arm of the LEI
- Global LEI Foundation as basis
- Private sector Board of Directors
- Selects LOUs, runs the network

- Contracted by COU
- Strict COU control (process, tech.)
- Public (e.g. business register)
- or private (e.g. data vendor)
- Local competition possible
- LOU issues LEIs, registers entities
- LOU can be local partner for users
The COU

LOUs deliver data to COU

and LOUs deliver fees to COU

Authorities mandate LEI in their constituency

public authority

private * authority

Registrants

Register...

... and pay fees (initial & annual)

Population of entities (potential registrants)

* e.g. exchange, market infrastructure

LEI System design: Business Model, steady state
The COU recruits a wider population of authorities. The population of LOUs grows. Coverage grows with each new constituency. * e.g. exchange, market infrastructure.
LEI System design: some basic principles

The LEI is a public good

• Use free of charge and of intellectual property limitations
• Cost to be borne by the entities obtaining a LEI (e.g. registration fee)

Quality & value are the prime duties

• Value comes from coverage and quality; growth to global is a key mission
• Data quality (accuracy, actuality) is the duty of each registered entity

The LEI system must deliver a credible, sustainable public good

• No other business interest than its core mission
• Protected against capture by other interests, private or else

The LEI system will develop continuously

• It will work with the best existing resources in each field (e.g. ISO)
The LEI

- Design concept
- Data model
- Where we stand
LEI Data Model

Level 1 data

- ID card of the entity represented
- No real legal issues

Level 2 data

- Relationship (e.g. ownership / hierarchy) data
- Link entities defined at level 1
- Legal issues (e.g. confidentiality, data protection)

Network / group representations

- Built from level 2 data
- Likely to be highly diverse; tailored to user needs
- Potential for commercial value-added products
Level 1 Data

Main attributes prescribed by ISO 17442

- LEI
- Official name
- Address of headquarters
- Address of legal formation
- Date of first LEI assignment
- Date of last update

Metadata for each attribute

- Process data for each attribute value:
  - Delivery date
  - Source of value
  - Validation date
  - Validation flag
  - Other comments
  - Etc.

Historical data for each attribute

- For each earlier state of each attribute:
  - Validity bracket
  - Source of value
  - Validation flag
  - Etc.
The LEI

• Design concept
• Data model
• Where we stand
Basic organisational structures in place and working:

- Regulatory Oversight Committee (ROC), now 65 members
- 23-member ROC Executive Committee
- Committee on Evaluation and Standards (CES)
- Global LEI Foundation (GLEIF) established on 26 June 2014, CEO recruited

Private Sector support for development through a network of volunteers

Operations now in transition from Pre-LEI system to Global LEI System

- Nearly 300,000 entities from 187 countries registered by 14 (pre-)LOUs
- LEI compulsory for OTC Derivative reporting in US (CFTC) and EU (EMIR)

Next steps towards the Global LEI System:

- Build-up of the Central Operating Unit (COU), a “daughter” of the GLEIF
- Development of the global operational “COU-LOUs network”, akin to a franchise,
- Development of legal compulsion to boost LEI adoption and increase its value
Further reading

http://www.leiroc.org/
LEI