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**Financial services — Legal entity  
identifier (LEI) —**

**Part 1:  
Assignment**

*Services financiers — Schéma d'identifiant d'entité légale (IEL) —  
Partie 1: Attribution*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 68, *Financial services*, Subcommittee SC 8, *Reference data for financial services*.

This first edition of ISO 17442-1, along with ISO 17442-2, cancels and replaces ISO 17442:2019, which has been technically revised.

The main changes to ISO 17442:2019 are as follows:

- clarification that international branches of entities that meet certain conditions may be assigned LEIs;
- addition of new attributes to the LEI data record concerning identification of the direct and ultimate parent of a legal entity;
- addition of new attributes of the LEI data record concerning the status of the entity and the data record, and events that cause the data record to change;
- addition of new attributes of the LEI data record in relation to investment funds;
- clarification regarding certain existing attributes of the LEI data record.

A list of all parts in the ISO 17442 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

Legal entity identification is an integrated and necessary component of financial transactions. Entering into business relationships requires “know your customer” processes to be initiated and maintained for the duration of these relationships and any longer-term data retention requirements to be addressed. Parties involved in financial transactions need to be identified in the records of these transactions to facilitate monitoring of the exposure to individual counterparties and the resulting concentration risk.

Moreover, financial institutions are subject to a variety of obligations to report transactions and exposures to financial regulators in order for them to have effective oversight of financial markets and risks in the financial system, at both national and global levels.

All of this needs to be achieved while the support for straight through processing (STP) is maintained.

This document fulfils the need for legal entity identification of the global financial services industry and the regulatory community. Its key provisions are that it:

- enables unique identification globally of entities requiring a legal entity identifier (LEI);
- defines an LEI code that contains no embedded intelligence;
- defines an LEI code that is interoperable with other standards and existing reference data and can be applied globally to support the financial services industry;
- leverages the expertise of ISO/TC 68 in defining and maintaining identifier standards;
- defines an LEI scheme that is reliable and an LEI code that is persistent;
- defines an LEI scheme that is extensible and free from limitation on use and redistribution.

It is important that the reference information described in [Clause 6](#) of this document is kept up to date at all times.

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# Financial services — Legal entity identifier (LEI) —

## Part 1: Assignment

### 1 Scope

This document specifies the minimum elements of an unambiguous legal entity identifier (LEI) scheme to identify the legal entities relevant to any financial transaction.

It is applicable to “legal entities”, which include, but are not limited to, unique parties that are legally or financially responsible for the performance of financial transactions or have the legal right in their jurisdiction to enter independently into legal contracts, regardless of whether they are incorporated or constituted in some other way (e.g. trust, partnership, contractual). It includes governmental organizations, supnationals and individuals when acting in a business capacity<sup>1)</sup>, but excludes natural persons. It also includes international branches as defined in 3.5.

The LEI is designed for automated processing. It can also be conveniently used in other media interchange when appropriate (e.g. paper document exchange).

NOTE Examples of eligible legal entities include, without limitation:

- all financial intermediaries;
- banks and finance companies;
- international branches;
- all entities that issue equity, debt or other securities for other capital structures;
- all entities listed on an exchange;
- all entities that trade financial instruments or are otherwise parties to financial transactions, including business entities, pension funds and investment vehicles such as collective investment funds (at umbrella and sub-fund level) and other special purpose vehicles that have a legal form;
- all entities under the purview of a financial regulator and their affiliates, subsidiaries and holding companies;
- sole traders (as an example of individuals acting in a business capacity);
- counterparties to financial transactions.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166 (all parts), *Codes for the representation of names of countries and their subdivisions*

ISO/IEC 7064, *Information technology — Security techniques — Check character systems*

ISO 8601 (all parts), *Data elements and interchange formats — Information interchange — Representation of dates and times*

1) As stated by the LEI Regulatory Oversight Committee on 30 September 2015.

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1 legal entity

legal person or structure that is organized under the laws of any jurisdiction

#### 3.2 supranational

governmental or non-governmental entity that is established by international law or treaty or incorporated at an international level

#### 3.3 address of legal formation

current legal address in the jurisdiction in which the entity is established

#### 3.4 investment fund

collective investment scheme (or pooled investment) beneficially owned by multiple investors and managed on behalf of those investors by an asset manager or by the fund itself

EXAMPLE Umbrella funds as well as sub-funds under an umbrella structure, hedge funds and private equity funds.

#### 3.5 international branch

unincorporated establishment of a legal entity that meets the criteria determined by the Legal Entity Identifier Regulatory Oversight Committee in its policy on *Including data on international/foreign branches in the Global LEI System*<sup>[3]</sup>

#### 3.6 direct parent

lowest-level legal entity that prepares consolidated financial statements that include those of the entity concerned

#### 3.7 ultimate parent

highest-level legal entity that prepares consolidated financial statements that include those of the entity concerned

#### 3.8 fund management entity

main management entity of a fund that is legally responsible for the constitution and operation of the fund

Note 1 to entry: A separate entity to which the fund management entity may delegate the day-to-day management of a fund's investments would not fall within this definition.

**3.9****umbrella structure**

investment fund with one or more than one sub-funds/compartments where each sub-fund/compartment has its own investment objectives, separate investment policies and strategies, segregation of assets and separate investors, and which has segregated liability between sub-funds/compartments

**3.10****master-feeder relationship**

relationship between two investment funds, in which one (the feeder fund) is exclusively, or almost exclusively, invested in one or more other funds that have identical investment strategies (master funds), according to the legal constitution of the feeder fund

**3.11****legal entity event**

event that causes a change to the reference or relationship information in the LEI data record for a legal entity

**4 Structure of the LEI**

This document uses the following conventions for data element representations:

## a) Character representations:

- a: upper-case letters (alpha characters A–Z only);
- n: digits (numeric characters 0–9 only);
- c: upper-case alphanumeric characters (A–Z and 0–9 only).

## b) Length indications:

- nn!: fixed length;
- nn: maximum length.

The format of the LEI shall be:

- 18!c2!n.

The LEI consists of 20 alphanumeric characters decomposed as follows:

- characters (18!c) without separators or “special” characters;
- the 19th and 20th characters (2!n) shall be the check digit pair, as calculated from the scheme defined in this document.

**5 Check digit pair****5.1 General**

The check digit pair shall be calculated based on the simplified procedure defined in ISO/IEC 7064 (MOD 97-10) after the conversion of the leftmost 18 alphanumeric characters into a character string consisting only of digits. The check digit pair is used to verify that the LEI code is properly formed.

Valid check digit pairs are in the range of [02 .. 98]. 00, 01 and 99 are not valid LEI check digit pairs.

If the check digit pair has been calculated correctly, when the entire 20-character LEI is converted to numbers following the process described in 5.2, step 1, and divided by 97 as described in 5.2, step 3, the remainder shall be “1”.

See [Annex A](#) for examples.

## 5.2 Calculating the check digit pair

Step 1: Any letters in the 18 alphanumeric characters shall be converted to digit pairs in accordance with ISO/IEC 7064 (MOD 97-10), as follows:

A = 10	F = 15	K = 20	P = 25	U = 30
B = 11	G = 16	L = 21	Q = 26	V = 31
C = 12	H = 17	M = 22	R = 27	W = 32
D = 13	I = 18	N = 23	S = 28	X = 33
E = 14	J = 19	O = 24	T = 29	Y = 34
				Z = 35

Step 2: Two zeros shall be appended to the resulting string at the rightmost positions.

Step 3: A Euclidian division of the resulting number by 97 shall be performed to determine the remainder.

Step 4: The remainder shall be subtracted from 98 to determine the check digit pair.

Step 5: The check digit pair shall be appended to the original 18 alphanumeric characters to form the 20 alphanumeric character LEI code.

## 6 LEI data record

In order to ensure an unambiguous identification of the legal entities, a set of data attributes shall be provided by any requestor. The LEI data record shall be composed of at least the following data attributes:

- a) The name of the legal entity as recorded in an official register, or otherwise in the entity's constituting documents.
- b) Where applicable, the name of the official register in which the legal entity is registered and its identifier in that registry.
- c) The legal form of the entity as represented in ISO 20275.
- d) The address of legal formation and the jurisdiction in which it is located as represented in the ISO 3166 series.
- e) The entity creation date, being the date on which the entity was first established, as represented in the ISO 8601 series. Where an LEI is required to be assigned before the entity is legally formed, this information should be added as soon as possible after its creation.
- f) The address of the headquarters of the legal entity or the international branch.
- g) Identification of the direct and ultimate parent or reason why these are not identified in the public record. In some circumstances, information regarding parent entities may be collected for regulatory use but not included in the public LEI data record. There are also reasons why parent information may not be collected, including where there is no parent entity or the child entity is exempt from submitting the data for exceptional reasons.
- h) In the case of an international branch, the LEI of the entity of which it is a branch.
- i) In the case of an investment fund, the LEI of the fund management entity.

- j) In the case of an investment fund that is also a sub-fund of an umbrella structure, the LEI of the umbrella structure.
- k) In the case of an investment fund that is also a feeder fund in a master-feeder relationship, the LEI of the master fund, when available.
- l) The status of the legal entity regarding whether or not the entity is legally registered, or otherwise constituted, and operating.
- m) The status of the validation, publication and updating of the LEI and its supporting data record.
- n) The date of the first LEI assignment, being the date of publication of the identifier and its supporting data record as represented in the ISO 8601 series.
- o) The date of last update of the LEI data record as represented in the ISO 8601 series, and the reason for the update.
- p) The effective date of a legal entity event, being the date on which the event was effective in the legal jurisdiction in which the entity was formed, as represented in the ISO 8601 series.

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## Annex A (informative)

### LEI check digit pair calculation and verification examples

#### A.1 Calculation

- Start: Take an 18 alphanumeric character string assigned for an LEI without check digit pair:  
YZ83GD8L7GG84979J5
- Step 1: Any letters in the 18 alphanumeric characters shall be converted to digit pairs in accordance with ISO/IEC 7064 (MOD 97-10):  
**343583161382171616**84979**195**
- Step 2: Two zeros shall be appended to the resulting string at the rightmost positions:  
34358316138217161684979195**00**
- Step 3: A Euclidian division of the resulting number by 97 shall be performed to determine the remainder:  
Remainder = 82
- Step 4: The remainder shall be subtracted from 98 to determine the check digit pair:  
Check digit pair = 16
- Step 5: The check digit pair shall be appended to the original 18 alphanumeric characters to form the 20 alphanumeric character LEI code:  
LEI code = YZ83GD8L7GG84979J5**16**

#### A.2 Verification

##### A.2.1 Example with correct check digit pair

LEI code including check digit pair: YZ83GD8L7GG84979J5**16**

- a) Convert the letters in the LEI code to digit pairs in accordance with ISO/IEC 7064 (MOD 97-10):  
**343583161382171616**84979**19516**
- b) Perform a Euclidian division of the resulting number by 97 to determine the remainder:  
Remainder = 1
- c) Verify the check digit pair and remainder:  
The check digit pair is in the range [02 .. 98] and the remainder of the division is 1.  
The LEI code YZ83GD8L7GG84979J5**16** is therefore determined to be properly formed.