

Connecting beneficial ownership with corporate ownership data via the LEI Factsheet

GLEIF and Open Ownership

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1. Introduction

Open Ownership (OO) is driving the global shift towards transparency over who owns and controls corporate vehicles. OO does this by enabling beneficial ownership (BO) disclosures which are accurate, well-structured, complete and machine-readable. OO supports governments to make high-quality BO data available, and works with governments, businesses and citizens to use it. This reduces risks such as corruption and tax evasion, and builds trust and development opportunities. OO focuses specifically on beneficial ownership transparency.

OpenCorporates is the world's foundational source for legal entity data and is on a mission to bring about genuine corporate transparency, and has been instrumental in opening access to corporate registries across Europe and North America, as well as being the largest open database of companies in the world, containing over 220 million companies and 300 million officers from 145 jurisdictions (as of early 2023). Its data is fully provenanced to official sources, unified according to a global schema, up-to-date and available at scale.

The Global Legal Entity Identifier Foundation (GLEIF) is a not-for-profit organization created to support the implementation and use of the Legal Entity Identifier (LEI). GLEIF manages a network of partners, the LEI Issuing Organizations, to provide trusted services and open, reliable data for unique legal entity identification worldwide.

The Legal Entity Identifier (LEI) is a 20-digit, alpha-numeric code based on the ISO 17442 standard developed by ISO. It connects to key reference information that enables clear and unique identification of legal entities participating in financial transactions.

The Beneficial Ownership Data Standard (BODS) is an open standard providing guidance and a structured template for collecting, sharing and using high-quality, machine-readable data on beneficial ownership. BODS is developed by OO in partnership with [Open Data Services](#).

The concept of a 'statement' is at the heart of the [BODS data model](#). BODS data consists of a collection of ordered statements describing: ownership or control relationships; entities (including companies, trusts and arrangements); and natural persons (who own or control entities). For the purposes of connecting beneficial ownership with corporate ownership data via the LEI, we are adding the LEI to the identifiers array in [BODS entity statements](#) where entities already have an OpenCorporates ID present following a reconciliation process set out below and that [OpenCorporates ID has been mapped to an LEI](#).

2. OpenCorporates and Open Ownership

To demonstrate the value of having data produced in line with BODS, OO has created a [range of open source tools](#) for mapping and republishing national beneficial ownership data after reconciling this information with bulk data from [OpenCorporates](#). The resulting BODS datasets are published via [bods-data.openownership.org](#).

As of September 2023, OO uses these tools to republish data from national registers in [Denmark](#), [Slovakia](#) and the [United Kingdom](#). These datasets are made searchable via the [Open Ownership Register](#) where users can download BODS JSON files for individual entities or beneficial owners as well as being able to [download a combined file](#) containing all the data in the register. OO also [works](#) with national governments or publishers to support and encourage them to publish to BODS at source.

Part of the OO tooling for beneficial ownership data sources is an [open source library](#) which ingests OpenCorporates bulk data and sets out processes by which national datasets are reconciled and enriched with OpenCorporates bulk data or by using the OpenCorporates reconciliation API if the entity is not found in the bulk files.

Following this reconciliation process, OO has now added [additional technical processes](#) to [allow](#) an LEI to be queried for an OpenCorporates ID and then LEIs mapped to OpenCorporate IDs to be [added](#) from the mapped data offered in OpenCorporates bulk data.

LEIs added to the identifiers array will have the LEI in the id field, a scheme of XI-LEI and a schemeName of Global Legal Entity Identifier Index as well as including a URI pointing to the LEI record page on [search.gleif.org](#). This is in line with [org-id.guide guidance](#) which is a service we recommend using in our BODS documentation.

3. Reference data

The OpenCorporates dataset is the source for the OpenCorporates ID and associated company data sourced from official company registers. Additional information on this data source including field definitions can be found [here](#).

The OpenCorporates ID-to-LEI mapping table does not include historical OpenCorporates ID/LEI pairs, stand-alone unmapped OpenCorporates IDs and LEIs, nor the listing of daily or monthly changes. Full details about the OpenCorporates ID-to-LEI mapping can be found on the [GLEIF website](#). Should you require further information please reach out to info@gleif.org.

Details about the beneficial ownership registers used as sources for BODS datasets republished by OO can be found at https://register.openownership.org/data_sources.

4. BODS data structure and statement model

OpenCorporates IDs and LEIs are published in the [identifiers array](#) of [BODS entity statements](#) in all cases where it has been possible for OO to detect the OpenCorporates ID-to-LEI mapping.

These identifiers will appear alongside other national identifiers published by source beneficial ownership registers and Open Ownership Register identifiers for the specific BODS entity statement.

The scheme and schemeName provided for these sources as well as OpenCorporates IDs and LEIs are published in line with [org-id.guide guidance](#).

Full BODS documentation can be found at standard.openownership.org. This includes a [schema browser](#), [key concepts](#) and [technical guidance](#) with the documentation available in [English](#), [Spanish](#) and [Russian](#).

5. Analysis

By April 2023, OpenCorporates and GLEIF records [showed](#) that there were around 220 million companies in the OpenCorporates dataset with over 2.3 million LEIs having been issued.

Of these 2.3 million, about 1.2 million had been automatically reconciled with a strict criterion applied with respect to registered jurisdiction and local company number.

September 2023 analysis by GLEIF and OO conducted after the process to add LEIs mapped to OpenCorporates IDs as additional identifiers in BODS entity statements found that there were subsequently more than 145,000 entities with LEIs in the BODS datasets.

6. On-going update process

The OO process depends on the mapping process established in cooperation between GLEIF and OpenCorporates leveraging on OpenCorporates API. This mapping file will be updated initially on a bi-weekly basis but OO receives bulk data files from OpenCorporates on a monthly basis, usually at the very start of the month.

Unmapped records will be revisited on an adhoc basis based on updates to OpenCorporates coverage or on renewal if an OpenCorporates ID has not previously been mapped.

Users of the OpenCorporates ID-to-LEI mapping reference file may ask general questions or challenge individual OpenCorporates ID/LEI pairs by emailing info@gleif.org.