

Japan Exchange Group/ Tokyo Stock Exchange (JPX/TSE)

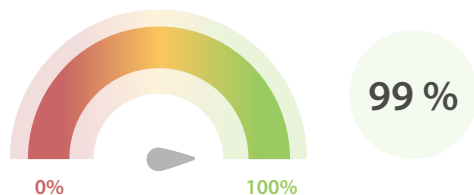
| Data Quality Report | December 2018



Data Quality Scores

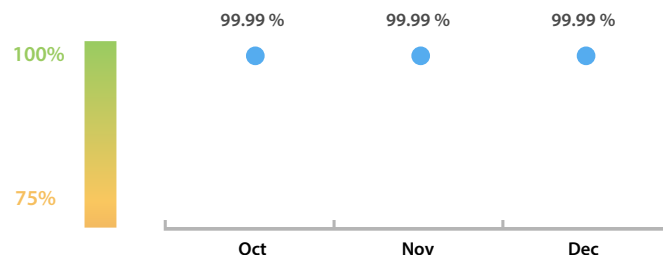
LEI Issuer Total Data Quality Score

The LEI Issuer Total Data Quality Score is calculated as the equal weighted average of the 11 'Data Quality Criteria'.

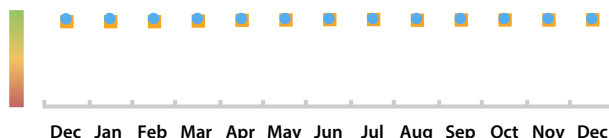


LEI Issuer Total Data Quality Score Trend

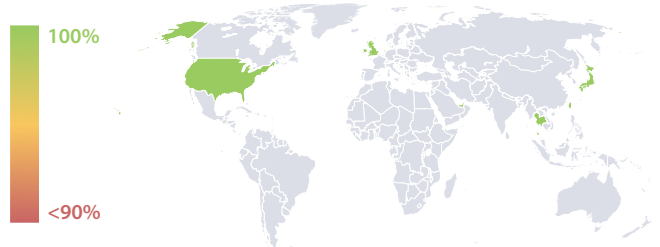
Progress achieved with regard to the continuous optimization of the data quality based on the LEI Issuer Total Data Quality Score.



LEI Issuer Data Quality (●) against LEI Pool Average (■)



Data Quality in Covered Countries



Top 5 Failing Checks

	# Failed Records	Check description
C000243	2	This LEI must not have any parent RR record in R...
C000291	1	If the ultimate parent is public: The ultimate par...
C000180	1	There is no repetition of the same LEI code with ...
N/A	N/A	N/A
N/A	N/A	N/A

Data Quality Criteria

	Dec	Nov	# Checks	# Failed Records
Accessibility	100.00 %	100.00 %	1	0 (0 %)
Accuracy	100.00 %	100.00 %	8	0 (0 %)
Completeness	99.99 %	99.99 %	3	2 (0.02 %)
Comprehensiveness	100.00 %	100.00 %	2	0 (0 %)
Consistency	99.99 %	100.00 %	21	1 (0.01 %)
Currency	100.00 %	100.00 %	1	0 (0 %)
Integrity	100.00 %	100.00 %	18	0 (0 %)
Provenance	100.00 %	100.00 %	2	0 (0 %)
Representation	100.00 %	100.00 %	2	0 (0 %)
Uniqueness	99.99 %	100.00 %	2	1 (0.01 %)
Validity	100.00 %	100.00 %	15	0 (0 %)

The Data Quality criteria is expected to contain 12 dimensions. Currently a subset of 11 criteria is implemented, to the detriment of the score, as they are averaged on all of them. This is expected to change, on a nonfixed timeline, to include all 12 dimensions.

Quality Maturity Level

		■ Dec: 1.99
		■ Nov: 1.99
		■ Oct: 1.99
L1 Required quality	L2 Expected quality	L3 Excellent quality

Statistics

Totals	Values
Managed LEIs	8,429 (+0.60 %)
Active entities managed	6,973 (+0.22 %)
Inactive entities managed	1,456 (+2.46 %)
Covered countries	13 (+/-0 %)
New lapsed LEIs *	6 (+100.00 %)

Level 2 Info	Values
LEIs with LEI parent relationships	67 (+6.34 %)
LEIs with complete parent information	7,481 (+0.68 %)

Duplicates	Values
Total LEIs marked as duplicate **	1 (+/-0 %)
Duplicate percentage of managed LEIs	< 1 % (-0.60 %)

Challenges	Values
Challenges this month	0 (+/-0 %)
Duplicates found this month	0 (+/-0 %)
Updates to entity information this month	0 (+/-0 %)

Files	Values
No. of days per month with CDF-compliant file uploads	31 / 31 (+/-0 %)

* Please see our Business Report www.gleif.org/business-reports for detailed information around lapsed LEIs.

** RegistrationStatus = DUPLICATE

DISCLAIMER: All figures of this LEI Data Quality Report are derived from these sources: 1) Global Legal Entity Identifier Foundation (GLEIF) Concatenated end-of-month files for all months mentioned in this report and 2) the Data Quality Reports for the reported month based on the LEI-Data-Quality-Check Specification v2.1.2. While every care has been taken in the compilation of this information, GLEIF will not be held responsible for any loss, damage or inconvenience caused as a result of inaccuracy or error within the LEI Data Quality Report. The text and graphic content of the LEI Data Quality Report may be used, printed and distributed ONLY with the copyright information displayed (© Copyright Global Legal Entity Identifier Foundation (GLEIF)).