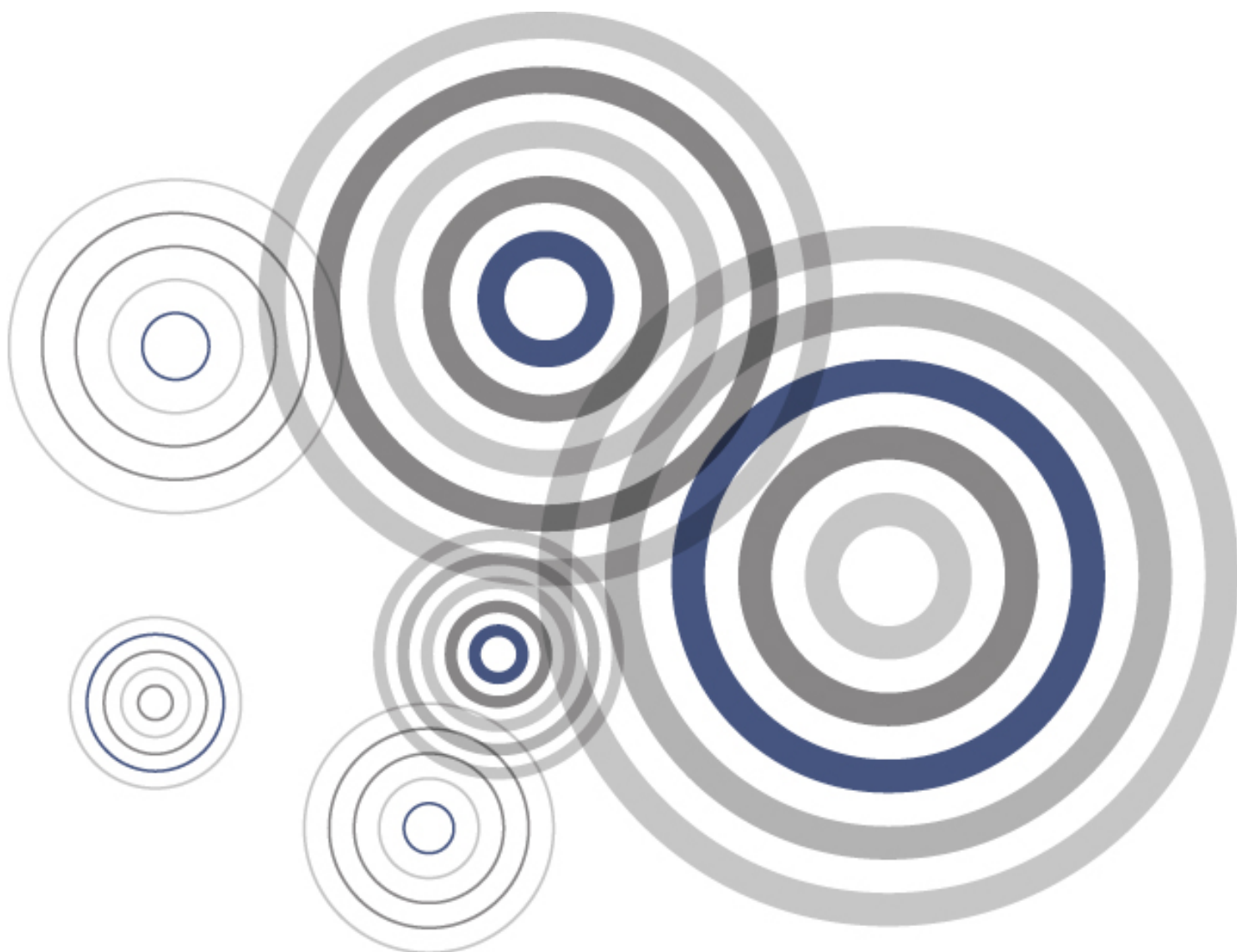


GLEIF and <MappingPartner> Restricted

Appendix 01 - Service Level Agreement (SLA) between GLEIF and <Mapping Partner>

Version 1.0 of 20YY-MM-DD

Template version 1.1 of 2020-05-29





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1. Service Level Agreement Glossary

Note: All definitions of terms in the Cooperation Agreement also apply to this Service Level agreement and prevail in case of inconsistency.

Term	Meaning
<Mapping Partner> Tasks	Activities of <Mapping Partner> in a GLEIF service to assure service delivery.
Access Groups	Allowed customers of the respective service.
Availability	Ability of a service to perform its agreed function when required.
Business Day	Business Day in Germany (Monday – Friday)
Description	Detailed description that also identifies the service interface and its outcomes.
Duplicate	The same mapping record is included more than once.
Essential Tasks	Essential Tasks that are required to be performed by the Service Provider to deliver the agreed service.
Mapping	Mapping of one record to another record to indicate a relationship.
Exception Report	Listing of LEIs included in the mapping pairs, where changes have occurred in the predefined reference data fields that must be corrected.
Mapping algorithm	A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer, to match one record to another record.
Master file	Aggregated file, that includes the defined data attributes from the <Mapping Partner>
Name	Name of the service.
Processing Time	Time of all involved parties (if not stated otherwise) to fulfill a service request.
Service Level	A measured and reported achievement against one or more Service Level Targets.
Service Level Target (SLT, also Service Target)	The objective of a Service, that is measured to identify non-conformity of a service delivery (service breach).
Service Provider	Organization or part of an organization that manages and delivers a service; could be <Mapping Partner> or GLEIF.
Service Transfer Point	The definition of the system where the service is delivered to measure the accordant Service Level Target.



Term	Meaning
Tag Line	A short description that summarizes the service.
Technical Note	A note, describing GLEIF processes already identified in this Agreement which have an impact on <Mapping Partner>.
Time Zone	All listed times are in UTC +1
Update Frequency	How often a request for service will occur in a given period of time.

2. GLEIF Services - Service Descriptions

The following services are performed by GLEIF. For all of them, the attended service operating time will be during GLEIF's Business Days between 09.00 – 17.00.

2.1. Certification of Mapping <XYZ> to LEI

Name	Certification of Mapping <XYZ> to LEI
Tag Line	Accuracy and confirmation of mapping <XYZ> to LEI process.
Description	<p><Mapping Partner> documents the nature and extent of the mapping process(es) in an operational protocol. Supporting documentation (e.g. narratives, diagrams, exhibits describing the process and procedures) must be provided as additional information.</p> <p>GLEIF checks the relevant sample data from <Mapping Partner> with its mapping algorithms for accuracy, and checks whether the relevant sample data meets the accuracy criteria.</p> <p>Provided the information on samples from <Mapping Partner> is sufficient for matching, GLEIF ensures the mismatches in the following areas have been checked:</p> <ol style="list-style-type: none"> Issuer name Issuer short name Issuer legal form Status (issuer is active/inactive) Address Country Branch entities (branch or headquarters?) Duplicates Missing data. <p>If the matching meets the data quality criteria, <Mapping Partner> receives a certificate.</p>
Essential Tasks	<ul style="list-style-type: none"> ▪ Define and maintain data quality checks ▪ Check of accuracy mapping between <Mapping Partner> data and GLEIF's LEI records ▪ Record and deliver result ▪ Re-validate (if applicable) with <Mapping Partner> ▪ Issue mapping certificate
Access Group(s)	<ul style="list-style-type: none"> ▪ <Mapping Partner>
<Mapping Partner> Tasks	<ul style="list-style-type: none"> ▪ Provide relevant sample data for mapping algorithm(s) ▪ Provide supporting documentation for data mapping algorithm(s) ▪ Re-validate data if applicable



Processing Time	30 Business Days
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2.2. Re-certification of Mapping <XYZ> to LEI

Name	Re-certification of Mapping <XYZ> to LEI
Tag Line	Re-certification of the accuracy and confirmation of relevant data sample matching process.
Description	<p>Annually <Mapping Partner> updates GLEIF’s understanding of the current status of the mapping process that were verified as part of the initial Certification.</p> <p>Significant changes should be advised within 30 days from the date they occurred. For areas where significant changes have occurred, <Mapping Partner> documents the nature and extent of the changes and how they affected the mapping processing. Supporting documentation must be provided as additional information regarding the change(s).</p> <p>GLEIF and <Mapping Partner> review the information and assess the overall impact of any changes noted in the mapping process. GLEIF and <Mapping Partner> determine if the changed mapping process still meets the required standard and decides as to whether any remediation action is required.</p> <p>GLEIF may check the relevant sample data from <Mapping Partner> with its mapping algorithms for data quality, whether the relevant sample data meets the data quality criteria.</p> <p>Provided the information on samples from <Mapping Partner> is sufficient for matching, GLEIF ensures the mismatches in the following areas have been checked (to be described in a Technical Note):</p> <ol style="list-style-type: none"> a. Issuer name b. Issuer short name c. Issuer legal form d. Status (issuer is active/inactive) e. Address f. Country g. Branch entities (branch or headquarters?) h. Duplicates i. Missing data. <p>If the matching meets the data quality criteria, the certification is confirmed.</p>
Essential Tasks	<ul style="list-style-type: none"> ▪ Check data quality of mapping between <Mapping Partner> data and GLEIF’s LEI records ▪ Record and deliver result of re-validation ▪ Re-validate (if applicable) with <Mapping Partner>



	<ul style="list-style-type: none"> ▪ Confirm re-certification
Access Group(s)	<ul style="list-style-type: none"> ▪ <Mapping Partner>
<Mapping Partner> Tasks	<ul style="list-style-type: none"> ▪ Provide updated relevant sample data for its mapping algorithm noting any changes ▪ Provide supporting documentation for any algorithm changes noted
Processing Time	30 Business Days
Update Frequency	Annual at the anniversary of certification

2.3. Publication of the <XYZ> to LEI Relationship Links

Name	Publication of the <XYZ> to LEI Relationship Links
Tag Line	GLEIF publishes the relationship links between the <XYZ> and the LEI.
Description	<p>Publication of the relationship links between the <XYZ> and LEI on gleif.org.</p> <p>Via an interface the upload of the master relationship link file to GLEIF takes place. Data is represented in a specific format (e.g. codes, timestamps). Details will be clarified in a Technical Note.</p> <p>The uploaded file received from <XYZ> will not be modified by GLEIF.</p>
Essential Tasks	<ul style="list-style-type: none"> ▪ Publish timely accurate file of LEI to <XYZ> relationship links ▪ Provide upload interface ▪ Process quality checks ▪ Send weekly reports to <Mapping Partner>
Access Group(s)	<ul style="list-style-type: none"> ▪ <Mapping Partner> ▪ Public
<Mapping Partner> Tasks	<ul style="list-style-type: none"> ▪ Deliver the mapping daily in the agreed format on time ▪ Remediate any reported errors
Availability	99,9 % (Monday – Sunday 00:00 – 24:00)
Update Frequency	<p>Daily by 10:15 – Mapping file</p> <p>Weekly on Friday by 15:00 - Reports</p>

3. <Mapping Partner> Services – Service Descriptions

The services of <Mapping Partner> set out in this Service Level Agreement are all related to mapping of LEIs (and the <XYZ> Issuer if applicable) and transmission of the <XYZ> to LEI Relationship data to GLEIF. In order to facilitate the certification performed by GLEIF, the relationship data produced by <Mapping Partner> should be uploaded to GLEIF in line with the services set out in this chapter.

3.1. Deliver <XYZ> to LEI Relationship Links

Name	Deliver <XYZ> to LEI Relationship Links
Tag Line	A cross reference of LEIs to <XYZ> which could be a one to one relationship or a one to many relationships.
Description	<p><Mapping Partner> provides a daily master file with relationships links of <XYZ> to LEIs with the attributes</p> <ul style="list-style-type: none"> ▪ LEI code ▪ <XYZ> code <p><Mapping Partner> does not provide any <XYZ> related reference data.</p>
Essential Tasks	<ul style="list-style-type: none"> ▪ Apply mapping algorithms according to <Mapping Partner> operational protocol to provide <XYZ> to LEI relationships ▪ Check for mismatches before delivering the file to GLEIF ▪ Deliver relationship links in the agreed format ▪ Include any changes based on reported errors from GLEIF ▪ Process Incidents immediately
Access Group(s)	<ul style="list-style-type: none"> ▪ GLEIF
Update Frequency	Daily by 9:30 AM
Processing Time Incidents (file not provided by <Mapping Partner>)	Up to 4 hours (to provide missing file)
Processing Time Reports (remediation from <Mapping Partner>)	Up to one calendar week The remediation period begins after GLEIF has delivered the Friday Exception Report (reference: 2.3 Update Frequency)

3.2. Manage Challenges Provided Through gleif.org

Name	Manage Challenges provided through gleif.org
Tag Line	<Mapping Partner> responds to LEI to <XYZ> challenges received from GLEIF.
Description	<p><Mapping Partner> will review and respond to LEI to <XYZ> challenges transmitted to it by GLEIF.</p> <p>These challenges may be transmitted to <Mapping Partner> by GLEIF on behalf of a third party or on behalf of GLEIF. <Mapping Partner> investigates the content of the challenge and verifies if justified.</p> <p><Mapping Partner> ensures the pertaining data is adjusted given the challenge is justified and uploads the adjusted record to GLEIF by using service 2.3.</p>
Essential Tasks	<ul style="list-style-type: none"> ▪ Review and respond to all challenges transmitted by GLEIF ▪ Research the content of the challenge and verify the challenge is valid and justified. ▪ Upload to GLEIF the updated data collected
Access Group(s)	<ul style="list-style-type: none"> ▪ Public
Processing Time	1 calendar week

4. Monitoring and Service Level Breaches

The Service Levels ensure the required high quality of the mapping relationships. It is therefore essential to closely monitor the achievement of the agreed Service Levels. Dependent on the service, <Mapping Partner> and GLEIF have to monitor and report the Service Level metrics.

4.1. Service Level calculation

The following table shows, how each Service Level is calculated.

Service Level	Formula	Service Transfer Point
Availability	$\left(\frac{(T_{month}) - T_{nonavailability}}{(T_{month})} \right) \times 100^*$	GLEIF webserver
Processing Time for “Manage Challenges”	$\left(\frac{\sum(E_{days} - S_{days}^{**})}{\sum_{Closed\ requests}} \right)$	GLEIF system
Processing Time for “Certification of Mapping <XYZ> to LEI”	$\left(\frac{\sum(E_{businessdays} - S_{businessdays}^{**})}{\sum_{Closed\ requests}} \right)$	GLEIF system
Processing Time for “Re-certification of Mapping <XYZ> to LEI”	$\left(\frac{\sum(E_{businessdays} - S_{businessdays}^{**})}{\sum_{Closed\ requests}} \right)$	GLEIF system
Processing time Incidents	$\left(\frac{\sum(E_{hours} - S_{hours}^{**})}{\sum_{Closed\ requests}} \right)$	GLEIF system
Processing time Reports	$\left(\frac{\sum(E_{days} - S_{days}^{**})}{\sum_{Closed\ requests}} \right)$	GLEIF system
Update Frequency for “Re-certification of Mapping <XYZ> to LEI”	<i>starttime</i> ≥ <i>LastValidationYearMonth01 + 1 year</i> AND <i>endtime</i> ≤ <i>LastValidationYearMonth01 + 1 year + 30 Business Days</i>	GLEIF system
Update Frequency Publication of the Mapping File	$\left(\frac{\sum_{TRUE} (publication\ time > Publication\ target\ time)^{***}}{\sum_{Calendar\ days\ in\ the\ month}} \right)$	GLEIF system
Update Frequency Uploading of the Mapping File	$\left(\frac{\sum_{TRUE} (Uploading\ time > Uploading\ target\ time)^{***}}{\sum_{Calendar\ days\ in\ the\ month}} \right)$	GLEIF system

*Tmonth = Availability of a month in minutes

Tnonavailability = Time frame, in which the service was unplanned not available; sum equals sum of each single outage

**E = End time stamp when request has been completed (formal notification)

**S = Start time stamp when request has been received (formal notification)

*** = Calendar days in the month when GLEIF has timely received a valid mapping file

4.2. Monitoring of Service Levels by GLEIF

GLEIF monitors and reports the following Service Levels on a monthly basis.

Service Level	Services
Availability	<ul style="list-style-type: none"> ▪ Publication of the <XYZ> to LEI Relationship Links
Processing Time	<ul style="list-style-type: none"> ▪ Certification of Mapping <XYZ> to LEI ▪ Re-certification of Mapping <XYZ> to LEI ▪ Manage Challenges Provided Through gleif.org ▪ Incidents (file not provided by <Mapping Partner>) ▪ Reports (remediation from <Mapping Partner>)
Update Frequency	<ul style="list-style-type: none"> ▪ Re-certification of Mapping <XYZ> to LEI ▪ Publication of the <XYZ> to LEI Relationship Links ▪ Uploading of the <XYZ> to LEI Relationship Links

4.2.1. Maintenance windows at GLEIF

GLEIF's website operates 24/7/365 without regular maintenance windows. In case of exceptional maintenance windows whenever possible and on a best effort basis GLEIF will announce them, two weeks before scheduled via email and on GLEIF's website.

4.3. Service Level Breaches

In case of Service Level breaches, finding a solution on time and remedying the breach is of predominant importance for GLEIF and <Mapping Partner>.

Based on the results of the monthly SLA Reports, which are created and distributed by GLEIF, the following steps in “4.3.1 Escalation Management” can be initiated, when Service Level breaches occur.

4.3.1. Escalation Management

Escalation Level 1:

In case a breach is detected, it will be listed in <Mapping Partner>’s monthly SLA Report and <Mapping Partner>’s Escalation Level 1 is consequently notified and requested to implement the needed countermeasures.

Escalation Level 1 is closed as soon as a clean <Mapping Partner>’s SLA Report is issued (i.e. a monthly SLA Report with no listed breach is provided).

Escalation Level 2:

Escalation Level 2 is triggered in case no clean <Mapping Partner> SLA Reports are issued for 4 consecutive months (i.e. the SLA Reports were listing breaches for 4 months in a row, even if on different service level targets). <Mapping Partner>’s Escalation Level 2 is consequently notified and requested to implement the needed countermeasures.

Escalation Level 2 is closed as soon as 2 consecutive clean monthly SLA Reports are issued in the following 3 months from the Escalation Level 2 notification, otherwise section 4.3.2 may be invoked having both the Escalation Level 2 counterparts thereupon informed Escalation Level 2 remediation timeframe has expired.

Escalation Contacts

Please refer to **Appendix 3** “Contact details of the Parties – “SLA Escalation Level Responsibilities”.

4.3.2. Termination

If neither GLEIF nor <Mapping Partner> can reach the defined Service Levels according to chapter 4, within an adequate period of time to implement recommendations the counterparty may terminate the Agreement according to section 9 Term and Termination of the Cooperation Agreement.

5. SLA Reports

GLEIF collects the data to create a monthly SLA Report and provides these monthly to <Mapping Partner> by the 15th Business Day of the following month.

In case of Service Level breaches GLEIF initiates escalation management.

Service Reports Definition

Type	Performance
Contents	Report parameters according to SLA
Reporting period	Monthly
Reporting	<Mapping Partner> and GLEIF services
Obligation	According to SLA
Language	English
Filing	Minimum 10 years

The first report will be generated in the 4th month after the first delivery of a mapping file. Up to this point, section 4.3 of this SLA does not apply.

6. Change of Service Levels

Service levels can be changed after agreement of changes between GLEIF and <Mapping Partner>.