13 November 2017

Governance arrangements for the unique product identifier (UPI): key criteria and functions

Consultation document dated 3 October 2017

Optional response template

Submission of responses via this optional template document would assist with the processing of responses.

The document has been designed to be completed as a form in Microsoft Word. Users are only able to make changes in the question response areas shaded grey.

For context or any defined terms, please refers to the relevant parts of the consultation document at http://www.fsb.org/wp-content/uploads/P031017.pdf.

Please save and submit the completed questionnaire as a Microsoft Word document, rather than converting it to a PDF.

The FSB invites stakeholders to provide their responses by Friday 17 November 2017 by e-mail to fsb@fsb.org with "UPI governance" in the e-mail subject line. The feedback received will be taken into account in the FSB's development of the UPI Governance Arrangements.

You may choose to leave answers blank – in that case it is acceptable to leave the answer reading "Click here to answer text".

Questions	Answers
General questions	
A. Name of respondent institution/firm	Global Legal Entity Identifier Foundation (GLEIF)
B. Name of representative individual submitting response	Stephan Wolf, CEO GLEIF
C. Email address of representative individual submitting response	Stephan.Wolf@gleif.org
D. Do you request non-publication of any part(s) of this response? If so, which part(s)? *Unless non-publication (in part or whole) is specifically requested, all consultation responses will be published in full on the FSB's website. An automated e-mail confidentiality claim will not suffice for these purposes.*	No
E. About the respondent institution/firm	Established by the Financial Stability Board in June 2014, the Global Legal Entity Identifier Foundation (GLEIF) is tasked to support the implementation and use of the Legal Entity Identifier (LEI). The foundation is backed and overseen by the LEI Regulatory Oversight Committee, representing public authorities from around the globe that have come together to jointly drive forward transparency within the global financial markets. GLEIF is headquartered in Basel, Switzerland. GLEIF is a supra-national not-for-profit organization making available the only global online source that provides open, standardized and high quality legal entity reference data. GLEIF is, by its statutes, agnostic to any particular commercial or political interests. GLEIF is uniquely positioned in the entity identification market.

Questions	Answers
F. General or introductory remarks	The Global Legal Entity Identifier Foundation (GLEIF) is pleased to provide the Financial Stability Board with comments on the Governance arrangement for the unique product identifier (UPI); key criteria and functions Consultation document.

This response will involve references to the following acronyms and reference documents:

- LOU – Local Operating Unit: within the Global LEI System responsible for the creation and issuance of new LEIs, collection of corresponding LE-RD, maintaining and renewing such

data, and – along with GLEIF – making available LEIs and LE-RD data as defined hereinafter

in the public domain.

- LEI ROC - Regulatory Oversight Committee: a group of public authorities from around the globe established in January 2013 to coordinate and oversee a worldwide framework of legal entity identification, the Global LEI System. In its role as overseer of the Global Legal Entity Identifier Foundation (GLEIF), the LEI ROC ensures that GLEIF upholds the principles of the Global LEI System.

- Financial Stability Board (FSB) Report - A Global Legal Entity Identifier for Financial Markets – founding document for the Global LEI System (https://www.gleif.org/en/about/governance/financial-stability-board-fsb#)

- GLEIF Statutes (Statutes) (https://www.gleif.org/en/about/governance/statutes#) |

Questions	Answers
	• Memorandum of Understanding (MoU) between GLEIF and the LEI ROC (https://www.gleif.org/en/about/governance/mou-between-gleif-and-lei-roc#) • Master Agreement (MA) between GLEIF and LOUs (https://www.gleif.org/en/lei-system/gleif-accreditation-of-lei-issuers/required-documents#)
G. Date of response	15th November 2017
Consultation questions	
Q01. Do you consider any further criteria should be included in the above list?	This question is considered out of scope for GLEIF.
Q02. Are there ways in which any of the key criteria should be modified? If so, which ones and how?	This question is considered out of scope for GLEIF.
Q03. Should the UPI System operate on a cost recovery model? If not, what is the suggested alternative and how does it fit with other governance criteria?	The cost recovery structure of the Global LEI System aligns well with the governance criteria for the UPI, specifically the criteria of public interest, economic sustainability, cost, and operational viability and continuity of UPI Service Provider operations. This response will demonstrate how cost recovery principles are realized in the Global LEI System and align to the UPI governance criteria.

Questions	Answers
	The founding documents for the Global LEI System identify cost recovery as a core principle (see FSB Report for full details):

- "An important objective in the system design is to ensure that the global LEI system has a self- sustaining funding model. The model must ensure that the system is based on non-profit cost recovery and that there are no monopoly rents accruing to service providers."

This aligns with the principle of public interest in the UPI system and ensures that the Global LEI System does not unduly benefit the operating body(ies).

After founding, GLEIF put in place clear guidelines on how GLEIF would measure and monitor cost recovery for LOUs. The Master Agreement clearly defines cost recovery requirements for the LOU (see Master Agreement section V. Financials, C. Cost Recovery Requirements for the LOU) and then verifies cost recovery at the time of accreditation and annual accreditation verification.

GLEIF requires each LOU establish its cost recovery reporting framework at the time of accreditation or entrance into the Global LEI System. Section 4.4 E – Cost Recovery Requirements (page 9) of the accreditation checklist (see Master Agreement Appendix 2) demonstrates the Candidate LOUs information submission for consideration during accreditation. This involves establishing a structure for future reporting of costs and revenues and estimating the initial LEI fee based on expected LEI issuance and |

Questions	Answers
	renewal volumes. GLEIF only allows reporting of direct costs which are defined as "a cost borne by the LOU that can be specifically allocated to a particular business activity, and that can be accurately and clearly traced, with little effort, to said business activity, including inter-company transfer fees based on "arm's lengths" terms and fees paid to third party service providers assisting the performance of Services agreed in the Service Level Agreement (Appendix 06)." LOUs are also allowed an overhead to cover indirect costs.

GLEIF then verifies compliance with cost recovery annually (see Appendix 10 Annual Accreditation Verification Requirements):

Extract from Appendix 10 of the Master Agreement:

- 2. Confirmation of reporting year cost recovery compliance (1 January to 31 December of the previous year as available). As established in the Master Agreement and Accreditation Documentation (Appendix 04), the LOU will be required annually to confirm and demonstrate its compliance with the cost recovery model in the previous reporting year (1 January to 31 December) by providing the following data that is independently validated:

2.1. Total previous year LEI fee revenues;

2.2. Total previous year annual Direct Cost (as defined in the Master Agreement) associated with its core duties as set out in Chapter IV such as |

Questions	Answers
	salaries and cost of IT and as documented by the LOU in its Accreditation Documentation (Appendix 04);
	2.3. LOU adds to the Direct Cost calculated as per above Section 2.2 amounts to cover overhead and determines its annual total costs estimate as follows:
	(i) The LOU determines the components of its Direct Cost calculated as per above Section 2.2 that are either (a) inter-company transfer fees with margin or (b) third-party service fees
	(ii) The LOU subtracts from annual Direct Cost (a) and (b) as defined in 2.3(i) and adds 100%
	(iii) The LOU adds 25% to (a) and (b) as defined in 2.3(i)
	(iv) The LOU determines its annual total costs estimate by adding 2.3(ii) and 2.3(iii)
	Confirmation of the previous reporting year cost recovery compliance must be reviewed and confirmed in writing by the LOU's independent auditors or by some other third party as agreed in the Accreditation Documentation (Appendix 04).
	This structure ensures full visibility into the costs attributed to each LOU's operation and ensures GLEIF has an understanding for each LOUs economic sustainability, operational viability, cost, and the cost to the end user.
	Lastly, the LEI ROC oversees GLEIF and is responsible to ensure the GLEIF upholds the Governance Principles of the Global LEI System. GLEIF must

Questions	Answers
	notify the LEI ROC of all proposed and adopted annual budgets including cost recovery principles and the amount of any fee to be paid by LOUs to GLEIF (see MoU Article V. Communications and Notices). Similarly, this ensures the LEI ROC has an understanding of the GLEIF's economic sustainability, operational viability, cost, and the cost to the end user.
Q04. How should cost recovery be defined in the context of UPI? How should a UPI Service Provider be permitted to recover its costs? Should start-up, infrastructure, and initial creation of UPI Code costs be treated differently than ongoing maintenance and other continuing costs of operating a UPI Service Provider?	GLEIF's experience is that a cost recovery principle must have clear implementation criteria. The response to question 3 provides the specific criteria applied by GLEIF to LOUs (see discussion on accreditation guidelines and annual accreditation verification) and LEI ROC to GLEIF.

In the Global LEI System, generally costs are recovered by LOUs via fees paid by the legal entity to the LOU for LEI issuance or annual renewal. LOUs are able to structure their fee model as long as the LOU complies with the cost recovery principle. For example, one LOU does not charge any fee to legal entities registering for LEIs and instead cost is covered by a regulator in that country. The reporting of LOU costs to GLEIF does not differentiate between start-up costs and on-going maintenance costs.

Other fee models also could be considered such as a "zero fee for the legal entity" model. Firms that largely benefit from the operational improvements of having the LEI as a primary identifier could fund LEI issuance. For instance, with the implementation of MiFID/MiFIR, the financial services industry could consider such a model for financial |

Questions	Answers
	institutions to obtain LEIs for their clients in to comply with MiFID/MiFIR requirements. GLEIF suggests the UPI system could use either model, one based on payment by the entity requesting the UPI code or one based on the entity primarily benefiting from the standardization. Flexibility is an important factor to allow the UPI system to evolve over time. GLEIF receives its funding from fees paid by the LOUs. The fee is calculated based on the number of revenue-generating LEIs maintained by the LOU. The structure of the Master Agreement allows flexibility as annually the contribution fee structure and amounts are determined by GLEIF in consultation with the LEI ROC (see Master Agreement section V. Financials, B Contribution fee to be paid by the LOU per issued LEI). GLEIF does not differentiate between start-up costs and on-going maintenance costs when reporting to the LEI ROC. GLEIF did benefit from a small contribution from the Founder, the FSB, as required by Swiss law. However, GLEIF believes having some additional funds available to the central service provider at the time of founding would ensure a smoother start up.
Q05. How should costs be allocated amongst stakeholders?	The UPI system may have many operational similarities to the Global LEI System. As such we provide insight on how costs are allocated amongst stakeholders in the Global LEI System:

Questions	Answers
	• GLEIF is the central body. Its costs relate to ensuring the operational viability, system security, business, system continuity relative to LOUs, and effective operations of the Global LEI System. • LOU costs are associated with the day-to-day operations of validating legal entity reference data, maintaining resources and help for legal entities in local languages and specific to local laws, and activities to ensure the effective operations of the LOU. Each LOU ensures its own system security and continuity. • The LEI ROC oversees GLEIF to ensure it upholds the Global LEI System principles (see MoU section IV and V). The costs of the LEI ROC are covered by the individual regulators participating in the LEI ROC and the FSB Secretariat.
Q06. How should a UPI Service Provider provide its rationale for calculating cost recovery? What level of transparency and frequency of disclosure of cost by a UPI Service Provider is required to demonstrate that the UPI System is being administered on a cost-recovery basis? For example, should a UPI Service Provider be required to undertake an audit or other type of review of its costs? To whom should transparency be provided (e.g. to Authorities and/or the public) and under what circumstances?	GLEIF believes transparency is an important aspect of a public-private system, specifically in cost recovery and oversight of the cost recovery principle. Independent review or third party audit are an effective ways of ensuring this transparency. Question 3 provides an overview of how cost recovery is reported and monitored in the Global LEI System. Both GLEIF and LOUs are required to ensure their cost recovery operations are annually reviewed and confirmed by an independent party. For LOUs, some openly publish costs and fees as they are publicly owned entities. Others, such as government owned entities or private organizations, only publish this information to GLEIF confidentially. In all cases, GLEIF requires an independent review. This could either be by an independent party such as internal audit unit or an

Questions	Answers
	external auditor, depending on the type of organization the LOU represents. GLEIF publishes annually an Audit Report per Article 26 of its Statutes and Article VIII of the MoU.
Q07. Should there be different categories of users to describe entities that interact with the UPI Service Provider(s), utilise the UPI System, or access the UPI Reference Data Library in different ways, such as creation of a UPI Code versus leveraging an existing UPI Code, and at different frequencies? How should those categories be defined and should there be different associated costs based on the type and frequency of use of UPI Codes? How would different cost considerations apply to different aspects of the UPI System?	The Global LEI System does not differentiate among users. Specifically, the FSB as founder established: • Access to the LEI and associated reference data will be free and open to all users, and there should be no 'bundling' of other services alongside the LEI by providers which forces users to pay directly or indirectly for the LEI. GLEIF suggests that a basic level of access to the UPI data should be ensured for all users of the UPI data. For example, GLEIF allows end users to access the LEI Repository via an open data license, and other partners collaborating with or supporting GLEIF through an individual agreement. Based on experience in the Global LEI System, the UPI Service Provider could charge additional amounts, in compliance with the cost recovery principle, where individual parties desire a specific service level agreement or additional features for accessing the UPI data. This would align with the UPI system principles of public interest, allowing the system to fulfill a diverse set of user needs, and cost recovery, ensuring that specialized users' needs are not subsidized by the general user.

Questions	Answers
Q08. Should access to, and use of, the UPI Reference Data Library (which includes the Data Elements therein) be unrestricted? If not, what types of usage restrictions would be appropriate and to whom should they apply? What would be the consequences, including for harmonisation, of having usage restrictions on the UPI Reference Data Library?	GLEIF proposes that access to, and use of, the UPI Reference Data Library should be unrestricted. This is the model and the approach the GLEIF has taken with the LEI codes and reference data. On its website, GLEIF makes available the full LEI data set, i.e., the GLEIF Concatenated Files, via a file download service. GLEIF also has published the Global LEI Index which provides information, updated daily, on all LEIs issued to date. The Global LEI Index, together with the LEI search engine developed by GLEIF, puts the complete legal entity reference data, made available by GLEIF as the authoritative source, at the disposal of any user free of charge.
Q09. Should the UPI Reference Data Library be subject to any intellectual property restrictions? If so, what types of restrictions would be appropriate? What would be the consequences of having any intellectual property restrictions on the use of, or access to, the UPI Reference Data Library?	The requirement to barrier free access to and distribution of data can be traced back to the requirements set forth for the LEI by the FSB and consequently the Statutes of the GLEIF. To insure barrier free access to and distribution of both the LEI code and the LEI data and GLEIF Concatenated Files, GLEIF has implemented the Creative Commons (CC Commons) Framework. CC Commons is a legal framework standard which outlines terms of use for barrier free data. GLEIF has implemented CC Commons in the Master Agreement (chapter XI). To accomplish this, the legal entity transfers its potential rights irrevocably to the LEI Issuers with the LOU's LEI terms and Conditions (Appendix 5). The LOU irrevocably transfers these (potential) rights to

Questions	Answers
	GLEIF (also chapter IX of the MA). GLEIF publishes LEI codes, data records and the GLEIF Concatenated Files under CC Commons as a public good.

For the implementation of CC Commons, GLEIF consulted with legal counsel and required both approval by the GLEIF CEO and GLEIF Board.

In January 2016, GLEIF formally endorsed the International Open Data Charter. The Charter defines open data as "digital data that is made available with the technical and legal characteristics necessary for it to be freely used, reused, and redistributed by anyone, anytime, anywhere".

The overarching goal of the Charter is to foster greater coherence and collaboration to promote the increased adoption and implementation of shared open data principles, standards and good practice across sectors around the world.

Adherents to the International Open Data Charter "agree to follow a set of six principles that will be the foundation for access to data and for the release and use of data". These principles mandate that data should be:

1. Open by default

2. Timely and comprehensive

3. Accessible and usable

4. Comparable and interoperable

5. For improved governance and citizen engagement |

Questions	Answers
	6. For inclusive development and innovation

GLEIF fully supports the International Open Data Charter and is proud to commit to the six principles it mandates. Endorsement of the Charter demonstrates to the public GLEIF's broader commitment this code of conduct to uphold open data principles. Voluntary endorsement of the Charter shows that GLEIF is serious about all usage of open data. Endorsement of the International Open Data Charter was recommended by the GLEIF CEO and approved by the GLEIF Board.

GLEIF notes the important distinction in the first part of this question for intellectual property to be able to exist in the UPI Reference Data Library, and separately, whether the intellectual property should be subject to restrictions. GLEIF proposes that information in the UPI Reference Data Library could have intellectual property. It then would be possible for an organization that owns this intellectual property to retain its intellectual property rights but to grant a non-exclusive, royalty-free license, in perpetuity, to all users of the UPI Reference Data Library. In this way, the UPI Reference Data Library would gain widespread, public use and not be subject to any intellectual property restrictions. |
| Q10. Are there any types of ownership or membership structures of a UPI Service Provider that could create conflicts of interest? If so, please describe. | GLEIF suggests the public-private partnership model of the Global LEI System may be considered as a model for ensuring the UPI system is designed for both regulator and private industry needs. The LEI ROC of the Global LEI System is responsible for evolving policy while GLIEF engages the |

Questions	Answers
	private industry through stakeholder groups. GLEIF must ensure transparency and publish all relevant information in line with the governance principle of the Global LEI System and the policies of the LEI ROC as described in Article 6 of the GLEIF Statutes. Such a structure may be useful in establishing the transparency principle that is important to the UPI Governance Arrangements and ensuring that conflicts of interest are avoided.
Q11. What kinds of business continuity arrangements would it be reasonable to expect from a UPI Service Provider?	GLEIF believes its technical operations strategy could be relevant for a UPI Service Provider: redundant datacenter location, redundant hardware systems, robust software systems, 24/7/365 systems and service monitoring that allows it to provide a service availability of 99.9% per month. The UPI Service provider could also consider putting in place business continuity/disaster recovery plans. One additional aspect of the Global LEI System that may be interesting to the GUUG is the distributed nature of the Global LEI System federated network. When the LOU collects the LEI reference data from the legal entity, the legal entity must the transfer its rights relating to any data becoming part of the LEI reference data and acknowledge that the LOU publishes daily its LEI and reference data. The LOU publishes its LEI reference data at least daily to its website under terms of use similar to GLEIF that ensures open data access. GLEIF collects the LOU data to create

Questions	Answers
	its Global LEI Index. Given this distributed nature, any other organization could collect the data published by the LOUs and also publish a Global LEI Index. This further ensures business continuity of the whole system. Lastly, the LEI ROC ensures the continuity of the Global LEI System. Per the MoU, the LEI ROC may terminate the designation of the GLEIF as the body that operates the central operating unit of the Global LEI System and transfer this designation to another organization (see Article XIII for further details).
Q12. What Governance Frameworks for other universal identifiers should or should not be considered in designing the UPI Governance Arrangements and why?	GLEIF believes the Governance Framework of the Global LEI System is a useful model for consideration in designing the UPI Governance Arrangements. The Global LEI System was also established by the FSB with the goals of improving transparency in the capital markets, mitigating systemic risk, and protecting against market abuse.
Q13. Which elements of such frameworks would be useful or not useful for the UPI Governance Arrangements and why?	The Global LEI System governance arrangements has three layers – the LEI ROC responsible for policy, GLEIF responsible for the operational integrity of the Global LEI System, and LOUs responsible for maintaining the day-to-day LEI issuance and renewal services. The LEI ROC and GLEIF are linked via an MoU. GLEIF and the LOUs are linked via the Master Agreement. Finally, the LOU is linked to the legal entities via a contract for LEI issuance and renewal. The UPI system could consider centralizing more of the operational protocol. Given the LEI system is heavily dependent on local law that

Questions	Answers
	defines a legal entity and the ability to reach and communicate locally to legal entities in the local language, it requires a strong partnership between a central operating body and local organizations with local expertise. The UPI Governance Arrangement could be more simplified by having fewer UPI Service Providers, particularly given the products themselves may be harmonized based on asset type rather than local law standards. One area of central utility that could be considered is a code generation facility so that each UPI Service Provider would not have to build UPI code generation capabilities in accordance with the UPI Technical Guidance. Centralizing this function also would address the requirements of uniqueness thus preventing duplicate issuance and reuse of UPI codes. The GUUG may also keep in mind emerging technologies that favor federated networks, such as distributed ledger technologies.
Q14. Do you agree with the articulated areas of governance identified above?	The two areas of governance articulated in the consultation paper are Functions relating to the ongoing generation of UPIs and Functions associated with the oversight of the UPI system. GLEIF agrees with the areas of governance identified section 5 of the consultation document. The three-tiered structure on which the Global LEI system operates addresses the requirements for both governance and operation of a global system of identifiers. The LEI ROC provides the oversight of the GLEIF. The GLEIF in turn ensures the operational integrity of the Global LEI system.

Questions	Answers
	Finally, the LEI issuers conduct the registration operations of the Global LEI System as organizations authorized to issue LEIs to legal entities. The governance aspects of oversight are outlined and designated by the MoU between the GLEIF and the LEI ROC. The Master Agreement between the LEI issuing organizations and the GLEIF sets out requirements for the LEI issuers to meet certain standards of quality and service and to maintain free and open access to LEI reference data. The Master Agreement also defines the rules and technical standards to be adhered to by the LEI issuers and the GLEIF. Through both of these at the foundation of the Global LEI System framework, the functions related to the ongoing generation of LEIs and those associated with the oversight of the Global LEI System are addressed.
Q15. Can you suggest any refinements or modifications to any of the functions therein?	GLEIF does not have suggestions for refinements or modifications to the functions articulated.
Q16. Can you suggest any other functions that should be included in the above list?	GLEIF does not have suggestions for additional functions to be included.
Q17. Could a UPI Service Provider also be expected to develop human readable aliases for UPI Codes to satisfy the needs of particular jurisdictions or other stakeholders? Why or why not?	GLEIF agrees with the core principles for sound reference data management of identifier codes having no embedded intelligence about

Questions	Answers
	the real world object that it identifiers and for meaning to be provided by a reference data record. GLEIF also understands that use of codes is most suitable for machine readability and data exchange. For needs by jurisdictions or other stakeholders, a standard human readable product type name could be included as part of the UPI Reference Data records. Users of the UPI then could choose to display, on a GUI for instance, the human readable product type name.
Q18. Are there functions in the list which are not relevant for the UPI in your view and if so which ones and why?	GLEIF regards that the following function would not be able to be covered by the GLEIF or the UPI Service Providers - 'Periodically assessing the distribution of products within the classification system and ensuring that products are assigned their proper taxonomical classification when appropriate.' GLEIF though could monitor as part of its data quality program and then allow external user input via a public challenge facility.
Q19. Which entity or entities (or type of entity) would be best placed to perform each of the above governance functions?	Each governance function has been mapped to the entities and roles within the Global LEI system with each entity (entities), as well as some entities outside the Global LEI System, noted after each function. ***Functions related to ongoing generation of UPIs*** *Production and routine maintenance*

Questions	Answers
	(a) Producing and assigning UPI Codes to OTC derivatives products in conformity with the UPI Technical Guidance, the UPI Data Standard, and any other standards relating to the UPI System that may prevail. Best placed entity(ies): UPI Service Providers
	(b) Updating and publishing the list of UPI Codes (including historical data) and associated UPI Reference Data Elements for each UPI Code. Best placed entity(ies): for updating – UPI Issuers; for publishing: GLEIF
	(c) Maintaining the UPI Reference Data Library (containing the UPI Reference Data Elements) and the permissible values thereof per asset class/product type. Best placed entity(ies): GLEIF
	(d) Establishing and maintaining adequate policies and procedures to conform to the UPI Technical Guidance and the UPI Data Standard (and any other standards relating to the UPI System that may prevail). Best placed entity(ies): GLEIF
	(e) Maintaining a history of issued UPI Codes to avoid reuse; to ensure compatibility of old and new versions of the UPI; and to facilitate the performance of historical data analysis. Best placed entity(ies): GLEIF

Questions	Answers

	New UPI protocol
	
	Establishing and maintaining the policies and procedures governing applications for obtaining new UPI Codes. This would include the form and manner of data submission, how users must connect to the UPI Service Provider(s) to provide data and request a UPI Code, and timelines for request processing. Best placed entity(ies): GLEIF
	
	Review and assessment
	
	  (a) Reviewing the UPI System to accommodate new product types, including deciding whether each addition or change to product types requires a change to associated reference data (e.g., through addition of new allowable values for the UPI Reference Data Elements within a given asset class or product type).
	
	Best placed entity(ies): Regulatory Oversight Committee and Industry Users
	
	  (b) Reviewing the UPI System to maintain appropriate granularity, having a process for accounting for errors in issuance of UPIs, and deprecating UPIs that become obsolete.
	
	Best placed entity(ies): GLEIF along with the UPI Service Providers
	
	  (c) Periodically assessing the distribution of products within the classification system and ensuring that products are assigned their proper taxonomical classification when appropriate.

Questions	Answers
	Best placed entity(ies): Refer to the response for question 18 in which this function is proposed to be covered through a GLEIF-provided challenge facility. ***Functions associated with the oversight of the UPI System*** *Oversight of production and routine maintenance* (a) Coordinating as necessary and where appropriate with market participants, UPI Service Providers (if there are more than one), third parties who issue any underlier identifiers used in the UPI Reference Data Library, infrastructure providers, and regulators with regard to changes in or introductions of the identifiers of underliers. Best placed entity(ies): GLEIF (b) Issuing recommendations for further updates or changes to reference data or related data structures. Best placed entity(ies): Regulatory Oversight Committee, GLEIF, UPI Service Providers and Industry Users (c) Overseeing the technical decisions of any UPI Service Provider, and ensuring that there is a mechanism for responding to complaints and inquiries. Best placed entity(ies): GLEIF

Questions	Answers
	(d) Coordinating with international regulatory oversight bodies and Authorities. Best placed entity(ies): GLEIF *Functions associated with implementation* (a) If the FSB were to determine that there should be an International Data Standard for the UPI Code and/or any UPI Reference Data Elements, taking necessary steps to achieve such a standard. Best placed entity(ies): International Organization for Standardization (ISO) (b) Recommending a coordinated approach for UPI implementation by Authorities, including timing aspects. Best placed entity(ies): Regulatory Oversight Committee (c) Implementation of the UPI through Authorities' rules and regulatory oversight, as appropriate. Best placed entity(ies): Global Regulators *Functions associated with oversight of ongoing operations* (a) Disseminating UPI Technical Guidance. The UPI Technical Guidance, as addressed to Authorities, shall be disseminated to facilitate its broad application.

Questions	Answers
	Best placed entity(ies): CPMI-IOSCO, Regulatory Oversight Committee (b) Overseeing the UPI Service Provider(s) and the monitoring of their adherence to the UPI Technical Guidance, the UPI Data Standard, any other standards relating to the UPI System that may prevail, the UPI Governance Arrangements, and any terms or conditions forming part of such arrangements. Best placed entity(ies): GLEIF (c) Taking any action with regard to the provision of services by the UPI Service Provider(s), including applicable procedural safeguards. Best placed entity(ies): GLEIF (d) Monitoring implementation of the UPI by Authorities. There may be the need to monitor implementation at the global level and identify implementation issues which hinder a harmonised approach. Best placed entity(ies): Regulatory Oversight Committee (e) Conformity assessment on the extent to which UPI-related processes (including generation, applications for UPIs, etc.) are being conducted in conformity with the UPI Technical Guidance, the UPI Data Standard, and any other standards relating to the UPI System that may prevail. Best placed entity(ies): GLEIF

Questions	Answers
	(f) Coordinating the analysis of and response to issues relating to the UPI Data Standard (and any other standards relating to the UPI System that may prevail), UPI Technical Guidance updates and maintenance with other relevant standard-setting bodies, standards development organisations, regulators, or Authorities. This may include coordination relating to changes in or introductions of identifiers of underliers. Best placed entity(ies): GLEIF, CPMI-IOSCO, ISO (g) Receiving and considering any recommendation by a UPI Service Provider for further updates or changes to reference data or related data structures. Best placed entity(ies): GLEIF (h) Considering updates to the UPI Technical Guidance and the costs and benefits of updates to the UPI Technical Guidance. Best placed entity(ies): CPMI-IOSCO (i) Reviewing the use of the UPI by market participants, UPI Service Providers and relevant Authorities. Best placed entity(ies): Regulatory Oversight Committee, GLEIF

Questions	Answers
	(j) Processing requests for information and providing clarification on the UPI Technical Guidance. Best placed entity(ies): CPMI-IOSCO (k) Maintenance of technical aspects of the UPI Data Standard (and any other standards relating to the UPI System that may prevail) as an International Data Standard. Best placed entity(ies): ISO
Q20. Do you see a need for the UPI Reference Data Elements to be standardised by an International Standardisation Body and if so why? Are there aspects in which this would be impracticable? If so, please describe those aspects.	GLEIF proposes that, in addition to the standard structure for the UPI code, the UPI Reference Data Elements also should be standardized by an International Standards Body. With GLEIF's experience with the International Organization for Standardization for the ISO 17442 LEI standard and the ISO 20275 Entity Legal Forms (ELF) standard, GLEIF proposes that ISO/TC 68 could undertake this development. More specifically, GLEIF supports the principle that the meaning of identifier codes should be represented by reference data records (also known as metadata) composed of the necessary elements needed uniquely identify the subject being identified. This will make the codes persistent as updates to the metadata of the codes will be made as information about real world objects change. This would support the UPI Technical Principles of Consistency, Persistence, Adaptability, Comprehensiveness and Extensibility.

Questions	Answers
	Further, each element in the reference data records should be defined formally. Reference data standards should use consistent notations and representations of the same concepts across the catalogue of reference data standards. This would support the UPI Technical Principles of Clarity and Precision. Reference data standards should use other ISO standards, where available, to represent elements within reference data records as structured data. For reference data record elements that are not represented by other structured ISO standards, the technical structure/format of these elements should be specified in the reference data standard. Using structured data elements will insure data quality. Both these points support UPI Technical Principle of Precision.
Q21. What benefits of implementation of the UPI, if any, do you see beyond OTC derivatives reporting? Please justify your answer.	This question is considered out of scope for GLEIF.
Q22. What would be the respective costs and benefits of the different potential models to administer the UPI System specified above?	As noted in the consultation document, the GUUG is considering one single UPI Service Provider across all asset classes or multiple UPI Service Providers. GLEIF responds in the context of the many service providers (LOUs) that operate in the Global LEI System and the costs and benefits that GLEIF feels is relevant for the GUUG consideration for the UPI system. As mentioned in question 13, the Global LEI System is heavily dependent on local law that defines a legal entity and the ability to reach and

Questions	Answers
	communicate locally to legal entities in the local language. As such the Global LEI System operates with multiple Service Providers and a central body overseeing the operations (GLEIF). The benefits of this model include: • the strong local expertise that exists within the Global LEI System especially for validation of LEI reference data (both Level 1 business card data and Level 2 data on direct/ultimate parent ownership), • the ability to communicate with legal entities around the world in terms comfortable and specific to the legal entity, • the ability to facilitate entering into contracts and exchanging payments with legal entities around the world, • continuous improvement of the Global LEI System based on hands on experience of the LOU and using English as the common language between GLEIF and the LOUs • detailed consultation process which allows for local engagement and buy-in from LOUs and LOU clients, • a federated model which could easily improve over time with the application of new technologies, such as distributed leger technology, which would allow real time updating of the Global LEI Index

Questions	Answers
	The costs associated with this model include: • Some of the technical infrastructure supporting LEI issuance and renewal is duplicated across all LOUs As noted in question 13, some of the operations could be more efficiently centralized in the UPI system, keeping in mind how a federated model is more adaptable to emerging technology such as distributed ledger technologies.
Q23. What would be the impact on market participants and other key stakeholders of having multiple UPI Service Providers (whether across asset classes or serving the same asset class) in terms of:	
(a) cost;	As noted in the response to question 22, having multiple service providers in the Global LEI System results in some duplication of technical infrastructure, thereby leading to higher cost across the Global LEI System. However, this structure does avoid lock-in or dependence on one service provider. The founding documents from the FSB identify this as an important principle: • Recommendation 6. COMPETITION AND ANTI-TRUST CONSIDERATIONS The LEI system should be designed to ensure that it is not "locked-in" with a particular service provider for any key system functions or processes, and that the principles of competition are ensured on both global and local levels where appropriate. The governance framework should provide safeguards to ensure that competition principles and anti-trust considerations

Questions	Answers
	are upheld. The local implementation of the global LEI system should meet local anti-trust requirements
(b) ease of use of the UPI System;	As mentioned in questions 11 and 22, a user may access the LEI and its reference data either via GLEIF or the LOUs. This gives the user choice and also ensures the business continuity of the Global LEI System as the user can decide to access information one-by-one at the individual LOU (individual service provider) or from GLEIF (central operations).
(c) their ability to conform to the UPI Technical Guidance; and	If multiple service providers are chosen, it is important to have a central body monitoring and ensuring data quality including adherence to UPI Technical Guidance. The ability of the UPI Service Providers to adhere to the UPI Technical Guidance would need to be qualified during accreditation and thereafter through regular data quality monitoring and annual accreditation verification.
(d) their ability to associate UPIs with products in a timely manner at least to facilitate the discharge of reporting obligations for OTC derivative transactions?	Having multiple service providers in the Global LEI System allows flexibility for the registrant – depending on jurisdiction, as the registrant has a choice between several LOUs providing service in the registrant's jurisdiction (see

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	GLEIF website for further detail: https://www.gleif.org/en/about-lei/how-to-get-an-lei-find-lei-issuing-organizations). This ensures the registrant has a choice service providers based on price and/or service.
Q24. Should one or a limited number of UPI Service Providers be selected at the outset? Should the UPI Governance Arrangements allow for additional UPI Service Provider(s) to be incorporated over time?	GLEIF suggests the GLEIF accreditation process is a useful structure to select one or a limited number of UPI Services Providers at the outset, with the flexibility to add more UPI Service Providers over time. For the Global LEI System, any organization may apply to become a LOU. This organization must then go through a six stage process whereby it: - describes its business interests in providing LEI services - presents its accreditation documentation describing its entity/organization structure, financial data, audits and general governance, cost recovery requirements, LOU services, required website items, records management, software development, networks & infrastructure, IT Security & Compliance, and data quality management - is ultimately approved by GLEIF in consultation with the LEI ROC The accreditation process and requirements are published to GLEIF's website ensuring transparent requirements and consistent evaluation of

Questions	Answers
	any interested party (https://www.gleif.org/en/lei-system/gleif-accreditation-of-lei-issuers). A similar accreditation process also would allow for the governing bodies to accept or reject applications for UPI Service Providers depending on the UPI system's business needs or the applicant's ability to fulfill the expected service requirements. Please note the Global LEI System initially started with a system of endorsement by individual regulators of the LEI ROC and evolved to the more transparent and standardized process of accreditation by GLEIF.