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Re: Financial Stability Board Consultation Document regarding Governance Arrangements for the UPI – Second consultation document (April 26, 2017)

IHS Markit (Nasdaq: INFO) is pleased to provide its comments regarding the Consultation Document ("CD") entitled Governance Arrangements for the unique product identifier (UPI): Second consultation document to the Financial Stability Board ("FSB")'s Working Group on UTI and UPI Governance ("GUUG"). Many of the points that we include within this response, confirm and reiterate our response and comments to the questions in the First consultation document dated October 3, 2017, in our return letter dated November 17, 2017.

I. Introduction

IHS Markit is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions.

We strongly support the global UPI initiative, which has the potential to significantly enhance the utility of OTC derivatives reporting data by greatly facilitating regulators' aggregation of this data through the standardized representation of products. We support this purpose and intend to help regulators move forward with a plan to increase their ability to aggregate and therefore utilize derivatives data.

IHS Markit has been servicing the credit OTC derivatives industry since 2003 and is an integral part of credit derivative workflows. We hold a unique position in reference data and this provides us with a view of how this market operates and the challenges regulators face. Our Reference Entity Database ("RED") provides legally verified reference data

across credit, loan, and fixed income asset classes to the industry. The RED service has two core components:

1) RED6 Codes - a six-digit code that corresponds to a particular reference entity;
2) RED9 Codes – also known as RED Pair Codes that are nine-digit codes representing a unique reference obligation with a corresponding reference entity.

RED Codes are market standards and are deeply embedded in the pre- and post-execution credit trading workflows. These identifiers are also widely used in risk analytics, pricing and valuations, trade confirmations, electronic trading, clearing, settlement and trade allocations.

When the FSB eventually seeks to recognize UPI Service Providers, the RED database would enable IHS Markit to potentially deploy a UPI solution for credit derivatives easily and our data management experience and expertise would place us in an excellent position to manage UPIs in other asset classes. For any of the asset classes where we might ultimately be recognized as UPI Service Provider, we would deliver a UPI in a manner compliant with the GUUG UPI Governance Framework, the UPI technical standard, and authorities' respective reference data requirements for the UPI.

To assist the FSB in this latest consultation in reaching its conclusions on aspects of the appropriate Governance Arrangements for the UPI System, we have provided below holistic thoughts around the key focus areas as outlined in the CD, and we follow-on from this with our response to the FSB's specific questions.

Key criteria, governance functions, and areas of governance

We believe the "lean" criterion is most important for the governance model, i.e. the Governance Arrangements should not be unnecessarily complex or costly (as described in the previous consultation document)[1]. The UPI Service Provider(s) should act as a central self-regulatory organization(s), subject to clear governance and data standard requirements, subject to regulatory oversight. Complex governance models with open-ended purposes like the Global LEI Foundation ("GLEIF") should be avoided as they are inappropriate for UPIs.

The UPI Service Provider should be generally responsible for performing the governance functions subject to public (regulatory) oversight. Any material changes to the UPI System should be published through publicly available rule amendments and there should be a mechanism for the industry and others to comment on such rules. Regulators, in turn, can demand certain rule changes as a condition of their approval of the UPI Service Provider as a source of UPIs. Members of the public, including market participants, should be allowed to petition the UPI Service Provider with rule changes. In any case, whether it is the UPI Service Provider, the regulator, or the public, any policy changes should be consistent with the UPI Governance Framework and criteria.

[1] [http://www.fsb.org/wp-content/uploads/P031017.pdf]

In certain circumstances, it may be appropriate to have regulators perform the governance functions. For example, it is appropriate to have regulators carry out governance functions associated with implementation and the oversight of ongoing operations in close cooperation with the UPI Service Provider. Furthermore, regulators should ensure that the UPI serves its primary Public Interest mandate: to facilitate data aggregation in support of regulators' regulatory objectives.

We believe that the establishment of a Unique Identifier Regulatory Oversight Committee (UIROC) would bring a further layer of authority to the structure and they would play a key role in the coordination with international regulators and oversight Authorities and any regulatory aspects of the implementation, such as adapting relevant International Data Standards.

The UIROC should also ensure consistency in a multiple UPI Service Provider environment and would be well positioned to monitor the fee structure and recovery model implemented by the UPI Service Provider(s).

To ensure the correct focus to each asset class there should be a multiple Industry Representation Group (IRG) structure with individual asset class specific IRGs working with and providing oversight to the UPI Service Provider(s). This would be even more important if the FSB decides that there should only be a Single UPI Service Provider because the single provider would face the challenge of having to provide coverage across diverging classes with different characteristics and regulatory landscapes. We have seen examples in similar structures where the Single Identifier provider has created and published multiple erroneous identifiers and one of the contributing factors to this has been a lack of specific asset class expertise.

We also believe a single UPI Reference Data Library would be required to provide consistency across all asset classes in a Multiple UPI Service Provider model. Otherwise this would be unnecessary.

Fee models and cost recovery

The operating principle for the UPI cost recovery model should ensure that the UPI Service Provider should be neither burdened nor derive benefit from producing UPIs and maintaining the UPI Reference Data Library. In other words, the UPI should be deployed in a manner that is unbundled and cost neutral.

Applying this principle to costs, the UPI System should operate on a cost recovery basis. The danger is, however, that without clarity a UPI Service Provider could abuse the concept of cost recovery. We therefore recommend that the GUUG develop clear guidelines on this.

We also believe that the benefits of producing the UPI should be contained. For example, there should be no bundling of UPI with non-UPI services.

The most extensive costs for the UPI Service Provider are likely to occur at the start-up stage (i.e. when the UPI System infrastructure is built and the first and largest set of UPI codes and the UPI Reference Data Library are created). These costs are likely to be substantial and, as such, should be allowed to be amortized and recovered over a period of years at a rate that reflects a standard time cost of money. In contrast, operational costs should be estimated a year in advance.

The most equitable way to allocate costs among stakeholders would be to charge stakeholders based on (1) frequency of use and (2) type of use. A market participant should, therefore, be charged based on each look-up or UPI reference in a regulatory reporting record. Higher cost allocations should be charged to dealers and market infrastructures who derive the most value from reference data generally. UPI look ups and references that lead to the creation of a new UPI should be charged more to provide the UPI Service Provider funds to build the UPI Reference Data Library to help defray start-up costs. In no event should market observers, e.g., regulators, researchers, curious members of the public, be charged a fee to access the UPI Reference Data Library.

The basis for cost recovery should be marginal cost. Cost recovery budgets should be developed annually and disclosed publicly at a balance sheet level. These cost recovery plans should be reviewed at a granular level annually through external audit and with oversight from the UIROC. The cost of the external audit itself should be a cost included in the cost recovery plans. The external audit report should be made available to regulators mandating the use of the UPI.

A UPI Service Provider should be required to meet certain clear cost-recovery requirements with clearly defined rules to prevent opportunistic behavior. For example:

1. There should be no ability to bundle additional data or services through the UPI distribution channels, i.e. any data or services that may complement the UPI System but are not required to be a part of the UPI under a given jurisdiction's requirements should be delivered completely outside the UPI delivery system.

2. Revenues exceeding costs can only be used for specific purposes, i.e. (a) to cover future expenses or (b) to refund the UPI Service Provider for any capital set aside at start-up or (c) as recoupment of start-up costs not yet recovered.

3. We defer to the GUUG as to whether a UPI Service Provider should be allowed to make a profit. If so, we would advise that the profit be set at a reasonable level, these profits be generally retained, and only issued through dividends to a parent company after considering the above factors (see (2.) above).

4. Fair, reasonable, and non-discriminatory ("FRAND") terms should govern connectivity to the UPI, preferential access to Application Programming Interfaces ("APIs") should not be used as a mechanism to favor affiliates of the UPI Service Provider over others.

5. Outsourcing of any service, e.g., management services, should be on a fixed fee basis and under no circumstances as a percentage of revenues to prevent conflicts of interest.

Intellectual property, standardization and other benefits of the UPI

Use of the UPI Reference Data Library should be unrestricted for uses consistent with the Public Interest basis for the global UPI initiative, i.e. supporting data integration by regulators. Any uses that go beyond this and disrupt existing contractual relationships, trademark, copyright, or the proprietary nature of certain data elements contained in the UPI Reference Data Library should be prohibited.

We recommend that the GUUG clarify that unrestricted use of the UPI and UPI Reference Data Library should extend only to use cases consistent with the Public Interest. Certain elements of a UPI Reference Data Library would represent commercial investment, such as reference benchmarks, and be intellectual property.[2] Opening the entire UPI Reference Data Library to unrestricted use would lead to a withdrawal of such value adding services and disincentivise innovation, something that would lead to a diminished service for all stakeholders.

In our previous response we outlined our proposal for the "Green code" concept. The Green code would be delivered to enhance the UPI's contribution to regulators' ability to aggregate derivatives data, the initiative's core purpose. The Green code could also enhance the transparency of publicly-available UPIs and regulatory reporting data and also enhance the utility of the transparency of the UPI Database. The Green code (General REference Entity and Name) would be a unique 8 digit alphanumeric code used to represent uncoded underliers, e.g., reference entities, rates, prices, and indexes that can be represented in varying ways when described through plain language text. The Green code is described in more detail in the attached appendix to our first consultation response letter dated November 17, 2017.

One versus many UPI Service Providers

We think that multiple UPI providers in a single asset class should be avoided, especially at the outset, given the costs and complexity of such an approach. However strongly

[2] For example, a proprietary reference benchmark name may be included in the UPI Reference Data Library, e.g., ICE US Dollar LIBOR, but with "no usage restrictions whatsoever" attached to that name would enable the largest users of the proprietary benchmark to reference the benchmark name in derivatives and other financial contracts without a license.

prefer to see different UPI providers in different asset classes. We believe that having multiple providers in an asset class enhances the potential for duplication of UPIs for the same product. The more complex the model, the more rules and processes would need to be established to mitigate the risk of erroneous publication of UPI data.

A single UPI Service Provider operating across all asset classes is unlikely to have the specialist skills and focus needed for all asset classes and could exert monopoly power, particularly if it is given an open-ended mandate and squeezes out other reference data and service providers.

We believe that the marginal cost of a single asset class UPI Service Provider providing the service in areas where that service provider is already the source of reference data for that asset class would be minimal. This would be as that reference data vendor could deliver through a parallel but separate mechanism the UPI at low cost, easily, in a compliant and timely way. This assumes the lowest marginal cost UPI Service Provider would be willing to deliver the UPI pursuant to the Governance Framework.

Where there is no obvious existing service provider and the reference data is not complicated, e.g., foreign exchange, then a single asset class Service Provider would still be the optimal model for cost, ease, compliance, and timeliness. This is because the marginal start-up cost would be low, as would the complexity relating to connecting to this service provider, and the risk of redundancies

In summary, the pros and cons of each approach are:

- **One single UPI Service Provider across all asset classes** – the key benefit of this approach would be to have only one source stakeholders would need to connect with. However, such a Service Provider may have high marginal start-up costs and times for a certain asset classes, would likely lack specific experitise and focus in some areas and increase the risk of monopoly issues.

- **One single UPI Service Provider per asset class but multiple Service Providers across the UPI System** – the key benefit would be that the UPI System could be built by asset class experts, focussed on each assert class with lower start-up cost and times. The main drawback of this approach would be the need to ensure consistency in data access and delivery to minimize the cost of connecting to multiple service providers. The concept of a central UPI Reference Data Library should circumvent the risk of inconsistent data access and formats.

- **Multiple UPI Service Providers within an asset class and a number of different UPI Service Providers, each of which covers all asset classes** – there would be less reliance on single providers but this approach could only work with clearly defined rules and processes to reduce redundancy, inconsistency and wasteful duplication. The more complex the model, the further the risks and the more the need for such rules and processes.

We believe the most suitable model would be for a single UPI Service Provider to be selected per asset class, subject to clearly defined rules (that can be developed by these service providers) to prevent redundancies and a consistent approach to UPI assignment.

Even if there was no existing provider (or no willing provider) who could potentially provide a UPI service quickly at low marginal costs, our Green code proposal could be targeted at certain asset classes (e.g. FX and commodities) to provide a UPI service at a relatively low marginal cost.

II. Answers to CD Questions

Q1. Do you agree a public-private partnership model should be adopted for the UPI Governance arrangements?

We believe that complex public-private governance models are unnecessary in the product identifier context given that the market for product reference data is relatively mature and does not have the collective action problem or lack of existing reference data sets that would justify the public-private governance that applies for other categories of reference data.

A complex, public-private hybrid, like the GLEIF would be inappropriate, unnecessarily complex, and slow down the implementation of the UPI. The LEI was developed to solve for a particular-collective action problem, i.e. the problem of mapping the world of legal entities to facilitate aggregation of entity-level risk by regulators that had no precedent in the reference data market. Such a collective action problem benefitted from a broad representation among the industry through the GLEIF and among regulators through the LEI Regulatory Oversight Committee. A public-private governance model without strict constraints would have the potential of furthering certain private interests at the expense of other private interests with the legitimizing power of public backing.

In contrast, the UPI is emerging out of an existing reference data ecosystem. This is particularly true in the case of certain asset classes like credit where there is an existing prototype for the credit UPI in IHS Markit's RED code. The UPI Governance Arrangement should therefore reflect the existing market structure for product reference data and work with it, rather than against it.

Q3. How should Governance Arrangements for the UPI System be funded?

Any accumulative third-party costs, due to representation and work undertaken as a member of the UIROC or IRG should be recovered as part of the UPI Service Provider(s) ongoing cost recovery model.

Q4. Do you consider the Governance Arrangements described are appropriate and adapted to provide oversight on fees and cost recovery?

We consider the Governance Arrangements appropriate, with the UIROC well positioned to monitor the fee structure and recovery model implemented by the UPI Service Provider(s).

Q5. Please provide any specific suggestion to promote adherence to the cost and open access criteria, including suggestions relating to escalation procedures, including complaint handling bodies and processes?

We would expect a cost recovery mechanism to be approved at IRG and UIROC level, with ongoing adherence on a periodic basis. Any planned or suggested changes to fee schedules or alterations to the model would need to be approved by the IRG and UIROC. Any escalations or complaints would be channeled through the UPI Service Providers and IRG to the UIROC and vice-versa.

Q6. If you believe that start-up costs should be fully recovered by a UPI Service Provider, how should they be allocated between earlier- and late arriving subscribers? For example, over approximately how many years should the start-up costs be amortized?

Start-up costs should be amortized over an initial 3-year period. Later arriving subscribers would pay an adapted start up tariff based upon a pro-rata calculation.

Q7. If revenues for a year have exceeded or fallen short of anticipated costs for that year, should the UPI Service Provider have a mechanism for rebating or recovering the excess, either during that year or at a later time?

Yes, the UPI Service Provider would rebalance the fees/ticket tariff to alter the costs in the following semi-annual/annual period. Any rebates could also be used to pay back or reimburse in part those early adopters.

Q8. Do you believe that a UPI Service Provider should be allowed to cross-subsidize the provision of UPI Services with revenues from other business lines, either with regard to start-up costs or on an ongoing basis? Why or why not?

We would be open to cross-subsidizing revenues from other business lines with one positive outcome being that this would reduce fees. The UPI Service Provider function should however be a ring-fenced isolated function that is not reliant on, or subject to, the commercial benefits/downfalls of alternative Business lines.

Q9. Should a UPI Service Provider be permitted to provide value added-products and services (i.e., products and services that incorporate UPI data but are not required by the UPI Technical Guidance)?

There could be opportunities to provide mapping of products against the UPI Reference Data Library which would provide potential efficiency gains in terms of end-to-end workflows that incorporate Pricing, Settlement, Confirmation, Reference Data and Reporting workstreams. Market Participants should not feel compelled to purchase additional products, although, should these products provide value-added services that could automate and streamline workflows, they should not be restricted from purchasing them. Any value-added products should be provisioned separately and be unbundled from the UPI service.

Q10. What is your evaluation of the risks of restrictive practices limiting open access, e.g. through the bundling of UPI Services with value-added services? How and by whom could such practices be prevented or restricted?

The risk of bundling UPI Services with value-added services is that in doing so the UPI itself is no longer open because the UPI users would feel compelled to subscribe to the value-added services, which would be unregulated, in order to access the UPI Reference Data Library. Any value-added services should be offered in an unbundled fashion and thereby subject the value-added services to market discipline, whilst ensuring that the UPI serves its intended purpose while remaining open. We note that a hard prohibition against any value-added services would reduce the attractiveness of the UPI. For UPI Service Providers there would be less incentive to produce a quality UPI that meets regulatory UPI as well as broader commercial purposes, and for UPI users who now have the option of a UPI that is also integrated into their commercial operations.

Q11. Should a UPI Service Provider that engages in other business activity be required to "ring fence" its UPI functions? If so, what sort of corporate, legal, and/or accounting mechanisms would be necessary to effect such an arrangement?

We believe that "ring-fencing" of the UPI function would avoid conflicts of interest and the potential for bundling of services. The isolation of a separate UPI Service with dedicated resource, management layers, governance, oversight and a separate unbundled commercial model would ensure that efforts were concentrated on promoting an effective UPI Service. All documented UPI Service Provider agreements should be easily accessible and all affiliations to the separate UPI Operating Company would be separately and clearly documented.

Q12. Should ownership of any intellectual property created by a UPI Service Provider be assigned to a third party in order to maintain and ensure continuation of open access in the event that the provider

were to become insolvent or subject to administration or voluntarily withdraw? If so, how should that third party be structured?

A copy of any IP used in generating UPIs should be kept in escrow, something that would follow standard market practice

Q13. Should access to a vendor-proprietary identifier in the UPI Reference Data Library be limited to only those market participants who have a corresponding license agreement with the respective vendor? If so, how should that underlying asset or index be identified for non-licensees?

We do not believe vendor-proprietary identifiers should be included in the Reference Data Library, however in the event they were to be then access to this vendor-proprietary identifier would require the appropriate licensing. In many cases, any market participant involved in the use of a particular reference benchmark as a data input or reference rate for valuation, transactional, or benchmarking purposes must obtain a license with the benchmark administrator. If a UPI and UPI Reference Data Library includes this benchmark and the UPI containing the proprietary benchmark is available for use without any use restriction whatsoever, then an opportunistic market participant could avoid the need to license the benchmark by referencing the UPI in commercial contexts, e.g., trading and settlement. This would reduce investment and innovation in these areas and make the benchmark industry susceptible to a "tragedy of the commons" scenario.[3]

In our first consultation response we outlined our proposal for the creation of a unique code, which we call a Green code, that would be delivered to enhance the UPI's contribution to regulators' ability to aggregate derivatives data, the core purpose of the UPI initiative. This code would represent uncoded underliers, e.g., reference entities, rates, prices, and indexes that can be represented in varying ways when described through plain language text.

Q14. Do you believe that whatever possible, elements within the Reference Data Library should use established International Data Standards?

We agree that where possible and applicable International Data Standards should be established and would reduce the potential for regional inconsistencies or those caused by multiple UPI Services.

Q15. Do you agree that, for similar reasons as were given in the UTI Consultation, the ISO is the most appropriate body to undertake the functions of an International Standardisation Body for the UPI?

[3] What is the "tragedy of the commons?" The story of the "tragedy of the commons" comes from the 19th century when William Forster Lloyd observed that in a public grazing pasture (the "commons"), each herder has the private incentive to graze the commons without regard to the costs of such grazing to the community. When all of the herders respond to these incentives, the pasture is not adequately maintained and becomes barren and overgrazed.

We agree that the International Organisation for Standardisation (ISO) would be a suitable body to undertake the function of standardisation for data elements in the UPI.

> *Q16. Do you think it desirable that all Data Elements in the UPI Reference Data Library be subject to ISO standards?*

We do not agree that all Data Elements should be subject to ISO standards. Where possible and applicable it would be desirable for Data Elements to be subject to ISO standards, however where an ISO standard has not already been developed it could be due to ISO not being the best source for that particular reference data. A universal standard for all Data Elements may not always be the best approach.

> *Q17. Do you agree with the FSB's preliminary conclusions about code-lists and related topics - required use of ISO standards and values for specific Reference Data Elements?*

We agree with the FSB's preliminary conclusions where ISO Standards already apply but where they are not already implemented please see our response to Q 16.

> *Q18. If you believe that the UPI can and should be used for purposes other than solely regulatory reporting, describe in detail and provide specific examples of any such additional purposes*

We believe that initially the UPI should be used solely for the purposes of regulatory reporting. We note that the regulatory purpose of the UPI, to facilitate data aggregation, is the central purpose of the UPI and at the root of its Public Interest mandate. Among other places, the mandate creating the UPI is described in the CPMI-IOSCO Report on OTC derivatives data reporting and aggregation requirements final report, "a structure for identification of different OTC derivative products is also required to achieve the objective of aggregation of trade data across TRs."[4] Any additional intended purposes would be outside the scope of the UPI Public Interest mandate and would be questionable from a policy and legal perspective. This is especially true if the UPI mandate was to start to diverge in a way that it disadvantages certain reference data vendors or users to the benefit of other reference data vendors or users in a manner that could not be seen as a logical consequence of the UPI Public Interest mandate.

While we stress that the UPI Public Interest mandate should be on enhancing the value of regulatory reporting for authorities, we note that a UPI subject to a UPI Governance Framework commensurate with the underlying UPI Public Interest mandate can have other unintended benefits. For asset classes lacking product reference data standards, the UPI will likely reduce transaction costs and operational risks. The UPI will also enhance the ability of reference data innovators to build off of the public UPI and public elements of the UPI Reference Data Library to create new reference data products, e.g.,

[4] Report on OTC derivatives data reporting and aggregation requirements, Final Report dated January 2012 https://www.iosco.org/library/pubdocs/pdf/IOSCOPD366.pdf, at 11.

by mapping reference data products to the public UPI to serve new use cases or new products, e.g., trading and settlement.

We stress however that making transactional cost and operational risk reduction a purpose governing the future of the UPI Governance Framework will likely be counterproductive as a reference data monopoly or "tragedy of the commons" scenario. This is far more likely if the GUUG facilitates an open-ended UPI Public Interest mandate whereby the UPI system begins to attempt to solve reference data challenges beyond regulatory purposes, benefiting some vendors and users at the expense of other vendors and users. A public-backed UPI System can easily crowd out private reference data vendors if the UPI Governance Framework is not given a clear and explicit Public Interest mandate, deterring investment in high quality and marketable private reference data, leading to a tragedy of the commons to the detriment of all market participants.

> *Q19. Considering the pros and cons of each of the above-mentioned models (Single UPI Service Provider model or Competitive model), what would in your view be the most suitable? Please provide detailed reasoning.*

We believe that one Single UPI Service Provider Model per asset class would be the most suitable model. There are benefits to the Single UPI Service Provider in that there would only be one source and therefore only one Service Provider to connect to. This model may also not require the additional layer of a single UPI Reference Data Library as the Single Service Provider could offer this function.

However, a Singe UPI Service Provider across all asset classes could exert monopoly power, particularly if given an open-ended mandate. It could squeeze out other reference data providers which could create operational risk in the market, especially where they, the affected data firms provide established services that support existing operational workflows. There would also be little incentive for such a Service Provider to invest in future technology enhancements and innovation. Furthermore, establishing a single provider across all asset classes is likely to lead to higher start-up costs and less focus and expertise on some asset classes.

We believe that the Multiple UPI Service Provider Model with a single UPI Service Provider for each asset class would provide the most benefit. UPI Service Providers under this model would be more likely to be built by asset class experts and face a lower start-up cost and times. It is our opinion that it would be difficult for one Single UPI Service Provider to provide the level of expertise required to effectively support the industry at an asset class level. Without the relevant subject matter expertise an operator might not be able to apply the necessary due-diligence and experience to identify an abnormality. Without this specific knowledge the market may well open itself to the risk of duplication and incorrect allocation of Identifiers. In a Multiple UPI Service Provider Model, we believe the most efficient Governance Structure would be for one Global UIROC providing oversight and consistency across each of the UPI Service Providers. This would also

ensure that the Commercial models of each UPI Service Provider would be consistent and transparent.

The Competitive Model could only work with clearly defined rules and processes, but this should be avoided, especially at the outset given the costs and complexity of such an approach.

Q20. Do you believe that there should be a single UPI Reference Data Library if multiple UPI Service Providers coexist in the UPI System? Why or why not?

A single UPI Reference Data Library would add an additional layer of cost overall but would be necessary in ensuring consistency across a multiple/competitive UPI Service Provider model. It would be essential for communications to be set between the Reference Data Library Control team and UPI Service Provider(s) to identify whether Identifiers for particular products already exist, to avoid duplication of identifiers.

Q21. What would be the value added in having competing UPI Service Providers if there was a single entity centrally managing the UPI Reference Data Library?

Competing UPI Service Providers would reduce the risk of disruption should a UPI Service Provider withdraw or fail.

Q22. How could the applicable technical principles and governance criteria be followed if there were multiple UPI Service Providers?

The Governance Structure should include a Global UIROC with an across Asset Class IRG positioned above individual Asset Class IRG's providing oversight to the asset class specific Service Provider. The UIROC and IRG structure would ensure consistency in terms of following and applying consistent technical principles and governance.

We hope that our comments are helpful to the FSB GUUG. We would be more than happy to elaborate or further discuss any of the points addressed above in more detail. In the event you may have any questions, please do not hesitate to contact Charles Palmer, Director for Credit Derivative Reference Data in the Finance – Information Division Charles.palmer@ihsmarkit.com or +44 20 7260 2327