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Submitted via email

Re: CPMI-IOSCO - Harmonisation of the Unique Product Identifier -- Second Consultative Report -- August 2016

Bloomberg, L.P.'s¹ Open Symbology Group (Bloomberg) thanks CPMI-IOSCO for the opportunity to respond to the Second Consultative Report (Report) regarding the Harmonisation of the Unique Product Identifier (UPI) published in August 2016.

As we stated in our response to the First Consultative Report,² Bloomberg supports the effort to develop a global UPI standard. Providing regulatory supervision and oversight of increasingly interconnected, global financial markets requires a modern approach to data infrastructure that allows regulators to aggregate, manipulate, and analyze financial data across asset classes, entities, markets, and jurisdictional borders. The UPI is an essential step to accomplish these goals.

The UPI will yield operational benefits to industry participants by simplifying product identification for regulatory and commercial purposes. Bloomberg's answers to the consultation questions below draw upon our deep experience with product identification, our development of the Financial Instrument

¹ Bloomberg, L.P., the global business and financial information and news leader, gives influential decision makers a critical edge by connecting them to a dynamic network of information, people and ideas. The company's strength – delivering data, news and analytics through innovative technology, quickly and accurately – is at the core of the Bloomberg Professional service, which provides real time financial information to more than 325,000 subscribers globally. The comments set forth herein are based on BLP's deep expertise in transaction reporting, data management, and analytics.

² Bloomberg, L.P.'s response can be found at:
<http://www.bis.org/cpmi/publ/comments/d141/bloomberg.pdf>.

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Global Identifier (FIGI) open symbology,³ and our decades of experience with managing data pursuant to other symbologies used by our customers along with their associated data requirements.

As the UPI is considered, it is important to keep in mind both the UPI's defined objectives as well as the UPI's role more broadly in identifying OTC derivative instruments (and any other instruments).

The UPI, at a minimum needs to:

- serve as a point of useful aggregation;
- address specific goals for analysis and transparency at the lowest level necessary to meet regulatory needs; and
- enable regulators to perform required analysis of over-the-counter (OTC) trades reported to trade repositories.

The G20 leaders committed, in 2009, to mandatory reporting of OTC derivatives trades to Trade Repositories to "improve transparency, mitigate systemic risk and protect against market abuse."⁴ Being able to aggregate and analyze OTC trades is critical to this.

As noted in the Financial Stability Board's September 19, 2014 publication, *Feasibility study on approaches to aggregate OTC derivatives data*,⁵ a key requirement for regulators is determining the levels at which aggregation needs to occur and by what classes individual instruments need to be grouped.

CPMI-IOSCO has proposed, in this Report, a set of data elements to enable aggregation for risk monitoring purposes. These include data elements that describe more general concepts for aggregation points (i.e. asset class, option type, etc.) and specific potential risk groupings (currency, currency pair, underlier, etc.). Properly and uniquely identifying these groupings is a critical building block for accurate analysis of reported trades that meets regulators' requirements.

Given the premium on identification, the actual representation of any UPI code is less important than the

³ FIGI is based on a symbology developed by Bloomberg to establish an identifier and symbology that: (1) provides unique identification at multiple levels of granularity across asset classes, (2) is usable across product lines and markets, and (3) solves the shortcomings of existing identifiers.

Subsequently, recognizing the utility of a uniform, global, open, multi-asset identifier for our clients and financial markets, Bloomberg assigned all rights and interests in FIGI to the Object Management Group (OMG) who now administers FIGI as an open data standard. Selected by an OMG board composed of individuals representing technology and financial firms across the industry, Bloomberg currently acts as the Registration Authority and is a Certified Provider for FIGI assignment.

FIGI is the only existing standard identification symbology currently in production that is a fee-free, license-free activity as per the requirements set out by the OMG.

⁴ See Leaders' Statement, at 9; Pittsburgh Summit (September 24–25, 2009), available at http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf.

⁵ http://www.fsb.org/wp-content/uploads/r_140919.pdf.

need for the chosen representation to provide a workable identification scheme that covers existing and future instruments. What is required is an identifier that uniquely identifies instruments as well as the critical reference data, or metadata, that needs to be linked to such an identifier. Due to the UPI's critical role in the markets and the value it will provide to regulators, Bloomberg believes the UPI should be made available on a fee-free, license-free basis.

Utilizing such metadata, the identifiers themselves require no embedded semantic meaning. A semantically meaningless identifier combined with appropriate metadata provides the simplest, most efficient implementation of the UPI for regulators. The identification of instruments is substantially simplified, freeing regulators to focus their attention on identifying the metadata required to aggregate and group derivatives trades.

Such an approach was utilized successfully in the formulation and implementation of the Legal Entity Identifier (LEI). Bloomberg's own successful, real-world utilization of FIGI demonstrates the benefits and workability of a semantically meaningless identifier approach as applied to product identification.

Combining a semantically meaningless identifier with appropriate metadata allows the UPI to identify, classify and group the extended universe of financial instruments, not just OTC derivatives. This will be important given CPMI-IOSCO's recognition, in the consultation, of the UPI's potential wider applicability. Ultimately, the true utility of the UPI will be found only with the implementation of the UPI across all financial instruments at whatever level of granularity is required to meet regulatory and commercial requirements.

Reviewing the Report, Bloomberg particularly welcomes clarifications regarding 'classification' versus 'reference data,' and the acknowledgement that the UPI must be adaptable to a broader range of existing and future financial products. Bloomberg remains concerned, however, that divergent derivatives identification approaches emerging across jurisdictions threaten realization of the regulatory and commercial benefits that global implementation of a uniform symbology for product identification should provide.

Bloomberg notes, for instance, that last year the European Securities and Markets Authority (ESMA) designated the International Securities Identification (ISIN) number as the sole compliant identifier for financial instruments traded on a trading venue or systematic internalizer.⁶ Bloomberg notes that ISINs have historically had restrictions on their usage. Significant fees are charged for various usages of ISINs, presenting significant costs for market participants. Bloomberg believes this is contrary to principles embodied by existing global standards such as LEI.

Generically, Bloomberg believes the UPI must have the following characteristics:

- 1) Uniform and Global**--It should have the approval of an independent standard setting organization with international representation so that it is a uniform standard and it is verified that any identifier can encode the necessary metadata to allow appropriate classification and

⁶ Final Report, Draft Regulatory and Implementing Technical Standards MiFID II/MiFIR (28 September 2015), https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-esma-1464_-_final_report_-_draft_rts_and_its_on_mifid_ii_and_mifir.pdf.

aggregation.

- 2) **Open Data Standard**--To avoid the conflicts associated with closed, proprietary identifiers that become profit centers for the parties issuing them, an identification standard should have an open license that is available for anyone to use. Open data standards should be favored over closed, proprietary data standards.
- 3) **Multi-Asset**--The identification standard should be able to cover multiple asset classes and be forward compatible with new asset classes.

Widely used today, FIGI embodies all of these characteristics. FIGI currently covers more than 330 million financial instruments, including listed and OTC derivatives. Bloomberg is currently working with the International Standards Organization (ISO) to have FIGI adopted as an ISO standard financial instrument identifier. Bloomberg is also a candidate to become a Local Operating Unit (LOU) for the Global LEI System (GLEIS).

Bloomberg Responses to Consultative Report Questions

Question 1: Do you believe that the data elements within each asset class described above are appropriate? Why or why not? If there are additional subcategories that you believe should be included for one or more asset classes, please describe them and discuss why you believe they should be included.

In the Report, the paragraph preceding the above question indicates that this question relates specifically to the Report's examples of data elements regarding underliers.

Data elements for underlying assets or indices should certainly be included in the reference data for the UPI. The Report's examples of data elements for different asset classes provide a viable approach for the inclusion of underliers. Bloomberg questions, however, the usage of 'underlying asset/contract type' and 'underlying asset/contract subtype' data elements to describe underliers. The characteristics of an underlying asset should be determined from the reference data linked to the data element 'underlier ID.' Therefore, these two fields, if they are included, are better limited to a description of 'Contract type' and 'Contract subtype.'

For underliers, FIGI provides a uniform, global, and open identifier which can be used across asset classes to uniquely identify underliers. A FIGI for the underlier can link to any metadata required to identify the underlier – including asset class and other descriptive information. FIGI could therefore be used in the 'Underlier ID' field in the examples above.

This demonstrates a strong advantage of using a semantically meaningless identifier, combined with appropriate metadata, to implement the UPI. Such an approach allows the same taxonomy to be used to represent products and their underliers. Products and identifiers are linked together by creating the appropriate metadata in the UPI's data element specifications.

Regarding the suggested data elements for credit, rates, commodities, equities, and FX asset classes presented on pages 15 – 18 of the consultation, Bloomberg's view is that the reference data defined by

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the data elements for each product needs to be standardized to the maximum extent possible. Bloomberg recognizes that the data elements for different asset classes or types of instruments may need to vary in order to achieve the granularity necessary to aggregate and classify trades according to the risk management objectives set out by CPMI-IOSCO. While some variation is required, standardization across asset classes will provide operational efficiencies for both regulators and firms. To this end, Bloomberg recommends that CPMI-IOSCO incorporate the recent industry work on derivatives symbology done by the ISO/TC 68/SC 4/SG 2 working group,⁷ the Securities Industry and Financial Markets Association Asset Management Group (SIFMA AMG)⁸, and the International Swaps and Derivatives Association (ISDA) Symbology initiative,⁹ as they have also considered these requirements.

Related to this, Bloomberg has comments regarding the diagram on page 6 depicting the difference between an OTC derivative product, an OTC derivatives contract, and an OTC derivatives transaction. The diagram shows four levels of hierarchy: Instrument Type, Product, Contract and Transaction. As we commented in our response to the previous consultation,¹⁰ we believe that an effective hierarchy should contain an Instrument Level reference data element between the Product and Contract levels. The Instrument Level can include an identifier such as FIGI for the relevant underlier.

The hierarchy within OTC derivatives, when taking into account actual processes and functionality, is more complex than the diagram in the consultation indicates. This is because specific data points used by one process (e.g., pre-trade) versus other processes (e.g., post execution), change in relevance and importance during the trade lifecycle.

For example, prior to execution, a product is identified and distinguished in regards to its tenor, or overall term (10 years, 5 years, 3 months, etc.). However, after execution, the rate (price) and maturity date become fixed. Therefore the 'meaningfulness' of the term 'tenor' is lost; i.e., in 5 years, a '10 year IRS' product will actually be a 5-year product. However, the maturity date remains fixed. With regard to pricing, netting, risk and other asset servicing functions, the maturity date is the unique common characteristic, and the inclusion of any tenor would make proper like-for-like comparisons more difficult.

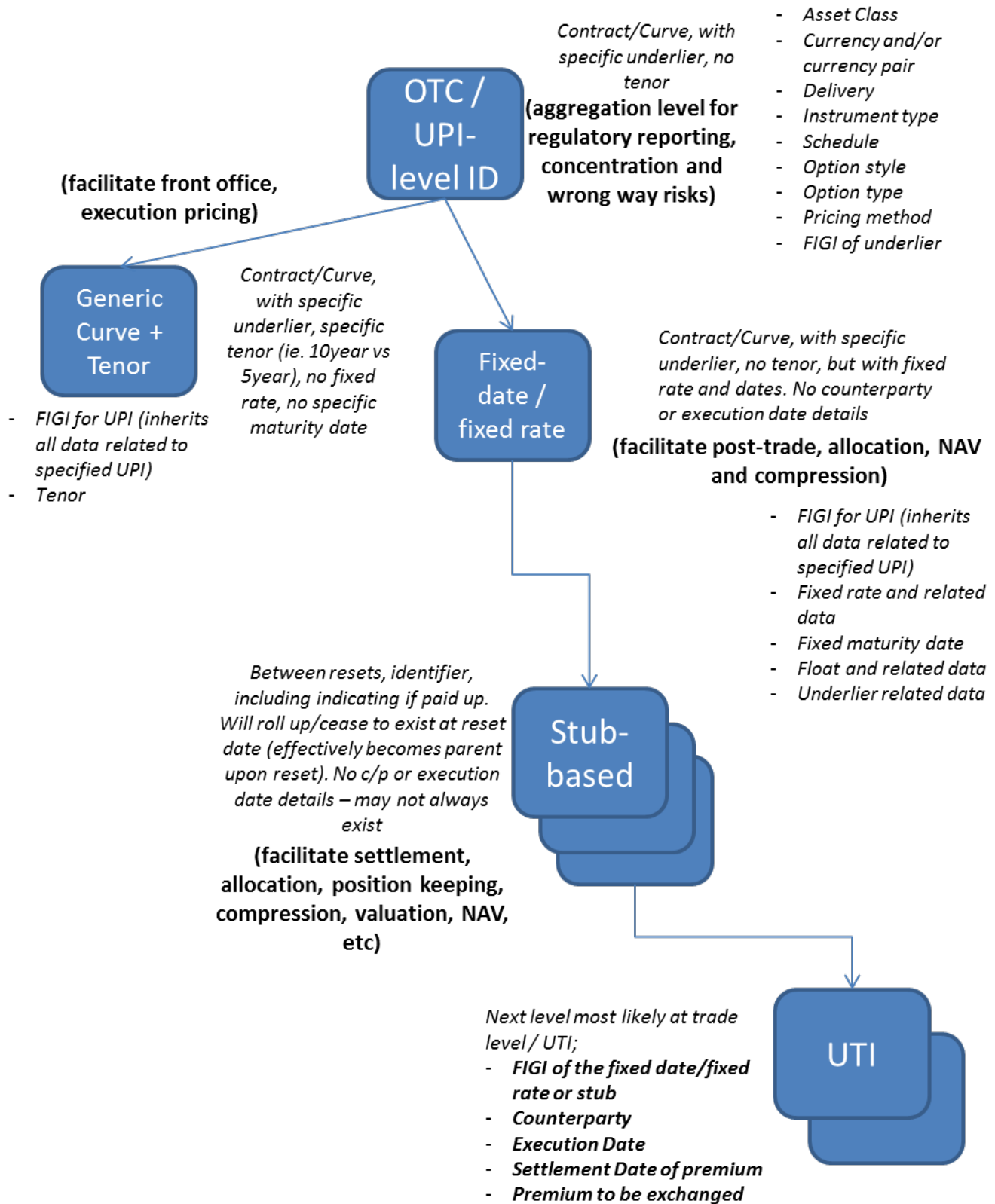
Functionally, any UPI should be a primary part of a framework for identification that supports the trade lifecycle and trade processing functions while providing a meaningful relationship to any regulatory reporting needs. To this end, we would suggest a more nuanced framework for identifying OTC derivatives as follows:

⁷ http://www.iso.org/iso/standards_development/technical_committees/other_bodies/iso_technical_committee.htm?commid=49690

⁸ <http://www.sifma.org/amg/>

⁹ <https://www2.isda.org/functional-areas/symbology/>

¹⁰ <http://www.bis.org/cpmi/publ/comments/d141/bloomberg.pdf>



Under this scheme, any ‘child ID’ would contain a metadata reference to the direct parent up thru any ‘ultimate parent.’ Any ‘Stub-based’ ID would have metadata that makes it unique, as well as the ID of

the 'Fixed-date / Fixed rate' ID and the UPI-level ID. In short, the UPI should be part of a logical standardized framework that provides meaningful granularity at every stage.

Question 2: Do you believe generally that the value “Other” is required in certain data elements? If so, which ones and why?

We would advise against the use of the data element, 'Other', as this can lead to imprecision and ambiguity. Within the FIGI standard, there is flexibility to extend data elements to accommodate variability requirements without resorting to generic non-descriptive data points such as 'Other'.

Where there is ambiguity or otherwise missing data, a null value would suffice rather than an 'Other' data element.

Question 3: For an OTC derivative product based on a custom basket of securities or assets, please provide your view of the optimal means of representing that OTC derivative product. Do you believe that it is practical to include all of the underlying securities or assets and their risk weights in the UPI reference data? If not, how do you believe that the elements of the custom basket and their risk weights should be reported to a TR?

It is not always practicable to include all the reference data for baskets in the direct reference data of the OTC derivative product. Instead, a standard identifier such as FIGI (which has broad coverage) should be used to identify baskets because indices or baskets of instruments are subject to change. From a data management perspective, by using a reference identifier such as FIGI linked to metadata describing an index or basket, any updates are automatically incorporated as opposed to needing to be independently maintained in parallel.

Question 4: How should underlying assets and reference entities be represented in the UPI data library? Would LEIs be suitable, at least for corporate reference entities? Why or why not? Are there suitable identifiers for indices? If not, is it feasible to use an existing identifier such as an ISIN code for them?

We recommend that uniform, global, open identifiers be used to represent underlying assets and entities to prevent ambiguity and to promote an open non-proprietary approach to the implementation of the UPI. Two codes, which between them fulfill this purpose, are the FIGI and the LEI. LEI is the standard open identifier for entities, and FIGI already provides coverage of indices and other underliers for financial instruments. To the extent ISIN remains a closed, proprietary standard, it should be avoided in favor of standards that are global, multi-asset and open.

Question 5: Do you envisage any obstacles to including the source of the identifier for the underlier as part of the reference data element for the underlier? Please explain and justify.

There are likely to be commercial licensing requirements if a closed, proprietary identifier is utilized. Selecting uniform, global, open identifiers such as FIGI and LEI avoids this. There may be cases where some private firms challenge the referencing of index names or other identifiers. Bloomberg notes FIGI has no such restrictions as its intellectual property is owned by OMG and is freely available for use.

Question 6: Could there be issues related to including proprietary benchmarks and indices in publicly available reference data or publicly disseminated UPIs? Please elaborate on any issues, such as licensing, that may exist.

Such problems could certainly arise. We recommend that in considering the UPI, CPMI-IOSCO adopt a clear and accepted definition of ‘open source’ such as the following;

“An Open Standard should be available to the general public at no cost and without restrictions. This includes the identifier, as well as any metadata required by regulation. The identifier and any metadata required by regulation must both be redistributable without costs or limitations.”

Bloomberg has concerns about non-audited, non-regulated ‘cost recovery’ or ‘reasonable and non-discriminatory (RAND) principle’ models that can be abused even when there is a level of oversight. In practice, many of these models have licensing restrictions and rely on proprietary data that carries significant costs and use restrictions for market participants. Where RAND or cost recovery approaches are in place for reference identifiers, there are often implications for what is considered ‘fair use’ by various market participants. Bloomberg is aware of no such concerns regarding fair use in regards to FIGI, which is a uniform, global, open data standard and for which there is no expectation of cost recover

FIGI is an open data standard, trademarked by OMG. FIGI is not dependent upon any proprietary data, proprietary assignment methodology, or proprietary/IP-restricted algorithm for generation of the code or check digit. Bloomberg notes that licensing, redistribution, and fee issues are common for closed standards such as ISIN. These issues can be avoided through adoption of a uniform, global, open identifier standard such as FIGI.

Question 7: What are the arguments for and against the use of a dummy UPI code or an intelligent UPI code, or having both types of code coexisting?

Increasingly, best practices in the data industry require the use of dummy codes (also referred to as ‘semantically meaningless’ codes). This approach was utilized by international regulators in creating the LEI standard. A semantically meaningless code with a formal metadata framework provides both flexibility and promotes data quality. It provides extensibility, which is important in addressing the Report’s acknowledgement that the UPI needs to be adaptable to a wide range of existing and future instruments and asset classes.

A semantically meaningless code also ensures that legacy issues do not impinge on the code, reducing the likelihood of ambiguity and resulting processing errors. A semantically meaningless code helps with persistence, long term viability and scope neutrality, and enables key information to be contained and managed within the metadata set associated with the code.

Question 8: Do you agree that a well-articulated UPI reference data library could support interoperability between dummy UPI codes and intelligent UPI codes? Why or why not? What steps could be taken with the UPI reference data to facilitate supporting both types of UPI code?

As expressed in answer to question 7, the UPI should be a semantically meaningless code, and any

attempt to have both a semantically meaningless code and an intelligent code causes confusion. Given the complexity of some derivative instruments, it would, in any event, be extremely difficult to devise an intelligent symbology that is consistent and adaptable over time.

That being said, it is possible to have ‘intelligent’ metadata for the purposes of human rendering. Descriptive data used for metadata is, by its nature, typically ‘intelligent’ in some fashion. The aggregate sum of the metadata against a semantically meaningless code is what gives that code meaning. If there is some ‘intelligent data’ that would be of use, it could be carried within metadata linked to a semantically meaningless identifier.

Question 9: What are the minimum and maximum lengths (in terms of number of characters) that you believe the industry could accommodate for a UPI code system? How does this vary between dummy and intelligent codes? What do you believe is the optimal number of characters, and why?

The UPI, acting as a semantically meaningless code, should be of sufficient length to provide for a reasonably ‘infinite’ number of permutations. FIGI is 12 characters in length. Identification codes for financial instruments range in size from 3 to more than 30 characters today. However, Bloomberg notes that a standard length of 12 characters has gained common acceptance. Therefore, a static length of 12 would fit well with most regulatory and financial firm systems, and provide trillions of code combinations whilst avoiding an unwieldy length – both things that are particularly important given the vast number of financial products likely to be created over time.

Question 10: For intelligent codes, how should the information be encoded? Are there existing models for this? How much adaptation would existing models require in order to meet the needs described in this consultation?

We do not believe intelligent codes are a wise choice. Our experience has taught us that intelligent codes all have substantial flaws, not the least being built-in legacy issues (i.e., the inability to easily adapt to new field requirements). From a data management perspective, such codes require use of outdated parsing methodologies, result in variable lengths, and result in significantly greater data quality issues.

Question 11: Do you believe that UPI codes should have an inherent means of validation? For example, should UPI codes include a check digit? Why or why not? Does this vary between dummy and intelligent codes and/or depend on the encoding method used in an intelligent code?

A check digit should be included in the 12 character identifier we discussed above. The use of a check digit algorithm, which should also be open source, helps to detect errors in code formulations, eliminates ambiguity and prevents problems associated with the use of an incorrect code.

Question 12: Another means of having a simple, partial validation for a UPI code would be for all UPI codes to be of uniform length: thus, any code that was not of the required length could be recognised as prima facie invalid. Do you believe that all UPI codes should be of uniform length? Why or why not? Or are optimal UPI codes of one asset class likely to be longer or shorter than optimal UPI codes for other asset classes? If so, do you believe that extra dummy characters should be inserted into the shorter codes to make them of the uniform length? Why or why not?

As we have described above, a semantically meaningless code is the best solution for UPI. Such an

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approach allows codes to be of uniform length, which is desirable from a systems and operational perspective. An intelligent code would likely result in codes of different lengths that would need to be 'bulked up' to a standard length. Bloomberg finds it is best to avoid the need for 'padding' characters in any coding system thru the adoption of a semantically meaningless code of uniform length in which all the character slots are used from day one, and which have no meaningful relationship to the metadata payload. Such an approach is offered today by FIGI.

Question 13: For an intelligent UPI code, how should underlying asset(s) or reference entity (entities) be represented within the UPI code? Would it be preferable for the part of the UPI code that represents the underlying asset(s) or reference entity (entities) to be dummy while the rest of the code is intelligent? Why or why not?

Such an approach would create enormous confusion and result in unnecessary complexity. Bloomberg recommends the use of standard length (12 character), semantically meaningless codes for both the asset itself and for any underlier.

That being said, using a semantically meaningless code with associated metadata would allow, as per the response to Question 8, use of any type of reference methodology within the metadata payload. While not optimal, this allows for the integration, backward compatibility and interoperability with legacy systems.

Question 14: Should the UPI code system avoid using Roman letters? Why or why not? Are there particular jurisdictions whose computer systems cannot accommodate Roman letters?

In a 12-character, semantically meaningless code, such as suggested above, combinations running into the trillions are possible through a combination of Roman letters and Arabic numerals. Consequently, Bloomberg recommends that the UPI utilizes Roman letters in combination with Arabic numerals. Care should be taken to not utilize characters that are standard delimiters used within programming languages or messaging protocols.

Question 15: Would it be preferable for the UPI code system to use only Roman letters, only Indo-Arabic numerals, or a combination of the two? Why? If Roman letters are included in the UPI code system, should they avoid being case-sensitive? If the UPI code system uses both Roman letters and Indo-Arabic numerals, should the system not disallow particular characters that could be mistaken for each other (the lower-case letter "l" and the number "1", the digit "0" and the upper-case letter "O" etc.).

The UPI should use Roman letters and Arabic numerals in combination, but we recommend that the use of Roman letters be confined to consonants only. The omission of vowels is in line with standard data best practices and eliminates potential confusion between '0' (zero) and 'O' (letter) and '1' (number one) and 'l' (lowercase letter). These best practice approaches are incorporated into the FIGI standard.

The differentiation between upper case and lower case characters can likewise cause confusion, and therefore should not be disambiguated (i.e., an upper case Roman letter should be considered equivalent and the same as its lower case counterpart). While use of disambiguated upper and lower case letters would theoretically create a larger universe, data quality is more likely to suffer. The benefit of disambiguated upper and lower case letters is typically only seen in regards to security (i.e., passwords)

and datasets requiring uniqueness past the zetta scale (thousand trillions of combinations).

Comments on Principles and high-level business specifications for the UPI

We acknowledge the re-statement and expansion provided by CPMI-IOSCO of the principles and high level business specifications for the UPI in section 3 of the Report. We support these principles and specifications for the UPI and provide comments on them below and, where appropriate, explain how a uniform, global, open identifier such as FIGI can help meet these requirements.

- **Jurisdiction Neutrality**

Bloomberg agrees that all values included in an OTC derivative product's reference data should be standardized among jurisdictions to the fullest extent possible. The FIGI is used globally across a wide range of asset classes and is built on standardized reference data. There are no jurisdictional dependencies.

- **Uniqueness**

Uniqueness is an essential attribute. The FIGI standard results in a 12-character string that is unique and has not been previously used as a FIGI. Checks are made to ensure that any financial instrument being identified does not already have a FIGI associated with it. Therefore, each FIGI is unique and maps to a unique set of data elements.

- **Consistency**

For ease of use and operational simplicity, consistency is vital. The reference data for FIGI includes data elements that describe each derivative product or financial instrument in a consistent way across asset classes. The data elements associated with each FIGI serve to highlight the differentiating features, as well as provide additional information about the financial instrument (e.g., its name).

- **Persistence**

Given the global nature of the UPI, persistence is important. Otherwise, market participants and regulators may not be clear what a particular UPI actually represents across time. A FIGI once assigned, is not re-used or re-assigned, even if the original product is defunct or otherwise no longer in existence. FIGI can do this as it is a semantically meaningless identifier.

- **Adaptability**

There are different ways to handle the challenge of adding new 'types' over time without the use of the data element, 'Other.' One of the strengths of a metadata approach is that metadata can be grouped and aggregated without requiring a 'type' to formally exist. This prevents the breakage of backward compatibility, and enables traceable and easy transitions both forward and back, without the additional overhead needed for versioning. Historical records are preserved through the metadata audit trail, and this allows for backfill without impacting historical or current data

or interpretations.

- **Clarity**

Freely available supporting documentation, instruction and guidance, along with clear descriptions and standards for the reference data elements are important. The FIGI standard and documentation is readily downloadable free of charge. There is a dedicated support team to support market participants using FIGI free of consulting or professional services fees or the mandate to purchase any commercial service.

- **Ease of generation/acquisition/query**

This is a key requirement to avoid unnecessary burdens on market participants. FIGIs can be easily requested and downloaded without restriction. This is very similar to the way in which LEIs are obtained from LOUs, and we would recommend and support such an approach for UPI. Additionally, as noted within the Clarity principle above, there is a dedicated staff that supports this function for FIGI.

- **Long-term viability**

We would caution against relying on any existing solution that requires fundamental changes to a combination of structure, coverage, governance, implementation methodology, and cost structures that support operations. With the rapid change of pace in financial markets regarding technology and data, many existing identifiers and associated reference data are mired in legacy issues and not easily extensible to the UPI. A metadata approach, updated in line with industry requirements, provides the best way forward. This will ensure a long term solution that remains vastly more adaptable than some existing schemes in financial services today. FIGI is flexible enough to satisfy the long-term identification requirements of the UPI.

- **Scope neutrality**

Scope neutrality is important and Bloomberg notes that the Report acknowledges that the UPI needs to be adaptable to recognize that in some jurisdictions, derivatives beyond swaps are also subject to trade repository reporting (for example, in the EU). In fact, the term ‘OTC,’ is increasingly misleading as more products are forced onto trading venues in line with the G20 recommendations. Additionally, scope neutrality should not be limited to ‘OTC’ asset types. Bloomberg believes in a universal approach to classification and identification across asset types, listed and unlisted, derivative or not.

- **Compatibility**

Bloomberg supports open standards. Again, it is important to clarify and agree on reasonable expectations for how an ‘open standard’ is defined and validated as such. An open standard should be freely available without restrictions. This includes the identifier as well as any associated metadata required by regulation to identify the instrument.

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A framework, such as FIGI, which is based on a semantically meaningless code coupled with appropriate metadata allows for extensibility and, therefore, for easier integration and compatibility with existing automated systems, data and infrastructures.

By contrast, repurposing existing identifiers for new or different purposes, such as to satisfy the UPI, risks not only failing to meet the needs of the UPI, but presents serious potential risks to current infrastructure and automated systems that depend on the existing iteration of that identifier.

While not specifically discussed, open standards requirements should address governance, ensuring that there are no 'pay for play' or participation fees. Such systems lack transparency and are subject to competitive concerns, even if falsely promoted as 'open.' These systems typically have hidden fees and embedded friction for those outside the membership of the governing body.

The FIGI standard, through OMG, provides for an open governance model that is highly transparent and accessible to any firm (regardless of size or financial might) and individuals alike.

- **Comprehensiveness**

Bloomberg agrees that the UPI needs to encompass as full a range of financial products as possible. An open standard, with specific rules, structure, and guiding principles provides the necessary flexibility to provide broad asset coverage, support for multiple reporting systems and operational efficiency. This approach enables high level identification but with the capability to provide more granularity as needed. It is ingrained in FIGI's architecture.

- **Extensibility**

Very closely related to the point about scope neutrality and comprehensiveness above, the UPI certainly needs to be able to extend beyond traditional OTC derivatives to embrace a broad range of financial instruments. FIGI has demonstrated how it can do this in practice given identification of over 330 million instruments across equities, fixed income, listed and OTC derivatives.

- **Precision**

It is crucial that a UPI solution have the capability to support various levels of granularity, enabling unambiguous financial instrument identification for differing regulatory and operational purposes. Identifying the correct metadata is a critical element for achieving precision.

- **Public dissemination**

It is vital that UPIs are freely and publicly available without undue barriers to access, or systemic discrimination through use of financially differentiated delivery methods. Creation of special distribution methodologies requiring payment, use restrictions, or licensing agreements creates

inequity in the marketplace. Like FIGI, the UPI needs to be free of re-distribution restrictions.

- **Representation**

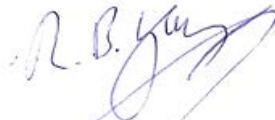
FIGI is used today across many systems and networks and is supported as an identifier standard in message formats constructed according to the ISO 20022 international standard. We would agree that the UPI needs to be similarly capable of use within international message standards, networks and systems.

Thank you, once again, for the opportunity to provide comments on the Report. The UPI is an essential element of the data reporting infrastructure required for regulators to analyze reported trades, identify risks and address market abuses. Given the current emergence of potentially divergent approaches to product identification, some of which rely on closed, proprietary standards, Bloomberg encourages CPMI-IOSCO to move forward as quickly as reasonably possible so that a uniform, global, open standard for the UPI can be realized. If Bloomberg can answer any further questions or be of further assistance, please feel free to contact us or Eric Juzenas, Global Regulatory and Policy Group, 202-807-2038 | ejuzenas@bloomberg.net.

Best regards,



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