24 February 2016

Submitted via email to:
CPMI Secretariat
cpmi@bis.org
and
IOSCO Secretariat
UPI@iosco.org

Re: Harmonisation of the Unique Product Identifier – Consultative Report

The International Swaps and Derivatives Association, Inc. (“ISDA”)\(^1\) appreciates the opportunity to provide the Committee on Payments and Market Infrastructures (“CPMI”) and the Board of the International Organization of Securities Commissions (“IOSCO”) with comments in response to the Consultative Report referenced above (the “Consultative Report”).

ISDA is a strong proponent of global data harmonization, working in tandem with our members and other buy- and sell-side market participants and market infrastructure providers to promote the important role of global standards in improving data quality and increasing the efficiency and value of reporting and other global regulatory requirements. We support the initiatives undertaken by the Working Group for the harmonization of key OTC derivatives data elements (the “Harmonisation Group”), and its efforts to develop guidance for a uniform global Unique Product Identifier (“UPI”).

1 Preface

ISDA, other industry organizations, and market participants have been developing a Symbology approach\(^2\) with a goal to define a coherent derivatives product identifier framework that can satisfy multiple regulatory and business requirements. Facilitating the aggregation of data reported across a variety of jurisdictions to multiple trade repositories is one important goal within this framework, however there are other areas where a consistent way to assign product identifiers can be very useful. These include areas such as liquidity determination, identification of products traded on an electronic venue, or facilitating buy-side access to multiple trading platforms by having a consistent way to identify

\(^1\) Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 850 member institutions from 67 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association’s website: www.isda.org.

\(^2\) For additional information about the Symbology initiative, refer to: http://www2.isda.org/functional-areas/symbology/
traded products. In the response to Question 8, we expand on some of the additional usages for product identifiers, leveraging a set of use cases developed by the Symbology rates working group.

The Symbology work seeks to define:

- the framework for product identifiers which allows the different levels of granularity to be leveraged into a code system that permits abstracting attributes as metadata;
- the different levels of granularity required for a product identifier applicable to each use case, including the eight outlined in our response to Question 8; and
- the attributes and allowable values for the level of granularity associated with a particular product and use case.

Through the analysis carried out by the Symbology group, we believe that in order to address the variations in use cases across the front-to-back trade lifecycle, there is a need for a standardized system of defining identifiers. This should ensure consistency in data attributes associated with the identifiers and future-proof against evolving regulatory and industry requirements. A preferable approach for realizing this would be through a hierarchical structure that can be adopted across multiple use cases and stages in trade lifecycles. Depending on the particular use case, identifiers would be assigned at different levels of granularity with the ability to link the related identifiers to each other. Identifiers issued at each level of granularity would be linked as a parent-child relationship.

Figure 1
An analysis of the required data fields for each of the scenarios for a plain vanilla interest rate swap as depicted in Figure 1 outlines a sample illustration of such a framework. Although the Symbology group is still in the process of detailing the specifics related to individual product classes, we have identified the core values underpinning the framework as follows:

- The framework should have logical aggregation of data attributes that address specific use cases in increasing order of granularity;
- Subsequent levels in hierarchy should build on data attributes identified in higher levels;
- There should be a balance between data attributes associated with a specific level and the number of unique identifiers which would result;
- Although multiple levels can exist in the hierarchy, careful consideration should be given to the issuance of identifiers at a specific level based on the use cases it addresses, due to the high costs associated with the issuance and maintenance of identifiers. Identifiers issued at each level of granularity would be linked as a parent-child relationship using fields in the metadata.

We propose to develop a first iteration of this identifier to address the reporting aggregation requirements outlined by the CPMI-IOSCO Consultative Report and evolving requirements around the Markets in Financial Instruments Directive II and Regulation (MiFIDII/MiFIR) and U.S. Securities & Exchange Commission (SEC) reporting. However, in order to achieve this in a timely fashion, there needs to be agreement on standardization of requirements (which will drive the associated data attributes) and timelines for adoption across current and evolving regulatory regimes.

The Symbology working group has been conducting analysis of the required data fields for different use cases for interest rate swaps, as shown in Appendix 3.1 and 3.2. We are expanding this analysis to include additional interest rate products and subsequently, other derivative asset classes. We will use this work with the International Organization for Standardization (“ISO”) study group on ISINs as a potential code, which are mandated by ESMA for a specific use case (see “Use Case 5” in the response to Question 8), and a subset of the derivatives population. We welcome further involvement and guidance from CPMI-IOSCO in the Symbology and ISO study group work.
Before addressing the specific questions raised in the Consultative Report we would like to make the following general comments that apply across our consultation response:

Implementation of a global UPI framework
There are currently numerous regulations, emerging in a somewhat uncoordinated fashion, which contemplate the use of a product identifier. Specific instances where these requirements are mutually incompatible already exist. It is unclear how these requirements will ultimately be synchronized with the CPMI-IOSCO efforts.

Establishing a product identifier infrastructure for derivatives is a costly and complex endeavor. A vital component of the cost and complexity relates to the need to modify numerous components and workflows among service providers, market infrastructures, regulators, buy-side and sell-side market participants. The creation of a product identifier framework with various levels of granularity creates an opportunity to streamline the overall trading and processing market infrastructure. In order to achieve global harmonization while avoiding interim solutions at jurisdiction-specific levels, we urge CPMI and IOSCO to work closely with national regulators and standards organizations. A two-stage process with different solutions would only dramatically increase costs further while commensurately delaying the global harmonization.

We acknowledge that the responsibility of issuing requirements for reporting to trade repositories falls outside of the responsibility of the Harmonization Group. We note that FSB has recognized a range of legal and regulatory impediments hindering data reporting, access and aggregation, such as trade repository access and data privacy limitations, and that, in many cases, these hurdles require changes in national or regional legislation to resolve. In its Thematic Review on OTC Derivatives Trade Reporting, FSB reported that its members have committed to report by June 2016 on their planned actions to resolve these impediments by June 2018. Since adoption of a harmonized UPI (as well as UTIs and other data elements) will likely also require changes to some national/regional reporting regulations in order to realize the full benefits, we urge CPMI-IOSCO to consider how similar commitments from member jurisdictions to implement resulting changes can be secured, and how coordination and oversight of global progress can be achieved.

Focusing on the specific uses that the Harmonisation Group is considering, we are unclear how the resulting UPI will synthesize with the product identifiers already in the process of being mandated, such as the ISIN requirement for MiFIR. While timing and scope might differ, both identifiers may actually sit at the same level of granularity and serve identical purposes. If this is the case, how will the further CPMI-IOSCO consultation on UPI codes be impacted by the ESMA mandate to use ISIN?

Scope
The Executive Summary of the Consultative Report specifies that the “purpose of the UPI is to uniquely identify OTC derivatives products.” Since the approach to OTC execution has changed and continues to evolve, market participants and regulators may not have identical definitions for OTC derivatives. We support the concept of “future-proofing” and therefore recommend that the scope of the UPI be amended to “derivatives” rather than “OTC derivatives.” Adjusting the scope fulfills the principle of “Extensibility” by providing the adaptability to accommodate any further evolution and satisfies the

---

principle of “Scope-neutrality” by accounting for differences in scope as well as differences in the definition of “OTC derivatives” for different reporting regimes. Certain products, such as repos and securitized products, would be excluded from the scope because they are not derivatives.

Classification versus product identification
CPMI-IOSCO is looking at standardizing Unique Product Identifiers (UPI) for the purpose of global data aggregation and regulatory reporting. The mandate of the Harmonization Group is to develop guidance regarding the definition, format and usage of a UPI for this purpose.

Throughout the Consultative Report, the authors make reference to a product classification system and in Section 1.3 write that the “product classification system and associated code” are “together referred to as the UPI”.

We view product identification as distinct in its implementation, granularity and usage from product classification. We understand from the discussions at the CPMI-IOSCO workshop in February 2016 that the CPMI-IOSCO work stream representatives agree with this distinction and that the goal is indeed to create a product identifier for purposes of data aggregation.

For OTC derivatives we are aware of two non-proprietary classification systems: the ISDA Derivatives Taxonomy ("Derivatives Taxonomy") and the newly revised Classification of Financial Instruments ("CFI") which now includes OTC derivatives. These are both hierarchical classification systems, going from more general to more specific. Our view is that product identifiers are defined at a more granular level of detail than either of these two classification systems. The metadata for the product identifiers should not be limited to the classification information of a particular taxonomy even though data points from the classification system could be part of the product identifier metadata, as is the case for the symbology proposed and described further in the response to Question 8.

UPI code
We recognize that this Consultative Report focuses on a derivatives products classification system, and that a further Consultative Report is intended to address the associated code of the UPI. Accordingly, our response is predominantly focused on the definition, attributes and usage of a product classification system, however, we do touch upon certain perspectives about the code when we believe it to be pertinent and constructive to our feedback in this response. Defining the requirements around code and the related infrastructure are considered within the Symbology initiative.
2 Responses to Consultative Report Questions

A. Key Concepts

1. Are the above three OTC derivative instrument types sufficient to describe (in combination) all OTC derivatives? Which OTC derivatives would fall outside this approach?

We generally agree with CPMI-IOSCO’s definitions of the three basic derivative instrument types, namely, forwards, swaps and options.

Through ISDA’s work related to derivatives products taxonomies, we recognize that some complex products can be a combination of one or more of these three instrument types, while others can include components which are not derivatives. Examples include complex trades such as baskets, accumulators and quanto synthetic forwards. For several of these examples, a single UPI could be reported if the parties confirm the exotic or complex trade as a single trade.

Packages involve multiple swap and option components and can include components which are not derivatives. These are covered in our response to Q4 regarding packages. A UPI is used as part of the reporting of each component of the package trade individually, resulting in multiple UPIS for a package.

The product identifier framework should be future-proofed to capture products which may not currently exist.

2. Is it valid to assume that a combination of data elements of the instrument and data elements of the underlier is sufficient to define a product? If not, please explain.

Firstly, we agree that the data elements of the underlier should be included in the definition of a product. A product identifier which does not include an underlier identifier does not sufficiently identify the product.

Secondly, whether the combination of data elements of the derivatives instrument plus data elements of the underlier is sufficient to define a derivatives product is dependent on the data elements included in the instrument data category. Specifically, certain economic terms and certain legal terms should be part of the definition of a product.

We find the relationship illustration on page 5 of the Consultative Report to be misleading because the product does not include any information about the economic and legal terms of the instrument to which it relates. We believe that a more appropriate graphical representation would include positioning the economic and legal terms across the product and contract layers. We propose the adjusted diagram in Figure 2 to illustrate this. This representation is consistent with the scenarios analysis provided in Annex 4 of the Consultative Report, in which the extent of the terms that are positioned as part of the product layer vary among those scenarios.

---

We commend CPMI-IOSCO’s approach of explicitly defining usage of the terms “Instrument Type” and “Product” as part of this UPI consultation. We recognise, however, that CPMI-IOSCO’s member Commissions have historically used the terms with either different meanings, or only tacitly defined (and therefore ambiguous) meanings.

We therefore request that CPMI-IOSCO works with its member Commissions to transparently reconcile the meanings of these terms across different regulations, and ensure that different uses of the same term do not result in the UPI initiative unintentionally re-calibrating the intent behind existing uses of these terms.

3. **Is it valid to assume that the combination/set of data elements in the UPI classification system may differ across asset classes? If not, please explain and state how a uniform set of data elements could be comprehensively applied across asset classes.**

Based on our experience with product classification with the Derivatives Taxonomy, we agree with the conclusion that the set of data elements in the UPI will differ across asset classes.

4. **Do you agree with this approach to the UPI’s treatment of package trades? If not, please explain and suggest alternatives.**

We broadly agree with CPMI-IOSCO’s provisional view that the aspects which produce a package trade (i.e. the fact that a particular transaction is linked to another transaction), are attributes of a transaction, and not of a product.

Accordingly, the data elements for package trades would not be part of the product identifier, but instead be relevant to the reporting of transactions. Details can be found in §C “Identifying Packaged Transactions” of the joint ISDA, Institute of International Finance, Investment
B. Product classification principles and high-level business specifications

5. Are the principles and high-level specifications listed and described above comprehensive in representing the characteristics of a classification system? If not, are there other principles and high-level specifications that should be considered? Please list and explain.

We broadly agree with the five “requirements for product identification” bulleted in Section 3 of the Consultative Report. We specifically support the second requirement which clarifies that while the UPI sits in a classification hierarchy, the UPI is more granular than a classification.

We are in broad agreement with the proposed principles and high-level business specifications described in Section 3 of the Consultative Report, however:

- we support the addition of “Reasonable Costs” as a principle
- we recommend a further point within “Ease of Generation” (see responses to Questions 6 and 7)
- we highlight considerations for “Public Dissemination” (see response to Question 7).

Reasonable costs:
We believe that a reasonable cost structure should be a key consideration and a principle for the UPI. The cost of issuance, access, processing, and maintenance of product identifiers and associated metadata should reflect the cost of operation and be kept at a reasonable level in order to make use of product identifiers accessible to all market participants. This includes redistribution of the identifier and the underlying metadata, which should be unrestricted by licensing requirements.

A party who has an obligation to report and who has traded a product which they believe may be new will need to determine whether a UPI already exists. The cost of determining (with certainty) whether an identifier already exists for a particular product as well as the cost of consuming the UPI should be negligible.

If a UPI does not exist, costs should not be a barrier to entry to generating or obtaining a new UPI. The process cannot be complex or lengthy in light of the short time window for reporting under certain regulations. Costs and complexity should not deter parties from trading particular products, nor discourage parties from going through the process of generating or obtaining a UPI.
A central reference source for product identifiers would provide long-term benefits, help avoid duplication of identifiers, expedite searches for existing UPIs, and maintain data integrity. However, the total cost of building and maintaining such a reference source should be taken into consideration.

6. Are the principles and high-level specifications listed and described above accurate and precise in their definitions? If not, are there changes you would suggest? Please list and explain.

Yes, other than what we have noted in the responses to Questions 5 through 7, we believe the principles and high-level specifications to be sufficiently specific in definition.

Ease of generation/acquisition/query
Providing expectations for the basic format of the UPI within the principle of “Ease of generation/acquisition/query” would provide clarity and help promote adoption of a standardized UPI.

We support a UPI code with a fixed length string containing a reasonable maximum number of characters. A fixed, as opposed to variable, length would make it easier and more cost-effective for industry participants to build towards. Looking at the work conducted for Symbology, we believe the length should not be too restrictive, in order to obtain the level of granularity needed to effectively identify a specific product.

Persistence
In addition to the high-level specification that “no product should ever be reassigned to another classification after the original assignment has taken place,” we recommend that the converse be added to the principle of “Persistence.” Specifically, a UPI should not be reassigned to another product after the original assignment has taken place.

Extensibility
As described in the preface of our response, a product identifier framework should not only be able to accommodate a broader range of financial products, but should also be able to accommodate changes to regulatory or industry requirements of product identification for future uses, such as liquidity determination and contract level identification.

7. Could some of these principles and high-level specifications pose implementation challenges? Which ones and why?

Public dissemination:
Public dissemination on an international level should take data privacy and confidentiality concerns into account. The need for public transparency must be balanced with the regulatory obligation to protect the liquidity of derivatives markets by safeguarding anonymity. Issues of trade data and identity confidentiality should be considered by CPMI-IOSCO in determining the level of granularity for the product classification system of the UPI if public dissemination is envisioned. Certain derivatives products are thinly traded or traded by a limited number of market participants. Disclosure of certain trade details, such as delivery or pricing
points for commodities or bespoke basket details, can lead to the disclosure of counterparty identities or reveal trading strategies. This can impair the ability of market participants to hedge on a timely basis, and may drive up pricing, which in turn limits the access of market participants to derivatives transactions at fair and competitive prices. A more granular product classification that is used for public dissemination could negatively impact the breadth of derivatives markets.

To avoid these implications, UPI could provide a level of granularity which would take into consideration the anonymity issues, and therefore be suitable for both regulatory and public dissemination purposes. Alternatively, if it is determined that a greater level of granularity is imperative to fulfill regulatory needs, a product identifier framework could consider two levels of granularity for public and regulatory reporting, respectively. An identifier could be associated to each level to allow the metadata to be abstracted and the relationship between these identifiers might be hierarchical. While there is a cost to creating additional identifiers, developing these within the same overall framework reduces that cost somewhat.

**Ease of generation/acquisition/query**

The entire derivatives marketplace infrastructure will have to be adjusted to incorporate and handle product identifiers, since identifiers will either be required for compliance obligations, and/or be needed to provide opportunities to abstract metadata into an identifier for pre-execution and post-execution flows. Furthermore, associated workflow considerations have not yet been specified. Once all the relevant details are known, an appropriate timeline to implementation must be considered that takes into account all impacted market participants and the differences among their technological capacity and resources.

8. **Providers of product classification systems are encouraged to provide a detailed response to Section 3 to set out how their prospective UPI solutions meet, or could be revised to meet, each of these principles and high-level business specifications. If the UPI solution does not meet a particular principle or high-level business specification, please describe planned or potential amendments that could satisfy it.**

In the preface of our response, we introduced our view of a product classification system as distinct from a product identifier framework. We will now discuss the proposed solution for each in greater detail:

(a) **Derivatives Classification: ISDA Derivatives Taxonomy**

ISDA and industry participants developed the Derivatives Taxonomy for credit, equities, rates, FX and commodities in late 2011. Derivatives Taxonomy v1.0 is currently in use for derivatives trade reporting in multiple jurisdictions. ISDA and industry users went through the governance process to initiate a version update to Derivatives Taxonomy v2.0 in 2015, incorporating input from regulators and market participants. See Appendix 3.4 for more detail on the Derivatives Taxonomy governance.

---

6 http://www2.isda.org/attachment/NzE5MQ==/ISDA%20OTC%20Derivatives%20Taxonomies%20-%20version%202015-01-09_live.xls
Although ISDA collaborated with ISO to expand the CFI product scope to include OTC derivatives (ISO 10962:2015), Derivatives Taxonomy v2.0 is better suited as a derivatives classification system because of several key points:

- Derivatives Taxonomy v2.0 offers more granularity than the CFI.
- While the CFI code can be useful for covering a variety of financial industry products, it provides for only six positions, with a limited set of allowable values for each position.
- The process for updating the CFI is lengthy, while the Derivatives Taxonomy governance model is flexible and able to react quickly to market developments. Appendix 3.4 provides an example of how the Derivatives Taxonomy governance process is being used to monitor reporting of the value “Other”.

(b) Product Identifiers: Symbology

As indicated in the preface of our response, we see several use cases for product identifiers to satisfy regulatory and general business requirements. Each of these use cases has a level of attribute granularity associated with them. Through the Symbology work we look to define the appropriate framework for product identifiers which accommodates different levels of granularity, each associated with an identifier that allows abstracting the attributes as underlying metadata. The framework also defines the relationship between each of these identifiers.

The CPMI-IOSCO UPI requirement for trade reporting and data aggregation is one particular and important use case of such a product identifier (or potentially two, depending on whether a public reporting identifier is needed). The UPI requirement should fit into the overall product identifier framework.

Our current analysis leads us to conclude that a proper product identifier framework should provide the ability to support multiple levels of identifiers, with a hierarchical relationship among those to the extent possible\(^7\). Although not originally intended for the scope for this consultation paper, we recommend this approach be considered as part of the UPI discussion. Here are several reasons:

- This would provide the ability to satisfy a variety of regulatory requirements (e.g. support of public price reporting within the scope of information required for such purpose, along with the facilitation of data analysis and aggregation at a more granular level);
- This would provide the ability to enhance the efficiency, transparency and resiliency of the broader marketplace through a usage of such multi-level product identifiers beyond those regulatory drivers; and

---

\(^7\) According to our analysis, such hierarchical relationship among multiple levels of product identifiers can be difficult to achieve if those metadata points are not compatible among levels. An example of such would be one of those levels requires initial tenor considerations, with another one requires remaining tenor.
A product identifier for data aggregation purposes that is clearly linked to product identifiers used in other contexts would be more cost effective to implement, lead to better data quality, and provide commercial benefits to the industry in terms of trade communication, pricing, netting, and reconciliation.

**Product identifier use cases:**

Appendix 3.1 and 3.2 contain two examples of the 17 data attributes for two different interest rate products. For each of the attributes there is an indication whether they are required for each of the 8 business cases. In addition, the 17 data attributes are mapped against an example based on the rates table in Annex 5 of the Consultative Report.

The use cases outlined are intended as illustrations of different requirements for a product identifier framework, rather than an all-inclusive list of usages. We expect a further expansion of use cases supporting different processes in the trading infrastructure. We strongly believe that the development of product symbols which take into account CPMI-IOSCO’s UPI requirements as well as other regulatory and business requirements will benefit both the industry and public authorities by streamlining market infrastructure and reducing overall cost. In addition, a product identification system that can be used in multiple processes throughout the whole trade lifecycle across all asset classes will ultimately lead to better data quality and efficiency gains.

**Use case 1:** MiFID II liquidity and Systematic Internaliser ("SI") determination

The assessment of whether a product is (i) deemed liquid and (ii) whether a quoting firm acts as a SI with respect to it, is a cornerstone of the MiFID II regulatory regime. A number of compliance obligations are driven by this assessment.

A product identifier which provides market participants an accessible and unambiguous way to perform this assessment will facilitate compliance. Furthermore, market participants as well as regulators would benefit if such assessment would be linked to the marketplace activity in a manner that is as transparent as possible. ‘Tagging’ relevant quotes and executions with an explicit symbol carved at the proper level of granularity will be advantageous. This would also allow identifying mistakes early on.

**Use case 2: Identification of instruments traded on public venues**

A product identifier which would allow the identification of instruments traded ‘on venue’ would facilitate implementation as well as compliance with the reporting requirements related to these instruments.

---

8 Refer to Appendix 3.1 and 3.2 "Use cases mapped to Symbology and CPMI-IOSCO Data Elements"

Use case 3: Public price reporting, e.g. U.S. Commodity Futures Trading Commission (CFTC)
Part 43 and MiFIR post-trade transparency
The product attributes which are mandated for reporting as part of the CFTC Part 43 public price reporting rule are a subset of those required for regulatory reporting. A product identifier, linked to this subset of attributes, would facilitate this public price reporting.

We note that while the preference is to have “non-intelligent” product identifiers in the identifier framework, public reporting is an area where a meaningful identifier could be useful. This can be achieved by working with human readable or “intelligent” aliases, in addition to the core non-intelligent identifier.

Additional use cases:
We have identified five other use cases which we believe would require a similar level of granularity:

Use case 4: Regulatory (non-public) e.g. CFTC Part 45, MiFIR transaction, and EMIR reporting
The product attributes required for regulatory (non-public) reporting represent a higher level of granularity versus those required for public reporting.

Use case 5: ESMA instrument reference data reporting

Use case 6: Consumption of pre-trade data from data vendors

Use case 7: Portfolio reconciliation and valuation across market participants
Market participants have recurring needs to share portfolios of positions among each other. The most known and recurring use case is portfolio reconciliation, often in the context of collateral management. Other use cases relate to portfolio acquisitions and valuation services.

The most challenging issue in this context is how to express the portfolio in a manner that can be computed by the receiving party. In the collateral management space, this has been partly tackled through the adoption of a shared infrastructure. However, this issue remains largely unsolved for more ad-hoc use cases, such as portfolio acquisitions and valuation services, compounded in cases which involve less sophisticated counterparties who do not have external interfaces that make use of data standards, such as Financial products Markup Language\(^\text{10}\) (“FpML”).

The ability to abstract part of the product economics through a product identifier would provide a meaningful value-add by removing the need to normalize a number of product attributes. This ability is illustrated in Appendix 3.1 and 3.2 via an interest rate swap, where we abstract a total of 17 attributes as metadata, of which:

\(^{10}\) http://www.fpml.org/
6 apply to each of the swap leg: calculation
1 is specific to the float leg
apply to the trade level

The effective, termination dates and price information (fixed rate and floating rate spread) are not part of defining the unique products because their inclusion lead to an unmanageable number of product identifiers. However, the product identifier packaged with date and price information as separate elements provides a workable solution to meet business requirements that leverage this combination of information.

Use case 8: Communication of requests for quote and orders
This use case is similar conceptually to the case of valuation among market participants, the key idea being that it is conceptually easier to communicate between counterparties through product identifiers that abstract the metadata, rather than exchanging all the product attributes.

Similar to the comment made in the case of public reporting, this use case would likely also benefit from an intelligible alias associated with the core non-intelligent identifier. The structure of such an alias can vary from asset class to asset class; readability is the primary focus.

Defining the levels of granularity for each of the use cases and specifying the attributes needed on an asset class by asset class and product by product basis for a particular level of granularity, associated with a specific use case, is the current focus of the Symbology work. In parallel the group is working with ISO to understand whether ISIN as a code and the underlying ISIN infrastructure (ANNA) can be leveraged for product identification for derivatives. Potential alternative product identifiers such as FIGI\textsuperscript{11} are evaluated as well.

Another important characteristic of any product identifier is the ability to abstract the underlying metadata. Free and open source creation, management and distribution of both the ID and the associated metadata are critical. The ability to abstract the metadata allows the identifier to be used in electronic processes without the need to communicate all the metadata, while at the same time making the metadata accessible at any point during the process.

In the extreme, the identifier is simply a set of concatenated data values. Additional levels of granularity can be achieved by adding or concatenating additional data fields. However, if the metadata itself were made a component of the product identifier, or a component of a packet of information communicated together with the identifier, the ability to achieve additional levels of granularity would be lost and therefore the value of the identifier diminished.

Many open questions related to the specifics of a product identification framework for derivatives remain. We strongly believe that a UPI for data aggregation should be part of this

\textsuperscript{11} Refer to www.openfigi.com
framework. The Symbology Governance Committee would very much like to develop this framework further in coordination with the CPMI-IOSCO regulatory community.

9. **As discussed in Section 3.5, should a classification system allow one or more of its data elements to take the value “Other” in order to incorporate new and/or highly bespoke products that do not yet have a more precise definition within the classification system? Why or why not? If not, how would the bespoke/non-standard products be treated within the classification system? What should be the criteria and processes for moving one or more data elements from “Other” to a more specific bucket? Should the volume of transactions that can be reported using these “Other” values be capped in order to maintain the precision of the classification system? If so, what would an appropriate cap be?**

We point again to the differences, highlighted in the preface of our response, between classification and product identification. While “Other” is a meaningful value in the context of a derivatives classification system and should be allowed, “Other” does not have a place in the context of the metadata underlying a product identifier. Thus, we do not believe that a product identifier should be created for complex and bespoke products that would be classified in the “Other” category.

Refer to Appendix 3.3 for reasons to have “Other” in the context of a derivatives classification system.

c. **Proposed Classification Systems**

10. **The results from the study presented in Annex 4 suggest that data elements that describe the instrument together with data elements that describe and identify the underlier may provide an optimal level of granularity for product classification. For informational purposes, beyond the use of a derivatives product classification system for the global aggregation of data reported to trade repositories, are you aware of product classifications for other purposes where this level of granularity is applicable? For example, what level of granularity is used for aggregating transactions to calculate a position, or to determine various risk exposures to a particular product? What level of granularity is used to aggregate transactions for the purposes of compression or netting operations?**

We are not aware of a product identification or classification system that is widely used in the OTC derivatives space for the purpose of position and risk analysis. Market participants have had to develop their own systems to evaluate the respective attributes of their individual firm’s trades and positions.
11. Do the options presented above appear operationally feasible? If not, please explain why.

In order to be useful for the purpose of position and risk analysis, a UPI solution will need to rely upon the relevant metadata points. It needs to go well beyond what is to be expected of a mere product classification system.

One of the challenges in this respect is to strike the right balance. Including the relevant set of data points could create a situation where the large number of product identifiers required makes the solution unmanageable, while also limiting usefulness if the ratio between products and underlying trades becomes quite low.

A data analysis conducted by the Symbology group concluded is that it is possible to develop a solution that would be useful for pricing and position management purposes. Part of our evaluation concluded that it might be appropriate for certain asset classes to keep some data points (such as certain dates) out of the scope of the product identifier although they are required for position and risk purposes, in order to keep the number of identifiers within a reasonable number. In this respect, our analysis seems similar to the one undertaken by the Harmonisation Group.

12. What are the pros and cons that you see in each considered level of granularity (one with an identifier for the underlier, one without an identifier for the underlier)?

A product identifier which does not identify the specific underlier is unable to identify a product sufficiently, so we advocate the level of granularity which includes an identifier for the underlier. However, we recognize that it may be very challenging and impractical to identify each underlier in the case of products with baskets or bespoke contracts.

Without including the underlier data, the granularity would be too coarse to effectively identify a product. On the other hand, inclusion of the underlier increases the number of product identifiers. We do not believe there is usage for a product identifier without information regarding the underlier imbedded. For example, in applications looking at risk exposure, we note that the exposure to the underlier is the critical component. We provide our perspective on selected underlier identifiers below:

Legal Entity Identifiers (LEIs)
We support the work of the Financial Stability Board, LEI Regulatory Oversight Committee, and the Global LEI Foundation and advocate the global Legal Entity Identifier (LEI) for reference entity identification. We note that currently, entities who are not trading financial instruments are not obligated to obtain an LEI, or may not be compelled to maintain LEIs as counterparties to a derivatives transaction. Therefore, when these entities undergo an event such as a merger, dissolution, or succession, there may be a time lag before their LEIs are updated. However, we recognize the ongoing “level 2” work to augment use of the LEI to identify entities within more complex relationships and hierarchies. In addition, we expect impending regulatory rules to grow the use of LEIs to a broader range of counterparties and asset classes over time. CPMI and IOSCO could further facilitate LEI use by establishing the LEI as the primary identifier to be used for underliers, where appropriate. However, any mandate should allow for the usage of
alternatives while the LEI coverage is expanded and should recognize that LEIs may not be appropriate in all cases.

**ISIN/CUSIP**

ISIN/CUSIP is suitable as an identifier of underliers, not as a derivative product identifier. ISINs can be used whenever the underlier of the derivative is a security. However, the accuracy of the ISIN as an identifier for an underlier is limited in that the underlier for the transaction (e.g. the Reference Entity for a credit derivatives transaction) could be either the issuer or the guarantor.

**ISO 4217 codes (currency codes)**

The ISO 4217 code to identify the underlier in FX trades provides a known, defined set of allowable values governed by ISO for market participants and trade repositories to build to. However, if a trade is executed on a non-ISO currency, we recommend that for purposes of reporting, parties should maintain a mapping of the off-shore currency to the on-shore equivalent ISO 4217 to report only the allowable values. For further details, see our response to the Consultative report on the Harmonisation of key OTC derivatives data elements (other than UTI and UPI) - first batch.12

**Other potential identifiers**

Other potential identifiers for underliers are the Reuters Identification Code (RIC) and Markit RED codes.

13. A classification system that includes identifiers for underliers in all asset classes would require identifiers that are open-source and freely available to all users with open redistribution rights. Looking at the example of classification systems provided in this section and in Annex 5, do such identifiers exist for all asset classes? If not, please specify where you foresee implementation challenges in this regard and any suggested solutions.

Open-source and freely available identifiers for underliers may not exist, or be widely used, for all asset classes. Proprietary identifiers are extremely valuable to the consistent and accurate identification of swap underliers. The issuers of such identifiers are commercially viable because they recognized an industry need for instrument-specific identification and provide services that allow market participants to uniformly agree and confirm the underlier to their transactions.

For some products or asset classes, market participants that are not subscribers to the services of a reference data service provider may not have equal ability to use proprietary underlier values or codes. In these cases, they should not be compelled to use the services or the associated identifiers. However, where a standard is predominant to that market, market participants that have access to these standard identifiers should be encouraged to use them.

If the underlier or underlying index can be identified by the reporting counterparties via an industry accepted uniform identifier for an overwhelming majority of the derivatives

---

12 Joint ISDA/IA/GFXD response to CPMI-IOSCO Consultative Report on the Harmonisation of key OTC derivatives data elements (other than UTI and UPI) – first batch, [http://www2.isda.org/attachment/Ni zkzNA==/CPMI-IOSCO%20Response_ODE_9%20Oct%202015_FINAL.pdf](http://www2.isda.org/attachment/Ni zkzNA==/CPMI-IOSCO%20Response_ODE_9%20Oct%202015_FINAL.pdf)
transactions traded in an asset class, then regulators should embrace their use to achieve good
data quality that supports their ability to meet their transparency and oversight
obligations. Prohibiting use of such proprietary identifiers forces all parties to use less efficient,
less accurate values that will not be consistent with the values submitted by others.

14. For the identifiers in each asset class, are there corresponding reference data that are
open-source and freely available to all users with open redistribution rights?
No response.

15. For a classification system that does not include an identifier for underliers in all
asset classes, what classification systems are available that are open-source and
freely available to all users with open redistribution rights? What are the data
elements included in these systems?
No response.

16. Based on the examples provided in this section and in Annex 5, do you have comments
on how the allowable values would be technically managed or/how they are
technically managed in the case of existing classification system solutions?

Leveraging existing industry standards will reduce cost, save time, and eliminate unnecessary
build complexities for market participants. FpML is the predominant open-source messaging
standard for OTC derivatives, facilitating both the electronic confirmation and electronic
reporting of transactions. For the product identifier work within the Symbology initiative, FpML
notations, which are based on ISDA legal definitions and used by reporting parties in their
reporting infrastructure, are leveraged to describe the attributes for different products that
correspond to different levels of granularity.

As far as the allowable values for each of the attributes, we propose leveraging FpML scheme
values which document the reference data and sources for a variety of data fields. This
reference data can be internal or external such as ISO codes or reference data provided by
regulators. The scheme values are freely available in XML format.

As far as a classification system, we propose leveraging the existing ISDA Derivatives Taxonomy.
Taxonomic classification values are agreed and documented through its governance framework,
which was established at inception of the Derivatives Taxonomy (see Appendix 3.4 for more
details on governance).

---

3 Conclusion

The International Swaps and Derivatives Association and its members recognize the importance of the Harmonisation Group’s work towards global data harmonization, and strongly support the initiatives of CPMI and IOSCO to promote global standards for OTC derivatives reporting. We would like to reiterate our appreciation for the opportunity provided by CPMI and IOSCO to respond to the Consultative Report with our feedback and proposals. We are happy to discuss our responses and to provide any additional information that may assist with your consideration of these important matters. We look forward to the further consultation to address the code of the UPI.

Thank you for your consideration of these very important issues to market participants. Please contact ISDA staff if you have any questions or concerns.

Sincerely,

Scott O’Malia
Chief Executive Officer
International Swaps and Derivatives Association, Inc.
### 3 Appendices

#### 3.1 Use Cases mapped to Symbology and CPMI-IOSCO Data Elements

*(Please note that these are illustrative and are not intended as final proposals)*

Fixed-Float IRS with distinct date and frequency terms across legs

<table>
<thead>
<tr>
<th>Metadata</th>
<th>Example</th>
<th>CPMI-IOSCO Data Element</th>
<th>CPMI-IOSCO Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Class</td>
<td>Rates</td>
<td>Asset Class</td>
<td>Rates</td>
</tr>
<tr>
<td>Base Product</td>
<td>IR Swap</td>
<td>Instrument type</td>
<td>Swap</td>
</tr>
<tr>
<td>Sub-Product</td>
<td>Fixed Float</td>
<td>Instrument sub-type</td>
<td>Fixed Float</td>
</tr>
<tr>
<td>Transaction Type</td>
<td>Plain Vanilla</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Floating Leg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculation frequency</td>
<td>3M</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Payment frequency</td>
<td>3M</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Roll convention</td>
<td>16</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Day count fraction</td>
<td>ACT/360</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Business day convention</td>
<td>MODFOLLOWING</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Business centers</td>
<td>GBLO, USNY</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Floating rate index</td>
<td>USD-LIBOR-BBA</td>
<td>Underlier ID</td>
<td>USD-LIBOR-BBA</td>
</tr>
<tr>
<td>Fixed Leg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculation frequency</td>
<td>6M</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Payment frequency</td>
<td>6M</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Roll convention</td>
<td>16</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Day count fraction</td>
<td>30/360</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Business day convention</td>
<td>MODFOLLOWING</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Business centers</td>
<td>GBLO, USNY</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Notional currency</td>
<td>USD</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Other terms indicator</td>
<td>N</td>
<td>Other data element</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESMA Liquidity / SI computation</th>
<th>Identification of instruments traded on public venues</th>
<th>Public price reporting, e.g. CFTC P43, MiFIR post-trade publication</th>
<th>Regulatory reporting, e.g. CFTC P45, MiFIR transaction reporting</th>
<th>ESMA instrument reference data reporting</th>
<th>Regulatory reporting and valuation across market participants</th>
<th>Portfolio reconciliation</th>
<th>Communication of requests for quote and orders</th>
<th>Consumption of pre-trade data from data vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity bucket****</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*Under the proposed ISDA taxonomy, single and multiple currency swaps are a separate 'Base Product'.

**Delivery Type' is not a necessary data field for Rates Swaps.

***The underlying ID source can be derived from the 'Floating rate index'/'Underlier ID' data (e.g. "USD-LIBOR-BBA" is unique to the 2006 ISDA Definitions).

**** Maturity bucket is required rather than the actual dates.
3.2 Use Cases mapped to Symbology and CPMI-IOSCO Data Elements

(Please note that these are illustrative and are not intended as final proposals)

Fixed-Float IRS with distinct date and frequency terms across legs and implied compounding on the fixed leg

<table>
<thead>
<tr>
<th>Metadata</th>
<th>Example</th>
<th>CPMI-IOSCO Data Element</th>
<th>CPMI-IOSCO Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Class</td>
<td>Rates</td>
<td>Asset Class</td>
<td>Rates</td>
</tr>
<tr>
<td>Base Product</td>
<td>IR Swap</td>
<td>Instrument type</td>
<td>Swap</td>
</tr>
<tr>
<td>Sub-Product</td>
<td>Fixed-Float</td>
<td>Instrument sub-type</td>
<td>Fixed-Float</td>
</tr>
<tr>
<td>Transaction Type</td>
<td>Plain Vanilla</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floating Leg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculation frequency</td>
<td>3M</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Payment frequency</td>
<td>3M</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Roll convention</td>
<td>16</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Day count fraction</td>
<td>ACT/360</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Business day convention</td>
<td>MOD_FOLLOWING</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Business centers</td>
<td>GBLD, USNY</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Floating rate index</td>
<td>USD-LIBOR-BBA</td>
<td>Underlier ID</td>
<td>USD-LIBOR-BBA</td>
</tr>
<tr>
<td>Fixed Leg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculation frequency</td>
<td>3M</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Payment frequency</td>
<td>6M</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Roll convention</td>
<td>16</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Day count fraction</td>
<td>30/360</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Business day convention</td>
<td>MOD_FOLLOWING</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Business centers</td>
<td>GBLD, USNY</td>
<td>Other data element</td>
<td>-</td>
</tr>
<tr>
<td>Notional currency</td>
<td>USD</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Other terms indicator</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective date</td>
<td>2/16/2015</td>
<td>Tenor period / Tenor period multiplier</td>
<td>Year / 6 Maturity bucket**** Maturity bucket</td>
</tr>
<tr>
<td>Termination date</td>
<td>2/16/2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed rate</td>
<td>0.015</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Floating rate spread</td>
<td>0.002</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Compounding method</td>
<td>Flat</td>
<td>Other data element</td>
<td></td>
</tr>
<tr>
<td>Other data element</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPMI-IOSCO Data Elements not included in ISDA proposal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notional schedule</td>
<td>Constant</td>
<td>Single or multiple currency*</td>
<td>Single-currency</td>
</tr>
<tr>
<td>Delivery Type**</td>
<td>Physical</td>
<td>Underlier ID source***</td>
<td>ISDA 2006 Definitions</td>
</tr>
</tbody>
</table>

*Under the proposed ISDA taxonomy, single and multiple currency swaps are a separate 'Base Product'.
**'Delivery Type' is not a necessary data field for Rates Swaps.
***The underlying ID source can be derived from the 'Floating rate index'/'Underlier ID' data (e.g. "USD-LIBOR-BBA" is unique to the 2006 ISDA Definitions).
****Maturity bucket is required rather than the actual dates.
3.3 Availability of “Other” would help achieve the optimal level of granularity in a derivatives classification system

A classification system should allow the value of “Other” for the following reasons:

- It may not be possible to provide a UPI classification for every derivative instrument type which exists. Some products are not standardized enough to warrant a stand-alone classification.
- Availability of “Other” would help achieve the optimal level of granularity the Harmonisation Group provisionally believes is ideal as noted in Section 4 of the Consultative Report, by keeping to a minimum the number of product groups that contain only a single or a limited number of transactions.
- It may not be practical from an industry cost and build perspective to create classifications for products which may be more thinly traded.
- Having an “Other” bucket allows users to classify products which do not fit precisely in other classification values; otherwise, firms may categorize products into a bucket which is not entirely accurate because an “Other” bucket is not available.

The category "Other" was created in the Derivatives Taxonomy since we believe that a classification system should cover all products that are traded, including those that would be classified as complex or bespoke. Over time, trading and legal terms for complex and bespoke products may become more standardized, at which point these products would be reclassified within the Derivatives Taxonomy.

See Appendix 3.4 “Governance” for information on how the governance process was applied to “Other” in the Derivatives Taxonomy.
3.4 Governance - ISDA Derivatives Taxonomy classification system

The governance process was designed to enable the Derivatives Taxonomy to evolve with market needs, as well as undergo more major revision updates, as needed. The existing governance framework\textsuperscript{14} has been used since inception of the Taxonomy in late 2011, whereby:

- A broad, inclusive, objective review board which consists of market participants, including buy-side, sell-side, affirmation platforms, trade execution platforms, trade repositories, CCPs and regulatory authorities are eligible to vote.
- There is an ability to submit proposed changes continuously.
- Any changes, such as new market products and more major revisions, undergo a clear and transparent review process, and progress through several stages of ratification.
- To ensure that the needs unique to each asset class are incorporated, asset class expert groups have the ability to opine on proposals.
- Proposals are open for a public comment period.
- Changes are tracked and a log made publicly available\textsuperscript{15}, which includes:
  - Date of former version of the specific product identifier affected
  - Date of change of the specific product identifier affected
  - Asset class affected
  - Product identifier impacted
  - Specific details of changes

As a practical example, the Derivatives Taxonomy has been applying a robust governance process to monitor the “Other” bucket, by analyzing publicly reported data from trade repositories in order to calculate the percentage of total trade count for a particular asset class reported with the corresponding “Other” taxonomic value. If the percentage rises to 7% of trade count, the governance process calls for action to be taken by industry working groups to further analyze the repository reporting statistics to determine whether further granularity is needed.

Over time, products which evolve and are traded more frequently become subject to a greater level of trading and legal standardization, thus becoming suitable for their own product classification within the Derivatives Taxonomy.


\textsuperscript{15} OTC Derivatives Taxonomies - Live version, http://www2.isda.org/attachment/NzE5MQ==/ISDA%20OTC%20Derivatives%20Taxonomies%20Version%202015-01-09_live.xls