February 24, 2016

CPMI Secretariat
IOSCO Secretariat
IOSCO
C/ Oquendo 12
28006 Madrid
SPAIN

RE: Committee on Payments and Market Infrastructures - Board of the International Organization of Securities Commissions. Consultative report: Harmonisation of the Unique Product Identifier

To Whom It May Concern:

The FIX Trading Community ¹("FIX") (http://www.fixtradingcommunity.org/) is pleased to provide responses to the questions raised by the Committee on Payments and MarketInfrastructures - Board of the International Organization of Securities Commissions ("CPMI-IOSCO") in the Consultative report: Harmonisation of the Unique Product Identifier.

The FIX Trading Community was faced with similar issues in terms of financial instrument classification. FIX inherited the International Securities Association for Institutional Trade Communication (ISITC) Security Type list, which has been expanded. In addition, a risk aggregation taxonomy was created to meet the requirements of the Dodd-Frank Act in the US. FIX adopted, as an additional field in our instrument component, the ISO 10962 Classification of Financial Instruments standard (CFI). The CFI has primarily been used for listed derivatives clearing and settlement by the major global derivatives clearing houses.

In 2012, the FIX Trading Community commissioned a study of financial instrument classification. The analysis and report was completed by Martin Sexton of the London Market Systems. This report is provided as part of our response (see accompanying attachment), with the goal being to help provide additional perspective and background for the vital work being conducted by CPMI-IOSCO on behalf of global market quality and safety.

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¹ FIX Trading Community is the non-profit, industry-driven standards body at the heart of global trading. The organization is independent and neutral, dedicated to addressing real business and regulatory issues impacting multi-asset trading in global markets through standardization, delivering operational efficiency, increased transparency, and reduced costs and risks for all market participants. Central to FIX Trading Community’s work is the continuous development and promotion of the FIX family of standards, including the core FIX Protocol messaging language, which has revolutionized the trading environment and has successfully become the way the world trades. Visit www.fixtradingcommunity.org for more information.
Once again, on behalf of the FIX Trading Community, we thank you for your efforts and for the opportunity to respond to this consultation. Please see our responses to your consultation questions in the pages that follow and let us know if we can provide any further clarification. We would be more than happy to discuss this directly with you and provide assistance where possible.

Sincerely,

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Attachment:
Document Ref: FIX002D001-1 Financial Information eXchange (FIX) Protocol
The provision of this document to CPMI-IOSCO has been approved by London Market Systems Limited.
Question 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?

The consensus view from FIX Trading Community is that within the scope of OTC derivatives the contracts we have seen within the industry are either sub-products or else combinations of the three types that IOSCO mention in the consultation report. Adding Exotics (aka "Other") is needed. The system needs to be flexible enough to cope with sub-products and combinations of the above three types. An approach to combining types is available via the FIX Risk Aggregation Taxonomy described in our answer to Question 8 below.

Question 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.

A combination of data elements of the instrument and the underlier(s) are sufficient to define the product, however this is a tautology and may be of little use to truly assess the risk exposure. The question that needs to be asked is to what level does the product need to be defined? This new question can only be answered based upon what is the use of the product definition. There needs to be a set of requirements as a starting point to address the issue of level of product definition. For example, what risks need to be measured so they can be managed? Some risks cannot be fully assessed only by knowledge of the product definition, for instance liquidity risk.

The examples do not seem to capture all the payoff characteristics of options. For example, Options on multiple currency cash flow characteristics, order of option, etc.

Question 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.

The simple answer is yes, this is the appropriate assumption. In practice, within the ISO 10962 Classification of Financial Instruments, originally designed for the consistent allocation of International Security Identification Number (ISO 6166 ISIN) and the ISDA Taxonomies both rely on different data elements (attributes) across different asset classes. Any approach to identifying the data elements required to classify assets must first be driven by the requirements for classification. Multiple classifications are likely required. A single derivative product can be classified and viewed from many dimensions: underlier risk, interest rate/foreign currency risk, market risk, to name some dimensions that likely require slightly different aggregations. In technical terms, the problem of financial instrument classification, there are likely multiple taxonomies required, often referred to as a multiple inheritance hierarchy. In FIX today we have two different views into this, where one view answers the question of "what product" is being traded, while a second view attempts to answer the question of "what's the underlying risk exposure".
Question 4: Do you agree with this approach to the UPI’s treatment of package trades? If not, please explain and suggest alternatives.

The overall complexity and the scope of classification will increase dramatically if the classification of packages is included within the scope of OTC derivatives. Given the number of permutations that can occur, especially when many packages contain hedges, a classification scheme is not feasible.

The standard practice today is to identify that a trade is part of a package on the trade reports for the individual legs of a package. This should be sufficient information for regulators to assess the amount of package trading that is occurring in the industry. The overall risk profile for can be determined from the components (legs) of the package.

Question 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.

The only concern with the approach is the inclusion of the underlier identifier as part of the classification scheme. The underlier identifier is a requirement for unique product identification, not classification. The overall principles and high level specifications are sufficient at the highest level, there does seem to require an additional level of more detailed analysis.

Question 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.

The list of jurisdictional-neutrality, uniqueness, consistency, persistence, adaptability, clarity, ease of generation/acquisition/query, long-term viability, scope-neutrality, compatibility, comprehensiveness, extensibility, precision, and public dissemination is sufficiently complete in our opinion.

We especially feel that jurisdictional-neutrality and uniqueness are vital for the success of this effort. The industry will greatly benefit if these two principles are fully met.

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

All of them. This statement is not mean to be flippant. Achieving success across all these vital factors will take incredible cooperation between and across regulators and market participants. The industry has been working for many years in trying to achieve these principles.

Trying to accomplish in a broad brush manner all OTC contracts is a daunting task. The contracts must be broken down into sub groups and attacked individually under a single framework. This approach is what we (the industry in concert with European regulators) are trying to achieve via the ISO TC68/SC4/SG2 Study Group on the allocation of ISINs for OTC derivatives. Allocation of ISINs encompasses the International Securities Identification
Number (ISIN) [ISO 6166] and the Classification of Financial Instruments (CFI) [ISO 10962] standards. In parallel, the Object Management Group also is using their flattened security type combined with the Financial Instrument Global Identifier (FIGI) standard to accomplish the same goals.

From a FIX Trading Community perspective, we are in the envious position of being open and able to carry any, and all, of these identifiers and classification schemes. FIX adopted the CFI (ISO 10962) in 2001. FIX also incorporates security types found in ISO 15022 and International Securities Association for Institutional Trade Communication (ISITC), as well as a product classification originally derived from the Bloomberg terminal’s “Yellow Key” of product types. At the request of regulators within the US, we have also defined and added our own risk aggregation taxonomy that we feel could be assimilated into other standards within the industry as it does provide the adaptability, clarity, scope-neutrality, comprehensiveness, extensibility, precision, ease of generation/acquisition/query, long-term viability as outlined in Chapter 3 of the classification report.²

Question 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.

What FIX has to offer without propriety or claims is the risk aggregation taxonomy that was developed for a US Regulator. This can work in conjunction with other international classification standards, such as the CFI (ISO 10962).

This very simple model is quite extensible and adaptable. Here are a list of the current values.

**AssetGroup** - Indicates the broad product or asset classification. May be used to provide grouping for the product taxonomy (Product(460), SecurityType(167), etc.) and/or the risk taxonomy (AssetClass(1938), AssetSubClass(1939), AssetType(1940), etc.).
1 = **Financials** A categorization which usually includes rates, foreign exchange, credit, bonds and equity products or assets.
2 = **Commodities** A categorization which usually includes hard commodities such as agricultural, metals, freight, energy products or assets.
3 = **Alternative investments** A categorization which usually includes weather, housing, and commodity indices products or assets.

**AssetClass** - The broad asset category for assessing risk exposure.
1 = Interest rate
2 = Currency
3 = Credit
4 = Equity
AssetSubClass - The subcategory description of the asset class.

--- Commodity ---
13 = Metals
14 = Bullion
15 = Energy
16 = Commodity index
17 = Agricultural
18 = Environmental
19 = Freight

--- Credit ---
4 = Single name
5 = Credit index
6 = Index tranche
7 = Credit basket

--- Currency ---
3 = Basket [for multi-currency]

--- Debt ---
20 = Government
21 = Agency
22 = Corporate
23 = Financing
24 = Money market
25 = Mortgage
26 = Municipal

--- Equity ---
9 = Common
10 = Preferred
11 = Equity index
12 = Equity basket

--- Fund ---
27 = Mutual fund
28 = Collective investment vehicle
29 = Investment program (A generalized fund for major investors.)
30 = Specialized account program (A specialized fund setup for a particular account or group of accounts.)

--- Interest Rate ---
1 = Single currency
2 = Cross currency

--- Loan Facility ---
31 = Term loan
32 = Bridge loan
33 = Letter of credit

--- Other ---
8 = Exotic
Question 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?

Our experience within the FIX Trading Community is that at some level there usually needs to be a category of “Other”. However, care must be taken where the value of "Other" is used in exceptional circumstances and does not become a mechanism for obscuring risk. FIX takes the view that when possible the use of "Other" be minimized and properly defined values for the field(s) in question should be defined and standardised.

Question 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?

The FIX Messages permit aggregation within our position reporting messages. We hope that users of the FIX and FpML messaging systems will provide a more detailed response to this question.

Question 11: Do the options presented above appear operationally feasible? If not, please explain why.

The approach above does appear to be feasible. The work is in expanding out and uniquely identifying the wide variety of contracts. This does not have to be an all or none situation, care should be taken in the pursuit of perfection. We have not seen a classification scheme or identification scheme in use that does not contain pragmatic compromise. The application of the 80/20 rule is probably required to be able to move forward in terms of classification for purposes of systemic risk measurement.

Question 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)?

The only answer that can be given is "it depends" on the requirements for the risk analysis. The classification scheme without identification of the underlier presents the problem of not being able to assess particular exposure to asset XYZ.
However, inclusion of the identifier of the underlier at the classification level in all cases may result in far too much classification granularity. At the identification level the issuer is an important component. At the classification level the issuer is too much granularity.

Question 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.

The inclusion of the underlier in the classification system seems to create too much granularity. The maintenance of Identifier + Classification + Underlier Identifier + uniqueness producing attributes of both the financial instrument and its underlier seems to be the appropriate level of granularity.

We would like to direct CPMI-IOSCO to the work just now starting within the ISO TC68/SC4/SG2 Study Group on ISIN Allocation. We welcome participation of global regulators as we try and create a concrete instance of the identifier and classification. The promise of this initiative is a comprehensive global solution to the requirements specified within the CPMI-IOSCO UPI Consultation Report.

Question 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?

FIX is aware that with the ISIN and the FIGI identifier standards there are a certain basic set of attributes provided free of charge. However, the number of available attributes will need to be expanded to accommodate OTC derivatives. Discussions on the provision of additional freely available attributes is being actively considered within ISO TC68/SC5/SG2 Study Group on ISIN Allocation for OTC derivatives.

Question 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?

The CFI (ISO 10962), the ISDA Taxonomies, and the FIX Product and Risk Taxonomies are all available for use freely. There is a nominal charge for the CFI (ISO 10962) specification, however in practice this standard document is not required to use the CFI codes.

The FIX Trading Community believes that the CFI (ISO 10962) should be used as a starting point for the UPI classification. Considerable work was performed to expand the CFI to support OTC Derivatives. Both the FIX Trading Community and ISDA participated in the expansion of the CFI for OTC Derivatives that became part of ISO 10962:2015. While it is recognized there are limitations to the CFI due to the definition of the standard, the ISO 10962:2015 received significant input from industry experts in the creation of the new CFI categories and the appropriate classification groups and attributes used for OTC derivatives.
Further work is going on now within the subcommittee responsible for the maintenance of the CFI (ISO 10962) standard. The US standards representative (ASC X.9) and FIX Trading Community (a member of ASC X.9) led the current advisory group ISOC TC68/SC4/AG1 on the long term direction for the CFI. The recommendations being put forth are to create an electronically machine readable and freely available version of the CFI Code list in a semantic format (among others) and to create a maintenance agency that would oversee evolution of the code values independent of the standard itself. The consequence of this will be a structure whereby market participants and regulators will be able to evolve the CFI classification schema within its category, groups, and attributes as needed.

Question 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/and how they are technically managed in the case of existing classification system solutions?

The FIX Trading Community would look to the standards body associated with the selected classification scheme for maintenance and meeting new requirements. For the CFI (ISO 10962) this will be the planned maintenance agency, for the ISDA Taxonomy, this would be the ISDA Industry Trade Association, and for the FIX Risk Taxonomy, this would be the FIX Trading Community Global Technical Committee.

In all likelihood there may need to be multiple classification schemes to support the aggregation requirements to fully understand systemic risk.