

30 September 2016

Via Electronic Submission

RE: Comments to the Second Consultative Report on Harmonisation of the Unique Product Identifier (UPI)

General Note

CME Group appreciates the opportunity to comment on CPMI-IOSCO's *Second consultative report: Harmonisation of the Unique Product Identifier* of August 18, 2016. As the world's leading and most diverse derivatives marketplace, CME Group is where the world comes to manage risk. CME Group exchanges offer the widest range of global benchmark products across all major asset classes, including futures and options based on interest rates, equity indexes, foreign exchange, energy, agricultural commodities, metals, weather and real estate. CME Group brings buyers and sellers together through the CME Globex electronic trading platform and trading facilities in New York and Chicago. CME Group also operates CME Clearing, one of the largest central counterparty clearing services in the world, which provides clearing and settlement services for exchange-traded contracts, as well as for over-the-counter derivatives transactions through CME ClearPort.

CME recommends that CPMI-IOSCO approach the International Organization for Standardization ("ISO") to converge their respective approaches to UPI harmonisation. Currently the UPI concept described in this consultation does not align with the UPI initiative based on ISIN that the European Securities and Markets Authority ("ESMA") and ISO are planning to implement. For example, while the consultation puts forth a general definition of a derivative product that is similar to that of the ESMA/ISO initiative, the granularity of the proposed data elements differs in significant ways. The ESMA/ISO specified data elements provide more detail and precision in the overlying structure whereas the consultation relies to a greater extent on the underlying benchmark to imply a similar level of detail. The credit and interest rate asset classes are especially divergent in this way. The result will be separate sets of identifiers meaning roughly the same thing but which are derived and represented very differently. The end result will be inefficiency and disproportionate costs as the industry will potentially need to support both UPI initiatives.

At some level these need to be closely harmonized. ESMA/ISO have proposed a parent level identifier which should be harmonized with the UPI proposed in this consultation. The ideal result would be a single standard that supports the objectives of all users in identifying and reporting financial products. At a minimum the separate UPI initiatives should be easily interoperable and highly compatible. As a result, we encourage interaction and collaboration between CPMI-IOSCO and ISO.

Several other key aspects of the UPI service not addressed in this consultation include governance, change process and implementation. These things must be carefully considered and addressed in an upcoming consultation as this will be an extremely important aspect of the UPI. Governance should be open and transparent. The change process should be simple and well-defined. Implementation and technology should be lightweight and offer open APIs. CME looks forward to the opportunity to provide feedback on this next phase of the UPI consultation.

Responses to Consultation 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.

CME Q1 Response

The selection of data elements is largely reasonable and workable for the purpose of defining a UPI. However the following changes will be necessary in order to adequately support the asset classes covered in the consultation: For the Credit asset class we propose the following changes:

- Underlying Contract Type – As currently specified the set of enumerations for this data element are inadequate to fully identify a CDS index. More granular values are needed at this level. We recommend adding values for the specific type of index being described, i.e. CDX, iTraxx, CMBX, etc
- Underlying Contract Subtype – Add values for Investment Grade, High Yield, Cross Over, etc
- Underlying Index Series/Version - Underlying for an option but not a swap. These are part of the primary definition of the CDS product and should not be abstracted as part of an underlying

For Rates we propose the following changes:

- Contract Type, i.e. fixed/float, Underlying for an option but not a swap. This is not an underlying attribute for the swap as this directly describes the behavior of the product itself. It can be considered part of the underlying for a swaption

Commodities, being a broad and diverse asset class, are one area which will require augmentation in order to adequately serve as the basis of a UPI. Energies by themselves will require several additional data elements to allow for differentiation across what would be otherwise indistinguishable products. The current Contract Type and Contract Subtype elements do not provide sufficient attribution. We propose the following changes be made in support of Energies and Agriculture:

1. Expand set of Return/Pricing method to include 'Swing', 'Index', 'Trade at Settlement', 'Trade at Marker', 'Balance of Month'.
2. Add a data element for Location/Zone, i.e. Houston, Henry Hub, Northern Rockies, LOOP, Transco Zone 4, NYISO, CAISO, PJM, ERCOT, Brent, Dubai, WTI, etc.
3. Add a data element for Means of Delivery, i.e. Pipeline, Hub, etc.
4. Add a data element for Load Type, i.e. PeakLoad, BaseLoad, Off-peak, etc.
5. Add a data element for cash vs collateralized valuation. This indicates whether the daily mark-to-market is treated as a daily cash flow or as a component of the overall margin.

For FX we propose the following changes:

1. Contract type should not be part of the underlying unless it is an option. Spot, Forward, Future is an attribute of the derivative itself. If the attribute doesn't fit, don't use it. It is appropriate for Equities and Commodities although it has very different applications.
2. FX – add a data element for cash vs collateralized valuation. This indicates whether the daily mark-to-market is treated as a daily cash flow or as a component of the overall margin.
3. FX – Please be specific in identifying Currency Pair as an attribute of the underlying.

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

CME Q2 Response

CME acknowledges that the value “Other” is needed as a temporary place holder in cases where the UPI version in use is unable to otherwise represent an instance of a product. Given the panoply of bespoke products that exist the value “Other” will need to be available in the majority of data elements. An important premise of the UPI should be to periodically issue new versions and assign specific values where Other has been used. CME notes that no more than a single value of Other in a given data element can be supported without creating duplicate UPIs where all other data elements are the same.

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?

CME Q3 Response

It is not practical to try to incorporate all the specifics of the securities that comprise a custom basket underlying an OTC derivative. The goal should be to make the UPI model no more complicated than necessary for the majority of products that use it. The characteristics of a custom basket should be reported as part of the trade or instrument and not the UPI.

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?

CME Q4 Response

We agree that LEIs would be suitable for representing corporate reference entities as there is an existing framework that can be utilized and adopted. Clearly it would not be sufficient to use an LEI for the purpose of identifying an asset because LEIs serve the purpose of identifying a legal entity and do not identify the specific asset or debt issued by that entity. An existing identifier assigned for the purpose of referencing the asset or debt such as an ISIN or a commonly used industry identifier made available via non-commercial license should be used for those purposes. The approach should be the same for indices which should leverage commonly used industry identifiers.

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.

CME Q5 Response

CME does not see an obvious problem related to incorporating the identifier source as an underlying data element since it will be a critical component of the underlier necessary in removing ambiguity from the UPI. Because of this it must be incumbent on vendors acting as the source to provide access to these identifiers on a free and open basis. Vendors must be willing to provide a non-commercial license or the equivalent as it relates to UPI reporting to both the entity administering the UPI as well as all industry users.

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.

CME Q6 Response

A core tenant of the UPI service must be that it should not require the use of any element which has an associated fee. Special licensing agreements would need to be negotiated with vendors of benchmarks and indices which would make them available via non-commercial license as it pertains to the UPI, and allow for the redistribution of licensed data.

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?

CME Q7 Response

CME favors a UPI which provides a 'unique arbitrary identifier' which is one that is not 'intelligent' and does not attempt to convey meaning through the mnemonic code itself. We believe that it is not practical to do so especially when the underlying can be highly specific and difficult to codify in an interpretable manner. An interpretable identifier is also less likely to be flexible, extensible and backwards compatible with prior versions and creates greater difficulty in maintaining as the UPI standard continues to grow. The minimum requirement for the UPI is that it uniquely identify an OTC product rather than convey what it is. CFI code should be leveraged for this purpose. Over the long term this will reduce difficulty of adoption and overall cost.

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?

CME Q8 Response

A well-articulated reference data library will be essential to support any type of effective identifier. A unique arbitrary identifier, i.e. Dummy identifier, will require a rich, well-organized, and well-maintained set of reference data. As stated in the response to question 7 CME believes that an intelligent identifier is unnecessary and will create problems shortly after initial implementation.

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?

CME Q9 Response

A reasonable maximum length for an identifier is 32 characters. Use of a unique arbitrary identifier will work well with an upper bound in this range. An intelligent code would need to be twice as large and likely larger. When a size of 32 characters is exceeded records and files will grow noticeably larger increasing the cost of the systems which must support them.

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?

CME Q10 Response

UPIs should be fully encoded from the standpoint that the code itself will be generated via algorithm which will ensure uniqueness. This may be done via sequencing, random generation, or hashing to produce a code which is unique and can be applied as an identifier. Many such models exist throughout the industry within an array of financial institutions as well as in commercial entities which market identifiers. UPIs should not be encoded into a binary, hexadecimal or compressed format and should be represented in standard ASCII format.

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?

CME Q11 Response

UPI codes which are arbitrary with respect to the meaning of the product being identified do not need an inherent means of validation. Once they have been assigned industry users will trust the UPI administrator and their own systems to ensure the integrity of the UPI. A check digit which could be applicable in the case of an intelligent UPI illustrates the point that difficulty of implementation and cost will increase if this approach is used.

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?

CME Q12 Response

Use of a uniform length for the UPI could have the effect of simplifying implementation as systems would not need to deal with issues related to left vs right justification, nulls filled vs space filled, etc. Ability to validate based on a fixed length code could also provide some value assuming that not all systems will be UPI certified and thus could truncate or otherwise adulterate the code. A standard length code for all asset classes is most desirable in order to avoid asset class specific logic in systems throughout the industry. Insertion of additional characters to pad the identifiers is not impractical and could follow a convention of using reserved place-holder characters representing unused positions at the front or back of the string, i.e. X or Z as a reserved place-holder character.

Question 13: For an intelligent UPI code, how should underlying the 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?

CME Q13 Response

It may be possible to construct a UPI in this manner. However, since the reference data library must be used to understand the underlying portion of the identifier it should be no more onerous to perform the same translation on the overlying part.

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?

CME Q14 Response

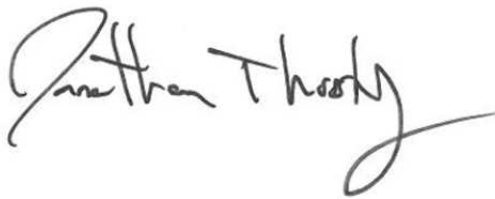
The UPI should be based on the standard ASCII printable character set inclusive of both upper and lower case letters and numbers. Special letters should likely be excluded due to system behaviors that can have problems when dealing with them, e.g. csv and xml files.

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).

CME Q15 Response

Please see the response to Question 14

Sincerely,



Jonathan Thursby
Executive Director
CME Group