

Unique Swap Identifier (USI): An Overview Document

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Introduction

Various international regulators and supervisory bodies¹ have called for the use of three unique identifiers in relation to derivatives data reporting:

- Unique Swap Identifier (USI) or Unique Trade Identifier (UTI)
- Legal Entity Identifier (LEI) or Unique Counterparty Identifier (UCI)
- Unique Product Identifier (UPI)

This paper focuses on one of those identifiers: how to uniquely identify a trade or contract. The CFTC is furthest along in specifying the requirements for this trade identifier. We believe and hope that the majority of the principles can be leveraged and applied internationally and it is indeed the desire from the industry to come up with a global accepted solution for unique trade identifiers. For the remainder of this document though we will focus on the CFTC requirements and hence use the CFTC term of USI.

Status

The purpose of this overview document is to provide the industry with Design & Guiding Principles to be used for USI generation and consumption. The document reflects the discussions and agreements reached in the ISDA USI / UTI Workflow working group. Certain complex flows require further analysis and actual implementation experiences might require revisions or refinements of the principles and will likely lead to further publications in this area. In particular the clearing and client clearing principles have not yet been finalized. In addition, as mentioned above, further work is required to look at the global applicability of a unique contract identifier.

¹ ESMA Discussion Paper: Draft Technical Standards for the Regulation on OTC Derivatives, CCPs and Trade Repositories - <http://www.esma.europa.eu/consultation/Consultation-Draft-Technical-Standards-Regulation-OTC-Derivatives-CCPs-and-Trade-Reposi>

CPSS-IOSCO Consultative Report on OTC Derivatives Data Reporting and Aggregation Requirements: <http://www.bis.org/publ/cpss96.htm>

CFTC: 17 CFR part 43 and part 45: <http://www.cftc.gov/LawRegulation/DoddFrankAct/Dodd-FrankFinalRules/index.htm>

Scope

The principles which have been established in this document relate only to the Credit, Interest Rate and Equity Derivatives asset classes. The Foreign Exchange and Commodity Derivative asset classes have developed a different set of approaches which will be discussed at a high level in this document.

CFTC requirements

On January 13, 2012, the CFTC published 17 CFR part 45: Swap Data Recordkeeping and Reporting Requirements. Part 45.5 states:

“To insure the uniqueness of USIs created by registered entities as provided in the final rule, the final rule will follow the NOPR in prescribing USI creation through what is known as the “name space” method. Under this method, the first characters of each USI will consist of a unique code that identifies the registered entity creating the USI, given to the registered entity by the Commission during the registration process. The remaining characters of the USI will consist of a code created by the registered entity that must be unique with respect to all other USIs created by that registered entity. While the Commission will not prescribe the means for ensuring the uniqueness of each USI created by a registered entity, Commission staff may work with registered entities to identify random number generators sufficiently capable for this purpose.”

Subsequently the CFTC made available draft technical standards for USI² which provide more detail on the composition of the USI. The CFTC provided additional information through discussions with the ISDA Data Working Group. Below is a summary of those points:

Format of the USI:

- Namespace: 10!an (Fixed length of 10; numeric characters and Uppercase letters without special characters are allowed)
- Transaction Identifier: 32!an (Fixed length of 32; numeric characters and Uppercase letters without special characters are allowed)

Namespace

The namespace is the first component of the USI. It is a ten-digit numeric identifier that consists of a three-digit prefix followed by a seven-digit identifier unique to each three-character prefix. The range of 101-119 is reserved for CFTC use for the three digit prefix. The range available for the prefix to other entities that could issue USIs in the future is 120-ZZZ

The CFTC has explicitly stated that the LEI will not be used to identify the entity initiating the transaction.

² At the time of publication of this document the CFTC technical standards document was not yet finalized. Several questions have been raised, in particular regarding the requirement for a fixed length identifier.

Additional points:

- Swap Dealers (SD) and Major Swap Participants (MSP) will register with the National Futures Association (NFA) (on behalf of the CFTC) who will issue them a 7 digit NFA ID. Most SD, MSP are already registered with NFA under a different category, so will likely use their current NFA ID but under the new classification. Firms should prefix 103 to the registration code to create their 10 digit USI Namespace.
- Swap Data Repositories (SDR), Swap Execution Facilities (SEF), Designated Contract Markets (DCM) and Derivatives Clearing Organizations (DCO) will register with the CFTC who will issue them a 7 digit ID. They should prefix 101 to the registration code they receive to create their USI Namespace.
- With respect to Namespace prefixes, CFTC will use 101 for now and NFA will use 103. 102 and 104, respectively, will be reserved for future use.
- If a party registers for multiple roles, this would represent two separate requests and two separate IDs. e.g., A legal entity who registers as both a SEF and a DCO, would have a different USI namespace for each of these roles.
- Registration is required for a CFTC or NFA namespace. The CFTC currently does not contemplate issuance of a namespace without a registration requirement.

Workflow Working Group Principles

The Workflow working groups, which started meeting in the fall of 2011, established a set of Guiding Principles for the creation and exchange of USI and a set of Design Principles detailing which party creates the identifier and how USIs are exchanged for a set of unique business scenarios.

A. USI / UTI Guiding Principles:

1. USI as per 45.5 will be created following First Touch as defined in the Final Rules³.

³“The NOPR provided for a “first-touch” approach to USI creation, **with the USI created by SEFs and DCMs for facility-executed swaps, by SDs and MSPs for off-facility swaps in which they are the reporting counterparty, and by SDRs for off-facility swaps between non-SD/MSP counterparties (who may lack the requisite systems for USI creation).**”

“**Having the USI created when the swap is executed, i.e., at the earliest possible point,** will best ensure that all market participants involved with the swap, from counterparties to platforms to clearinghouses to SDRS, will have the same USI for the swap, and have it as soon as possible. This will avoid confusion and potential errors.⁴³ It will avoid delays in submitting an executed swap for clearing while waiting for receipt of a USI from creation at a later time, and will minimize to the extent possible the need to alter pre-existing records concerning the swap in various automated systems to add the USI. As the sole exception to first-touch USI creation, designed to reduce burdens on non-SD/MSP reporting counterparties who may lack the technical sophistication or automated systems needed for USI creation, the final rule will maintain the NOPR provision calling for the USI for each swap between non-SD/MSP counterparties to be created by the SDR to which the swap is reported.”

2. USI will be created at the point of execution* USI might also be assigned when a bilateral trade gets cleared, or following a compression/netting cycle.
3. USI format will be “name space” + Unique ID.
4. Reporting Party will be responsible for the generation of USI for non-SEF/non-DCM trades and non-DCO positions.
5. USI may be included with Real Time reporting.
6. USI will not be publicly reported.
7. Reporting Party will be required to notify the non-reporting party of the USI with counterparty (non-reporting party).**
8. If the non-reporting party chooses to submit a voluntary report to the SDR it must include the USI assigned by the RCP in addition to all other required fields for voluntary reporting.
9. The reporting party can assign a 3rd party service provider to generate USI on its behalf.
10. If the trade is sent to a DCO for clearing, the Reporting Party*** will be required to notify the DCO of the USI for that trade as well as the identity of the SDR to which the trade has been reported.****

* Pending clarification of the Legal interpretation of the word 'execution'

** Except in cases where the SDR will assign a USI for trades between non-SD/non-MSP counterparties (i.e. end-user vs. end-user trades) as defined in the final rules

***Except in cases where the SDR will assign a USI for trades between non-SD / non-MSP counterparties in which case the SDR will notify the DCO of the USI.

****Except where the Reporting Counterparty has been excused from reporting, in which case the Reporting Counterparty will notify the DCO that the trade has not been reported to the SDR.

B. USI / UTI Design Principles

The working group utilized the principles above to create the below USI design principles for the different scenarios.

a. Swap Execution Facility (SEF) Executed Trades

- SEF is responsible for generating the USI, but can delegate the action to a 3rd party (but cannot delegate responsibility).
- SEF is responsible for applying Reporting Counterparty (RCP)* logic, but can delegate the action to a 3rd party (but cannot delegate responsibility).
- SEF transmits USI and RCP determination to trading counterparties via middleware if used or directly otherwise.
- SEF reports USI to SDR as part of the reporting for the trade.
- Where applicable, SEF transmits USI and identity of the SDR to the DCO.

* Where an asset class or swap dealer deems it applicable, the reporting party logic may be defined prior to submission to the SEF.

b. Non-SEF Executed Trades - Electronically Confirmed – on Confirm Platform

- Trading counterparties are responsible for determining/agreeing the RCP on the trade; they can delegate the action to a 3rd party (but cannot delegate responsibility).
- RCP is responsible for generating the USI; RCP can delegate the action to a 3rd party (but cannot delegate responsibility).
- RCP transmits the USI to the non-RCP via one or more of the following mediums (depending on the technological capability of the non-RCP):
 - The electronic confirmation platform (if service is available)
 - The SDR (via ACK message being made available)
 - Via telephone/email or other (if there is no other option)
- Where applicable, RCP transmits the USI and identity of the SDR to the DCO in the trade message sent for clearing.

c. Non-SEF Executed Trades - Electronically Confirmed – No Confirm Platform

- Trading counterparties are responsible for determining/agreeing the RCP on the trade; they can delegate the action to a 3rd party (but cannot delegate responsibility).
- RCP is responsible for generating the USI. RCP can delegate the action to a 3rd party (but cannot delegate responsibility).
- RCP transmits the USI to the non-RCP via one or more of the following mediums (depending on the technological capability of the non-RCP):
 - The electronic confirmation
 - The SDR (via ACK message being made available)
 - Via telephone/email or other (if there is no other option)
- Where applicable, RCP transmits the USI and identity of the SDR to the DCO in the trade message sent for clearing.

d. Non-SEF Executed Trades - Paper Confirmed

- Trading counterparties are responsible for determining/agreeing the RCP on the trade; they can delegate the action to a 3rd party (but cannot delegate responsibility).
- RCP is responsible for generating the USI. RCP can delegate the action to a 3rd party (but cannot delegate responsibility).
- RCP transmits the USI to the non-RCP via one or more of the following mediums (depending on the technological capability of the non-RCP):
 - A middleware ‘trade pairing solution/generic template’ (if service is available)
 - The SDR (via ACK message being made available)
 - The paper confirmation
 - Via telephone/email or other (if there is no other option)

In cases c and d, we note that the communication of USI via the ACK message works, provided both parties connect to the same SDR, and telephone/email may require manual methods.

e. Positions Generated through Clearing- Derivatives Clearing Organization (DCO)*

Discussions are ongoing between DCOs and market participants regarding the treatment of USI in clearing workflows, in particular, the responsibilities to report valuation data and the determination and role of RCP for cleared positions in relation to SDR reporting.

f. Client Clearing

The section below discusses USI generation for client clearing. In this context, a 'Client' is defined as a party who is not directly clearing the trade, but rather is clearing via a third party such as a Futures Commission Merchant (FCM) or Direct Clearing Member (DCM) to the clearing house (collectively referred to below as Clearing Member ie a clearing member of the DCO who clears on behalf of clients)

During a client clearing workflow, a trade is executed between two parties (at least one of whom is a 'client') and is given up for clearing. This process generates one or more 'client legs' of the cleared trade which describe the relationship between three parties: the Client the DCO and the Clearing Member.

Depending on the origination workflow, the clearing event may result in one or more client legs, e.g.:

- A non-SEF executed trade between a Client and an Executing Broker (EB) without allocations will generate a single client leg, one with allocations will generate one client leg per allocation.
- Certain SEF models could permit two clients to execute with one another, which (in the absence of allocations) will result in two distinct client legs.

Note that where the trade was executed against an Executing Broker, there will also be a 'dealer leg' of the cleared trade.

USI Generation Principles for Client Cleared Trades:

1) Regardless of the execution venue, DCOs, upon clearing, are unambiguously responsible for generating USIs on client legs.

2) The USI(s) must be propagated back to clearing acceptance or middleware platforms for capture by the client's Clearing Member.

3) For client clearing under and FCM model, one USI is necessary and sufficient for each client leg, and spans all three parties to the trade, regardless of the data model individual institutions may use to represent that trade.

4) For client clearing under an SCM model (where a principal legal relationship between the Client and the Clearing Member exists) it is possible that two USIs are required. This is still under discussion within the industry.

5) Prior USIs provide an audit history of trading activity, but must be managed carefully such that the unique namespaces of executing or clearing parties are not revealed to one another and anonymity is preserved. In general:

- For pre-clearing allocation with clearing on the block level, the prior USI on each cleared allocation will be the block level USI of the initial EB – client execution.
- For pre-clearing allocation with clearing on the allocated level, the prior USI on each cleared allocation will be the USI of each split of the initial EB – client execution.
- For post-clearing allocation, the prior USI on the allocations will be the USI of the client cleared block trade.

6) In the event a trade fails to clear, reporting workflow reverts to standard bilateral or intermediation reporting workflows as appropriate.

7) In the event of a position transfer, (the client moves its positions from one Clearing Member to another) the original positions are terminated, and replacement positions, identifying the new Clearing Member are created. The DCO is responsible for generating the new USIs for each ported position and making them available to the new Clearing Member.

The following five example use cases illustrate the proposed USI exchange at a high-level:

1. Executing Broker (EB) executes with Hedge Fund (HF, non-allocating client)
 - USI α generated by EB on execution between EB and HF; α is reported to the SDR and submitted to the DCO in the clearing workflow.
 - On clearing, DCO generates USI β on cleared leg between EB and DCO; β is reported to the SDR with prior USI α , and exposed to the EB via the clearing acknowledgement.
 - Simultaneously, DCO generates USI γ on leg between HF and DCO cleared by the Clearing Member; γ is *also* reported to the SDR with prior USI α , and exposed to the Clearing Member via the clearing acknowledgement.

Note that α (which includes EB namespace) should not be exposed to the Clearing Member in any part of the clearing workflow or in the SDR to preserve anonymity between EB and the Clearing Member.

2. *EB executes with Asset Manager (AM, an allocating client) under a pre-clearing allocation model at a DCO supporting block clearing*
 - USI α generated by EB on execution between EB and AM; α is reported to the SDR and submitted to the DCO in the clearing workflow.
 - AM provides their allocations with affirmation prior to clearing.
 - On clearing, DCO generates USI β on cleared leg between EB and DCO; β is reported to the SDR with prior USI α , and exposed to the EB via the clearing acknowledgement.
 - Simultaneously, DCO generates USIs $\gamma_{1..N}$ for allocations between AM and DCO cleared by the Clearing Member, the $\gamma_{1..N}$ are also reported to the SDR with prior USI α , and exposed to the Clearing Member via the clearing acknowledgement. Again α (which includes EB namespace) should not be exposed to the Clearing Member in any part of the clearing workflow or in the SDR to preserve anonymity between EB and the Clearing Member.
3. *EB executes with Asset Manager (AM, an allocating client) under a pre-clearing allocation model at a DCO supporting clearing of individual splits*
 - USI $\alpha_{1..N}$ generated by EB on execution and subsequent allocation between EB and AM; $\alpha_{1..N}$ are reported to the SDR and submitted to the DCO in the clearing workflow.
 - On clearing, DCO generates USI $\beta_{1..N}$ on cleared legs between EB and DCO; $\beta_{1..N}$ are reported to the SDR with prior USI α , and exposed to the EB via the clearing acknowledgement.
 - Simultaneously, DCO generates USIs $\gamma_{1..N}$ for allocations between AM and DCO cleared by the Clearing Member, the $\gamma_{1..N}$ are also reported to the SDR with prior USI α , and exposed to the Clearing Member via the clearing acknowledgement. Again α (which includes EB namespace) should not be exposed to the Clearing Member in any part of the clearing workflow or in the SDR to preserve anonymity between EB and the Clearing Member.
4. *EB executes with AM (an allocating client) under a post-clearing allocation model*
 - USI α generated by EB on execution between EB and AM; α is reported to the SDR and submitted to the DCO in the clearing workflow.
 - On clearing, DCO generates USI β on cleared leg between EB and DCO; β is reported to the SDR with prior USI α , and exposed to the EB via the clearing acknowledgement.
 - Simultaneously, DCO generates USI γ on leg between AM and DCO cleared by the Clearing Member; γ is *also* reported to the SDR with prior USI α , and exposed to the Clearing Member via the clearing acknowledgement.
 - γ is allocated post-clearing to one or more "ultimate" • Clearing Members; the DCO will generate $\delta_{1..N}$ which are reported to the SDR with prior USI γ , and exposed to the 'ultimate' • Clearing Members via their clearing acknowledgements.

Again α (which includes EB namespace) should not be exposed to *any* Clearing Member in any part of the clearing workflow or in the SDR to preserve anonymity between EB and Clearing Member.

5. Hedge Fund ports positions from Transferee Clearing Member to Transferor Clearing Member

- HF has a position with USI γ at DCO cleared by Transferee Clearing Member.
- HF initiates workflow to port of position from Transferee Clearing Member to Transferor Clearing Member.
- On Transferor Clearing Member acceptance, DCO closes out γ , reporting the lifecycle event to the Transferee Clearing Member.
- Simultaneously DCO creates δ on position between HF and DCO cleared by Transferee Clearing Member with prior USI γ .

g. **Prime Brokerage Intermediation**

- A trade intermediated by a Prime Broker (PB) on behalf of an Executing Broker (EB) and Client will be RT reported with respect to the EB - PB trade leg when EB and Client agree on the terms.
- RCP responsibility for the EB – PB leg is *always* with the EB, as PB may not be made aware of a trade for some time after its inception. Except for the case of a trade executed on a SEF, the USI will carry the namespace of the EB.
- Execution time for the PB – Client leg is point of PB acceptance.
- PB is the RCP on the PB – Client leg(s).
- Two USIs will be generated in the booking process:
 - USI1 – RT, PET and Confirmation on the EB – PB leg
 - USI2 – PET and Confirmation on the PB – Client leg(s) (but no RT reporting).
 - There is no relationship between the EB and client and thus no transaction and no additional USI requirement.

h. **Novations**

- For Novations which are price forming (i.e. incur a fee), Industry agreed Reporting Party rules are re-evaluated upon an event.
- Transaction between Transferee and Transferor is the only Real Time reported piece to a novation.
- Reports will be generated on three USIs:
 - USI1 – Original trade, keeps original USI
 - USI2 – RT report between Transferee and Transferor (USI will only be issued for RT)
 - USI3 – Remaining transaction between Remaining Party and Transferee

Note: Definition of execution time:

1. When the EE and the OR agree the trade – this is the time that should be captured on USI2.

2. When all parties consent – this is the time that should be captured on USI3.

Approach for the other asset classes:

Foreign Exchange Approach

The GFMA Global FX Division Market Architecture Group has published a USI / UTI proposal specific to the foreign exchange industry. This recommends design and guiding principles for USI / UTI generation and consumption intended to facilitate reporting for market participants across both SEF and clearing exempt products (as indicated by the proposed US Treasury exemption) as well as mandatory SEF and clearing products to be reported under the CFTC rules. Further details can be found at [http://www.gfma.org/initiatives/foreign-exchange-\(fx\)/fx-market-architecture/](http://www.gfma.org/initiatives/foreign-exchange-(fx)/fx-market-architecture/).

Commodities Approach

The commodities flows are still under discussion in the commodities working groups. Trades electronically executed on a SEF will have USIs generated by the SEFs. The preferred approach for non-SEF executed trades is for the SDR to provide an optional service to generate the USI on behalf of the Reporting Party. A standardized methodology for dissemination will need to be laid out and adhered to by all SDRs servicing the asset class. Due to differences in product and market convention, there may be the need to apply different rules and work flows for USIs to those laid out in this document for interest rate, credit and equity derivatives.

USI / UTI Event Table:

To further summarize the USI principles the following event table was created by the working group.

Event Type		New USI Generated?
New Trade		Y
Amendment (correction to the trade for any trade attribute or fee)		N
Cancel (trade booked in error)		N
Trade Allocated	Original Unallocated Trade	N/A
	Allocated Trades	Y
Cleared Positions	Original Bilateral Trade	N/A
	Cleared Position	Y
Termination / Unwind		N
Partial Termination / Partial Unwind / Partial Decrease		N
Increase / Decrease		N
Full Novation – Remaining Party		Y
Full Novation – Step In		Y
Full Novation – Step Out (Price Forming Event)		Y
Full Novation – 4 way		Y
Partial Novation – Partial Remaining Party	Original Trade	N
	New Trade	Y
Partial Novation – Partial Step In	Original Trade	N
	New Trade	Y
Partial Novation – Partial Step Out	Original Trade	N
	New Trade	Y

Partial Novation – Partial 4 way	Original Trade	N
	New Trade	Y
Novation Execution Fee		Y
Exercise	Original Option	N
Exercise (New Swap-Physically Settled)		Y
Prime Brokerage		Y
Succession Events	Rename	N
	Reorganizations	Y
Credit Events	Bankruptcy / Failure to Pay	N
	Restructuring	Y*
Compression Event		Original Trades- N/A
		New Trades- Y
CCP: Position Transfer (i.e. transfer of a trade between Clearing Members)		Y
CCP: Declear then Reclear		Y
CCP: Compression		Y

*Depending on product type and triggering activity

Other items of relevance to USI

Representation in FpML:

The FpML industry groups have engaged to discuss the modeling of USI. Below is a summary of the work. More information can be found in FpML version 5.3 (see the Specifications section at www.fpml.org).

The FpML Reporting Working Group agreed to represent the USI using a two-field representation that is based on the existing PartyTradeIdentifier structure, with a change to allow an issuer ID to be explicitly provided inline rather than referenced to a party block. The group considered a number of alternatives but formally voted on the following syntax:

<partyTradeIdentifier>

<issuer issuerIdScheme="http://www.fpml.org/coding-scheme/external/cftc/issuer-identifier">1011234567</issuer>

<tradeId tradeIdScheme="http://www.fpml.org/coding-scheme/external/unique-transaction-identifier">12345678901234567890123456789012</tradeId>

</partyTradeIdentifier>

Arguments in favor of this approach:

- Ability to separate the two components of the ID.
- Relatively small schema change.
- Ease of recognizing the identifier using data localized in one place in the document.

In addition, validation rules have been developed in order to limit the number of USIs.

Post Allocation, Pre-Clearing PET Reporting:

USI working group discussions have uncovered a potential problem regarding an obligation on the Executing Broker to report post-allocation shapes and final legal end-counterparties on trades in a pre-cleared or pending clearing state. The current market practice (and infrastructure) for the FCM clearing model does not support propagation of final legal end-counterparties back to the Executing Broker post allocation. The USI working group acknowledges this potential issue and understands this may be reviewed in additional industry forums to determine advocacy or solutions where necessary.

Swap Execution Facility (SEF):

The industry is awaiting the registration details for SEFs. Therefore, the SEF may be missing at the point of regulatory reporting “Go Live” dates. If the SEF is not available then a default determined by the industry may be used where the SEF is deemed in the principles.

In regards to the “name space”, the final rule 45.5 states the following, “(a) *Swaps executed on a swap execution facility or designated contract market.* For each swap executed on a swap execution facility or designated contract market, the swap execution facility or designated contract market shall create and transmit a unique swap identifier as provided in paragraphs (a)(1)(ii) of this section.”

The USI working groups understand the above to imply that the SEF will register with the CFTC and apply their “name space” where applicable.

Multiple Future Reporting Jurisdictions

The USI working group notes that it is certain that other regulators will place reporting requirements on industry members. It is possible that another regulator might impose similar requirements to those of the CFTC; that is that trades are to be reported by one reporting party with a unique UTI in a short time scale.

In this situation, It is possible that both parties to the trade may bear Reporting Party obligations; one to each regulator. If the UTI for the trade is not agreed between the parties at execution, then the time constraints may require that firms cannot exchange a single UTI with one another before they must report. The working group notes that this would result in a situation where one trade has different UTIs representations with different regulators; one being an “Our Ref” UTI and the other being a “Your Ref” UTI. It is recommended that firms consider this in future-proofing their implementations for the USI.