

FIX CAT Working Group

Extensions for CAT/FIX Mapping

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# Document History

| **Revision** | **Date** | **Author** | **Revision Comments** |
| --- | --- | --- | --- |
| 0.1 | August 28, 2019 | Hanno Klein, GTC | Initial draft |
| 0.2 | September 5, 2019 | Hanno Klein, GTC | Added CopyMsgIndicator(797) to NewOrderSingle(35=D) message (resolution of open issue #5a).Confirmed mapping of CAT field deptType to one of two FIX fields, depending on the CAT event (resolution of open issue #14a). |
| 0.3 | September 16, 2019 | Hanno Klein, GTC | Added new FIX field OrderOriginationFirmID for CAT field originatingIMID (only inside aggregated orders). Resolution of open issue #21a.Changed mapping of CAT field unsolicitedInd from FIX field QuoteAttributeType(2707) to SolicitedFlag(377). Resolution of open issue #24.Corrected mapping of CAT field accountHolderType to FIX field OwnerType(522). Only one new standard value needed.Removed SecondaryOrdType(TBD), new UDF to be used instead. Resolution of open issue #25.Added “this” to new TimeInForce(59) value “Good for this Month” to avoid mis-interpretation.Added references to CAT fields as mapping and usage comments for new or added fields. |
| 0.4 | October 1, 2019 | Hanno Klein, GTC | Approved by CAT WG for submission to GTC |
| 0.5 | October 11, 2019 | Hanno Klein, GTC | Preliminarily approved by GTC (added usage of existing TrdRegTimestampType(770) values, corrected references and fonts) |
|  |  |  |  |
|  |  |  |  |

The above document history section, including date, author, and comments, is required to track editing changes to the document. List revisions in **ascending order**. Please insert additional rows in the table as needed.

Template version information:

r2: 2010-11-13 Revised to support abbreviations, inlined component references

r3: 2011-12-02 Revised to add additional usage clarification

r3.1: 2013-01-04 Revised Copyright year, changed template to Office 2013 .docx version, updated font to Calibri for cleaner look. Added additional template usage clarification.

R3.2 2016-05-23 – revised the copyright date, corrected document references and replaced the FIX logo with the most current graphic.

2016-09-14 – Removed blue highlighting from hidden text content, removed ICR column from 5.1 and 6.1 tables and added “FIX Spec” to the Comments column header of table 6.1 and revised notation of optional elaboration for fields and enums in the data dictionary.

# Introduction

This gap analysis proposal seeks to address requirements identified by Consolidated Audit Trail (the “CAT”) Working Group related to data reporting required by the CAT NMS Plan.

CAT NMS is a national market system plan submitted by national securities exchanges and national securities associations to create, implement, and maintain a consolidated audit trail (the “CAT”) that would allow regulators to more efficiently and accurately track all activity in U.S. equity and listed options markets. The SEC approved the CAT NMS Plan on November 15, 2016.

In accordance with SEC Rule 613, the CAT NMS Plan requires a Central Repository that will comprehensively track orders throughout their lifecycle and identify the Participants (FINRA and national securities exchanges) and Industry Members (Broker-dealers) handling them, as well as the account holders and authorized traders for any account that originates an order (Customers). Specific data elements will be submitted by Participants, Industry Members, and CAT Reporting Agents (Third party firms reporting on behalf of other entities).

The following document is used as a reference and input to this gap analysis document:

<https://www.catnmsplan.com/wp-content/uploads/2019/06/Industry-Member-Tech-Specs-v2.2-Clean.pdf>

Furthermore, this document uses a separate CAT-to-FIX mapping spreadsheet as a source for the extensions included in this proposal. The mapping shows complete CAT and FIX messages, indicating current gaps in FIX Latest that this proposal seeks to close.

# Business Requirements

The CAT specification is divided into almost 20 messages (Phase 2A only), each of which corresponds to a specific CAT event. The scope of this proposal does not include future phases that may or may not already be included in Version 2.2 of the *CAT Reporting Technical Specifications for Industry Members*.

Phase 2A requires the following five FIX message types to be extended, i.e. some of the CAT events are mapped to the same FIX message type (see Appendix E for details):

* NewOrderSingle(35=D)
* ExecutionReport(35=8)
* TradeCaptureReport(35=AE)
* Quote(35=S)
* QuoteStatusReport(35=AI)

## Summary of Changes

The table below describes the requirements along with the solution proposed by the GTC. Note that FIX messages types are only mentioned where new fields are added to the root level of a message. Otherwise the proposal identifies the component to which the field is added.

Table 1 Summary of proposed solution

| **#** | **Subject** | **Change Request** | **GTC Proposed Solution** |
| --- | --- | --- | --- |
| 1 | Events | CAT events need to be explicitly identified due to the fact that multiple CAT events are sourced from the same FIX message type. | Use RegulatoryReportType(1934). See section 2.2 for details. |
| 2 | Parties | CAT requires a number of different parties to be identified. | Use Parties component. There are no gaps in FIX related to parties in CAT. See section 2.3 for details. |
| 3 | Initiator | CAT requires to identify the type of actor that initiated a modification or cancellation event.* C = Initiated by the customer
* F = Initiated by the firm
 | Add new field EventInitiatorType(TBD) to ExecutionReport(35=8) and QuoteStatusReport(35=AI) with valid values:* C = Customer or client
* F = Firm or broker
* E = Exchange or execution venue[[1]](#footnote-1)
 |
| 4 | Timestamps | CAT has two generic timestamps (eventTimestamp, electronicTimestamp) as well as many specific timestamps (e.g. orderKeyDate). The generic CAT field electronicTimestamp is used to capture timestamps of manual events. | All CAT timestamps are of regulatory nature, i.e. use repeating group TrdRegTimestamps. See section 2.4 for details.Add component TrdRegTimestamps to Quote(35=S) and QuoteStatusReport(35=AI).For manual events, add new boolean field TrdRegTimestampManualIndicator(TBD) to TrdRegTimestamps component. It indicates whether a given timestamp relates to an event that was manually captured. |
| 5 | NBBO Information | CAT requires to report NBBO information related to the timestamp of the event. | Add new fields to the TrdRegTimestamps component to be attached to the event defined by TrdRegTimestampType(770).* NBBOEntryType(TBD)
* NBBOPrice(TBD)
* NBBOQty(TBD)
* NBBOSource(TBD)

Valid values for NBBOEntryType(TBD):* 0 = Bid
* 1 = Offer
* 2 = Mid-price[[2]](#footnote-2)

Valid values for NBBOSource(TBD):* 0 = Not applicable
* 1 = Direct
* 2 = SIP
* 3 = Hybrid
 |
| 6 | Order Aggregation | CAT requires the ability to attach a list of orders (reference and key attributes) to an order aggregating them.Each instance of an order must also have a timestamp (orderKeyDate). | Add OrderAggregationGrp to ExecutionReport(35=8).Add OrderTime(TBD) to OrderAggregationGrp. |
| 7 | Prior Order ID | CAT requires to link modifications of an order to the original order. | Use RefOrderID(1080) together with RefOrderIDSource(1081) and add a new valid value TBD = Previous order identifier. |
| 8 | Prior Quote ID | CAT requires to link modifications of a quote to the original order. | Use RefOrderID(1080) together with RefOrderIDSource(1081) and add a new valid value TBD = Previous quote identifier. |
| 9 | Parent Order ID | CAT requires to link child orders to its parent order when reporting their creation or when internally routing a child order. | Use RefOrderID(1080) together with RefOrderIDSource(1081) and add a new valid value TBD = Parent order identifier. |
| 10 | Manual Order ID | CAT requires to link duplicative electronic messages to a previously (separately) reported manual event by capturing the internal order ID of the manual order. | Use RefOrderID(1080) together with RefOrderIDSource(1081) and add a new valid value TBD = Manual order identifier. |
| 11 | Duplicate Routed Order ID | Indicates when a modification to an order previously routed to a national securities exchange requires the use of the original routedOrderID. | Add new boolean field DuplicateClOrdIDIndicator(TBD) to NewOrderSingle(35=D) with* N = Unique ClOrdID(11)
* Y = Duplicate ClOrdID(11)
 |
| 12 | Prices | CAT requires additional prices to be reported when a broker is an ATS. CAT field displayPrice indicates the price at which the order was displayed to the market (0 represents a hidden price). CAT field workingPrice indicates the price of the order at the time it was accepted. | Add new field DisplayPrice(TBD) to the DisplayInstruction component.Add new field WorkingPrice(TBD) to the ExecutionReport(35=8) and NewOrderSingle(35=D) messages. |
| 13 | Order Validity | CAT field timeInForce supports a value “Good This Month” (GTM) which defines an order as valid until the end of the current month. | Add new valid value TBD = Good for this Month (GFM) to TimeInForce(59). |
| 14 | Representative Orders | CAT requires to indicate if an order was originated to represent a customer/client order and if linkage is required.* Y (Representative Order, linkage required)
* YS (Representative order, linkage required; details in supplement event)
* YF (Representative Order, linkage required in future phase)
* YP (Representative Order, pricing guarantee, no linkage required)
* YE (Representative eligible – Order eligible for customer fills via an unlinked system (unlinked OMS-EMS or position fill workflow))
* N (Not a representative order, linkage is not applicable)
 | Add new value TBD = Representative order to OrderAttributeType(2594) with OrderAttributeValue(2595) = Y or N.Add new value TBD = Linkage type to OrderAttributeType(2594) with OrderAttributeValue(2595) as follows:* Y (Linkage required)
* S (Details in supplement, linkage)
* F (Required in the future, linkage)
* P (Pricing guarantee, no linkage)
* E (Eligible, linkage via unlinked system)
* N (Not applicable)
 |
| 15 | Fulfillment Link Type | CAT requires to indicate whether there is order level and trade level linkage, only trade level linkage (e.g., fill from the pre-existing customer order), or why the firm side details are not present.* Y (Representative Order, linkage required)
* YF (Representative Order, linkage required in future phase)
* YP (Fill from pre-existing Principal order, linkage required)
* YE (Representative eligible – Order eligible for customer fills via an unlinked system (unlinked OMS-EMS or position fill workflow))
* FOR (Fulfillment on an order routed to a foreign destination, no linkage required)
 | Add new value TBD = Representative order to OrderAttributeType(2594) with OrderAttributeValue(2595) = Y or N.Add new value TBD = Linkage type to OrderAttributeType(2594) with OrderAttributeValue(2595) as follows:* Y (Linkage required)
* F (Required in the future, linkage)
* PRE (Pre-existing principal order, linkage)
* E (Eligible, linkage via unlinked system)
* FOR (Routed to foreign, no linkage)
 |
| 16 | Account Holder | CAT requires to distinguish different account holders (accountHolderType):* A (Institutional Customer)
* E (Employee Account)
* F (Foreign)
* I (Individual Customer)
* (Market Making)
* P (Other Proprietary Account)
* V (Firm Agency Average Price Account)
* X (Error Account)
 | Add new value to OwnerType(522):* TBD = Firm Agency Average Price Account
 |
| 17 | Department | CAT requires to distinguish different departments (deptType):* A (Agency)
* ATS (ATS)
* DMA (Direct Market Access)
* SA (Sponsored Access)
* T (Trading)
* O (Others)
 | Use fields ReceivingDeptID(1726) for MEOA/MEIR and OriginatingDeptID(1725) for MENO.  |
| 18 | Only One Quote | CAT requires to identify instances when the quoting system allows only one quote to be active at a time for the particular market maker. | Add new field SingleQuoteIndicator(TBD) to Quote(35=S).* N = Multiple quotes allowed
* Y = Only one quote allowed
 |
| 19 | Market Participant’s Quote Status | CAT requires to indicate if a market maker’s quote is open (O) or closed (C) whenever the quote is sent to an inter-dealer quotation system. | Add new value TBD = Quote issuer status to QuoteAttributeType(2707) with QuoteAttributeValue(2708) = O or C. |
| 20 | Unsolicited Indicator | CAT requires to identify unsolicited quotes and whether they on the bid and/or ask side.* U Unsolicited Bid and Ask
* A Unsolicited Ask
* B Unsolicited Bid
* N Not Unsolicited
 | Add existing field SolicitedFlag(377) to the Quote(35=S) message, inferring bid/ask from presence of BidPx(132) and/or OfferPx(133). |
| 21 | Quote Wanted Indicator | Required to indicate if the quote message received by an IDQS is a request for a bid or an ask. Bid and ask fields are not required when this field is used. | Add new value TBD = Bid or ask request to QuoteAttributeType(2707) with QuoteAttributeValue(2708) = B or A |
| 22 | Sequence Number | The sequence number is required to be an increasing value for a CAT Reporter, event date, and symbol, such that it can be used to sequence events having the same event timestamp in chronological order. | Use existing fields depending on the FIX message type field MsgType(35):* For ExecutionReport(35=8), use ExecID(17)
* For NewOrderSingle(35=D), use OrderRequestID(2422)
* For TradeCaptureReport(35=AE), use TradeReportID(571)
* For Quote(S), use QuoteMsgID(1166)
* For QuoteStatusReport(35=AI), use QuoteMsgID(1166)
 |
| 23 | ATS Order Type | Unique identifier representing the specific order type(s) offered by the ATS. ATS only field. ATSs will provide their order types and handling instructions to CAT by submitting data dictionaries. Multiple *atsOrderType* values may be populated. | Do not add standard FIX field as proprietary order types from ATS venues are not subject to standardization and merely included for reporting purposes to CAT. Create new user defined field VenueOrderTypes(TBD) in the 8000-8499 range (defined by FIX). |
| 24 | ATS Display Indicator | ATS only field. Indicates if the order is displayed outside of the ATS to subscribers only, or via publicly disseminated quotation data.* **S** Order is displayed outside of the ATS to subscribers only
* **A** Order is displayed outside of the ATS to subscribers only, aggregated by price level on a timer basis.
* **Y** Order is displayed outside of the ATS via public quotation
* **N** Order is not displayed outside of the ATS
 | Add new valid values to TrdRegPublicationType(2669):* TBD = Order level publication to subscribers
* TBD = Price level publication to subscribers
* TBD = Order level publication to the public
* TBD = Publication internal to execution venue
 |
| 25 | Action Type | When receiving a record, CAT wants to know if it is a new, a changed, or a deleted record.* NEW = New record
* COR = Correction of events w/o CAT error
* RPR = Repair of events with CAT error
* DEL = Record level deletion
 | N/A on FIX session, only required for CAT session, no mapping required. |
| 26 | Record Identifier | When receiving a record, CAT wants the submitter to provide his own identifier for the record. | N/A on FIX session, only required for CAT session, no mapping required. |
| 27 | Error Identifier | When receiving a modified record, CAT wants the submitter to return the error code it had provided when acknowledging the original record. | N/A on FIX session, only required for CAT session, no mapping required. |
| 28 | Electronic duplicates | CAT requires to flag a duplicate report for initial events based on manual interaction between client and broker. This also applies to routing events (MEOR) where the FIX message NewOrderSingle(35=D) is used. | Add existing field CopyMsgIndicator(797) to NewOrderSingle(35=D). |

## CAT Event Mappings

A single CAT event is proposed to be explicitly mapped to a valid value of RegulatoryReportType(1934) as follows. The objective is to introduce as few new values as possible so that they can be re-used in other regulatory environments. The mapping of a FIX regulatory report type to a CAT event type requires to inspect the value or simply the presence or absence of the following FIX fields. See separate mapping sheet for details.

* MsgType(35) to distinguish orders, quotes, trades
* Product(460) to identify equities
* SecurityType(167) to identify options (not required for Phase 2A)
* ExecType(150) to distinguish new, modify, cancel events for orders and trades
* OrdType(40) to distinguish CAT modifications and adjustments
* DeskType(1033) to distinguish external and internal routes
* SecondaryQuoteID(1751) to distinguish sent and received quotes

| **CAT Event(s)** | **FIX Value** | **FIX Value Name** | **Elaboration** |
| --- | --- | --- | --- |
| MENO MEOM MEOJ MEOC | TBD | Order | Report for order handling events to enter, change or delete orders. In the context of US CAT this is used for the event types MENO, MEOM, MEOJ, and MEOC. |
| MECO MECOM MECOC | TBD | Child Order | Report for child order handling events to enter, change or delete child orders. Child orders are created when a (parent) order is split into multiple (child) orders. In the context of US CAT this is used for the event types MECO, MECOM, and MECOC. |
| MEOR MEIR MEOA | TBD | Order Route | Reported when an order is routed between market participants and/or execution venues such as an exchange. In the context of US CAT this is used for the event types MEOR, MEOA and MEIR. |
| MEOT MEOF MEFA | TBD | Trade | Report for trade handling events to enter, change or delete trades. In the context of US CAT this is used for the event types MEOT, MEOF and MEFA. |
| MENQ MEQR MEQC | TBD | Quote | Report for quote handling events to enter, change or delete quotes. In the context of US CAT this is used for the event types MENQ, MEQR, and MEQC. |
| MENOS MEOMS MEOTS | TBD | Supplement | Reported when an order, quote or trade report is split across multiple messages. The recipient must be able to create the full report by combining the initial and supplement reports. In the context of US CAT this is used for the event types MENOS, MEOMS and MEOTS. |

## CAT Party Identifiers

Actors are covered in FIX with the repeating groups Parties or RootParties. Both components have the same kind of internal elements and identical values. See the separate mapping sheet for further details, e.g. when Parties and when RootParties are to be used. CAT is able to use existing fields and valid values for all required actors, e.g. for a CAT Reporter IMID. The following table shows the mapping details. Some CAT fields are shown twice if they can map to two different parties according to the CAT Specification.

| **CAT Field** | **CAT Data Type** | **FIX Fields** |
| --- | --- | --- |
| CATReporterIMID | CAT Reporter IMID | PartyID(448) = <IMID>PartyIDSource(447) = C (Generally accepted)PartyRole(452) = 116 (Reporting entity)PartyRoleQualifier(2376) = 19 (New) |
| originatingIMID | CAT Reporter IMID | PartyID(448) = <IMID>PartyIDSource(447) = C (Generally accepted)PartyRole(452) = 116 (Reporting entity)PartyRoleQualifier(2376) = 18 (Current) |
| firmDesignatedID | Text(40) | PartyID(448) = <IMID>PartyIDSource(447) = S (FDID)PartyRole(452) = 1 (Executing Firm) |
| receiverIMID | Industry Member ID | PartyID(448) = <IMID>PartyIDSource(447) = C (Generally accepted)PartyRole(452) = 1 (Executing Firm) |
| senderIMID | Industry Member ID | PartyID(448) = <IMID>PartyIDSource(447) = C (Generally accepted)PartyRole(452) = 13 (Order Originating Firm) |
| senderIMID | Exchange ID | PartyID(448) = <MIC>PartyIDSource(447) = G (Market Identifier Code)PartyRole(452) = 22 (Exchange) |
| session | Text(40) | PartyID(448) = <Session Identifier>PartyIDSource(447) = D (Proprietary)PartyRole(452) = 55 (Session) |
| marketCenterID | Choice (FINRA) | PartyID(448) = <FINRA value>PartyIDSource(447) = C (Generally accepted)PartyRole(452) = 55 (Session) |
| marketCenterID | Choice (Exchange) | PartyID(448) = <MIC>PartyIDSource(447) = G (Market Identifier Code)PartyRole(452) = 65 (Regulated Market) |

## CAT Timestamp Mappings

Regulatory timestamps are covered in FIX with the repeating group TrdRegTimestamps. CAT is able to use a number of existing values of TrdRegTimestampType(770) but requires the following additional values (see separate spreadsheet for mapping to existing values). Note that this only includes timestamps at the root level of the CAT message. The CAT timestamp field orderKeyDate is also present in the repeating group for aggregated orders. Only this instance is mapped to a new FIX field OrderTime(TBD) inside the component OrderAggregationGrp (see also *Table 1 Summary of proposed solution*).

| **CAT Timestamp(s)** | **FIX Valid Value** | **FIX Elaboration** |
| --- | --- | --- |
| eventTimestamp (MECO), orderKeyDate, quoteKeyDate, fillKeyDate, tradeKeyDate | TBD = Identifier assigned | Timestamp for the assignment of a (unique) identifier to an entity (e.g. order, quote, trade). |
| priorOrderKeyDate, parentOrderKeyDate, priorQuoteKeyDate, priorFillKeyDate | TBD = Previous identifier assigned | Timestamp of previous assignment of a (unique) identifier to an entity (e.g. order, quote, trade). |
| eventTimestamp (MECOC, MEQC) | TBD = Order cancellation time | Timestamp for the cancellation of an order or quote. |
| eventTimestamp (MECOM) | TBD = Order modification time | Timestamp for the modification of an order or quote. |
| eventTimestamp (MEOR), electronicTimestamp (MEOR) | TBD = Order routing time | Timestamp for the routing of an order to another broker or electronic execution venue. |
| cancelTimestamp (MEOF, MEOT) | TBD = Trade cancellation time | Timestamp for the cancellation of an execution (ExecType(150) = H (Trade Cancel)) or trade (TradeReportType(856) = 6 (Trade Report Cancel)). |
| eventTimestamp (MEFA), electronicTimestamp (MEFA) | TBD = Trade modification time | Timestamp for the modification of an execution (ExecType(150) = G (Trade Correct)) or trade (TradeReportType(856) = 5 (No/Was)). |
| nbboTimestamp (MENO, MEOA, MEOJ, MEOM, MEOT) | TBD = Reference time for NBBO | Timestamp for an NBBO reference price. |
| eventTimestamp (MEOF, MEOT), electronicTimestamp (MEOF, MEOT) | 1 = Execution time | Timestamp for an execution (ExecType(150) = F (Trade) processed by the Industry Member or trade (TradeReportType(856) = 0 (Submit) executed by the Insdutry Member. |
| eventTimestamp (MEQR) | 2 = Time in | Timestamp for a quote received by the ATS or Industry Member.  |
| eventTimestamp (MENQ) | 3 = Time out | Timestamp for a quote sent by the Industry Member to the recipient.  |
| eventTimestamp (MENO, MEOA, MEOJ, MEOC, MEOM), electronicTimestamp (MENO, MEOA, MEOJ, MEOC, MEOM) | 4 = Broker receipt | Timestamp for an Industry Member receiving a request to create, accept, adjust, modify, cancel an order. |
| eventTimestamp (MEIR), electronicTimestamp (MEIR) | 6 = Desk receipt | Timestamp for a desk of an Industry member receiving a request to accept an internally routed order. |

# Issues and Discussion PointsThe information in this section can be presented in table or numbered list format or sub-sections of descriptive text. Include issues and important discussion points that arose during the sub-committee or working group's effort to develop the gap analysis proposal. Also include resolutions of the issues and discussion points. The items will aid in understanding the thought process and tracks for the decisions made.

None

# Proposed Message Flow

There are no changes to standard FIX message flows.

The following diagram was copied from the document *CAT Reporting Technical Specifications for Participants* 5/10/2018 Version 2.0.0 Section 3.4 Order Linkage and Lifecycle (page 35).



The FIX message NewOrderSingle(35=D) is used for some CAT events (e.g. MEOR) as a drop copy. This may seem unusual as drop copies are normally covered by the FIX messages ExecutionReport(35=8) and TradeCaptureReport(35=AE). However, there are cases, e.g. when a broker receives a new client order, where the broker has to report the acceptance of the order as well as the fact that he has routed this order to another broker or exchange. These cases are distinguished by using an ExecutionReport(35=8) message with ExecType(150) = 0 (New) followed by a NewOrderSingle(35=D) message with RefOrderID(180) set to the system order identifier assigned to the client order.

# FIX Message Tables

## FIX Message NewOrderSingle(35=D)

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be stored in the repository |
| Message Name | NewOrderSingle |
| Message Abbreviated Name (for FIXML) | Order |
| Category | (no change) |
| Action | \_\_New \_X\_Change |
| Message SynopsisRequired, short, one or two paragraph description of the message. | (no change) |
| Message ElaborationOptional longer description of the message usage  | (no change) |
| To be finalized by FPL Technical Office |
| (MsgType(tag 35) Enumeration | D |
| Repository Component ID | 14 |

| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *FIX Spec Comments* |
| --- | --- | --- | --- | --- | --- |
| ***Standard Header*** | Y |  |  | MsgType=D |
| 11 | ClOrdID | Y |  |  |  |
| 2422 | OrderRequestID | N |  |  |  |
| 526 | SecondaryClOrdID | N |  |  |  |
| 583 | ClOrdLinkID | N |  |  |  |
| TBD | DuplicateClOrdIDIndicator | N | New | CAT: dupROIDCond |  |
| Component Block ***Parties*** | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| Component Block ***OrderQuantityData*** | N |  |  |  |
| 40 | OrdType | Y |  |  |  |
|  |  |  |  |  |  |
| 423 | PriceType | N |  |  |  |
| 44 | Price | N |  |  |  |
| TBD | WorkingPrice | N | New | CAT: workingPrice | Can be used for new (child) orders stemming from the split of a parent order. Refers to the working price of the parent order. |
| 1092 | PriceProtectionScope | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| 377 | SolicitedFlag | N |  |  |  |
| 797 | CopyMsgIndicator | N | Add | CAT: electronicDupFlag  | Can be used when intentionally sending a new order more than once, e.g. an order being received manually as well as electronically in conjunction with a regulatory requirement to report both events.  |
| *(…truncated…)* |  |  |  |  |
| ***Standard Trailer*** | Y |  |  |  |

## FIX Message OrderCancelReplaceRequest(35=G)

This message is not required by CAT for Phase 2A but has been added to immediately support modifications of the new fields introduced for CAT.

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be stored in the repository |
| Message Name | OrderCancelReplaceRequest |
| Message Abbreviated Name (for FIXML) | OrdCxlRplcReq |
| Category | *(no change)* |
| Action | \_\_New \_X\_Change |
| Message SynopsisRequired, short, one or two paragraph description of the message. | *(no change)* |
| Message ElaborationOptional longer description of the message usage  | *(no change)* |
| To be finalized by FPL Technical Office |
| MsgType(tag 35) Enumeration | G |
| Repository Component ID | 17 |

| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *FIX Spec Comments* |
| --- | --- | --- | --- | --- | --- |
| ***Standard Header*** | Y |  |  | MsgType=G |
| 37 | OrderID | N |  |  |  |
| 2422 | OrderRequestID | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| 11 | ClOrdID | Y |  |  |  |
| 526 | SecondaryClOrdID | N |  |  |  |
| 583 | ClOrdLinkID | N |  |  |  |
| TBD | DuplicateClOrdIDIndicator | N | New | CAT: dupROIDCond |  |
| 66 | ListID | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| Component Block ***OrderQuantityData*** | N |  |  |  |
| 40 | OrdType | Y |  |  |  |
|  |  |  |  |  |  |
| 423 | PriceType | N |  |  |  |
| 44 | Price | N |  |  |  |
| TBD | WorkingPrice | N | New | CAT: workingPrice | Can be used to correct the initial working price of the parent order when this (child) order was entered. |
| 1092 | PriceProtectionScope | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| ***Standard Trailer*** | Y |  |  |  |

## FIX Message ExecutionReport(35=8)

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be stored in the repository |
| Message Name | ExecutionReport |
| Message Abbreviated Name (for FIXML) | ExecRpt |
| Category | (no change) |
| Action | \_\_New \_X\_Change |
| Message SynopsisRequired, short, one or two paragraph description of the message. | (no change) |
| Message ElaborationOptional longer description of the message usage  | (no change) |
| To be finalized by FPL Technical Office |
| (MsgType(tag 35) Enumeration | 8 |
| Repository Component ID | 9 |

| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *FIX Spec Comments* |
| --- | --- | --- | --- | --- | --- |
| ***Standard Header*** | Y |  |  |  |
| Component Block ***ApplicationSequenceControl*** |  |  |  |  |
| 37 | OrderID | Y |  |  |  |
| 2422 | OrderRequestID | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| 636 | WorkingIndicator | N |  |  |  |
| TBD | WorkingPrice | N | New | CAT: workingPrice | Current working price of the order. |
| 103 | OrdRejReason | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| Component Block ***OrderQuantityData*** | N |  |  |  |
| 1093 | LotType | N |  |  |  |
| 40 | OrdType | N |  |  |  |
|  |  |  |  |  |  |
| 423 | PriceType | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| Component Block ***FillsGrp*** |  |  |  |  |
| Component Block ***OrderEventGrp*** |  |  |  |  |
| TBD | EventInitiatorType | N | New | CAT: initiator | Refers to the event related to the entire message. |
| *(…truncated…)* |  |  |  |  |
| ***Standard Trailer*** | Y |  |  |  |

## FIX Message Quote(35=S)

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be stored in the repository |
| Message Name | Quote |
| Message Abbreviated Name (for FIXML) | Quot |
| Category | QuotationNegotiation |
| Action | \_\_New \_X\_Change |
| Message SynopsisRequired, short, one or two paragraph description of the message. | (no change) |
| Message ElaborationOptional longer description of the message usage  | (no change) |
| To be finalized by FPL Technical Office |
| (MsgType(tag 35) Enumeration | S |
| Repository Component ID | 27 |

| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *FIX Spec Comments* |
| --- | --- | --- | --- | --- | --- |
|  | ***Standard Header*** | Y |  |  | MsgType =S |
| 131 | QuoteReqID | N |  |  |  |
| 117 | QuoteID | Y |  |  |  |
| *(…truncated…)* |  |  |  |  |
| 537 | QuoteType | N |  |  |  |
| 2403 | QuoteModelType | N |  |  |  |
| 1171 | PrivateQuote | N |  |  |  |
| TBD | SingleQuoteIndicator | N | New | CAT: onlyOneQuoteFlag |  |
| Component Block***QuotQualGrp*** | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| 581 | AccountType | N |  |  |  |
| TBD | OwnerType | N | New | CAT: accountHolderType |  |
| 377 | SolicitedFlag | N | Add | CAT: unsolicitedInd |  |
| *(…truncated…)* |  |  |  |  |
|  | ***Standard Trailer*** | Y |  |  |  |

## FIX Message QuoteStatusReport(35=AI)

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be stored in the repository |
| Message Name | QuoteStatusReport |
| Message Abbreviated Name (for FIXML) | QuotStatRpt |
| Category | QuotationNegotiation |
| Action | \_\_New \_X\_Change |
| Message SynopsisRequired, short, one or two paragraph description of the message. | (no change) |
| Message ElaborationOptional longer description of the message usage  | (no change) |
| To be finalized by FPL Technical Office |
| (MsgType(tag 35) Enumeration | S |
| Repository Component ID |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Tag*** | ***FieldName*** | ***Req'd*** | ***Action*** | ***Mappings and Usage Comments*** | ***FIX Spec Comments*** |
| ***Standard Header*** | Y |  |  | MsgType = AI |
| 649 | QuoteStatusReqID | N |  |  |  |
| 131 | QuoteReqID | N |  |  |  |
| 117 | QuoteID | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| Component Block ***QuotQualGrp*** | N |  |  |  |
| TBD | EventInitiatorType | N | New | CAT: initiator |  |
| 2115 | NegotiationMethod | N |  |  |  |
| *(…truncated…)* |  |  |  |  |
| ***Standard Trailer*** | Y |  |  |  |

# FIX Component Blocks

## Component DisplayInstruction

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be included in the repository |
| Component Name | DisplayInstruction |
| Component Abbreviated Name (for FIXML) | DsplyInstr |
| Component Type | \_\_\_ Block Repeating \_X\_\_ Block |
| Category | (no change) |
| Action | \_\_New \_X\_Change |
| Component SynopsisRequired, short, one or two paragraph description of the component. | (no change) |
| Component ElaborationOptional longer description of the component usage | (no change) |
| To be finalized by FPL Technical Office |
| Repository Component ID |  |

|  |
| --- |
| <*DisplayInstruction*> |
| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *Comments* |
| 1138 | DisplayQty | N |  |  |  |
| 1082 | SecondaryDisplayQty | N |  |  |  |
| 1608 | InitialDisplayQty | N |  |  |  |
| TBD | CurrentDisplayPrice | N | New | CAT: displayPrice |  |
| 1083 | DisplayWhen | N |  |  |  |
| 1084 | DisplayMethod | N |  |  |  |
| 1085 | DisplayLowQty | N |  |  |  |
| 1086 | DisplayHighQty | N |  |  |  |
| 1087 | DisplayMinIncr | N |  |  |  |
| 1088 | RefreshQty | N |  |  |  |
| </ *DisplayInstruction* > |

## Component TrdRegTimestamps

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be included in the repository |
| Component Name | TrdRegTimestamps |
| Component Abbreviated Name (for FIXML) | TrdRegTS |
| Component Type | \_X\_\_ Block Repeating \_\_\_ Block |
| Category | (no change) |
| Action | \_\_New \_X\_Change |
| Component SynopsisThe synopsis is a short one or two paragraph description of the component. This is required. | (no change) |
| Component ElaborationAn optional longer description of the usage of the component can be provided in the elaboration. The elaboration will be stored in the repository | (no change) |
| To be finalized by FPL Technical Office |
| Repository Component ID |  |

|  |
| --- |
| Component FIXML Abbreviation: <*TrdRegTimestamps*> |
| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *Comments* |
| 768 | NoTrdRegTimestamps | N |  |  |  |
| 🡪 | 769 | TrdRegTimestamp | N | Change |  | Required if NoTrdRegTimestamps(768) > 0~~1~~ |
| 🡪 | 770 | TrdRegTimestampType | N | Change |  | Required if NoTrdRegTimestamps(768) > 0~~1~~ |
| 🡪 | 771 | TrdRegTimestampOrigin | N |  |  |  |
| 🡪 | 1033 | DeskType | N | Change |  | ~~Type of Trading Desk~~ |
| 🡪 | 1034 | DeskTypeSource | N |  |  |  |
| 🡪 | 1035 | DeskOrderHandlingInst | N |  |  |  |
| 🡪 | 1727 | InformationBarrierID | N |  |  |  |
| 🡪 | TBD | NBBOEntryType | N | New | CAT: N/A | Type of NBBO price at the time in TrdRegTimestamp(769) |
| 🡪 | TBD | NBBOPrice | N | New | CAT: nbbPrice, nboPrice | Price of NBBO at the time in TrdRegTimestamp(769) |
| 🡪 | TBD | NBBOQty | N | New | CAT: nbbQty, nboQty | Quantity NBBO at the time in TrdRegTimestamp(769) |
| 🡪 | TBD | NBBOSource | N | New | CAT: nbboSource | Source feed of NBBO at the time in TrdRegTimestamp(769) |
| </*TrdRegTimestamps*> |

## Component OrderAggregationGrp

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be included in the repository |
| Component Name | OrderAggregationGrp |
| Component Abbreviated Name (for FIXML) | OrdAggrtn |
| Component Type | \_X\_\_ Block Repeating \_\_\_ Block |
| Category | (no change) |
| Action | \_\_New \_X\_Change |
| Component SynopsisRequired, short, one or two paragraph description of the component. | (no change) |
| Component ElaborationOptional longer description of the component usage | (no change) |
| To be finalized by FPL Technical Office |
| Repository Component ID | 1078 |

|  |
| --- |
| Component FIXML Abbreviation: <*OrdAggrtn*> |
| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *Comments* |
| 73 | NoOrders | N |  |  |  |
| → | 11 | ClOrdID | N |  |  | Required if NoOrders(73) > 0. |
| → | 37 | OrderID | N |  |  |  |
| → | 38 | OrderQty | N |  |  | Required if NoOrders(73) > 0. |
| → | 799 | OrderAvgPx | N |  |  |  |
| → | TBD | OrderTime | N | New | CAT: orderKeyDate |  |
| → | TBD | OrderOriginationFirmID | N | New | CAT: originatingIMID | Can be used when aggregating orders that were originally submitted by different firms, e.g. due to a merger or acquisition. |
| </*OrdAggrtn*> |

## Component TrdCapRptSideGrp

|  |
| --- |
| To be completed at the time of the proposal – all information provided will be included in the repository |
| Component Name | TrdCapRptSideGrp |
| Component Abbreviated Name (for FIXML) | RptSide |
| Component Type | \_X\_\_ Block Repeating \_\_\_ Block |
| Category | (no change) |
| Action | \_\_New \_X\_Change |
| Component SynopsisRequired, short, one or two paragraph description of the component. | (no change) |
| Component ElaborationOptional longer description of the component usage | (no change) |
| To be finalized by FPL Technical Office |
| Repository Component ID |  |

|  |
| --- |
| Component FIXML Abbreviation: <*RptSide*> |
| *Tag* | *Field Name* | *Req'd* | *Action* | *Mappings and Usage Comments* | *Comments* |
| 552 | NoSides | N |  |  |  |
| → | 54 | Side | Y |  |  | Required when NoSides(552) > 0. |
| → | *(…truncated…)* |  |  |  |  |
| → | 581 | AccountType | N |  |  |  |
| → | 522 | OwnerType | N | Add | CAT: accountHolderType |  |
| → | *(…truncated…)* |  |  |  |  |
| </*RptSide*> |

# Category Changes

 *There are no changes to existing categories.*

# Appendix A - Data DictionaryThe Data Dictionary table must be filled in for all new fields being proposed and all existing fields where changes are being proposed. Each row, representing a field, must identify the requested action of “new”, "add", "change", or "deprecate" for each field.

For new fields provide the data type for each field, the field definition, along with any enumerations related to the field. New fields will use "TBD" in the Tag column. For existing fields, document the proposed additions and changes and highlighting the change (e.g. to the description, new enumerations being added, etc.).

List new fields at the top of the table, followed by fields to be deprecated, and then fields to be changed.

* **Tag** - Order all new fields at the top of the table. The "Tag" column should be "TBD" for the new fields. For existing fields include the official tag number.
* **FieldName** – Field name – required for all fields including existing fields being changed and proposed.
* **Action** - indicates whether the field is to be added, changed, or deprecated in the data dictionary:

 **NEW** - A new proposed field. Use "TBD" in Tag column. Identified in the "Add to/ Deprecate from Message type or Component block" column the message or component the new field is to be added to.

 **ADD** - An existing field to be added to the component or message type identified in the "Add to/ Deprecate from Message type or Component block" column.

 **DEPRECATE** - An existing field to be deprecated. If the deprecation is message specific (as oppose to deprecating the field from the entire specification), identify in the "Add to/ Deprecate from Message type or Component block" column the component or message from which the field is to be deprecated.

 **CHANGE** - An existing field to be modified – modifications are limited to changing the Data Dictionary description or changing or adding new enumerations. A data type change requires strong business requirements justification to be documented as part of the proposal and will be reviewed in detail by the GTC.

* **Datatype** - The data type, e.g. int, Price, Boolean, etc. (See FIXimate for the complete list of FIX datatypes). Required for new fields; not required for existing fields, unless the proposal is to change the data type. See the list of data types in Volume 1 of the FIX Protocol specification.
* **Description -** A definition of the field. The description of the field should be sufficiently descriptive and meaningful but should be generic enough that the field can be reused. For specific message or component context based usage rules these should be described as field usage text within the message or component in which the field is included.

 **Enumerations** - When a field requires enumerations, these are included within the **Description** column of the Data Dictionary table. When enumerations are to be defined for a new field, the field should be of *int* data type and the enumerated values be integers starting at 0 (zero). If the field is to have a default enumeration value that is implied by the omission of the field, the default value must be assigned the value 0 (zero). All enumerations must have a short description included that provides sufficient meaning for the enumeration value. A longer elaboration or description for the enumeration may also be included.

* **FIXML Abbreviation** - The abbreviation for the field when used in FIXML Schema. The submitter is not required to supply the abbreviation, but it will need to be entered in conjunction with the GTC before ratification of the proposal. If the submitter is familiar with the abbreviation rules or convention, the submitter is encouraged to supply a proposed FIXML abbreviation; however, this is subject to review and change by the GTC. If new terms require abbreviation, propose the abbreviation for the new term(s) in Appendix C.
* **Add to / Deprecate from Message type or Component block** - Identify the message types or component blocks in which to apply the Action for the field.

The fields are sorted alphabetically within two groups, new fields followed by existing fields that are subject to change.

| **Tag** | **FieldName** | **Action** | **Datatype** | **Description** | **FIXML Abbreviation** | **Add to / Deprecate from Message type or Component block** |
| --- | --- | --- | --- | --- | --- | --- |
| TBD | CurrentDisplayPrice | NEW | Price | Price at which the order is currently displayed to the market. Can be used on order messages, e.g. NewOrderSingle(35=D), to provide the currently displayed price of a parent order when splitting it into smaller ones. In the context of US CAT this is used when reporting new child orders. | @CurDspPx | Add to component DisplayInstruction |
| TBD | DuplicateClOrdIDIndicator | NEW | Boolean | Used to indicate that a ClOrdID(11) value is an intentional duplicate of a previously sent value. Allows to avoid the rejection of an order with OrdRejReason(103) = 6 (Duplicate Order). In the context of US CAT this can be used when the recipient of a previously routed order requires the same identifier to be re-used for a new route.Valid values:N = Unique ClOrdID(11)Y = Duplicate ClOrdID(11)  | @DupClOrdIDInd | Add to message NewOrderSingle(35=D) OrderCancelReplaceRequest(35=G) |
| TBD | EventInitiatorType | NEW | char | Type of initiator for an event, e.g. modification or cancellation of an order or quote.Valid values:C = Customer or clientF = Firm or brokerE = Exchange or execution venue | @EvntInitrTyp | Add to messages ExecutionReport(35=8), QuoteStatusReport(35=AI) |
| TBD | NBBOEntryType | NEW | int | Type of NBBO information.Valid values:0 = Bid1 = Offer2 = Mid-price | @NBBOTyp | Add to component TrdRegTimestamps |
| TBD | NBBOPrice | NEW | Price | Price related to NBBO. See NBBOEntryType(TBD) for category, e.g. bid or offer.  | @NBBOPx | Add to component TrdRegTimestamps |
| TBD | NBBOQty | NEW | Qty | Quantity related to NBBO. See NBBOEntryType(TBD) for category, e.g. bid or offer. | @NBBOQty | Add to component TrdRegTimestamps |
| TBD | NBBOSource | NEW | int | Source of NBBO information.Valid values:0 = Not applicable (default)[Elaboration: NBBO information is not applicable to the given transaction. NBBOEntryType(TBD), NBBOPrice(TBD), and NBBOQty(TBD) must be absent in this case.]1 = Direct[Elaboration: Information is retrieved directly from an exchange or other electronic execution venue. There may be a performance advantage compared to retrieving the information from a source consolidating multiple feeds.]2 = SIP[Elaboration: The Securities Information Processor (SIP) links the U.S. markets by processing and consolidating all protected bid/ask quotes and trades from every trading venue into a single, easily consumed data feed.]3 = Hybrid[Elaboration: A combination of two or more feeds is used as NBBO source. In the context of US CAT this is used for a combination of direct and SIP feeds.] | @NBBOSrc | Add to component TrdRegTimestamps |
| TBD | OrderOriginationFirmID | NEW | String | Identfier for the original owner of an order as part of the OrderAggregationGrp component. Use the Parties component with PartyRole(452) = 13 (Order Origination Firm) to identify the original owner of an individual order outside of an aggregation. | @OrigntnFirmID | Add to component OrderAggregationGrp |
| TBD | OrderTime | NEW | UTCTimestamp | Timestamp for the assignment of a (unique) identifier to an order. | @Tm | Add to component OrderAggregationGrp |
|  |  |  |  |  |  |  |
| TBD | SingleQuoteIndicator | NEW | Boolean | Used as part of quote messages to indicate whether the quoting system allows only one quote to be active at a time for the quote issuer or market maker.Valid values:N = Multiple quotes allowedY = Only one quote allowed | @SnglQteInd | Add to message Quote(35=S) |
| TBD | WorkingPrice | NEW | Price | Current state of the order relative to price. In the context of US CAT this can be used for the current price of the parent order when reporting a split into new (child) orders. | @WorkingPx | Add to messages NewOrderSingle(35=D) OrderCancelReplaceRequest(35=G)ExecutionReport(35=8) |
| 522 | OwnerType | CHANGE | Int | Identifies the type of ownerValid values:1 = Individual investor2 = Public company…20 = Unknown beneficial owner[Elaboration: In the context of US CAT this is a non-broker-dealer foreign affiliate or non-reporting foreign broker-dealer.]21 = Error account of firmTBD = Firm Agency Average Price Account[Elaboration: In the context of US CAT this is TBD .] | @OwnerTyp | Add to message Quote(35=S)Add to componentTrdCapRptSideGrp |
| 2594 | OrderAttributeType | CHANGE | int | The type of order attribute.Valid values:0 = Aggregated order1 = Order pending allocation…8 = Large in scale order9 = Hidden orderTBD = Representative order[Elaboration: Order was originated to represent a order received by the broker from a customer/client.]TBD = Linkage type[Elaboration: Order is subject to regulatory linkage requirements related to customer/client orders. Can be used for US CAT order and trade level linkages between customer/client orders and representative orders.] | @Typ |  |
| 2707 | QuoteAttributeType | CHANGE | int | The type of attribute for the quote.Valid values:0 = Quote is above standard market size1 = Quote is above size specific to the instrument2 = Quote applicable for liquidity provision activityTBD = Quote issuer status[Elaboration: Indicate whether quote issuer is available or not. Can be used in the context of US CAT to indicate if a market maker’s quote is open (O) or closed (C) whenever the quote is sent to an inter-dealer quotation system.]TBD = Bid or ask request[Elaboration: Indicate explicitly whether a request for a quote is a request for a bid or an ask.] | @Typ |  |
| 1081 | RefOrderIDSource | CHANGE | int | Used to specify ~~what identifier,~~ the source for the identifier in RefOrderID(1080). This can be an identifier provided in order depth market data~~, to use~~ when hitting (taking) a specific order or to identify what type of order or quote reference is being provided when seeking credit limit check. In the context of US CAT this can be used to identify related orders and quotes which are parent, previous, or manual orders or quotes. Previous relates to orders changing their unique system assigned order identifier.Valid values:0 = SecondaryOrderID(198)…6 = QuoteReqID(131)TBD = Previous order identifier[Elaboration: Can be used when previously assigned (unique) system order identifier has changed.]TBD = Previous quote identifier[Elaboration: Can be used when previously assigned (unique) quote identifier has changed.]TBD = Parent order identifier[Elaboration: Can be used where orders are split into child orders and need to refer back to their parent order.]TBD = Manual order identifier[Elaboration: Can be used to refer to a manually received order that is being replaced by an electronically received order.] | @RefOrdIDSrc |  |
| 1934 | RegulatoryReportType | CHANGE | Int | Type of regulatory reportValid values:0 = Real-time (RT)…21 = Full details in Aggregated FormSEE SECTION 2.2 FOR ***NEW*** VALUES AND THEIR ELABORATIONS. | @RegRptTyp |  |
| 59 | TimeInForce | CHANGE | Char | Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. NOTE not applicable to CIV Orders. (see Volume : "Glossary" for value definitions)Valid values:0 = Day (or session)[Elaboration: A buy or sell order that, if not executed expires at the end of the trading day on which it was entered.]1 = Good Till Cancel[Elaboration: An order to buy or sell that remains in effect until it is either executed or canceled; sometimes called an “open order”.]2 = At the opening[Elaboration: A market or limit-price order to be executed at the opening of the stock or not at all; all or part of any order not executed at the opening is treated as canceled.]3 = Immediate Or Cancel (IOC)[Elaboration: A market or limit-price order that is to be executed in whole or in part as soon as it is represented in the Trading Crowd; any portion not so executed is to be canceled.]4 = Fill Or Kill (FOK)[Elaboration: A market or limit-price order that is to be executed in its entirety as soon as it is represented in the Trading Crowd; if not so executed, the order is to be canceled.]5 = Good Till Crossing (GTX)[Elaboration: An order to buy or sell that is canceled prior to the market entering into an auction or crossing phase. Typically, markets that support continuous trading will have an auction phase at the beginning and sometimes also at the end of trading to match up orders that have been entered into the exchange's order book during the pre- or post-trading phase (i.e. where no continuous trading was available). A GTX order automatically expires immediately prior to the commencement of a crossing session, i.e. the party originating the order wants to make sure it gets filled during the current continuous auction, and any remaining open quantity should be discarded at the end of the current continuous auction period.]6 = Good Till Date (GTD)[Elaboration: An order to buy or sell that remains in effect until it expires, defined by ExpireDate(432) or ExpireTime(126).]7 = At the Close[Elaboration: Indicated price is to be around the closing price, however, not held to the closing price.]8 = Good Through Crossing[Elaboration: An order that is valid up till and including a crossing phase.]9 = At Crossing[Elaboration: An order that is valid only during crossing (auction) phases. The order is valid during the day or up to and including a specified trading (sub) session.]A = Good for Time (GFT)[Elaboration: An order that is valid for a pre-defined time period expressed with ExposureDuration(1629) and (optionally) ExposureDurationUnit(1916).]B = Good for A~~a~~uction (GFA)[Elaboration: An order that is valid for an auction initiated by a trading firm (see AuctionType(1803) for examples.]TBD = Good for this Month (GFM)[Elaboration: An order that is valid until the end of the current month, i.e. from the time of order submission until the end of the last trading day of the current month.] | @TmInForce |  |
| 2669 | TrdRegPublicationType | CHANGE | int | Specifies the type of regulatory trade publication.Valid values:0 = Pre-trade transparency waiver1 = Post-trade deferral2 = Exempt from publicationTBD = Order level publication to subscribers[Elaboration: Individual orders are displayed outside of the execution venue but only to subscribers.]TBD = Price level publication to subscribers[Elaboration: Aggregated orders are displayed outside of the execution venue but only to subscribers.]TBD = Order level publication to the public[Elaboration: Individual orders are displayed outside of the execution venue via public quotation.]TBD = Publication internal to execution venue[Elaboration: Orders are not displayed outside of the execution venue.] | @Typ |  |
| 770 | TrdRegTimestampType | CHANGE | int | Trading / Regulatory timestamp type.Note of applicability: Values are required in various regulatory environments: required by CFTC for US futures markets ~~by the CFTC~~ to support computerized trade reconstruction, ~~and~~ required by MiFID II / MiFIR for transaction reporting and publication, and required by FINRA for reporting to the Consolidated Audit Trail (CAT).~~(see Volume : "Glossary" for value definitions)~~Valid values:1 = Execution time[Elaboration: Timestamp for the order execution. In the context of US futures markets (CFTC regulated) this is the non-qualified reporting time of order execution.]2 = Time in[Elaboration: Timestamp for receiving an order, quote or trade. In the context of US futures markets (CFTC) this is the timestamp of when the order was received on the trading floor (booth).]3 = Time out[Elaboration: Timestamp for sending an order, quote or trade. In the context of US futures markets (CFTC) this is the timestamp when the trade was received from the pit.]4 = Broker receipt[Elaboration: Timestamp for a broker receiving an order, quote or trade. In the context of US futures markets (CFTC) this is the time at which the broker received the order.]5 = Broker execution[Elaboration: Timestamp for the broker executing an order. In the context of US futures markets (CFTC regulated) this is the time at which a broker executed the order for another broker.]6 = Desk receipt[Elaboration: Timestamp for the transmission of an order to an internal desk or department on the same day the firm received the order.]7 = Submission to clearing[Elaboration: The timestamp when the trade was officially acknowledged by the Clearing House.]8 = Time priority[Elaboration: A timestamp (manually or electronically) assigned by a market to specify time priority for an order or quote.]SEE SECTION 2.4 FOR ***NEW*** VALUES AND THEIR ELABORATIONS. | @Typ |  |
| 797 | CopyMsgIndicator | ADD | Boolean | Indicates whether or not this message is a drop copy of another message. | CopyMsgInd | Add to message NewOrderSingle(35=D) |
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# Appendix B - Glossary EntriesThis section, if included, should contain a table with terminology to be included in the FIX specification Glossary in Volume 1. These are usually business terms that are defined to help readers understand the relevant space for the proposal.

* **Term** - The business term.
* **Definition** - The definition of the term. If a term has different definitions in different contexts or for different asset types, include and identify fully these differing definitions. If the definition is copied or paraphrased from a source, identify the source in parentheses after the definition.
* **Field where used** - Identifies the FIX field name for the field where this term is used.

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| --- | --- | --- |
| **Term** | **Definition** | **Field where used** |
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# Appendix C - Abbreviations

When new fields, components, and messages are added to the FIX Specification, an abbreviated name that is primarily used for FIXML (at this time) must be created for them. Abbreviations are standardized within the FIX Specification. A list of abbreviations is maintained in the FIX Repository. You can access the current list of abbreviations via FIXimate on the FPL website. If abbreviations do not exist, use this table to define additional abbreviations required for your proposal. New abbreviations are subject to final approval of and may be changed by the GTC.

If you are not comfortable proposing new abbreviations, the "Proposed Abbreviations" can be omitted and the GTC will assign new abbreviations.

|  |  |  |
| --- | --- | --- |
| **Term** | **Proposed Abbreviation** | **Proposed Messages, Components, Fields where used** |
| Initiator | Initr | EventInitiatorType(TBD) |
| NBBO | NBBO | NBBOEntryType(TBD), NBBOPrice(TBD), NBBOQty(TBD), NBBOSource(TBD) |
| Single | Sngl | SingleQuoteIndicator(TBD) |
|  |  |  |

# Appendix D - Usage Examples

None

This is an optional section where the sub-committee or working group can provide whole or fragments of example FIX messages with actual or dummy data. These examples are useful for illustrating usage or rules specific to the business domain covered in the proposal.

# Appendix E – CAT to FIX Message Mapping

This is an optional section where the sub-committee or working group can provide whole or fragments of example FIX messages with actual or dummy data. These examples are useful for illustrating usage or rules specific to the business domain covered in the proposal.

The following table shows the mapping of CAT events to FIX messages for Phase 2A. CAT Phase 2A only relates to equities.

| **CAT Event** | **CAT Event Name** | **Event Description** | **Proposed FIX Message** |
| --- | --- | --- | --- |
| MENO | New Order | Reported when an Industry Member originates an order, receives a customer order, originates a bunched, representative or proprietary order, or receives an order from a non-reporting foreign entity. | ExecutionReport (35=8) |
| MENOS | New Order Supplement | Supplement to the New Order event, used when the New Order event exceeds the maximum length allowed, or the child orders of a representative order is not captured in the New Order Event. Also used to provide an FDID once known if not available at time of reporting a MENO. | ExecutionReport (35=8) |
| MEOR | Order Route | Reported when an Industry Member routes an order to another broker dealer or execution venue such as an exchange or ATS. The modification of a routed order is also reported using this Order Route event in Phase 2A. | NewOrderSingle (35=D) |
| MEOA | Order Accepted | Reported when an Industry Member, including an ATS, accepts a routed order that originated atanother broker dealer. | ExecutionReport (35=8) |
| MEIR | Order Internal Route Accepted | Reported when an order moves within an Industry Member to another desk or other department.  | NewOrderSingle (35=D) |
| MECO | Child Order | Reported for the generation of child order(s). This is to provide extra flexibility of reporting, however there is not a scenario in which the useof Child Order is mandatory. | NewOrderSingle (35=D) |
| MECOM | Child Order Modified | Reported when a Child Order is modified. | ExecutionReport (35=8) |
| MECOC | Child Order Canceled | Reported when a Child Order is canceled. | ExecutionReport (35=8) |
| MEOM | Order Modified | Reported whenever changes to the Material Terms of an order are made, or an order is cancel/replaced. | ExecutionReport (35=8) |
| MEOMS | Order Modified Supplement | Supplement to the Order Modified event, used when the Order Modified event exceeds the maximum length allowed, or the child orders of a representative order is not captured in the Order Modified Event. | ExecutionReport (35=8) |
| MEOJ | Order Adjusted | Used to report simple order modifications including changes to the price or quantity of the order.  | ExecutionReport (35=8) |
| MEOC | Order Canceled | Reported whenever an Industry Member fully or partially cancels an order that it has not already routed to another destination. | ExecutionReport (35=8) |
| MEOT | Trade | Reported by the executing venue where the trade occurred, with details of the trade, including Agency Order Crosses and broker internalization of an order. (i.e., the order is filled against Industry Member’s proprietary account). | TradeCaptureReport (35=AE) |
| MEOF | Order Fulfillment | Reports how orders are fulfilled by each Industry Member who handled a given order. | TradeCaptureReport (35=AE) |
| MEFA | Order Fulfillment Amendment | Reports how the order fulfillment was amended. | TradeCaptureReport (35=AE) |
| MENQ | New Quote | Reported when quotations on equity Eligible Securities sent to a quote display facility or quote driven ATS, or a quote sent to a customer or broker dealer that resulted in a trade. | Quote(35=S) |
| MEQR | Equity Quote Received | Reported when a quote is received by an Industry Member | Quote(35=S) |
| MEQC | Equity Quote Canceled | Reported when a quote is canceled. | QuoteStatusReport (35=AI) |

1. Not required by CAT [↑](#footnote-ref-1)
2. Not required by CAT. [↑](#footnote-ref-2)