FIX CAT Working Group

Extensions for CAT/FIX Mapping

October 10, 2019

Revision 0.5

Proposal Status: Approved

For Global Technical Committee Governance Internal Use Only

Submission Date	Oct 1, 2019	Control Number	EP253
Submission Status	Approved	Ratified Date	Nov29, 2019
Primary Contact Person	Michael Tirello, Bloomberg	Release Identifier	Latest

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1 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)
	November 27, 2019	Hanno Klein, GTC	Added missing extension of TrdRegPublicationReason(2670) from CAT-FIX mapping sheet.
ASBUILT	November 29, 2019	GTC	Pre-assigned IDs and generated SBUILT document.
	November 18, 2020	GTC	Added SPEC-2476, correcting value “10” to “A” of field RefOrderIDSource(1081)

2 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.

3 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)

3.1 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 3.2 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 3.3 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(2830) 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]
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 3.4 for details. Add component TrdRegTimestamps to Quote(35=S) and QuoteStatusReport(35=AI). For manual events, add new boolean field TrdRegTimestampManualIndicator(2839) 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(2831) • NBBOPrice(2832) • NBBOQty(2833) • NBBOSource(2834) Valid values for NBBOEntryType(2831):

[1] Not required by CAT

#	Subject	Change Request	GTC Proposed Solution
			• 0 = Bid • 1 = Offer • 2 = Mid-price[2] Valid values for NBBOSource(2834): • 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(2836) 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 7 = 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 8 = 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 9 = 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 A = 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(2829) 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).	Add new field CurrentDisplayPrice(2822) to the DisplayInstruction component. Add new field CurrentWorkingPrice(2838) to the ExecutionReport(35=8), OrderCancelReplaceRequest(35=G) and NewOrderSingle(35=D) messages.

[2] Not required by CAT.

#	Subject	Change Request	GTC Proposed Solution
		CAT field workingPrice indicates the price of the order at the time it was accepted.	
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 C = 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 12 = Representative order to OrderAttributeType(2594) with OrderAttributeValue(2595) = Y or N. Add new value 13 = 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 12 = Representative order to OrderAttributeType(2594) with OrderAttributeValue(2595) = Y or N. Add new value 13 = 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)

#	Subject	Change Request	GTC Proposed Solution
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): • 22 = 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(2837) 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 3 = 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 4 = Bid or ask request to QuoteAttributeType(2707) with QuoteAttributeValue(2708) = B or A

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#	Subject	Change Request	GTC Proposed Solution
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(8024) 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): • 3 = Order level publication to subscribers • 4= Price level publication to subscribers • 5= Order level publication to the public • 6= 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	N/A on FIX session, only required for CAT session, no mapping required.

#	Subject	Change Request	GTC Proposed Solution
		• RPR = Repair of events with CAT error • DEL = Record level deletion	
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).
29	Reporting exceptions	CAT requires the reason that a unique identifier (e.g., Branch Sequence Number, Compliance ID) was not supplied to a transaction reporting system. See also https://www.finra.org/filing-reporting/market-transparency-reporting/trade-reporting-faq Q202.1: How should trades executed with a broker-dealer that is not a FINRA member be reported to FINRA? A202.1: When reporting a trade with a broker-dealer that is not a FINRA member, the non-member should not be identified on the trade report as the contra party to the trade.	Add new valid values to TrdRegPublicationReason(2670): • 13 = Exception due to report by paper • 14 = Exception due to trade executed with non-reporting party • 15 = Exception due to intra-firm order

3.2 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	22	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	23	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	24	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	25	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	26	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	27	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.

3.3 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)

3.4 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(2836) 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	27= Identifier assigned	Timestamp for the assignment of a (unique) identifier to an entity (e.g. order, quote, trade).
priorOrderKeyDate, parentOrderKeyDate, priorQuoteKeyDate, priorFillKeyDate	28= Previous identifier assigned	Timestamp of previous assignment of a (unique) identifier to an entity (e.g. order, quote, trade).
eventTimestamp (MECOC, MEQC)	29= Order cancellation time	Timestamp for the cancellation of an order or quote.
eventTimestamp (MECOM)	30 = Order modification time	Timestamp for the modification of an order or quote.
eventTimestamp (MEOR), electronicTimestamp (MEOR)	31 = Order routing time	Timestamp for the routing of an order to another broker or electronic execution venue.
cancelTimestamp (MEOF, MEOT)	32 = 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)	33 = 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)	34 = 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 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.

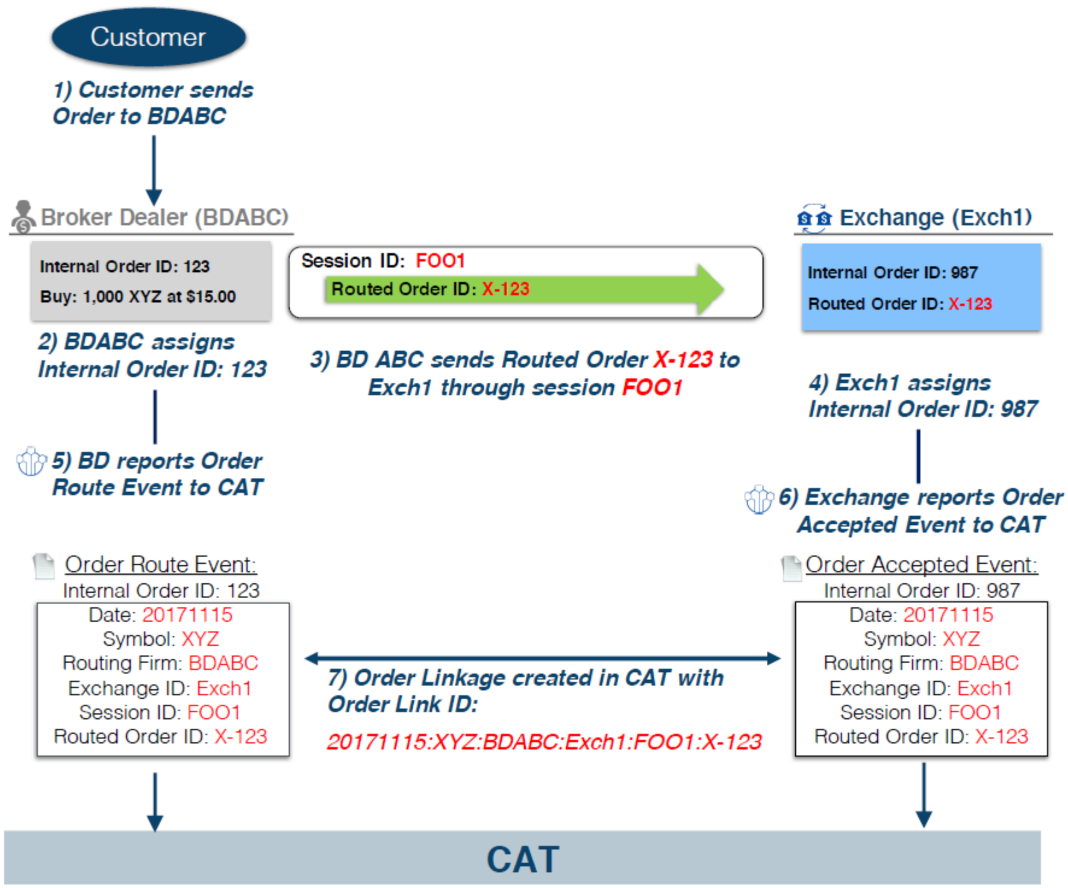
4 Issues and Discussion Points

None

5 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.

6 FIX Message Tables

6.1 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 Synopsis	(no change)
Message Elaboration	(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			
2829	DuplicateClOrdIDIndicator	N	New	CAT: dupROIDCond	
Component Block ***Parties***		N			
(…truncated…)					
Component Block ***OrderQtyData***		N			
40	OrdType	Y			
423	PriceType	N			
44	Price	N			

Tag	*Field Name*	*Req'd*	*Action*	*Mappings and Usage Comments*	*FIX Spec Comments*
2838	CurrentWorkingPrice	N	New	CAT: workingPrice	May 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	May be used when intentionally sending an 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			

6.2 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 Synopsis	*(no change)*
Message Elaboration	*(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			
2829	DuplicateClOrdIDIndicator	N	New	CAT: dupROIDCond	
66	ListID	N			
(...truncated...)					
Component Block ***OrderQtyData***		N			
40	OrdType	Y			
423	PriceType	N			
44	Price	N			
2838	CurrentWorkingPrice	N	New	CAT: workingPrice	May 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			

6.3 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 Synopsis	(no change)
Message Elaboration	(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			
2838	CurrentWorkingPrice	N	New	CAT: workingPrice	
103	OrdRejReason	N			
(…truncated…)					
Component Block ***OrderQtyData***		N			
1093	LotType	N			
40	OrdType	N			
423	PriceType	N			
(…truncated…)					
Component Block ***FillsGrp***					
Component Block ***OrderEventGrp***					
2830	EventInitiatorType	N	New	CAT: initiator	
(…truncated…)					
Standard Trailer		Y			

6.4 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 Synopsis	(no change)	
Message Elaboration	(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			
2837	SingleQuoteIndicator	N	New	CAT: onlyOneQuoteFlag	
Component Block ***QuotQualGrp***		N			
(…truncated…)					
581	AccountType	N			
522	OwnerType	N	Add	CAT: accountHolderType	
377	SolicitedFlag	N	Add	CAT: unsolicitedInd	
(…truncated…)					
	Standard Trailer	Y			

6.5 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 Synopsis	(no change)	
Message Elaboration	(no change)	

To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration	AI
Repository Component ID	68

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			
2830	EventInitiatorType	N	New	CAT: initiator	
2115	NegotiationMethod	N			
(…truncated…)					
Standard Trailer		Y			

7 FIX Component Blocks

7.1 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 Synopsis	(no change)
Component Elaboration	(no change)
To be finalized by FPL Technical Office	
Repository Component ID	1029

<DisplayInstruction>					
Tag	*Field Name*	*Req'd*	*Action*	*Mappings and Usage Comments*	*Comments*
1138	DisplayQty	N			
1082	SecondaryDisplayQty	N			
1608	InitialDisplayQty	N			
2828	CurrentDisplayPrice	N	New	CAT: displayPrice	
1083	DisplayWhen	N			
1084	DisplayMethod	N			
1085	DisplayLowQty	N			
1086	DisplayHighQty	N			
1087	DisplayMinIncr	N			
1088	RefreshQty	N			
</ DisplayInstruction >					

7.2 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 Synopsis	(no change)
Component Elaboration	(no change)
To be finalized by FPL Technical Office	
Repository Component ID	1020

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			
→	2839	TrdRegTimestampManualIndicator	N	New		
→	1033	DeskType	N	Change		~~Type of Trading Desk~~
→	1034	DeskTypeSource	N			
→	1035	DeskOrderHandlingInst	N			
→	1727	InformationBarrierID	N			
→	2831	NBBOEntryType	N	New	CAT: N/A	May be used with TrdRegTimestampType(770)=34 (Reference time for NBBO).
→	2832	NBBOPrice	N	New	CAT: nbbPrice, nboPrice	May be used with TrdRegTimestampType(770)=34 (Reference time for NBBO).
→	2833	NBBOQty	N	New	CAT: nbbQty, nboQty	May be used with TrdRegTimestampType(770)=34 (Reference time for NBBO).
→	2834	NBBOSource	N	New	CAT: nbboSource	May be used with TrdRegTimestampType(770)=34 (Reference time for NBBO).
</TrdRegTimestamps>						

7.3 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 Synopsis	(no change)

Component Elaboration	(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			
→	2836	OrderTime	N	New	CAT: orderKeyDate	
→	2835	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>						

7.4 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 Synopsis	(no change)
Component Elaboration	(no change)
To be finalized by FPL Technical Office	

Repository Component ID	2061

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*>						

8 Category Changes

There are no changes to existing categories.

9 FIX Specification Errata

This section includes errata from prior versions and extension packs (EP) that are being implemented as corrections as part of this extension pack.

Jira Item	**Affected EP/Version**	**Synopsis of change.**
SPEC-2388	Latest	Correct component type to BlockRepeating for components incorrectly coded as Block
SPEC-2476	Latest	Value 10 of RefOrderIDSource(1081) does not match data type

Appendix A - Data Dictionary

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
2828	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 current displayed price of a parent order when splitting it into smaller child orders. Field elaboration: In the context of US CAT this is used when reporting new child orders.	@CurDspPx	Add to component DisplayInstruction
2829	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). Field Elaboration: 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)
2830	EventInitiatorType	NEW	char	Indicates the type of entity who initiated an event, e.g. modification or cancellation of an order or quote.	@EvntInitrTyp	Add to messages ExecutionReport(35=8), QuoteStatusReport(35=AI)

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				Valid values: C = Customer or client F = Firm or broker E = Exchange or execution venue		
2831	NBBOEntryType	NEW	int	Type of NBBO information. Valid values: 0 = Bid [Elaboration: May apply to price or quantity.] 1 = Offer [Elaboration: May apply to price or quantity.] 2 = Mid-price	@NBBOTyp	Add to component TrdRegTimestamps
2832	NBBOPrice	NEW	Price	Price related to NBBO. NBBOEntryType(2831) may be used to indicate entry type, e.g. bid or offer.	@NBBOPx	Add to component TrdRegTimestamps
2833	NBBOQty	NEW	Qty	Quantity related to NBBO. NBBOEntryType(2831) may be used to indicate entry type, e.g. bid or offer.	@NBBOQty	Add to component TrdRegTimestamps
2834	NBBOSource	NEW	int	Source of NBBO information. Valid values: 0 = Not applicable [Elaboration: Default if not specified. NBBO information is not applicable. NBBOEntryType(2831), NBBOPrice(2832), and NBBOQty(2833) must be omitted.] 1 = Direct	@NBBOSrc	Add to component TrdRegTimestamps

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				[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 = Securities Information Processor [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 data feeds is used as NBBO source. In the context of US CAT this is used for a combination of direct and SIP feeds.]		
2835	OrderOriginationFirmID	NEW	String	Identifier 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
2836	OrderTime	NEW	UTCTimestamp	Timestamp for the assignment of a (unique) identifier to an order.	@Tm	Add to component OrderAggregationGrp
2837	SingleQuoteIndicator	NEW	Boolean	Used 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 allowed	@SnglQteInd	Add to message Quote(35=S)

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				Y = Only one quote allowed		
2838	CurrentWorkingPrice	NEW	Price	Current working price of the order relative to the state of the order. Field Elaboration: 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.	@CurWrkngPx	Add to messages NewOrderSingle(35=D) OrderCancelReplaceRequest(35=G) ExecutionReport(35=8)
2839	TrdRegTimestamp ManualIndicator	NEW	Boolean	Indicates whether a given timestamp was manually captured. Valid values: N = Not manually captured Y = Manually captured	@ManInd	Add to component TrdRegTimestamps
522	OwnerType	CHANGE	Int	Identifies the type of owner Valid values: 1 = Individual investor 2 = 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 firm 22 = Firm agency average price account	@OwnerTyp	Add to message Quote(35=S) Add to component TrdCapRptSideGrp
2594	OrderAttributeType	CHANGE	int	The type of order attribute.	@Typ	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				Valid values: 0 = Aggregated order 1 = Order pending allocation … 8 = Large in scale order 9 = Hidden order 12 = Representative order [Elaboration: Order was originated to represent an order received by the broker from a customer/client.] 13 = 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.]		
2707	QuoteAttributeType	CHANGE	int	The type of attribute for the quote. Valid values: 0 = Quote is above standard market size 1 = Quote is above size specific to the instrument 2 = Quote applicable for liquidity provision activity 3 = 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.]	@Typ	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				4 = Bid or ask request [Elaboration: Indicate explicitly whether a request for a quote is a request for a bid or an ask.]		
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) 7 = Previous order identifier [Elaboration: Can be used when previously assigned (unique) system order identifier has changed.] 8 = Previous quote identifier [Elaboration: Can be used when previously assigned (unique) quote identifier has changed.] 9 = Parent order identifier [Elaboration: Can be used where orders are split into child orders and need to refer back to their parent order.] A = Manual order identifier	@RefOrdIDSrc	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				[Elaboration: Can be used to refer to a manually received order that is being replaced by an electronically received order.]		
1934	RegulatoryReportType	CHANGE	Int	Type of regulatory report Valid values: 0 = Real-time (RT) … 21 = Full details in Aggregated Form 22 = Order [Elaboration: 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.] 23 = Child order [Elaboration: 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.] 24 = Order route [Elaboration: 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.] 25 = Trade [Elaboration: Report for trade handling events to enter, change or delete trades. In the context of US	@RegRptTyp	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				CAT this is used for the event types MEOT, MEOF and MEFA.] 26 = Quote [Elaboration: 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.] 27 = Supplement [Elaboration: 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.]		
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;	@TmInForce	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				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 available in the market; 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 available in the market; 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.] 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		

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				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.] C = 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.]		
2670	TrdRegPublicationReason	CHANGE	Int	Additional reason for trade publication type specified in TrdRegPublicationType(2669). Reasons may be specific to regulatory trade publication rules. Valid values: 0 = No preceding order in book […] … 12 = Exempted due to […] (ESCB) policy transaction 13 = Exception due to report by paper [Elaboration: Incomplete report due to submission by paper (form). In the context of US CAT this is Form T pursuant to FINRA Trade Reporting Rules.]	@Rsn	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				14 = Exception due to trade executed with non-reporting party [Elaboration: Incomplete report due to counterparty of the reporting party being absent. In the context of US CAT this is when a trade was executed by a non-FINRA member and reported to the TRF by the FINRA member counterparty.] 15 = Exception due to intra-firm order [Elaboration: Incomplete report due to intra–firm order filled from firm's proprietary account.]		
2669	TrdRegPublicationType	CHANGE	int	Specifies the type of regulatory trade publication. Valid values: 0 = Pre-trade transparency waiver 1 = Post-trade deferral 2 = Exempt from publication 3 = Order level publication to subscribers [Elaboration: Individual orders are displayed outside of the execution venue but only to subscribers.] 4 = Price level publication to subscribers [Elaboration: Aggregated orders are displayed outside of the execution venue but only to subscribers.] 5 = Order level publication to the public [Elaboration: Individual orders are displayed outside of the execution venue via public quotation.] 6 = Publication internal to execution venue [Elaboration: Orders are not displayed outside of the execution venue.]	@Typ	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
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	@Typ	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				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.] 9 = Orderbook entry time … 26 = Previous time priority 27= Identifier assigned [Elaboration: Timestamp for the assignment of a (unique) identifier to an entity (e.g. order, quote, trade).] 28= Previous identifier assigned [Elaboration: Timestamp of previous assignment of a (unique) identifier to an entity (e.g. order, quote, trade).]		

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				29= Order cancellation time [Elaboration: Timestamp for the cancellation of an order or quote.] 30 = Order modification time [Elaboration: Timestamp for the modification of an order or quote.] 31 = Order routing time [Elaboration: Timestamp for the routing of an order to another broker or electronic execution venue.] 32 = Trade cancellation time [Elaboration: Timestamp for the cancellation of an execution (ExecType(150) = H (Trade Cancel)) or trade (TradeReportType(856) = 6 (Trade Report Cancel)).] 33 = Trade modification time [Elaboration: Timestamp for the modification of an execution (ExecType(150) = G (Trade Correct)) or trade (TradeReportType(856) = 5 (No/Was)).] 34 = Reference time for NBBO [Elaboration: Timestamp for an NBBO reference price.]		
797	CopyMsgIndicator	ADD	Boolean	Indicates whether or not this message is a drop copy of another message.	CopyMsgInd	Add to message NewOrderSingle(35=D)

Appendix B - Glossary Entries

Term	Definition	Field where used

Appendix C - Abbreviations

Term	Proposed Abbreviation	Proposed Messages, Components, Fields where used
Initiator	Initr	EventInitiatorType(2830)
NBBO	NBBO	NBBOEntryType(2831), NBBOPrice(2832), NBBOQty(2833), NBBOSource(2834)
Single	Sngl	SingleQuoteIndicator(2837)
Working	Wrkng	CurrentWorkingPrice(2838)

Appendix D - Usage Examples

None

Appendix E – CAT to FIX Message Mapping

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)

CAT Event	CAT Event Name	Event Description	Proposed FIX Message
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 at another 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 use of 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)

CAT Event	CAT Event Name	Event Description	Proposed FIX Message
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)