FINANCIAL INFORMATION EXCHANGE (FIX)

RECOMMENDED PRACTICES

FIX Digital Asset Working Group

Trading Digital Assets

March 2023

FIX Global Technical Committee

Table of Contents

Table of Tables

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1 Introduction

The purpose of this document is to define industry practices for common usage of the FIX Protocol for trading digital assets. The FIX Protocol provides support for a large number of asset classes and, through work undertaken by the FIX Digital Asset Working Group, has been extended to support digital assets, not only including cryptocurrencies like bitcoin but also any kind of digital tokens that can be traded electronically.

This document is based on work undertaken by the FIX Digital Asset Working Group in 2022 to extend the FIX Protocol to support these types of assets. It is aimed at practitioners involved in or investigating the electronic trading of digital assets. This includes traders, business analysts, project managers, software developers and testers. Its purpose is to provide guidance on how to use the FIX Protocol for trading digital assets.

2 Scope

This document covers the changes required to trading messages to accompany the FIX Protocol changes made to support digital asset trading.

No new trading workflows or modifications to existing workflows have been identified, and hence this document does not attempt to re-document existing workflows other than to provide a summary and examples of the two trading styles (“FX-style” and “Securities-style”) as described above. These are described in terms of simple order-based trading, though the changes outlined for digital assets are intended to be sufficiently generic such that it is expected that they can be applied in a similar manner to other trading mechanisms (e.g. lists, multi-leg, RFQs etc.). Should a need be identified for further elaboration regarding the trading of digital assets under these other mechanisms, then this document will be extended or new documents written as required.

This document does not cover pre-trade messaging (e.g., IOIs and market data), post-trade (e.g., allocations, confirmations and payment/settlement) or reporting (e.g., trade capture reports). Furthermore, OTC trading is out of scope.

3 Functional Overview

3.1 Overview

The findings of the FIX Digital Asset Working Group are that digital assets are traded either like a currency exchange or a security. The FIX Protocol supports both approaches:

- In traditional currency exchange or Foreign Exchange trading the Symbol(55) field carries the currency pair using the "CCY1/CCY2" convention, e.g. EUR/USD. Many digital asset market participants who have adopted FIX have been using this FX-style convention, e.g., "BTC/USD"
- An alternative convention adopted by some digital asset market participants is trading a digital asset like a security similar to trading of stocks. This style of trading simply provides the digital asset "symbol" in the Symbol(55) field, e.g. "BTC". This approach is popular when the digital asset is priced in terms of a fiat (government issued or sovereign) currency, such as US Dollars.

Note that how a digital asset trades have no bearing on the function or classification of a digital asset. Digital assets that are considered securities can trade using Foreign Exchange convention, and digital assets that are considered virtual currencies can trade like stocks. This document makes no recommendation regarding which of the two approaches should be used; this is left to bilateral agreement.

3.2 Summary of specific elements of the FIX Protocol for trading Digital Assets

The identification' of fiat currencies was standardized with ISO 4217, whereas the identification of digital assets (including digital currencies) was standardized with ISO 24165 *Digital Token Identifier* (2021). The specific elements of the FIX Protocol to support digital assets trading can be summarised as:

- FIX currency fields (e.g. (Currency(15)) support both ISO 4217, ISO 24165 Digital Token Identifiers and various other security identifier types used for digital assets (e.g. ISIN, CUSIP, FIGI and SEDOL). This includes currency code fields (e.g. CurrencyCodeSource(2897)) to identity which type of identifier is being used.
- Specific security type "DIGITAL" to describe digital assets in general.
- Specific security identifier source supported by FIX field SecurityIdSource(22) and similar to include ISO 24165 Digital Token Identifiers.
- Instrument symbology fields to support unambiguous and complete specification of instrument pairs, i.e., for a symbol 'XXX/YYY', specify the type of security identifier used for each of XXX and YYY.

FIX Protocol datatype "Currency" references digital assets in its description:

Synopsis/Description – Identifies currency used for price or quantity fields, depending on the asset class being traded. CurrencyCodeSource(2897) may be used to disambiguate the code source scheme used, and ISO 4217 is the default scheme if absent.

Elaboration – For securities trading and digital assets traded securities-style, identifies the currency used to denote the price. Absence of this field is interpreted as the default for the security. For Foreign Exchange (FX) and digital assets traded FX-style, identifies the dealt currency used to denominate (the) quantity related field(s).

3.3 Securities-Style Trading

Trading digital assets 'securities-style' simply requires the ability to specify the required instrument and, if necessary, currencies (e.g., when trading or settling in a digital currency). The use of the Currency(15) denotes that Price(44), LastPx(31) and AvgPx(6) are denominated in the specified currency.

The tables below provide examples of how to use certain key FIX Protocol fields of the NewOrderSingle(35=D) and ExecutionReport(35=8) messages for trading both 'conventional' and digital assets. Note that 'securities-style' trading can be used for trading digital currencies as shown in the final two columns of these tables.

3.3.1 Securities-Style Trading – Key Fields for Order Messages

Table 1: Securities-Style Trading – Key Fields for Order Messages

Field	**Buying 250 MSFT in USD**	**Buying 5 'crypto-Apple shares' in USD**	**Buying $100,000 of bitcoin**	**Buying 10 ether in bitcoin**
Symbol(55)	MSFT	ABCD[1]	BTC	ETH
SecurityID(48) – DTI		A1B2C3D4E[2]	4H95J0R2X (bitcoin's DTI)	X9J9K872S (ether's DTI)
SecurityIDSource(22) – DTI		*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
SecurityID(48) – Other	594918104 2588173 US5949181045 BBG000BPH459		KKG000000M81	KKG000000DV5
SecurityIDSource(22) – Other	*1 (CUSIP)* *2 (SEDOL)* *4 (ISIN)* *S (FIGI)*		*S (FIGI)*	*S (FIGI)*
Side(54)	Buy	Buy	Buy	Buy
Price – Price(44)	311	500	40,000	0.075 (price of 1 ETH in BTC)
Quantity – OrderQty(38)	250	5		10
Quantity – CashOrderQty(152)			100,000	
Dealing Ccy – Currency(15)	USD	USD	USD	4H95J0R2X (bitcoin's DTI)
CurrencyCodeSource(2897)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
Optional unless settling in a third currency:				
SettlCurrency(120)	USD	USD	4H95J0R2X (bitcoin's DTI)	4H95J0R2X (bitcoin's DTI)
SettlCurrencyCodeSource(2899)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*

[1] This is not a valid ticker symbol and only used to illustrate the example.
[2] This is not a valid DTI and only used to illustrate the example.

3.3.2 Securities-Style Trading – Key Fields for ExecutionReport(35=8) Messages

Table 2: Securities-Style Trading – Key Fields for ExecutionReport(35=8) Messages

Field	**Buying 250 MSFT in USD**	**Buying 5 'crypto-Apple shares' in USD**	**Buying $100,000 of bitcoin**	**Buying 10 ether in bitcoin**
Symbol(55)	MSFT	ABCD[3]	BTC	ETH
SecurityID(48) – DTI		A1B2C3D4E[4]	4H95J0R2X (bitcoin's DTI)	X9J9K872S (ether's DTI)
SecurityIDSource(22) – DTI		*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
SecurityID(48) – Other	594918104 2588173 US5949181045 BBG000BPH459		KKG000000M81	KKG000000DV5
SecurityIDSource(22) – Other	*1 (CUSIP)* *2 (SEDOL)* *4 (ISIN)* *S (FIGI)*		*S (FIGI)*	*S (FIGI)*
Side(54)	Buy	Buy	Buy	Buy
Price – LastPx(31) / AvgPx(6)	311	500	40,000	0.075 (price of 1 ETH in BTC)
Quantity – LastQty(32)	250	5	2.5 (in bitcoin)	10 (in ether)
Dealt Ccy – Currency(15)	USD	USD	USD	4H95J0R2X (bitcoin's DTI)
CurrencyCodeSource(2897)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
Optional unless settling in a third currency:				
SettlCurrency(120)	USD	USD	4H95J0R2X (bitcoin's DTI)	4H95J0R2X (bitcoin's DTI)
SettlCurrencyCodeSource(2899)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
SettlCurrAmt(119) – on ERs	77750	2500	2.5 (in bitcoin)	0.75 (in bitcoin)

3.4 FX-Style Trading

Under 'FX-style' trading, firms use 'human-readable' symbols representing currency pairs in Symbol(55), with Currency(15) denoting the denomination of OrderQty(38) and LastQty(32). Currency symbols used for FX-style trading use ISO 4217 3-character codes which are created only under the framework of that standard. Digital assets did not

[3] This is not a valid ticker symbol and only used to illustrate the example.
[4] This is not a valid DTI and only used to illustrate the example.

have the benefit of an ISO standard at their inception, which has led to different symbols or labels to identify the same digital asset, e.g., “BTC” as well as “XBT” for bitcoin and “ETH” as well as “XET” for ether. ISO 24165 (Digital Token Identifier – DTI) was recently published to address the ambiguity by providing a unique identifier for cryptocurrencies as well as other digital assets where one or more synthetic but human-readable labels can be attached. For example, the DTI assigned to bitcoin is 4H95J0R2X.

To provide an unambiguous and complete machine-readable description of instrument pairs, where either or both instruments may be a fiat currency or a digital asset, the FIX Protocol makes use of its SecAltID group. This allows both components of the instrument pair to be described in terms of their identifier value, the type of identifier (which now supports Digital Token Identifiers) and their position in the symbol:

Table 3: Examples for FX-Style Trading with Symbol(55) and SecAltIDGrp

Field	**Buying 2.5 bitcoin in USD**	**Buying $100,000 of bitcoin (or selling $100,000 for bitcoin)**	**Buying 10 ether in bitcoin**
Symbol(55)	BTC/USD	BTC/USD	XET/XBT
NoSecurityAltID(454)	2	2	2
> SecurityAltID(455)	4H95J0R2X (bitcoin’s DTI)	4H95J0R2X (bitcoin’s DTI)	X9J9K872S (ether’s DTI)
> SecurityAltIDSource(456)	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
> SymbolPositionNumber(2957)	1	1	1
> SecurityAltID(455)	USD	USD	4H95J0R2X (bitcoin’s DTI)
> SecurityAltIDSource(456)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
> SymbolPositionNumber(2957)	2	2	2

Note that Symbol(55) uses exchange ticker or other bilaterally agreed symbology, which is not consistent. In the example above, bitcoin could be represented as either BTC or XBT in the Symbol(55) field, but the DTI for bitcoin is the same in all cases.

The tables below provide examples of how to use certain key FIX Protocol fields on NewOrderSingle(35=D) and ExecutionReport(35=8) messages for trading fiat currencies. Though the SecAltIDGrp is not generally used in such FX trading, it is shown here to show how it should be used, mostly to aid comparison with the digital asset scenarios covered in later tables.

3.4.1 FX-Style Trading, Fiat Currencies – Key Fields for Order Messages

Table 4: FX-Style Trading, Fiat Currencies – Key Fields for Order Messages

Field	**Buying 1M EUR**	**Selling 1.4M USD**
Symbol(55)	EUR/USD	EUR/USD
Side(54)	Buy	Sell
Direction – PriceType(423)	20 (Normal - CCY1 * rate)	21 (Inverse - CCY1 / rate)
Rate – Price(44)	1.4	1.4
Dealing Qty – OrderQty(38)	1000000	1400000
Dealing Ccy – Currency(15)	EUR	USD

Field	Buying 1M EUR	Selling 1.4M USD
Optional unless settling in a third currency:		
SettlCurrency(120)	USD	EUR

3.4.2 FX-Style Trading, Fiat Currencies – Key Fields for ExecutionReport(35=8) Messages

Table 5: FX-Style Trading, Fiat Currencies – Key Fields for ExecutionReport(35=8) Messages

Field	Buying 1M EUR	Selling 1.4M USD
Symbol(55)	EUR/USD	EUR/USD
Side(54)	Buy	Sell
Direction – PriceType(423)	20 (Normal - CCY1 * rate)	21 (Inverse - CCY1 / rate)
Rate – LastPx(31) / AvgPx(6)	1.4	1.4
Dealt Qty – LastQty(32)	1000000	1400000
Dealt Ccy – Currency(15)	EUR	USD
CalculatedCcyLastQty(1056)	1400000	1000000
Optional unless settling in a third currency:		
SettlCurrency(120)	USD	EUR
SettlCurrAmt(119)	1400000	1000000

The tables below provide examples of how to use certain key FIX Protocol fields on NewOrderSingle(35=D) and ExecutionReport(35=8) messages for trading digital currencies.

3.4.3 FX-Style Trading, Digital Assets – Key Fields for Order Messages

Table 6: FX-Style Trading, Digital Assets – Key Fields for Order Messages

Field	Buying 2.5 bitcoin in USD	Buying $100,000 of bitcoin (or selling $100,000 for bitcoin)	Buying 10 ether in bitcoin
Symbol(55)	BTC/USD	BTC/USD	ETH/BTC
NoSecurityAltID(454)	2	2	2
> SecurityAltID(455)	4H95J0R2X (bitcoin’s DTI)	4H95J0R2X (bitcoin’s DTI)	X9J9K872S (ether’s DTI)
> SecurityAltIDSource(456)	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
> SymbolPositionNumber(2957)	*1*	*1*	*1*
> SecurityAltID(455)	USD	USD	4H95J0R2X (bitcoin’s DTI)
> SecurityAltIDSource(456)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
> SymbolPositionNumber(2957)	*2*	*2*	*2*
Side(54)	Buy	Sell (because we are selling USD)	Buy

Field	**Buying 2.5 bitcoin in USD**	**Buying $100,000 of bitcoin (or selling $100,000 for bitcoin)**	**Buying 10 ether in bitcoin**
Direction - PriceType(423)	20 (Normal - CCY1 * rate)	21 (Inverse - CCY1 / rate)	20 (Normal - CCY1 * rate)
Rate – Price(44)	40,000 (price of 1 BTC in USD)	40,000 (price of 1 BTC in USD)	0.075 (price of 1 ETH in BTC)
Dealing Qty – OrderQty(38)	2.5 (in bitcoin)	100,000 (in USD)	10 (in ether)
Dealing Ccy - Currency(15)	4H95J0R2X (bitcoin's DTI)	USD	X9J9K872S (ether's DTI)
CurrencyCodeSource(2897)	*Y (ISO 24165 Digital Token Identifier)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
Optional unless settling in a third currency:			
SettlCurrency(120)	USD	4H95J0R2X (bitcoin's DTI)	4H95J0R2X (bitcoin's DTI)
SettlCurrencyCodeSource(2899)	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*

3.4.4 FX-Style Trading, Digital Assets – Key Fields for ExecutionReport(35=8) Messages

Table 7: FX-Style Trading, Digital Assets – Key Fields for ExecutionReport(35=8) Messages

Field	**Buying 2.5 bitcoin in USD**	**Buying $100,000 of bitcoin (or selling $100,000 for bitcoin)**	**Buying 10 ether in bitcoin**
Symbol(55)	BTC/USD	BTC/USD	ETH/BTC
NoSecurityAltID(454)	2	2	2
> SecurityAltID(455)	4H95J0R2X (bitcoin's DTI)	4H95J0R2X (bitcoin's DTI)	X9J9K872S (ether's DTI)
> SecurityAltIDSource(456)	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
> SymbolPositionNumber(2957)	*1*	*1*	*1*
> SecurityAltID(455)	USD	USD	4H95J0R2X (bitcoin's DTI)
> SecurityAltIDSource(456)	*6 (ISO 4217 Currency Code)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
> SymbolPositionNumber(2957)	*2*	*2*	*2*
Side(54)	Buy	Sell (because we are selling USD)	Buy
Direction - PriceType(423)	20 (Normal - CCY1 * rate)	21 (Inverse - CCY1 / rate)	20 (Normal - CCY1 * rate)

Field	**Buying 2.5 bitcoin in USD**	**Buying $100,000 of bitcoin (or selling $100,000 for bitcoin)**	**Buying 10 ether in bitcoin**
Rate – LastPx(31) and AvgPx(6)	40,000 (price of 1 BTC in USD)	40,000 (price of 1 BTC in USD)	0.075 (price of 1 ETH in BTC)
Dealt Qty – LastQty(32)	2.5 (in bitcoin)	100,000 (in USD)	10 (in ether)
Dealt Ccy - Currency(15)	4H95J0R2X (bitcoin's DTI)	USD	X9J9K872S (ether's DTI)
CurrencyCodeSource(2897)	*Y (ISO 24165 Digital Token Identifier)*	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*
CalculatedCcyLastQty(1056)	100,000 (in USD)	2.5 (in bitcoin)	0.75 (in bitcoin)
Optional unless settling in a third currency:			
SettlCurrency(120)	USD	4H95J0R2X (bitcoin's DTI)	4H95J0R2X (bitcoin's DTI)
SettlCurrencyCodeSource(2899)	*6 (ISO 4217 Currency Code)*	*Y (ISO 24165 Digital Token Identifier)*	*Y (ISO 24165 Digital Token Identifier)*
SettlCurrAmt(119)	100,000 (in USD)	2.5 (in bitcoin)	0.75 (in bitcoin)

4 FIX Message Workflows

There are no new or amended message workflows for trading digital assets.

5 Message and Component Tables

Term	Value
title	Trading Digital Assets
publisher	FIX Trading Community
rights	Copyright 2023, FIX Protocol, Limited
date	2023-03-07

The following tables show the baseline recommended set of FIX fields used for sending order related FIX messages between trading counterparties when trading digital assets. The full set of fields for these messages and components can be found in the online specification.

5.1 Messages

5.1.1 Message NewOrderSingle(35=D)

Tag	Name	Req'd	Values	Description
comp	StandardHeader	Y		MsgType = D See component for details.
11	ClOrdID	Y		
group	Parties			See group for details.
21	HandlInst			See code set for supported values.
18	ExecInst			See code set for supported values.
100	ExDestination			Can be used to identify the destination Cryptoexchange.
1133	ExDestinationIDSource			See code set for supported values.
comp	Instrument	Y		See component for details.
54	Side	Y		See code set for supported values.
60	TransactTime	Y		Time this order request was initiated/released by the trader, trading system, or intermediary.
comp	OrderQtyData	Y		See component for details.
40	OrdType	Y		See code set for supported values.
423	PriceType			See code set for supported values.
44	Price			
99	StopPx			Required for OrdType(40)=3 (Stop) or OrdType(40)=4 (Stop limit).
15	Currency			
2897	CurrencyCodeSource			See code set for supported values.
59	TimeInForce			See code set for supported values. Absence of this field indicates Day order.
120	SettlCurrency			
2899	SettlCurrencyCodeSource			See code set for supported values.
58	Text			

Tag	Name	Req'd	Values	Description
group	TrdRegTimestamps			See group for details.
comp	StandardTrailer	Y		See component for details.

5.1.2 Message ExecutionReport(35=8)

Tag	Name	Req'd	Values	Description
comp	StandardHeader	Y		MsgType = 8 See component for details.
37	OrderID	Y		
11	ClOrdID			
41	OrigClOrdID			
group	Parties			See group for details.
17	ExecID	Y		
19	ExecRefID			Required for Trade Cancel and Trade Correct ExecType(150) messages.
150	ExecType	Y		
39	OrdStatus	Y		
103	OrdRejReason			For optional use with ExecType(150)=8 (Rejected)
378	ExecRestatementReason			Required for ExecType(150)=D (Restated)
comp	Instrument	Y		See component for details.
54	Side	Y		
comp	OrderQtyData			See component for details.
40	OrdType			See code set for supported values.
423	PriceType			See code set for supported values.
44	Price			Required if specified on the order.
99	StopPx			Required if specified on the order.
15	Currency			
2897	CurrencyCodeSource			See code set for supported values.
59	TimeInForce			See code set for supported values. Absence of this field indicates Day order.
18	ExecInst			See code set for supported values.
32	LastQty			
1056	CalculatedCcyLastQty			
31	LastPx			
30	LastMkt			If ExecType(150)=F (Trade), indicates the market where the trade was executed. If ExecType(150)=0 (New), indicates the market where the order was routed.
29	LastCapacity			
151	LeavesQty	Y		

Tag	Name	Req'd	Values	Description
14	CumQty	Y		
6	AvgPx			Not required for markets where average price is not calculated by the market. Conditionally required otherwise.
75	TradeDate			Used when reporting other than current day trades.
60	TransactTime			
119	SettlCurrAmt			
120	SettlCurrency			
2899	SettlCurrencyCodeSource			See code set for supported values.
21	HandlInst			See code set for supported values.
58	Text			
group	TrdRegTimestamps			See group for details.
comp	StandardTrailer	Y		See component for details.

5.1.3 Message OrderCancelReplaceRequest(35=G)

Tag	Name	Req'd	Values	Description
comp	StandardHeader	Y		MsgType = G See component for details.
37	OrderID			Unique identifier of most recent order as assigned by sell-side (broker, exchange, ECN).
group	Parties			See group for details.
41	OrigClOrdID			
11	ClOrdID	Y		
21	HandlInst			See code set for supported values.
18	ExecInst			
100	ExDestination			
1133	ExDestinationIDSource			See code set for supported values.
comp	Instrument	Y		See component for details.
54	Side	Y		See code set for supported values.
60	TransactTime	Y		
comp	OrderQtyData	Y		See component for details.
40	OrdType	Y		See code set for supported values.
423	PriceType			See code set for supported values.
44	Price			
99	StopPx			Required for OrdType(40)=3(Stop) or OrdType(40) =4(Stop limit).
15	Currency			
2897	CurrencyCodeSource			See code set for supported values.

Tag	Name	Req'd	Values	Description
59	TimeInForce			See code set for supported values. Absence of this field indicates Day order.
120	SettlCurrency			
2899	SettlCurrencyCodeSource			See code set for supported values.
58	Text			
group	TrdRegTimestamps			See group for details.
comp	StandardTrailer	Y		See component for details.

5.1.4 Message OrderCancelRequest(35=F)

Tag	Name	Req'd	Values	Description
comp	StandardHeader	Y		MsgType = F See component for details.
41	OrigClOrdID			
37	OrderID			
11	ClOrdID	Y		Unique ID of cancel request as assigned by the institution.
group	Parties			See group for details.
comp	Instrument	Y		See component for details.
54	Side	Y		See code set for supported values.
60	TransactTime	Y		Time this order request was initiated/released by the trader or trading system.
comp	OrderQtyData	Y		See component for details.
58	Text			
comp	StandardTrailer	Y		See component for details.

5.1.5 Message OrderCancelReject(35=9)

Tag	Name	Req'd	Values	Description
comp	StandardHeader	Y		MsgType = 9 See component for details.
37	OrderID	Y		If CxlRejReason(102)=1 (Unknown order), specify "NONE".
11	ClOrdID			
41	OrigClOrdID			
39	OrdStatus	Y		
60	TransactTime	Y		
434	CxlRejResponseTo	Y		
102	CxlRejReason			
58	Text			
comp	StandardTrailer	Y		See component for details.

5.1.6 Message OrderStatusRequest(35=H)

Tag	Name	Req'd	Values	Description
comp	StandardHeader	Y		MsgType = H See component for details.
37	OrderID			Conditionally required if ClOrdID(11) is not provided. Either OrderID(37) or ClOrdID(11) must be provided.
11	ClOrdID			The ClOrdID(11) of the order whose status is being requested. Conditionally required if the OrderID(37) is not provided. Either OrderID(37) or ClOrdID(11) must be provided.
group	Parties			See group for details.
790	OrdStatusReqID			Optional, can be used to uniquely identify a specific OrderStatusRequest(35=H) message. Echoed back on ExecutionReport(35=8) if provided.
comp	Instrument	Y		See component for details.
54	Side	Y		See code set for supported values.
comp	StandardTrailer	Y		See component for details.

5.2 Groups

5.2.1 Group Parties

See complete definition online (FIX Latest).

Used in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G), OrderCancelRequest(35=F), OrderStatusRequest(35=H)

The Parties component block is used to identify and convey information on the entities both central and peripheral to the financial transaction represented by the FIX message containing the Parties Block. The Parties block allows many different types of entities to be expressed through use of the PartyRole(452) field and identifies the source of the PartyID(448) through the the PartyIDSource(447).

Tag	Name	Req'd	Values	Description
453	NoPartyIDs			
448	> PartyID			
447	> PartyIDSource			
452	> PartyRole			See code set for supported values.
group	> PtysSubGrp			See group for details.

5.2.2 Group PtysSubGrp

See complete definition online (FIX Latest).

Used in group Parties

Tag	Name	Req'd	Values	Description
802	NoPartySubIDs			
523	> PartySubID			
803	> PartySubIDType			See code set for supported values.

5.2.3 Group SecAltIDGrp

See complete definition online (FIX Latest).

Used in component Instrument

Tag	Name	Req'd	Values	Description
454	NoSecurityAltID			
455	> SecurityAltID			
456	> SecurityAltIDSource			See code set for supported values.
2957	> SymbolPositionNumber			

5.2.4 Group TrdRegTimestamps

See complete definition online (FIX Latest).

Used in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G)

Tag	Name	Req'd	Values	Description
768	NoTrdRegTimestamps			
769	> TrdRegTimestamp			
770	> TrdRegTimestampType			See code set for supported values.

5.3 Components

5.3.1 Component Instrument

See complete definition online (FIX Latest).

Used in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G), OrderCancelRequest(35=F), OrderStatusRequest(35=H)

Tag	Name	Req'd	Values	Description
55	Symbol	Y		
48	SecurityID			
22	SecurityIDSource			See code set for supported values.
group	SecAltIDGrp			See group for details.
167	SecurityType			See code set for supported values.
207	SecurityExchange			
106	Issuer			

5.3.2 Component OrderQtyData

See complete definition online (FIX Latest).

Used in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G), OrderCancelRequest(35=F)

Tag	Name	Req'd	Values	Description
38	OrderQty			Used to specify order quantity in number of tokens.

Tag	Name	Req'd	Values	Description
152	CashOrderQty			Used to specify the order quantity as a total amount of ccy1 currency.

5.3.3 Component StandardHeader

The standard FIX message header.

Tag	Name	Req'd	Values	Documentation
8	BeginString	Y		FIXT.1.1 (Always unencrypted, must be first field in message)
9	BodyLength	Y		(Always unencrypted, must be second field in message)
35	MsgType	Y		(Always unencrypted, must be third field in message)
49	SenderCompID	Y		(Always unencrypted)
56	TargetCompID	Y		(Always unencrypted)
34	MsgSeqNum	Y		(Can be embedded within encrypted data section.)
52	SendingTime	Y		(Can be embedded within encrypted data section.)

5.3.4 Component StandardTrailer

The standard FIX message trailer.

Tag	Name	Req'd	Values	Documentation
10	CheckSum	Y		(Always unencrypted, always last field in message)

5.4 Fields

Tag	Name	Type	Values	Description
6	AvgPx	Price		Online
8	BeginString	String		Online
9	BodyLength	Length		Online
10	CheckSum	String		Online
11	ClOrdID	String		Online
14	CumQty	Qty		Online
15	Currency	Currency		Online
17	ExecID	String		Online
18	ExecInst	ExecInstCodeSet		Values / Online
19	ExecRefID	String		Online
21	HandlInst	HandlInstCodeSet		Values / Online
22	SecurityIDSource	SecurityIDSourceCodeSet		Values / Online
29	LastCapacity	LastCapacityCodeSet		Values / Online
30	LastMkt	Exchange		Online
31	LastPx	Price		Online
32	LastQty	Qty		Online

Tag	Name	Type	Values	Description
34	MsgSeqNum	SeqNum		Online
35	MsgType	String		Online
37	OrderID	String		Online
38	OrderQty	Qty		Online
39	OrdStatus	OrdStatusCodeSet		Values / Online
40	OrdType	OrdTypeCodeSet		Values / Online
41	OrigClOrdID	String		Online
44	Price	Price		Online
48	SecurityID	String		Online
49	SenderCompID	String		Online
52	SendingTime	UTCTimestamp		Online
54	Side	SideCodeSet		Values / Online
55	Symbol	String		Online
56	TargetCompID	String		Online
58	Text	String		Online
59	TimeInForce	TimeInForceCodeSet		Values / Online
60	TransactTime	UTCTimestamp		Online
75	TradeDate	LocalMktDate		Online
99	StopPx	Price		Online
100	ExDestination	Exchange		Online
102	CxlRejReason	CxlRejReasonCodeSet		Values / Online
103	OrdRejReason	OrdRejReasonCodeSet		Values / Online
106	Issuer	String		Online
107	SecurityDesc	String		Online
119	SettlCurrAmt	Amt		Online
120	SettlCurrency	Currency		Online
150	ExecType	ExecTypeCodeSet		Values / Online
151	LeavesQty	Qty		Online
152	CashOrderQty	Qty		Online
167	SecurityType	SecurityTypeCodeSet		Values / Online
207	SecurityExchange	Exchange		Online
378	ExecRestatementReason	ExecRestatementReasonCodeSet		Values / Online
423	PriceType	PriceTypeCodeSet		Values / Online
434	CxlRejResponseTo	CxlRejResponseToCodeSet		Values / Online
447	PartyIDSource	PartyIDSourceCodeSet		Values / Online
448	PartyID	String		Online

Tag	Name	Type	Values	Description
452	PartyRole	PartyRoleCodeSet		Values / Online
453	NoPartyIDs	NumInGroup		Online
454	NoSecurityAltID	NumInGroup		Online
455	SecurityAltID	String		Online
456	SecurityAltIDSource	SecurityIDSourceCodeSet		Values / Online
523	PartySubID	String		Online
768	NoTrdRegTimestamps	NumInGroup		Online
769	TrdRegTimestamp	UTCTimestamp		Online
770	TrdRegTimestampType	TrdRegTimestampTypeCodeSet		Values / Online
790	OrdStatusReqID	String		Online
802	NoPartySubIDs	NumInGroup		Online
803	PartySubIDType	PartySubIDTypeCodeSet		Values / Online
1056	CalculatedCcyLastQty	Qty		Online
1133	ExDestinationIDSource	ExDestinationIDSourceCodeSet		Values / Online
2897	CurrencyCodeSource	CurrencyCodeSourceCodeSet		Values / Online
2899	SettlCurrencyCodeSource	CurrencyCodeSourceCodeSet		Values / Online
2957	SymbolPositionNumber	int		Online

5.5 Codesets

5.5.1 Codeset CurrencyCodeSourceCodeSet type String

Used by CurrencyCodeSource(2897) and SettlCurrencyCodeSource(2899) in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G).

Symbolic Name	Value	Description
CUSIP	1	CUSIP
SEDOL	2	SEDOL
ISINNumber	4	ISIN
ISOCurrencyCode	6	ISO Currency Code (ISO 4217)
FinancialInstrumentGlobalIdentifier	S	Financial Instrument Global Identifier (FIGI)
DigitalTokenIdentifier	Y	Digital Token Identifier (ISO 24165)

5.5.2 Codeset CxlRejReasonCodeSet type int

Used by CxlRejReason(102) in message OrderCancelReject(35=9)

Symbolic Name	Value	Description
TooLateToCancel	0	Too late to cancel
UnknownOrder	1	Unknown order

Symbolic Name	Value	Description
BrokerCredit	2	Broker / Exchange Option

5.5.3 Codeset CxlRejResponseToCodeSet type char

Used by CxlRejResponseTo(434) in message OrderCancelReject(35=9)

Symbolic Name	Value	Description
OrderCancelRequest	1	Order cancel request
OrderCancelReplaceRequest	2	Order cancel/replace request

5.5.4 Codeset ExecInstCodeSet type MultipleCharValue

Used by ExecInst(18) in messages NewOrderSingle(35=D), OrderCancelReplaceRequest(35=G), ExecutionReport(35=8)

Symbolic Name	Value	Description
AllOrNone	G	All or none (AON)

5.5.5 Codeset ExDestinationIDSourceCodeSet type char

Used by ExDestinationIDSource(1133) in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G), OrderCancelReject(35=9), OrderCancelRequest(35=F)

Symbolic Name	Value	Description
Proprietary	D	Proprietary / Custom code
MIC	G	MIC (ISO 10383 - Market Identifier Code)

5.5.6 Codeset ExecTypeCodeSet type char

Used by ExecType(150) in message ExecutionReport(35=8)

Symbolic Name	Value	Description
New	0	New
Canceled	4	Canceled
Replaced	5	Replaced
Rejected	8	Rejected
Calculated	B	Calculated
Restated	D	Restated (ExecutionReport(35=8) message sent unsolicited by sellside, with ExecRestatementReason(378) set)
OrderStatus	I	Order Status
Trade	F	Trade (partial fill or fill)
TradeCorrect	G	Trade Correct

5.5.7 Codeset ExecRestatementReasonCodeSet type int

Used by ExecRestatementReason(378) in message ExecutionReport(35=8)

Symbolic Name	Value	Description
GTCorporateAction	0	GT corporate action
GTRenewal	1	GT renewal / restatement (no corporate action)
VerbalChange	2	Verbal change

5.5.8 Codeset HandlInstCodeSet type char

Used by HandlInst(21) in messages NewOrderSingle(35=D), OrderCancelReplaceRequest(35=G), ExecutionReport(35=8)

Symbolic Name	Value	Description
AutomatedExecutionNoIntervention	1	Automated execution order, private, no Broker intervention
AutomatedExecutionInterventionOK	2	Automated execution order, public, Broker intervention OK
ManualOrder	3	Manual order, best execution

5.5.9 Codeset LastCapacityCodeSet type char

Used by LastCapacity(29) in message ExecutionReport(35=8)

Symbolic Name	Value	Description
Agent	1	Agent
CrossAsAgent	2	Cross as agent
CrossAsPrincipal	3	Cross as principal

5.5.10 Codeset OrdRejReasonCodeSet type int

Used by OrdRejReason(103) in message ExecutionReport(35=8)

Symbolic Name	Value	Description
BrokerCredit	0	Broker / Exchange Option
UnknownSymbol	1	Unknown symbol
ExchangeClosed	2	Exchange Closed

5.5.11 Codeset OrdStatusCodeSet type char

Used by OrdStatus(39) in messages ExecutionReport(35=8), OrderCancelReject(35=9)

Symbolic Name	Value	Description
New	0	New
PartiallyFilled	1	Partially filled
Filled	2	Filled

5.5.12 Codeset OrdTypeCodeSet type char

Used by OrdType(40) in messages NewOrderSingle(35=D), OrderCancelReplaceRequest(35=G), ExecutionReport(35=8)

Symbolic Name	Value	Description
Market	1	Market
Limit	2	Limit
Stop	3	Stop/Stop Loss
StopLimit	4	Stop Limit

5.5.13 Codeset PartyIDSourceCodeSet type char

Used by PartyIDSource(447) in group Parties

Symbolic Name	Value	Description
LegalEntityIdentifier	N	Legal Entity Identifier (ISO 17442) LEI
GeneralIdentifier	C	Generally accepted market participant identifier (e.g. NASD mnemonic)
Proprietary	D	Proprietary / Custom code. Custom ID schema used between counterparties, trading platforms and repositories.

5.5.14 Codeset PartyRoleCodeSet type int

Used by PartyRole(451) in group Parties

Symbolic Name	Value	Description
ExecutingFirm	1	Executing Firm
ClientID	3	Client ID

5.5.15 Codeset PartySubIDTypeCodeSet type int

Used by PartySubIDType(803) in group PtysSubGrp

Symbolic Name	Value	Description
Firm	1	Firm

5.5.16 Codeset PriceTypeCodeSet type int

Used by PriceType(423) in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G)

Symbolic Name	Value	Description
PerUnit	2	Per unit (i.e. per share or contract). Use for Cryptotokens (i.e. per token) representing other assets (ICOs).
FixedAmount	3	Fixed amount (absolute value). Use for Cryptocurrency with Price(44) in Currency(15) units

5.5.17 Codeset SecurityIDSourceCodeSet type String

Used by SecurityID(48) in component Instrument and by SecurityAltID(455) in group SecAltIDGrp.

Symbolic Name	Value	Description
CUSIP	1	CUSIP
SEDOL	2	SEDOL
ISINNumber	4	ISIN
ISOCurrencyCode	6	ISO Currency Code (ISO 4217)
FinancialInstrumentGlobalIdentifier	S	Financial Instrument Global Identifier (FIGI)
DigitalTokenIdentifier	Y	Digital Token Identifier (ISO 24165)

5.5.18 Codeset SecurityTypeCodeSet type String

Used by SecurityType(167) in component Instrument

Symbolic Name	Value	Description
DigitalAsset	DIGITAL	Digital Asset. Asset that exists only in digital form or which is the digital representation of another asset (Source: ISO 24165 - Terms and Definitions).

5.5.19 Codeset SideCodeSet type Char

Used by Side(54) in messages NewOrderSingle(35=D), ExecutionReport(35=8), OrderCancelReplaceRequest(35=G), OrderCancelRequest(35=F), OrderStatusRequest(35=H)

Symbolic Name	Value	Description
Buy	1	Buy
Sell	2	Sell

5.5.20 Codeset TimeInForceCodeSet type char

Used by TimeInForce(59) in messages NewOrderSingle(35=D), OrderCancelReplaceRequest(35=G), ExecutionReport(35=8)

Symbolic Name	Value	Description
Day	0	Day (or session)
GoodTillCancel	1	Good Till Cancel (GTC)
ImmediateOrCancel	3	Immediate Or Cancel (IOC)

5.5.21 Codeset TrdRegTimestampTypeCodeSet type int

Used by TrdRegTimestampType(770) in group TrdRegTimestamps

Symbolic Name	Value	Description
ExecutionTime	1	Execution Time
TimeIn	2	Time in
TimeOut	3	Time out