COMMERZBANK

Commander FIX

Rules of Engagement

Corporates and Markets

3 May 2018 | Version 1.10

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Version Changes

Version Changed	Date	Author	Details
1.7	15 Sept 15	Tim Burrage	BidPx2 and OfferPx2 added to Quote Response
1.7	15 Sept 15	Tim Burrage	Additional order types, Best Price and Resting
1.7	15 Sept 15	Tim Burrage	Optional support for CFICode & LegCFICode. To be mandated in a future revision
1.7	15 Sept 15	Tim Burrage	Text added to TradingSessionStatus
1.7	15 Sept 15	Tim Burrage	TradingSessionID clarified as in UTC Timezone
1.7	15 Sept 15	Tim Burrage	Clarified requirement to send ForwardPoints, Price2, MDReqID, in New Order Single
1.7	15 Sept 15	Tim Burrage	Support for additional TimeInForce values
1.7	15 Sept 15	Tim Burrage	Support for ClientSlippage on Spot orders
1.7	15 Sept 15	Tim Burrage	Clarified that FixingDate and LegFixingDate are mandatory for NDF trades
1.7	15 Sept 15	Tim Burrage	Clarified price and quantity tags in ExecutionReports to support partial fills
1.8	28 Sept 15	Tim Burrage	CFICode and LegCFICode added to QuoteRequest, Quote and QuoteResponse
1.8	28 Sept 15	Tim Burrage	FixingDate and FixingRef mandated on QuoteResponse if present on QuoteRequest and Quote
1.8	13 Oct 15	Tim Burrage	NoAllocs group enhanced on ExecutionReport
1.8	20 Oct 15	Tim Burrage	CFICode mandated for Best Price and Resting Orders
1.9	03 Mar 16	Sat Bhandal	Optional RFQ changes adding NumOfCompetitors, ExposureDuration, OnBehalfOfCompID, CoverPrice and expanding QuoteRespType.
1.10	21 Apr 16	Tim Burrage	Clarified comments for NoAllocs in QuoteResponse
1.10	28 Apr 16	Tim Burrage	Removed Resting StopLimit Order, OrdType=4 and updated associated fields relating to OrdType=4
1.10	28 Apr 16	Tim Burrage	Removed support for TimeInForce=Day(0) for Resting Orders
1.10	29 Apr 16	Tim Burrage	Added OrderStatusRequest message
1.10	29 Apr 16	Tim Burrage	Clarified ExecutionReport details for unsolicited cancellation of Resting Orders
1.10	29 July 16	Tim Burrage	Text field in QuoteRequestReject moved outside of NoRelatedSym group
1.10	5 Aug 16	Tim Burrage	One Cancels-Other & If-Done Linked Resting Orders
1.10	5 Aug 16	Tim Burrage	Removed StopLimit OrdType support
1.10	5 Aug 16	Tim Burrage	EffectiveTime added to NewOrderSingle for Resting Orders
1.10	5 Aug 16	Tim Burrage	Addition of OrderCancelReplaceRequest for amendment of Resting Orders
1.10	30 Aug 16	Tim Burrage	OrdStatusSuspendedReason and OrdStatusActivationReason added to

			ExecutionReports to clarify status of Linked Orders
1.10	6 Dec 16	Sat Bhandal	Corrected NewSeqNo on SequenceReset
1.10	6 Dec 16	Sat Bhandal	Support for post trade allocations
1.10	7 Dec 16	Tim Burrage	OrdStatus=Expired included
1.10	7 Dec 16	Tim Burrage	Loop Linked Resting Orders
1.10	6 Jan 17	Tim Burrage	Inclusion of Client Execution Strategies, via TargetStrategy & NoStrategyParameters
1.10	17 Jan 17	Tim Burrage	Re-introduced support for TimeInForce=Day(0) for Resting Orders
1.10	20 Jan 17	Tim Burrage	Deprecated ON and TN Tenors. Included TODAY and TOM Tenors
1.10	20 Jan 17	Tim Burrage	LastMkt added to ExecutionReport against a client execution strategy
1.10	8 Mar 17	Tim Burrage	TargetStrategy added to OrderStatusRequest & OrderCancelRequest
1.10	8 Mar 17	Tim Burrage	AggressorIndicator added to ExecutionReport
1.10	7 Apr 17	Tim Burrage	Corrected comment for OfferSpotRate in QuoteResponse – for buy orders
1.10	12 Apr 17	Tim Burrage	SpotRate and ForwardPoints in QuoteResponse made optional
1.10	5 May 17	Tim Burrage	Added IndividualAllocID and removed TradeDate from AllocationInstruction
1.10	30 May 17	Tim Burrage	TransactTime added to OrderCancelReject
1.10	30 May 17	Tim Burrage	Side added to OrderStatusRequest
1.10	28 Jun 17	Tim Burrage	Stated end of week expiry of Client Execution Strategy Resting Orders
1.10	3 July 17	Tim Burrage	Pre-Trade Allocations on Order Session via New Order Single
1.10	27 July 17	Tim Burrage	MIFID updates
1.10	6 Oct 17	Tim Burrage	Execution and Investment Decision Maker'sfor MIFID added to Quote
1.10	23 Oct 17	Tim Burrage	Re-numbered MIFID II tags SecurityID2 and VenueTransactionId
1.10	25 Oct 17	Tim Burrage	MIFID II:- 1. EDM/IDM clarifications in PartyIDs group 2. Limited LastCapacity to 4. 3. Removed OrderCancelReplaceRequest from scope.
1.10	13 Nov 17	Tim Burrage	Re-numbered MIFID II tags SecurityID2 and VenueTransactionId
1.10	14 Nov 17	Tim Burrage	Corrected tag numbers for LegSecurityID(602) & LegSecurityIDSource(603)
1.10	29 Nov 17	Tim Burrage	Introduced TradingVenueTransactionId2(20062) to cover far leg of swap trades.
1.10	7 Dec 17	Tim Burrage	Added ExecutionReport where missing to "Support for MiFID II" summary table.
1.10	24 Jan 18	Tim Burrage	Clarified use of Account and NoAllocs in NewOrderSingle
1.10	25 Jan 18	Tim Burrage	TargetStrategy added to OrderCancelReject
1.10	14 Feb 2018	Tim Burrage	Clarified direction of Side in AllocationInstruction

1.10	3 Apr 2018	Tim Burrage	Replaced UTI(20009) with AllocUTI(20020) in QuoteResponse NoAllocs repeating group

1 Introduction

Purpose

This document provides a description of how Commerzbank's Commander eFX trading platform uses the FIX Protocol and how a client/vendor can connect for the purpose of electronic foreign exchange trading.

It is intended for use by business and technical managers implementing or adapting a FIX interface to Commander via FIX.

The FIX Protocol

The Financial Information eXchange (FIX) protocol is an industry standard messaging definition for electronic communication of financial data. For more information, documents and tools please refer to the FIX protocol website at http://www.fixprotocol.org

In order to connect to Commander via FIX, client and vendor applications will be required to support FIX 4.4. This document outlines the tags supported by Commander and the value definitions. Additional tags will be ignored and rejected.

FIX Onboarding

We have a dedicated FIX onboarding team who will manage the onboarding process through to go live.

All new connections are required to be certified by a conformance test, where both positive and negative scenarios are tested to ensure they are handled appropriately by the client/vendor application. If changes are made to your software post-golive then you may need to recertify to ensure no issues are introduced.

There are three types of FIX session:

- Market Data
- Orders
- Quotes

Market data sessions are used to subscribe to and receive market data.

Orders are submitted down this FIX session and executions are received on them. Where applicable, orders are related to the price streams from the market data session.

Quotes are requested, received and cancelled on this FIX session in addition to any orders or executions relating to quotes. A quote stream is like a market data stream; except that it is closed once an execution is completed.

Connectivity

An SSL (v.3 or later) internet connection should be used for the purposes of testing on the Demo environment.

We support cross connect in several colocation data centres, otherwise BT Radianz lines should be used for connectivity in Production. An SSL internet connection can be provisioned as well.

Connections are identified using SenderCompID (tag 49) and TargetCompID (tag 56). The values are agreed during the onboarding process but typically follow the format:

- Market data session: COBAMD <> CLIENTMD
- Orders session: COBAORD <> CLIENTORD
- Quote session: COBARFQ <> CLIENTRFQ

Support

Once your connection is live it will be supported by our dedicated support teams ensuring your trading experience is as efficient and responsive as you need. Contact us 24 hours a day, if you would like further assistance or have any queries:

Email us esupport@commerzbank.com

Or call us

Location	Phone number	Service hours
Singapore	+65 (0)6311 0175	22:30–06:30 GMT
UK	+44 (0)207 475 4500	06:30–17:00 GMT
Germany	+49 (0)69 136 84500	06:30–17:00 GMT
US	+1 (0)866 672 8355	17:00–22:30 GMT

System Availability

Please reset sequence numbers during the weekend system downtime.

2 Products

The following products are supported via FIX:

- Spot
- Forward
- Swap

We support over 500 currency pairs, including inverses, across over 50 currencies. Selected currencies are NDF only or Deliverable only. We do not support Non-Deliverable Swaps (NDS). We support uneven swaps and pre-trade allocations. We also support market orders for spot trading. We support block trades (single currency pair, multi-tenors and multi-accounts). Please discuss your requirements with us during onboarding.

Further products may be available via our Commander platform; more information may be found at http://commanderfx.com

Market Data and Order Sessions

Clients can request market data on a specified currency pair and submit orders with a reference to a previously quoted price.

To subscribe to rates, clients should submit a Market Data Request message with the interested currency pair and value date or tenor. Depending on the available liquidity, clients should begin receiving Market Data Snapshot/Full Refresh messages with indicative prices and sizes for the interested currency pair. Clients may trade against these prices with Previously Quotes orders.

To trade on a quoted price, clients should submit a NewOrderSingle message with the QuoteID (tag 117) set to the respective MarketDataSnapshotFullRefresh QuoteEntryID. Order responses are sent in ExecutionReport messages.

Resting Orders are supported where they remain active and fill when the clients price and liquidity matches.

Quote Session

To submit a quoted FX order, clients should submit a Quote Request message which contains all the details of the desired trade.

The system will start to stream indicative prices in return using Quote Messages or will reject the request using a Quote Reject Request message.

A price can be traded on using a Quote Response message with Hit or Lift specified, or the streaming can be terminated via a Quote Response Pass message.

FX forwards and swaps may be traded using a quote session or an orders session.

Multileg trades may be quoted, using the NoLegs repeating group in the QuoteRequest and NewOrderSingleMultiLeg messages.

Tenors

The following tenors are supported, contact us to confirm the latest supported values.

TODAY	2M	10M
TOM	3M	11M
SP	4M	1Y
SN	5M	15M
1W	6M	18M
2W	7M	21M
3W	8M	2Y
1M	9M	

Currency

The Currency (tag 15) of a trade message refers to the OrderQty (tag 38) and may be either the base (CCY1) or terms (CCY2) currency of the currency pair in Symbol (tag 55).

Please note that the Side (tag 54) always refers to the base currency.

The Currency in market data messages refers to the required and available liquidity, and may be either the base or terms currency.

Example usage for a NewOrderSingle:

<table>
<tr><th>Tag</th><th>Buy EUR</th><th>Sell USD</th><th>Sell EUR</th><th>Buy USD</th></tr>
<tr><td>55</td><td colspan="4">EUR/USD</td></tr>
<tr><td>54</td><td colspan="2">1 (Buy EUR)</td><td colspan="2">2 (Sell EUR)</td></tr>
<tr><td>15</td><td>EUR</td><td>USD</td><td>EUR</td><td>USD</td></tr>
<tr><td>38</td><td>1m (EUR)</td><td>1m (USD)</td><td>1m (EUR)</td><td>1m (USD)</td></tr>
<tr><td>117</td><td colspan="2">Offer Quote ID</td><td colspan="2">Bid Quote ID</td></tr>
</table>

Quote Driven vs. Order Driven Liquidity

Quote driven liquidity sets each rung of the rate ladder to have a quote for the full amount on that rung. It is the same price as asking for a quote for the specific amount. Only a single order can be placed against this at a given time as it is not sweep-able.

Order driven liquidity sets each rung of the rate ladder as if they are orders on an exchange. Single or multiple orders can be placed against this at the same time. Each will require a New Order Single and will be executed individually.

Quote driven liquidity is preferred and is supported on both market data sessions and quote sessions.

Liquidity Examples

The following bids were sent in one message for an Quote Driven ladder:

CCY Pair	Bid Price	Size	Reference
GBP/USD	1.4773	1m	2002002.0.B
	1.4772	5m	2002002.1.B

Clients who wish to sell 1m of GBP/USD will send an order with the price 1.4773 and reference 2002002.0.B.

For a larger order of 3m, clients will need to submit one order: 3m at 1.4772 (reference 2002002.1.B). Similarly for 5m order, 1.4772, ref 2002002.1.B.

The following bids were sent in one message for an Order Driven ladder:

CCY Pair	Bid Price	Size	Reference
GBP/USD	1.4773	1m	20030011.0.B
	1.4770	4m	20030011.1.B

Clients who wish to sell 1m of GBP/USD will send an order with the price 1.4773 and reference 2003011.0.B.

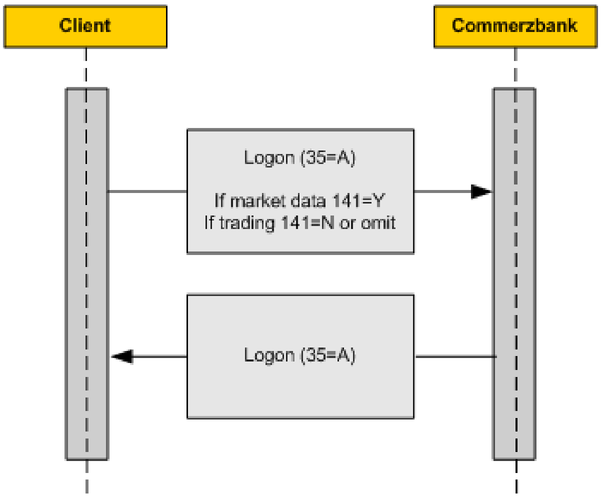
However, for a larger order of 3m, clients may choose to submit two orders, one for 1m at 1.4773 with a reference of 2003011.0.B and one for 2m at 1.4770 with a reference of 2003011.1.B to get the best price. Alternatively they could submit one order with a reference of 2003011.1.B to use the 1.4771 (rounded wider if required) price for the entire trade. Note that submitting two orders will be a slower and more complex process than using one order, and the response from the server will be slower as there are two messages. It is possible that the order would effectively be partially filled as each item of the order would be processed separately

3 Message Flows

Logon

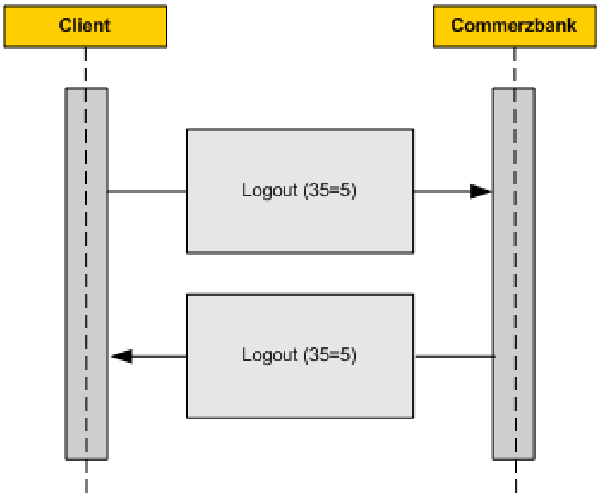
The logon sequence is client initiated.

- On a market data session you must reset sequence numbers on every logon using 141=Y.
- Sequence numbers on an orders session must not reset sequence numbers intraweek.



Logout

It is recommended to send a Logout when intentionally disconnecting to assist in troubleshooting. Please specify a description in the Text field (tag 58). If you receive a Logout from Commerzbank you are advised to attempt reconnection.



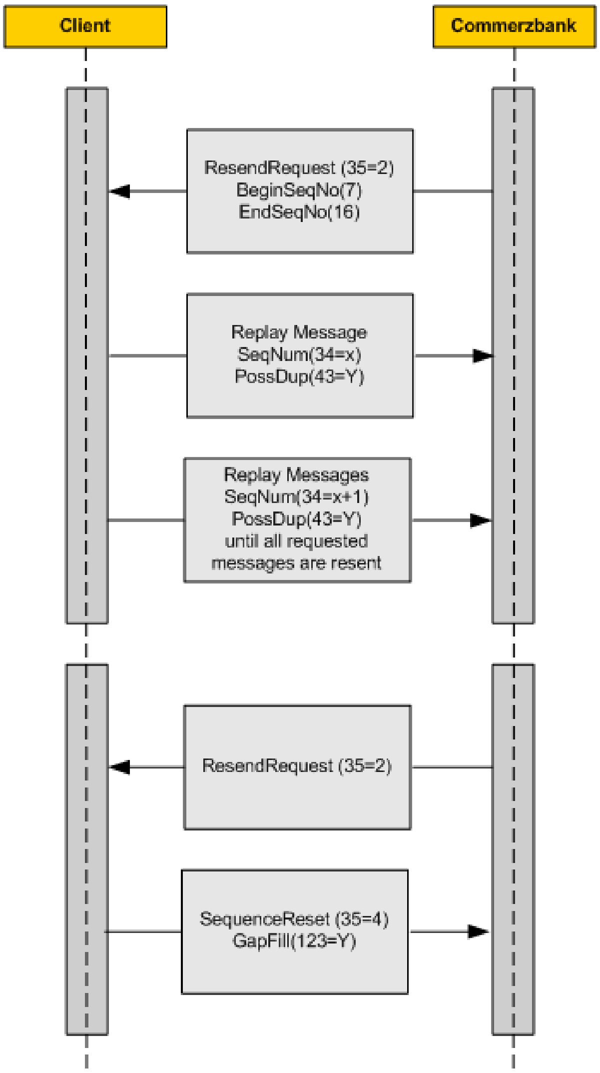
Resend requests

It is important the all FIX sessions can handle Gap Fills as per the FIX protocol, to facilitate recovery where possible during a disconnection or missed message.

Standard behaviour if you receive a ResendRequest is:

- Resend the requested messages in order with the original sequence numbers and PossDupFlag (tag 43) set to Y.

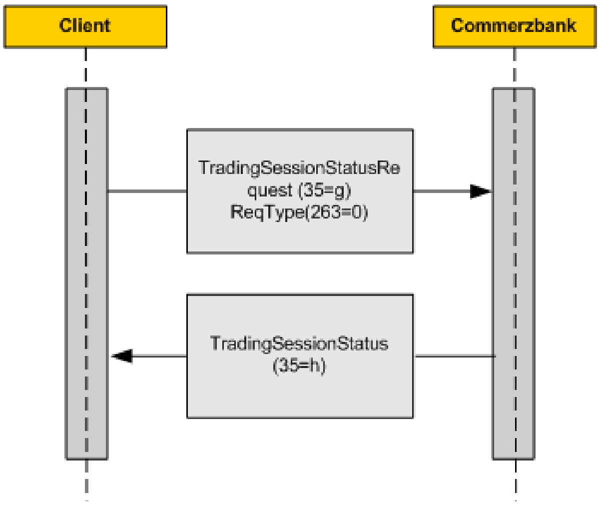
Where appropriate, send a SequenceReset (message type 4) with GapFillFlag (tag 123) set to Y, to replace the retransmission of unnecessary messages, e.g. Heartbeats.Please note that messages and sequence numbers are not persisted on Market Data Sessions, so message replay is not supported.



Please note that flow can be in either direction.

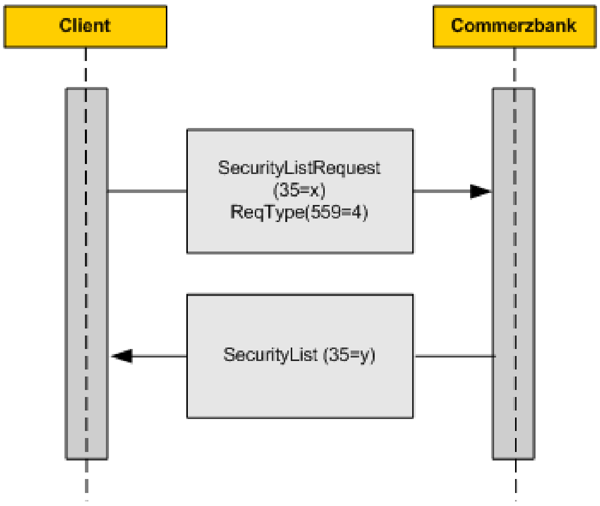
Trading session status

The trading status of a session can be ascertained on market data and orders sessions using the TradingSessionStatusRequest message.

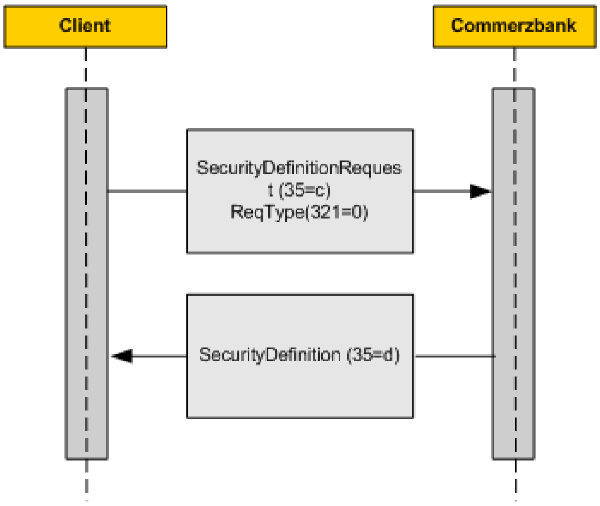


Security information

A list of the permitted currency pairs available for a FIX session can be requested using the SecurityListRequest.



More information can be retrieved about a currency pair and tenor using the SecurityDefinitionRequest.



Market data

Pricing is sent in response to a valid subscription to a currency pair, providing pricing is currently available.

The prices and quantities represent the current best that may be available at time of transmission and do not represent a firm offer to trade at that price and quantity.

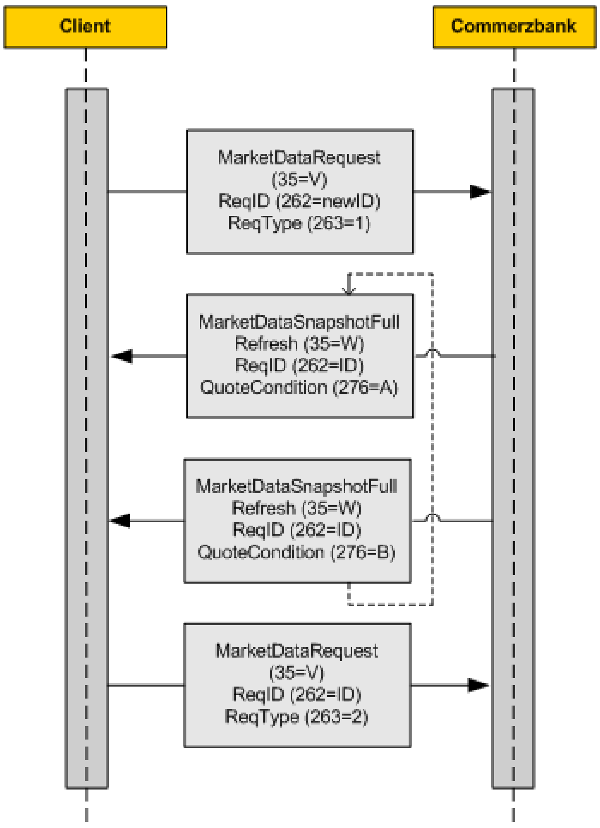
Invalid subscriptions will be rejected. For forwards and swaps, valid dates or tenors must be used, observing any relevant holidays.

Each subscription must have a unique identifier, which will be used when streaming prices in return and when unsubscribing. To request top of book use OrderQty (tag 38) and MarketDepth (tag 264) set to '1'.

If prices become staled, a market data message with QuoteCondition set to 'B' will be sent. When pricing resumes market data will be sent with QuoteCondition set to 'A'. There is no need to re-subscribe. Messages may be sent that include both A and B QuoteCondition states.

A new market data message invalidates all previous prices sent for the same subscription. Each message contains the complete liquidity level on the currency pair, unless specific liquidity levels are requested in the initial MarketDataRequest.

In the event of a FIX session disconnection, all active subscriptions will be cancelled and FIX sequence numbers are reset.



Orders

A number of different order types are supported, with the required and optional tags detailed in Table 1.

- Previously Quoted – these are issued against a MarketDataSnapshot and are executed in a single fill.
- Best Price – these are issued against an existing MarketDataSubscription, requesting the best available price. The Order must indicate which particular subscription is required via the MDReqID field. They are executed in a single fill.
- Resting – these do not reference any Market Data and will remain active until filled or cancelled. They can execute as a single fill or multiple partial fills.

All orders will be responded to with an ExecutionReport to indicate acceptance or otherwise. If the initial ExecutionReport is not received within a few seconds then the client's system should alert their support team to contact us in a timely manner. Orders should not be assumed to be done or not done.

In the event of a FIX session disconnection:-

- Previously Quoted and Best Price orders will continue to execute.
- Resting Orders will continue to trade. Attempted transmissions of Order updates may be retained and forwarded to Clients once connectivity is re-established. Clients who have any outstanding orders should use either the OrderStatusRequest message to retrieve the latest Order status.

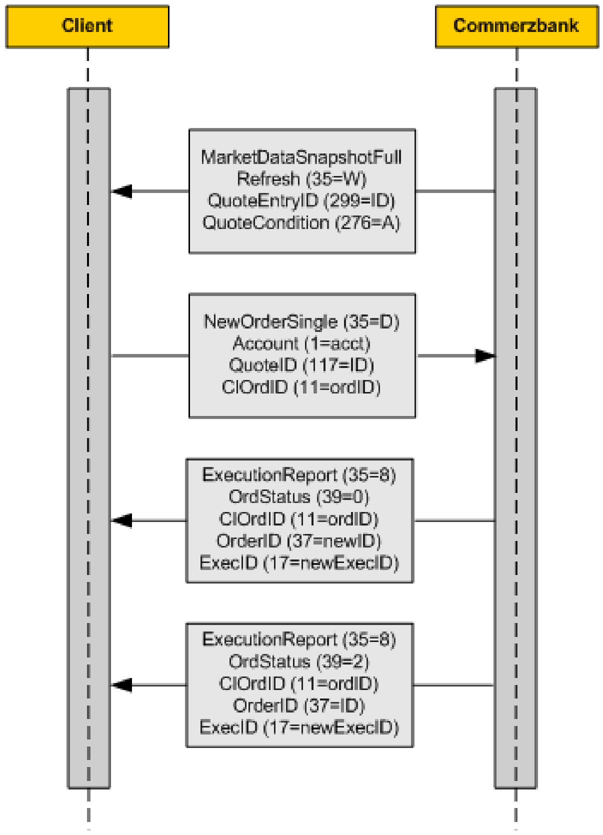
Following restoration of connectivity, Clients who have any outstanding orders should contact us to reconcile their position to ensure any fills are accounted for.

Partial Filling and MinQty

Orders may be fulfilled via one or more partial fills as dictated by type, liquidity, price and trading rules. If clients prefer not to receive partial fills, they should set MinQty=OrdQty. If MinQty is not set, partial filling will be assumed.

When set on Resting Orders, each partial fill will be at least that quantity. The final fill to complete the Order may be less than the MinQty.

Typical message sequence for a Previously Quoted or Best Price Order



Resting Orders

Resting Orders are supported as Limit or Stops.

Limit Order

A limit Order is used to buy or sell currency at a specified level which is better than the market price. In the event the FX spot rate moves in a favourable direction the order will execute locking in profit. Limit orders to buy/sell are entered below/above the market price.

Stop Order

A Stop Order is used to buy or sell currency at a specified level in order to exit short or long positions respectively. In the event the FX spot rate moves in an unfavourable direction the order will execute limiting potential loss. Stop orders to sell/buy are entered below/above the market price. A Stop-Ask order to sell is watched on the right hand side (RHS) quote and a Stop-Bid order to buy is watched on the left hand side (LHS) quote.

Forward Resting Order

Limit and Stop Orders can also be placed with certain forward dates. These orders will execute at a requested FX spot rate and then roll to a given forward maturity at whatever forward points are quoted at the time of order execution.

In some cases where Swap Points were not available at the time of Fill, these will be shown as zero and may need to be amended. We will endeavor to do this without undue delay.

Linked Resting Orders

Resting Orders may be linked together to form trading patterns.

Three link styles are available:-

- One-Cancels-Other
- If-Done
- Loop

Additional guidance and rules are detailed in section 8.

One-Cancels-Other

A One-Cancels-Other (OCO) order pair combines a Limit and a Stop Order in a single strategy. Both orders are active at the same time. When one leg executes the other one is automatically cancelled.

If-Done Order

Limit and Stop Orders can be linked in a parent-child relationship. Initially the parent order is active. As soon as the parent order fills then the child order becomes active. One order essentially acts as a trigger for another. The general use case for If-Done orders is to initiate a new position, and once initiated, it will create 1 (or more) orders to risk manage the new position. For example, a Limit Order may be entered as an IF-Done order, and if this order is filled, an OCO may be instantly initiated to manage both the upside and downside of the newly created position for the client.

Loop Order

Two Limit Orders can be combined into a pair where the active order alternates as each fills.

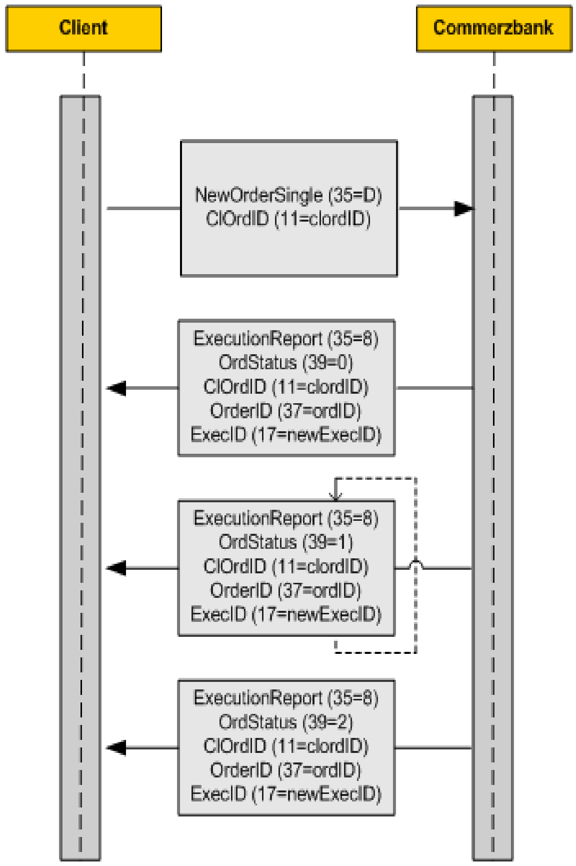
Client Execution Strategies

A number of executions strategies are available for Resting Orders. These are generally specified via the TargetStrategy and entries in the NoStrategyParameters repeating group.

Each strategy is defined in a separate addendum document.

Contact us to discuss the latest available strategies and obtain their specification documents.

Typical message sequence for a Resting Order.



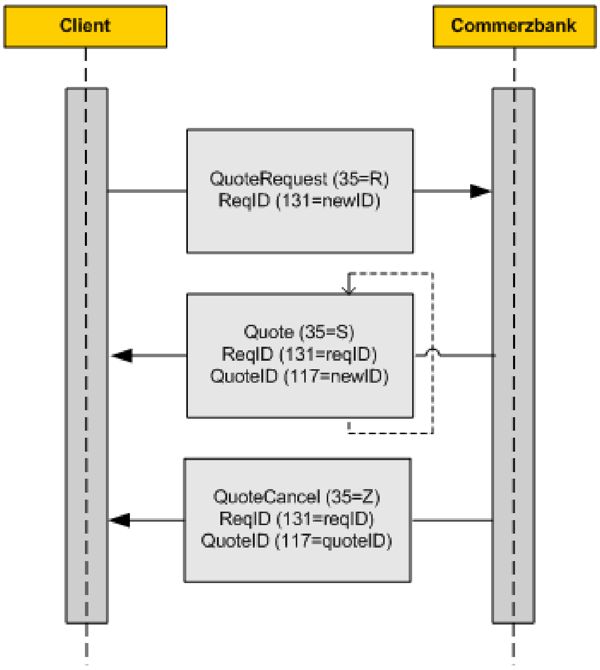
Quotes

Pricing is sent in response to a valid subscription to a currency pair, providing pricing is currently available. Invalid subscriptions will be rejected.

The prices and quantities represent the current best that may be available at time of transmission and do not represent a firm offer to trade at that price and quantity.

A new quote message invalidates all previous messages sent for the same subscription.

A QuoteCancel message can cancel a quote during streaming and it cancels the subscription, so a new QuoteRequest is needed to resubscribe to the stream.

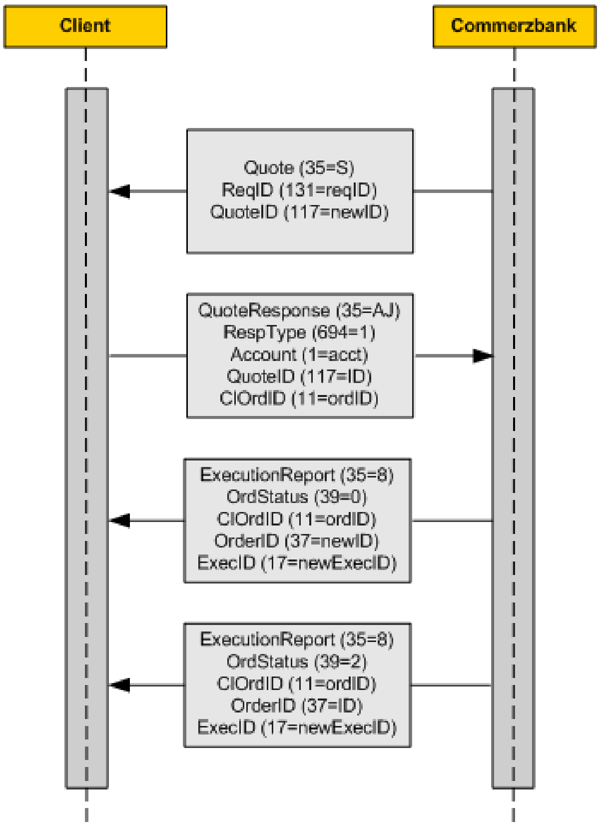


A quote can be traded on by sending a QuoteResponse with QuoteResponseType (tag 694) set to Hit/Lift. The stream can be cancelled by sending a QuoteResponse with QuoteResponseType set to Pass.

If a QuoteResponse message is invalid then a QuoteStatusReport will be returned. A valid QuoteResponse will be responded to with an ExecutionReport; a successful order will receive an acknowledgement and then be confirmed as executed; an unsuccessful order will be rejected.

If no response is received within a few seconds then the client's system should alert their support team to contact us in a timely manner. Orders should not be assumed to be done or not done.

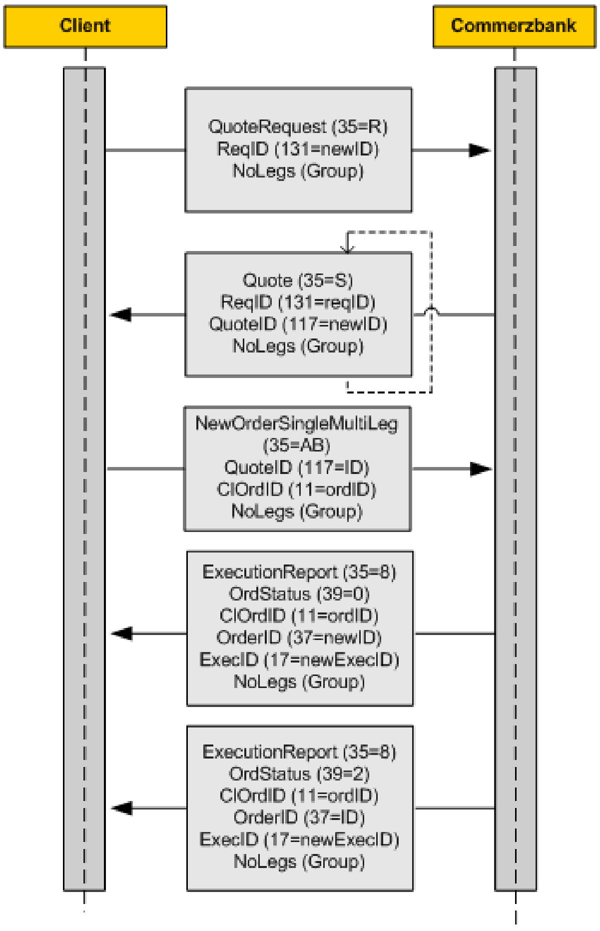
In the event of a FIX session disconnection, all accepted quotes will continue to execute. Clients who have any outstanding accepted quotes should contact us to reconcile their position to ensure any fills are accounted for.



MultiLeg Orders

MultiLeg orders are supported over Quote-based sessions.

To trade a multileg order, the NewOrderSingleMultiLeg message is used instead of a QuoteResponse. The repeating group NoLegs is used to provide the details of the trade.



EMIR

Custom tags have been added to our specification to allow you to provide and receive UTI information where appropriate.

These fields are of two types, pre-trade and trade.

Pre-trade fields are

- ExecutionVenue (20011)
- ExecutionVenueType (20012)
- ReportingParty (20013)
- TradeRespository (20014)
- ClearingExemption (20015)
- ClearingVenue (20016)
- ClearingIndicator (20017)
- CounterpartyLEI (20018)

These are used on messages that request pricing, e.g. MarketDataRequest and QuoteRequest. If you provide these tags on your request, we will use the values throughout the life of the pricing and subsequent order(s).

Trade fields are

- UTIPrefix (20008)
- UTI (20009)
- UTI2 (20010)

These are used on messages to trade, e.g. QuoteResponse, NewOrderSingle and NewOrderSingleMultiLeg. If you provide these values on your order, we will use them.

In the case where you do not provide values in these tags, we will generate values to return to your connection on ExecutionReports.

TimeInForce and Expiry

Resting Orders will trade until they are filled, cancelled or finally reach expiry as controlled by TimeInForce(59).

Three TimeInForce options are available for Resting Orders:-

Day(0)- These trade until the next date roll i.e. 5p.m NY time (regardless of currency market convention)..

GoodTillCancel(1)- These trade until filled or cancelled.

GoodTillDate(6)- These trade until filled, cancelled or reach the specified ExpireTime.

Resting Orders that trade over multiple days will be restated at the end of the trading day via an ExecutionReport with ExecType=D and ExecRestatementReason=1.

Spot Orders that trade over multiple days will roll the value date forward at the end of every trading day to retain Spot settlement.

Forward Orders that trade over multiple days will progress in one of two ways:-

1. Orders placed with SettlDate=YYYYMMDD will retain the requested value date and continue to trade until the end of the last day where Spot settlement is possible.

2. Orders placed with SettlDate="Tenor" (eg. 1W) will roll the value date forward at the end of every trading day to retain the settlement relationship with the requested Tenor.

Active Resting Orders utilizing a Client Execution Strategy will be automatically cancelled on a Friday shortly before New York close at Commerzbank's discretion.

CFICode

The CFICode has been added to clarify the intent of the trade.

This field is mandatory for Best Price and Resting Orders.

Please note that the intention is to mandate this field in a future update to the Rules Of Engagement and clients are therefore advised to plan accordingly.

Code	Trading Intent	Status
RCSXXX	Spot	Supported
FFCPNO	Forward	Supported
FFCPNW	Swap	Supported
FFCNNO	Non-Deliverable Forward	Supported
FFCNNW	Non-Deliverable Swap	Reserved, Not Currently Supported

Forward Points

All forward points are provided in pips, not absolute values

Pre-Trade Allocations

Pre-Trade Allocations (PTA) are available for both the Order and Quote Sessions, via the NoAllocs repeating group in the New Order Single and Quote Request messages respectively.

For the Order Session, PTA are available for the Previously Quoted and Best Price order types only.

Clarification of rules for Pre-Trade Allocations

- Accounts on both legs of Swaps must be the same. For example, if Account1 and Account2 are specified on the near leg, they and only they must be specified on the far leg.

- TwoWay Request For Quote's require the sides of the allocations of both legs to be specified as if the leg is a Buy.

- NoAllocs should not be used with NoLegs. If NoLegs is used to specify a multileg request, (Leg)Alloc (1) field should be used on each Leg.

4 Support for MiFID II

The table below summarizes list of items to support MiFID II requirements.

Item	Tags	Description	Included in message
ISIN	SecurityID(48) SecurityIDSource (22) SecurityID2 (20061) LegSecurityID(602) LegSecurityIDSource(603)	12 alpha numeric value to uniquly identify instrument To be provided by MTF venue Note required for both legs of a swap.	QuoteRequest QuoteResponse NewOrderSingle NewOrderMultiLeg ExecutionReport
Venue MIC and type (MTF)	ExecutionVenue(20011) ExecutionVenueType(20012)	Venue Market Identificer Code (required for MTF venues) Venue Type of '3' for MTF	QuoteRequest QuoteResponse NewOrderSingle NewOrderMultiLeg ExecutionReport
Trading Venue Transaction Id	TradingVenueTransactionId (20060) TradingVenueTransactionId2 (20062) LegTradingVenueTransactionId(20058) AllocTradingVenueTransactionId(20059)	Alphanumerical code assigned by the trading venue	QuoteResponse NewOrderSingle NewOrderMultiLeg AllocationInstruction ExecutionReport
Post Trade Deferral	NoTrdRegPublications (2668)	Is trade executed under Post trade Deferral/ESCB Exemption	QuoteResponse NewOrderSingle NewOrderMultiLeg ExecutionReport
Execution Decision Maker within Firm	NoPartyIDs(453)	Algo Id or Person details as short code	Quote ExecutionReport
Investment Decision Maker within Firm	NoPartyIDs(453)	Person details as short code	Quote ExecutionReport
LastCapacity	LastCapacity(29)	Include with supported value for DEAL	ExecutionReport
TransactTime	TransactTime(60)	Support granularity to millisecond	All

5 FIX Message Definitions

TradingSessionStatusRequest (Message type g)

Name	Tag	Required	Description
TradSesReqID	335	Y	Unique identifier
TradingSessionID	336	Y	Set to today in the format 'YYYYMMDD' in UTC Timezone
SubscriptionsRequestType	263	Y	'0'=Snapshot

An example TradingSessionStatusRequest message:

```
8=FIX.4.4|9=82|35=g|49=FIXCLIENT|56=COBA|34=2|52=20131026-
19:20:35|335=AASDMJJ961|263=0|10=147
```

TradingSessionStatus (Message type h)

Name	Tag	Required	Description
TradSesReqID	335	Y	Original identifier supplied by client
TradingSessionID	336	Y	Set to today in the format 'YYYYMMDD' in UTC Timezone
TradSesStatus	340	Y	Supported values: '2'=Open, '3'=Closed, '6'=Request Rejected
TradSesStatusRejReason	567	N	Rejection code
Text	58	N	Description of rejection reason

An example TradingSessionStatus response:

```
8=FIX.4.4|9=95|35=h|49=COBA|56=FIXCLIENT|34=2|52=20131026-19:22:35|336=20131026|335=AASDM
JJ961|340=2|10=026
```

SecurityListRequest (Message type x)

Name	Tag	Required	Description
SecurityReqID	320	Y	Unique identifier
SecurityListRequestType	559	Y	'4'=All Securities
MaturityDate	541	N	Valid tenor. Default is all tenors

An example SecurityListRequest message:

```
8=FIX.4.4|9=80|35=x|49=FIXCLIENT|56=COBA|34=2|52=20131026-
18:52:32|320=AASD9E0100|559=4|10=219
```

SecurityList (Message type y)

Name		Tag	Required	Description
SecurityReqID		320	Y	Original identifier supplied by client
SecurityResponseID		322	Y	Unique identifier
SecurityRequestResult		560	Y	Supported values: ‘0’=Valid request, ‘1’=Invalid or unsupported request
Text		58	N	Description of rejection reason
NoRelatedSym (repeating group)		146	Y	Number of currency pairs returned
	Symbol	55	Y	Currency pair (CCY/CCY)
	MaturityDate	541	Y	Tenor

An example SecurityList message that response with a single currency pair (GBP/USD SP):

```
8=FIX.4.4|9=40759|35=y|49=COBA|56=FIXCLIENT|34=2|52=20131026-18:52:10|320=AASD9E0100|322=
1AAS05M4481|560=0|146=1|55=GBP/USD|1=SP|10=121
```

SecurityDefinitionRequest (Message type c)

Name	Tag	Required	Description
SecurityReqID	320	Y	Unique identifier
SecurityRequestType	321	Y	‘0’=Request security identity
Symbol	55	Y	Currency pair (CCY/CCY)
MaturityDate	541	N	Valid tenor. Default is ‘SP’

An example SecurityDefinitionRequest message for GBP/USD SP:

```
8=FIX.4.4|9=99|35=c|49=FIXCLIENT|56=COBA|34=4|52=20131026-
18:52:32|320=AASD9E0841|321=0|55=GBP/USD|541=SP|10=205
```

SecurityDefinition (Message type d)

Name	Tag	Required	Description
SecurityReqID	320	Y	Original identifier supplied by client
SecurityResponseID	322	Y	Unique identifier
SecurityResponseType	323	Y	Supported values: ‘1’=Accept security proposal,’5’=Reject security proposal
Symbol	55	Y	Currency pair (CCY/CCY)
MaturityDate	541	Y	Tenor
Text	58	N	Description of rejection reason
InstrumentPricePrecision	5514	N	Number of decimal prices that this instrument will be priced

An example SecurityDefinition message respond for GBP/USD SP:

```
8=FIX.4.4|9=122|35=d|49=COBA|56=FIXCLIENT|34=3|52=20131026-18:52:10|320=AASD9E0840|322=1A
AS05M4482|323=1|55=GBP/USD|541=SP|5514=5|10=139
```

MarketDataRequest (Message type V)

Name		Tag	Required	Description
MDReqID		262	Y	Unique identifier
SubscriptionRequestType		263	Y	Supported values: ‘1’=SnapshotUpdate, ‘2’=Unsubscribe
MarketDepth		264	N	‘0’=Full depth, >0 Limits the depth to the request levels. Support for values other than Full Depth are optional, clients should agree support during the on-boarding process.
MDUpdateType		265	Y	‘0’=Full
NoMDEntryType (repeating group)		267	Y	Number of MDEntryType requested
	MDEntryType	269	Y	Supported values: ‘0’=Bid, ‘1’=Offer
OrderQty		38	N	Liquidity size requested, or the near leg of a swap If more than 1 liquidity band is required use NoMDBandQty Default is full liquidity
OrderQty2		192	N	Liquidity size requested for far leg of a swap Default is even leg quantities
Currency		15	N	Deal currency. Default is base
NoRelatedSym		146	Y	Number of symbols requested

(repeating group)				Supported values: ‘1’=Spot and Forward ‘2’=Swap
	Symbol	55	Y	Currency pair (CCY/CCY)
	SettlDate	64	N	Value date, valid tenor or YYYYMMDD. Default is ‘SP’
NoMDBandQty (repeating group)		20002	N	Number of MDBandQty For swaps, only a single band can be requested. Support for non-Swap trades is optional, clients should agree support during the on-boarding process.
	MDBandQty	20003	N	Liquidity size
ExecutionVenue		20011	N	LEI, MIC or SEF
ExecutionVenueType		20012	N	Supported values: ‘1’=SEF ‘2’=Off Facility '3'= Multilateral Trading facility (MTF)
ReportingParty		20013	N	Reporting party for continuation data reporting
TradeRepository		20014	N	Trade repository where trade is sent
ClearingExemption		20015	N	‘Y’ or ‘N’
ClearingVenue		20016	N	LEI of clearing house
ClearingIndicator		20017	N	‘Y’ or ‘N’
CounterpartyLEI		20018	N	Counterparty LEI

An example MarketDataRequest message that subscribes to bids and offers for GBP/USD SP:

```
8=FIX.4.4|9=136|35=V|49=FIXCLIENT|56=COBA|34=2268|52=20131026-19:05:52|262=AASDJKG790|263
=1|265=0|264=0|146=1|55=GBP/USD|64=SP|267=2|269=0|269=1|10=247
```

An example MarketDataRequest message that subscribes to bids and offers for GBP/USD 1W:

```
8=FIX.4.4|9=133|35=V|49=FIXCLIENT|56=COBA|34=3|52=20131026-
19:24:35|262=AASDN23462|263=1|265=0|264=0|146=1|55=GBP/USD|64=1W|267=2|269=0|269=1|10=015
```

An example MarketDataRequest message that subscribes to bids and offers for GBP/USD 1W, with liquidity 5, 10, and 15 (million):-

```
8=FIX.4.4|9=133|35=V|49=FIXCLIENT|56=COBA|34=3|52=20131026-
19:24:35|262=AASDN23462|263=1|265=0|146=1|55=GBP/USD|64=1W|267=2|269=0|269=1|20002=3|2000
3=5000000|20003=10000000|20003=15000000|10=015
```

MarketDataRequestReject (Message type Y)

Name	Tag	Required	Description
MDReqID	262	Y	Original identifier supplied by client
MDReqRejReason	281	N	Reject reason code
Text	58	N	Description of rejection reason

An example MarketDataReject message response for a subscription to GBP/GBP SP:

```
8=FIX.4.4|9=104|35=Y|49=COBA|56=FIXCLIENT|34=2|52=20131026-
19:16:47|262=AASDLKN850|281=0|58=Unknown symbol/tenor|10=212
```

MarketDataSnapshotFullRefresh (Message type W)

Name		Tag	Required	Description
MDReqID		262	Y	Original identifier supplied by client
Symbol		55	Y	Currency pair (CCY/CCY)
SettlDate		64	N	Value date, valid tenor or YYYYMMDD.
SettlDate2		193	N	Value date of the far leg, valid tenor of YYYYMMDD
BidForwardPoints		189	N	Bid forward points
OfferForwardPoints		191	N	Offer forward points
BidForwardPoint2		642	N	Far leg bid forward points
OfferForwardPoints2		643	N	Far leg offer forward points
MidPx		631	N	Mid price
MidPx2		20001	N	Mid price of far leg
NoMDEntries (repeating group)		268	Y	Number of liquidity bands
	MDEntryType	269	Y	Supported values: '0'=Bid, '1'=Offer
	MDEntryPx	270	Y	Price
	Currency	15	Y	Currency
	MDEntrySize	271	Y	Size of this liquidity level
	MDEntryDate	272	Y	Value date, valid tenor or YYYYMMDD
	QuoteCondition	276	Y	Supported values: 'A'=Open (tradable), 'B'=Closed (indicative)
	QuoteEntryID	299	Y	Unique identifier

	SpotRate	5235	N	Spot rate
	MDEntryPx2	20005	N	Price for far leg of a swap
	MDEntrySize2	20006	N	Size of far leg of an uneven swap
MarketDataReferenceID		20007	N	Custom identifier field used by Commerzbank

An example MarketDataSnapshotFullRefresh message for GBP/USD SP that has 2 open liquidity levels for each side (bid and offer, including sizes):

```
8=FIX.4.4|9=389|35=W|49=COBA|56=FIXCLIENT|34=2268|52=20131026-19:05:31|262=AASDJKG790|55=
GBP/USD|64=SP|268=4|269=0|270=1.58285|15=GBP|271=6000000|272=20131028|276=A|299=105214.0.
B|269=0|270=1.58265|15=GBP|271=15000000.00|272=20131028|276=A|299=105214.1.B|269=1|270=1.
58315|15=GBP|271=6000000|272=20131028|276=A|299=105214.0.S|269=1|270=1.58335|15=GBP|271=1
5000000|272=20131028|276=A|299=105214.1.S|10=058
```

An example MarketDataSnapshotFullRefresh message for GBP/USD 1W that has 2 forward points for each side without sizes:

```
8=FIX.4.4|9=211|35=W|49=COBA|56=FIXCLIENT|34=4|52=20131026-19:24:12|262=AASDN23462|55=
GBP/USD|64=1W|268=2|269=0|270=-1.40|15=GBP|272=20131104|276=B|299=112207.0.B|269=1|270=-
0.20|15=GBP|272=20131104|276=B|299=112207.0.S|10=049
```

NewOrderSingle (Message type D)

Name	Tag	Required	Description
ClOrdID	11	Y	Unique identifier
Account	1	N	Account, value provided by Commerzbank, should not be supplied if using NoAllocs
OnBehalfOfCompID	115	N	Prime brokerage client identifier
SettlType	63	N	'0'=Regular
SettlDate	64	N	Value date, valid tenor or YYYYMMDD. Default is 'SP'
SettlDate2	193	N	Value date of far leg of a swap, valid tenor or YYYYMMDD
BidForwardPoints	189	N	Bid forward points. Required on non-Spot PreviouslyQuoted near leg sell.
OfferForwardPoints	191	N	Offer forward points. Required on non-Spot PreviouslyQuoted near leg buy
BidForwardPoints2	642	N	Far leg bid forward points. Required for a PreviouslyQuoted Swap buy
OfferForwardPoints2	643	N	Far leg offer forward points. Required for a PreviouslyQuoted Swap sell
SpotRate	5235	N	Spot rate. Required for PreviouslyQuoted Forwards and Swaps
Symbol	55	Y	Currency pair (CCY/CCY)
SecurityID	48	N	International Securities Identification Number 12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
SecurityIDSource	22	N	Supported values: 4 = ISIN
SecurityID2	20061	N	Swap far leg International Securities Identification Number 12 alpha numeric value to uniquely identify instrument.
Side	54	Y	Supported values: '1'=Buy, '2'=Sell. For a swap refers to the near leg
TransactTime	60	Y	Timestamp in UTC
OrderQty	38	Y	Size. For a swap refers to the near leg
OrderQty2	192	N	Size for far leg of a swap. Only required on uneven swaps
OrdType	40	Y	Supported values: '1'=Market, 'D'=PreviouslyQuoted, 'G'=ForexSwap, '2'=Limit, '3'=Stop
Currency	15	Y	Currency of OrderQty
Price	44	N	All in price. For a swap refers to the near leg.

			Required for OrdType = D, G, 2
Price2	640	N	All in price for far leg of the swap. Required for PreviouslyQuoted Swaps.
QuoteID	117	N	QuoteEntryID of price being used. Required for OrdType = D or G
MDReqID	262	N	Required for Best Price orders, OrdType = 1,2 and TimeInForce=4
TimeInForce	59	Y	Supported values: ‘0’=Day, ‘1’=Good Till Cancel, ‘3’=Immediate Or Cancel, ‘4’=Fill or kill,‘6’=Good Till Date
ClientSlippage	20022	N	Absolute slippage to the all in price that client is prepared to accept in preference to rejection.
MinQty	110	N	Minimum size of partial fills for Restring Orders, ie. OrdType 2, 3. If partial fills are not required/supported, set = OrdQty
StopPx	99	N	Stop Price required for OrdType=3
ExpireTime	126	N	Required for TimeInForce = 6
EffectiveTime	168	N	Time the details within the message should take effect. Prior to taking effect, OrdStatus=’9’ (Suspended)
FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD. Required for NDF trades.
FixingRef	20000	N	Fixing reference for an NDF, see NDF Fixing References
CFICode	461	N	Mandatory for Best Price and Resting Orders Optionally provided on Previously Quoted trades to clarify trade intention. Please note, it is intended to mandate this field in the future.
UTIPrefix	20008	N	Standard legal entity identifier (LEI) of UTI or USI generating party
UTI	20009	N	UTI or USI. For swap refers to near leg
UTI2	20010	N	UTI or USI for far leg of swap
ExecutionVenue	20011	N	LEI, MIC or SEF
ExecutionVenueType	20012	N	Supported values: ‘1’=SEF ‘2’=Off Facility '3'= Multilateral Trading facility (MTF)
ReportingParty	20013	N	Reporting party for continuation data reporting
TradeRepository	20014	N	Trade repository where trade is sent
ClearingExemption	20015	N	‘Y’ or ‘N’
ClearingVenue	20016	N	LEI of clearing house
ClearingIndicator	20017	N	‘Y’ or ‘N’
CounterpartyLEI	20018	N	Counterparty LEI
TradingVenueTransactionId	20060	N	Alphanumerical code assigned by the trading venue.

			Applicable where the order may only fill with a single ExecutionReport.
TradingVenueTransactionId2	20062	N	Alphanumerical code assigned by the trading venue for the far leg of a swap. Applicable where the order may only fill with a single ExecutionReport.
ExDestination	100	N	Defines the liquidity pool to utilise for Client Execution Strategies
OrderIsFirstActiveLoopOrder	20030	N	'Y' or 'N' Indicates if this order is the first active order in a Loop Order pair. One of the orders of a Loop pair must = 'Y'
NoClOrdLinkID (repeating group)	20026	N	Number of ClOrdLinkID. Used for Linked Orders to create OCO or If-Done relationships.
ClOrdLinkID	583	N	ClOrdID of the Resting Order to link to
ClOrdLinkType	20027	N	Supported values: '1'=If-Done Parent '2'=One Cancels Other '3'=Loop
TargetStrategy	847	N	The id of the desired execution strategy.
NoStrategyParameters	957	N	Number of repeating StrategyParameters
StrategyParameterName	958	N	The name of the strategy parameter.
StrategyParameterValue	960	N	The value of the named strategy parameter.
NoAllocs (repeating group)	78	N	Number of pre-trade allocations, required if Account is not used
AllocAccount	79	N	Account, value provided by Commerzbank
IndividualAllocID	467	N	Unique identifier for the allocation
AllocQty	80	N	Quantity of allocation
AllocQty2	6381	N	Quantity of allocation of far leg of a swap
AllocSide	6354	N	Side of the allocation. If not provided, the side will be assumed to be that of the request.
AllocUTI	20020	N	UTI or USI
AllocTradingVenueTransactionId	20059	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
NoTrdRegPublications	2668	N	
TrdRegPublicationType	2669	N	'2'=Exempted
TrdRegPublicationReason	2670	N	'12'= Exempted due to ESCB policy

An example PreviouslyQuoted NewOrderSingle message for buying 1M GBP/USD SP:

```
8=FIX.4.4|9=185|35=D|49=FIXCLIENT|56=COBA|34=3|52=20131028-08:24:47|1=CLIENTACC|11=AAU5P3
7750|63=0|64=SP|55=GBP/USD|54=1|60=20131028-08:24:47|38=1000000|15=GBP|59=4|40=D|44=1.578
58|117=696090.1.S|10=053
```

An example PreviouslyQuoted NewOrderSingle message for buying 2M EUR/USD 1W:

```
8=FIX.4.4|9=209|35=D|34=162|52=20150616-09:48:50.852|49=FIXCLIENT|56=COBA|
1=CLIENTACC|11=ID16094850852|15=EUR|38=2000000|40=D|44=1.359126|54=1|55=EUR/USD|
60=20150616-09:48:50|63=0|64=1W|117=0.1106.0.S|191=0.26|5235=1.3591|10=176
```

An example PreviouslyQuoted NewOrderSingle message for selling 2M EUR/USD 1W:

```
8=FIX.4.4|9=208|35=D|34=173|52=20150616-09:54:20.441|49=FIXCLIENT|56=COBA|
1=CLIENTACC|11=ID16095420441|15=EUR|38=2000000|40=D|44=1.359022|54=2|55=EUR/USD|
60=20150616-09:54:20|63=0|64=1W|117=0.1285.0.B|189=0.22|5235=1.359|10=088
```

An example Resting NewOrderSingle message for buying 200000 EUR/USD SP at 1.3 with GTD expiry:

```
8=FIX.4.4|9=170|35=D|34=6|52=20150616-10:28:32.971|49=FIXCLIENT|56=COBA|1=CLIENTACC|
11=ID16102832971|15=EUR|38=200000|40=2|44=1.3|54=1|55=EUR/USD|59=6|126=20150716-
22:00:00|461=RCSXXX|60=20150616-10:28:32|63=0|64=SP|10=037
```

An example PreviouslyQuoted NewOrderSingle message including UTI fields:

```
8=FIX.4.4|9=362|35=D|49=FIXCLIENT|56=COBA|52=20140116-16:09:47|34=24|1=CLIENTACC
|11=ID16160947490|63=0|64=SP|55=EUR/USD|54=1|60=20140116-16:09:47|38=1000|
15=EUR|59=4|40=D|44=1.3607|117=0.891.0.S|20008=1234567890|20009=***UTI***|20011=Execution
Venue|20012=ExecutionVenueType|20013=ReportingParty|20014=TradeRepository|20015=Y|20016=C
learingVenue|20017=Y|20018=CounterpartyLEI|10=136
```

An example Resting One-Cancels-Other linked order pair:

```
8=FIX.4.4|9=316|35=D|34=2534|52=20170105-
14:26:47.944|49=FIXCLIENT|56=COBA|1=CLIENTACC|11=76743059|15=EUR|38=9000|40=2|44=0.85205|
54=1|55=EUR/GBP|59=1|60=20170105-
14:26:47.943|63=0|64=SP|110=1000000|461=RCSXXX|20026=1|583=76743060|20027=2|10=220

8=FIX.4.4|9=316|35=D|34=2535|52=20170105-
14:26:47.944|49=FIXCLIENT|56=COBA|1=CLIENTACC|11=76743060|15=EUR|38=9000|40=3|54=1|55=EUR
/GBP|59=1|60=20170105-
14:26:47.944|63=0|64=SP|99=0.86053|110=1000000|461=RCSXXX|20026=1|583=76743059|20027=2|10
=235
```

An example Resting Limit order, with a following If-Done linked child order:

```
8=FIX.4.4|9=273|35=D|34=2553|52=20170105-
14:34:32.801|49=FIXCLIENT|56=COBA|1=CLIENTACC|11=76743063|15=EUR|38=9000|40=2|44=0.85155|
54=1|55=EUR/GBP|59=1|60=20170105-14:34:32.801|63=0|64=SP|110=1000000|461=RCSXXX|10=138

8=FIX.4.4|9=316|35=D|34=2554|52=20170105-
14:34:32.802|49=FIXCLIENT|56=COBA|1=CLIENTACC|11=76743064|15=EUR|38=9000|40=2|44=0.85581|
54=2|55=EUR/GBP|59=1|60=20170105-
14:34:32.801|63=0|64=SP|110=1000000|461=RCSXXX|20026=1|583=76743063|20027=1|10=200
```

An example Resting Loop order pair, where the second order is active first:

```
8=FIX.4.4|9=316|35=D|34=2564|52=20170105-
14:39:13.512|49=FIXCLIENT|56=COBA|1=CLIENTACC|11=76743066|15=EUR|38=9000|40=2|44=0.85117|
54=1|55=EUR/GBP|59=1|60=20170105-
14:39:13.512|63=0|64=SP|110=1000000|461=RCSXXX|20026=1|583=76743067|20027=3|10=208
```

```
8=FIX.4.4|9=324|35=D|34=2565|52=20170105-
14:39:13.512|49=FIXCLIENT|56=COBA|1=CLIENTACC|11=76743067|15=EUR|38=9000|40=2|44=0.85971|
54=2|55=EUR/GBP|59=1|60=20170105-
14:39:13.512|63=0|64=SP|110=1000000|461=RCSXXX|20030=Y|20026=1|583=76743066|20027=3|10=10
1
```

An example Previously Quoted order with Pre-Trade Allocations:

```
8=FIX.4.4|9=284|35=D|34=5|52=20170703-16:06:12.719|49=FIXCLIENT|56=COBA|
11=03160612719|15=EUR|38=1000000|40=D|44=1.1370|54=1|55=EUR/USD|60=20170703-
16:06:12|63=0|64=SP|117=0.211.0.S|461=RCSXXX|
78=2|
79=CLIENT_ACC1|467=A1|80=2000000|6354=1|
79=CLIENT_ACC2|467=A2|80=1000000|6354=2|
|10=113|
```

Table 1:- Summary of a Selection of Required and Optional Tags for New Order Singles

Trade Type	OrdType	Price	StopPx	TimeIn Force	ExpireTime	Effective Time	QuoteId	MDReqId	MinQty	Client Slippage	Supported Trade Type	NoAllocs
Previously Quoted, Fill Or Kill	D, G	Y		4			Y			O	S/F/Sw	O
Previously Quoted, Immediate Or Cancel	D	Y		3			Y			O	S	O
Best Price Market, Fill Or Kill	1			4				Y			S	O
Best Price Limit, Fill Or Kill	2	Y		4				Y	O		S	O
Resting, Limit Order	2	Y		0,1,6	Y (if 59=6)	O			O		S/F	
Resting, Stop Order	3		Y	0,1,6	Y (if 59=6)	O			O		S/F	

Key:-

Y	Mandatory, must be supplied.
O	Optional
[blank]	Not applicable. If supplied it will either be ignored or cause a rejection.

Supported Trade Type:-

S	Spot
F	Forward
Sw	Swap

OrderCancelRequest (Message type F)

The OrderCancelRequest message may be used to request cancellation of Resting Orders, ie. Orders where TimeInForce is Day, Good Till Cancel or Good Till Date.

Name	Tag	Required	Description
OrigClOrdID	41	Y	Identifier of order to be cancelled
OrderID	37	N	Identifier of order to be cancelled
ClOrdID	11	Y	Unique identifier of cancel request
Symbol	55	Y	Currency pair (CCY/CCY)
Side	54	Y	Supported values: ‘1’=Buy, ‘2’=Sell
TransactTime	60	Y	Timestamp in UTC
TargetStrategy	847	N	The id of the desired execution strategy. Must be provided if it was on the original NewOrderSingle

OrderCancelReject (Message type 9)

Issued in response to an OrderCancelRequest or OrderCancelReplaceRequest.

Name	Tag	Required	Description
OrderID	37	Y	If CxlRejReason=’Unknown order’ then ‘NONE’
ClOrdID	11	Y	Identifier of order that the cancel request was rejected for
OrigClOrdID	41	N	Identifier of new order that the cancel request was rejected for
OrdStatus	39	Y	OrdStatus value after this cancel reject
CxlRejResponseTo	434	Y	Supported values: ‘1’=Order Cancel Request (F) ‚2‘=Order Cancel/Replace Request (G)
CxlRejReason	102	N	Description of rejection reason
TransactTime	60	Y	Timestamp in UTC
TargetStrategy	847	N	The id of the execution strategy

OrderCancelReplaceRequest (Message type G)

The OrderCancelReplaceRequest message should be used to request a change to a Resting Order.

The following tags may be altered from the original NewOrderSingle:-

- OrderQty
- Price or StopPx
- TimeInForce and ExpireTime if GTD
- EffectiveTime

Name	Tag	Required	Description
ClOrdID	11	Y	Unique identifier
OrigClOrdID	41	Y	The ClOrdID of the previous non rejected Resting Order
Account	1	Y	Account, value provided by Commerzbank
OnBehalfOfCompID	115	N	Prime brokerage client identifier
SettlType	63	N	‘0’=Regular
SettlDate	64	N	Value date, valid tenor or YYYYMMDD. Default is ‘SP’
Symbol	55	Y	Currency pair (CCY/CCY)
Side	54	Y	Supported values: ‘1’=Buy, ‘2’=Sell.
TransactTime	60	Y	Timestamp in UTC
OrderQty	38	Y	Size.
OrdType	40	Y	Supported values ‘2’=Limit, ‘3’=Stop
Currency	15	Y	Currency of OrderQty
Price	44	N	All in price. For a swap refers to the near leg. Required for OrdType = 2
TimeInForce	59	Y	Supported values: ‘0’=Day, ‘1’=Good Till Cancel, ‘6’=Good Till Date
ExDestination	100	N	Defines the liquidity pool to utilise for Client Execution Strategies
MinQty	110	N	Minimum size of partial fills for Restring Orders, ie. OrdType 2, 3
StopPx	99	N	Stop Price required for OrdType=3
ExpireTime	126	N	Required for TimeInForce = 6
EffectiveTime	168	N	Time the details within the message should take effect. Prior to taking effect, OrdStatus=’9’ (Suspended)
CFICode	461	Y	

UTIPrefix	20008	N	Standard legal entity identifier (LEI) of UTI or USI generating party
UTI	20009	N	UTI or USI. For swap refers to near leg
UTI2	20010	N	UTI or USI for far leg of swap
ExecutionVenue	20011	N	LEI, MIC
ExecutionVenueType	20012	N	Supported values: '1'=SEF '2'=Off Facility '3'= Multilateral Trading facility (MTF)
ReportingParty	20013	N	Reporting party for continuation data reporting
TradeRepository	20014	N	Trade repository where trade is sent
ClearingExemption	20015	N	'Y' or 'N'
ClearingVenue	20016	N	LEI of clearing house
ClearingIndicator	20017	N	'Y' or 'N'
CounterpartyLEI	20018	N	Counterparty LEI
OrderIsFirstActiveLoopOrder	20030	N	Indicates if this order is the first active order in a Loop Order pair. One of the orders of a Loop pair must = 'Y'
NoClOrdLinkID (repeating group)	20026	N	Number of ClOrdLinkID Used for Linked Orders to create OCO or If-Done relationships.
ClOrdLinkID	583	N	ClOrdID of the Resting Order to link to
ClOrdLinkType	20027	N	Supported values: '1'=If-Done Parent '2'=One Cancels Other '3'=Loop
TargetStrategy	847	N	The id of the desired execution strategy. Must be provided if it was on the original NewOrderSingle
NoStrategyParameters	957	N	Number of repeating StrategyParameters
StrategyParameterName	958	N	The name of the strategy parameter.
StrategyParameterValue	960	N	The value of the named strategy parameter.

NewOrderMultiLeg (Message type AB)

Name	Tag	Required	Description
ClOrdID	11	Y	Unique identifier
OnBehalfOfCompID	115	N	Prime brokerage client identifier
SettlType	63	N	'0'=Regular
SpotRate	5235	Y	Spot rate

Symbol	55	Y	Currency pair (CCY/CCY)
Side	54	Y	Supported values: ‘1’=Buy, ‘2’=Sell. Only required for two way
TransactTime	60	Y	Timestamp in UTC
OrdType	40	Y	‘D’=PreviouslyQuoted
Currency	15	Y	Currency of LegQty
QuoteID	117	N	QuoteEntryID of price being used
TimeInForce	59	Y	‘4’=Fill or kill
UTIPrefix	20008	N	Standard legal entity identifier (LEI) of UTI or USI generating party
ExecutionVenue	20011	N	LEI, MIC or SEF
ExecutionVenueType	20012	N	Supported values: ‘1’=SEF ‘2’=Off Facility '3'= Multilateral Trading facility (MTF)
NoLegs (repeating group)	555	Y	Number of Legs
LegSymbol	600	Y	Currency pair (CCY/CCY)
LegSecurityID	602	N	International Securities Identification Number 12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
LegSecurityIDSource	603	N	Supported values: 4 = ISIN
LegCFICode	608	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
LegSide	624	Y	Supported values: ‘1’=Buy, ‘2’=Sell
LegCurrency	556	Y	Currency of LegQty
LegQty	687	Y	Size
LegRefID	654	Y	Unique identifier of Leg
LegPrice	566	Y	All in price
LegSettleDate	588	Y	Value date, YYYYMMDD
(Leg)Account	1	Y	Account
(Leg)BidForwardPoints	189	N	Bid forward points. Required if on Quote
(Leg)OfferForwardPoints	191	N	Offer forward points. Required if on Quote
(Leg)FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD. Required for NDF trades.

	(Leg)FixingRef	2000	N	Fixing reference for an NDF, see NDF Fixing References. Required if on Quote
	(Leg)UTI	20009	N	UTI or USI
	LegTradingVenueTransactionId	20058	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
NoTrdRegPublications		2668	N	
	TrdRegPublicationType	2669	N	‘2’=Exempted
	TrdRegPublicationReason	2670	N	‘12’= Exempted due to ESCB policy

ExecutionReport (Message type 8)

Name	Tag	Required	Description
OrderID	37	Y	Unique identifier for order
ClOrdID	11	Y	Identifier supplied by client
OrigClOrdID	41	N	Original identifier supplied by client. Unsolicited cancel, OrdStatus=4 & OrigClOrdID absent
ExecID	17	Y	Unique identifier for this execution
ExecType	150	Y	Supported values: ‘0’=New, ‘4’=Cancelled, ‘6’=Pending Cancel, ‘8’=Rejected, ‘9’=Suspended ‘A’=Pending New, ‘D’=Restated, ‘E’=Pending Replace, ‘F’=Trade (fill), ‘I’=Order Status
OrdStatus	39	Y	Supported values: ‘0’=New,’1’=Partially Filled, ‘2’=Filled, ‘4’=Cancelled, ‘6’=Pending Cancel, ‘8’=Rejected, ‘9’=Suspended, ‘A’=Pending New, ‘C’=Expired, ‘E’=Pending Replace
Account	1	N	Account
DeliverToCompID	128	N	Prime brokerage client identifier
SettlType	63	N	‘0’=Regular
SettlDate	64	N	Value date, YYYYMMDD. For a swap refers to the near leg For ExecType = D will contain the new Value date.
SettlDate2	193	N	Value date for far leg of the swap, YYYYMMDD
Symbol	55	Y	Currency pair (CCY/CCY)
SecurityID	48	N	International Securities Identification Number

			12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
SecurityIDSource	22	N	Supported values: 4 = ISIN
SecurityID2	20061	N	Swap far leg International Securities Identification Number 12 alpha numeric value to uniquely identify instrument.
Side	54	N	Supported values: '1'=Buy, '2'=Sell. Not provided on one-way multi-leg
OrderQty	38	Y	Size
OrderQty2	192	N	Size for far leg of a swap
OrdType	40	Y	Supported values: '1'=Market, 'D'=PreviouslyQuoted, 'G'=ForexSwap '2'=Limit, '3'=Stop
StopPx	99	N	Stop price for OrdType 3
Price	44	N	Requested price for OrdType, D, G, 2
Price2	640	N	Requested price of the far leg of a swap
Currency	15	Y	Currency of OrderQty
TimeInForce	59	Y	Supported values: '0'=Day, '1'=Good Till Cancel, '3'=Immediate Or Cancel, '4'=Fill or kill,'6'=Good Till Date
ClientSlippage	20022	N	Absolute slippage to the all in price that client is prepared to accept in preference to rejection.
ExDestination	100	N	Defines the liquidity pool to utilise for Client Execution Strategies
MinQty	110	N	Minimum size of partial fills for Restring Orders, ie. OrdType 2, 3
ExpireTime	126	N	Required for TimeInForce = 6
EffectiveTime	168	N	Time the details within the message should take effect. Prior to taking effect, OrdStatus='9' (Suspended)
LastQty	32	Y	Quantity of this fill
LastQty2	6808	N	Quantity of this fill for the far leg of a swap
LastPx	31	Y	All in price of this fill
LastPx2	6160	N	All in price of this fill for the far leg of a swap
LastSpotRate	194	N	Spot rate of this fill
LastFwdPoints	195	N	Forward points for a forward or swap with a

				forward near leg
LastFwdPoints2		641	N	Forward points for far leg of a swap
LeavesQty		151	Y	The open quantity for further execution.
CumQty		14	Y	The total quantity filled for this order.
AvgPx		6	Y	Average price of fills.
AvgPx2		6159	N	Average price of fills for the far leg of a swap
TransactTime		60	Y	Timestamp in UTC This will be to milli-second accuracy.
CFICode		461	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
FixingDate		6203	N	Fixing date for an NDF, YYYYMMDD
FixingRef		20000	N	Fixing reference for an NDF, see NDF Fixing References
OrdStatusSuspendedReason		20028	N	Provided where OrdStatus='9' (Suspended) to clarify the reason for suspension. Supported values: 1='Pre Activation' for EffectiveTime (168) 2=''Awaiting trigger from Linked Order'
OrdStatusActivationReason		20029	N	When the OrderStatus=0 (New), this indicates the reason for the activation if it was previously Suspended. Provided for Linked Resting Orders. Supported values: 1='Suspended due to EffectiveTime' 2='Suspended due to associated Linked order'
Text		58	N	Description of execution or rejection reason
NoLegs (repeating group)		555	N	Number of Legs
	LegSymbol	600	N	Currency pair (CCY/CCY)
	LegSecurityID	602	N	International Securities Identification Number 12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
	LegSecurityIDSource	603	N	Supported values: 4 = ISIN
	LegCFICode	608	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
	LegSide	624	N	Supported values: '1'=Buy, '2'=Sell
	LegCurrency	556	N	Currency of LegQty

	LegQty	687	N	Size
	LegRefID	654	N	Unique identifier of Leg
	LegPrice	566	N	All in price
	LegSettleDate	588	N	Value date, YYYYMMDD
	LegLastPx	637	N	Price of this fill
	(Leg)Account	1	N	Account
	(Leg)BidForwardPoints	189	N	Bid forward points. Required if on Quote
	(Leg)OfferForwardPoints	191	N	Offer forward points. Required if on Quote
	(Leg)FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD. Required if on Quote
	(Leg)FixingRef	2000	N	Fixing reference for an NDF, see NDF Fixing References. Required if on Quote
	(Leg)UTI	20009	N	Unique trade identifier (UTI) or Unique Swap Identifier (USI) for Leg
	LegTradingVenueTransactionId	20058	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
NoAllocs (repeating group)		78	N	Number of pre-trade allocations, present if using NoAllocs on QuoteRequest
	AllocAccount	79	N	Account
	IndividualAllocID	467	N	Unique identifier for the allocation
	AllocQty	80	N	Quantity of allocation
	AllocQty2	6381	N	Quantity of allocation of far leg of a swap
	AllocSide	6354	N	Side of the allocation. If not present, the side will be assumed to be that of the request.
	AllocUTI	20020	N	UTI or USI
	AllocTradingVenueTransactionId	20059	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
ExecRestatementReason		378	N	‘1’=GT renewal. Required on ExecType = D
LegalEntityIdentifier		20008	N	Standard legal entity identifier (LEI) of UTI or USI generating party
UTI		20009	N	UTI or USI. For swap refers to near leg
UTI2		20010	N	UTI or USI for far leg of swap
ExecutionVenue		20011	N	LEI, MIC or SEF
ExecutionVenueType		20012	N	Supported values: ‘1’=SEF ‘2’=Off Facility

			'3'= Multilateral Trading facility (MTF)
ReportingParty	20013	N	Reporting party for continuation data reporting
TradeRepository	20014	N	Trade repository where trade is sent
ClearingExemption	20015	N	'Y' or 'N'
ClearingVenue	20016	N	LEI of clearing house
ClearingIndicator	20017	N	'Y' or 'N'
CounterpartyLEI	20018	N	Counterparty LEI
OrdStatusReqID	790	N	Required if responding to and if provided on the Order Status Request (H) message. Echo back the value provided by the requester.
TradingVenueTransactionId	20060	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
TradingVenueTransactionId2	20062	N	Alphanumerical code assigned by the trading venue for the far leg of a swap. Applicable where the order may only fill with a single ExecutionReport.
OrdRejReason	103	N	Code to identify reason for order rejection.
AggressorIndicator	1057	N	Used to identify whether the order initiator is an aggressor or not in the trade
LastCapacity	29	N	Supported values: '4'=Principal, DEAL
NoClOrdLinkID (repeating group)	20026	N	Number of ClOrdLinkID Only present on the child Order.
ClOrdLinkID	583	N	ClOrdID of the Resting Order to link to
ClOrdLinkType	20027	N	Supported values: '1'=If-Done Parent '2'=One Cancels Other
TargetStrategy	847	N	The id of the desired execution strategy.
LastMkt	30	N	Execution venue for last fill. Provided for an execution of a client strategy.
NoStrategyParameters	957	N	Number of repeating StrategyParameters
StrategyParameterName	958	N	The name of the strategy parameter.
StrategyParameterValue	960	N	The value of the named strategy parameter.
NoPartIDs	453	N	Always 2 where present
PartyID	448	N	Shor code for Execution Decision maker within Firm. Algo Id or Person
PartyIDSource	447	N	'P' = Short code identifier

	PartyRole	452	N	'12' = Executing Trader (default)
	PartyRoleQualifier	2376	N	'22' = Algorithm '24' = Natural Person
	PartyID	448	N	Shor code for Investment Decision maker within Firm.
	PartyIDSource	447	N	'P' = Short code identifier
	PartyRole	452	N	'122' = Investment decision maker
	PartyRoleQualifier	2376	N	'24' = Natural Person
NoTrdRegPublications		2668	N	
	TrdRegPublicationType	2669	N	2'=Exempted
	TrdRegPublicationReason	2670	N	'12'= Exempted due to ESCB policy

Example ExecutionReport messages for a successful trade fill for buying 1M GBP/USD SP (ExecType=New followed by ExecType=Trade):

```
8=FIX.4.4|9=267|35=8|49=COBA|56=FIXLCLIENT|34=3|52=20131028-08:24:18|37=28336228|11=AAU5P37750|17=28336228.N|150=0|39=0|55=GBP/USD|54=1|151=1000000|14=0|32=0|6=0|31=0|194=0|40=D|38=1000000|44=1.57858|15=GBP|64=20131101|60=20131028-08:24:18|63=0|58=|1=CLIENTACC|59=4|10=006
```

```
8=FIX.4.4|9=289|35=8|49=COBA|56=FIXCLIENT|34=4|52=20131028-08:24:18|37=28336228|11=AAU5P37750|17=28336228|150=F|39=2|55=GBP/USD|54=1|151=0|14=1000000|32=1000000|6=1.57858|31=1.57858|194=1.57858|40=D|38=1000000|44=1.57858|15=GBP|64=20131101|60=20131028-08:24:18|63=0|58=deal executed|1=CLIENTACC|59=4|10=136
```

Example ExecutionReport message including UTI fields:

```
8=FIX.4.4|9=414|35=8|34=16|49=COBAFXRFQ|52=20140116-16:03:36.909|56=FIXLDN1RFQ|1=FIXLDN|6=1.3607|11=ID16160336781|14=2000|15=EUR|17=13689^A31=1.3607|32=2000|37=13689|38=2000|39=2|40=D|44=1.3607|54=1|55=EUR/USD|59=4|60=20140116-16:03:36|63=0|64=20140120|150=F|151=0|194=1.3607|20008=1234567890|20009=***UTI***|20011=ExecutionVenue|20013=ReportingParty|20014=TransactionRepo|20015=Y|20016=ClearingVenue|20017=Y|20018=CounterpartyLEI|10=120
```

OrderStatusRequest (Message type H)

The OrderStatusRequest message should be used to determine the status of any outstanding Resting Orders.

Statuses will be available for all completed Orders until the end of the trading day in which they completed.

Clients should use to determine the status of Resting Orders following a FIX session disconnect.

Requests against an unknown order will result in an ExecutionReport with OrdStatus=8 (Rejected) and OrdRejReason=5 (Unknown Order)

Name	Tag	Required	Description
ClOrdID	11	Y	Identifier of order the request is for
OrdStatusReqID	790	Y	Used to uniquely identify a specific Order Status Request (H) message. Echoed back on Execution Report (8).

Symbol	55	Y	Currency pair (CCY/CCY)
TargetStrategy	847	N	The id of the desired execution strategy. Must be provided if it was on the original NewOrderSingle
Side	54	Y	Supported values: ‘1’=Buy, ‘2’=Sell.

QuoteRequest (Message type R)

Name	Tag	Required	Description
QuoteReqID	131	Y	Unique identifier
Account	1	N	Account, value provided by Commerzbank, should not be supplied if using NoAllocs
OnBehalfOfCompID	115	N	Identifier of the user trading
NumOfCompetitors	1913	N	The number of dealers receiving the quote request
NoRelatedSym (repeating group)	146	Y	‘1’
Symbol	55	Y	Currency pair (CCY/CCY)
SecurityID	48	N	International Securities Identification Number 12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
SecurityIDSource	22	N	Supported values: 4 = ISIN
SecurityID2	20061	N	Swap far leg International Securities Identification Number 12 alpha numeric value to uniquely identify instrument.
Side	54	N	Supported values: ‘1’=Buy, ‘2’=Sell. For a swap refers to the near leg. If omitted then two-way. For MultiLeg use LegSide
OrderQty	38	Y	Size
SettlDate	64	N	Value date, valid tenor or YYYYMMDD. Default is ‘SP’
OrdType	40	Y	Supported values: ‘D’=PreviouslyQuoted, ‘G’=PreviouslyQuoted Swap
SettlDate2	193	N	Value date of far leg of a swap, valid tenor or YYYYMMDD
OrderQty2	192	N	Size of the far leg of an uneven swap. If absent, an even swap is assumed.
Currency	15	Y	Currency of the OrderQty
NoLegs (repeating group)	555	N	Number of Legs
LegSymbol	600	N	Currency pair (CCY/CCY)

		LegSecurityID	602	N	International Securities Identification Number 12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
		LegSecurityIDSource	603	N	Supported values: 4 = ISIN
		LegCFICode	608	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
		LegSide	624	N	Supported values: ‘1’=Buy, ‘2’=Sell. If omitted then two-way, note if any are two-way then all must be two-way.
		LegCurrency	556	N	Currency of the LegQty. Must be the same for all legs
		LegQty	687	N	Size
		LegRefID	654	N	Unique identifier of Leg
		LegSettleDate	588	N	Value date, YYYYMMDD. Default is ‘SP’
		(Leg)Account	1	N	Account
		(Leg)FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD. Required for NDF trades.
		(Leg)FixingRef	20000	N	Fixing reference for an NDF, see NDF Fixing References
FixingDate			6203	N	Fixing date for an NDF, YYYYMMDD. Required for NDF trades.
FixingRef			20000	N	Fixing reference for an NDF, see NDF Fixing References
ExecutionVenue			20011	N	LEI, MIC or SEF
ExecutionVenueType			20012	N	Supported values: ‘1’=SEF ‘2’=Off Facility '3'= Multilateral Trading facility (MTF)
ReportingParty			20013	N	Reporting party for continuation data reporting
TradeRepository			20014	N	Trade repository where trade is sent
ClearingExemption			20015	N	‘Y’ or ‘N’
ClearingVenue			20016	N	LEI of clearing house
ClearingIndicator			20017	N	‘Y’ or ‘N’
CounterpartyLEI			20018	N	Counterparty LEI
CFICode			461	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
NoAllocs (repeating group)			78	N	Number of pre-trade allocations, required if Account is not used
	AllocAccount		79	N	Account, value provided by Commerzbank

	IndividualAllocID	467	N	Unique identifier for the allocation
	AllocQty	80	N	Quantity of allocation
	AllocQty2	6381	N	Quantity of allocation of far leg of a swap
	AllocSide	6354	N	Side of the allocation. If not provided, the side will be assumed to be that of the request.

An example of a QuoteRequest message that uses an incorrect syntax for the currency pair:

```
8=FIX.4.4|9=137|35=R|49=FIXLDNMD1|56=COBAFXMD|34=2269|52=20110822-
07:01:10|1=FIXUK|131=ID1313996470281|40=D|64=SP|146=1|55=EURUSD|54=1|38=2000000|15=EUR|10
=219
```

A correctly formatted QuoteRequest SPOT message to Buy 2.5m EUR:

```
8=FIX.4.4|9=138|35=R|49=FIXLDNMD1|56=COBAFXMD|34=2270|52=20110822-
07:01:27|1=FIXUK|131=ID1313996487984|40=D|64=SP|146=1|55=EUR/USD|54=1|38=2500000|15=EUR|1
0=034
```

A correctly formatted QuoteRequest SPOT message to Buy 2.5m USD of EUR:

```
8=FIX.4.4|9=138|35=R|49=FIXLDNMD1|56=COBAFXMD|34=2270|52=20110822-
07:01:27|1=FIXUK|131=ID1313996487984|40=D|64=SP|146=1|55=EUR/USD|54=2|38=2500000|15=USD|1
0=034
```

A correctly formatted two-way QuoteRequest FORWARD message:

```
8=FIX.4.4|9=126|35=R|34=18|56=COBAFX|49=FIXLDN1Q|52=20120307-
09:26:56|1=FIXUK|131=ID07092656686|40=D|64=1W|146=1|55=EUR/USD|38=1000000|15=EUR|10=140|
```

A correctly formatted two-way QuoteRequest SWAP message:

```
8=FIX.4.4|9=133|35=R|34=85|56=COBAFX|49=FIXLDN1Q|52=20120307-
09:59:56|1=FIXUK|131=ID07095956323|40=G|64=1W|193=1M|146=1|55=EUR/USD|38=1000000|15=EUR|1
0=234|
```

A correctly formatted QuoteRequest message with UTI fields:

```
8=FIX.4.4|9=264|35=R|56=COBAFXRFQ|49=FIXLDN1RFQ|52=20140116-
16:03:32|34=13|1=FIXLDN|131=ID16160332281|146=1|55=EUR/USD|40=D|64=SP|54=1|38=2000|15=EUR
|20011=ExecutionVenue|20012=1|20013=ReportingParty|20014=TransactionRepo|20015=Y|20016=Cl
earingVenue|20017=Y|20018=CounterpartyLEI|10=200
```

A correctly formatted QuoteRequest message with Pre-trade Allocations:

```
8=FIX.4.4|9=138|35=R|49=FIXLDNMD1|56=COBAFXMD|34=2270|52=20110822-07:01:27|
78=2|
79=FIXUK|467=alloc.1|80=500000|
79=FIXJP|467=alloc.2|80=2000000|
131=ID1313996487984|40=D|64=SP|146=1|55=EUR/USD|54=1|38=2500000|15=EUR|10=034
```

A correctly formatted QuoteRequest message with Pre-trade Allocations, 1 buy, one sell netting to the total OrderQty

```
8=FIX.4.4|9=138|35=R|49=FIXLDNMD1|56=COBAFXMD|34=2270|52=20110822-07:01:27|
78=2|
79=FIXUK|467=alloc.1|80=500000|6354=2
79=FIXJP|467=alloc.2|80=2000000|6354=1
131=ID1313996487984|40=D|64=SP|146=1|55=EUR/USD|54=1|38=1500000|15=EUR|10=034
```

A correctly formatted QuoteRequest even SWAP message with Pre-trade Allocations of differing quantities for each leg:

```
8=FIX.4.4|9=133|35=R|34=85|56=COBAFX|49=FIXLDN1Q|52=20120307-09:59:56|
78=4|
79=FIXUK|467=alloc.1|80=200000|
79=FIXJP|467=alloc.2|80=800000|
79=FIXUK|467=alloc.3|6381=990000|
79=FIXJP|467=alloc.4|6381=10000|
131=ID07095956323|54=1|40=G|64=1W|193=1M|146=1|55=EUR/USD|38=1000000|15=EUR|10=234|
```

A correctly formatted QuoteRequest uneven SWAP message with Pre-trade Allocations of differing quantities and side for each leg. In this Buy/Sell Swap example, the sides of the Allocations netts to be that of their corresponding leg:-

Near Leg:- -200000 + 1200000 = 1000000

Far Leg:- -100000 + 50000 = -50000

```
8=FIX.4.4|9=133|35=R|34=85|56=COBAFX|49=FIXLDN1Q|52=20120307-09:59:56|
78=4|
79=FIXUK|467=alloc.1|80=200000|6354=2
79=FIXJP|467=alloc.2|80=1200000|6354=1
79=FIXUK|467=alloc.3|6381=100000|6354=2
79=FIXJP|467=alloc.4|6381=50000|6354=1
131=ID07095956323|54=1|40=G|64=1W|193=1M|146=1|55=EUR/USD|38=1000000|192=50000|15=EUR|10=
234|
```

A correctly formatted TwoWay QuoteRequest uneven SWAP message with Pre-trade Allocations of differing quantities and side for each leg. In this TwoWay example, the sides of the Allocations netts to Buy for both legs.

Near Leg:- -200000 + 1200000 = 1000000

Far Leg:- 100000 + -50000 = 50000

```
8=FIX.4.4|9=133|35=R|34=85|56=COBAFX|49=FIXLDN1Q|52=20120307-09:59:56|
78=4|
79=FIXUK|467=alloc.1|80=200000|6354=2
79=FIXJP|467=alloc.2|80=1200000|6354=1
79=FIXUK|467=alloc.3|6381=100000|6354=1
79=FIXJP|467=alloc.4|6381=50000|6354=2
131=ID07095956323|40=G|64=1W|193=1M|146=1|55=EUR/USD|38=1000000|192=50000|15=EUR|10=234|
```

Quote (Message type S)

Name	Tag	Required	Description
QuoteReqID	131	Y	Original identifier supplied by client
QuoteID	117	Y	Unique identifier
Symbol	55	Y	Currency pair (CCY/CCY)
SettlDate	64	Y	Value date, YYYYMMDD
SettlDate2	193	N	Value date for far leg of the swap, YYYYMMDD
OrdType	40	Y	Supported values: 'D'=PreviouslyQuoted, 'G'=PreviouslyQuoted Swap
Side	54	N	Supported values: '1'=Buy, '2'=Sell, Default is two-way. For a swap refers to the near leg
Currency	15	Y	Currency of the BidSize or OfferSize
Account	1	N	Account, value provided by Commerzbank, not required if using NoAllocs
ExposureDuration	1629	N	The number of ms after quote timestamp when the platform should expire quote on our behalf
BidPx	132	N	All in bid price. Provided on sell or two-way quotes
OfferPx	133	N	All in offer price. Provided on buy or two-way quotes
MidPx	631	N	All in mid price (only on forwards)
BidSize	134	N	Bid size of the near leg quote. Provided on sell or two-way quotes
OfferSize	135	N	Offer size of the near leg quote. Provided on buy or two-way quotes
ValidUntilTime	62	Y	Quote expiry time in UTC
BidSpotRate	188	N	Bid spot rate. Provided on sell or two-way quotes
OfferSpotRate	190	N	Offer spot rate. Provided on buy or two-way quotes
BidForwardPoints	189	N	Bid forward points. Provided on sell or two-way quotes
OfferForwardPoints	191	N	Offer forward points. Provided on buy or two-way quotes
BidPx2	6050	N	All in bid price for the far leg of a swap
OfferPx2	6051	N	All in offer price for the far leg of a swap
BidSize2	6052	N	Bid size for the far leg of a swap
OfferSize2	6053	N	Offer size for the far leg of a swap
BidForwardPoints2	642	N	Bid forward points for the far leg of a swap. Provided on sell or two-way quotes

OfferForwardPoints2	643	N	Offer forward points for the far leg of a swap. Provided on buy or two-way quotes
FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD
FixingRef	20000	N	Fixing reference for an NDF, see NDF Fixing References
MidPx2	20001	N	For swaps only, the all in mid price for the far leg
TransactTime	60	Y	Timestamp in UTC
CFICode	461	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
NoLegs (repeating group)	555	N	Number of Legs
LegSymbol	600	N	Currency pair (CCY/CCY)
LegCFICode	608	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
LegSide	624	N	Supported values: ‘1’=Buy, ‘2’=Sell. If omitted then two-way, note if any are two-way then all must be two-way.
LegCurrency	556	N	Currency of the LegQty. Must be the same for all legs
LegQty	687	N	Size
LegRefID	654	N	Unique identifier of Leg
LegSettleDate	588	N	Value date, YYYYMMDD
LegBidPx	681	N	Leg all in bid price
LegOfferPx	684	N	Leg all in offer price
(Leg)MidPx	631	N	All in mid price (only on forwards)
(Leg)Account	1	N	Account
(Leg)BidForwardPoints	189	N	Leg bid forward points
(Leg)OfferForwardPoints	191	N	Leg offer forward points
(Leg)FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD
(Leg)FixingRef	20000	N	Fixing reference for an NDF, see NDF Fixing References
NoPartIDs	453	N	Always 2 where present
PartyID	448	N	Short code for Execution Decision maker within Firm. Algo Id or Person
PartyIDSource	447	N	‘P’ = Short code identifier
PartyRole	452	N	'12' = Executing Trader (default)
PartyRoleQualifier	2376	N	‘22’ = Algorithm ‘24’ = Natural Person
PartyID	448	N	Short code for Investment Decision maker within Firm.
PartyIDSource	447	N	‘P’ = Short code identifier

	PartyRole	452	N	‘122’ = Investment decision maker
	PartyRoleQualifier	2376	N	‘24’ = Natural Person

A tradable Quote message:

```
8=FIX.4.4|9=210|35=S|49=COBAFXMD|56=FIXLDNMD1|34=2270|52=20110822-
07:01:30.141|1=FIXUK|131=ID1313996487984|15=EUR|54=1|55=EUR/USD|60=20110822-
07:01:30|62=00:03:17|64=20110824|117=38362967.Q|133=1.43561|190=1.43561|135=2500000|10=18
9
```

Quote Request Reject (Message type AG)

A Quote Request Reject will be sent in response to a Quote Request.

Name		Tag	Required	Description
QuoteReqID		131	Y	Original identifier supplied by client
QuoteRequestRejectReason		658	Y	Supported values: ‘0’=Unknown symbol, ‘99’=Other
Text		58	N	Description of rejection reason
NoRelatedSym (repeating group)		146	Y	‘1’
	Symbol	55	Y	Currency pair (CCY/CCY)

A QuoteRequestReject message indicating an invalid quote request:

```
8=FIX.4.4|9=145|35=AG|49=COBAFX|56=FIXLDN1Q|34=77|52=20111005-
15:16:45.190|131=ID05151645190|658=99|146=1|55=EUR/USD|58=Invalid value in tag 64
(SettlDate) [XX]|10=063
```

Quote Response (Message type AJ)

A message sent by the client in response to a previously requested quote stating that:

- The client does not wish to trade on the received quote (Pass).
- The client wishes to deal on a specific quote (Hit/Lift)

Quote Response (Pass)

Name	Tag	Required	Description
QuoteRespID	693	Y	Unique identifier
QuoteID	117	N	QuoteID if received a quote, else not required
QuoteResponseType	694	Y	Supported values: ‘4’=Cover, ‘5’ Done Away, ‘6’=Pass, ‘9’=Tied, ‘10’:TiedCover, ‘20’=BestTradedAway: Quote was best, client traded on another ‘21’=PlatformPass: Platform passed/rejected our quote for any reason
Symbol	55	Y	Currency pair (CCY/CCY)
QuoteReqID	131	N	Original identifier supplied by client, required if no QuoteID

A “Pass” QuoteResponse message:

```
8=FIX.4.4|9=119|35=AJ|34=3|56=COBAFX|49=FIXLDN1Q|52=20120306-
10:05:30|117=39940485.0.Q|693=ID06100527105|694=6|55=EUR/USD|1=FIXUK|54=2|10=018
```

Quote Response (Hit/Lift)

Name	Tag	Required	Description
QuoteRespID	693	Y	Unique identifier
QuoteID	117	Y	QuoteID
QuoteResponseType	694	Y	‘1’=Hit/Lift
ClOrdID	11	Y	Unique identifier. Will be returned in ExecutionReports
Symbol	55	Y	Currency pair (CCY/CCY)
SecurityID	48	N	International Securities Identification Number 12 alpha numeric value to uniquely identify instrument. Applies to near leg for swap trades.
SecurityIDSource	22	N	Supported values: 4 = ISIN
SecurityID2	20061	N	Swap far leg International Securities Identification Number 12 alpha numeric value to uniquely identify instrument.
Side	54	Y	Supported values: ‘1’=Buy, ‘2’=Sell. For a swap refers to the near leg
OrderQty	38	Y	Size. For a swap refers to the near leg
OrderQty2	192	N	Size for far leg of a swap
OrdType	40	N	‘D’=PreviouslyQuoted
Currency	15	Y	Currency of the OrderQty
Account	1	N	Account, value provided by Commerzbank, not required if using NoAllocs
CoverPrice	1917	N	The next best quoted price
OnBehalfOfCompID	115	N	Identifier of the user trading
BidPx	132	N	All in bid price. Required on sell orders
OfferPx	133	N	All in offer price. Required on buy orders
BidSpotRate	188	N	Bid spot rate. Optionally presented on sell orders. If supplied must match original Quote
OfferSpotRate	190	N	Offer spot rate. Optionally presented on buy orders. If supplied must match original Quote
BidForwardPoints	189	N	Bid forward points. Optionally presented on sell orders for forwards or swaps with a forward near leg. If supplied must match original Quote
OfferForwardPoints	191	N	Offer forward points. Optionally presented on buy orders for forwards or swaps with a forward near leg. If supplied must match original Quote
BidPx2	6050	N	All in bid price for the far leg of a swap. Required on buy orders.

OfferPx2	6051	N	All in offer price for the far leg of a swap. Required on sell orders.
BidForwardPoints2	642	N	Bid forward points for the far leg of a swap. Optionally presented on buy orders. If supplied must match original Quote
OfferForwardPoints2	643	N	Offer forward points for the far leg of a swap. Optionally presented on sell orders. If supplied must match original Quote
SettlDate	64	Y	Value date, YYYYMMDD. For a swap refers to the near leg
SettlDate2	193	N	Value date for far leg of the swap, YYYYMMDD. Required on Swaps
UTIPrefix	20008	N	Standard legal entity identifier (LEI) of UTI or USI generating party
UTI	20009	N	UTI or USI. For swap refers to near leg
UTI2	20010	N	UTI or USI for far leg of swap
ExecutionVenue	20011	N	LEI, MIC or SEF
ExecutionVenueType	20012	N	Supported values: '1'=SEF '2'=Off Facility '3'= Multilateral Trading facility (MTF)
ReportingParty	20013	N	Reporting party for continuation data reporting
TradeRepository	20014	N	Trade repository where trade is sent
ClearingExemption	20015	N	'Y' or 'N'
ClearingVenue	20016	N	LEI of clearing house
ClearingIndicator	20017	N	'Y' or 'N'
CounterpartyLEI	20018	N	Counterparty LEI
TradingVenueTransactionId	20060	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
TradingVenueTransactionId2	20062	N	Alphanumerical code assigned by the trading venue for the far leg of a swap. Applicable where the order may only fill with a single ExecutionReport.
CFICode	461	N	Optionally provided to clarify trade intention. Please note, it is intended to mandate this field in the future.
FixingDate	6203	N	Fixing date for an NDF, YYYYMMDD. Required if on Quote.
FixingRef	20000	N	Fixing reference for an NDF, see NDF Fixing References. Required if on Quote.
NoAllocs	78	N	Number of pre-trade allocations, required to provide

(repeating group)				UTI if using NoAllocs on QuoteRequest.
	AllocAccount	79	N	Account
	IndividualAllocID	467	N	Unique identifier for the allocation. Must match the value supplied in the QuoteRequest
	AllocUTI	20020	N	UTI or USI.
	AllocTradingVenueTransactionId	20059	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.
NoTrdRegPublications		2668	N	
	TrdRegPublicationType	2669	N	'2'=Exempted
	TrdRegPublicationReason	2670	N	'12'= Exempted due to ESCB policy

A "Hit/Lift" QuoteResponse accepting quote based on one-way spot RFQ message:

```
8=FIX.4.4|9=164|35=AJ|34=8|56=COBAFX|49=FIXLDN1Q|52=20120306-
09:16:03|117=39940473.1.Q|693=ID06091558587|694=1|55=EUR/USD|54=1|11=ID06091603962|15=USD
|1=FIXUK|38=100000|190=1.3192|10=251
```

A "Hit/Lift" QuoteResponse accepting quote based on two-way forward RFQ message:

```
8=FIX.4.4|9=175|35=AJ|34=19|56=COBAFX|49=FIXLDN1Q|52=20120307-
09:27:00|117=39940530.0.Q|693=ID07092656686|694=1|55=EUR/USD|1=FIXUK|54=1|11=ID0709270018
6|15=USD|38=1000000|190=1.3146|191=3.00|10=240
```

A "Hit/Lift" QuoteResponse including UTI fields

```
8=FIX.4.4|9=222|35=AJ|56=COBAFXRFQ|49=FIXLDN1RFQ|52=20140116-
16:03:36|34=14|117=1.13689.Q|693=ID16160336781|694=1|55=EUR/USD|1=FIXLDN|54=1|64=20140120
|11=ID16160336782|15=EUR|38=2000|190=1.3607|133=1.3607|20008=1234567890|20009=***UTI***|1
0=128
```

A "Hit/Lift" QuoteResponse accepting quote based on two-way forward swap RFQ message:

```
8=FIX.4.4|9=186|35=AJ|34=86|56=COBAFX|49=FIXLDN1Q|52=20120307-
10:00:00|117=39940531.1.Q|693=ID07095956323|694=1|55=EUR/USD|1=FIXUK|54=1|11=ID0710000041
7|15=USD|38=1000000|190=1.314748|191=2.98|643=2.24|10=235
```

Quote Cancel (Message type Z)

Name	Tag	Required	Description
QuoteReqID	131	Y	Original identifier supplied by client
QuoteID	117	Y	Unique identifier of quote cancel
QuoteCancelType	298	Y	'1'=Cancel for symbol
Account	1	Y	Account, value provided by Commerzbank
NoQuoteEntries (repeating group)	295	Y	'1'

	Symbol	55	Y	Currency pair (CCY/CCY)

An example of a correctly formed QuoteCancel message:

```
8=FIX.4.4|9=120|35=Z|49=COBAFX|56=FIXLDN1Q|34=92|52=20120306-
15:39:12.170|1=FIXUK|117=39940516|131=ID06153852046|298=1|295=1|55=EUR/USD|10=050
```

Quote Status Report (Message type AI)

Name	Tag	Required	Description
QuoteRespID	693	Y	Original identifier supplied by client
QuoteID	117	Y	Unique identifier of quote
Symbol	55	Y	Currency pair (CCY/CCY)
QuoteStatus	297	Y	Supported values: ‘1’=Cancelled for symbol, ‘5’=Rejected, ‘9’=Quote not found
Text	58	Y	Description of rejection reason

A QuoteStatusReport message in response to an invalid QuoteResponse message:

```
8=FIX.4.4|9=118|35=AI|49=COBAFX|56=FIXLDN1Q|34=73|52=20111005-
15:14:53.893|117=38729967.Q|55=EUR/USD|297=5|58=Tag 1 (Account) missing|10=209
```

A QuoteStatusReport message sent in case of any failure during processing QuoteResponse PASS:

```
8=FIX.4.4|9=161|35=AI|49=COBAFX|56=FIXLDN1Q|34=75|52=20120306-
15:38:55.202|693=ID06153852046|117=39940516.28.Q|55=EUR/USD|297=5|58=Error cancelling
quote with ID: 39940516.28.Q|10=094
```

A QuoteStatusReport message sent in case of any failure during processing QuoteResponse HIT/LIFT:

```
8=FIX.4.4|9=158|35=AI|49=COBAFX|56=FIXLDN1Q|34=30|52=20120306-
15:31:54.088|693=ID06153147400|117=39940511.8.Q|55=EUR/USD|297=1|58=Error accepting quote
with ID: 39940511.8.Q|10=130
```

AllocationInstruction (Message type J)

Name	Tag	Required	Description
AllocID	70	Y	Unique identifier for this Allocation Instruction (J) message
AllocTransType	71	Y	‘0’=New
AllocType	626	Y	‘1’= Buyside Calculated
AllocLinkID	196	N	Can be used to link two different Allocation Instruction (J) messages together, i.e. for F/X "Swaps"

AllocLinkType	197	N	'1' =F/X Swap. Required if AllocLinkID is specified
AllocNoOrdersType	857	Y	'1'=Explicit list provided
NoOrders (repeating group)	73	Y	1
ClOrdID	11	Y	Client generated order ID for which allocations are being supplied
OrderID	37	Y	Commerzbank's unique identifier for the order
Side	54	Y	Supported values: '1'=Buy, '2'=Sell Must match the Side of the deal to which the allocation applies
Symbol	55	Y	Currency pair (CCY/CCY)
Quantity	53	N	Total quantity in dealt currency, allocated to all accounts. For a swap refers to the near leg.
OrderQty2	192	N	Total quantity in dealt currency, allocated to all accounts. Required for a swap far leg.
AvgPx	6	Y	Average price of fills.
Currency	15	Y	Dealt currency
SettlDate	64	N	Value date YYYYMMDD. For a swap refers to the near leg.
SettDate2	193	N	Value date YYYYMMDD. Required for a swap far leg.
NoAllocs (repeating group)	78	Y	Indicates number of **allocation** groups to follow
AllocAccount	79	Y	Allocation account
IndividualAllocID	467	Y	Unique identifier for the allocation
AllocQty	80	Y	Allocation quantity
AllocSide	6354	N	Supported values: '1'=Buy, '2'=Sell. Side of the allocation. If not present, the side will be assumed to be that of the request.
AllocUTI	20020	N	UTI or USI
AllocTradingVenueTransactionId	20059	N	Alphanumerical code assigned by the trading venue. Applicable where the order may only fill with a single ExecutionReport.

AllocationInstructionAck (Message type P)

Name	Tag	Required	Description
AllocID	70	Y	Unique identifier for this Allocation Instruction (J) message

AllocStatus	87	Y	Supported values '0'=Accepted (successfully processed) '1'=Block level reject
AllocRejCode	88	N	Required for AllocStatus = 1. Supported values: '0'=Unknown account(s), '1'=Incorrect quantity, '2'=Incorrect average price, '5'=Unknown OrderID (37), '7'=Other (further in Note 58=), '8'=Incorrect allocated quantity, '9'=Calculation difference.
Text	58	N	Can include explanation for AllocRejCode = 7.

Spot Trade

Allocation example:

```
8=FIX.4.4|9=267|35=J|49=FIXLCLIENT|56=COBA||34=3|52=20160110-
08:24:18|115=FIXTEST1|70=83905012|71=0|626=1|857=1|73=1|11=AAU5P37750|37=28336228|54=2|55
=EUR/USD|53=2000000|6=1.2645|15=EUR|64=20160114|78=1|79=ACCT1|467=A1|80=2000000|10=006|
```

Accept:

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=4|52=20160110-
08:24:19||70=83905012|87=0|10=006|
```

Reject:

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=4|52=20160110-
08:24:19||70=83905012|87=1|88=0|58=ACCT1|10=006|
```

Netted Trade

Allocation example:

```
8=FIX.4.4|9=267|35=J|49=FIXLCLIENT|56=COBA||34=3|52=20160110-
08:24:18|115=FIXTEST1|70=62935388|71=0|626=1|857=1|73=1|11=AAU5P37750|37=28336228|54=2|55
=EUR/USD|53=2000000|6=1.2645|15=EUR|64=20160114|78=2|79=ACCT1|467=A1|80=3000000|6354=2|79
=ACCT2|467=A2|80=1000000|6354=1|10=006|
```

Accept:

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=4|52=20160110-
08:24:19||70=62935388|87=0|10=006|
```

Forward Trade

Allocation example:

```
8=FIX.4.4|9=267|35=J|49=FIXLCLIENT|56=COBA||34=3|52=20160110-
08:24:18|115=FIXTEST1|70=89102012|71=0|626=1|857=1|73=1|11=AAU1P37751|37=22333248|54=1|55
=USD/GBP|53=1000000|6=1.1351|15=USD|64=20160130|78=1|79=ACCT1|467=A1|80=1000000|10=006|
```

Accept:

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=4|52=20160110-
08:24:19||70=89102012|87=0|10=006|
```

Swap Trade

Allocation example:

```
8=FIX.4.4|9=267|35=J|49=FIXLCLIENT|56=COBA||34=3|52=20160110-
08:24:18|115=FIXTEST1|70=928467572_N|71=0|626=1|196=SWAP1|197=1|857=1|73=1|11=ABU1P3732|3
7=5953893|54=1|55=GBP/USD|53=1000000|6=1.1356|15=GBP|64=20160112|78=1|79=ACCT1|467=A1|80=
1000000|10=006|
```

```
8=FIX.4.4|9=267|35=J|49=FIXLCLIENT|56=COBA||34=2|52=20160110-
08:24:18|115=FIXTEST1|70=928467572_F|71=0|626=1|196=SWAP1|197=1||857=1|73=1|11=
ABU1P3732|37=5953893|54=2|55=GBP/USD |192=1000000|6=1.1362|15= GBP
|193=20160130|78=1|79=ACCT1|467=A2|80=1000000|10=006|
```

Accept:

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=5|52=20160110-
08:24:19||70=928467572_N|87=0|10=006|
```

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=6|52=20160110-
08:24:19|70=928467572_F|87=0|10=006|
```

Reject:

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=5|52=20160110-
08:24:19|70=928467572_N|87=1|88=0|58=ACCT1|10=006|
```

```
8=FIX.4.4|9=267|35=P|49=COBA|56=FIXLCLIENT|34=6|52=20160110-
08:24:19|70=928467572_F|87=1|88=0|58=ACCT1|10=006|
```

6 Standard FIX Message Definitions

All standard FIX messages can be found in the FIX Protocol documentation at http://fixprotocol.org

Logon (Message type A)

Name	Tag	Required	Description
EncryptMethod	98	Y	‘0’=None/Other
HeartBtInt	108	Y	Heartbeat interval in seconds. 60 recommended
ResetSeqNumFlag	141	N	‘Y’=Reset sequence numbers. Default is ‘N’

An example of a FIX logon message:

```
8=FIX.4.4|9=74|35=A|49=FIXCLIENT|56=COBA|34=1|52=20131026-18:22:15|108=30|98=0|10=106
```

Logout (Message type 5)

Name	Tag	Required	Description
Text	58	N	Description of logout reason

An example of a FIX logout message:

```
8=FIX.4.4|9=57|35=5|49=FIXCLIENT|56=COBA|34=51|52=20131026-18:46:40|10=082
```

Resend Request (Message type 2)

Name	Tag	Required	Description
BeginSeqNo	7	Y	Sequence number of first message to resend
EndSeqNo	16	Y	Sequence number of last message to resend, or ‘0’ (zero) for all subsequent messages

Sequence Reset (Message type 4)

Name	Tag	Required	Description
GapFillFlag	123	N	‘Y’=Gap Fill message, ‘N’=Sequence reset
NewSeqNo	36	Y	New sequence number

Reject (Message type 3)

Name	Tag	Required	Description
RefSeqNum	45	Y	Message number of the rejected message
RefTagId	371	N	Tag field on the rejected message
RefMsgType	372	N	Message type of the rejected message
SessionRejectReason	373	N	Reject code
Text	58	N	Description of the rejection

Test Request (Message type 1)

Name	Tag	Required	Description
TestReqID	112	Y	Unique identifier

Heartbeat (Message type 0)

Name	Tag	Required	Description
TestReqID	112	N	Id for the TestRequest it is responding to

7 Conformance Tests

This section details a number of example test scenarios that will conducted during on-boarding of new clients. The full suite of tests will be clarified during the certification process.

Session

Test Name	Required	Expected Behaviour
Login	Y	Successful login using the Logon message and the provided Sender and Target Comp IDs. Reset Sequence numbers (tag 141) set to Y for market data session, and not set on orders session
Heartbeat	Y	Heartbeat sent and received at agreed interval
TestRequest	Y	Test Requests responded to with Heartbeat containing the relevant TestRequestID
Logout	Y	Logout sent on intentional disconnection Logout responded to with a Logout
Trading session status	N	Valid trading session status processed (Optional: only tested if client's software supports it)
Connection resilience	N	Ensure that the FIX sessions are connected for a continuous 24 hour period
Automatic reconnection	Y	Sessions retry reconnecting on a disconnection.
Sequence number mismatch	Y	Client sequence numbers are too low, connection will not connect, alerting should be raised on the client software Client sequence numbers are too high, message recovery with appropriate resends and gap fills, and session resumes normal behaviour Commander sequence numbers are too low, connection should be disconnected, alerting should be raised on the client software Commander sequence numbers are too high, message recovery with appropriate resends and gap fills, and session resumes normal behaviour

Market data

Test Name	Required	Expected Behaviour
Subscribe to multiple currency pairs	Y	Successful subscription for a number of currency pairs and tenors, including NDFs, broken dates and swaps as appropriate. Clients should be receiving prices.
Subscribe to multiple currency pairs at specific sizes	N	Successful subscription for a number of currency pairs and tenors at specific sizes. Clients should be receiving one liquidity band of prices for each subscription.
Handling of stale prices	Y	The system will send indicative (stale/closed) rates (QuoteCondition = 'B'). Clients should handle these to ensure that the price is staled/removed and is untradeable.
Unsubscribe	N	Successful removal of subscriptions and clients should not get further updates

Test Name	Required	Expected Behaviour
Unsolicited Reject	N	The system will send an unsolicited MarketDataRequestReject back to the client for subscriptions that can't be continued. Client's should handle this accordingly and only re-subscribe when the trading session is active again. (Optional: only required if client's support this)
Subscribe to Unknown Instrument	N	The system will send a reject message. Clients should handle this reject. (Optional: only required if client's support this)
Automatic resubscription	Y	Clients should automatically resubscribe after being disconnected intra-day or receiving MarketDataReject messages.

Orders

Test Name	Required	Expected Behaviour
Submit spot buy order in base currency	Y	Clients submit a spot buy order in a quote's base currency. They should get a valid execution back.
Submit spot sell order in base currency	Y	Clients submit a spot sell order in a quote's base currency. They should get a valid execution back.
Submit spot buy order in secondary currency	N	Clients submit a spot buy order in a quote's secondary currency. They should get a valid execution back.
Submit spot sell order in secondary currency	N	Clients submit a spot sell order in a quote's secondary currency. They should get a valid execution back.
Submit forward buy order in base currency	N	Clients submit a forward buy order in a quote's base currency. They should get a valid execution back.
Submit forward sell order in base currency	N	Clients submit a forward sell order in a quote's base currency. They should get a valid execution back.
Submit forward buy order in secondary currency	N	Clients submit a forward buy order in a quote's secondary currency. They should get a valid execution back.
Submit forward sell order in secondary currency	N	Clients submit a forward sell order in a quote's secondary currency. They should get a valid execution back.
Submit swap buy order in base currency	N	Clients submit a swap buy order in a quote's base currency. They should get a valid execution back.
Submit swap sell order in base currency	N	Clients submit a swap sell order in a quote's base currency. They should get a valid execution back.
Submit swap buy order in secondary currency	N	Clients submit a swap buy order in a quote's secondary currency. They should get a valid execution back.
Submit swap sell order in secondary currency	N	Clients submit a swap sell order in a quote's secondary currency. They should get a valid execution back.
Submit buy order above a liquidity level	N	Client submits a buy order above the available liquidity level. They should get a reject back.

Submit sell order above a liquidity level	N	Client submits a sell order above the available liquidity level. They should get a reject back.
Submit multiple orders for a liquidity level (successful)	N	Client submits multiple orders for a one liquidity level. For example, client submits a 0.7m and 0.3m orders for 1m of available liquidity.
Submit multiple orders for a liquidity level (failed)	N	Client submits multiple orders that sum up to more than one liquidity level. For example, client submits a 0.7m and 0.4m orders for 1m of available liquidity.

Quotes

Test Name	Required	Expected Behaviour
Request an invalid quote	N	The client should send an invalid Request For Quote and receive QuoteRequestReject message.
Request a valid one-way quote	Y	The client should send a Request For Quote and receive stream of Quotes having only offer or bid side populated, depending on what side has been requested. Repeat this step after doing successful deal on a quote also for FORWARD and SWAP quotes.
Deal on a quote	Y	The client should send an order (QuoteResponse type “hit/lift”) using the quote’s identifier and receive an execution with a fill.
Request a valid two-way quote	Y	The client should send a two-way SPOT Request For Quote and receive stream of Quotes having both offer and bid sides populated. Repeat this step after doing successful deal on a quote also for FORWARD and SWAP quotes.
Deal on a quote	Y	The client should send an order (QuoteResponse type “hit/lift”) using the quote’s identifier and receive an execution with a fill.
Cancel a quote	N	Where possible, the client should cancel a quote (QuoteResponse type “pass”).
Handle stale quotes	Y	While streaming receive and process a QuoteCancel.

8 Resting Linked Order Guidance and Rules

Linked orders should be established at order creation (35=D), linkage should not be constructed with a later amendment via an Order Cancel/Replace Request (35=G).

Order cancellation requires all members to be cancelled.

A One-Cancels-Other pair should consist of a Limit order and a Stop Loss order.

Client Execution Strategies only support If-Done linkage.

Loop orders must conform to the following at placement and amendment:-

- be Limit orders
- be Spot
- have marching Symbol(55)
- matching capture Currency(15)
- have a minimum spread between them
- have opposite sides
- have matching OrdQty amounts
- have matching valid from time, eg. absent or matching EffectiveTime
- have matching valid to times, eg. GTC or matching ExpireTime
- must not arbitrage each other
- have other linked parents or children

Amendment of Loop orders will be subjected to validation rules to ensure conformance to minimum spread rules

9 NDF Fixing References

Supported Non-Deliverable Forward Fixing References

Details	Supported References	Default
USD contracts	USD NDF FIX TIME	USD NDF FIX TIME
Non-USD contracts	USD NDF WMR 8am	USD NDF WMR 8am

Please note that we do not support Non-Deliverable Swaps (NDS).

Please refer to your account manager for the current list of supported references and associated defaults.