



Rules Of Engagement

USER GUIDE

Functional Document

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1 DOCUMENT PROPERTIES

1.1 PURPOSE OF THIS DOCUMENT

This document contains an overview of the Financial Information Exchange (FIX) services offered by Saxo Group (hereafter referred to as, "Saxo"). Consult this document to understand the technical aspects of implementing FIX, how to connect and use Saxo's FIX server (hereafter referred to as, "the Server").

As we continue, please note:

- Saxo's FIX/API server is FIX 4.3 compliant. Both the client and Saxo Group must support the FIX communication protocol.
- The document does not describe the inner workings of the FIX protocol itself. Refer to the subsequent sections for more details.

INTENDED AUDIENCE

1. Regulated Financial Institutions: **Retail Brokerage Companies/Banks** offering online trading to their clients on **FX, Spot Metals, Futures, Stocks and CFDs** through their own proprietary trading platforms.
Note: *Companies trading in FX must manage their existing client trading flow. According to their own Risk management, they must cover their exposure automatically (STP) with a liquidity provider (Saxo Group).*
2. **Brokerage Companies** can consider enhancing their offering with new products and access to more exchanges. With a single point of integration (**Saxo Group**) they can access and trade on multiple markets: **Stocks, Futures and CFD DMA, FX Spot, Spot Metals, CFD Spot Indices and CFD Futures.**
3. **Small Hedge Funds** looking for a single point of access to a range of markets. Such companies very often require an automated way of processing all their daily trading and hedging operations.
4. **Proprietary Trading Firms, Money Managers** and **Corporates** with existing client base and running business. Such companies very often are looking for automated trading solutions in order to hook their **algo, black-box** and **computer-driven trading models/strategies** instead of covering these via manual trading through front end Saxo Platforms. Sometimes, manual trading is not sufficient.
5. Selected **Trading software (platforms) and Trading Services Providers** with well-established **client base (usually Retail)** and solid operational and IT history and knowledge.

1.2 REVISION HISTORY

DATE	VERSION	BY	CHANGE
24-01-2005	1.0	XNES	Created first draft of Rules of Engagement User Guide.

17-04-2012	1.1	XMNC	CFD on Indices and Commodities added.
18-09-2012	1.2	RL	Description of Tag 21 and Tag 115, Section 4.2.4 –Market Data Request
26-09-2012	1.3	RL	Section 2.3 updated with FOK orders
27-09-2012	1.4	RL	Update Section 4.2.1 Quote Request, 4.2.2 Quote request Response
09-10-2012	1.5	RL	Rewrite of section 7, Sections 8.1.6 and 8.1.7 added, Update of section 9
10-10-2012	1.6	RL	Chapter 1, page 10 Session Matrix, Section 4.2.4 Market Data Request, have been updated. "Things To Remember" on Section 6.1, Section 6.2 and Section 7, have been updated.
14-11-2013	1.7	PPM	Added Chapter 4.3.1.5 "Placing an Order on the second Currency Amount"
01-02-2014	1.8	PPM	Revised Version
29-05-2015	1.9	SLM	Add Contract Details
07-07-2015	1.10	SLM	Update Contact Details
04-07-2016	1.11	GG	Update Various content (tag1028 for Futures), CFDs on indices and commodities, RFQ trading, update names and contacts etc.
28-11-2016	1.12	RL	Update version to include FX Market/Limit IOC orders.
16-05-2017	1.13	XLJ	Adding product type Bonds
21-06-2018	1.141	XLJ	Update Test Details
11-04-2019	1.142	XLJ	Replacing StopIfBid, StopIfOffer to a single type Stop
25-04-2019	1.143	XLJ	Update support trading on second currency Update supported order type for expiring and continuous CFDs Update requirement of tag 142 for Contract Futures trading Update Supported Order Type Table For Stocks, Futures and CFD
10-07-2019	1.15	XLJ	Update related order for FX

1.3 ABBREVIATIONS

TERM	DESCRIPTION
FIX	Financial Information Exchange
MIC	Market Identifier Code
CFD	Contract For Difference
DMA	Direct Market Access
CET	Central Eastern Time
UTC	Universal Time Coordinates
DST	Daylight Saving Time
SQ	Streaming Quotes
B2B	Back To Back
EBS	Electronic Banking System
DO	Day Order
IPSEC	Internet Protocol Security
VPN	Virtual Private Network
SSL	Secure Socket Layer
SAFT	Saxo Automated FIX Testing
DTLS	Datagram TLS
GTD	Good Till Date
GTC	Good Till Cancel
FX	Foreign Exchange
OCO	One Cancels Other
FUTs	Futures
ISIN	International Security Identification Number

IC	Indices
COMM	Commodities

1.4 REFERENCE LIST

REFERENCE	LINK
FIX Protocol Limited, "Financial Information Exchange Protocol (FIX)", Version 4.3, Volumes 1 – 7	www.fixprotocol.org
ISO 10383 Market Identifier Code (MIC). Used for Futures, Stocks and CFDs	www.iso15022.org/MIC/ISO10383_MIC_V1_11.pdf

1.5 OPERATION TIMINGS

FX SPOT – HOURS OF OPERATION - THE TRADING HOURS FOR FX SPOT ARE THE FOLLOWING:

Open:

Monday morning 05:00 Sydney.

With northern wintertime this corresponds to: Sunday 19:00 Copenhagen (CET), 18:00 London, 18:00 UTC, 13:00 (1 pm) New York.

With northern summertime or DST, this corresponds to: Sunday 21:00 Copenhagen, 20:00 London, 19:00 UTC, 15:00 (3 pm) New York.

Close:

Friday afternoon 17:00 (5 pm) New York.

With northern wintertime this corresponds to: Friday 23:00 Copenhagen, 22:00 London, 22:00 UTC, Saturday morning 09:00 Sydney.

In the week with EU, (not U.S.) this corresponds to: Friday 24:00 Copenhagen, 23:00 London, 22:00 UTC, Saturday morning 08:00 Sydney.

With northern summertime or DST, this corresponds to: Friday 23:00 Copenhagen, 22:00 London, 21:00 UTC, Saturday morning 07:00 Sydney.

Saxo Group is closed December 25 and January 1 (UTC).

MAINTENANCE WINDOW

- The system is **inaccessible from 01:00 Saturday night to Sunday at 17:00 (both CET)**. In this interval, Saxo performs **maintenance** on the system.
- All client sessions using the connection **will be logged out prior** to the start of the maintenance window. Before the Log-out message, a *TestRequest* will be issued to obtain a 'Heartbeat' signal from the client in order to ensure that there are no sequence number gaps.
- Before actually closing the session, **Saxo (Logout Initiator) waits for the client (Acceptor)** to respond with a confirming Logout message. This gives the acceptor a chance to perform any 'Gap Fill' operations that may be necessary. The session will be terminated if the acceptor does not respond within an appropriate timeframe.

- FIX sequence numbers are **reset** during the maintenance window.

SESSIONS - IF THE CONNECTION IS USED FOR FX SPOT TRADING ON SQ, TWO DATA-EXCHANGE SESSIONS ARE ESTABLISHED

1). For trade related communication 2). For quote related communication

- ✓ Trading session also supports trades on all instruments FX Spot, Spot Metals, Futures, Stocks, CFD DMA, CFD Spot Indices and CFD Futures.
- ✓ Saxo for its part will not send Resend Requests on the quote session but will simply accept the incoming sequence number as the correct one.

The table below gives an overview of the different session possibilities.

Session Matrix

	QUOTE SESSION	TRADE SESSION
Trade FX on SQ	X	X
Place Orders on all Products		X

QUOTES ON CFD SPOT INDICES AND CFD FUTURES

Saxo Bank stream indicative prices for some of the CFD Spot Indices and CFD Futures instruments, Please refer to [section 7.1](#) for the full list.

2 OVERVIEW – PRODUCTS

The Server offers a variety of products namely, FX, Future, Stocks, CFD DMA, CFD Futures and CFD Spot Indices and Bonds. The following sections describe them in a detailed manner.

Things to Remember

1. Due to business and technical restrictions, you cannot connect to DesktopTrader, WebBased Platform - SaxoTraderGO or mobile platforms and the FIX Server at the same time with the same User.
2. Simultaneous connection is only supported with Web Connect + FIX server.
3. In order to have simultaneous trading access from both DesktopTrader as well as trading access via FIX API server, contact your **Account Manager** and/or **E-Trading Client Services Team**.

2.1 FX

Things to Remember

1. The EBS format of **CCY1/CCY2 ("EUR/USD")** is used for instrument identification.
2. The Server supports the use of decimal pips. Whether or not this feature should be enabled is decided in co-operation with the client.
3. Trading in fractions is not supported.

2.2 SPOT

Things to Remember

1. Trading on SQ is done via volume band configured for each instrument. The exact band specification is discussed in [section 4.2.6](#).
2. Multiple volume bands that deliver differing prices depending on the volume are supported for spot trading on SQ. The bands are symmetric on each side (buy/sell) and the price will rise with the quoted quantity, e.g. 1.1258/60 (2 pips) for 2 million EUR/USD and 1.1257/61 (4 pips) for 5 million EUR/USD.

2.3 ORDERS

The Server supports the following order types and durations.

ORDER TYPE	DO	GTC	IOC	FOK
Market	X		X	X
Limit	X	X	X	X
Stop	X	X		
OCO	X	X		
IF-Done Orders	X	X		

Things to Remember

1. For FX stop order, a stop order to sell will be triggered when the offer price at which you could undertake a transaction of equivalent size reaches the specified price level. Once triggered, the order will be treated as a market order.

A stop order to buy will be triggered when the bid price at which you could undertake a transaction of equivalent size reaches the specified price level. Once triggered, the order will be treated as a market order.
2. Market order will be executed only if the required liquidity is present at the time the order place request is submitted. Refer to **section 4.2.6** for more information on the Liquidity Control.
3. FOK orders are instant orders, which are filled at the first price in the book which can accommodate the full amount. For example: if there is a bid price for 5m and a bid price for 10m, an order to sell 8m will be filled in full, in a single fill, @ the price for 10m. This type of order is either completely filled or completely rejected (killed). Refer to **section 4.2.7.3**

2.4 FUTURES, STOCKS AND CFD

For information on how exchange traded products are handled, refer to [section 6](#) of this document.

2.5 CFD SPOT INDICES AND CFD ON FUTURES

For information on how Saxo CFD Spot Indices and CFD Futures products are handled, refer to [section 7](#) of this document.

2.6 BONDS

For Bonds information, refer to section 8 of this document.

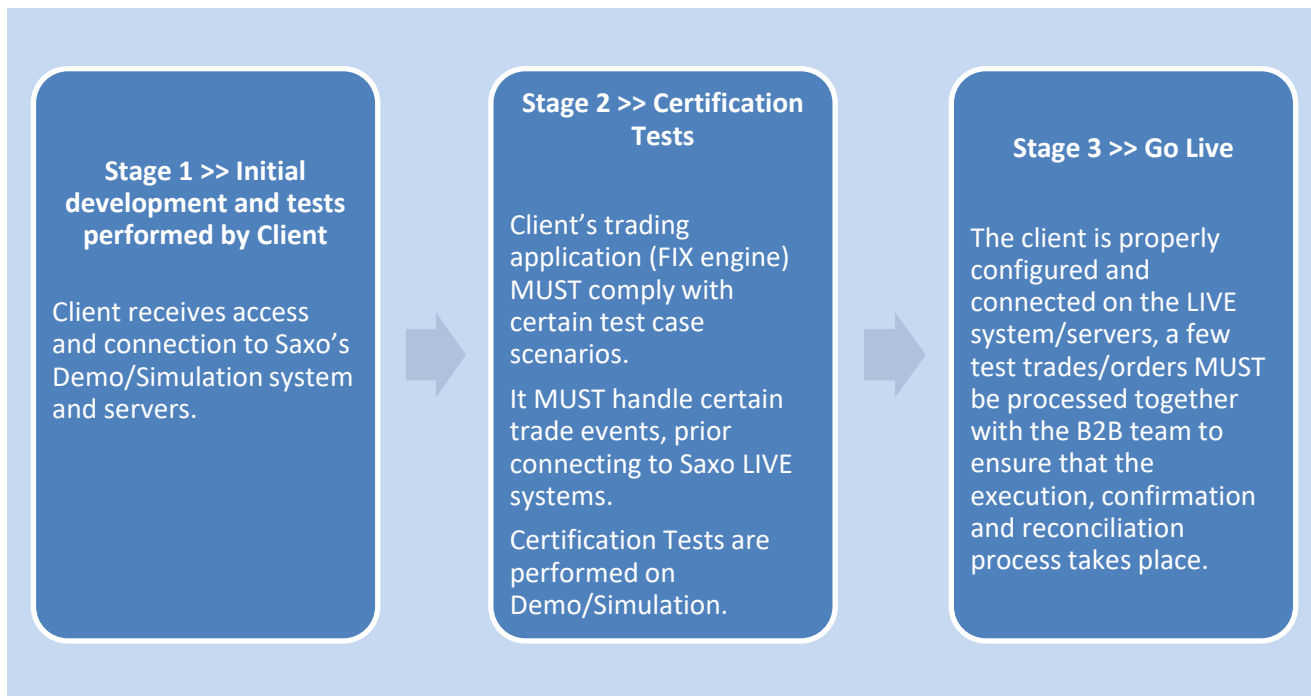
3 PROCESS

3.1 HOW TO CONNECT A NEW CLIENT

B2B Team coordinates with the client for Onboarding process, facilitating FIX integration on Demo/Simulation, proceeding with certification tests and, making the connection live.

3.1.1 GOING LIVE

The process of Going Live is divided into three stages:



3.1.2 CONNECTIVITY

Clients can connect to the Server in the following ways:

1. SSL Cisco AnyConnect VPN
2. IPSec VPN over public Internet (Only available for technical Exceptions)

3.1.3 FIX ENGINE COMPATIBILITY TESTING

Saxo offers its clients access to Demo/Simulation FIX/API server. It is pre-configured with some specific test case scenarios when handling certain trade and order events. Saxo calls these pre-defined events **SAFT**.

Please find all the supported test cases described in [section 8](#).

3.2 VPN SETUP GUIDE INFORMATION

This section describes the Virtual Private Network (VPN) setup with Saxo Group.

3.2.1 SSL VPN CISCO ANYCONNECT

Things to Remember

1. Saxo uses Cisco Anyconnect client which provides remote users with secure VPN connections using the Secure Socket Layer (SSL) protocol and DTLS protocol.
2. Before going Live, clients are provided a certificate which must be installed to ensure a 2-factor security on VPN connection, Certificate and Credentials.
3. The client can work on Win, Mac, Linux. However, we offer support on Win with IE only.

3.2.2 IPSEC VPN

Things to Remember

1. As an exception, when Anyconnect client cannot be used, Saxo offers an **IPSEC VPN (RFC 2401)** which is compliant with any type of equipment that uses a standard IPSEC protocol.
2. More details on this issue can be provided if it is concluded that SSL VPN is not an option.

4 IMPLEMENTATION

4.1 FIX MESSAGE DETAILS

Things to Remember

1. Saxo's B2B FIX server is based on the standard message of **Financial Information Exchange (FIX) protocol version 4.3**
2. The following sections include messages and fields relevant to the communication between Saxo and its clients only.
3. Each message lists the fields and their supported values required by Saxo. For detailed description and FIX specific information refer to: <http://www.fixprotocol.org/specifications>
4. Message type is always defined using **Tag 35**
5. According to the FIX protocol, certain values under Required (column) must be contained in parentheses "()".

4.1.1 ADMINISTRATIVE MESSAGE DETAILS

The following administrative messages are supported as shown below in Table 1.

Table 1

MESSAGE TYPE	VALUE	DESCRIPTION
Heartbeat	0	<i>Trade Session:</i> Default heartbeat interval is 30 seconds . <i>Quote Session:</i> Default heartbeat interval is 30 seconds .
Logon	A	
Test Request	1	Please refer to Notes below.
Resend Request	2	
Session-level Rejection	3	
Sequence Reset (Gap Fill)	4	
Logout	5	

Example Logon Message (Trade Session):

8=FIX.4.3 9=114 35=A 34=1 49=CLIENT_TEST 52=20100107-10:28:29.609 56=SAXOTRADE_TEST 50=FX 98=0 108=30 141=Y
553=xxxxxxx 554=xxxxxxx 10=057

NOTES REGARDING TAG141Trade Session

1. **Tag 141** should only be set to "Y" for the first logon.
2. After the maintenance window during the weekend, it should be set to "N" for all other logons during the same week (**This tag is not mandatory**).
3. Saxo resets the sequence numbers during the weekend and expects the clients to start their sequence numbers from week 1. If the client resets sequence numbers on any login after **141=Y**, he may not be able to recover the previously sent messages from Saxo.
4. Only if every next login request begins with **141=N** throughout the week, the client will be able to recover previous messages send from Saxo to the client.

Quote Session

Tag 141 must always be set to "Y" when a quote session is established. Old quotes/data cannot be recovered from the system. Saxo considers them non-tradable, expired quotes.

NOTES REGARDING TEST REQUEST MESSAGE (35=1)

1. When initiating A Trade or A Quote sessions, Saxo always sends a *Test Request* message and expects the client to answer with a *Heartbeat* message within next 3 seconds containing the same **Tag112** as sent from Saxo in the *Test Request* message.
2. Once the sessions are established, the client needs to keep these 'alive' by exchanging **HeartBeat messages (35=0)**. **Failure to do so will initiate another Test Request message from Saxo.**
3. If the client fails to respond correctly to a *Test Request* message, Saxo will disconnect the client from FIX API server (both sessions).

4.1.2 SAXO AND CLIENT TRADE IDS

1. All trade, quote and order IDs allocated by Saxo are (globally) unique.
2. Client request IDs and client order IDs must be unique.
3. Messages containing duplicate IDs will be rejected. The maximum supported length of client ID is 32, i.e. string [32].

4.1.3 COMPIDS IN FIX MESSAGES

When sending messages, the CompID is used to identify the party connecting to Saxo's B2B FIX server. The tag values for the messages must be as follows:

Table 2 CompIDs in FIX Messages

MESSAGE TYPE	SENDERCOMPID	ONBEHALFOFCOMPID	TARGETCOMPID	TARGETSUBID
Quote Request	ID1	E1	SAXOQUOTE	
Quote Request Reject	SAXOQUOTE		ID1	ID2
Quote	SAXOQUOTE		ID1	ID2
Order Single	ID1	E1	SAXOTRADE	
Cancel Request	ID1	E1	SAXOTRADE	
Cancel/Replace Request	ID1	E1	SAXOTRADE	
Execution Report	SAXOTRADE		ID1	ID2

E1 is an ID that uniquely identifies the trading entity.

Table 3 Requirements to tag OnBehalfOfCompID

CLIENT TYPE	REQUIREMENTS
Direct Client	Only a unique Account ID is required
Saxo Facilitator	Client ID and Client Account ID identifying the Saxo Client
Non-Saxo Facilitator	Unique ID identifying the trading entity client that do not belong to Saxo and the Saxo Account ID identifying the institutional client with account in Saxo

Things to Remember

1. When placing a trade via a facilitator connection it is **mandatory** to include Tag 115 which will be used to identify the user performing the trade, the user id in a facilitator connection type will always **be a Saxo generated user id**, the response to tag 115 in the execution report will be Tag 128 which will carry the user id performing the trade. Tag 116 is used to identify the end user of the trade origin.
2. When placing a trade via a direct client connection or a non Saxo facilitator connection, it is **recommended** to include Tag 115 which will be used to identify the user performing the trade or the user the trade is placed on behalf, the user id in the above types of connections will always be **a non-Saxo generated id**, the response to tag 115 in the

execution report will be Tag 128 which will carry the non Saxo user id performing the trade.

4.1.4 STANDARD HEADER

Table 4 states the requirements of the standard header of each FIX message.

Table 4: Requirements: Standard Header

NAME	TAG	REQUIRED	DESCRIPTION
BeginString	8	Y (Y)	Must be FIX.4.3
BodyLength	9	Y (Y)	
MsgType	35	Y (Y)	Refer to section 4.1.1
SenderCompID	49	Y (Y)	Refer to section 4.1.3
TargetCompID	56	Y (Y)	Refer to section 4.1.3
SenderSubID	50	Y (N)	Unique value provided by Saxo.
OnBehalfOfCompID	115	Y (N)	Conditionally required relating to setup. Verify with B2B Team whether to use it or not.
MsgSeqNum	34	Y (Y)	
SendingTime	52	Y (Y)	

Alert: Tag 57 (TargetSubID) must not be used. It is reserved for future use.

4.1.5 LOGON MESSAGE

Table 5 defines the requirements of the logon message.

Table 5 Requirements: Logon Message

NAME	TAG	REQUIRED	DESCRIPTION
EncryptMethod	98	Y (Y)	Saxo doesn't encrypt FIX messages, so default value is: 98=0
HeartBtInt	108	Y (Y)	Trade session: Default heartbeat interval is 30 seconds. Quote session: Default heartbeat interval is 30 seconds.

ResetSeqNumFlag	141	N (N)	If client doesn't specify this tag, Saxo will read as 141=N .
Username	553	Y (N)	Supplied to client by Saxo
Password	554	Y (N)	Supplied to client by Saxo

4.2 FX SPOT TRADING

Table 6 shows five primary messages for FX Spot trading.

Table 6 Application Messages: FX Spot Trading

NAME	MESSAGE TYPE
Quote Request	R
Quote Request Reject	AG
Quote	S
Quote Cancel	Z
Single Order	D

Things to Remember

According to the FIX protocol, certain values under Required (column) must be contained in parentheses "()".

4.2.1 QUOTE REQUEST

The *Quote Request* message can contain a request for one or more currency pairs. If a quote request is accepted completely/partially, the quote will be sent to the client as shown in the diagram in Figure 1.

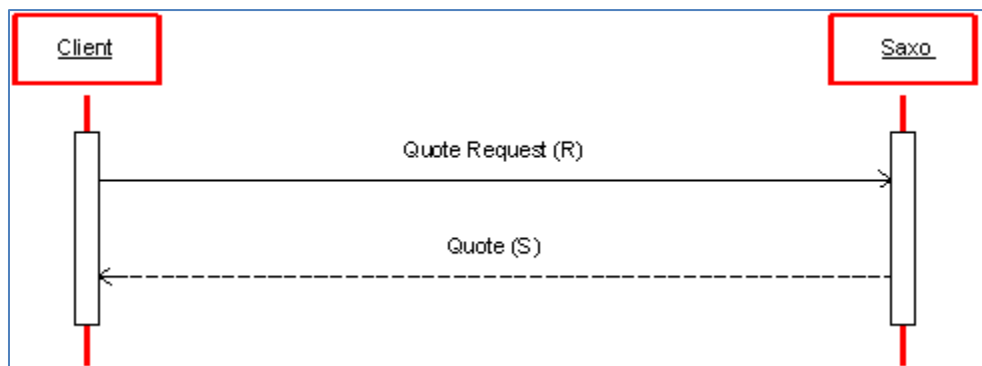


Figure 1 Quote Request Message Flow: Accept

Table 7 defines the requirements of **SQ - Streaming Quotes** (Single Bands as well as Mass quotes) message.

Table 7 Requirements: Quote Request Message

NAME	TAG	REQUIRED	DESCRIPTION
QuoteReqID	131	Y (Y)	
NoRelatedSym	146	Y (Y)	
Symbol	55	Y (N)	Currency cross
Product	460	Y (N)	4 = Currency
QuoteRequestType	303	N (N)	2 = Automatic
OrderQty	38	Y (N)	Max size for band. Must correspond to client configuration value. However, please note, when subscribing to mass quotes there is no need to include tag 38 in the quote request message, see section 4.2.2.2 .

Table 8 shows sample *Quote Request* message of **SQ - Streaming Quotes** (Single Bands as well as Mass quotes).

Table 8 Example: Quote Request message (SQ)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = R</i>
QuoteReqID	131	1	Quote Request ID
NoRelatedSym	146	3	Number of Related Symbols in repeated section
* Symbol	55	EUR/USD	
* Product	460	4	Currency
* OrderQty	38	5000000	Bands are provided by Saxo However, please note, when subscribing to mass quotes there is no need to include tag 38 in the quote request message, see section 4.2.2.2 .
* Symbol	55	GBP/CAD	

*	Product	460	4	Currency
*	OrdQty	38	5000000	Bands are provided by Saxo However, please note, when subscribing to mass quotes there is no need to include tag 38 in the quote request message, see section 4.2.2.2 .
*	Symbol	55	GBP/USD	
*	Product	460	4	Currency
*	OrdQty	38	5000000	Bands are provided by Saxo However, please note, when subscribing to mass quotes there is no need to include tag 38 in the quote request message, see section 4.2.2.2 .

Standard Trailer

Things to Remember

1. The tags marked with an asterisk (*) are part of a repeated section, hence it is possible to request quotes for several currency pairs in the same *Quote Request* message.
2. **Tag 146 (NoRelatedSym)** gives the number of sections in the repeated block.
3. **Tag 146** MUST come before the repeated section.
4. However, please note that they will all have the same quote request ID, so if more than one volume band is requested in the same message it will not be possible to distinguish between them. Saxo Bank therefore recommends that a separate quote request message is sent for each volume band.

Example Logon Message on Quote Session:

```
8=FIX.4.3 9=114 35=A 34=1 49=CLIENT_TEST 52=20100107-10:28:29.546 56=SAXOQUOTE_TEST 50=FX 98=0 108=30 141=Y
553=xxxxxxx 554=xxxxxxx 10=117
```

Example Subscribe (request) streaming quotes on one instrument EURUSD:

```
8=FIX.4.3 9=119 35=R 34=2 49=CLIENT_TEST 52=20100107-10:28:31.934 56=SAXOQUOTE_TEST 50=FX 131=20000000 146=1
55=EUR/USD 460=4 38=20000000 10=131
```

Example of a request (subscription to multiple instruments):

```
8=FIX.4.3 9=119 35=R 34=2 49=CLIENT_TEST 52=20100107-10:28:31.934 56=SAXOQUOTE_TEST 50=FX 131=20000000 146=8
55=AUD/CHF 460=4 38=30000000 55=AUD/JPY 460=4 38=50000000 55=AUD/NZD 460=4 38=10000000 55=CAD/CHF 460=4 38=30000000
55=CHF/DKK 460=4 38=20000000 55=CHF/JPY 460=4 38=50000000 55=CHF/PLN 460=4 38=500000 55=EUR/USD 460=4 38=20000000
10=131
```

4.2.1.1 STREAMING QUOTES AND REQUEST FOR QUOTES

FIX/API server (B2B server) supports a single model for obtaining quotes namely, *Streaming Quotes* (SQ)
This section discusses *Streaming Quotes* (SQ) model in detail.

SQ**Things to Remember**

1. To get a stream of quotes one MUST send a *QuoteRequest* on the quote session.
2. The *QuoteRequestType* (Tag 303) should either be set to **Automatic (2)** or omitted. If omitted, it is interpreted as having the value "2". This re-starts the stream and new quotes will be streamed until the session is disconnected.
3. Currently, it is NOT possible to unsubscribe to a stream.
4. Streaming Quotes can be either **Indicative (537=0)** or **Tradable (537=1)**
5. In order to execute a trade, the client MUST monitor if a quote is tradable or not. Also, check the available streaming liquidity on **Bid Size (132)** or **Ask Size (133)**.

4.2.2 QUOTE REQUEST RESPONSE

4.2.2.1 QUOTE (SINGLE BAND)

If the Quote Request message described in [section 4.2.1](#) is (partially) accepted, quotes will begin to flow to the client.

Table 11 shows sample *Quote Message* (Single)

Table 11 Example: Quote Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = S</i>
QuoteReqID	131	5000000	
QuoteID	117	CLIENT-EURGBP-2010-1-7:10.28.35:3-5000000	
QuoteType	537	1	Tradable
Symbol	55	EUR/GBP	Currency pair
Product	460	4	Currency
BidPx	132	0.90093	Bid price
OfferPx	133	0.90107	Offer price
BidSize	134	5000000	Bid Value
OfferSize	135	5000000	Ask Value
TransactTime	60	20100107-10:28:35	
FutSettDate	64	20100111	Value date
<i>Standard Trailer</i>			

Example of quote sent to client from Saxo:

```
8=FIX.4.3 9=234 35=S 49=SAXOQUOTE_TEST 56=CLIENT_TEST 34=35 57=FX 52=20100107-10:28:35 369=18 131=5000000
117=CLIENT-EURGBP-2010-1-7:10.28.35:3-5000000 537=1 55=EUR/GBP 460=4 132=0.90093 133=0.90107 134=5000000
135=5000000 60=20100107-10:28:35 64=20100111 10=208
```

4.2.2.2 MASS QUOTE

Some clients are configured to receive streaming Mass Quotes instead of streaming Single Quotes. All FX price bands for the given currency cross are contained within the Mass Quote as individual Quote Entries.

Table 12 Example: Mass Quote Message

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = i
QuoteReqID	131	3000000	
QuoteID	117	S5-USDCHF- 2010-4- 22:9.37.2:97	
QuoteType	537	0	Tradable(1) or not (0)
NoQuoteSets	296	1	
QuoteSetID	302	1	
TotQuoteEntries	304	5	
NoQuoteEntries	295	5	
QuoteEntryID	299	S5-USDCHF- 2010-4- 22:9.37.2:97- 0-5000000	
Symbol	55	USD/CHF	Currency pair
Product	460	4	Currency
BidPx	132	1.07226	Bid price
OfferPx	133	1.07246	Offer price
BidSize	134	0	
OfferSize	135	0	
TransactTime	60	20100422- 09:37:02	
FutSettDate	64	20100426	Value date
QuoteEntryID	299	S5-USDCHF- 2010-4-	

		22:9.37.2:97-0-10000000	
Symbol	55	USD/CHF	Currency pair
Product	460	4	Currency
BidPx	132	1.07219	Bid price
OfferPx	133	1.07249	Offer price
BidSize	134	0	
OfferSize	135	0	
TransactTime	60	20100422-09:37:02	
FutSettDate	64	20100426	Value date
QuoteEntryID	299	S5-USDCHF-2010-4-22:9.37.2:97-0-20000000	
Symbol	55	USD/CHF	Currency pair
Product	460	4	Currency
BidPx	132	1.07213	Bid price
OfferPx	133	1.07258	Offer price
BidSize	134	0	
OfferSize	135	0	
TransactTime	60	20100422-09:37:02	
FutSettDate	64	20100426	Value date
QuoteEntryID	299	S5-USDCHF-2010-4-22:9.37.2:97-0-35000000	
Symbol	55	USD/CHF	Currency pair
Product	460	4	Currency

BidPx	132	1.07213	Bid price
OfferPx	133	1.07258	Offer price
BidSize	134	0	
OfferSize	135	0	
TransactTime	60	20100422-09:37:02	
FutSettDate	64	20100426	Value date
QuoteEntryID	299	S5-USDCHF-2010-4-22:9.37.2:97-0-50000000	
Symbol	55	USD/CHF	Currency pair
Product	460	4	Currency
BidPx	132	1.07213	Bid price
OfferPx	133	1.07258	Offer price
BidSize	134	0	
OfferSize	135	0	
TransactTime	60	20100422-09:37:02	
FutSettDate	64	20100426	Value date

*Standard
Trailer*

4.2.2.3 QUOTE REQUEST REJECT

QuoteRequest message may contain a request for several currency pairs. However, only one *quote request rejection* message will be sent even if several are rejected. The diagram in Figure 2 shows the message flow based on a quote request where the request is rejected.

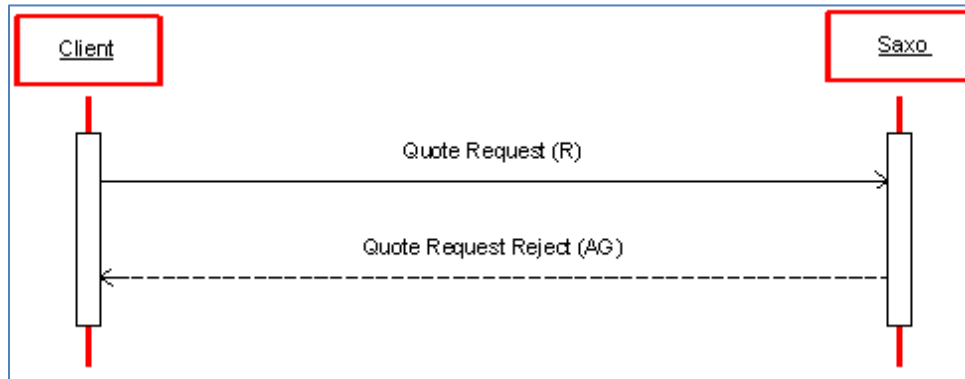


Figure 2 Quote Request Reject Message

Table 10 shows sample Quote Request Reject Message

Table 10 Example: Quote Request Reject Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = AG</i>
QuoteReqID	131	20000000	Quote Request ID
QuoteRequestRejectReason	658	3	Quote Request Reject Reason (Unknown symbol)
NoRelatedSym	146	1	Number of Related Symbols in repeated section
* Symbol	55	EUR/USD	
* OrderQty	38	20000000	
Text	58	3: Band '20000000' not valid for symbol 'EUR/USD'	Reject reason as Text
<i>Standard Trailer</i>			

Example of rejection message returned from Saxo:

8=FIX.4.3 9=178 35=AG 49=SAXOQUOTE_TEST 56=CLIENT_TEST 34=3 57=FX 52=20100107-10:28:32 369=2 131=20000000 658=3 146=1 55=EUR/USD 38=20000000 58=3: Band '20000000' not valid for symbol 'EUR/USD'; 10=094

Things to Remember

1. As described in [section 4.1](#), more than one currency pair and/or volume band can be requested in a single *Quote Request* message. Regardless of the number of requests that are rejected, only one *Quote Request Reject* message will be returned. This message will contain a repeated section (indicated by the asterisk (*)) containing the rejected quotes. The message will also contain a *Reject Reason* (**Tag 658**) and a free text description (**Tag 58**)
2. The existing protocol only allows the use of single reject reason, even if the quote requests have been rejected for different reasons.
3. The enumeration in **tag 658 (QuoteRequestRejectReason)** will contain the reason for the first encountered reject.

4.2.3 MARKET DATA REQUEST

Requests for Market Data are available via the quote session.

The Market Data Request only supports subscribing to these market values:

- Highest client bid (quoted for the requested symbol during the current trading day)
- Lowest client ask (for symbol for the current trading day).

For FX the trading day rolls at 5pm NY time thus resetting the values at that point.

For CFD Indices and CFD on Futures the roll time is usually when the appropriate market opens.

The Market Data request message may contain a request for several currency pairs.

If all or part of the Market Data request is accepted, Market Data snapshot/full refresh will be sent to the client as shown in the diagram below.

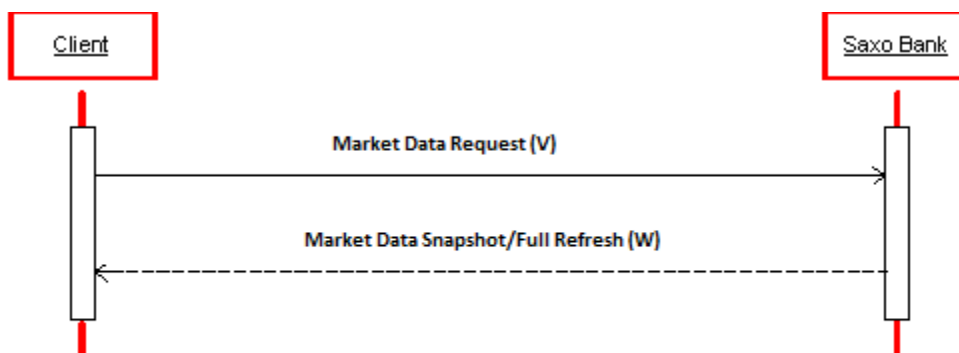


Figure 4 Market Data Request Message Flow: Accept

Table 14 defines the requirements of the Market Data request message.

Table 14 Requirements: Market Data Request Message

NAME	TAG	REQUIRED	DESCRIPTION
MDReqID	262	Y (Y)	Unique identification
SubscriptionRequestType	263	Y (Y)	Must be 1 (Snapshot and updates)
MarketDepth	264	Y (Y)	Must be 1
MDUpdateType	265	Y (Y)	Must be 0 (Full refresh)
NoMDEntryTypes	267	Y (Y)	
Symbol	55	Y(N)	Currency cross
Product	460	Y (N)	4 = Currency

Table 15 shows example of *Market Data Request* message.

Table 15 Example: Market Data Request Message

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header	35	Y (Y)	35 = V
MDReqID	262	Y (Y)	262=MD Request ID
SubscriptionRequestType	263	Y (Y)	263=1
MarketDepth	264	Y (Y)	264=1
MDUpdateType	265	Y (Y)	265=0
NoMDEntryTypes	267	Y (Y)	267=2 Two entries of tag 269
*MDEntryType	269	Y (Y)	269=7 High (best client bid for trading day)
*MDEntryType	269	Y (Y)	269=8 Low (best client ask for trading day)
NoRelatedSym	146	Y (Y)	146=3

			Number of Related Symbols in repeated section
*Symbol	55	Y (Y)	55=EUR/USD
*Product	460	Y (Y)	4 = FX
*Symbol	55	Y (Y)	55=GBP/CAD
*Product	460	Y (Y)	4 = FX
*Symbol	55	Y (Y)	55=GBP/USD
*Product	460	Y (Y)	4 = FX
Standard Trailer			

The tags marked with an asterisk (*) are part of a repeated section, hence it is possible to request Market Data for several currency pairs in the same Market Data Request Message.

Tag 146 (NoRelatedSym) gives the number of sections in the repeated block, please note that tag 146 must come before the repeated section, the same is applicable for tag 267 and tag 269.

However, please note that they will all have the same MDReqID so it will be more difficult to distinguish between the replies/rejects if more symbols are requested, therefore Saxo Bank recommends that a separate Market Data request message is sent for each symbol.

4.2.4 MARKET DATA REQUEST REJECTION

As noted in section 4.2.4, Market Data request message may contain a request for several currency pairs, however, only one Market Data request rejection message will be sent even if several are rejected.

The diagram in Figure 5 shows the message flow based on a market data request where the request is rejected.

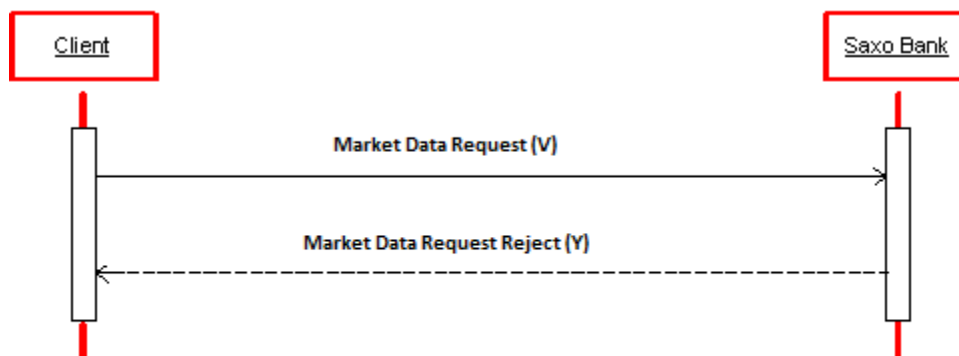


Figure 5 Message Data Request Message Flow: Reject

Table 16 shows example of *Market Data Request Reject* message.

Table 16 Example: Market Data Request Reject Message

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header	35	Y (Y)	35 = V
MDReqID	262	Y (Y)	262= MD Request ID
MDRequestRejectReason	281	Y (Y)	281=0 MD Request Reject Reason (Unknown symbol)
Text	58	Y (Y)	58=Currency 'GBP/CAD' not valid; Currency 'GBP/USD' not valid.
Standard Trailer			

As described in [section 4.2.4](#), more than one currency pair and/or volume band can be requested in one Market Data Request message, regardless of the number of requests that is rejected, only one Market Data Request Reject message will be returned, this message will then contain the Reason (tag 281) for the first rejected symbol and a free text description (tag 58).

Please note, the protocol only allows the use of *one* reject reason, even if the market data requests have been rejected for different reasons. The enumeration in tag 281 (MDRequestRejectReason) will contain the reason for the first encountered reject.

4.2.5 MARKET DATA SNAPSHOT/FULL REFRESH

If the Market Data Request message described in section 4.2.4 is (at least partially) accepted, Market Data Snapshot/Full Refresh will begin to flow to the client.

Data will only flow when the market data has changed (sometimes this may be at trade day roll).

Table 17 shows examples *Market Data Snapshot/Full Refresh Message*.

Table 17 Example: Market Data Snapshot/Full Refresh Message

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header	35	Y (Y)	35 = W
MDReqID	262	Y (Y)	262= MD Request ID Corresponds to the ID sent in the Request.
Symbol	55	Y (Y)	55 = EUR/USD
NoMDEntries	268	Y (Y)	268=2

			Number of Related Symbols in repeated section
MDEntryType	269	Y (Y)	269=7 Highest bid (for band)
MDEntryPx	270	Y (Y)	270=1.3363 Best bid price for t-day (can cross best offer)
MDEntrySize	271	Y (Y)	271=1000000 The Band it corresponds to (not present for CFD's)
MDEntryType	269	Y (Y)	269=8 Lowest offer (for band)
MDEntryPx	270	Y (Y)	270=1.3364 Best offer price for t-day (can cross best bid)
MDEntrySize	271	Y (Y)	271=1000000 The Band it corresponds to (not present for CFD's)
MDEntryType	269	Y (Y)	269=7 Highest bid (for band)
MDEntryPx	270	Y (Y)	270=1.3365 Best bid price for t-day (can cross best offer – does here)
MDEntrySize	271	Y (Y)	271=200000 Band it corresponds to (not present for CFD's)
MDEntryType	269	Y (Y)	269=8 Lowest offer (for band)
MDEntryPx	270	Y (Y)	270=1.3362

			Best offer price for t-day
MDEntrySize	271	Y (Y)	271=2000000 The Band it corresponds to (not present for CFD's)
Standard Trailer			

Note: We only reply to Market Data requests to clients that are subscribing and receiving streaming quotes for the relevant currency pairs. It is not possible to just receive the Market Data messages.

4.2.6 FX TRADE

4.2.6.1 PLACING AN FX ORDER

The diagram in Figure 6 shows the message flow for a Single Order (trade request).

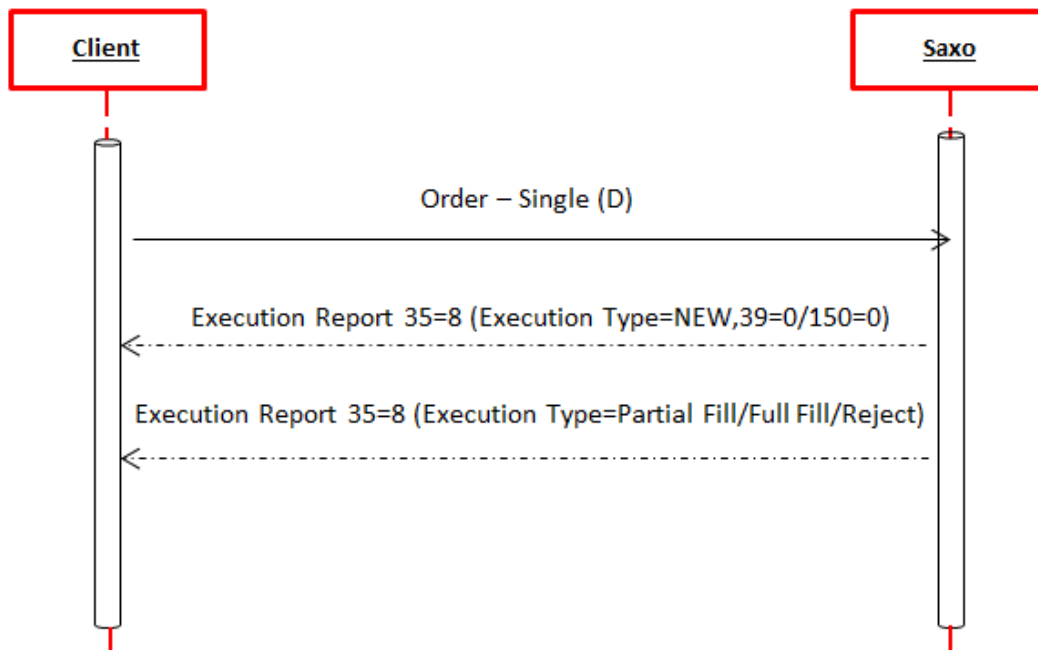


Figure 6 Trade Request Message Flow: Place

Things to Remember

1. By default, Market Orders are executed with **FOK** duration, unless Market IOC or Limit IOC duration specified in the order request.
2. Market orders are valid up to the largest band configured and subscribed for the client for each cross.

Example: If you have two bands, both 5M and 10M bands for EURUSD. You can place Market orders up to 10M. Orders of 9M EURUSD are fine, orders for 11M EURUSD will be rejected.

Note: Market orders are subject to Liquidity Control. A 2M Market order on a cross, if filled, reduces the streaming liquidity by 2M for the traded cross.

3. Market IOC and Limit IOC orders can be filled in several partial amounts and so reported in several execution reports. The full order amount may not be filled on an IOC: the remaining amount will be rejected. This will occur when the underlying market liquidity cannot support the full order amount.

Please see Sample for a Market IOC order request in Table 18 and responses in Table 19-25.

Table 18 Example: Order – Single Message (Trade Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = D</i>
ClOrderID	11	36866	Client Order ID (max 32 characters)
Account	1	NIKHIL_B2BTEST	Account to book order
HandlInst	21	1	Automated execution order, private, no Broker intervention
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
TransactTime	60	20161124-08:55:36	
OrderQty	38	900000	Order Quantity
OrdType	40	1	40=1 - For Market Orders 40=2 - For Limit Orders
TimeInForce	59	3	IOC If Time In Force not specified, by default the order will be executed with Fill Or Kill (FOK) duration. 59=3 Required for IOC duration. 59=0 Required for Day duration. 59=1 Required for GTC duration.

Price	44	1.05	Limit Price - only required on Limit order types (40=2).
EchoPositionID	12113	Y	Returns the Saxo Position ID
<i>Standard Trailer</i>			

Example for a Market IOC Order – Single sent from Client to Saxo:

8=FIX.4.39=17635=D34=1849=B2BSENDER50=FX52=20161124-
 08:55:36.54656=SAXOBANK115=21473091091=NIKHIL_B2BTEST11=3686621=138=900000**40**=154=155=EUR/USD**59**=**360**=20161124-08:55:36460=410=115

Sample *Execution Report* – New in Table 19 is an example of an accepted trade.

Table 19 Example: **Execution Report Message (New)**

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	1702844	Saxo Order ID
ClOrdID	11	36866	Client Order ID (max 32 characters)
ExecID	17	127553544289667630	Execution message ID
ExecType	150	0	New
OrdStatus	39	0	New
FutSettDate	64	20110810	
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	900000	Order Quantity
OrdType	40	1	Market
TimeInForce	59	3	IOC - Specifies how long the order remains in effect.
TransactTime	60	20110808-12:13:04	

HandInst	21	1	Automated execution order, private, no Broker intervention
----------	----	---	---

Standard Trailer

Example of Execution report New for a Market IOC Order - returned from Saxo to client:

8=FIX.4.39=24835=849=SAXOBANK56=B2BSENDER115=214730910934=1857=FX52=20161124-
08:55:37.921369=1837=4798955311=3686617=1312445133660896703150=039=064=2016112855=EUR/USD460=454=238=900000
40=159=3151=90000014=06=060=20161124-08:55:37.92121=110=101

Following the execution report (New) acknowledgement, sent by Saxo, the order can be executed/filled with the either of the below scenarios,

- Partial Fill followed by a Full Fill – The order was executed in partial manner (partial order amount) ending with a full fill for the remaining amount.
- Partial Fill followed by Cancel Remaining – The order was executed in partial manner (partial order amount) ending with a cancel for the remaining amount.
- Full Fill - The entire order amount filled.
- Rejected – The order was completely rejected described in section 4.2.7.

4.2.6.1.1 PARTIAL FILL FOLLOWED BY A FULL FILL

Partial Fill followed by A_Full Fill – The order was executed in partial manner (partial order amount) ending with a full fill for the remaining amount.

Please see FIX sample of an order response (execution report – Partial Fill then Full Fill) message in Tables 20-22.

In this scenario the order for Buy 900,000 EUR/USD was executed in 3 execution reports, with 2 partial fills and ending with a full fill for the remaining amount.

Table 20 Example: 1st Execution Report Message (Trade – 1st Partial Fill then Full Fill)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	1702844	Saxo Order ID
ClOrdID	11	36866	Client Order ID (max 32 characters)
ExecID	17	1312445133804648544	Execution message ID

ExecType	150	F	Fill
OrdStatus	39	1	Partially filled
FutSettDate	64	20110810	
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	900000	Order Quantity
OrdType	40	1	Market
TimeInForce	59	3	IOC - Specifies the duration of the order.
LastQty	32	25000	Quantity of this fill. Required if ExecType = F, Note that 25000 was filled out of the 900000 original requested amount.
LastPx	31	1.05565	Price of this fill. Required if ExecType = F
LeavesQty	151	875000	Remaining Quantity from the original order request: LeavesQty = OrderQty - CumQty
CumQty	14	25000	Cumulative quantity
AvgPx	6	1.05565	Average price
TransactTime	60	20110808-12:13:04	
HandlInst	21	1	Automated execution order, private, no Broker intervention
PositionID	12114	1361033736	Saxo Position ID
<i>Standard Trailer</i>			

Example of Execution report Trade for a Market IOC Order returned from Saxo to client:

08:55:38.046 Out(318): 8=FIX.4.39=29535=849=SAXOBANK56=B2BSENDER115=214730910934=1957=FX52=20161124-
08:55:38.046369=1837=4798955311=3686617=1312445133804648544**150=F39=11**=NIKHIL_B2BTEST64=2016112855=EUR/USD460
=454=238=900000**40=159=332=2500031=1.05565151=87500014=250006**=1.0556560=20161124-08:55:38.00021=110=154

Table 21 Example: 2nd Execution Report Message (Trade – 2nd Partial Fill then Full Fill)

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = 8
OrderID	37	1702844	Saxo Order ID
ClOrdID	11	36866	Client Order ID (max 32 characters)
ExecID	17	1312445133812461145	Execution message ID
ExecType	150	F	Fill
OrdStatus	39	1	Partially filled
FutSettDate	64	20110810	
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	900000	Order Quantity
OrdType	40	1	Market
TimeInForce	59	3	IOC - Specifies the duration of the order.
LastQty	32	25000	Quantity of this fill. Required if ExecType = F, Note that 50000 was filled out of the 900000 original requested amount.
LastPx	31	1.05565	Price of this fill. Required if ExecType = F
LeavesQty	151	850000	Remaining Quantity from the original order request: LeavesQty = OrderQty - CumQty
CumQty	14	50000	Cumulative quantity
AvgPx	6	1.05565	Average price

TransactTime	60	20110808-12:13:04	
HandlInst	21	1	Automated execution order, private, no Broker intervention
PositionID	12114	1361033736	Saxo Position ID
<i>Standard Trailer</i>			

Example of Execution report Trade for a Market IOC Order returned from Saxo to client:

8=FIX.4.39=29535=849=SAXOBANK56=B2BSENDER115=214730910934=2057=FX52=20161124-08:55:38.124369=1837=4798955311=3686617=1312445133812461145**150=F39=11**=NIKHIL_B2BTEST64=2016112855=EUR/USD460=454=238=900000**40=159=332=2500031=1.05565151=85000014=500006**=1.0556560=20161124-08:55:38.00021=110=123

Table 23 Example: **3rd Execution Report Message (Trade – Full Fill for the remaining amount)**

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	1702844	Saxo Order ID
ClOrdID	11	36866	Client Order ID (max 32 characters)
ExecID	17	1312445133890587146	Execution message ID
ExecType	150	F	Fill
OrdStatus	39	2	Fill
FutSettDate	64	20110810	
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	900000	Order Quantity
OrdType	40	1	Market
TimeInForce	59	3	IOC - Specifies the duration of the order.

LastQty	32	850000	Quantity of this fill. Required if ExecType = F, Note that the remaining amount 850000 was filled out of the 900000 original requested amount.
LastPx	31	1.05713	Price of this fill. Required if ExecType = F
LeavesQty	151	0	Remaining Quantity from the original order request: LeavesQty = OrderQty - CumQty
CumQty	14	900000	Cumulative quantity
AvgPx	6	1.05713	Average price
TransactTime	60	20110808-12:13:04	
HandlInst	21	1	Automated execution order, private, no Broker intervention
PositionID	12114	1361033736	Saxo Position ID
<i>Standard Trailer</i>			

Example of Execution report Trade for a Market IOC Order returned from Saxo to client:

```
88=FIX.4.3 9=295 35=8 49=SAXOBANK 56=B2BSENDER 115=2147309109 34=20 57=FX 52=20161124-08:55:38.1243 69=18
37=47989553 11=36866 17=1312445133812461145 150=F 39=2 1=NIKHIL_B2BTEST 64=20161128 55=EUR/USD 460=4 54=2
38=900000 40=1 59=3 32=850000 31=1.05713 151=0 14=900000 6=1.05713 60=20161124-08:55:38.000 21=11
```

4.2.6.1.2 PARTIAL FILL FOLLOWED BY CANCEL REMAINING AMOUNT

Partial Fill then Cancel Remaining Amount – The order was executed in partial manner (partial order amount filled) ending with a cancel for the remaining amount.

Please see FIX sample of an order response (execution report – Partial Fill then Cancel Remaining Amount) message in Tables 24.

The example contains a message of a cancelation of the remaining amount, as partial fill messages samples where already included in previous example (see Partial Fill followed by Full Fill section above).

In this scenario the order for Buy 900,000 EUR/USD was executed in 3 execution reports, with 2 partial fills executing 50,000 from the requested amount, and the last execution report, **canceled the remaining amount (850,000)**.

Table 24 Example: **3rd Execution Report Message (Trade – Cancel Remaining Amount)**

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = 8
OrderID	37	1702844	Saxo Order ID
ClOrdID	11	36866	Client Order ID (max 32 characters)
ExecID	17	1312445133890587146	Execution message ID
ExecType	150	4	Cancel
OrdStatus	39	4	Cancel
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	900000	Order Quantity
OrdType	40	1	Market
TimeInForce	59	3	IOC - Specifies the duration of the order.
LastQty	32	0	Quantity of this fill. Required if ExecType = F, Note that the remaining amount 850000

			was filled out of the 900000 original. requested amount.
LastPx	31	1.05565	Price of this fill. Required if ExecType = F
LeavesQty	151	850000	Remaining Quantity from the original order request: LeavesQty = OrderQty - CumQty
CumQty	14	50000	Cumulative quantity
AvgPx	6	1.05565	Average price
TransactTime	60	20110808-12:13:04	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Description	58	244: Order Cancelled	Free format text string
<i>Standard Trailer</i>			

Example of Execution report Trade for a Market IOC Order returned from Saxo to client:

8=FIX.4.39=30335=849=SAXOBANK56=B2BSENDER115=214730910934=2157=FX52=20161124-08:55:38.905369=1837=4798955311=3686617=1312445133890587146150=439=41=NIKHIL_B2BTEST55=EUR/USD460=454=238=90000040=159=332=031=1.05565151=85000014=500006=1.0556560=20161124-08:55:39.00021=158=244: Order Cancelled10=173

4.2.7 TRADE REJECTION/CANCELLATION/EXPIRY

Execution reports for trades that are not accepted/filled can be reported with one of these execution types, rejection, cancellation or expiry.

The diagram in Figure 5 shows the message flow for a Single Order (trade request) that is rejected.

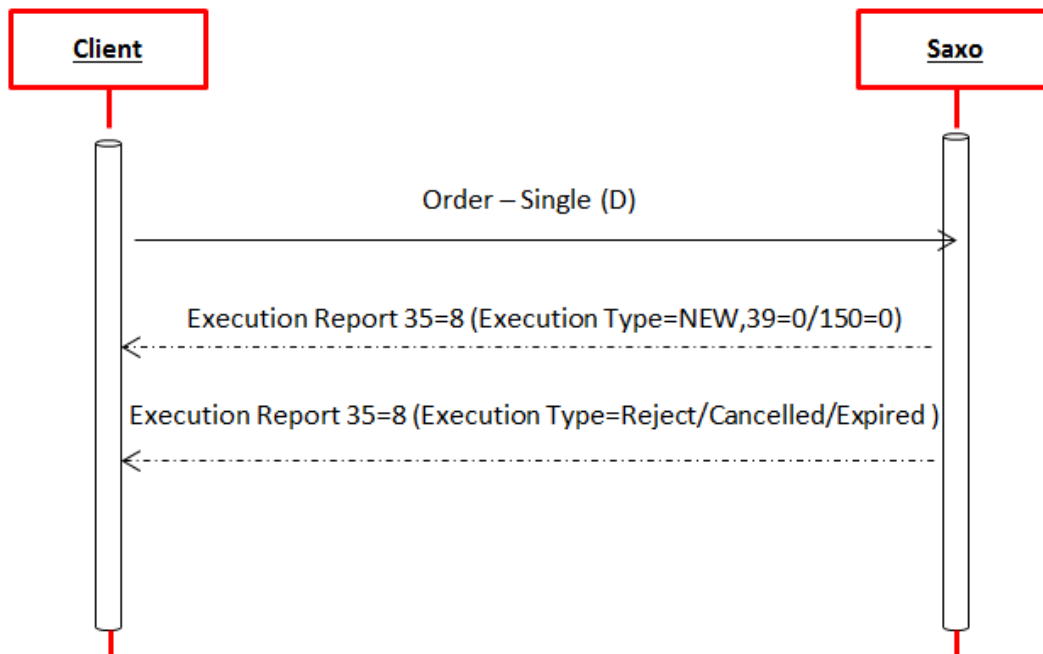


Figure 5 Trade Request Message Flow: Reject

Things to Remember

1. The standard FIX protocol has 13 defined order reject reasons (**Tag 103: OrdRejReason**).
2. To accommodate an improved error handling of rejected trades in SAFT, a number of extra rejection reasons have been defined. These are described in [section 8.1.5.3](#) to [section 8.1.5.15](#).

Sample of Trade Rejection for a Limit IOC order (Sell 2100000 EUR/USD at 1.05) can be found in Table 26.

Sample of Trade Cancellation for a Limit IOC order (Sell 1600000 EUR/USD at 1.05) can be found in Table 27.

Sample of Trade Expiry for a Limit IOC order (Sell 2100000 EUR/USD at 1.05) can be found in Table 28.

Table 26 shows sample execution report for Trade Reject.

Table 26 Example: Execution Report Message (Limit IOC Order Rejected)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	47989545	Order ID
ClOrderID	11	1702849	Client Order ID
ExecID	17	127553544350296122	Execution message ID
ExecType	150	8	Rejected
OrdStatus	39	8	Rejected
Symbol	55	EUR/USD	Currency Pair
Product	460	4	Currency
Side	54	2	Sell
OrderQty	38	2100000	Order Quantity
OrdType	40	2	Order Type (Limit)
Price	44	1.05	Client Price
LeavesQty	151	2100000	LeavesQty = OrderQty – CumQty
TimeInForce	59	3	Duration: IOC
CumQty	14	0	Cumulative quantity
AvgPx	6	0	Average price
HandlInst	21	1	Automated execution order, private, no Broker intervention
Text	58	Market Price Not Matched	228:IOC order rejected as market price did not match client fill level
<i>Standard Trailer</i>			
<i>Standard Header</i>			<i>MsgType = 8</i>

Note: There are scenarios where Tag 130 be included in the reject message.

Table 27 shows sample execution report for Trade Reject.

Table 27 Example: Execution Report Message (Limit IOC Order Canceled)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	47989557	Order ID. <i>Is always 0 (zero) on trade rejects.</i>
ClOrderID	11	56326	Client Order ID
ExecID	17	13124456096171515618	Execution message ID
ExecType	150	4	Canceled
OrdStatus	39	4	Canceled
Account	1	B2BTEST	Client Account
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	2	Sell
OrderQty	38	1600000	Order Quantity
OrdType	40	2	Order Type (Limit)
Price	44	1.05	Client Price
LeavesQty	151	1600000	LeavesQty = OrderQty – CumQty
TimeInForce	59	3	Duration: IOC
LastQty	32	0	Always Set to 0
LastPX	31	0	Always Set to 0
CumQty	14	0	Cumulative quantity
AvgPx	6	0	Average price
HandlInst	21	1	Automated execution order, private, no Broker intervention
TransactTime	60	60=20161124-10:14:56.000	Transaction Time

Text	58	Order Cancelled	244: Order Cancelled
<i>Standard Trailer</i>			
<i>Standard Header</i>			<i>MsgType = 8</i>

Table 28 shows sample execution report for Trade Expiry.

Table 28 Example: Execution Report Message (Limit IOC Order Expired)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	47989558	Order ID. <i>Is always 0 (zero) on trade rejects.</i>
ClOrderID	11	35850	Client Order ID
ExecID	17	13124456439125270423	Execution message ID
ExecType	150	C	Expired
OrdStatus	39	C	Expired
Account	1	B2BTEST	Client Account
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	2	Sell
OrderQty	38	2100000	Order Quantity
OrdType	40	2	Order Type (Limit)
Price	44	1.05	Client Price
LeavesQty	151	2100000	LeavesQty = OrderQty – CumQty
TimeInForce	59	3	Duration: IOC
LastQty	32	0	Always Set to 0
LastPX	31	0	Always Set to 0
CumQty	14	0	Cumulative quantity

AvgPx	6	0	Average price
HandlInst	21	1	Automated execution order, private, no Broker intervention
TransactTime	60	60=20161124-10:14:56.000	Transaction Time
Standard Trailer			
Standard Header			MsgType = 8

4.2.8 FX SPOT LIQUIDITY CONTROL

This section describes how the liquidity control of the Server works.

Things to Remember

1. Each quote sent by Saxo contains both a price and a trade size. As long as the client trades below this trade size, the limit control will never result in a trade rejection.
2. Re-capture 'N' millions per currency cross per side per 't' seconds.

EXAMPLE: (ASSUME WE ARE TRADING EUR/USD)

Assume streaming liquidity on a particular instrument is: 10 million
Liquidity reload amount: "1 million per 30 seconds"

Alert: Please note that all values are examples only. Actual values may differ.

The example is illustrated in Table 21. In the *Direction* column, *In* indicates messages received by Saxo, and *Out* indicates messages sent by Saxo.

At 00:00 a quote is sent out. The client trades at 00:00 on Q1 and at 01:00 on Q2.

At 05:30 we are back to the full liquidity amount again.

Table 26 shows liquidity control: How reload time and reload amount works is shown in Table 26.

Table 26: Example: FX Spot Liquidity Control

MM:SS	DIRECTION	DESCRIPTION
00:00	Out	Quote send (QuoteID=Q1) (10 mill EUR/USD left to trade on)
00:00	In	Trade request for 5 mill (TradeID=T1) (10 - 5 = 5 left)

00:01	Out	Trade response (TradeID=T1) : Success
00:01	Out	Quote send (QuoteID=Q2) (5 mill EUR/USD left to trade on)
00:30	Out	Quote send (QuoteID=Q3) (6 mill EUR/USD left to trade on)
01:00	In	Trade request for 5 mill (TradeID=T2) (6 - 5 = 1 left)
01:01	Out	Trade response (TradeID=T2) : Success
01:01	Out	Quote send (QuoteID=Q3) (1 mill EUR/USD left to trade on)
01:30	Out	Quote send (QuoteID=Q4) (2 mill EUR/USD left to trade on)
02:00	Out	Quote send (QuoteID=Q5) (3 mill EUR/USD left to trade on)
02:30	Out	Quote send (QuoteID=Q6) (4 mill EUR/USD left to trade on)
03:00	Out	Quote send (QuoteID=Q7) (5 mill EUR/USD left to trade on)
03:30	Out	Quote send (QuoteID=Q8) (6 mill EUR/USD left to trade on)
04:00	Out	Quote send (QuoteID=Q9) (7 mill EUR/USD left to trade on)
04:30	Out	Quote send (QuoteID=Q10) (8 mill EUR/USD left to trade on)
05:00	Out	Quote send (QuoteID=Q11) (9 mill EUR/USD left to trade on)
05:30	Out	Quote send (QuoteID=Q12) (10 mill EUR/USD left to trade on)

EXAMPLE: IF A TRADE REQUEST IS REJECTED, THE AVAILABLE LIQUIDITY REMAINS UNCHANGED

If the second trade request *Trade T2* at 01:00 had been rejected, 6 million would have been available at 01:01 in the example above.

Things to Remember

1. Buy-side and sell-side are independent.
2. If we continue the example in Table we can buy 5 million in EUR/USD and for the next couple of minutes buy an additional 5 million and sell 10 million.

The diagram in Figure 6 shows the example from Table 26.

EXPLANATION

Liquidity Control and available executable liquidity can be monitored via the Quote Session with every quote streamed to the client: **Tag (134) Bid Liquidity** and **Tag (135) Ask Liquidity**.

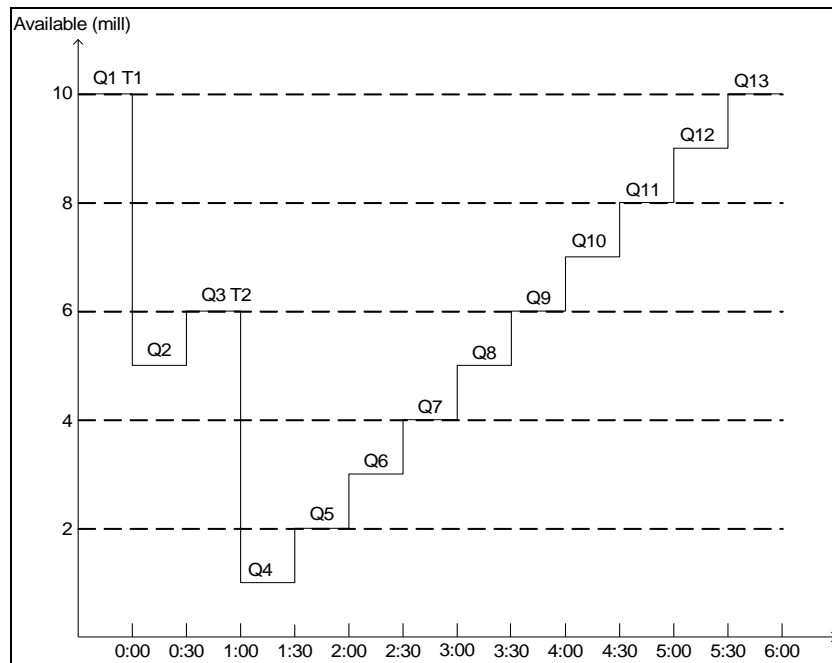


Figure 6 FX Spot Liquidity Control

Example of quote sent to client from Saxo:

```
8=FIX.4.3 9=234 35=S 49=SAXOQUOTE_TEST 56=CLIENT_TEST 34=35 57=FX 52=20100107-10:28:35 369=18 131=5000000
117=CLIENT-EURGBP-2010-1-7:10:28:35:3-5000000 537=1 55=EUR/GBP 460=4 132=0.90093 133=0.90107 134=5000000
135=5000000 60=20100107-10:28:35 64=20100111 10=208
```

4.2.9 VOLUME BANDS

As described in section 2.2, it is possible to subscribe to more than one volume band.

Saxo Bank defines the size of the volume band(s).

Please note that it is not possible to have a maximum liquidity greater than the maximum value of the highest volume band.

When price changes occur, quotes for all bands are streamed to the client.

Example 1:

Assume that a client has three bands for EUR/USD:

- Up to 2 million
- Between 2 and 5 million

- Between 5 and 10 million.

Assume that the maximum liquidity of the client is 10 million.

Assume that the client wants to buy 7 million EUR/USD.

If this 7 million EURUSD trade is accepted, the maximum trade size for the three bands will now be 0 for the first band (up to 2 million), 0 for the middle band (between 2 and 5 million) and 3 for the high band (between 5 and 10 million).

As time passes, the liquidity control will increase the maximum trade sizes of the bands.

The example is illustrated in chart 1. The trade of the 7 million occurs between t1 and t2 in the figure. The white, checkered and black bar are the first, second and third volume band respectively.

Available (mill):

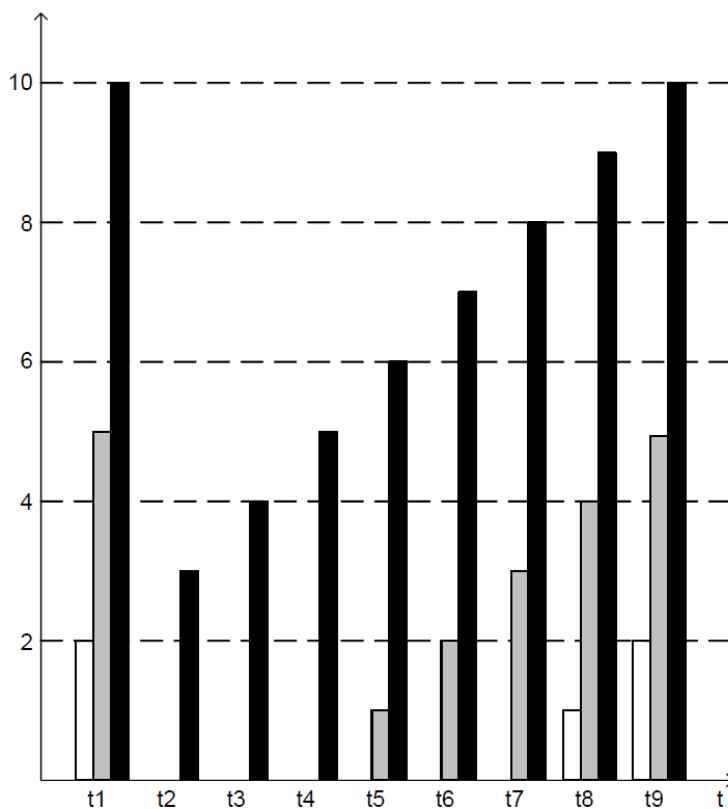


Chart 1 Example: Volume Bands – Example 1

Example 2:

Assume that a client has three bands for EUR/USD:

- Up to 2 million
- Between 2 and 5 million
- Between 5 and 10 million.

Assume that the maximum liquidity of the client is 10 million.

Assume that the client wants to buy 3 million EUR/USD.

If the client wants to buy only 3 million EUR/USD (and the trade is accepted), the max size for the first band is 0, 2 for the second band and 7 for the third band.

The above example is illustrated in chart 2. The client buys the 3 million between t1 and t2 in the figure. The white, checkered and black bar are the first, second and third volume band respectively.

Available (mill):

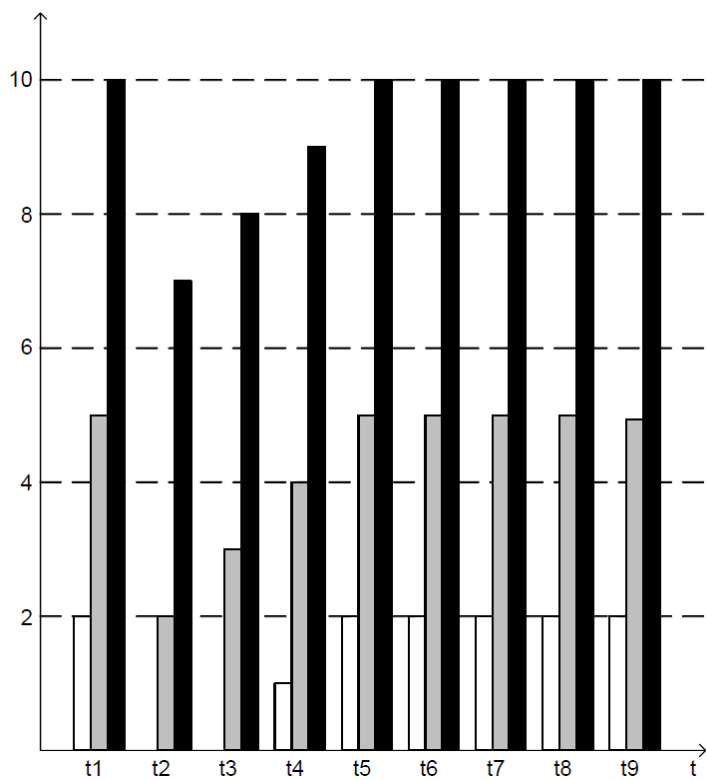


Chart 2 Example: Volume Bands – Example 2

4.3 ORDER CANCEL/REPLACE/RELATED

This section defines the message requirements for order cancel, replace and related orders.

Table 27 Application Messages: Order Placement

NAME	MESSAGE TYPE
Order Cancel Request	F
Order Cancel/Replace Request (also known as Amend)	G
Related orders (IF-Done and OCO)	E

Things to Remember

1. The sequence diagrams only show the normal message flow, which may change due to latency in the network.
2. According to the FIX protocol, the value in the parentheses “()” in the Required-column in some of the coming tables is the requirement according to the FIX protocol.
3. For all sequence diagrams in the coming sections: Neither network latency nor user intervention is considered, in the form of submitting cancel requests before receiving an order placement confirmation. The scenario where a user request is rejected due to the order being filled is not described.

4.3.1 FX SPOT AND SPOT METALS

This section describes the requirements of the messages listed in Table 27 with regard to FX orders.

4.3.1.1 STOP ORDER

Table 28 shows an example of an Order – Single message for a Stop order.

Table 28 Example: FX: Order – Single Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = D</i>
ClOrderID	11	1709477122	Client Order ID (max 32 characters)
Account	1	B2B_Test4_USD	
FutSettDate	64	20100109	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Symbol	55	EUR/USD	Symbol
Product	460	4	Currency
Side	54	1	Buy
TransactTime	60	20100131-09:31:58	Time of transaction
OrderQty	38	10000000	Quantity ordered
OrdType	40	3	Stop
StopPx	99	1.20825	Stop price per unit of quantity
TimeInForce	59	0	Day order
<i>Standard Trailer</i>			

8=FIX.4.3 9=137 35=D 34=161 49=CLIENT_TEST 50=FX 52=20100107-11:47:42.615 56=SAXOTRADE_TEST 11=1709477122 1=B2B_Test4_USD 64=20100109 21=1 55=EUR/USD 460=4 54=1 60=20100131-09:31:58 38=10000000 40=3 99=1.20825 59=0 10=107

If the order request shown in Table 28 is accepted, the resulting execution report can be seen in Table 29.

Table 29 Example: FX: Execution Report Message (Accept Order Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	2472811	Saxo Order ID
ClOrdID	11	1709477122	Client Order ID (max 32 characters)
ExecID	17	127752247178115774	Unique identifier of execution message
ExecType	150	0	New
OrdStatus	39	0	New
Account	1	Demo_1234567	
FutSettDate	64	20100111	
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	10000000	Quantity ordered
OrdType	40	3	Stop
StopPx	99	1.20825	Stop price per unit of quantity
TimeInForce	59	0	Day order
LeavesQty	151	10000000	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
HandlInst	21	1	Automated execution order, private, no Broker intervention
<i>Standard Trailer</i>			

```
8=FIX.4.3 9=301 35=8 49=SAXOTRADE_TEST 56=CLIENT_TEST 34=243 57=FX 52=20100107-12:27:30 37=2472811 11=1709477122
17=127752247178115774 150=0 39=0 1=Demo_1234567 64=20100111 55=EUR/USD 460=4 54=1 38=10000000 40=3 99=1.20825
59=0 151=10000000 14=0 6=0 21=1 10=210
```

If a placed order is filled the flow will be as shown in Figure 9.

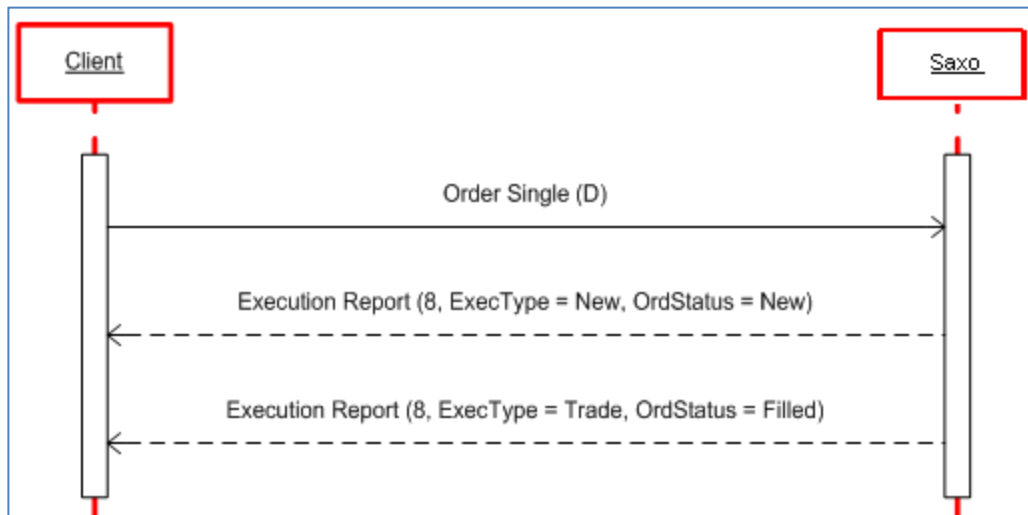


Figure 9 Place Order Message Flow (FX): Filled

The execution report shown in Table 30 is an example of an order being filled.

Table 30 Example: FX: Execution Report Message (Order Filled)

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = 8
OrderID	37	2472811	Saxo Order ID
ClOrdID	11	1709477122	Client Order ID (max 32 characters)
ExecID	17	127718728096257324	Unique identifier of execution message
ExecType	150	F	Trade
OrdStatus	39	2	Filled
FutSettDate	64	20051102	Specific date of trade settlement (SettlementDate) in YYYYMMDD format
Symbol	55	EUR/USD	
Product	460	4	Currency
Side	54	1	Buy

OrderQty	38	1000000	Quantity ordered
OrdType	40	3	Stop
StopPx	99	1.20825	Price per unit of quantity
TimeInForce	59	1	Good Till Cancelled (GTC)
LastQty	32	1000000	Quantity bought - sold on this (last) fill
LastPx	31	1.20825	Price on this (last) fill
LeavesQty	151	0	Quantity open for further execution
CumQty	14	1000000	Total quantity filled
AvgPx	6	1.20825	Calculated average price of all fills on this order
TransactTime	60	20051031-14:26:50	Time of execution
HandlInst	21	1	Automated execution order, private, no Broker intervention

Standard Trailer

If the order request is rejected, an *execution report* with ExecType = 8 (Rejected) will be sent back to the client. This is shown in Figure 10.

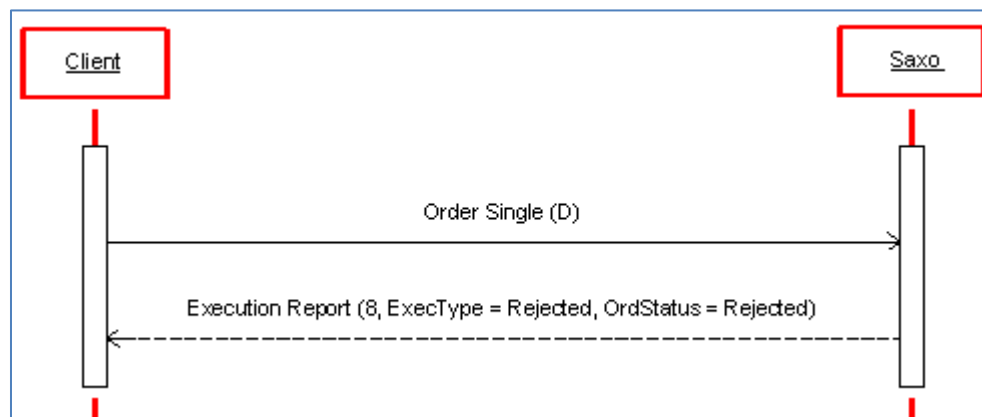


Figure 10 Place Order Message Flow (FX): Rejected

The *execution report* shown in Table 31 is an example of the message sent if a request to place a market order is rejected.

Table 31 Example: FX: Execution Report Message (Rejected Order Request) As the order placement request is rejected, the Server returns OrderID equal to "0"

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	0	Saxo Order ID
ClOrdID	11	1398315264	Client Order ID (max 32 characters)
ExecID	17	127740092411454274	Unique identifier of execution message
ExecType	150	8	Rejected
OrdStatus	39	8	Rejected
OrdRejReason	103	1	Unknown symbol
Symbol	55	USD/JPY	
Product	460	4	Currency
Side	54	1	Buy
OrderQty	38	1000000	Quantity ordered
OrdType	40	1	Market
TimeInForce	59	0	Day Order
LeavesQty	151	1000000	
CumQty	14	0	
AvgPx	6	0	
HandleInstr	21	1	Automated execution order, private, no Broker intervention
Text	58	99: USD/JPY always rejected in SAFT system	
<i>Standard Trailer</i>			

4.3.1.2 ORDER CANCEL

Things to Remember

1. If the client wishes to cancel a working order, an *Order Cancel* request should be sent.
2. Client will not receive an execution report with order status **PendingCancel (OrdStatus = 6)**.

The diagram in Figure 11 shows the flow of an order cancel request being accepted (with the *initial order place* request first).

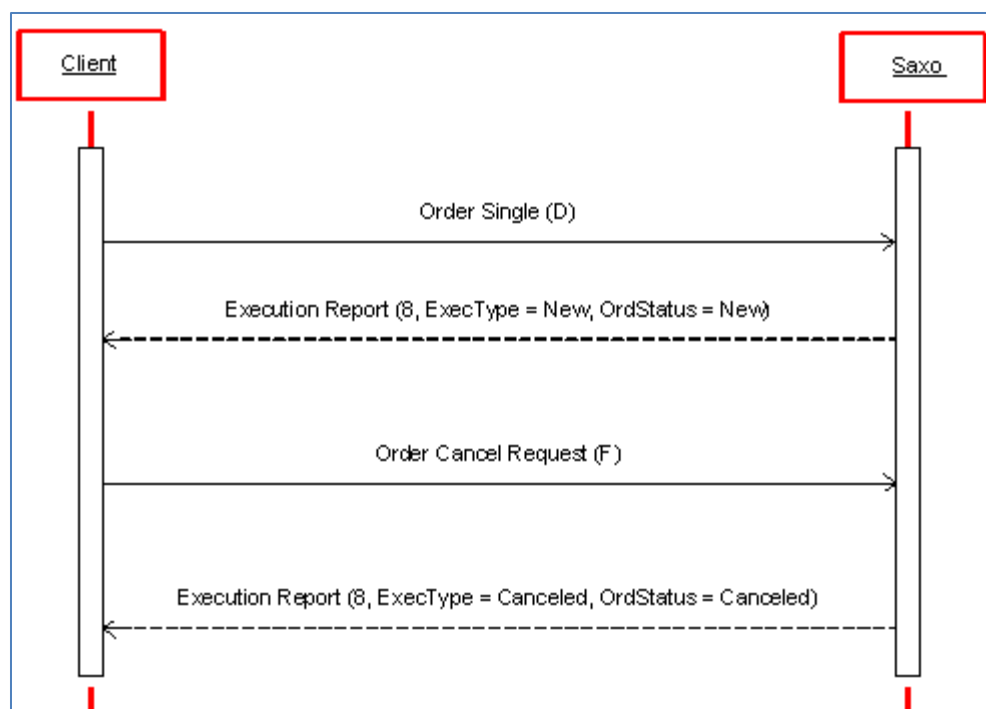


Figure 11 Cancel Order Message Flow (FX): Accept

The requirements of the Order Cancel message are shown in Table 32.

Table 32 Requirements: FX: Order Cancel

NAME	TAG	REQUIRED	DESCRIPTION
OrderID	37	Y (N)	Order ID
Product	460	Y (N)	4 = CURRENCY
Symbol	55	Y (N)	e.g. EUR/USD

An example of *order cancel* request is shown in Table 32 and the response in Table 33.

Table 33 Example: FX: Order Cancel Request Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = F</i>
OrigClOrdID	41	1714486017	
OrderID	37	2475481	Saxo Order ID
ClOrdID	11	1714489859	Client Order ID (max 32 characters)
Symbol	55	AUD/CAD	
Product	460	4	Currency
Side	54	2	Sell
TransactTime	60	20051031-14:58:19	
<i>Standard Trailer</i>			

The execution report shown in Table 33 is an example of an *accepted order cancel* request.

Table 33 Example: FX: Execution Report Message (Accept Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	2475481	Saxo Order ID
ClOrdID	11	1714489859	Client Order ID (max 32 characters)
OrigClOrdID	41	1714486017	
ExecID	17	127752442985926250	
ExecType	150	4	Cancelled
OrdStatus	39	4	Cancelled
Symbol	55	AUD/CAD	
Product	460	4	Currency
Side	54	2	Sell
OrderQty	38	1000000	Quantity ordered

LeavesQty	151	0
CumQty	14	0
AvgPx	6	0
<i>Standard Trailer</i>		

The flow for a rejected order cancel request can be seen in Figure 12.

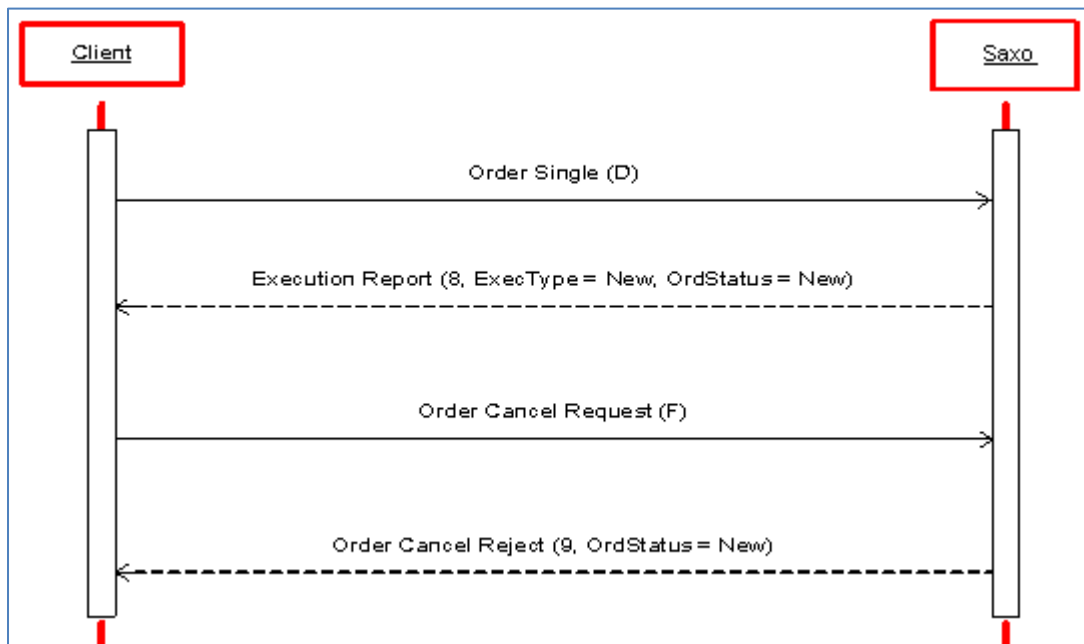


Figure 12 Cancel Order Message Flow FX: Rejected

Things to Remember

The client will not receive an *execution report*. However, an *order cancel reject* message will be sent if the cancel request is rejected.

An example of an order cancel reject message as response to a cancel request is shown below in Table 34.

Table 34 Example: FX: Order Cancel Reject Message (Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 9</i>
OrderID	37	NONE	Saxo Order ID

ClOrdID	11	1714260251	Client Order ID (max 32 characters)
OrigClOrdID	41	1714203651	
OrdStatus	39	0	New
CxlRejResponseTo	434	1	Order Cancel Request
CxlRejReason	102	1	Unknown order
<i>Standard Trailer</i>			

4.3.1.3 ORDER CANCEL/REPLACE (AMEND)

Things to Remember

1. If the client wishes to amend a working order, an *Order Cancel/Replace* request must be sent. This will be described as an Amend request.
2. Like *cancel request*, the client will not receive an execution report indicating the pending state, here **PendingReplace (OrdStatus = E)**

The diagram in Figure 13 shows the flow of an accepted amend request. For completeness, the initial order place request is also shown.

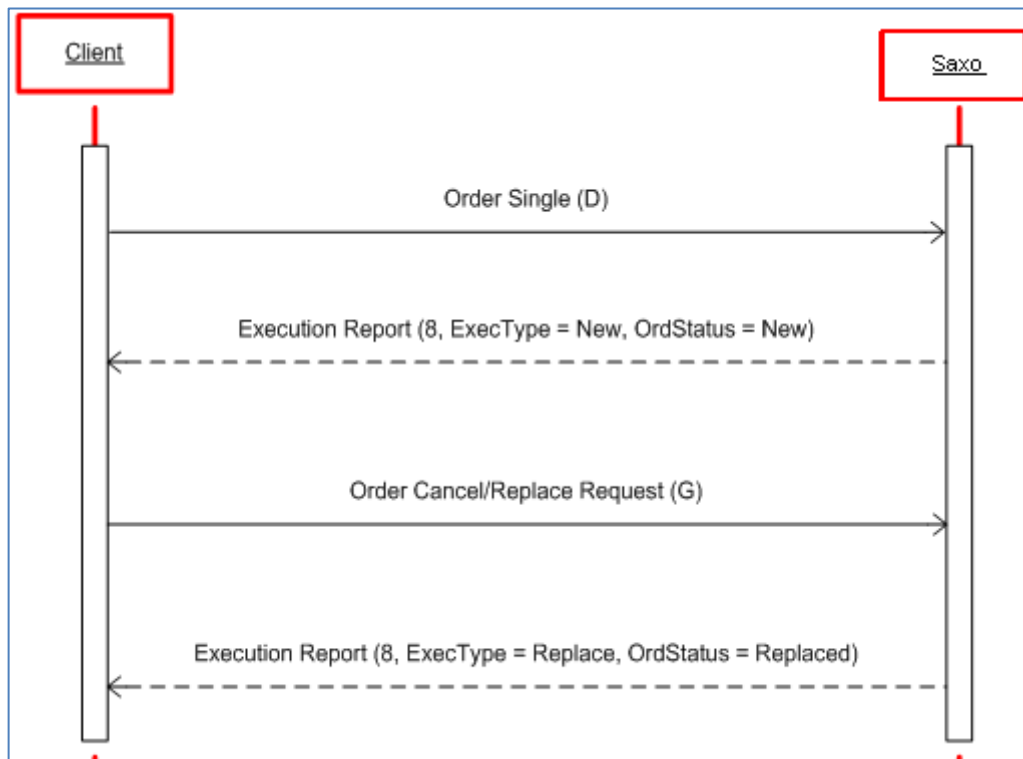


Figure 13 Amend Order Message Flow (FX): Accept

The requirements of the Amend message are shown in Table 35.

Table 35 Requirements: FX: Order Cancel/Replace (Amend)

NAME	TAG	REQUIRED	DESCRIPTION
OrderID	37	Y (N)	Order ID
Account	1	Y (N)	Provided to client by Saxo
HandlInst	21	Y (Y)	1 = Automated execution order, private, no Broker intervention
Product	460	Y (N)	4 = CURRENCY
Symbol	55	Y (N)	Example: EUR/USD

EXAMPLE

An example of an amend request is shown below.

Table 33 shows the message for amending request. It's response is shown in Table 34. The working order being amended is a Limit Sell 5.000.000 AUD/CAD @ 0.88. It is being amended to a Limit Sell 4.000.000 AUD/CAD @ 0.89

An example of an amend request is shown in Table 34.

Table 36 Example: FX - Amend Request Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = G</i>
OrderID	37	2745557	Saxo Order ID
OrigClOrdID	41	981322438	Client Order ID (max 32 characters)
ClOrdID	11	981323713	
Account	1	B2B_Test4_USD	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Symbol	55	AUD/CAD	
Product	460	4	Currency
Side	54	2	Sell

TransactTime	60	20051220-10:29:16	
OrderQty	38	4000000	
OrdType	40	2	Limit
TimeInForce	59	0	Day Order
Price	44	0.89	
<i>Standard Trailer</i>			

The *Execution report* shown in Table 37 is an example of accepted order amend request.

Table 37 Example: FX: Execution Report Message (Accept Amend Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	2745557	Saxo Order ID
ClOrdID	11	981323713	
OrigClOrdID	41	981322438	Client Order ID (max 32 characters)
ExecID	17	127795481563738216	
ExecType	150	5	Replace
OrdStatus	39	5	Replaced
Symbol	55	AUD/CAD	
Product	460	4	Currency
Side	54	2	Sell
OrderQty	38	4000000	Quantity ordered
Price	44	0.89	
OrdType	40	2	Limit
LeavesQty	151	4000000	
CumQty	14	0	

AvgPx	6	0	
HandlInst	21	1	Automated execution order, private, no Broker intervention
TimeInForce	59	0	Day order
<i>Standard Trailer</i>			

The amend request may be rejected. Should this happen, the client will receive messages as described in the diagram in Figure 14.

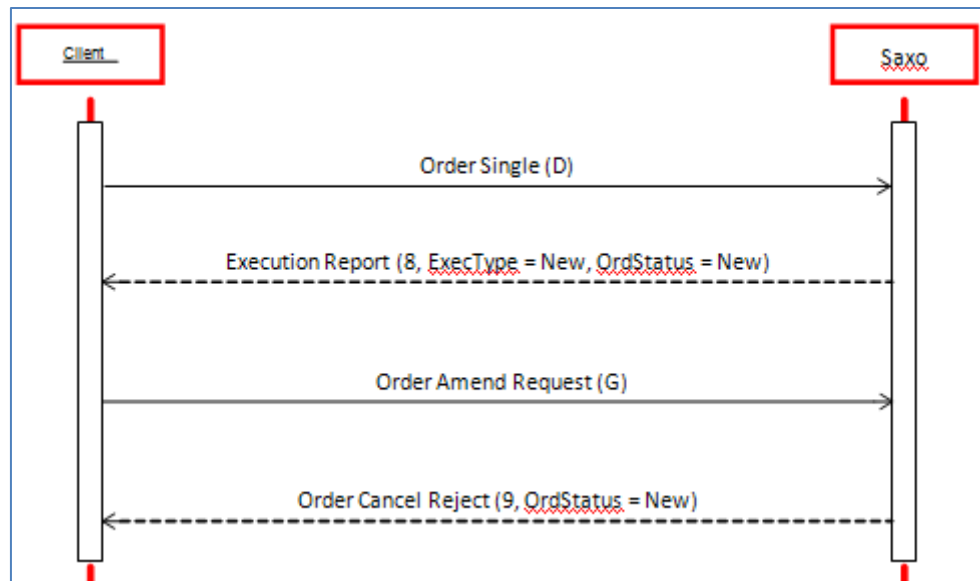


Figure 14 Amend Order Message Flow (FX): Rejected

An example of an order cancel reject message as response to an amend request can be seen in Table 38.

Table 38 Example: FX: Order Cancel Reject Message (Amend Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 9</i>
OrderID	37	NONE	Saxo Order ID
ClOrdID	11	2400187	Client Order ID (max 32 characters)
OrigClOrdID	41	2400187	
OrdStatus	39	0	New
CxlRejResponseTo	434	2	Order Cancel/Replace Request
CxlRejReason	102	1	Unknown order

Standard Trailer

4.3.1.4 PLACING RELATED (CONTINGENT) ORDERS

Things to Remember

Two types of related orders are currently supported: /IF-Done and OCO orders:

1. **IF-Done** (also known as 'One-Triggers-Other' order). An IF-Done involves two or three orders. A Master order (Entry Order) and one or two related orders ('slave orders'). The related orders usually act as '**Take Profit order**' and/or a '**Stop Loss order**'. The related order(s) becomes active when the master order is executed.
2. **OCO** (One-Cancels-Other). An OCO order is an order whose execution results in the immediate cancellation of another order linked to it.

When using Related (Contingent) orders the following limitations exist:

1. Related orders (IF-Done and OCO) are only supported for **Spot FX** and **Spot Metals**. Related orders are not supported for Futures, Stocks CFD DMA, and CFD Spot Indices and CFD Futures.
2. Currently there is no possibility to relate orders to an already open position!
3. Currently there is no possibility to relate additional 'Slave' orders to an already placed pending/active standalone 'Entry' orders (LIMIT or STOP)!
4. When placing an **IF-Done** order - a Master(Entry) order with 1 or 2 additional 'Slave' orders related like: (Stop Loss and/or Take Profit), client will receive execution reports for all individual orders being placed in the relation.
Note: *A Master order may be accepted and successfully placed but one or both of the related slave orders, might not be accepted and successfully placed! Such situation may arise if a wrong logic is used when relating the orders against the Master (Entry) order. In order to place valid IF-Done order with all active slave orders, client must cancel all the orders and then re-send a new IF-Done order again with Master and Slave order relations between them.*
5. When placing OCO order, client receives 2 separate execution reports one for each order. However, one of the orders maybe accepted and the other not, if the orders are not logically related in the correct manner. In order to place valid OCO orders, client must cancel the initial OCO orders and then again re-send a new List of OCO orders.

6. **Tag 68 (TotNoOrders)** total number of orders is currently supported only in a way that it mirrors the number of **Tag73 (NoOrders)**
7. **Tag 66 (ListID)** will be used only when related orders are placed initially. Saxo will report back to a ListID, only right after a successful **NewOrderList** message is being placed or rejected.
8. **ListID(tag66)** will be present in execution reports send from Saxo for: **(39=0 New, 150=0 New)**
9. **ListID(tag66)** will be present in execution reports send from Saxo for: **(39=8 Reject, 150=8 Reject)**
10. Saxo will not present in execution reports ListID (**tag66**) when orders (either Master or Slave) are cancelled, amended or filled! Instead individual ClOrdID (**Tag11**) will be reported for each order in the relation /both for OCO and for IF-Done orders/.

4.3.1.4.1 PLACE A NEWORDER LIST MESSAGE TYPE 35=E

Things to Remember

1. The **NewOrderList** message is a request for placing related orders in the orderbook of Saxo.
2. **Message type 35=E** is only used when a client want to place first time a related order type (OCO) or IF-Done order.

The requirements to the **NewOrderList** message are shown in table 39 below.

Table 39 contains * - is a repeated section needed for each **ClOrderID** being placed

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = E
ListID	66	Y (Y)	Must be unique, by customer, for the day
ContingencyType	1385	Y (N)	1 = OCO (One Cancels the Other) 2 = IF-Done order
NoOrders	73	Y (Y)	Number of orders in repeated section (2 or 3) 73=2 when IF-Done order with 1 Master(Entry) order and 1 related 'slave' order either Stop Loss or Take Profit. 73=2 when standalone OCO orders are placed.

				73=3 when IF-Done order is placed with a Master Entry order with 2 'Slave' orders: Stop-Loss and the other as Take-Profit (that are in mutual OCO relationship between them)
	TotNoOrders	68	Y(Y)	Should always be equal to the value used for Tag 73 (NoOrders)!
*	ClOrdID	11	Y (Y)	Client Order ID (max 32 characters)
*	ListSeqNo	67	Y(Y)	<p>Starts always with 1! And in the rest of the repeated sections can be with values 2 or 3!</p> <p>In OCO - the first field is with value: 1 for one of the orders in the relation and 2 for the other related order.</p> <p>In IF-DONE order the ListsSeqNo should always start with 1 for the Master(Entry) order! The rest of the Slave orders can have values 2 and 3 respectively.</p>
*	Account	1	Y (N)	Provided by Saxo
*	HandlInst	21	Y (Y)	1 = Automated execution order, private, no Broker intervention
*	Symbol	55	Y (N)	e.g. EUR/USD (must be the same for all orders)
*	Product	460	Y(Y)	4=Currency
*	Side	54	Y (Y)	1=BUY or 2=SELL
*	TransactTime	60	Y(Y)	Time of transaction
*	OrderQty	38	Y(Y)	Quantity ordered
*	OrdType	40	Y(Y)	Stop or Limit
*	StopPx / Price	99/44	Y(Y)	<p>The price at which the STOP order will be triggered (when a STOP will be used then 'Tag99' needs to be specified)</p> <p>The price at which the LIMIT order will be triggered (when a LIMIT will be used then 'Tag44' needs to be specified)</p>
*	TimeInForce	59	1	GTC

Table 40 shows an example of **NewOrderList** message.

*Table 40 Example: NewOrderList message used to place **IF-Done (Master Entry order)** with 2 related 'slave' orders - **Take Profit (Limit)** and **Stop Loss (Stop)***

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = E
ListID	66	10001	Must be unique, by customer, for the day
ContingencyType	1385	2	2 = IF-Done order
NoOrders	73	3	Number of orders in repeated section (must be 2 or 3). In our case: 73=3
TotNoOrders	68	3	(same as Tag73)
ClOrderID	11	111101_MEO	Client Order ID (max 32 characters) /will be used for the Master Entry Order/
ListSeqNo	67	1	/to specify the Master order in the relation/
Account	1	SAXO123ACCOUNT	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Symbol	55	EUR/USD	Symbol
Product	460	4	Currency
Side	54	1	Buy
TransactTime	60	20100131-09:31:58	Time of transaction
OrderQty	38	10000000	Quantity ordered
OrdType	40	3	Stop
StopPx	99	1.3400	Stop price per unit of quantity
TimeInForce	59	1	GTC
ClOrderID	11	111101_TP	Client Order ID (max 32 characters)

/Used for the related Take Profit order/			
ListSeqNo	67	2	/to specify one of the related orders in the relation /
Account	1	SAXO123ACCOUNT	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Symbol	55	EUR/USD	Symbol
Product	460	4	Currency
Side	54	2	Sell
TransactTime	60	20100131-09:31:58	Time of transaction
OrderQty	38	10000000	Quantity ordered
OrdType	40	2	Limit
Price	44	1.3500	Stop price per unit of quantity
TimeInForce	59	1	GTC
ClOrderID	11	111101_SL	Client Order ID (max 32 characters) /Used for the related take Stop Loss order/
ListSeqNo	67	3	/to specify the second order in the relation /
Account	1	SAXO123ACCOUNT	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Symbol	55	EUR/USD	Symbol
Product	460	4	Currency
Side	54	1	Sell
TransactTime	60	20100131-09:31:58	Time of transaction
OrderQty	38	10000000	Quantity ordered
OrdType	40	3	Stop

StopPx	99	1.3300	Stop price per unit of quantity
TimeInForce	59	1	GTC

Standard Trailer

4.3.1.4.2 FIX MESSAGES

Things to Remember

Place an IF-done order on **EUR/USD**. Buy with Limit Entry Order at **1.27081** with **Take Profit** at **1.2710** and **Stop Loss** at **1.2669**.

4.3.1.4.3 NEWORDERLIST

Placement of initial Master order with two related "slave" orders (Take Profit and Stop Loss)

```
8=FIX.4.3|9=411|35=E|34=106|49=FIX_TEST|50=FX|52=20190709-
09:11:10.438|56=SAXOTRADE_TEST|66=10268_UID|68=3|73=3|11=10268|67=1|1=5358126|21=1|55=EUR/USD|460=4|54=1|60=20190709-
11:11:10|38=50000|40=2|44=1.1109|59=0|11=10269|67=2|1=5358126|21=1|55=EUR/USD|460=4|54=2|60=20190709-
11:11:10|38=50000|40=2|44=1.1309|59=0|11=10270|67=3|1=5358126|21=1|18=9|55=EUR/USD|460=4|54=2|60=20190709-
11:11:10|38=50000|40=3|99=1.11|59=0|1385=2|10=057|
```

Execution report (New) – successfully placed for the Master order

```
8=FIX.4.3|9=223|35=8|49=SAXOTRADE_TEST|56=FIX_TEST|34=114|57=FX|52=20190709-
09:11:10|369=106|37=78112719|11=10268|66=10268_UID|17=13207137070401390017|150=0|39=0|55=EUR/USD|460=4|54=1|38=50000|40=
2|44=1.1109|59=0|151=50000|14=0|6=0|21=1|10=227|
```

Execution report (New) – successfully placed for the slave Limit Sell order (Take Profit)

```
8=FIX.4.3|9=223|35=8|49=SAXOTRADE_TEST|56=FIX_TEST|34=115|57=FX|52=20190709-
09:11:10|369=106|37=78112720|11=10269|66=10268_UID|17=13207137070415375218|150=0|39=0|55=EUR/USD|460=4|54=2|38=50000|40=
2|44=1.1309|59=0|151=50000|14=0|6=0|21=1|10=235|
```

Execution report (New) – successfully placed for the slave Stop Sell order (Stop Loss)

```
8=FIX.4.39=23135=849=SAXOTRADE56=SAXOTEST334=13857=FX52=20110105-15:19:
8=FIX.4.3|9=226|35=8|49=SAXOTRADE_TEST|56=FIX_TEST|34=116|57=FX|52=20190709-
09:11:10|369=106|37=78112721|11=10270|66=10268_UID|17=13207137070436377519|150=0|39=0|55=EUR/USD|460=4|54=2|38=50000|40=
3|99=1.11|59=0|18=9|151=50000|14=0|6=0|21=1|10=113|
```

Execution report (Fill Master (Entry) Order) once the price triggers execution of the order

```
8=FIX.4.3|9=289|35=8|49=SAXOTRADE_TEST|56=FIX_TEST|115=5358126|34=14|57=FX|52=20190709-
08:23:03|369=8|37=78096166|11=3091|17=13207134183211076310|150=F|39=2|1=5358126|64=20190711|55=EUR/USD|460=4|54=1|38=402
797|40=2|44=0|59=1|32=402797|31=1.12013|151=0|14=402797|6=1.12013|60=20190709-08:23:03.000|21=1|10=033|
```

4.3.1.4.4 REJECTS

Things to Remember

If a **NewOrderList** message is rejected by Saxo, a *Reject* message is sent for each order in the **NewOrderList** message specifying the relevant individual **ClorderID (Tag11)**.

Refer to [section 4.3.1.1 Order-Single and Reject Order Request](#) Table 28.

4.3.1.4.5 ORDER CANCEL

Things to Remember

The orders in an order relation can be cancelled by issuing an *Order Cancel* request. See [section 4.3.1.2 Order Cancel](#).

1. Cancelling one of the orders in an OCO order will leave the other order working.
2. Cancelling the master order in an **IF-Done** order will cancel the other related orders as well.
3. Cancelling one of the related orders in an **IF-Done** order will also delete the other related order if one exist and leave the master order working.

4.3.1.4.6 ORDER CANCEL/REPLACE (AMEND) 35=G

Things to Remember

Client need to send **Order Cancel/ Replace (Amend)** message type (**35=G**) when any of the individual orders **ClOrdID(Tag11)** are being amended and replaced. Message type **35=E** is no longer used! In order to refer to a valid message type **35=G** please refer to [section 4.3.1.3 Order Cancel/Replace \(Amend\)](#).

The following restrictions exist:

1. Amendment and Replacement of the entry price level or the amounts of any related order in an OCO type of order is possible only until the entry price entered is within the correct OCO relation. Amounts in OCO orders can be different.
2. Changing the side of the order **/Tag54=1 or 2 ('BUY' or 'SELL')/** is not possible after the 2 OCO orders are placed. If client need to change

any side of any of the OCO orders he needs to cancel the original **OCO** order and place a **NewOrderList** message **35=E**.

3. Amendment and Replacement of the entry price levels and amounts of the master and related orders in an **IF-Done** relation can be possible only if the entry price is within the correct **IF-Done** relation. Amounts in **IF-Done** order can be different.
4. Changing of the side **Tag54=1** or **2** ('BUY' or 'SELL') after the order has been successfully placed and active is not allowed for any of the master or related orders. If client need to change a side he need to cancel the original IF-Done order and place a **NewOrderList** message **35=E**.

4.3.1.4.7 RELATED ORDERS MESSAGES FLOW

- **NewOrderList**

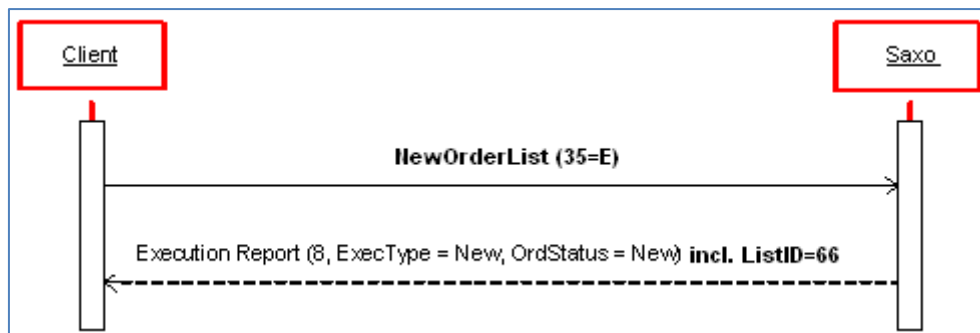


Figure 15 New Order List

- **Related order message flow in case of a Reject**

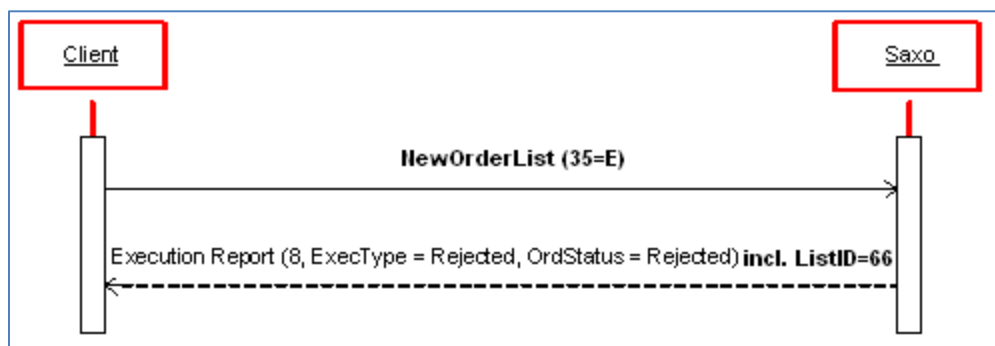
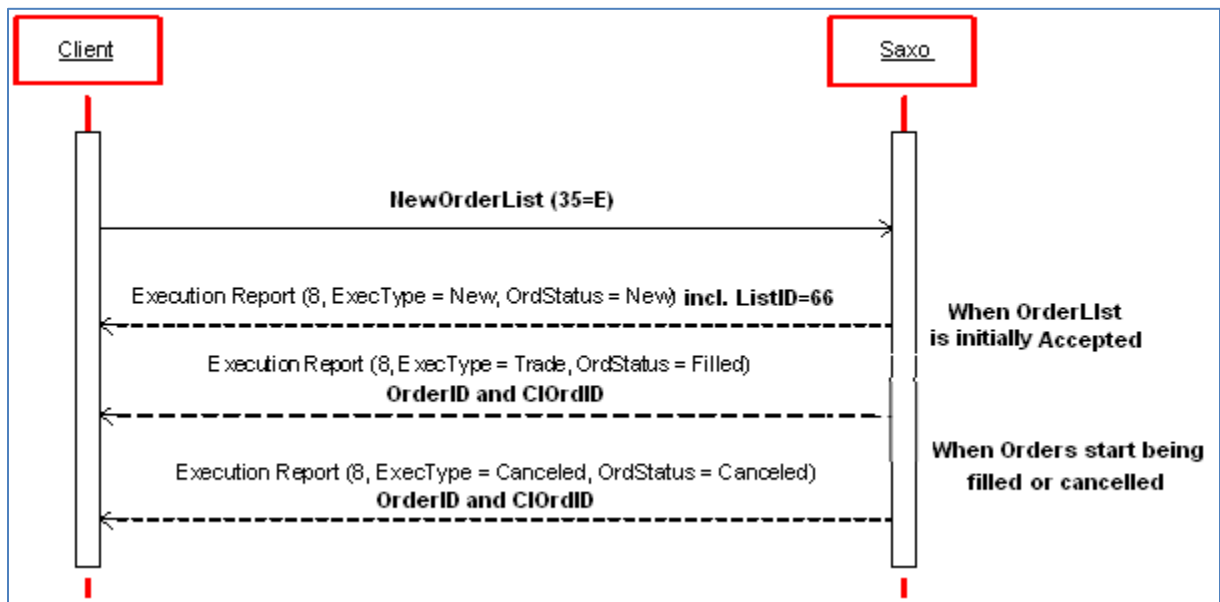


Figure 16 Order Message Flow in case of a Reject

- **Fill of a related orders message flow**

*Figure 17 Fill of a related order*

4.4 SECOND CURRENCY TRADING

This section describes the method of placing an order on the second currency amount instead of the first.

Tag 15 (currency) is used to determine if the order quantity (tag38) is for CCY1 or CCY2.

When tag 15 is not present in the trade request message, the trade will be on CCY1 as described in the previous sessions.

Similarly, when tag 15 is not present in the trade request message, the trade will be on CCY1 as described in the previous sessions.

If tag 15 is neither equal to the first or the second currency, the order will be rejected.

Tag 54(Side) should be interpreted as buying or selling the currency stated in tag 15.

Example1:

55=EUR/USD, 38=1000000, 15=EUR, 54=1,

Will be rendered as BUY 1,000,000 EUR of EURUSD (buying the 1st ccy, i.e. buying EUR/USD)

55=EUR/USD, 38=1000000, 15=USD, 54=1,

Will be rendered as BUY 1,000,000 **USD** of EURUSD (buying the 2nd ccy, i.e. selling EUR/USD)

Example:

55= EUR/USD, 38=1000000, 15=USD, 54=1. (Meaning BUY 1,000,000 **USD** of EUR/USD (buying the 2nd ccy) at market).

Market price at order time:

band	bid amt	bid price	ask price	ask amt
1	1,000,000	1.4904	1.4906	1,000,000

Market order will be filled at bid price 1.4904

4.4.1 SUPPORTED ORDER TYPE

The following order types are supported for this functionality:

- Market IOC order
- Limit IOC order

4.4.2 FIX MESSAGE

Fix message example:

```
8=FIX.4.39=23435=D34=89749=xxxx50=xx52=20190424-
04:35:00.79156=xxxx1=xxxx11=112090897916626534415=HKD21=138=389711640=244=7.8402154=155=USD/HKD59=360=2
0190424-04:35:00460=410=116
```

```
8=FIX.4.39=32035=849=xxxx56=xxxx115=xxxx34=89057=xxxx52=20190424-
04:35:00.981369=89737=27431723911=112090897916626534417=13200554100981635312150=F39=21=xxxx64=2019042655
=USD/HKD460=454=138=389711640=244=7.8402115=HKD59=332=389711631=7.84021151=014=38971166=7.8402160=2019
0424-04:35:01.00021=110=121
```

The following tags are validated:

NAME	TAG	ALLOWED VALUES	DESCRIPTION
Currency	15		The currency of the trade amount and side
Product	460	4	4=Currency
Order Type	40	1 or 2	1=Market 2=Limit
Order Quantity	38	>0	The amount requested for the second currency of the pair
Symbol	55	Valid Symbol	FX Cross Symbol, for instance EURUSD. EUR considered the 1 st currency of the pair, USD is considered the 2 nd currency of the pair.
Side	54	1 (buy)/2 (sell)	This should refer to the requested side (buy/sells) on second currency.
Price	44	Price Values	Applicable if 40=2
TimeInForce	59	3	3=ImmediateOrCancel

5 TRADE VIA FIX API AND ALLOCATION PROCESS

Things to Remember

1. Trading via FIX API on a block-trading account follows the same rule as for trading on a block-trading via Client Station – front end GUI trading platform.
2. The client **MUST** set its Rules/keys initially via Saxo front-end trading platform before trying to execute a trade on their block-trading account via FIX API.
3. The key difference is that after some new rules or existing rules are updated. The clients **MUST** restart their trade session connection in order to apply these new/amended rules.
4. If trade is routed to a block-trading account via FIX API, without prior allocation of rules/keys, Saxo FIX API servers will automatically return **rejection message (35=8)** to the client with error message in **Tag58: '58=130: Could not find TradeAllocation Rule'**.

Table 41 shows Order Placement.

Table 41 Application Messages: Order Placement

NAME	MESSAGE TYPE
Order – Single	D
Order Cancel Request	F
Order Cancel/Replace Request (also known as Amend)	G
Related orders (IF-Done and OCO)	E

Example of Trade Rejection message sent from Saxo:

8=FIX.4.3 9=236 35=8 49=SAXOTRADE 56=TRA_LIVETEST 34=4 57=FX 52=20110302-13:48:20 369=4 37=0 11=20480 17=12943547300141522451 150=8 39=8 103=0 55=EUR/USD 460=4 54=2 38=10000 40=1 59=0 151=10000 14=0 6=0 21=1 **58=130: Could not find TradeAllocation Rule** 10=130

6 STOCKS, FUTURES AND CFD

6.1 SPECIFICATION ON EXCHANGE TRADED PRODUCTS

The Server supports placement of orders for Contract For Difference (CFD), Stocks (CS) and Futures (FUT).

Table 42 shows how it supports the following order types and durations.

Table 42 CFD, Stocks and Future Order Types and Durations

DURATION	DAY ORDER (DO)	GOOD TILL DATE	GOOD TILL CANCELLED
ORDER TYPE		(GTD)*	(GTC)
Market	X		
Limit	X	X (*CFD only)	X
Stop	X	X (*CFD only)	X

Things to Remember

1. Individual Stocks and CFD instruments are identified by a combination of FIX MIC code for the exchange and ISIN code. Following this trend, Vodafone on the London Stock Exchange would be identified by the MIC code XLON and the ISIN code GB00B16GWD56.
2. Futures are identified by a combination of FIX MIC and exchange symbol. Following this trend, "Nymex - Crude Oil, Light Sweet, Jul 2009" would have the FIX MIC code XCME and the exchange symbol CLN9. The FIX MIC symbol follows ISO 10383 defined at: http://www.iso15022.org/MIC/ISO10383_MIC_v1_40.pdf
3. When trading Futures it is mandatory that **tag1028** is used specifying manual (**1028=Y**) or automatic(algo) triggering(origin) of the order requests (**1028=N**)
4. When trading Futures it is mandatory that tag 142 (SecurityIDSource) is included. It is especially required by CME. More details please refer to <https://www.cmegroup.com/confluence/display/EPICSANDBOX/Point+of+Order+Origination>. The value of tag 142 follows ISO3166-1 standard. For valid values, please refer to <ftp://ftp.cmegroup.com/fix/coo>

Market Regulation requires only the submission of the two first characters of tag 142-SenderLocationID for all countries with the exception for Canada. For Canada, the 5 bytes including the province code must be submitted. For Cancel/Replace (tag 35-MsgType=G) messaging, the tag 142 value submitted in the original New Order will not persist for the lifetime of the order.

Note: If tag 142 is missing from a Security Definition Request message (tag 35=c), the UDS (*User-Defined Spreads*) request will be rejected with tag 323=5.

Note: *Market orders are not supported for exchanges that do not support these types of orders natively, namely, Copenhagen Stock Exchange, when placing a market order, Saxo Bank will release it to the exchange as an aggressive limit order.*

Stop orders are not supported for exchanges that do not support these type of orders natively, namely, Copenhagen Stock Exchange, when placing a stop order, Saxo Bank will hold the order and release it as a market order to the exchange when the price reaches the stop price placed in the order.

6.2 STOCKS, FUTURES, CFD DMA – HOURS OF OPERATION

Things to Remember

1. Saxo does not limit the time during which it is possible to place orders, apart from the maintenance window described in [section 1.7](#).
2. If an order is placed during exchange closing hours, an execution report with order status *new* will be returned.
When the exchange opens, a second execution report will be returned having order status *new*.
3. If the order cannot be routed to the exchange during exchange open hours, due to technical issues, the order will be rejected.
4. For a detailed description of the trading conditions, refer to our website at www.saxobank.com
5. Refer to individual trading conditions applied for your LIVE trading account. Verify these via **Web Connect/Trading Conditions** and consult **DesktopTrader/Account/Trading Conditions**.

6.2.1 INSTRUMENT TYPE SPECIFICATION

The various supported instrument types are identified by a combination of **Tag 460 (Product)** and **Tag7550 (BookingTypeCustom)**.

Table 43 Requirements: Instrument Type Specification

INSTRUMENT TYPE	TAG 460	TAG 7750	TAG 22	TAG 167
FX	4 (Currency)		4 (ISIN)	
CFD	5 (Stocks)	1 (CFD)	4 (ISIN)	CS
Stocks	5 (Stocks)	0 (Stocks)	4 (ISIN)	CS
Futures	12 (Other)		8 (Exchange sym)	FUT

6.3 TRADING AND ORDER PLACEMENT ON FUTURES, STOCKS AND CFD DMA

6.3.1 SINGLE ORDER

A *Single Order* message is used to route a *place order* request through to a given exchange. As the message is received, an execution report with order status *Pending New* is sent back to the client as acknowledgement of receiving the request. As soon as the exchange receives the message, it is forwarded to the client.

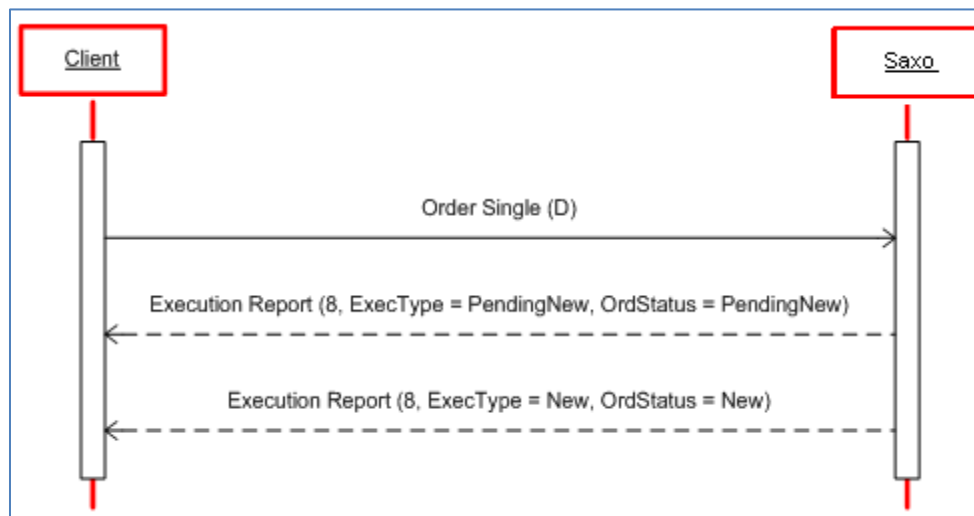


Figure 18 Place Order Message Flow (CFD/Stocks/Futures): Accept

Refer to [section 4.3.1.1](#) Table 28 to view requirements and tags for Single Order message. Requirements for Single Order are shown below:

Table 44 Requirements: CFD: Single Order (Order Placement). Sample Single Order message for a limit order

NAME	TAG	REQUIRED	DESCRIPTION
ClOrdID	11	Y (N)	Client Order ID (max 32 characters)
Account	1	Y (N)	Provided to client by Saxo
Currency	15	Y (N)	Identifies currency used for price, e.g. GBP
HandlInst	21	Y (Y)	1 = Automated execution order, private, no Broker intervention
Product	460	Y (N)	5 = Stocks
Symbol	55	Y (N)	e.g. VOD
BookingTypeCustom	7750	Y (N)	1 = CFD
SecurityIDSource	22	Y (N)	4 = ISIN

SecurityID	48	Y (N)	GB00B16GWD56
ExDestination	100	Y (N)	e.g. XLON

Table 45 shows an example of order – Single Message.

Table 45 Example: CFD: Order – Single Message

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>		<i>MsgType = D</i>	
Account	1	B2B_TEST3	
ClOrdID	11	37888	Client Order ID (max 32 characters)
Currency	15	GBP	Identifies currency used for price
HandInst	21	1	Automated execution order, private, no Broker intervention
SecurityIDSource	22	4	ISIN
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	28.40	Price per unit of quantity
SecurityID	48	GB0004901517	Security identifier value of SecurityIDSource
Side	54	1	Buy
Symbol	55	AAL	
TimeInForce	59	0	Day
ExDestination	100	XLON	London Stock Exchange
SecurityType	167	CS	Common Stock
Product	460	5	Stocks
BookingTypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

EXAMPLE

If the order request shown in the above table is accepted, the resulting *execution report* can be seen in table below. The table 32 shows the execution report **(New)** not the execution report **(Pending New)**

Table 46 shows an example of Execution Report message.

Table 46 Example: CFD: Execution Report Message (Accept Order Request)

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880525	Saxo Order ID
ClOrdID	11	37888	Client Order ID (max 32 characters)
ExecID	17	1282396084222057268	Unique identifier of execution message
ExecType	150	0	New
OrdStatus	39	0	New
Symbol	55	AAL	
SecurityID	48	GB0004901517	Security identifier value of SecurityIDSource
SecurityIDSource	22	4	ISIN
SecurityType	167	CS	Common Stock
Side	54	1	Buy
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	28.40	Price per unit of quantity
Currency	15	GBP	Identifies currency used for price
TimeInForce	59	0	Day
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
HandlInst	21	1	Automated execution order, private, no Broker intervention
Product	460	5	Stocks

BookingTypeCustom	7750	1	CFD
-------------------	------	---	-----

Standard Trailer

If a placed order is filled, the flow can be seen in Figure 19. The order may not be duly filled but may contain partial fills.

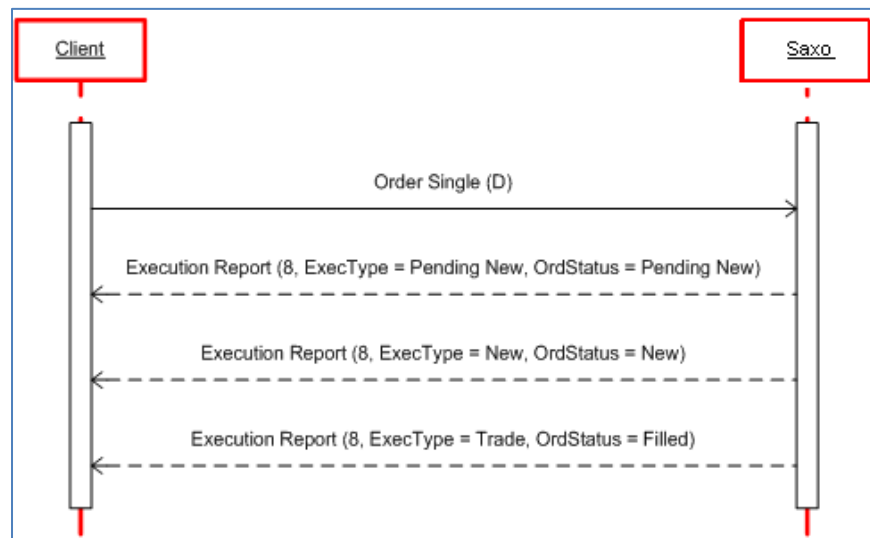


Figure 19 Place Order Message Flow (CFD): Filled

Execution Report shown in Table 47 is an example of an order being filled.

Table 47 Example: CFD: Execution Report Message (Order Filled)

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880525	Saxo Order ID
ClOrdID	11	37888	Client Order ID (max 32 characters)
ExecID	17	1282396084222057268	Unique identifier of execution message
ExecType	150	F	Trade
OrdStatus	39	2	Filled
Symbol	55	AAL	
SecurityID	48	GB0004901517	Security identifier value of SecurityIDSource

SecurityIDSource	22	4	ISIN
SecurityType	167	CS	Common Stock
Side	54	1	Buy
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	28.40	Price per unit of quantity
Currency	15	GBP	Identifies currency used for price
TimeInForce	59	0	Day
LastQty	32	150	Quantity bought - sold on this (last) fill
LastPx	31	28.40	Price on this (last) fill
LeavesQty	151	0	Quantity open for further execution
CumQty	14	150	Total quantity filled
AvgPx	6	28.40	Calculated average price of all fills on this order
HandlInst	21	1	Automated execution order, private, no broker intervention
Product	460	5	Stocks
BookingTypeCustom	7750	1	CFD

Standard Trailer

If the order request is rejected, the client receives an *execution report* with **ExecType = 8 (Rejected)**

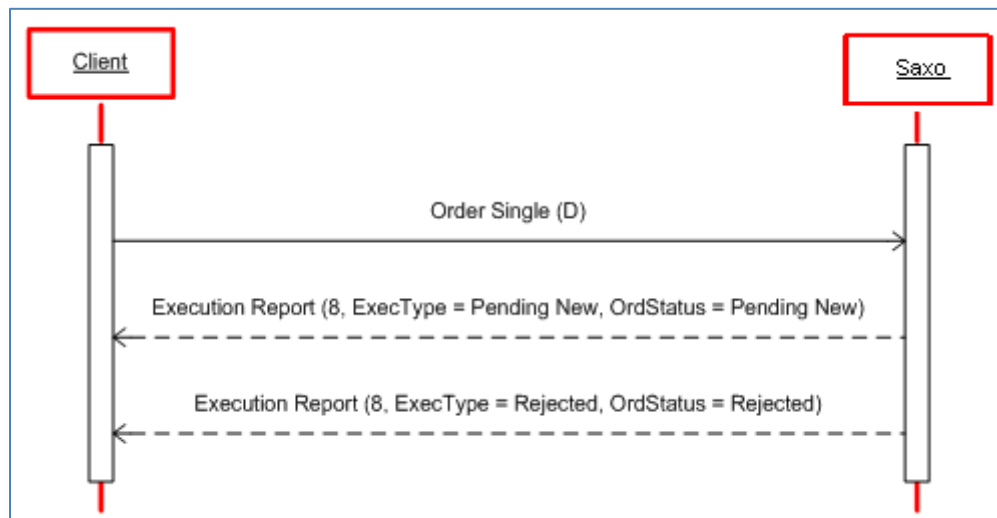


Figure 20 Place Order Message Flow (CFD): Rejected

Table 48 shows sample *Execution Report* shown of the message sent if a request to place a market order is rejected.

Table 48 Example: CFD: Execution Report Message (Rejected Order Request)

Alert: Any reject reason received from the exchange/broker will be forwarded in tag 58 (Text)

NAME	TAG	VALUE	DESCRIPTION
Standard Header			MsgType = 8
OrderID	37	0	Saxo Order ID
ClOrdID	11	24588	Client Order ID (max 32 characters)
ExecID	17	12823960889204646920	Unique identifier of execution message
ExecType	150	8	Rejected
OrdStatus	39	8	Rejected
OrdRejReason	103	1	Broker / Exchange option
Symbol	55	GAW	
SecurityID	48	GB0003718474	Security identifier value of SecurityIDSource
SecurityIDSource	22	4	ISIN
SecurityType	167	CS	Common Stock
Side	54	1	Buy

OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	2.65	Price per unit of quantity
Currency	15	GBP	Identifies currency used for price
TimeInForce	59	0	Day
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
HandlInst	21	1	Automated execution order, private, no Broker intervention
Product	460	5	Stocks
Text	58		
BookingTypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

6.3.2 ORDER CANCEL

If the client wishes to cancel a working order, an *Order Cancel* request MUST be sent.

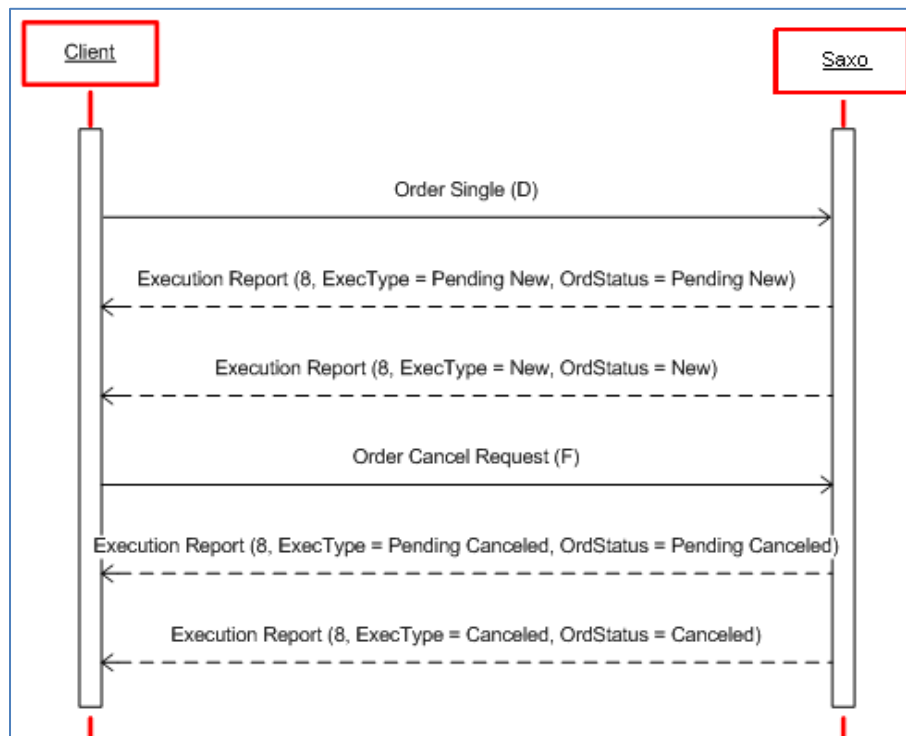


Figure 21 Cancel Order Message Flow (CFD): Accept

The requirements of the **Order Cancel** message are shown in the table 49 below.

Table 49 Requirements: CFD: Order Cancel

NAME	TAG	REQUIRED	DESCRIPTION
OrderID	37	Y (N)	Order ID
Symbol	55	Y (N)	Example: VOD
Product	460	Y (N)	Example: 5 (Stocks and CFDs) or 12(Futures)

Sample Order Cancel request is shown in Table 49 and the response in Table 50.

Table 50 CFD: Order Cancel Request Message

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = F
ClOrdID	11	10247	Client Order ID (max 32 characters)
OrderID	37	3880535	Saxo Order ID
OrigClOrdID	41	5126	

Product	460	Y (N)	e.g. 5 (Stocks and CFDs) or 12(Futures)
Symbol	55	DOM	
<i>Standard Trailer</i>			

Execution Report shown in Table 51 is an example of an accepted order cancel request.

Table 51 Example: CFD: Execution Report Message (Accept Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880535	Saxo Order ID
ClOrdID	11	10247	Client Order ID (max 32 characters)
OrigClOrdID	41	5126	
ExecID	17	12823960870548516315	Unique identifier of execution message
ExecType	150	4	Canceled
OrdStatus	39	4	Canceled
Symbol	55	DOM	
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
Product	460	Y (N)	e.g. 5 (Stocks and CFDs) or 12(Futures)
<i>Standard Trailer</i>			

The flow for *Rejected Order Cancel* request is shown in Figure 22. If *Cancel Request* is rejected, the client will not receive an execution report but an *Order Cancel Reject* message.

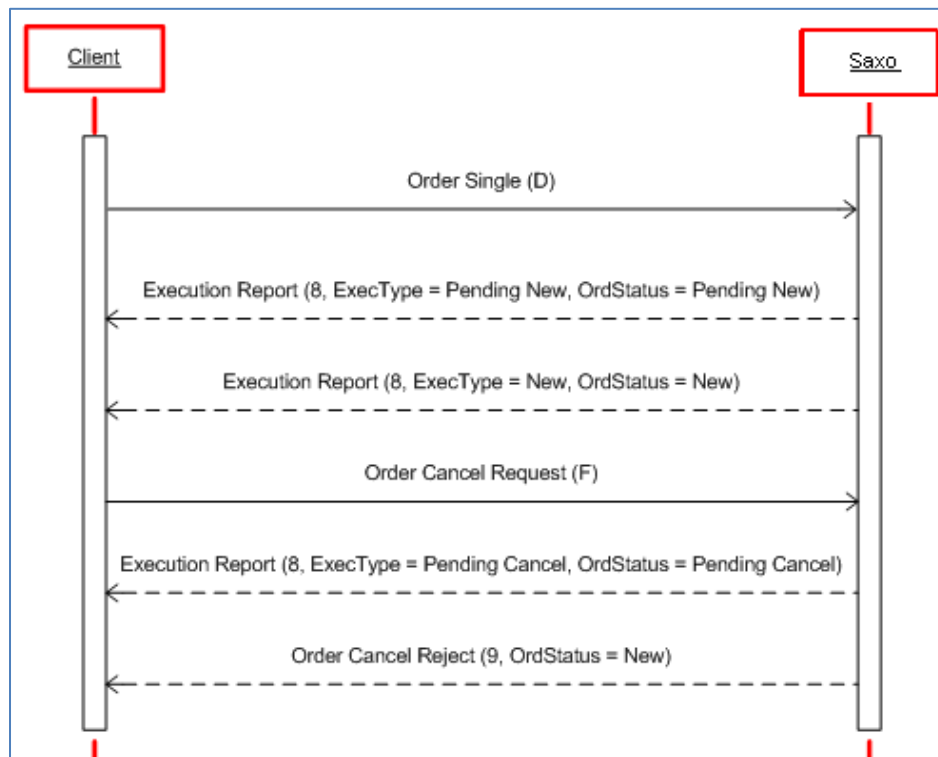


Figure 22 Cancel Order Message Flow (CFD): Rejected

Sample order *Cancel Reject* message in response to a *Cancel Request* can be seen in Table 52.

Table 52 Example: CDF: Order Cancel Reject Message (Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = 9
OrderID	37	3880543	Saxo Order ID
ClOrdID	11	44048	Client Order ID (max 32 characters)
OrigClOrdID	41	38927	
OrdStatus	39	0	New
CxlRejResponseTo	434	1	Order Cancel Request
CxlRejReason	102	1	Unknown order
Text	58		
Standard Trailer			

6.3.3 ORDER CANCEL/REPLACE (AMEND)

If the client wishes to amend a working order, an *Order Cancel/Replace* request MUST be sent. In the following section, this will be described as an *Amend* request. The message flow can be seen in Figure 23.

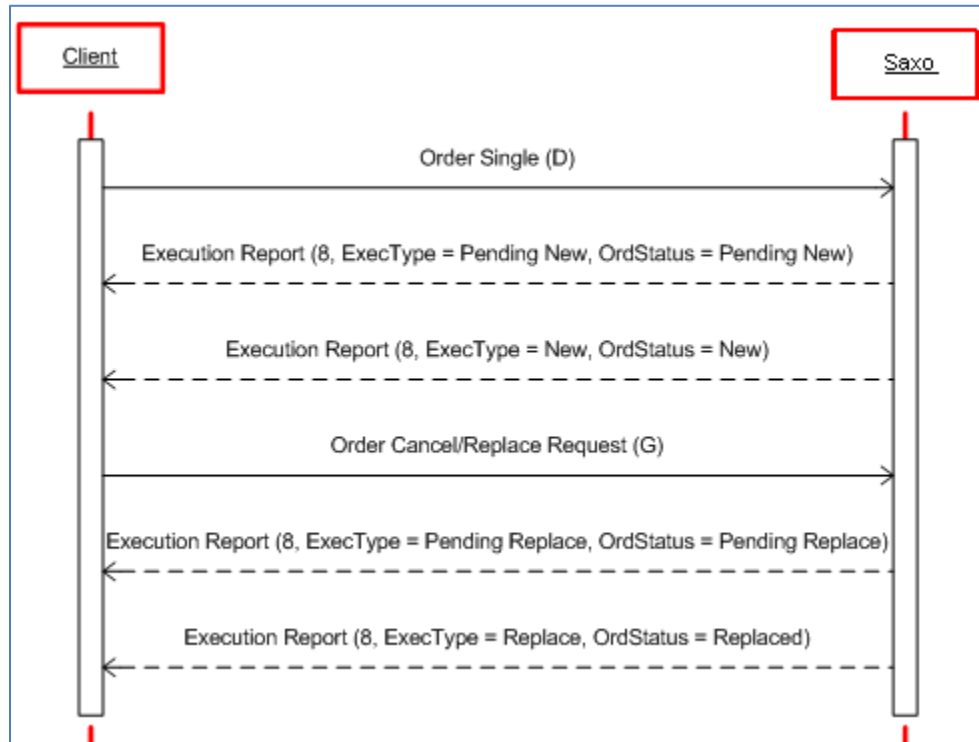


Figure 23 Amend Order Message Flow (CFD): Accept

EXAMPLE

An amend request is shown in Table 54 and its response in Table 55. The working order being amended is a Limit Buy 150 DOM @ 2.60. It is being amended to a Limit Buy 200 DOM @ 2.59.

The requirements of the Amend message are shown in Table 53.

Table 53 Requirements - CFD: Order Cancel/Replace (Amend)

NAME	TAG	REQUIRED	DESCRIPTION
OrderID	37	Y (N)	Order ID
Account	1	Y (N)	Provided to client by Saxo
HandInst	21	Y (Y)	1 = Automated execution order, private, no Broker intervention
Product	460	Y (N)	5 = Stocks

Symbol	55	Y (N)	Example: VOD
BookingTypeCustom	7750	Y (N)	1 = CFD
SecurityIDSource	22	Y (N)	4 = ISIN
SecurityID	48	Y (N)	GB00B16GWD56
ExDestination	100	Y (N)	e.g. XLON

Table 54 shows the response of Amend Request.

Table 54 Example: CFD: Amend Request Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = G</i>
ClOrdID	11	5	Client Order ID (max 32 characters)
OrigClOrdID	41	57348	
OrderID	37	3880534	Saxo Order ID
Account	1	B2B_Test3	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Currency	15	GBP	Identifies currency used for price
SecurityIDSource	22	4	ISIN
OrderQty	38	200	Quantity ordered
OrdType	40	2	Limit
Price	44	2.59	Price per unit of quantity
SecurityID	48	GB00B1S49Q91	Security identifier value of SecurityIDSource
Side	54	1	Buy
Symbol	55	DOM	
TimeInForce	59	0	Day
ExDestination	100	XLON	London Stock Exchange

SecurityType	167	CS	Common Stock
Product	460	5	Stocks
BookingTypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

Sample *Execution Report* shown in Table 55 is an example of an *Accepted Order Amend* request.

Table 55 Example: CFD: Execution Report Message (Accept Amend Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880534	Saxo Order ID
ClOrdID	11	5	Client Order ID (max 32 characters)
OrigClOrdID	41	57348	
ExecID	17	12823960865548548313	Unique identifier of execution message
ExecType	150	5	Replace
OrdStatus	39	5	Replaced
Symbol	55	DOM	
Product	460	5	Stocks
SecurityType	167	CS	Common Stock
Side	54	1	Buy
OrderQty	38	200	Quantity ordered
OrdType	40	2	Limit
Price	44	2.59	Price per unit of quantity
TimeInForce	59	0	Day
LeavesQty	151	200	Quantity open for further execution
CumQty	14	0	Total quantity filled

AvgPx	6	0	Calculated average price of all fills on this order
BookingTypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

If *Amend Request* message is rejected, the client receives the message described in Figure 24.

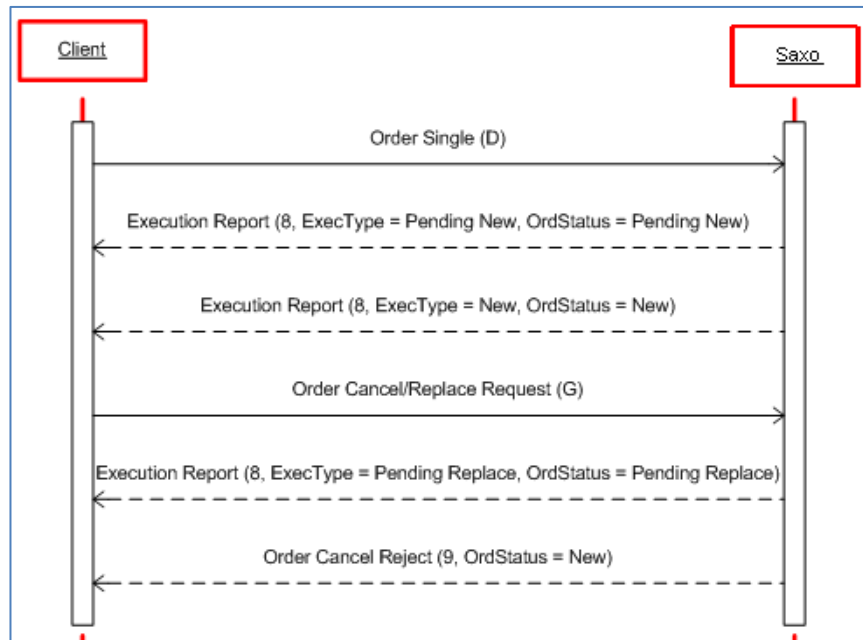


Figure 24 Amend Order Message Flow (CFD): Rejected

Sample *Order Cancel Reject* message in response to an amend request can be seen in Table 56.

Table 56 Example: CFD: Order Cancel Reject Message (Amend Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 9</i>
OrderID	37	3880542	Saxo Order ID
ClOrdID	11	33806	Client Order ID (max 32 characters)
OrigClOrdID	41	29709	
OrdStatus	39	0	New
CxlRejResponseTo	434	2	Order Cancel/Replace Request

Text	58
------	----

Standard Trailer	
------------------	--

6.3.4 EXECUTION REPORTS – DONE-FOR-DAY

Things to Remember

1. When trading stocks, some LIMIT orders (Duration: G.T.C) are neither triggered nor filled. Such orders are reported as **Done-For-Day** orders prior the exchange is closed.
2. Execution report with **/Tag150=3** and **Tag39=3 'Done for day'** is sent.
3. In some cases, during one trade session, certain orders triggered are only partially. Prior to the exchange closing, clients again receive **Done-For-Day** orders for the filled total amount.
4. Remaining securities are placed in the exchange for further execution on the next working day/trading session.
5. Saxo retains the same Client **OrderID /Tag11/** for the originally received order from the client but reverts with **New/Fill** with a new Saxo **OrderID /Tag37/**

7 CFD SPOT INDICES (CONTINUOUS) AND CFD ON FUTURES (EXPIRING CFDS ON INDICES AND EXPIRING CFDS ON COMMODITIES)

7.1 SPECIFICATION ON SAXO MARKET MAKING PRODUCTS

The Server supports placement of orders for CFD Spot Indices and CFD on Futures.

Table 57 shows how it supports the following order types and durations.

Table 57 CFD spot Indices and CFD on Futures Order Types and Durations

DURATION	DAY ORDER (I	GOOD TILL D	GOOD TILL CANCELLED	IMMEDIATE OR CANCEL
ORDER TYPE	(GTD)	(GTC)	(IOC)	
Market	X			x
Limit	X	X	X	x
Stop	X	X	X	










Below is the full list of supported SAXO instruments and codes for CFD on Futures that can be traded via the FIX API, where SAXO can also provide a price session. Have in mind that some of the instruments are supported and are subject to annual payment from Client side, before the price feed is made available:

CFDs on Index-Tracking CFD (Expiring CFDs)

These are Expiring Contracts. There is no CFD Financing, and no Corp. Actions (dividends) applied to your Saxo account

The below can be supplied with both a Quote and Trade session, or can be used with a Trade session only.

Index Name	Symbol name +MMYY	Min trade size (N of indices)	Max trade size (auto-execution)	Trading Hours*	Annual data feed cost charged in advance
 UK 100	UK100	1 index	500 indices	01:01 - 20:55*	Free, if flow is executed on A-book
 Germany 30	GER30	1 index	500 indices	08:01 - 21:55*	Free, if flow is executed on A-book
 EU Stocks 50	EU50	1 index	2,000 indices	08:01 - 21:55*	Free, if flow is executed on A-book
 Switzerland 20	SWISS20	1 index	300 indices	08:01 - 21:55*	Free, if flow is

					executed on A-book
 China 50	CHINA50	1 index	50 indices	09:01 - 01:55*	Free, if flow is executed on A-book
 India 50	INDIA50	1 index	50 indices	09:01 - 01:55*	Free, if flow is executed on A-book
 Singapore	SINGAPORE	1 index	1,000 indices	08:31 - 01:55*	Free, if flow is executed on A-book
 Taiwan	TAIWAN	1 index	50 indices	08:46 - 01:55*	Free, if flow is executed on A-book
 US 2000	US2000	1 index	2,000 indices	20:00-16:00 EST	Free, if flow is executed on A-book
 USD Index	USDINDEX	100 index	10,000 indices	18:01 - 16:00 (22 hrs)	Free, if flow is executed on A-book
 US Tech 100 NAS	USNAS100	1 index	1,500 indices	18:01 - 16:00 (22 hrs)	12,500 USD
 US SPX500	US500	1 index	3,000 indices	18:01 - 16:00 (22 hrs)	12,500 USD
 US 30 Wall Street	US30	1 index	300 indices	18:01 - 16:00 (22 hrs)	12,500 USD

*Trading hours are stated in the local hours of the underlying exchange

CFDs on Spot Indices (Continuous CFDs)

These are Continuous Contracts. Corp. Actions (dividends) and CFD financing are applied to your Saxo account. The below are supplied with both a Quote and Trade session.

Index Tracker	Symbol	Min trade size (N of indices)	Max trade size (auto-execution)	Trading Hours*	Annual data feed cost charged in advance
 EU Stocks 50	EU50.I	1 index	2,000 indices	08:01 - 21:55	Free, if flow is executed on A-book

 Germany 30	GER30.I	1 index	500 indices	08:01 - 21:55	Free, if flow is executed on A-book
 Switzerland 20	SWISS20.I	1 index	300 indices	08:01 - 21:55	Free, if flow is executed on A-book

***Trading hours are stated in the local hours of the underlying exchange**

CFDs on Commodities (Expiring CFD)

These are Expiring Contracts. No CFD Financing is applied

The below can be supplied with both a Quote and Trade session, or can be used with a Trade session only.

Instrument	Symbol +MMYY	Min. trade size	Max. trade size (auto-execution)	Trading hours *	Expiry date	Annual data feed cost charged in advance
METALS						
Gold*	GOLD	1 oz	1,000 oz	18:00-17:15 EST	FND -2	4,000 USD
Silver*	SILVER	25 oz	100,000 oz	18:00-17:15 EST	FND -2	4,000 USD
Platinum*	PLATINUM	1 oz	250 oz	18:00-13:05 EST	FND -2	4,000 USD
Palladium*	PALLADIUM	1 oz	500 oz	18:00-17:15 EST	FND -2	4,000 USD
US Copper	COPPERUS	500 pounds	250,000 pounds	18:00-17:15 EST	FND -2	4,000 USD
ENERGIES						
UK Brent	OILUK	25 barrels	15,000 barrels	23:01-21:15 GMT	LTD -2	Free, if flow is executed on A-book
UK Gas	GASOILUK	1 metric ton	500 metric tons	23:01-21:15 GMT	LTD -2	Free, if flow is executed on A-book
US Crude	OILUS	25 barrels	30,000 barrels	18:00-17:15 EST	LTD -2	4,000 USD
Heating Oil	HEATINGOIL	500 gallons	420,000 gallons	18:00-17:15 EST	LTD -2	4,000 USD
Gasoline US	GASOLINEUS	500 gallons	420,000 gallons	18:00-17:15 EST	LTD -2	4,000 USD
US Natural Gas	NATGASUS	200 mmBtu	50,000 mmBtu	18:00-17:15 EST	LTD -2	4,000 USD
AGRICULTURE						
Corn	CORN	200 bushels	50,000 bushels	19:00 - 13:15 CST	FND -2	4,000 USD

Wheat	WHEAT	200 bushels	50,000 bushels	19:00 – 13:15 CST	FND -2	4,000 USD
Soybeans	SOYBEANS	200 bushels	50,000 bushels	19:00 – 13:15 CST	FND -2	4,000 USD

FND= First Notice ! LTD= Last trading

*Trading hours are stated in the local hours of the underlying exchange

* selected CFDs on Metals instruments, are also supported as Spot Metals, where for Spot Metals annual fees for data feed does not apply.

7.2 HOURS OF OPERATION

Things to Remember

1. The products are available for trading, apart from the maintenance window hours described in [section 1.7](#).
2. When an order is placed during exchange closing hours an execution report with order status *Pending New* will be returned, followed by a second execution report with an order status *New*, once the exchange opens an execution report with an order status *Fill will be sent (pending on the type of the order and market conditions)*.
3. For a detailed description of the trading conditions, refer to our website at www.saxobank.com
4. Refer to individual trading conditions applied for your LIVE trading account. Verify these via **Web Connect/Trading Conditions** and consult **DesktopTrader/Account/Trading Conditions**.

7.2.1 INSTRUMENT TYPE SPECIFICATION

The various supported instrument types are identified by a combination of **Tag 460 (Product)** and **Tag7550 (BookingTypeCustom)**.

Table 58 Requirements: Instrument Type Specification

INSTRUMENT TYPE	TAG 460	TAG 7750	TAG 22	TAG 167
CFD Spot(Continuous) Indices	7 (Spot(Continuous) Index)	1 (CFD)	N/A	XLINKD
CFD on Futures (Expiring)	2 (Futures) (Expiring CFDs)	1 (CFD)	N/A	FUT

7.3 QUOTES ON CFD SPOT INDICES AND CFD FUTURES

7.3.1 REQUEST AND RESPONSE FOR A QUOTE (STREAMING)

Table 59 shows requirements for a streaming quote message.

Table 59 Requirements: CFD spot Indices and CFD Futures: Streaming Quote Request

NAME	TAG	REQUIRED	DESCRIPTION
MsgType	35	Y (N)	R
Symbol	55	Y (N)	e.g. GER30.I or COPPERUSMAR12 or GER30xMAR12
Product	460	Y (N)	7 = Spot Index 2 = Futures
OrderQty	38	Y (N)	10
OrderQty2	192	Y (N)	Signifies the number of end clients to whom the prices are distributed to.

Table 60 shows sample Quote Request message for **SQ – Streaming Quotes**.

Table 60: CFD spot Indices and CFD Futures: Sample Quote Request message for SQ

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = R</i>
QuoteReqID	131	1	Quote Request ID
NoRelatedSym	146	1	Number of Related Symbols in repeated section
Symbol	55	GER30.I COPPERUSMAR12 GER30xMAR12	Example for each type of product (CFD Spot indices, CFD Commodities futures and CFD Indices futures)
Product	460	7	Index
OrderQty	38	1000	Bands are requested by the client
OrderQty2	192	100	Number of end clients
<i>Standard Trailer</i>			

Sample Quote message for CFD spot indices, in response to a Sample Quote Request can be seen in Table 61.

Table 61: CFD spot Indices and CFD Futures: Sample Quote Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = S</i>
QuoteReqID	131	1	
QuoteID	117	WAS-GER30.I-2012-2-7:11.39.20:22-10000	Example for CFD Spot indices
QuoteType	537	0	Indicative
Symbol	55	GER30.I	Example for CFD Spot indices
Product	460	7	Index
BidPx	132	324.54	Bid price
OfferPx	133	324.94	Offer price
BidSize	134	0	Bid Size
OfferSize	135	0	Offer Size

Things to Remember

1. All quotes for CFD spot Indices and CFD Futures are indicative.
2. Saxo will stream indicative prices during the Exchange open hours.
3. The Bid and Offer size, on indicative prices, will be zero.

7.4 ORDER PLACEMENT ON CFD SPOT (CONTINUOUS) INDICES AND CFD ON FUTURES (EXPIRING CFDS)

7.4.1 SINGLE ORDER

A *Single Order* message will be used to route an *order* request to Saxo. Once the message received, an execution report with order status *Pending New* is sent back to the client as acknowledgement of receiving the request.

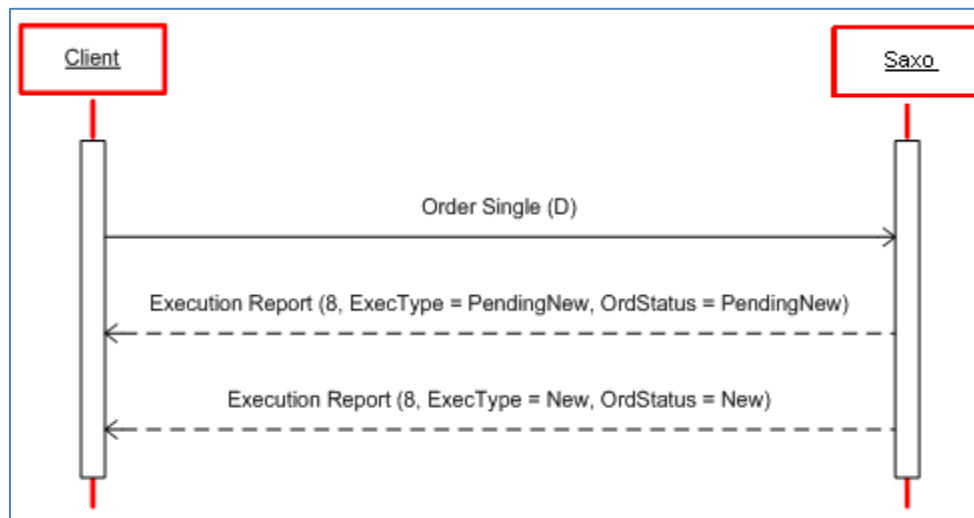


Figure 25 Place Order Message Flow (CFD spot Indices and CFD Futures): Order Accepted

Table 62 shows Sample *Single Order* message

Table 62 Requirements: CFD spot Indices and CFD Futures: *Single Order (Order Placement)*

NAME	TAG	REQUIRED	DESCRIPTION
ClOrdID	11	Y (N)	Client Order ID (max 32 characters)
Account	1	Y (N)	Provided to client by Saxo
Currency	15	Y (N)	Identifies currency used for price, e.g. GBP
Product	460	Y (N)	2=CFD Future 7= CFD Spot Index
Side	54	Y(N)	1=Buy 2=Sell
Symbol	55	Y (N)	e.g. GER30.I (Example for CFD Spot indices)
BookingTypeCustom	7750	Y (N)	1 = CFD
OrdQty	38	Y (N)	Order quantity
OrdType	40	Y (N)	1=Market 2=Limit 3=Stop
Price	44	Y(N)	Price, Conditionally required for Limit Order.
StopPx	99	Y(N)	Stop price, Conditionally required for Stop orders.

Table 63 shows an example of **Order – Single** message

Table 63 Example: CFD spot Indices and CFD Futures: Order – Single, Limit Order - Message

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = D</i>
Account	1	B2B_TEST3	Account ID
ClOrdID	11	37888	Client Order ID (max 32 characters)
Currency	15	EUR	Identifies currency used for price
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	28.40	Price per unit of quantity
Side	54	1	Buy
Symbol	55	GER30.I	Example for CFD Spot indices
TimeInForce	59	0	Day
Product	460	7	Index
BookingTypeCustom	7750	1	CFD
HandInst	21	1	
SecurityType	167	XLINKD	Indexed Linked
<i>Standard Trailer</i>			

EXAMPLE:

If the order request shown in the above table is accepted (filled), you will receive 3 different execution reports, one following the other, **Pending New**, **New**, and **Fill**.

The table 64 shows the execution report **Pending New** and **New** (see tag 150 and 39 in the description column), **Fill** execution report can be seen on table 65 below.

Table 64 shows an example of Execution report message.

Table 64 Example: CFD spot Indices and CFD Futures: Execution Report Message (Accept Order Request)

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880525	Saxo Order ID
ClOrdID	11	37888	Client Order ID (max 32 characters)
ExecID	17	1282396084222057268	Unique identifier of execution message
ExecType	150	A 0	Pending New OR New
OrdStatus	39	A 0	Pending New OR New
Symbol	55	GER30.I	Example for CFD Spot indices
SecurityType	167	XLINKD	Indexed Linked
Side	54	1	Buy
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	28.40	Price per unit of quantity
Currency	15	EUR	Identifies currency used for price
TimeInForce	59	0	Day
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
Product	460	7	CFD Spot Index
BookingTypeCustom	7750	1	CFD

Account	1	B2B_TEST
HandInst	21	1
<i>Standard Trailer</i>		

If a placed order is filled, the flow can be seen in Figure 26. The order may not be fully filled but may contain partial fills (Saxo supports partial fills on CFD spot Indices and CFD Futures, for example, during execution is manual, under certain scenarios).

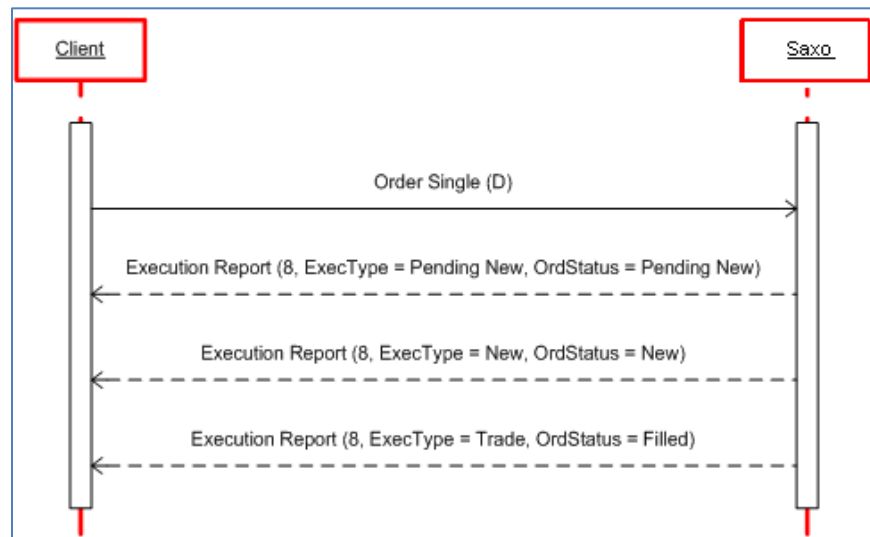


Figure 26 Place Order Message Flow (CFD spot Indices and CFD Futures): Filled

Execution Report shown in table 65 is an example of an order being filled.

Table 65 Example: CFD spot Indices and CFD Futures: Execution Report Message (Order Filled)

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880525	Saxo Order ID
ClOrdID	11	37888	Client Order ID (max 32 characters)
ExecID	17	1282396084222057268	Unique identifier of execution message
ExecType	150	F	Trade
OrdStatus	39	2	Filled
Symbol	55	GER30.I	Example for CFD Spot indices

SecurityType	167	XLINKD	Indexed Linked
Side	54	1	Buy
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	28.40	Price per unit of quantity
Currency	15	EUR	Identifies currency used for price
TimeInForce	59	0	Day
LastQty	32	150	Quantity bought - sold on this (last) fill
LastPx	31	28.40	Price on this (last) fill
LeavesQty	151	0	Quantity open for further execution
CumQty	14	150	Total quantity filled
AvgPx	6	28.40	Calculated average price of all fills on this order
HandlInst	21	1	Automated execution order, private, no broker intervention
Product	460	7	CFD Spot Index
BookingTypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

If the order request is rejected, the client receives an *execution report* with **ExecType = 8 (Rejected)**

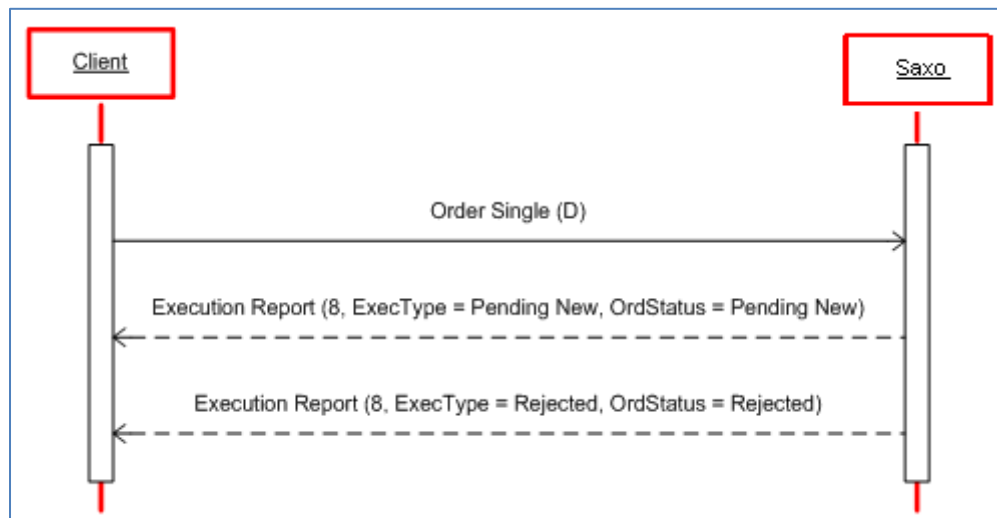


Figure 27 Place Order Message Flow (CFD spot Indices and CFD Futures): Rejected

Table 66 shows sample of *Execution Report* of a rejected market order.

Table 66 Example: CFD spot Indices and CFD Futures: Execution Report Message (Rejected Order Request)

NAME	TAG	VALUE	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	0	Saxo Order ID
ClOrdID	11	24588	Client Order ID (max 32 characters)
ExecID	17	12823960889204646920	Unique identifier of execution message
ExecType	150	8	Rejected
OrdStatus	39	8	Rejected
OrdRejReason	103	1	Broker / Exchange option
Symbol	55	GER30.I	Example for CFD Spot indices
SecurityType	167	XLINKD	Indexed Linked
Side	54	1	Buy
OrderQty	38	150	Quantity ordered
OrdType	40	2	Limit
Price	44	2.65	Price per unit of quantity

Currency	15	EUR	Identifies currency used for price
TimeInForce	59	0	Day
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
HandlInst	21	1	Automated execution order, private, no Broker intervention
Product	460	7	CFD Spot Index
Text	58		
BookingTypeCustom	7750	1	CFD
Account	1	B2B_TEST	
ExecInst	18	9	

Standard Trailer

7.4.2 ORDER CANCEL

In order to cancel an open order an Order Cancel request must be sent.

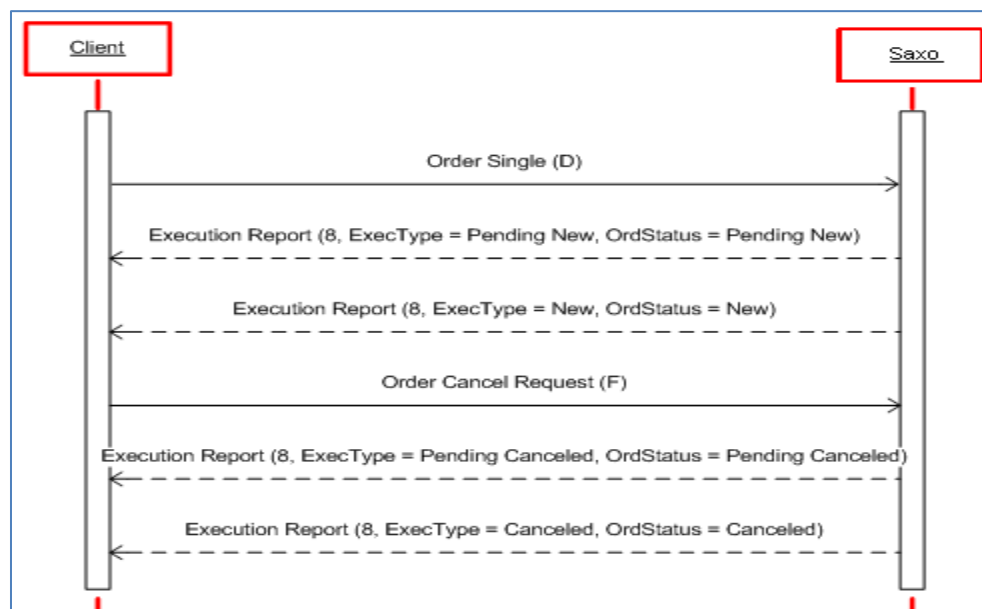


Figure 28 Cancel Order Message Flow (CFD spot Indices and CFD Futures): Accept

The requirements of the **Order Cancel** message are shown in the table 67 below.

Table 67 Requirements: CFD spot Indices and CFD Futures: Order Cancel

NAME	TAG	REQUIRED	DESCRIPTION
OrderID	37	Y (N)	Order ID
Symbol	55	Y (N)	Example: GER30.I (Example for CFD Spot indices)
Product	460	Y (N)	Example: 2 (CFD Futures) or 7(CFD spot Index)

Sample **Order Cancel** request is shown in Table 68 and the response in Table 69.

Table 68: CFD spot Indices and CFD Futures: Order Cancel Request Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = F</i>
ClOrdID	11	10247	Client Order ID (max 32 characters)
OrderID	37	3880535	Saxo Order ID
OrderQty	38	1000	
OrigClOrdID	41	5126	
Product	460	Y (N)	e.g. 2 (CFD Futures) or 7(CFD spot Indices)
Symbol	55	GER30.I	Example for CFD Spot indices
<i>Standard Trailer</i>			

Execution Report shown in Table 69 is an example of an accepted order cancel request.

Table 69 Example: CFD spot Indices and CFD Futures: Execution Report Message (Accept Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>
OrderID	37	3880535	Saxo Order ID
ClOrdID	11	10247	Client Order ID (max 32 characters)
OrigClOrdID	41	5126	

ExecID	17	12823960870548516315	Unique identifier of execution message
ExecType	150	4	Canceled
OrdStatus	39	4	Canceled
Symbol	55	GER30.I	Example for CFD Spot indices
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
Product	460	Y (N)	e.g. 2 (CFD Futures) or 7(CFD Spot Index)
SecurityType	167	XLINKD	Indexed Linked
OrdQty	38	21	Quantity Ordered
OrdType	40	3	Stop
Price	99	12357	Price per unit of quantity
Side	54	1	Buy
TimeInForce	59	0	Day
Currency	15	EUR	Identifies currency used for price
HandInst	21	1	
BookingtypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

The flow for *Rejected Order Cancel* request is shown in Figure 29.

If *Cancel Request* is rejected, the client will not receive an execution report but an *Order Cancel Reject* message.

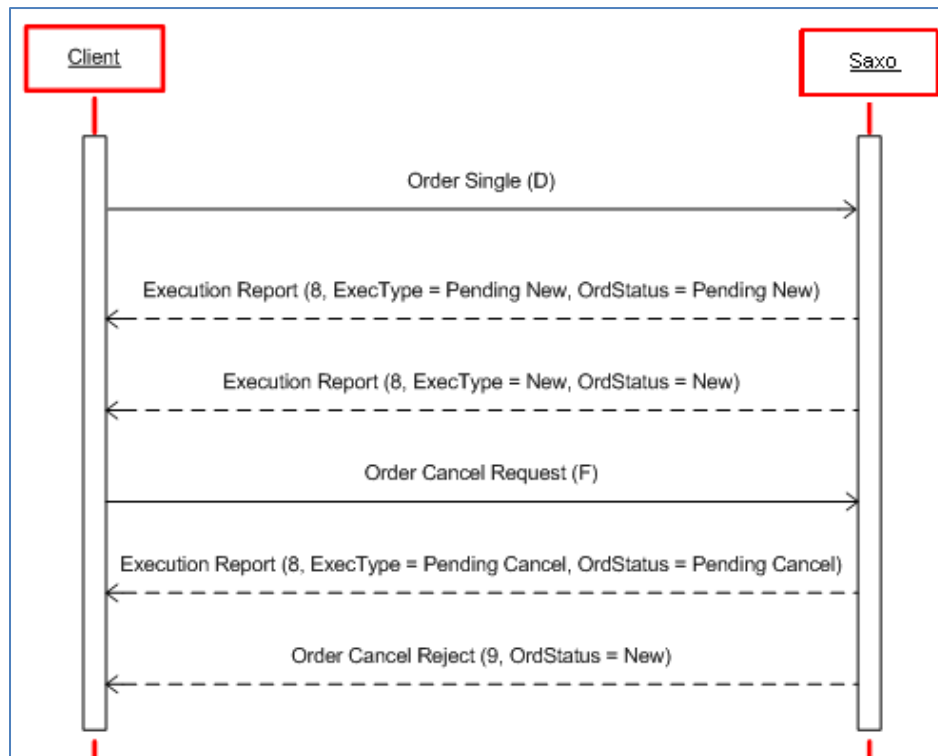


Figure 29 Cancel Order Message Flow (CFD spot Indices and CFD Futures): Rejected

Sample order *Cancel Reject* message in Table 70 and its response to a *Cancel Request* can be seen in Table 71.

Table 70 Example: CFD spot Indices and CFD Futures: Order Cancel Reject Message (Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = 9
OrderID	37	3880543	Saxo Order ID
ClOrdID	11	44048	Client Order ID (max 32 characters)
OrigClOrdID	41	38927	
OrdStatus	39	0	New
CxlRejResponseTo	434	1	Order Cancel Request
CxlRejReason	102	2	Unknown order
Text	58		

Standard Trailer

Sample order Cancel Reject message in response to a Cancel Request can be seen in Table 71.

Table 71 Example: CFD spot Indices and CFD Futures: Order Cancel Reject Message (Cancel Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 9</i>
OrderID	37	3880543	Saxo Order ID
ClOrdID	11	44048	Client Order ID (max 32 characters)
OrigClOrdID	41	38927	
OrdStatus	39	0	New
CxlRejResponseTo	434	1	Order Cancel Request
CxlRejReason	102	2	Unknown order
Text	58		
<i>Standard Trailer</i>			

7.4.3 ORDER CANCEL/REPLACE (AMEND)

If the client wishes to amend an open order, an *Order Cancel/Replace* request must be sent.

In the following section, this will be described as an *Amend* request. The message flow can be seen in Figure 30.

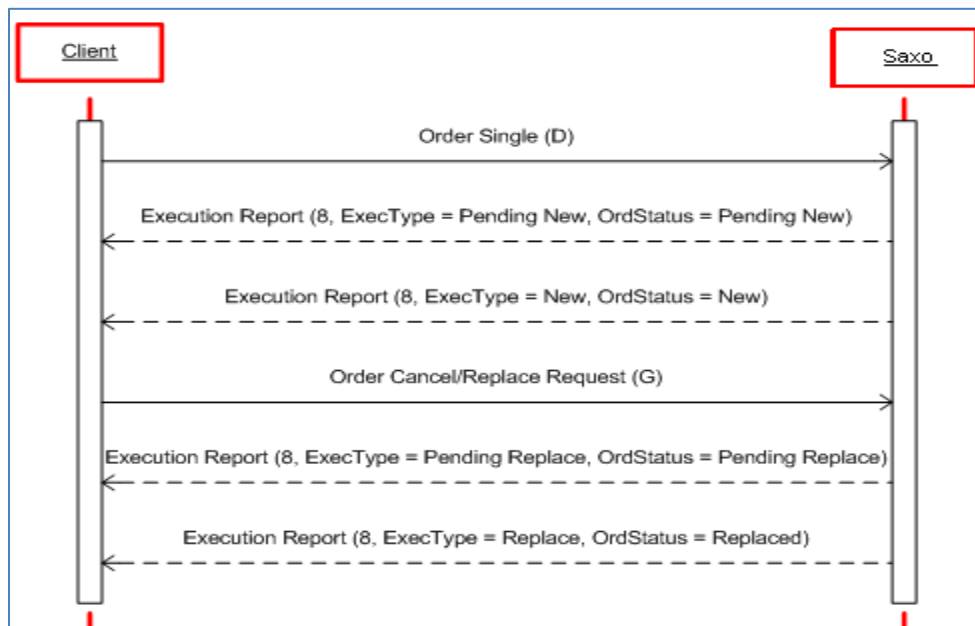


Figure 30 Amend Order Message Flow (CFD spot Indices and CFD Futures): Accept

EXAMPLE:

An amend request is shown in Table 73 and it's response in Table 74. The working order being amended is a Limit Buy 150 GER30.I @ 2.60. It is being amended to a Limit Buy 200 DAX.I @ 2.59.

The requirements of the Amend message are shown in Table 72.

Table 72 Requirements: CFD spot Indices and CFD Futures: Order Cancel/Replace (Amend)

NAME	TAG	REQUIRED	DESCRIPTION
OrderID	37	Y (N)	Order ID
ClOrdID	11	Y (N)	Client Order ID (max 32 characters)
Account	1	Y (N)	Provided to client by Saxo
HandlInst	21	Y (Y)	1 = Automated execution order, private, no Broker intervention
Product	460	Y (N)	2 = CFD Futures, 7=CFD Spot Index
Symbol	55	Y (N)	GER30.I Example for CFD Spot indices
BookingTypeCustom	7750	Y (N)	1 = CFD

Table 73 shows an example of amend request.

Table 73 Example: CFD spot Indices and CFD Futures: Amend Request Message

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = G</i>
ClOrdID	11	5	Client Order ID (max 32 characters)
OrigClOrdID	41	57348	
OrderID	37	3880534	Saxo Order ID
Account	1	B2B_Test3	
HandlInst	21	1	Automated execution order, private, no Broker intervention
Currency	15	EUR	Identifies currency used for price
OrderQty	38	200	Quantity ordered
OrdType	40	2	Limit
Price	44	2.59	Price per unit of quantity
Side	54	1	Buy
Symbol	55	GER30.I	Example for CFD Spot indices
TimeInForce	59	0	Day
SecurityType	167	XLINKD	Indexed Linked
Product	460	2	Index
BookingTypeCustom	7750	1	CFD
<i>Standard Trailer</i>			

Sample *Execution Report* shown in Table 74 is an example of an *Accepted Order Amend* request.

Table 74 Example: CFD spot Indices and CFD Futures: Execution Report Message (Accept Amend Request)

NAME	TAG	REQUIRED	DESCRIPTION
<i>Standard Header</i>			<i>MsgType = 8</i>

OrderID	37	3880534	Saxo Order ID
ClOrdID	11	5	Client Order ID (max 32 characters)
OrigClOrdID	41	57348	
ExecID	17	12823960865548548313	Unique identifier of execution message
ExecType	150	5	Replace
OrdStatus	39	5	Replaced
Symbol	55	GER30.I	Example for CFD Spot indices
Product	460	7	Index
SecurityType	167	XLINKD	Indexed Linked
Side	54	1	Buy
OrderQty	38	200	Quantity ordered
OrdType	40	2	Limit
Price	44	2.59	Price per unit of quantity
TimeInForce	59	0	Day
LeavesQty	151	200	Quantity open for further execution
CumQty	14	0	Total quantity filled
AvgPx	6	0	Calculated average price of all fills on this order
BookingTypeCustom	7750	1	CFD

Standard Trailer

If *Amend Request* message is rejected, the client will receive the message described in Figure 31.

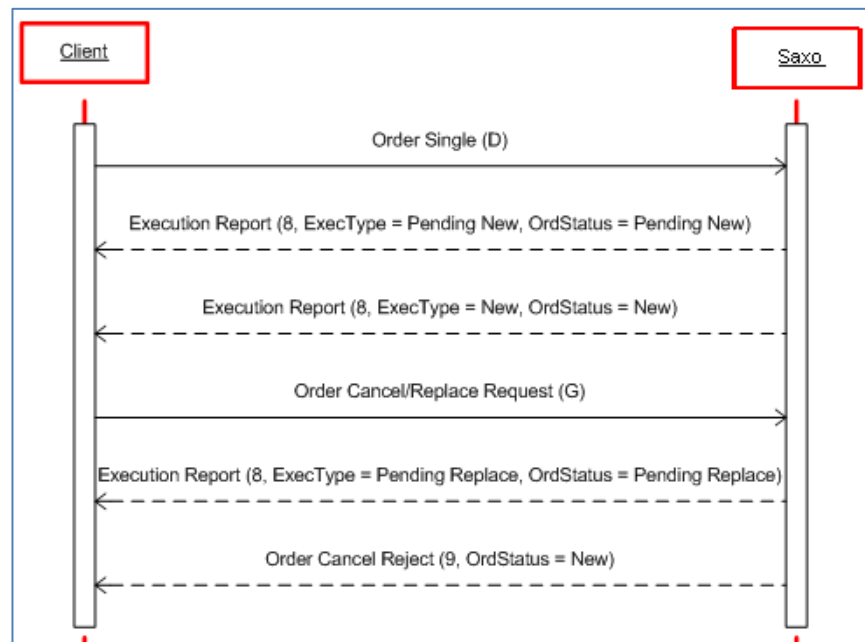


Figure 31 Amend Order Message Flow (CFD spot Indices and CFD Futures): Rejected

Sample Order Cancel Reject message in response to an amend request can be seen in Table 75.

Table 75 Example: CFD spot Indices and CFD Futures: Order Cancel Reject Message (Amend Request)

NAME	TAG	REQUIRED	DESCRIPTION
Standard Header			MsgType = 9
OrderID	37	3880542	Saxo Order ID
ClOrdID	11	33806	Client Order ID (max 32 characters)
OrigClOrdID	41	29709	
OrdStatus	39	0	New
CxlRejResponseTo	434	2	Order Cancel/Replace Request
Text	58		
CxlRejReason	102	2	On wrong side of market
Standard Trailer			

7.4.4 EXECUTION REPORTS – DONE-FOR-DAY

Things to Remember

1. Execution report with **Tag150=3** and **Tag39=3 'Done for day'** is sent for unexpired orders.
2. Execution report with **Tag150=C** and **Tag39=C 'Expired'** is sent for expired orders.

8 BONDS

8.1 SPECIFICATION ON BONDS TRADING

The Server supports placement of orders on online trading bonds. The bonds include government bonds from the most liquid markets and some corporate bonds or other bonds with high degree of liquidity.

Table 76 order types and durations.

DURATION	FILL OR KILL	DAY	GOOD TILL DA	GOOD TILL CANCELL
ORDER TYPE	(FOK)	(DO)	(GTD)	(GTC)
Market	X			

8.2 TRADING HOURS

Table 77 Exchanges and trading hours

ExchangeID	Description	Schedule
CMEA_HARD	Bonds CEEMEA Hard Currency	09:00-19:00 CET.
CMEA_LOCAL	Bonds CEEMEA Local Currency	09:00-19:00 CET.
US_GOV	Bonds US Government	14:00-23:00 CET.
APAC_HARD	Bonds APAC Hard Currency	01:00-18:00 CET.
EU_CP_IG	Bonds Europe Corporate - Investment Grade	09:00-19:00 CET.
EU_CP_MG	Bonds Europe Corporate - Mortgage	09:00-19:00 CET.
US_CP_IG	Bonds US Corporate - Investment Grade	14:00-23:00 CET.
EU_GOV_IM	Bonds Europe Government Banca IMI	09:00-19:00 CET.
LATAM_HARD	Bonds LATAM Hard Currency	09:00-23:00 CET.
EU_CPHY_IM	Bonds Europe Corporate - High Yield - Banca IMI	09:00-19:00 CET.
EU_CPIG_IM	Bonds Europe Corporate - Inv. Grade - Banca IMI	09:00-19:00 CET.
EU_GOV	Bonds Europe Government	09:00-19:00 CET.
APAC_LOCAL	Bonds APAC Local Currency	01:00-18:00 CET.
EU_CP_HY	Bonds Europe Corporate - High Yield	09:00-19:00 CET.
US_CP_HY	Bonds US Corporate - High Yield	14:00-23:00 CET.

8.3 STREAMING QUOTES

Streaming quotes of bid and ask prices are always indicative. The supporting of streaming quotes will be available soon.

8.4 TRADING AND ORDER PLACEMENT ON BONDS

8.4.1 INSTRUMENT TYPE SPECIFICATION

Table 78 Requirement: Instrument Type Specification

TAG	DESCRIPTION	VALUE
460	Product type	Corporate: 3 Government:6 Mortgage:10

8.4.2 SINGLE ORDER REQUEST

Ordermodification or cancellation for Market FOK orders are not supported.

Table 79 Single Order Request

NAME	TAG	REQUIRED	DESCRIPTION
ClOrdID	11	Y (N)	Client Order ID (max 32 characters)
Account	1	Y (N)	Provided to client by Saxo
Currency	15	Y (N)	Identifies currency used for price, e.g. EUR
Product	460	Y (N)	eg 3 or 6 or 10
SecurityIDSource	22	Y	4
SecurityID	48	Y	ISIN
Side	54	Y(N)	1=Buy 2=Sell
Symbol	55	Y (N)	e.g. GERMANY-0-15AUG26
Exchange	100	Y (N)	XOFF
OrdQty	38	Y (N)	Order quantity in nominal value
OrdType	40	Y (N)	1=Market
TimeInForce	59	Y(N)	4 as FOK

8=FIX.4.3 9=231 35=D 34=115 49=CLIENTX 56=SAXOTRADE 115=6245807 50=SH 52=20170109-11:48:59 43=N
1=ACCXXX 11=103753V1C2 21=1 55=GERMANY-0-15AUG26 48=DE0001102408 22=4 100=XOFF 54=2
60=20170109-11:48:59 38=10000 40=1 15=EUR 59=4 167=CORP 460=3 10=149

8.5 EXECUTION REPORT

Table 80 Execution Report

NAME	TAG	VALUE	DESCRIPTION
------	-----	-------	-------------

Standard Header			MsgType = 8
OrderID	37	3880525	Saxo Order ID
ClOrdID	11	37888	Client Order ID (max 32 characters)
ExecID	17	1282396084222057268	Unique identifier of execution message
ExecType	150	A 0 F 8 4 C	Pending New OR New Fill Rejection Cancellation Expire
OrdStatus	39	A 0 F 8 4 C	Pending New OR New Fill Rejection Cancellation Expire
Symbol	55	GERMANY-0-15AUG26	Example for CFD Spot indices
SecurityID	48		ISIN
Side	54	1	Buy
OrderQty	38	20000	Quantity ordered in Nominal value
OrdType	40	1/2	Market/Limit
Price	44	28.40	Limit Price
Currency	15	EUR	Identifies currency used for price
TimeInForce	59	4	FOK
LeavesQty	151	150	Quantity open for further execution
CumQty	14	0	Total quantity filled

AvgPx	6	0	Calculated average price of all fills on this order
Product	460	3	3 or 6 or 10
SecurityIDSource	22	4	
Account	1		
HandInst	21	1	

Standard Trailer

Pending new order:

8=FIX.4.3 9=259 35=8 49=SAXOTRADE 56=CLIENTX 115=6245807 34=112 57=SH 52=20170109-11:48:59.933 369=115 37=211082479 11=103753V1C2 17=13128436139918872078 150=A 39=A 55=GERMANY-0-15AUG26 460=3 167=CORP 54=2 38=10000 40=1 59=4 151=10000 14=0 6=0 60=20170109-11:48:59.933 21=1 10=197

New order:

8=FIX.4.3 9=290 35=8 49=SAXOTRADE 56=CLIENTX 115=6245807 34=113 57=SH 52=20170109-11:49:00.380 369=115 37=211082479 11=103753V1C2 17=13128436140380087279 150=0 39=0 1=ACCXXX 55=GERMANY-0-15AUG26 48=DE0001102408 54=2 38=10000 40=2 44=97.293 15=EUR 59=4 151=10000 14=0 6=0 60=20170109-11:49:00.000 21=1 10=188

Order fill:

8=FIX.4.3 9=448 35=8 49=SAXOTRADE 56=CLIENTX 115=6245807 34=114 57=SH 52=20170109-11:49:01.194 369=115 37=211082479 11=103753V1C2 17=13128436141194090580 150=F 39=2 1=ACCXXX 64=20170111 55=GERMANY-0-15AUG26 48=DE0001102408 54=2 38=10000 40=2 44=97.293 15=EUR 59=4 32=10000 31=97.353 151=0 14=10000 6=97.353 60=20170109-11:49:01.000 21=1 58=Order type 'Market(Fill or Kill)' has successfully been routed as 'Limit(Fill or Kill)' with a limit price of 97.293000 10=226

Order rejection:

8=FIX.4.3 9=268 35=8 49=SAXOTRADE 56= CLIENTXX 115=6245807 34=48 57=EQI 52=20170109-11:17:18.320 369=50 37=0 11=103749V1C2 17=13128434238294368114 150=8 39=8 103=1 55=UNITEDSTATES-3.25-31MAR17 460=3 167=CORP 54=1 38=20003 40=1 59=4 151=20003 14=0 6=0 21=1 58=80: Amount not in lot size 10=121

FOK order expired:

8=FIX.4.39=29935=849=SAXOTRADE56=CLIENTXX115=624580734=81157=EQI52=20170113-11:18:24.513369=69937=21152112111=105271V1C217=13128779904513724039150=C39=C1=CLIENTACOCUNTXX55=UNITEDSTATES-3.25-31MAR1748=US912828MV9654=238=1000040=244=100.56415=USD59=4151=1000014=06=060=20170113-11:18:25.00021=110=177

Order cancelled:

8=FIX.4.39=30135=849=SAXOTRADE56=CLIENTXX115=624580734=81257=EQI52=20170113-11:18:24.549369=69937=21152112111=105271V1C217=13128779904549758740150=439=41=CLIENTACOCUNTXX55=UNITEDSTATES-3.25-31MAR1748=US912828MV9654=238=1000040=244=100.5644215=USD59=4151=1000014=06=060=20170113-11:18:24.00021=110=001

9 TEST ENVIRONMENT

9.1 ON TESTING WITH SAFT (DEMO/SIMULATION FIX API SERVER)

Consult this section to understand how **SAFT** works.

Things to Remember

1. The table does not include the different pending execution reports.

2. Symbols used in raw FIX logs differ from the symbols used in the tables.

Note: *This is done to illustrate that it is only the first character of the symbol that is used.*

This specified behavior applies if the order is not being filled by the market. To elaborate, if the order is in the market, it gets filled even if SAFT dictates that it can be replaced or cancelled. Therefore, it is imperative to put the limit order price below (for buy orders) or above (for sell orders) the current bid or ask price.

Note: *Market orders are not supported by SAFT.*

9.1.1 RECOVERY FROM MISSED MESSAGES

9.1.1.1 FX

Placing a trade request in USD/DKK triggers the following sequence (after *Initial Quote Request* message):

Table 81 Testing: Resend Request (FX)

CLIENT	SAXO
Order - Single (55=USD/DKK)	
	Execution Report (Trade, 34=n). Note: <i>This execution report is not send to simulate missing messages.</i>
	Heart beat (34=n+1)
Resend Request (7=n, 16=0)	
	Execution Report (Trade, 34=n)
Order - Single (55=USD/DKK)	
	Execution Report (Trade, 34=n). Note: <i>This execution report is not send to simulate missing messages.</i>
	Heart beat (34=n+1)

9.1.1.2 FUTURES, STOCKS, CFD DMA

Sending a place order request for a CFD, Stock or Future for an instrument starting with the initial letter triggers the following sequence.

EXAMPLE:

For example, 'T' - The company Tele Danmark (Symbol TDC, Exchange XCSE)

Table 82 Testing: Resend Request (CFD)

CLIENT	SAXO
Order – Single (55=TDC, 48=DK0010253335, 100=XCSE)	
	Execution Report (New, 34=n). <i>This execution report is not send to simulate missing messages.</i>
	Heart beat (34=n+1)
Resend Request (7=n, 16=0)	
	Execution Report (New, 34=n)

EXAMPLE:

```
8=FIX.4.3|9=196|35=D|34=38|49=SAXOTEST2|52=20070518-11:22:06.595|
56=SAXOTRADE|1=B2B_Test3_EUR|11=2069|15=GBP|21=1|22=4|38=150|
40=2|44=650|48=GB0008754136|50=CFD|54=1|55=TATE|59=0|100=XLON|
167=CS|460=5|7750=1|10=207|
```

9.1.2 FX SPOT STREAMING QUOTE AND TRADING

This sub-section describes the testing of FX Spot trade. The response from the test system is dictated by the quote used in the requests.

Note: The currency pairs available for testing are the ones previously configured by the B2B Team.

9.1.2.1 QUOTE REQUEST REJECT

Sending a Quote Request for a currency pair other than those already configured will trigger a Quote Request Reject.

Table 83 FX Testing: Quote Request Reject

CLIENT	SAXO
Quote Request (55=EUR/NOK)	
	Quote Request Reject

As stated in [section 4.2.1](#), it is possible to request more than one currency pair in each quote request. If this is done, the currency pairs will be rejected following the rules stated above.

9.1.2.2 TRADE REJECT – ALWAYS

Things to Remember

1. A trade request for USD/JPY is always rejected on Demo/Simulation FIX API server. This scenario provides you the opportunity to test the following rejection scenario:

Table 83 FX Testing (SQ): Trade Reject

CLIENT	SAXO
Quote Request (55=USD/JPY)	
	Quote
Order – Single	
	Execution Report (Rejection)
Quote Request (55=USD/JPY)	

9.1.2.3 TRADE REJECT – PERIODICALLY

Things to Remember

Apart from a certain trade rejection, you can let the test system reject every buy trade request and accept every sell trade request that lies within the liquidity control limit. The outcome of trading in NZD/USD is show in the table below.

Table 85 FX Testing (SQ): Trade Reject

CLIENT	SAXO
Quote Request (55= NZD/USD)	
	Quote
Order – Single (sell)	
	Execution Report (Trade)
Order – Single (buy)	
	Execution Report (Rejected)

9.1.2.4 TRADE

Things to Remember

A trade request for an amount below the liquidity control limit of one the crosses configured for demo trading/testing *will* be accepted.

Note: The quote ID must be valid and the FIX message in compliance with the protocol.

Table 86 FX Testing (SQ): Trade

CLIENT	SAXO
Quote Request (55=EUR/USD)	
	Quote
Order – Single	
	Execution Report (Trade)
Quote Request (55=EUR/USD)	
	Quote

9.1.3 FX SPOT REQUEST FOR QUOTE TRADING

This subsection explains the testing of manual RFQ trading. The response from the test system is dictated by the quote used in the request.

Table 92 shows the supported currency pairs.

Table 92 FX Testing (RFQ): Supported Currency Pairs

SUPPORTED CURRENCY	DEALER ACCEPT QUOTE (DEALER'S RESPONSE ON QUOTE REQUEST)	DEALER ACCEPT TRADE (DEALER'S RESPONSE ON TRADE REQUEST)
EUR/JPY	Accept to quote	Accept trade
NZD/USD*	Accept to quote	Accept trade
AUD/NZD*	Accept to quote	Accept trade
EUR/CHF	Accept to quote	Reject trade
EUR/SEK	Reject to quote	Reject trade
GBP/CHF*	Accept to quote	Accept trade

Notes:

1. For the currencies marked with *, the requested amount dictates the response time from the dealer or the time before the quote expires; one million is equal to one second. The minimum timeout is one second and the maximum is 10 regardless of the requested amount.
2. Maximum timeout changeable.

EXAMPLE:

An RFQ for EUR/JPY is made and a quote is returned. Should the client wish to trade on the returned quote, the trade is accepted. If the choice had been EUR/CHF, a quote would be returned, but a subsequent trade request would be rejected.

9.1.4 FX ORDER PLACEMENT

This section describes how SAFT (Demo/Simulation FIX API) system works in relation to FX order placement.

Things to Remember

1. As you know, the response from the test system is dictated by currency used in the place order request, you can use any instrument when testing order placement.
2. You can amend an order (as many times as required) and/or cancel it, only after the order has been accepted.
3. To allow testing *reject-scenarios*, three currencies are set up with special behavior:
 - a. Order place requests in **USD/JPY (buy and sell)** and **order place requests in NZD/USD (buy)** will *always* be rejected.

- b. Amend requests in **USD/CHF (buy and sell)** will *always* be rejected.
 - c. Cancel requests in **USD/CHF (buy and sell)** will *always* be rejected.
4. To test for *unsolicited cancels* place an order in USD/SEK. Firstly, an order is accepted. After a short time period, e.g. a *heartbeat*, it stays cancelled.

Contact B2B Team to clear mandatory Certification Tests on Demo prior going to LIVE trading!

9.1.5 FUTURES, STOCKS, CFD DMA ORDER PLACEMENT

This section describes how **SAFT (Demo/Simulation FIX API)** system works in relation to CFD, Stocks and Futures order placement.

Things to Remember

1. As is the case with FX, the response from the test system is dictated by the symbol used in *Place Order* request. SAFT considers the first character of the symbol to determine the response.
Example: AstraZeneca (Symbol AZN) and British Telecom (Symbol BT) generate different responses. However, **Amstad (Symbol AMT)** generates the same response as AstraZeneca
2. If the instrument does not exist, the place order request stays rejected.
3. Limit orders are filled on the limit prices used in the place order request while Market orders are filled at the current market price.
4. Whether the order is a Buy or a Sell, the response remains the same. The amount does not influence the response either.

Note: Though the examples mentioned only CFDs, it also applies to Stocks and Futures when the relevant tags are implemented.

9.1.5.1 MARKET ORDER

Market orders are sent for any instrument that is NOT starting with special characters as described/expected from SAFT (check special symbols below). The behavior for instruments starting with a non-SAFT letter stays as expected. Safran. (Symbol SAF, Exchange XPAR).

Table 87 CFD/Stock Testing: Market Order

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)

Execution Report (39=Filled, 150=Trade)

9.1.5.2 STOP ORDER

Stop orders sent for instruments NOT starting with a SAFT defined letter stay as expected.

Safran. (Symbol SAF, Exchange XPAR)

Table 88 CFD/Stock Testing: Stop Order

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=Filled, 150=Trade)

9.1.5.3 A: PLACE – NEW – FILL

Apple Inc. (Symbol AAPL, Exchange XNAS)

Table 89 CFD/Stock Testing: Place – New – Fill

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=Filled, 150=Trade)

9.1.5.4 B: PLACE – NEW - PARTIAL FILL – FILL

British Telecom (Symbol BT, Exchange XLON)

Table 90 CFD/Stock Testing: Place – New – Fill

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=Partially filled, 150=Trade)
	Execution Report (39=Filled, 150=Trade)

9.1.5.5 C: PLACE – NEW – AMEND – FILL

Cadbury Schweppes (Symbol CBRY, Exchange XLON)

Table 91 CFD/Stock Testing: Place – New – Amend – Fill

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
Amend Request	
	Execution Report (39=Replaced, 150=Replace)
	Execution Report (39=Filled, 150=Trade)

9.1.5.6 D: PLACE – NEW – CANCEL/AMEND

Daimler Chrysler AG (Symbol DCXGn, Exchange XETR). You can place unlimited *Amend requests*

Table 92 CFD/Stock Testing: Place – New – Cancel/Amend

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
Amend Request	
	Execution Report (39=Replaced, 150=Replace)
Amend Request	
	Execution Report (39=Replaced, 150=Replace)
Cancel Request	
	Execution Report (39=Cancelled, 150=Cancelled)

9.1.5.7 E: PLACE – NEW – PARTIAL FILL – CANCEL

Easy Jet (Symbol EZJ, Exchange XLON)

Table 93 CFD/Stock Testing: Place – New – Partial Fill – Cancel

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=Partially filled, 150=Trade)

Cancel Request

Execution Report (39=Cancelled, 150=Cancelled)

9.1.5.8 F: PLACE – NEW – PARTIAL FILL - AMEND – FILL

Fiat (Symbol FIA, Exchange XMIL)

Table 94 CFD/Stock Testing: Place – New – Partial Fill – Amend – Fill

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=Partially filled, 150=Trade)
Amend Request	
	Execution Report (39=Replaced, 150=Replace)
	Execution Report (39=Filled, 150=Trade)

9.1.5.9 G: PLACE – REJECT

Glaxo Smith Kline (Symbol GSK, Exchange XLON)

Table 95 CFD/Stock Testing: Place – Reject

CLIENT	SAXO
New Order	
	Execution Report (39=Rejected, 150=Rejected)

9.1.5.10 H: PLACE – NEW – AMEND – REJECT

Halliburton Co (Symbol HAL, Exchange XNYS)

Table 96 CFD/Stock Testing: Place – Amend – Reject

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
Amend Request	

Order Cancel Request (434=Order Cancel-
Replace Request)

9.1.5.11 I: PLACE – NEW – CANCEL – REJECT

International Business Machines Corporation (Symbol IBM, Exchange XNYS)

Table 97 CFD/Stock Testing: Place – New – Cancel – Reject

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
Cancel Request	
	Order Cancel Request (434=Order Cancel Request)

9.1.5.12 K: PLACE – NEW – DONEFORDAY

Kellogg Co. (Symbol K, Exchange XNYS)

Table 98 CFD Testing: Place – New – DoneForDay

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=DoneForDay, 150=DoneForDay)

9.1.5.13 L: PLACE – NEW – UNSOLICITED CANCEL

Lockheed Martin (Symbol LMT, Exchange XNYS)

Table 99 CFD/Stock Testing: Place – New – Unsolicited Cancel

CLIENT	SAXO
New Order	
	Execution Report (39=New, 150=New)
	Execution Report (39=Cancelled, 150=Cancelled)

9.1.5.14 M: PLACE – NO REPLY

Microsoft Corporation (Symbol MSFT, Exchange XNAS)

Table 100 CFD/Stock Testing: Place – No Reply

CLIENT	SAXO
New Order	

9.1.5.15 P: PLACE – SUSPENDED – NEW– FILL

Pepsico Inc (Symbol PEP, Exchange XNYS)

Table 101 CFD/Stock Testing: Place – Suspended – New – Fill

CLIENT	SAXO
New Order	
	Execution Report (39=Suspended, 150=Suspended)
	Execution Report (39=New, 150=New)
	Execution Report (39=Filled, 150=Trade)

9.1.6 CFD FUTUERS & CFD STOCK INDICES STREAMING QUOTE

This sub-section describes the testing of CFD Futures and CFD Stock Indices, Quote Subscription.

9.1.6.1 AUTOMATIC SUBSCRIPTION TO QUOTES

The client should be able to automatically reconnect to the FIX server in cases of disconnections, and automatically request for quotes.

Saxo will test this feature during the certification phase by forcing a network disconnects.

9.1.6.2 QUOTE REQUEST REJECT

Quote request reject can be triggered by sending a Quote Request for an instrument outside relevant trading hours. See trading hours in [Section 7.1](#).

Table 102 FX Testing: Quote Request Reject

CLIENT	SAXO
Quote Request (55 = GER30.I)	
Quote Request Reject	

As stated in [Section 7.3.1](#), it is possible to request more than one Instrument in each quote request. If this is done, the instrument quote request will be rejected based on the rules stated above.

9.1.7 CFD FUTUERS & CFD STOCK INDICES ORDER PLACEMENT

This section describes how **SAFT (Demo/Simulation FIX API)** system works in relation to CFD Futures and CFD Stock Indices order placement.

9.1.7.1 PLACE – NEW – FILL

CFD on Stock Indices (cash continuous) can be tested by placing market orders on any of the below symbols.

- SWISS20.I
- EU50.I

CFD on Futures (Expiring CFDs Commodities and Expiring CFDs on Indices) can be tested by placing market orders on any of the below symbols.

(Note! Please see the naming standard for CFD Futures in [Section 7.1](#))

- OILUS
- SILVER
- SOYBEANS
- WHEAT

Table 103 CFD Futures and CFD Stock Indices: Place – New – Fill

CLIENT	SAXO
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New Order	
	Execution Report (39=Pending New, 150=Pending New)
	Execution Report (39=New, 150=New)
	Execution Report (39=Filled, 150=Trade)

9.1.7.2 : PLACE – NEW – AMEND – FILL

This scenario can be tested by placing a Limit Order, with a limit price that is not too far from the market, and then amending the limit price to market price.

CFD on Stock Indices can be tested by placing limit orders on any of the below symbols.

- SWISS20.I
- EU50.I

CFD on Futures (Expiring CFDs Commodities and Expiring CFDs on Indices) can be tested by placing limit orders on any of the below symbols.

(Note! Please see the naming standard for CFD Futures in [Section 7.1](#))

- OILUS
- SILVER
- SOYBEANS
- WHEAT

Table 104 CFD Futures and CFD Stock Indices: Place – New – Amend – Fill

CLIENT	SAXO
New Order	
	Execution Report (39=Pending New, 150=Pending New)
	Execution Report (39=New, 150=New)
Amend Request	
	Execution Report (39=Replaced, 150=Replace)
	Execution Report (39=Filled, 150=Trade)

9.1.7.3 PLACE – NEW – CANCEL

This scenario can be tested by placing a Limit Order, with a limit price that is not too far from the market, and then cancelling the limit order.

CFD on Stock Indices can be tested by placing limit orders on any of the below symbols.

- SWISS20.I
- EU50.I

CFD on Futures (Expiring CFDs Commodities and Expiring CFDs on Indices) can be tested by placing limit orders on any of the below symbols.

(Note! Please see the naming standard for CFD Futures in [Section 7.1](#))

- OILUS
- SILVER
- SOYBEANS
- WHEAT

Table 105 CFD Futures and CFD Stock Indices: Place – New – Cancel

CLIENT	SAXO
New Order	
	Execution Report (39=Pending New, 150= Pending New)
	Execution Report (39=New, 150=New)
Cancel Request	
	Execution Report (39=Pending Cancel, 150= Pending Cancel)
	Execution Report (39=Cancelled, 150=Cancelled)

9.1.7.4 PLACE – REJECT

This scenario can be tested by placing a Limit Order, with a limit price that is extremely far from the market, only relevant for CFD on Futures with the below symbols.

- GASOLINEUS
- GOLD

9.1.7.5 PLACE – NEW – AMEND – REJECT

This scenario can be tested by placing a Stop Order, and then amending the Stop price to be extremely far from the market price.

CFD on Stock Indices can be tested by placing stop orders on any of the below symbols.

- SWISS20.I
- EU50.I

CFD on Futures (Expiring CFDs Commodities and Expiring CFDs on Indices) can be tested by placing stop orders on any of the below symbols.

(Note! Please see the naming standard for CFD Futures in [Section 7.1](#))

- OILUS
- SILVER
- SOYBEANS
- WHEAT

Table 106 CFD Futures and CFD Stock Indices: Place – Amend – Reject

CLIENT	SAXO
New Order	
	Execution Report (39=Pending New, 150=Pending New)
	Execution Report (39=New, 150=New)
Amend Request	
	Order Cancel Request (434=Order Cancel-Replace Request)
Reject	Execution Report (35=9)

10 ORDER REJECT REASONS

This section defines the values of **tag 58**, which is the explanatory text in trade and order rejections.

Things to Remember

1. While the text gets changed or expanded, the enumeration remains the same. In other words, if **tag58=4** it will always correspond to '**Invalid quote IDs**' error message.

Note: All error messages are listed in the table below.

2. The enumeration and text are separated by a colon. For example, "**4: Invalid Quote ID**".

NO.	TEXT
1	Not in FX trading session
2	Unknown ordertype '%s'
3	Invalid tag value for tag '%s'
4	Invalid Quote ID
5	Price mismatch
6	Price not tradable
7	Quote expired or invalid Quote ID
8	Invalid amount or rejected by liquidity control
9	Internal error
10	Symbol not found: '%s'
11	Trade validation failed
12	Invalid Band ID: %d
13	Currency Band '%d' not active
14	Quote session not connected
15	FX trading not activated
16	Failed to place order

17	<i>TimeInForce</i> value <u>not</u> supported
18	Failed to change order %d
19	Failed to cancel order
20	Dealer busy
21	Rejected by dealer
22	Quote expired
23	Trade request different from manual quote
24	RFQ not enabled
25	Could not get FX spot price
27	Invalid amount or rejected by liquidity control
28	Rejected by liquidity control
31	Insufficient cash
32	Not owned
33	Would exceed margin
34	Too close to market
35	Funds closed
36	Fund units not available
37	Short trade disabled
38	Business rule violation
39	Unknown user
40	User not active
41	Invalid account
42	Price too far from market
43	On wrong side of market
44	Cancelled manually

45	Sell orders already exist for owned contracts
46	Client exposure limitation
47	Internal server error
50	Ambiguous values
51	Unknown instrument type
52	Unknown instrument
53	Instrument type not enabled
54	Unsupported value
55	Change is not allowed
56	Client not calculated
57	Full calculation error
58	Fund not found
59	Not checked
60	Saxo commission error
61	Saxo feed error
62	Saxo margin requirement error
63	Saxo symbol error
64	WLC not found
66	Order value too small
65	Order size too small
67	Accounts with a partner only Liquidity Profile not allowed to trade on manual quote
68	General business error
69	Account not active
70	Client not active

71	Same price order already exists
72	Too far from market
73	Wrong side of entry order
74	Limit price too far from price
75	Limit on wrong side of order price
76	Too late
77	New amount cannot be less than filled amount
78	Wrong side of contingent order
79	Price not in tick size
80	Amount not in lot size
81	Order request already pending
82	No new client orders
83	Invalid order relation
84	No market access
85	Amount above trail stop max account
86	Below minimum lot size
87	Amount above guaranteed stop max amount
88	No routing rule
89	Illegal order type change
90	Account is DMA but not setup for exchange
91	Cannot place order in auction
92	Too far from entry order
93	Guaranteed stop not allowed for contract type
94	Order value too large
95	Duration not supported

96	Client orders does not match working client order Id
97	Order exceeds aggressive tolerance
98	Limit too far from stop
99	Expire date is not a trading day
100	Amount differs from amount on related order
101	Amendments not supported in break session
102	GTD order cannot be later than expiry
103	Instrument has expired
104	Order type not supported
105	Too Close To OCO Related Order Price
106	Stop order higher limit on buy
107	Limit order lower then stop on buy
108	Stop order lower limit on sell
109	Limit order higher stop on sell
110	Not FIFO compliant
111	Buy sell different
112	Instrument different
113	Client cannot cancel stop out order
114	Client cannot cancel market expiry order
115	Related order has hit time
116	Order cannot be changed at this time
117	Invalid allocation key used
118	Relations longer than day restricted
119	Account is not enabled for direct market access
120	ListSeqNo(Tag 67) is invalid

121	HandlInst(Tag 21) is invalid
122	Product(Tag 460) is invalid
123	Side(Tag 54) is invalid
124	OrderCty(Tag 38) is invalid
125	StopPx(Tag 99) is invalid
126	ClOrdID(Tag 11) more than 32 characters
127	ExecInst(Tag 18) is invalid
128	NoOrders(Tag 73, 68) is invalid
129	ContingencyType(Tag 1385) is invalid
130	Could not find TradeAllocation Rule
131	Illegal order type combination
133	Not enabled to place this type of order
134	Order rejected, no subscription for currency cross
135	Account cash withdrawal override
136	Client cash withdrawal override
137	Illegal instrument type for account
138	Forced exposure reduction violation
139	Short trade disabled by caller
140	Exercise cutoff time violation
141	Posting mode violation
142	Trading profile violation
143	Saxo exposure error
144	Unsupported client type
145	Amount lower than allocation key units
146	Allocation key does not match account

147	Position buildup min commission violation"
148	Close all positions already being closed
149	Position buildup not valid for instrument
150	Account is trade restricted
151	Client cannot change stop out order
152	Amount not multiple of allocation key units
153	To open close is undefined
154	To open close invalid in order to position relations
155	To open close invalid in order to position relations
156	Option exercise after cutoff
157	No market volume
158	Client cannot cancel allocated order
159	Order cannot be cancelled at this time
160	Order/Trade/Change rejected, due to PossDupFlag set to Y
161	Trade rejected as too many trades attempted within a short time period
162	Placing order would exceed margin limits
163	Would exceed margin ceiling
164	Trade rejected due to quote chosen being too old
165	Trade rejected due to newer quotes having been sent
166	Trade rejected due to excessive market move

11 CONTACT DETAILS

If you have any questions to this Rule of Engagement, please do not hesitate to send us an email to ETCS@Saxobank.com or call us at +45 3977 6903.