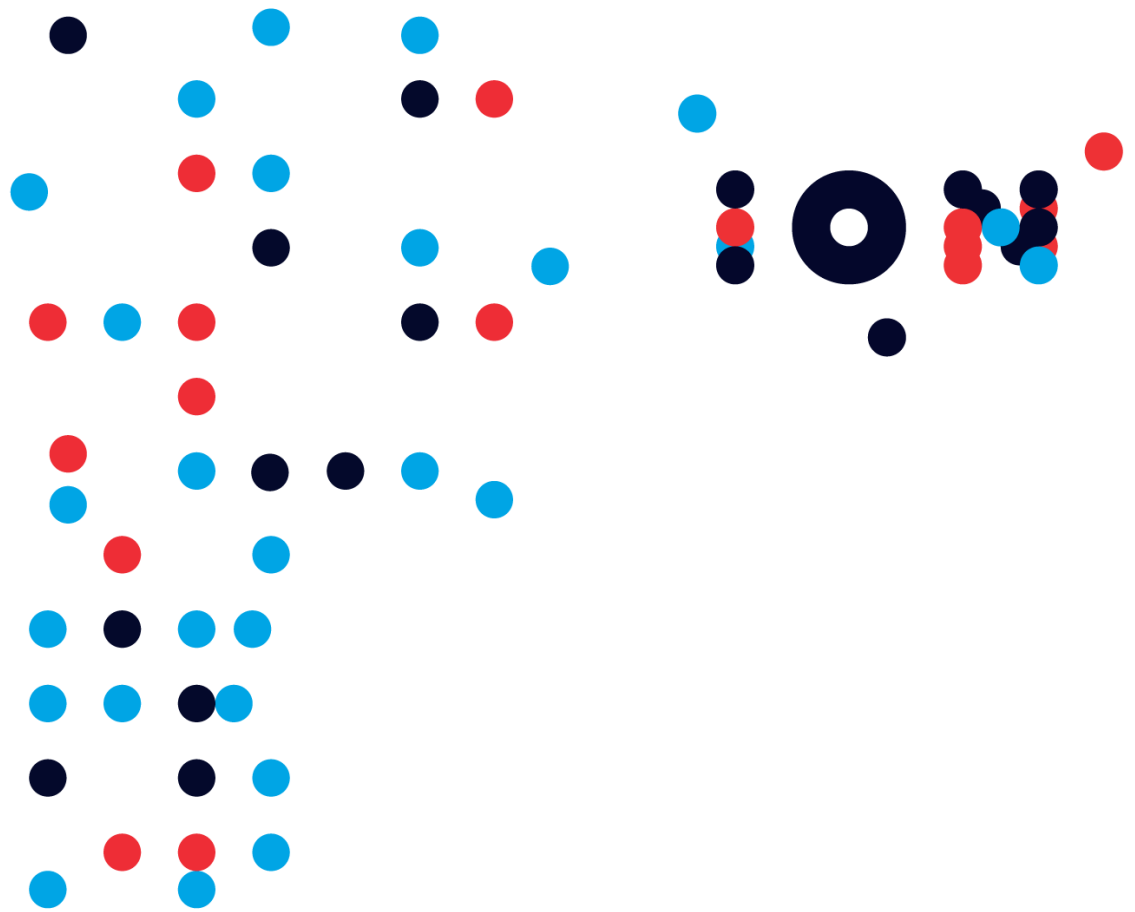
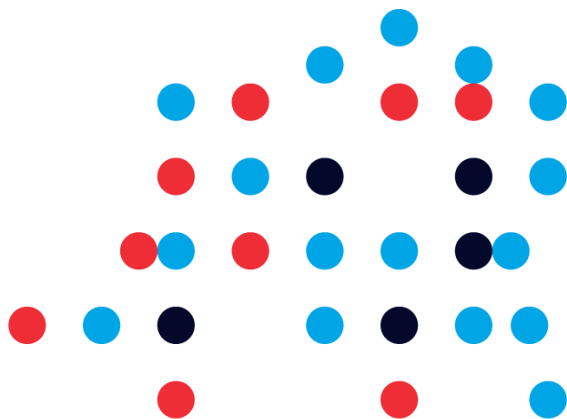


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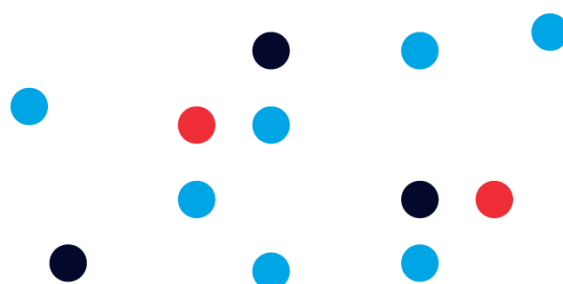
# Trading through FIX 4.2

## FIX 4.2 Protocol Specification



Technical note

Version [2.16]



6<sup>th</sup> October 2017



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# 1 Document History

Version	Date	Author	Reviewer	Software Version	Comments
2.0	23/09/2008	G Georgiou	J Farron	2008 Q4	Rewrite of “External FIX Documentation” version 1.5. Content transferred into new template and re-structured to mirror new “Trading through FIX 4.4.doc”. Changed: Section numbers, formatting, table formatting. Added: Introduction & Overview Section.
2.1	03/10/2008	R McElvogue	G Georgiou	2008 Q4	2.0 Reviewed. Minor text amendments. Table formatting by J Farron.
2.2	07/11/2008	G Georgiou	J Farron	2008 Q4	Addition of “Internal References” section. Fixed TOC formatting. Minor text and misc formatting amendments.
2.3	13/11/2008	J Farron		2008 Q4	Brought some information up to date with latest release (including system diagram). Restructured document: now closer to other documents in set.
2.4	10/5/2013			2013 M3	Support of disable self cross check on submit and replace message. Support for market with leftover as limit order submit.
2.5	28/3/2014	P Pisek		2014 M1	Algold support for EUREX added.
2.6	15/7/2014	J Jetmar		2014 M3	Updated spec to be in line with code base
2.7	5/3/2015	J Jetmar		2015 Q2	Support for strategies with multiple underlying (tags 10000 and 10001 allows to specify ratio and user price)
2.8	28/07/2015	I Stepanov		2015 Q4	List of available order types has been updated



2.9	13/10/2015	I Stepanov		2015 Q4	StopPriceCondition can be specified for Stop and MIT orders
2.10	17/06/2016	I Stepanov		2016 Q4	Field RoundLot(561) has been added to SecurityDefinition response (35=d)
2.11	2/2/2017	J Jetmar		2017 Q2	Updated list of ExecRestatementReason (378)
2.12	25/05/2017	A Pavlov		2017-Q3	Reformat to new ION design.
2.13	14/9/2017	J Jetmar		2017 Q4	MIFID regulatory data <ul style="list-style-type: none"><li>• new Parties group</li><li>• new OrderAttribute group</li><li>• new TrdRegPublication group</li><li>• additional Side(54) values for short selling</li><li>• new tags OrderCapacity(528), AggressorIndicator(1057), DEA(1724)</li></ul>
2.14	19/9/2017	J Jetmar		2017 Q4	Document fixes
2.15	04/10/2017	P Maco		2017 Q4	Fixed reserved short-code numbers in Parties component block
2.16	06/10/2017	J Jetmar		2017 Q4	Microseconds in SendingTime(52), OrigSendingTime(122) and TransactTime(60) PartyRoleQualifier is not required for new MiFID party roles order operations. When not specified we will provide 0 on execution reports.



# Contents

1	Document History.....	1
	Contents .....	3
2	Introduction and Overview .....	5
2.1	Overview .....	5
2.2	System Diagram .....	5
2.3	References and Related Documents .....	5
2.4	MiFID regulation .....	6
3	Specification Overview .....	7
3.1	Order lifetime .....	7
3.2	Retrieving orders .....	7
3.3	FFastFill group trading specifics .....	7
3.4	Logon with sequence reset .....	7
3.5	FFastFill FIX 4.2 protocol overview .....	7
4	Session Messages .....	9
4.1	Logon message.....	9
4.2	Test Request message.....	9
4.3	Heartbeat Message.....	9
4.4	Resend Request Message .....	10
4.5	Reject Message .....	10
4.6	Sequence Reset Message .....	10
4.7	Logout Message.....	10
5	Order Messages.....	12
5.1	New Order - Single Message.....	12
5.2	Order Cancel/Replace Request (a.k.a. Order Modification Request) .....	16
5.3	Order Cancel Request Message .....	19
5.4	Order Cancel Reject Message.....	20
5.5	Order Status Request Message .....	21
5.6	Execution Report Message .....	22
5.7	Stop Price Conditions.....	26
6	Security Information Messages.....	27
6.1	Security Definition Request Message .....	27
6.2	Security Definition Message.....	30
7	Appendix A .....	33
7.1	New Order Single Request .....	33
7.2	Execution Report Response .....	34



7.2.1	Order is accepted by FFastFill system.....	34
7.2.2	Order is accepted by Exchange (CME).....	34
7.2.3	Order is filled by Exchange (CME).....	35
7.3	Component definitions .....	36
7.3.1	<Order Attributes> Component Block.....	36
7.3.2	<TrdRegPublicationGrp> Component Block .....	36
7.3.3	<Parties> Component Block.....	37
8	Appendix B.....	39
8.1	Security Definition Request Message .....	39
8.2	Security Definition.....	39
9	Appendix C.....	40
9.1	FFastFill Strategy Codes.....	40



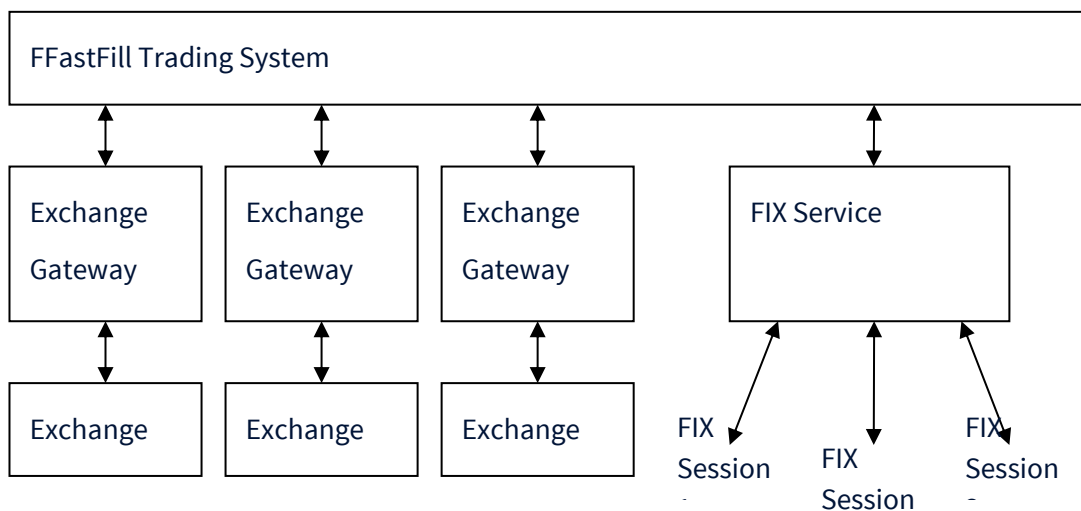
## 2 Introduction and Overview

FIX service provides connectivity to FFastFill system for registered FFastFill traders through FIX protocol version 4.2.

### 2.1 Overview

FIX sessions are mapped to regular FFastFill trader's sessions, what allows the full FFastFill trading functionality for external FIX trader - in other words FFastFill server doesn't know anything about FIX trader - it works only with ordinary FFastFill traders and FIX service masks the whole communication and translates it from FIX to FFastFill and vice versa.

### 2.2 System Diagram



### 2.3 References and Related Documents

- FFastFill Fact Sheets
- Spreading
- Third Party Integration
- Trading
- Hosting
- FFastFill Trading Interfaces
- FFastFill Protocol Specs
- Trading through FIX 4.4



- FIX 4.4 Drop Copy (Inbound/Outbound)
- FIX 4.2 Drop Copy (Inbound)
- Internal References - FFastFill Wiki
- [http://ffwiki/index.php/External\\_FIX\\_Service](http://ffwiki/index.php/External_FIX_Service)
- [http://ffwiki/index.php/Third\\_Party\\_Interfaces](http://ffwiki/index.php/Third_Party_Interfaces)
- <http://ng-intranet/ffw/FIXService>
- External References
- FIX Protocol Organisation: <http://www.fixprotocol.org/>
- QuickFIX Engine: <http://www.quickfixengine.org/>

## 2.4 MiFID regulation

With MiFID regulation additional fields were introduced to specify required data. See new PartyRoles, OrderAttributes, DEA, TrdRegPublication, OrderCapacity and AggressorIndicator tags.

We also support better time precision on tags OrigSendingTime, SendingTime and TransactTime. Any message to ION can contain such tag with second, millisecond or microsecond precision. It is required to have always 0, 3 or 6 decimal places behind second

Samples:

52=20171004-09:39:13.699878

52=20171004-09:39:13.699

52=20171004-09:39:13

To receive microseconds on responses from ION it is required to setup Fix service with setting "Use microseconds in timestamp tags".





## 3 Specification Overview

### 3.1 Order lifetime

All orders created in FIX stay active until they are filled or cancelled - it means that orders are not cancelled neither by Log Out nor disconnection - their status is automatically updated after each Log On - see Retrieving orders.

### 3.2 Retrieving orders

All orders which are still active between connections are retrieved from FFastFill system in 15 seconds after successful Log On.

### 3.3 FFastFill group trading specifics

Group trading is a specific FFastFill trading configuration allowing multiple traders to share their order books as well as actions with orders. If FFastFill group trader is used for FIX session mapping there are these limitations for FIX session:

FIX trader can see only orders originated from particular FIX session (created by New Order Single message)

Unsolicited order changes are possible for FIX originated orders, if said orders are changed by other group trader in regular FFastFill front-end. ExternalFIXService will generate ordinary Execution Report message for such changes with the same value of fields CLORDID (11) and ORIGCLORDID (41).

### 3.4 Logon with sequence reset

Session is supposed to start with sequence numbers 1, 1. It may be configured either to never reset the sequence numbers or to reset them daily at UTC midnight.

It is possible to reset session sequence numbers by setting field RESETSEQNUMFLAG (141) to Y in the Logon Message.

### 3.5 FFastFill FIX 4.2 protocol overview

There are some FFastFill specific changes of standard protocol because of security definitions etc. All required and supported messages with descriptions are listed in the following text.



Supported *incoming* messages:

[Logon](#)

[Logout](#)

[Heartbeat](#)

[Test Request](#)

[Resend Request](#)

[Sequence Reset](#)

[New Order - Single](#)

[Order Cancel Request](#)

[Order Cancel/Replace Request](#)

[Order Status Request](#)

[Security Definition Request](#)

Supported *outgoing* messages:

[Logon](#)

[Logout](#)

[Heartbeat](#)

[Test Request](#)

[Resend Request](#)

[Sequence Reset](#)

[Execution Report](#)

[Order Cancel Reject](#)

[Reject](#)

[Security Definition](#)



## 4 Session Messages

### 4.1 Logon message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = A
98	EncryptMethod	Y	Y	(Always unencrypted) = value 0
108	HeartBtInt	Y	Y	Note same value used by both sides
95	RawDataLength	N	N	ignore
96	RawData	N	Y	Password for session
141	ResetSeqNumFlag	N	N	Indicates both sides of a FIX session should reset sequence numbers
383	MaxMessageSize	N	N	ignored
384	NoMsgTypes	N	N	ignored
→ 372	RefMsgType	N	N	ignored
→ 385	MsgDirection	N	N	ignored
	Standard Trailer	Y	Y	

### 4.2 Test Request message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = 1
112	TestReqID	Y	Y	
	Standard Trailer	Y	Y	

### 4.3 Heartbeat Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = 0
112	TestReqID	N	N	Required when the heartbeat is the result of a Test Request message.



	Standard Trailer	Y	Y	
--	------------------	---	---	--

## 4.4 Resend Request Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = 2
7	BeginSeqNo	Y	Y	
16	EndSeqNo	Y	Y	
	Standard Trailer	Y	Y	

## 4.5 Reject Message

Tag	Field Name	Req'd	FFastFill Submitted	Comments
	Standard Header	Y	Y	MsgType = 3
45	RefSeqNum	Y	Y	MsgSeqNum of rejected message
371	RefTagID	N	Y	The tag number of the FIX field being referenced.
372	RefMsgType	N	N	
373	SessionRejectReason	N	N	
58	Text	N	Y	Where possible, message to explain reason for rejection
354	EncodedTextLen	N	N	
355	EncodedText	N	N	
	Standard Trailer	Y	Y	

## 4.6 Sequence Reset Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = 4
123	GapFillFlag	N	N	
36	NewSeqNo	Y	Y	
	Standard Trailer	Y	Y	

## 4.7 Logout Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = 5
58	Text	N	N	



354	EncodedTextLen	N	N	ignored
355	EncodedText	N	N	ignored
	Standard Trailer	Y	Y	



## 5 Order Messages

### 5.1 New Order - Single Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = D
11	ClOrdID	Y	Y	It has to be unique per session life, for GTC orders it has to be unique for all time
109	ClientID	N	Y	FFastFill Client name is expected
76	ExecBroker	N	N	Ignored
1	Account	N	Y	FFastFill Client name is expected
78	NoAllocs	N	N	Enabled only for client mapping configuration (ClientRetriever="FixClient")
→ 79	AllocAccount	N	N	See tag 78
→ 80	AllocShares	N	N	See tag 78
63	SettlmntTyp	N	N	Ignored
64	FutSettDate	N	N	Ignored
21	HandlInst	Y	N	Support of care orders. Based on your service configuration values '2' or '3' (or both at once) can identify order that should be manually executed by broker. For electronic execution use '1'
18	ExecInst	N	N	Ignored
110	MinQty	N	N	Minimal volume where supported by FFastFill
111	MaxFloor	N	N	Ignored
100	ExDestination	N	Y	Exchange mapping: CME = '2' CME iLink 2.0 = 'CI2' LIFFE = '3' LIFFE EQUITY = '5' Euronext.LIFFE Paris Financials = 'p' Euronext.LIFFE Paris Equities = 'PA' Equities = 'SL' CBOT = 'CB' Eurex = 'd' IDEM = 'ID' LME = 'l'



				BTEX = 'BX' OM = '17' IPE = 'IP' CBOT.LIFFE = 'CBL' LME Cinnober CTS This can be configured for each fix service.
386	NoTradingSessions	N	N	Ignored
→ 336	TradingSessionID	N	N	Ignored
81	ProcessCode	N	N	Ignored
55	Symbol	Y	Y	Product code (depends on IDSource)
65	SymbolSfx	N	N	Ignored
48	SecurityID	N	N	SecurityID can be obtained by Security Definition Request message
22	IDSource	N	Y	Allowed values '4' – ISIN, '8' Exchange code (FFastfill market identification)
167	SecurityType	N	Y	Future = 'FUT' Option = 'OPT' Stock = 'CS' Foreign exchange contract = 'FOR' Strategy = 'MLEG' (implies tag SecurityID)
200	MaturityMonthYear	N	N	Required for future or option, use 299901 for 3M CTS instruments
205	MaturityDay	N	N	Required for non-monthly instruments
201	PutOrCall	N	N	Required for option Put = '0' Call = '1'
202	StrikePrice	N	N	Required for option
206	OptAttribute	N	N	Ignored
231	ContractMultiplier	N	N	Ignored
223	CouponRate	N	N	Ignored
207	SecurityExchange	N	N	Used as backup when ExDestination not used.
106	Issuer	N	N	Ignored
348	EncodedIssuerLen	N	N	Ignored
349	EncodedIssuer	N	N	Ignored
107	SecurityDesc	N	N	Ignored



350	EncodedSecurityDescLen	N	N	Ignored
351	EncodedSecurityDesc	N	N	Ignored
140	PrevClosePx	N	N	Ignored
54	Side	Y	Y	Side Possible values: Buy ('1'), Sell ('2') For MIFID exchange additional values are supported: Sell short ('5'), Sell short exempt ('6'), Sell undisclosed ('H')
114	LocateReqd	N	N	ignored
60	TransactTime	Y	Y	Time this order request was initiated/released by the trader or trading system.
38	OrderQty	N	Y	Always Required
152	CashOrderQty	N	N	Ignored
40	OrdType	Y	Y	Types: Market = '1' Limit = '2' Stop = '3' Stop limit = '4' Market on close = '5' With or without = '6' Limit or better='7' Limit with or without='8' On basis='9' On close='A' Limit on close='B' Forex market='C' Previously quoted='D' Previously indicated='E' Forex limit = 'F' Forex swap='G' Forex previously quoted='H' Funari='I' Pegged = 'P' Market on open = 'O' Trailing stop='t' Market if touched = 'J'
44	Price	N	N	Limit price for non-Market orders
99	StopPx	N	N	Trigger price for Stop/Stop limit orders





5255	StopPriceCondition	N	N	Triggering price condition for Stop and MIT orders. See <a href="#">Stop Price Conditions</a>
15	Currency	N	N	Ignored
376	ComplianceID	N	N	Ignored
377	SolicitedFlag	N	N	Ignored
23	IOIid	N	N	Ignored
117	QuoteID	N	N	Ignored
59	TimeInForce	N	Y	Time types: Day = '0' Good Till Cancel (GTC) = '1' Immediate or Cancel (IOC) = '3' Fill or Kill (FOK) = '4' Good Till Date = '6'
168	EffectiveTime	N	N	Ignored
432	ExpireDate	N	N	Required for GTC/GTD Orders
126	ExpireTime	N	N	Ignored
427	GTBookingInst	N	N	Ignored
12	Commission	N	N	Ignored
13	CommType	N	N	Ignored
47	Rule80A (aka OrderCapacity)	N	N	Ignored
121	ForexReq	N	N	Ignored
120	SettlCurrency	N	N	Ignored
58	Text	N	N	Can be used to specify comment on care order
354	EncodedTextLen	N	N	Ignored
355	EncodedText	N	N	Ignored
193	FutSettlDate2	N	N	Ignored
192	OrderQty2	N	N	Ignored
77	OpenClose	N	N	Optional. Defaults to Open if not specified. Open = 'O' Close = 'C'
203	CoveredOrUncovered	N	N	Ignored
204	CustomerOrFirm	N	N	Ignored
210	MaxShow	N	N	Ignored
211	PegDifference	N	N	Ignored
388	DiscretionInst	N	N	Ignored
389	DiscretionOffset	N	N	Ignored



439	ClearingFirm	N	N	Ignored
440	ClearingAccount	N	N	Ignored
528	OrderCapacity	N	C	Required for MIFID exchanges. Valid values: AOTC ('A'), DEAL ('P'), MTCH ('R')
<u>1724</u>	<u>DEA</u>	<u>N</u>	<u>C</u>	<u>Available on MIFID reports. Possible values: Yes ('5'), No ('0')</u>
	<PartyID> Component Block	N	C	Required only for MIFID exchanges.
	<OrderAttributes> Component Block	N	C	Required only for MIFID exchanges.
10070	DisableSelfCrossCheck	N	N	This can disable checking if own or group order can be filled (this functionality must be first enabled in user settings). DataType: BOOLEAN
25029	RegulatoryID	N	N	If set, specifies AlgoID of the algorithm used for submitting the message. Currently EUREX only.
	Standard Trailer	Y	Y	

## 5.2 Order Cancel/Replace Request (a.k.a. Order Modification Request)

Tag	Field Name		Req'd	Comments
	Standard Header	Y	Y	MsgType = G
37	OrderID	N	N	ignored
109	ClientID	N	N	ignored
76	ExecBroker	N	N	ignored
41	OrigClOrdID	Y	Y	Original ClOrdID
11	ClOrdID	Y	Y	New ClOrdID - it has to be unique per session life, for GTC orders it has to be unique for all time
66	ListID	N	N	ignored
1	Account	N	N	ignored
78	NoAllocs	N	N	ignored
→ 79	AllocAccount	N	N	ignored
→ 80	AllocShares	N	N	ignored
63	SettlMntTyp	N	N	ignored
64	FutSettDate	N	N	ignored



21	HandlInst	Y	N	ignored
18	ExecInst	N	N	ignored
110	MinQty	N	N	Minimal volume where supported by FFastFill, can't be changed
111	MaxFloor	N	N	ignored
100	ExDestination	N	N	ignored
386	NoTradingSessions	N	N	ignored
→ 336	TradingSessionID	N	N	ignored
55	Symbol	Y	N	ignored
65	SymbolSfx	N	N	ignored
48	SecurityID	N	N	ignored
22	IDSource	N	N	ignored
167	SecurityType	N	N	ignored
200	MaturityMonthYear	N	N	ignored
205	MaturityDay	N	N	ignored
201	PutOrCall	N	N	ignored
202	StrikePrice	N	N	ignored
206	OptAttribute	N	N	ignored
231	ContractMultiplier	N	N	ignored
223	CouponRate	N	N	ignored
207	SecurityExchange	N	N	ignored
106	Issuer	N	N	ignored
348	EncodedIssuerLen	N	N	ignored
349	EncodedIssuer	N	N	ignored
107	SecurityDesc	N	N	ignored
350	EncodedSecurityDescLen	N	N	ignored
351	EncodedSecurityDesc	N	N	ignored
54	Side	Y	N	Ignored, can't be changed On MIFID exchanges adjust is allowed to change new possible values: Sell short ('5'), Sell short exempt ('6'), Sell undisclosed ('H'). This is not propagated to exchange.
60	TransactTime	Y	N	ignored
38	OrderQty	N	Y	Always Required
152	CashOrderQty	N	N	ignored
40	OrdType	Y	N	Ignored, can't be changed
44	Price	N	N	Limit price for non-Market orders



99	StopPx	N	N	Trigger price for Stop/Stop limit orders
211	PegDifference	N	N	ignored
388	DiscretionInst	N	N	ignored
389	DiscretionOffset	N	N	ignored
376	ComplianceID	N	N	ignored
377	SolicitedFlag	N	N	ignored
15	Currency	N	N	ignored
59	TimeInForce	N	N	Ignored, can't be changed
168	EffectiveTime	N	N	ignored
432	ExpireDate	N	N	Required for GTC/GTD Orders
126	ExpireTime	N	N	ignored
427	GTBookingInst	N	N	ignored
12	Commission	N	N	ignored
13	CommType	N	N	ignored
47	Rule80A (aka OrderCapacity)	N	N	ignored
121	ForexReq	N	N	ignored
120	SettlCurrency	N	N	ignored
58	Text	N	N	ignored
354	EncodedTextLen	N	N	ignored
355	EncodedText	N	N	ignored
193	FutSettDate2	N	N	ignored
192	OrderQty2	N	N	ignored
77	OpenClose	N	N	Optional – can be changed only on Bloomberg plugin
203	CoveredOrUncovered	N	N	ignored
204	CustomerOrFirm	N	N	ignored
210	MaxShow	N	N	ignored
114	LocateReqd	N	N	ignored
439	ClearingFirm	N	N	ignored
440	ClearingAccount	N	N	ignored
528	OrderCapacity	N	C	Required for MIFID exchanges. Valid values: AOTC ('A'), DEAL ('P'), MTCH ('R')
<u>1724</u>	<u>DEA</u>	<u>N</u>	<u>C</u>	<u>MIFID exchanges only. Possible values: Yes ('5'), No ('0')</u>
	<PartyID> Component Block	N	C	Available only for MIFID exchanges.



	<OrderAttributes> Component Block	N	C	Available only for MIFID exchanges.
10070	DisableSelfCrossCheck	N	N	This can disable checking if own or group order can be filled (this functionality must be first enabled in user settings). DataType: BOOLEAN
25029	RegulatoryID	N	N	If set, specifies Algoid of the algorithm used for submitting the message. Currently EUREX only.
Standard Trailer		Y	Y	

## 5.3 Order Cancel Request Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = F
41	OrigClOrdID	Y	Y	Original ClOrdID
37	OrderID	N	N	ignored
11	ClOrdID	Y	Y	New ClOrdID - unique per session life
66	ListID	N	N	ignored
1	Account	N	N	ignored
109	ClientID	N	N	ignored
76	ExecBroker	N	N	ignored
55	Symbol	Y	N	ignored
65	SymbolSfx	N	N	ignored
48	SecurityID	N	N	ignored
22	IDSource	N	N	ignored
167	SecurityType	N	N	ignored
200	MaturityMonthYear	N	N	ignored
205	MaturityDay	N	N	ignored
201	PutOrCall	N	N	ignored
202	StrikePrice	N	N	ignored
206	OptAttribute	N	N	ignored
231	ContractMultiplier	N	N	ignored
223	CouponRate	N	N	ignored
207	SecurityExchange	N	N	ignored
106	Issuer	N	N	ignored
348	EncodedIssuerLen	N	N	ignored



349	EncodedIssuer	N	N	ignored
107	SecurityDesc	N	N	ignored
350	EncodedSecurityDescLen	N	N	ignored
351	EncodedSecurityDesc	N	N	ignored
54	Side	Y	N	ignored
60	TransactTime	Y	N	ignored
38	OrderQty	N	N	ignored
152	CashOrderQty	N	N	ignored
376	ComplianceID	N	N	ignored
377	SolicitedFlag	N	N	ignored
58	Text	N	N	ignored
354	EncodedTextLen	N	N	ignored
355	EncodedText	N	N	ignored
25029	RegulatoryID	N	N	If set, specifies Algoid of the algorithm used for submitting the message. Currently EUREX only.
Standard Trailer		Y	Y	

## 5.4 Order Cancel Reject Message

Tag	Field Name	Req'd	FFastFill Submitted	Comments
	Standard Header	Y	Y	MsgType = 9
37	OrderID	Y	N	
198	SecondaryOrderID	N	N	
11	CLOrdID	Y	Y	Always
41	OrigCLOrdID	Y	Y	OrigCLOrdID if exists, otherwise "Unknown"
39	OrdStatus	Y	Y	Status: Rejected = '8' Suspended = '9' (if order cannot be cancelled or modified due to an internal error)
109	ClientID	N	N	
76	ExecBroker	N	N	
66	ListID	N	N	
1	Account	N	N	



60	TransactTime	N	N	
434	CxlRejResponseTo	Y	Y	Type of request being rejected (not present if rejecting an Order Status Request)
102	CxlRejReason	N	Y	Rejection reason code
58	Text	N	N	Explaining text, where possible
354	EncodedTextLen	N	N	
355	EncodedText	N	N	
	Standard Trailer	Y	Y	

## 5.5 Order Status Request Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = H
37	OrderID	N	N	ignored
11	ClOrdID	Y	Y	Unique ID required
109	ClientID	N	N	ignored
1	Account	N	N	ignored
76	ExecBroker	N	N	ignored
55	Symbol	Y	N	ignored
65	SymbolSfx	N	N	ignored
48	SecurityID	N	N	ignored
22	ISource	N	N	ignored
167	SecurityType	N	N	ignored
200	MaturityMonthYear	N	N	ignored
205	MaturityDay	N	N	ignored
201	PutOrCall	N	N	ignored
202	StrikePrice	N	N	ignored
206	OptAttribute	N	N	ignored
231	ContractMultiplier	N	N	ignored
223	CouponRate	N	N	ignored
207	SecurityExchange	N	N	ignored
106	Issuer	N	N	ignored
348	EncodedIssuerLen	N	N	ignored
349	EncodedIssuer	N	N	ignored
107	SecurityDesc	N	N	ignored
350	EncodedSecurityDescLen	N	N	ignored



351	EncodedSecurityDesc	N	N	ignored
54	Side	Y	N	ignored
	Standard Trailer	Y	Y	

## 5.6 Execution Report Message

Tag	Field Name	Req'd	FFastFill Submitted	Comments
	Standard Header	Y	Y	MsgType = 8
37	OrderID	Y	Y	FFastFill Order ID
198	SecondaryOrderID	N	Y	Exchange identifier
11	ClOrdID	N	Y	Always filled
41	OrigClOrdID	N	N	Filled if response to Order Cancel/Replace or Order Cancel Request
109	ClientID	N	N	
76	ExecBroker	N	N	
382	NoContraBrokers	N	N	
→ 375	ContraBroker	N	N	
→ 337	ContraTrader	N	N	
→ 437	ContraTradeQty	N	N	
→ 438	ContraTradeTime	N	N	
66	ListID	N	N	
17	ExecID	Y	Y	Unique ID
20	ExecTransType	Y	Y	Types: NEW = '0' CORRECT = '1' CANCEL = '2' STATUS = '3'
19	ExecRefID	N	N	
150	ExecType	Y	Y	Same value as OrdStatus
39	OrdStatus	Y	Y	Statuses: New = '0' Partially filled = '1' Filled = '2' Done for day = '3' Cancelled = '4' Replaced = '5'





				Pending Cancel = '6' Rejected = '8' Pending New = 'A' Pending Replace = 'E'
103	OrdRejReason	N	Y	Reason of order request rejection
378	ExecRestatementReason	N	N	'3' = Repricing of Trailing Stop order '4' = adjust on order operation performed by group trader '8' = Order type changed on exchange (MTL)
1	Account	N	N	
63	SettlmntTyp	N	N	
64	FutSettDate	N	N	
55	Symbol	Y	Y	Always (FFastFill product code in outrights and strategy legs or FFastFill strategy code in strategy markets)
65	SymbolSfx	N	N	
48	SecurityID	N	Y	Always
22	IDSource	N	Y	'4' = ISIN '8' = NG
167	SecurityType	N	Y	'MLEG' in main strategy Execution Report, normal security type in legs and outrights
200	MaturityMonthYear	N	Y	Outright markets and strategy legs only
205	MaturityDay	N	Y	Non-monthly outright markets and strategy legs only
201	PutOrCall	N	Y	Outright option markets and strategy legs only
202	StrikePrice	N	Y	Outright option markets and strategy legs only
206	OptAttribute	N	N	
231	ContractMultiplier	N	N	
223	CouponRate	N	N	
207	SecurityExchange	N	N	
106	Issuer	N	N	
348	EncodedIssuerLen	N	N	
349	EncodedIssuer	N	N	
107	SecurityDesc	N	N	
350	EncodedSecurityDescLen	N	N	



351	EncodedSecurityDesc	N	N	
54	Side	Y	Y	Always. Possible values: Buy ('1'), Sell ('2') For MIFID exchange additional values are supported: Sell short ('5'), Sell short exempt ('6'), Sell undisclosed ('H')
38	OrderQty	N	Y	Always
152	CashOrderQty	N	N	
40	OrdType	N	Y	Always
44	Price	N	N	For non market order types
99	StopPx	N	N	For stop/stop limit orders
5255	StopPriceCondition	N	N	Triggering price condition for Stop and MIT orders. See <a href="#">Stop Price Conditions</a>
211	PegDifference	N	N	
388	DiscretionInst	N	N	
389	DiscretionOffset	N	N	
15	Currency	N	N	
376	ComplianceID	N	N	
377	SolicitedFlag	N	N	
59	TimeInForce	N	Y	Always
168	EffectiveTime	N	N	
432	ExpireDate	N	Y	For GTC/GTD Orders
126	ExpireTime	N	N	
18	ExecInst	N	N	
47	Rule80A (aka OrderCapacity)	N	N	
32	LastShares	N	Y	Trades only
31	LastPx	N	Y	Trades only
194	LastSpotRate	N	N	
195	LastForwardPoints	N	N	
30	LastMkt	N	N	
336	TradingSessionID	N	N	
29	LastCapacity	N	N	
151	LeavesQty	Y	Y	Always
14	CumQty	Y	Y	Always
6	AvgPx	Y	Y	Always



424	DayOrderQty	N	N	
425	DayCumQty	N	N	
426	DayAvgPx	N	N	
427	GTBookingInst	N	N	
75	TradeDate	N	N	
60	TransactTime	N	Y	Always
113	ReportToExch	N	N	
12	Commission	N	N	
13	CommType	N	N	
381	GrossTradeAmt	N	N	
119	SettlCurrAmt	N	N	
120	SettlCurrency	N	N	
155	SettlCurrFxRate	N	N	
156	SettlCurrFxRateCalc	N	N	
21	HandlInst	N	N	
110	MinQty	N	N	Only for min. volume orders
111	MaxFloor	N	N	
77	OpenClose	N	N	
210	MaxShow	N	N	
58	Text	N	Y	Order of sent report for multi-leg instruments - in form: 0 of 2 (0 2)
354	EncodedTextLen	N	N	
355	EncodedText	N	N	
193	FutSettDate2	N	N	
192	OrderQty2	N	N	
439	ClearingFirm	N	N	
440	ClearingAccount	N	N	
442	MultiLegReportingType	N	N	
528	OrderCapacity	N	C	Provided by MIFID exchanges. Valid values: AOTC ('A'), DEAL ('P'), MTCH ('R')
1057	AggressorIndicator	N	C	Available on MIFID trade reports. Possible values: 'Y', 'N'
1724	DEA	N	C	Available on MIFID reports. Possible values: Yes ('5'), No ('0')
	<PartyID> Component Block	N	C	Provided only for MIFID exchanges.



	<OrderAttributes> Component Block	N	C	Provided only for MIFID exchanges.
	<TrdRegPublicationGrp> Component Block	N	C	Provided only on MIFID exchanges
	Standard Trailer	Y	Y	

## 5.7 Stop Price Conditions

Tag StopPriceCondition (5255) allows to specify triggering condition for Stop and MIT orders (currently on IDEM only). The table below contains complete mapping of values in tag 5255.

Table 1 - Usage of STOPPRICECONDITION (5255) in Order Messages

Value of StopPriceCondition (5255)	Stop order condition	MIT order condition
0	Last	Last
1	Rejected	Bid
2	Bid	Rejected
3	Offer	Rejected
4	Rejected	Ask
5	Not supported	Not supported
6	Not supported	Not supported



## 6 Security Information Messages

### 6.1 Security Definition Request Message

Tag	Field Name	Req'd	FFastFill Req'd	Comments
	Standard Header	Y	Y	MsgType = c (lowercase)
320	SecurityReqID	Y	Y	Unique ID
321	SecurityRequestType	Y	Y	Always 1
55	Symbol	N	N	Product code (depends on IDSource)
65	SymbolSfx	N	N	ignored
48	SecurityID	N	N	SecurityID can be obtained by Security Definition Request message
22	IDSource	N	Y	Allowed values '4' – ISIN, '8' Exchange code (FFastfill market identification)
167	SecurityType	N	Y	Values : Future = 'FUT' Option = 'OPT' Stock = 'CS' Foreign exchange contract = 'FOR' Strategy = 'MLEG'
200	MaturityMonthYear	N	N	only for outright SecurityID request
205	MaturityDay	N	N	only for non-monthly outright SecurityID request
201	PutOrCall	N	N	only for outright SecurityID request
202	StrikePrice	N	N	only for outright SecurityID request
206	OptAttribute	N	N	only for outright SecurityID request
231	ContractMultiplier	N	N	ignored
223	CouponRate	N	N	ignored



207	SecurityExchange	N	Y	Exchange mapping (for outright request): CME = '2' CME iLink 2.0 = 'CI2' LIFFE = '3' LIFFE EQUITY = '5' Euronext.LIFFE Paris Financials = 'p' Euronext.LIFFE Paris Equities = 'PA' Equities = 'SL' CBOT = 'CB' Eurex = 'd' IDEM = 'ID' LME = 'l' BTEX = 'BX' OM = '17' IPE = 'IP' CBOT.LIFFE = 'CBL' LME Cinnober = 'CTS'
106	Issuer	N	N	ignored
348	EncodedIssuerLen	N	N	ignored
349	EncodedIssuer	N	N	ignored
107	SecurityDesc	N	N	Field to represent requested strategy: field form: X [Y] [Z] X is strategy code (see 9.1 below for a complete list) Y optional - only for vola trades - underlying price (integer) Z optional - only for vola trades - delta (integer)
350	EncodedSecurityDescLen	N	N	ignored
351	EncodedSecurityDesc	N	N	ignored
15	Currency	N	N	ignored
58	Text	N	N	ignored
354	EncodedTextLen	N	N	ignored
355	EncodedText	N	N	ignored
336	TradingSessionID	N	N	ignored



146		NoRelatedSym	N	N	Number of legs that make up the Security
➔	311	UnderlyingSymbol	N	N	FFastFill product code
➔	312	UnderlyingSymbolSfx	N	N	ignored
➔	309	UnderlyingSecurityID	N	N	ignored
➔	305	UnderlyingIDSource	N	N	ignored
➔	310	UnderlyingSecurityType	N	N	Values: Future = ‘FUT’ Option = ‘OPT’ Stock = ‘CS’
➔	313	UnderlyingMaturityMonthYear	N	N	Specifies the month and year of maturity. Required if UnderlyingMaturityDay is specified.
➔	314	UnderlyingMaturityDay	N	N	ignored
➔	315	UnderlyingPutOrCall	N	N	For Options.
➔	316	UnderlyingStrikePrice	N	N	For Options.
➔	317	UnderlyingOptAttribute	N	N	ignored
➔	436	UnderlyingContractMultiplier	N	N	ignored
➔	435	UnderlyingCouponRate	N	N	ignored
➔	308	UnderlyingSecurityExchange	N	N	Exchange mapping: CME = ‘2’ CME iLink 2.0 = ‘CI2’ LIFFE = ‘3’ LIFFE EQUITY = ‘5’ Euronext.LIFFE Paris Financials = ‘p’ Euronext.LIFFE Paris Equities = ‘PA’ Equities = ‘SL’ CBOT = ‘CB’ Eurex = ‘d’ IDEM = ‘ID’ LME = ‘l’ BTEX = ‘BX’ OM = ‘17’ IPE = ‘IP’ CBOT.LIFFE = ‘CBL’ LME Cinnober = ‘CTS’
➔	306	UnderlyingIssuer	N	N	ignored
➔	362	EncodedUnderlyingIssuerLen	N	N	ignored



→	363	EncodedUnderlyingIssuer	N	N	ignored
→	307	UnderlyingSecurityDesc	N	N	ignored
→	364	EncodedUnderlyingSecurityDescLen	N	N	ignored
→	365	EncodedUnderlyingSecurityDesc	N	N	ignored
→	319	RatioQty	N	N	Quantity of particular leg in the Security
→	54	Side	N	N	Indicates if this leg of the security is to be Bought or Sold as part of this complex security.
→	318	UnderlyingCurrency	N	N	ignored
→	10000*	LegDelta	N	N	Delta for a volatility strategy. Required only in the underlying (Future) legs. DataType: FLOAT
→	10001*	LegUnderlyingPrice	N	N	Underlying future price for a volatility strategy. Required only in the underlying (Future) legs. DataType: PRICE
Standard Trailer			Y	Y	

## 6.2 Security Definition Message

Tag	Field Name	Req'd	FFastFill Submitted	Comments
	Standard Header	Y	Y	MsgType = d (lowercase)
320	SecurityReqID	Y	Y	Always
322	SecurityResponseID	Y	Y	Always
323	SecurityResponseType	N	Y	Always
393	TotalNumSecurities	Y	N	
55	Symbol	N	N	
65	SymbolSfx	N	N	
48	SecurityID	N	Y	Unique security ID, which can be used for New Order Single
22	IDSource	N	Y	'4' = ISIN '8' = NG





167	SecurityType	N	N	
200	MaturityMonthYear	N	N	
205	MaturityDay	N	N	
201	PutOrCall	N	N	
202	StrikePrice	N	N	
206	OptAttribute	N	N	
231	ContractMultiplier	N	N	
223	CouponRate	N	N	
207	SecurityExchange	N	Y	Always
106	Issuer	N	N	
348	EncodedIssuerLen	N	N	
349	EncodedIssuer	N	N	
107	SecurityDesc	N	N	
350	EncodedSecurityDescLen	N	N	
351	EncodedSecurityDesc	N	N	
15	Currency	N	N	
336	TradingSessionID	N	N	
58	Text	N	Y	“Accepted” if successful or error description
354	EncodedTextLen	N	N	
355	EncodedText	N	N	
561	RoundLot	N	N	Trade Unit
146	NoRelatedSym	N	N	
→ 311	UnderlyingSymbol	N	N	
→ 312	UnderlyingSymbolSfx	N	N	
→ 309	UnderlyingSecurityID	N	N	
→ 305	UnderlyingIDSource	N	N	
→ 310	UnderlyingSecurityType	N	N	
→ 313	UnderlyingMaturityMonthYear	N	N	
→ 314	UnderlyingMaturityDay	N	N	
→ 315	UnderlyingPutOrCall	N	N	
→ 316	UnderlyingStrikePrice	N	N	
→ 317	UnderlyingOptAttribute	N	N	
→ 436	UnderlyingContractMultiplier	N	N	
→ 435	UnderlyingCouponRate	N	N	
→ 308	UnderlyingSecurityExchange	N	N	



→	306	UnderlyingIssuer	N	N	
→	362	EncodedUnderlyingIssuerLen	N	N	
→	363	EncodedUnderlyingIssuer	N	N	
→	307	UnderlyingSecurityDesc	N	N	
→	364	EncodedUnderlyingSecurityDescLen	N	N	
→	365	EncodedUnderlyingSecurityDesc	N	N	
→	319	RatioQty	N	N	
→	54	Side	N	N	
→	318	UnderlyingCurrency	N	N	
		Standard Trailer	Y		



## 7 Appendix A

FIX submission example:

### 7.1 New Order Single Request

Tag	Tag Number	Tag Value
BeginString	8	FIX.4.2
BodyLength	9	185
MsgType	35	D
SenderCompID	49	CLIENT1
TargetCompID	56	FFASTFILL
MsgSeqNum	34	93
SendingTime	52	20030612-09:57:48.263
Symbol	55	ES
ClOrdID	11	34A66E0099FC4EBD00001A01
OrderQty	38	1
ClientID	109	CMEClient
TransactTime	60	20030612-09:57:48.263
MaturityMonthYear	200	200306
Side	54	1
OrdType	40	2
Price	44	970
TimeInForce	59	0
SecurityType	167	FUT
ExDestination	100	2
Checksum	10	106

Text form of message:

```
8=FIX.4.2 9=185 35=D 49=CLIENT1 56=FFASTFILL 34=93 52=20030612-09:57:48.263
55=ES 11=34A66E0099FC4EBD00001A01 38=1 109=CMEClient 60=20030612-
09:57:48.263 200=200306 54=1 40=2 44=970 59=0 167=FUT 100=2 10=106
```



## 7.2 Execution Report Response

### 7.2.1 Order is accepted by FFastFill system

Tag	Tag Number	Tag Value
BeginString	8	FIX.4.2
BodyLength	9	181
MsgType	35	8
MsgSeqNum	34	97
SenderCompID	49	FFASTFILL
SendingTime	52	20030612-09:57:51
TargetCompID	56	CLIENT1
AvgPx	6	0
ClOrdID	11	34A66E0099FC4EBD00001A01
CumQty	14	0
ExecID	17	{018F156A-CBF2-4EA8-BC86-63D9999AEBD1}
ExecTransType	20	0
OrderID	37	1755
OrderQty	38	1
OrdStatus	39	A
Side	54	1
Symbol	55	ES
ExecType	150	A
LeavesQty	151	1
Checksum	10	110

Text form of message:

8=FIX.4.2 9=181 35=8 34=97 49=FFASTFILL 52=20030612-09:57:51 56=CLIENT1 6=0  
11=34A66E0099FC4EBD00001A01 14=0 17={018F156A-CBF2-4EA8-BC86-63D9999AEBD1}  
20=0 37=1755 38=1 39=A 54=1 55=ES 150=A 151=1 10=110

### 7.2.2 Order is accepted by Exchange (CME)

Tag	Tag Number	Tag Value
BeginString	8	FIX.4.2
BodyLength	9	181
MsgType	35	8
MsgSeqNum	34	98



SenderCompID	49	FFASTFILL
SendingTime	52	20030612-09:57:52
TargetCompID	56	CLIENT1
AvgPx	6	0
ClOrdID	11	34A66E0099FC4EBD00001A01
CumQty	14	0
ExecID	17	{01C0FD6E-85D4-441D-8821-509F9E6388C9}
ExecTransType	20	0
OrderID	37	1755
OrderQty	38	1
OrdStatus	39	0
Side	54	1
Symbol	55	ES
ExecType	150	0
LeavesQty	151	1
Checksum	10	007

Text form of message:

8=FIX.4.2 9=181 35=8 34=98 49=FFASTFILL 52=20030612-09:57:52 56=CLIENT1 6=0  
11=34A66E0099FC4EBD00001A01 14=0 17={01C0FD6E-85D4-441D-8821-509F9E6388C9}  
20=0 37=1755 38=1 39=0 54=1 55=ES 150=0 151=1 10=007

### 7.2.3 Order is filled by Exchange (CME)

Tag	Tag Number	Tag Value
BeginString	8	FIX.4.2
BodyLength	9	194
MsgType	35	8
MsgSeqNum	34	211
SenderCompID	49	FFASTFILL
SendingTime	52	20030612-11:31:54
TargetCompID	56	CLIENT1
AvgPx	6	0
ClOrdID	11	34A66E0099FC4EBD00001A01
CumQty	14	1
ExecID	17	{2E1F580B-7A99-430E-BBFA-F84B0784FCD9}
ExecTransType	20	0
LastShares	32	1



OrderID	37	1755
OrderQty	38	1
OrdStatus	39	2
Price	44	970
Side	54	1
Symbol	55	ES
ExecType	150	2
LeavesQty	151	0
Checksum	10	133

Text form of message:

8=FIX.4.2 9=194 35=8 34=211 49=FFASTFILL 52=20030612-11:31:54 56=CLIENT1 6=0  
11=34A66E0099FC4EBD00001A01 14=1 17={2E1F580B-7A99-430E-BBFA-F84B0784FCD9}  
20=0 32=1 37=1755 38=1 39=2 44=970 54=1 55=ES 150=2 151=0 10=133

## 7.3 Component definitions

### 7.3.1 <Order Attributes> Component Block

This component block is used in order and trade messages that are for exchanges that provide MIFID regulatory data.

Tag #	Field Name	Req'd	Comments
2593	NoOrderAttributes	N	Number of repeating group items
→ 2594	OrderAttributeType	Y	Possible values: Liquidity Provision flag ('2') Hedger Speculator ('3') Ancillary Trading ('1001')
→ 2595	OrderAttributeValue	Y	Possible values: Yes ('Y') No ('N')

### 7.3.2 <TrdRegPublicationGrp> Component Block

MIFID trade regulatory data

Tag #	Field Name	Req'd	Comments
2668	NoTrdRegPublications	N	Number of repeating group items
→ 2669	TrdRegPublicationType	Y	Possible values: Waiver ('0') Deferral ('1')
→ 2670	TrdRegPublicationReason	Y	Possible values:



			When TrdRegPublicationType is 0: <ul style="list-style-type: none"><li>ILQD ('4'), SIZE ('5'), LRGS ('9')</li></ul> When TrdRegPublicationType is 1: <ul style="list-style-type: none"><li>LRGS ('6'), ILQD ('7'), SIZE ('8')</li></ul>
--	--	--	---

### 7.3.3 <Parties> Component Block

This common block will be used only to provide MIFID regulatory data. No other PartyRole values will be supported in FIX 4.2.

Table 2 - Tags in <Parties> Component Block

Tag #	Field Name	Req'd	Comments
453	NoPartyIDs	N	Number of repeating group items.
→ 448	PartyID	Y	Party information value. In FIX4.2 only MIFID related values are supported. It is not possible to set client or account through Party Component. For MIFID regulatory PartyRoles it will support following values: When Party Role is InvestmentDecisionID('122') then: <ul style="list-style-type: none"><li>From 4 to 4294967295 – Investment decision Short Code</li></ul> When Party Role is ExecWithinFirmID ('12') then: <ul style="list-style-type: none"><li>3 – Client</li><li>From 4 to 4294967295 – Execution decision Short Code</li></ul> When Party Role is ClientCode ('1003') then: <ul style="list-style-type: none"><li>0 – None</li><li>1 – Aggregation of multiple orders (AGGR)</li><li>2 – Pending allocation (PNAL)</li><li>From 4 to 4294967295 – Client Short Code</li></ul>
→ 452	PartyRole	Y	The supported type of PARTYID are ExecWithinFirmID ('12'), InvestmentDecisionID ('122') or ClientAreaName('1002')
→ 2376	PartyRoleQualifier	C	Will be provided for MIFID regulatory PartyRoles ExecWithinFirmID ('12'), InvestmentDecisionID ('122') and ClientCode ('1003'). Possible values: <ul style="list-style-type: none"><li>Not set ('0') – valid for PartyRole 12, 122 and 1003 (only when not required / provided by Exchange)</li><li>Algorithm ('22') – valid for Party Roles 12 and 122</li><li>Firm or Legal Entity ('23') - valid for Party Role 1003</li></ul>



				<ul style="list-style-type: none"><li>• Natural Person ('24') - valid for Party Roles 12, 122 and 1003</li></ul>
--	--	--	--	--





## 8 Appendix B

Strategy SecurityID request

### 8.1 Security Definition Request Message

- for CME opposite calendar spread ES Dec03 - Sep03

```
8=FIX.4.2 9=182 35=c 34=13 49=CLIENT1 52=20030718-14:54:32 56=FFASTFILL
107=68 146=2 311=ES 310=FUT 313=200312 308=2 319=1 54=1 311=ES 310=FUT
313=200309 308=2 319=1 54=2 167=MLEG 207=2 320=3 321=1 10=203
```

### 8.2 Security Definition

- reply from FIX Service - returned tag SecurityID (48) can be used in New Order Single message for trading strategy

- returned code is FFastFill strategy ID - and it can be found in FFastFill\_GW/Strategies table

```
8=FIX.4.2 9=128 35=d 34=12 49=FFASTFILL 52=20030718-14:54:32 56=CLIENT1
48=253252 58=Accepted 207=2 320=3 322=20030718-14:54:32.344 323=1 393=1
10=252
```



## 9 Appendix C

### 9.1 FFastFill Strategy Codes

2	Calendar Spread
3	Butterfly
4	Condor
5	Pack
6	Bundle
7	Strip
10	Call Butterfly
11	Put Butterfly
12	Call Spread
13	Put Spread
14	Call Calendar Spread
15	Put Calendar Spread
16	Call Diagonal Calendar Spread
17	Put Diagonal Calendar Spread
18	Guts
19	2x1 Call Spread
20	2x1 Put Spread
21	Iron Butterfly
22	Combo
23	Strangle
24	Call Ladder
25	Put Ladder
26	Straddle Calendar Spread
27	Straddle Diagonal Calendar Spread
28	Reversal / Conversion
29	Straddle



30	Call Condor
31	Put Condor
32	Box
33	Synthetic Conversion / Reversal
34	Buy a Call Spread Vs a Put
35	Buy a Put Spread Vs a Call
36	Straddle Vs Call
37	Straddle Vs Put
38	Call Volatility
39	Put Volatility
40	Call Spread Vs Underlying
41	Put Spread Vs Underlying
42	Straddle Vs Buy the Underlying
43	Straddle Vs Sell the Underlying
44	Call Spread Vs Sell a Put Vs the Underlying
45	Put Spread Vs Sell a Call Vs the Underlying
46	Call Ladder Vs Buy the Underlying
47	Call Ladder Vs Sell the Underlying
48	Put Ladder Vs Buy the Underlying
49	Put Ladder Vs Sell the Underlying
50	Combo Vs Buy the Underlying
52	Synthetic Strategy
53	Call 2x1 Spread Vs Buy the Underlying
54	Call 2x1 Spread Vs Sell the Underlying
55	Call Calendar Spread Vs Buy the Underlying
56	Call Calendar Spread Vs Sell the Underlying
57	Put 2x1 Spread Vs Buy the Underlying
58	Put 2x1 Spread Vs Sell the Underlying
59	Put Calendar Spread Vs Buy the Underlying
60	Put Calendar Spread Vs Sell the Underlying



61	Inter Spread
62	CMO
63	FLEX
64	Jelly Roll
65	Iron Condor
66	Strip
68	Opposite Calendar Spread
69	Reduced Tick Calendar Spread
72	Strangle Vs Buy the Underlying
73	Strangle Vs Sell the Underlying
74	Call Spread Combination
75	Put Spread Combination
76	Call Calendar Spread Combination
77	Put Calendar Spread Combination
78	Straddle Combination
79	Strangle Combination
80	Guts Combination
81	Synthetic Conversion / Reversal Combination
82	Calendar Spread Combination
83	Crack Spread
84	Call Diagonal Calendar Spread Vs Buy the Underlying
85	Call Diagonal Calendar Spread Vs Sell the Underlying
86	Put Diagonal Calendar Spread Vs Buy the Underlying
87	Put Diagonal Calendar Spread Vs Sell the Underlying
88	Call Butterfly Vs Buy the Underlying
89	Call Butterfly Vs Sell the Underlying
90	Put Butterfly Vs Buy the Underlying
91	Put Butterfly Vs Sell the Underlying
92	Call Condor Vs Buy the Underlying
93	Call Condor Vs Sell the Underlying



94	Put Condor Vs Buy the Underlying
95	Put Condor Vs Sell the Underlying
96	Iron Butterfly Vs Buy the Underlying
97	Iron Butterfly Vs Sell the Underlying
98	Iron Condor Vs Buy the Underlying
99	Iron Condor Vs Sell the Underlying
100	Straddle Calendar Spread Vs Buy the Underlying
101	Straddle Calendar Spread Vs Sell the Underlying
102	Straddle Diagonal Calendar Spread Vs Buy the Und.
103	Straddle Diagonal Calendar Spread Vs Sell the Und.
104	Guts Vs Buy the Underlying
105	Guts Vs Sell the Underlying
106	Call X-mas Tree
107	Put X-mas Tree
108	Risk Reversal
109	Call Ratio 1x2
110	Call Ratio 1x3
111	Call Ratio 2x3
112	Put Ratio 1x2
113	Put Ratio 1x3
114	Put Ratio 2x3
115	Carry Order
117	Future Inter Commodity Spread
119	Call Cabinet
120	Put Cabinet
121	Future Bundle Spread
122	Future Double Butterfly
123	Future Month vs Pack
124	CME Generic
125	Put Double Spread



- 126 Call Double Spread
- 127 Put Conditional Curve
- 128 Call Conditional Curve
- 129 Straddle Strip Spread
- 130 Future Pack Butterfly
- 131 Future Pack Spread

Note: Not all strategies are available on all exchanges.

