IT Development Division Trading Systems Development Department



ATHEX FIX Server Specifications Version 1.0.5

Athens, February 2023

<u>Revision List</u>

Version	Date	Description
1.0.0	10/02/2022	The ATHEX FIX Server offers Members FIX connectivity to ATHEX Trading System.
1.0.1	20/09/2022	 5.1.4 Execution Report Changed field OrdStatus to required. Added value 8 (Rejected) for OrdStatus field 5.1.5 Order Cancel Reject Changed field OrdStatus to required. Added value 8 (Rejected) for OrdStatus field Appendix A – Field Description Changed field OrdStatus to required. Added value 8 (Rejected) for OrdStatus field Appendix A – Field Description Changed field OrdStatus to required. Added value 8 (Rejected) for OrdStatus field Appendix A – Field Description Changed field OrdStatus to required. Added value 8 (Rejected) for OrdStatus field Corrected various typos and formatting errors Updated network connection diagram (SSL encryption is mandatory) 3.1 Prerequisites Provided clarification for client password stating that it needs to be changed at first logon. 3.2.1 Logon Provided clarification about the requirement to change password at first logon. 11.2 Trade Report Disapproval TradeCaptureReport informing seller of the disapproval will contain TradeReportTransType=New 11.3 Trade Report Cancellation TradeCaptureReport informing buyer of the cancellation will contain TradeReportTransType=New 5.1.4 ExecutionReport CumQty and AvgPx tags are required 3.6 Handling of garbled messages 3.8 Outstanding messages limit
1.0.2	05/10/2022	 5.1.4 Execution Report Updated description of field ClOrdID. Added OrderRefID(5510) custom field 5.1.5 Order Cancel Reject
		 Added SecutiryExchange(207) field. Added RejectReasonCode(5532) custom field 5.6 Custom Fix Tags Added OrderRefID(5510) custom field 6.2.2 Associating trades to orders

		 5.2.1 Order Mass Cancel Request Updated valid values for tag PartyIDSource 5.3.2 QuoteCancel
1.0.3	11/01/2023	 5.3.2 Quote Request Component block <instrument> moved right after NoRelatedSym<146> field</instrument> 5.1.4 Execution Report Removed Value 'S' for OrdStatus<39> field 5.1.5 Order Cancel Reject Swapped order of OrigClOrdID<41> field and ClOrdID<11> field. 3.2.7 Reject Added SessionRejectReason<373> values 3.7 Message rate throttling Added SessionRejectReason<373> value 3.8 Outstanding message limit Added SessionRejectReason<373> value
1.0.4	23/01/2023	 8 Appendix A Added format and range specification for AvgPx field. Added format and range specification for BidPx field. Added format and range specification for HighPx field. Added format and range specification for LastPx field. Added format and range specification for LowPx field. Added format and range specification for LowPx field. Added format and range specification for MktBidPx field. Added format and range specification for OfferPx field. Added format and range specification for SecurityPrice field. Added format and range specification for StopPx field.
1.0.5	15/02/2023	• 5.1.1 New Order Single

 Added support for ISO8859-7 character set for field Text<58>
• 5.1.2 Order Cancel/Replace Request
 Added support for ISO8859-7 character set for field Text<58>
• 5.1.3 OrderCancel Request
 Added support for ISO8859-7 character set for field Text<58>
• 5.1.4 Execution Report
 Added support for ISO8859-7 character set for field Text<58>
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Important Note

The Athens Exchange agrees that the information contained herein is accurate as of the date of publication. This document may be altered without any prior notice. The Athens Exchange shall not be held liable of any direct or indirect consequences arising from any errors herein.

This document is the updated version of older documents containing corresponding information.

1. Introduction

Athens Exchange provides a FIX trading interface to ATHEX OASIS Trading platform, hereafter called **ATHEX FIX Server** enabling member firms to submit orders, quotes and/or trade capture reports and receive real-time information on executed trades.

The interface is a point-to-point service based on the technology and industry standards TCP/IP and FIX. The session and application event models and messages are based on version 4.4 of FIX protocol.

1.1. Purpose

The purpose of this document is to provide a technical description of the ATHEX FIX Server.

1.2. Supported FIX Versions

Only FIX protocol version 4.4 is supported.

1.3. Enquiries

For issues in relation to the information contained in this document and general issues concerning the development of applications through the ATHEX FIX Server, the Trading Members or the software developers should raise a ticket via the official ATHEX Ticketing System, JIRA Service Desk <u>https://servicedesk.athexgroup.gr/servicedesk/customer/portal/201</u> and more specifically, via the section "**TRADING related issues**".

1.4. Document overview

The following list is a brief description of all the document chapters.

Chapter 1, Introduction, this is the introductory chapter

Chapter 2, Network connection, provides network connectivity information

Chapter 3, Session layer, describes the session layer communication, including administrative messages used, supported user authentication, establishment of FIX sessions, retransmission method of missed messages and the limitations enforced by message rate throttling.

Chapter 4, Recovery, discusses in detail the session recovery mechanism of a FIX session and the correct usage and understanding of the FIX sequence number value. It provides a detailed description of all possible recovery scenarios and the actions the client should take accordingly.

Chapter 5, Application messages, offers an analytical overview of all application level messages. Showcasing for each message the fields that compose it, their allowed values and their meaning while also describing a set of rules for the correct usage of each message type.

Chapter 6, Instructions for implementing business logic, provides instructions for business logic implementation including general concepts of the OASIS Server, correct usage of information sent by OASIS Server to client and business logic and verifications that should be done by the client before sending messages.

Chapter 7, Technical information and guidelines, covers technical information and guidelines for the FIX client application, in order to minimise rejection messages and errors. It contains a TCP error handling guideline and further notes on session handling.

Appendices A and B give a detailed description of the application messages' fields, as depicted in chapter 5, along with a dictionary of the OASIS Server parameters and their depiction.

Appendices C and D describe in depth all the various scenarios of Quotation Negotiation and Trade Report procedures with the use of diagrams, showing the stages of each transaction.

Appendix E is a glossary intent on familiarising clients with the most common terminology used by the Server.

2. Network connection

ATHEX provides colocation services for FIX clients. For all participants, SSL encryption is required (up to TLS 1.3). This is shown in the figure below:

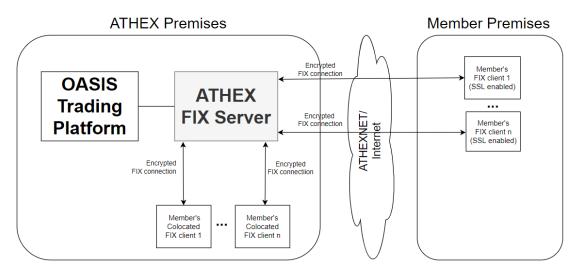


Figure 2-1 ATHEX FIX Server connectivity

3. Session layer

A FIX session is established over TCP-connection between a client and the ATHEX FIX Server. Session participants are identified by fields SenderCompID(49) and TargetCompID(56). The values for these fields are communicated to the client by ATHEX as described in the paragraph below.

3.1. Prerequisites

For each FIX session ATHEX will provide the client the following:

- SenderCompID
- TargetCompID
- Username
- Password (must be changed at first logon)
- IP (the same for all FIX connections)
- port (unique for each FIX connection)
- dropcopy session (yes/no)

3.2. Administrative messages

3.2.1. *Logon*

The Logon message allows the client to connect to the ATHEX FIX Server. It is also used by the ATHEX FIX Server to confirm the logon from the client (see paragraph 3.3).

The Logon Username(553) and Password(554) fields are used to authenticate the client. In addition, the client is required to modify the default password using the NewPassword(925) field at **first logon**. This procedure holds true for every (FIX) session initiated by the client. The new password must comply with the following rules:

- must be at least 8 characters long
- must contain at least one uppercase letter
- must contain at least one lowercase letter
- must contain at least one digit
- must contain at least one punctuation character

When the client is authenticated, the system responds with a Logon message to the client. If any error is detected in Logon, the system will respond with a Logout(5) message and the session will be disconnected. In this case the number of the next expected message will not be changed.

Any Logon message with a NewPassword field not complying with the above rules will be rejected with a Logout(5) message specifying the reason for the rejection followed by the termination of the TCP connection.

After successfully changing the password, its new value shall be used in any subsequent Logon messages by the client.

The Logon message may contain the optional tag NextExpectedMsgSeqNum(789) that allows the client to specify the next expected message sequence number. This tag should be included in the Logon message in the case of recovery to the backup port. For more details on this please refer to chapter 4.2.

<u>Note</u>: In the Logon response, the ATHEXSessionID(5604) user-defined field will be included specifying the unique identity of the session. This field will also be included in any application message that will be sent to the client's sessions as a response to any client's action (see chapter 5).

3.2.2. *Logout*

The Logout message initiates or confirms the termination of a FIX session. It is also used by the ATHEX FIX Server to reject the FIX session logon.

3.2.3. ResendRequest

The Resend Request is used by the client and the ATHEX FIX Server to initiate the retransmission of messages in a recovery scenario.

The Resend Request message may contain the optional tag '6001' (LastSecondaryOrderID) that allows the client to specify the last application message successfully received. This enables the ATHEX FIX Server to only transmit messages not previously sent to the client. In order to achieve this purpose, tag's '6001' value should depict the value of tag '198' (SecondaryOrderId) of the last application message received by the client. When tag '6001' is filled, only application messages with values in tag 198 greater than this one will be sent to client upon a Resend Request.

Important note: ATHEX FIX Server will never request retransmission of messages from the client (Resend Request) during the Logon procedure. This will happen even if the message sequence number of the client's Logon message is greater than expected. In this case, ATHEX FIX Server will update its input sequence number to the message's sequence number.

In case the FIX client receives a Resend Request from the ATHEX FIX Server during the trading session (and not during the login process), it shall respond as it is described in the FIX Protocol.

In all messages sent to FIX Client as a result of a ResendRequest (2):

• the PossDupFlag (43) field, in the Header, will be set to 'Y'

Value 'Y" in this field is used to indicate that an application message may have already been sent using the same MsgSeqNum (34).

• the PossResend (97) field, in the Header, will be set to 'Y'

Value 'Y" in this field is used to indicate that an application message may have already been sent under a different MsgSeqNum (34). The client should validate the contents (e.g. ClOrdID, QuoteMsgID, ExecID, TradeReportID, TrdMatchID, e.t.c.) of such a message against those of messages already received during the current trading day to determine whether the new message should be ignored or processed.

• the OrigSendingTime (122) field will be filled with the correct value or, if not possible, will be set to the same value as the SendingTime (52).

3.2.4. *HeartBeat*

The Heartbeat message may be used by the client and the ATHEX FIX Server to monitor the status of the communication link during periods of inactivity. The heartbeat interval (in seconds) is specified in the HeartBtInt (108) field in the client's Logon message.

The client must send a Heartbeat message if the heartbeat interval passes without the client sending any messages. If the heartbeat interval passes without the ATHEX FIX Server receiving any messages from the client, the ATHEX FIX Server will send a Test Request to solicit a Heartbeat from the client. If an additional heartbeat interval passes without receiving any messages, the ATHEX FIX Server will send a Logout and close the TCP connection.

3.2.5. TestRequest

The Test Request message is used to trigger a heartbeat message from the opposing application.

3.2.6. SequenceReset

The Sequence Reset message has two modes:

- Gap Fill mode is used in response to a Resend Request when one or more messages must be skipped over.
- Reset mode specifies an arbitrarily higher new sequence number after an unrecoverable application failure.

3.2.7. *Reject*

The message Reject (3) is sent by the ATHEX FIX Server in response to any invalid message (incorrectly generated or transmitted) from the other party.

The reasons for rejection may be the absence of required fields, invalid message type or length, invalid data type, etc. All session layer messages with invalid value of any field are also rejected by the message Reject.

The system specifies the rejected message number in the field RefSeqNum (45). Value 0 in this field means that the field MsgSeqNum (34) is missing in the rejected message. Text (58) has a detailed textual description of error.

following table:	
SessionRejectReason<373>	Text<58>
19	"Maximum message transfer rate has
	been reached."
20	"Maximum number of outstanding
	messages has been reached."

Lastly, field SessionRejectReason<373> value range is extended according to the following table:

<u>Note:</u> Application messages rejected with a Reject message are not transmitted to the OASIS Server.

3.3. FIX session concept

A FIX session is defined as a bi-directional stream of ordered messages between two parties within a contiguous sequence number. Session is identified by fields SenderCompID(49) and TargetCompID(56).

A participant may have multiple FIX sessions each with its own SenderCompID. The CompID of the server is "ATHEX". A FIX session will be initiated by the participant and maintained between the participant and the ATHEX FIX Server over the course of a trading day.

Participants are required to order separate FIX sessions for access to the different two types of sessions:

1. Trading session

Supports order/quote/trade report management. Each session of this type will receive information for all its own orders/quotes/trade reports plus unsolicited information sent by the Trading Server targeting the trading session or its Member or all of the participants.

2. Drop-copy session

It allows a Member to receive all application messages directed to all its sessions. The actual session to which the message was directed can be identified by the value of the tag '5604' included in the application messages. A Member is not allowed to send any application message through the drop-copy session.

Also, for each FIX session specified, a primary port and a backup port are specified for recovery purposes and communicated to the client. That is for each (SenderCompID, TargetCompID) combination there will be two ports listening for a connection. The client may connect to any of these ports but not at both at the same time. Please refer to chapter 4 for recovery procedures.

3.4. Establishment of FIX Session and authentication

FIX session may be established via the exchange of Logon (A) messages between the two communicating parties as shown in the figure below:

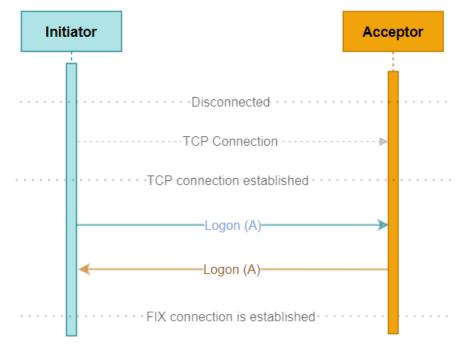


Figure 3-1 FIX session establishment

The client (initiator) shall send a Logon message following TCP connection establishment. The client must provide the corresponding FIX session's username in the Username (553) field, and the corresponding password in the Password (554) field in the Logon message. Username and password are communicated to the client by ATHEX at session's definition.

A new password may be set by setting the NewPassword (925) field along with the current password in the Password (554) field. The new password will, if accepted, be effective for subsequent logins.

The ATHEX FIX Server will authenticate the identity of a FIX Client by examining these credentials submitted in the Logon message.

If the authentication succeeds, ATHEX FIX Server will send a Logon response message to the initiator, as shown in the figure below. In cases where authentication is refused, a Logout message will be sent, and the TCP connection shall be disconnected.

After establishing the FIX session, transmission of messages between counterparties shall be possible.

3.5. Transmission of missed messages

The confirmation/rejection/information messages generated during a period when a client is disconnected from the server will be sent to the client when it next reconnects (using the Resend Request process described above in chapter 3.2.3).

3.6. Handling of garbled messages

Upon receipt of any message that is garbled, cannot be parsed or fails the integrity check, ATHEX FIX Server will send a Reject response specifying the problem. It will not augment the input message sequence number. Processing of the next valid FIX message will cause detection of a sequence gap and a Resend Request will be generated by the ATHEX FIX Server.

3.7. Message rate throttling

The rate at which a client can send application level messages into the system is limited. When the client's send rate exceeds the limit, ATHEX FIX Server replies with a Reject message to any application message explaining the reason of rejection and sets fields SessionRejectReason<373> and Text<58> according to section 3.2.7.

This limit is communicated to the client at the beginning of each trading day and each time this limit is readjusted by ATHEX (see message News – Message Note, paragraph 5.5.5).

Please note that client-initiated administrative messages are not counted towards the throttling limits.

3.8. Outstanding messages limit

The number of application-level messages that a client can send without receiving a response (outstanding messages) is limited. When this limit is exceeded, ATHEX FIX Server replies with a Reject message to any application message explaining the reason of rejection and sets fields SessionRejectReason<373> and Text<58> according to section 3.2.7.

This limit is communicated to the client at the beginning of each trading day and each time this limit is readjusted by ATHEX (see message News – Message Note, paragraph 5.5.5).

Please note that client-initiated administrative messages are not counted towards this limit.

4. Recovery

For each client's session defined, a primary port and a backup port are specified for recovery purposes and communicated to the client. That is for each (SenderCompID, TargetCompID) combination there will be two ports listening for a connection. The client may connect to any of these ports, but not both, at any given time.

The session recovery mechanism described hereafter ensures that no orders will re-enter the trading engine (note that there is currently no special handling of possible duplicate messages by the trading system). Furthermore, it limits the exchange of large amounts of messages between counterparties.

When a client reconnects after a FIX session disconnection during the same business day, two different scenarios can be identified as a reason for the outage: namely outage on the client side and outage on the ATHEX FIX Server side.

4.1. Outage on the Client Side

When an outage on the client side happens, there are two separate cases addressed:

• The FIX session was disconnected but the FIX client has kept its state (input/output FIX messages and message sequence numbers)

In this case, the client should resume the FIX connection (by sending a logon) without resetting/changing any message sequence number.

• The FIX session was disconnected, and the FIX client has lost its state

In this case, the client's message sequence numbers will be reset to 1. Upon client's Logon with message sequence number equal to 1 (34=1), ATHEX FIX Server will respond with a Logout message including the following Text field:

58="MsgSeqNum too low, expecting <expected_sequence_number> but received 1"

where <expected_sequence_number> is the next expected message sequence number by the ATHEX FIX Server.

The client should reset its output sequence number to the above number and resume the FIX connection (by sending a Logon using this number).

After resuming the FIX session, the client may have missed some messages from the ATHEX FIX Server. In this case, the sequence number of the next message received from the ATHEX FIX Server will be ahead of the last MsgSeqNum (34) stored on the client side. The client should send a ResendRequest (2) message to trigger all missed messages during the outage. The LastSecondaryOrderID(6001) may optionally be used. For more details on this, please refer to chapter 3.2.3

The ATHEX FIX Server will return all potentially missed messages with PossDupFlag (43) = "Y" and PossResend(97) = "Y" to indicate that a message may have been

previously transmitted with the same MsgSeqNum (34) and OrigSendingTime (122) field will be filled with the correct value.

<u>Note</u>: Mass cancellation service on disconnect is not supported by the ATHEX FIX Server. All open orders remain in the order book during an outage including non-persistent orders.

4.2. Outage on ATHEX FIX Server Side

In the unlikely event that the disconnection was due to an outage on the ATHEX FIX Server side, the client should try to reconnect to the primary port. If the primary port becomes unavailable, the client should consider connecting to the backup port.

In attempting FIX session recovery through the usage of the primary and backup port, the client should note the following:

- The client may connect to either primary or backup port, but not both, at any given time.
- If the client has not connected to the backup port, this backup session holds only the application messages directed to the client but not those messages sent by the client towards the primary session. Furthermore, the backup session does not hold any Session Layer messages exchanged in the primary session. This means that the session's output message sequence number from the acceptor point of view may differ from the client's input message sequence number and that the outgoing application messages may have been stored in this session using different message sequence numbers than those used for storing the same application messages in the primary session.
- After reconnection of the FIX session, the ATHEX FIX Server may receive a sequence number higher than the one expected. In this case, as it is already described in chapter 3.2.3, it will not ask for retransmission of any lost messages, but it will update its input sequence number accordingly.

When an outage on the ATHEX FIX Server side happens, there are two separate cases addressed:

• FIX client has kept its state (input/output FIX messages and message sequence numbers)

In this case, the client should resume the FIX connection (by sending a logon) without resetting/changing any message sequence number. This Logon message should contain the tag NextExpectedMsgSeqNum(789) allowing the client to specify the next expected message sequence number. If this field is omitted, then there is possibility that the ATHEX FIX Server will reply with a message sequence number lower than expected and this may result in the client's disconnection. The presence of this tag will allow the ATHEX FIX Server to reset its output sequence number to the value requested and thus avoid the client's disconnection.

Since the backup session does not hold the messages that the client has already sent through the primary port, the client's logon message sequence number will be higher than expected. ATHEX FIX Server will update its input sequence number accordingly as already described in chapter 3.2.3.

The client should request any lost messages by sending a Resend Request message with the optional provision of tag 6001 (LastSecondaryOrderID). See chapter 3.2.3

The ATHEX FIX Server will return all potentially missed messages with PossDupFlag (43) = "Y" and PossResend(97) = "Y" to indicate that a message may have been previously transmitted (with the same or different message sequence number).

• FIX client has lost its state

In this case, the client's message sequence numbers will be reset to 1. Upon client's Logon, ATHEX FIX Server will respond with a Logon message.

The client should request all input messages by sending a Resend Request message with BeginSeqNo(7)=1 and EndSeqNo(16)=0.

4.2.1. Resetting FIX sequence numbers on the ATHEX FIX Server side

The system has been designed with fault tolerance and disaster recovery technology that should ensure that the ATHEX FIX Server retains its incoming and outgoing message sequence number for each client in the unlikely event of an outage. However, clients are required to support a manual request by ATHEX to initialize sequence numbers prior to the next login attempt.

This option will be used only in special cases where all the other recovery procedures have failed and only after mutual agreement between ATHEX and the client.

5. Application messages

In this chapter there is a detailed description of the FIX messages available to client applications, as well as supplements concerning the rules of ATHEX trading system.

The functionality supported by the ATHEX FIX Server is the following:

- 1. Single General Order Handling (including hit&take orders)
- 2. Mass Order Handling
- 3. Quotation Negotiation Handling
- 4. Trade Reports Handling
- 5. Market Messages

FIX Headers

Standard FIX headers apply to all messages. Only required tags are currently being used and further description is omitted here, with the exception of tag 35 (MsgType). Please refer to FIX documentation for further information.

5.1. Single General Order Handling

5.1.1. New Order – Single

The NewOrderSingle (D) message is used by the Members to create a new order.

An ExecutionReport (8) is returned either on successful order entry or rejection.

Tag		Field Name	Req	Description		
Stand	Standard Header					
35 MsgType		Y	D = NewOrderSingle			
Mess	age Bo	dy				
11		ClOrdID	Y	Client specified identifier of the order. Max size is 16-char.		
453 NoPartyIDs Y Number of party ident		Number of party identifiers.				
•	448	PartyID	Y			

⇒	447	PartyIDSource	Y	Class or s	source of the PartyID(448) value.
				Value	Meaning
				D	D (Proprietary/Custom Code)
					Used for the PartyRole values 1, 4, and 36
				Р	Short code identifier
					Used for the PartyRole values 3, 12, 26 and 122
⇒	452	PartyRole	Y	Role of th	ne specified PartyID(448).
				Value	Meaning
				1	Executing Firm
				3	Client ID (MIFID II: Client identification code)
				4	Clearing Firm
				12	Executing trader (MIFID II: Execution within firm)
				26	Correspondent broker (MIFID II: Non-executing broker)
				36	Entering trader (Trader ID)
				122	Investment Decision Maker (MIFID II: Investment decision within firm)
⇒	2376	PartyRoleQualifier	N	Qualifier	of the specified PartyRole (452).
				Value	Meaning
				22	Algorithm
					Used for the PartyRole values 12 and 122
				23	Firm or legal entity
					Used for the PartyRole value 3
				24	Natural person Used for the PartyRole values 3, 12 and 122
1		Account	Y	Investor I	D
L *		110000111	-		~

15		Currency	N	Not used.		
Component		Instrument	Y			
•	48	SecurityID	Y	Security identification		
•	22	SecurityIDSource Y Identifies class or source of the s and StopSymbol (5521) if given		class or source of the SecurityID Symbol (5521) if given.		
				Value	Meaning	
				8	Exchange Symbol	
				А	Bloomberg Symbol	
•	207	SecurityExchange	Y	Values ar 4 characte	e given by ATHEX. Max length is	
40		OrdType	Y	Type of the order.		
40		Old I ype	1	Value	Meaning	
				1	Market	
				7	Limit or Better	
				3	Stop	
				4	Stop Limit	
				А	On Close	
				Q	Hit & take order selection	
				OrdType= the tags S SecurityS FIX Serve	Orders (OrdType=3 or =4), ATHEX FIX Server will use topSymbol (5521) with value the symbol of the order. Also, ATHEX er will use the value of tag bolType(5527) 'S' which means ymbol.	

59	TimeInForce	Ν	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY.			
			Value	Meaning		
			0	Day		
			1	Good Till Cancel (GTC)		
			2	At the Opening		
			3	Immediate Or Cancel (IOC)		
			4	Fill Or Kill (FOK)		
			6	Good Till Date (GTD)		
432	ExpireDate	N		order expires. Required if rce (59) is GTD (6)		
58	Text	Ν	Additionally supports the ISO8859-7 (Latin/Greek alphabet) character encoding.			
44	Price	N	Required	Required for limit order types.		
99	StopPx	N	Required if OrdType=3 or OrdType=4.			
38	OrderQty	Y	This tag is used to specify the quantity of the order.			
63	SettlType	N	Indicates values are	order settlement period. Valid		
			Value	Meaning		
			0	Normal		
			1	Immediate		
			Absence of this field is interpreted as normal settlement period			
528	OrderCapacity	Ν	Indicates	order capacity. Valid values are:		
			Value Meaning			
			А	Agency (AOTC)		
			Р	Principal (DEAL)		
			R	Riskless principal (MTCH)		
			Absence of	of this field is interpreted as agency		

77	PositionEffect	N	Indicates a trade she	derivatives omnibus accounting. whether the resulting position after ould be an opening or a closing Valid values are:	
			Value	Meaning	
			0	Open	
			С	Close	
			Absence of opening p	of this field is interpreted as position.	
210	MaxShow	Ν	not sent, i	he disclosed volume of the order. If t is assumed equal to OrderQty(38). 0 0, then it denotes an inactive order	
54	Side	Y	Side of th	e order.	
34	Side	I	Value	Meaning	
			1	Buy	
			2	Sell	
			5	Sell short	
			R	Buy to cover	
60	TransactTime	Y	Time this	order request was initiated.	
Standard T	Standard Trailer				

The following table contains the extra and custom tags that can be sent in this message.

Tag	Field Name	Req	Description
5506	BoardID	Ν	Identifies board. Absence of this field is interpreted as the default value 'M' (the main board).
5521	StopSymbol	N	Used only if OrdType=3 or OrdType=4. For stop orders, this is the instrument identification of the stop symbol. If not supplied, the value of tag 48 will be used. For class or source of this field, check tag 22.

5527	StopS	ymbolType	N	Used only	y if OrdType=3 or OrdType=4.
				'S' for sto	values are 'I' for stop on index order and op on symbol orders. If not supplied, 'S' ssumed ("Stop on symbol")
5561	MBLi	stID	N	Not requi purposes.	red. If given, it will be used for clearing
1724	Order	Origination	N	Indicates	order origination. Valid values are:
1/24	Order	ongination		Value	Meaning
				0	Order is not submitted using Direct Electronic Access (DEA)
				5	Order is submitted using Direct Electronic Access (DEA)
				Absence submitted (DEA)".	of this field is interpreted as "order is not d using Direct Electronic Access
2593	NoOr	derAttributes	N	Number o	of order attributes.
					order attribute type. Valid values are:
•	2594	OrderAttribu teType	N	Value	Meaning
		te i ype		2	Liquidity provision activity order
				3	Risk Reduction
				4	Algorithmic order
				Required than 0.	if NoOrderAttributes(2593) is greater
•	2595	OrderAttribu	N	Indicates	order attribute value. Valid values are:
		teValue		Value	Meaning
				Y	True
				N	False (Default value)
				Required than 0.	if NoOrderAttributes(2593) is greater
1080	RefOr	derID	Ν	-	is used to specify the OrderID of the ng hit or taken.

			Required selection)	if OrdType = "Q" (Hit & take or	der
1081	RefOrderIDSource	N	Used to specify what identifier to use when hitting (taking) a specific order.		
			-	if RefOrderID is submitted. Defa (Order ID)	aun
5582	SpecialConditions	N		the special conditions of the hit and ta e entered. Valid values are:	ake
			Value	Meaning	
			Α	All Or None	
			М	Minimum Fill	
			0	Multiples Of	
5583	ConditionVolume	N	Indicates order.	the conditional volume of the hit&ta	ake
			-	if SpecialConditions(5582) is submit lue is either 'M' (Minimum Fill) or s of).	

5.1.2. Order Cancel/Replace Request (a.k.a. Order Modification Request)

The OrderCancelReplaceRequest (G) message is used in two situations:

- Modify orders
- Suspend/Resume orders

An ExecutionReport (8) is returned either on successful order modification/suspension/resumption or rejection.

Tag	Field Name	Req	Description		
Standard Header					
35	MsgType	Y	G = OrderCancelReplaceRequest		
Message Body					
37	OrderID	Y	Unique identifier of the order as assigned by the exchange.		
41	OrigClOrdID	Y	Client specified original identifier of the order. Max size is 16-char. Note: OrigClOrdID is		

				validated is OrderII	but the unique identifier of the order D .
11		ClOrdID	Y		ecified identifier of the order. Max
18 ExecInst N		Ν	suspension ExecInst changed exception (provision	uired. Used only for order n/release from suspension. If tag is used, other fields cannot be in the same transaction, with the of MaxShow when ExecInst=q of MaxShow is required in this case) tes are shown below.	
				Value	Meaning
				S	Suspend
				q	Release from suspension (user defined value)
453		NoPartyIDs	Y	Number o	f party identifiers.
⇒	448	PartyID	Y		
⇒	447	PartyIDSource	Y	Class or se	ource of the PartyID(448) value.
				Value	Meaning
				D	D (Proprietary/Custom Code) Used for the PartyRole values 1, 4, and 36
				Р	Short code identifier
					Used for the PartyRole value 3, 12, 26 and 122
⇒	452	PartyRole	Y	Role of th	e specified PartyID(448).
				Value	Meaning
				1	Executing Firm
				3	Client ID (MIFID II: Client identification code)
				4	Clearing Firm
				12	Executing trader (MIFID II: Execution within firm)

				26	Correspondent broker (MIFID II: Non-executing broker)
				36	Entering trader (Trader ID)
				122	Investment Decision Maker (MIFID II: Investment decision within firm)
⇒	2376	PartyRoleQualifi	N	Qualifier	of the specified PartyRole (452).
		er		Value	Meaning
				22	Algorithm
					Used for the PartyRole values 12 and 122
				23	Firm or legal entity
					Used for the PartyRole value 3
				24	Natural person
					Used for the PartyRole values 3, 12 and 122
1		Account	N	Investor I	D
15		Currency	Ν	Not used.	
Comj t	ponen	Instrument	Y		
⇒	48	SecurityID	Y	Security i	dentification
•	22	SecurityIDSourc e	Y		class or source of the SecurityID Symbol(5521) if given.
				Value	Meaning
				8	Exchange Symbol
				А	Bloomberg Symbol
•	207	SecurityExchang e	Y	Values ar characters	e given by ATHEX. Max length is 4
40		OrdType	N	Condition	nally required if tag 59 is present.
				• •	pe change between stop and non-stop ot available.
					ler being amended is of OrdType '1' A' (Market/Limit/On Close), useable
				Value	Meaning

			1 or 3	Market
			7 or 4	Limit or Better
			А	On Close
				rder being amended is of OrdType 3 p/StopLimit) the above becomes:
			Value	Meaning (for STOP orders)
			3 or 1	Stop
			4 or 7	Stop Limit
59	TimeInForce	N	Condition	nally required if tag 40 is present.
			Value	Meaning
			0	Day
				Good Till Cancel (GTC)
			-	
			2	At the opening
			6	Good Till Date (GTD)
432	ExpireDate	Ν	Date th TimeInFo	ne order expires. Required if orce (59) is GTD (6)
58	Text	Ν	Additiona (Latin/Gr	ally supports the ISO8859-7 eek alphabet) character encoding.
44	Price	Ν	Required	for limit OrdTypes.
38	OrderQty	Y	This tag	is used to specify the quantity of the
77	PositionEffect	N	Indicates trade show	n derivatives omnibus accounting. whether the resulting position after a uld be an opening or a closing Valid values are:
			Value	Meaning
			0	Open
			С	Close

63	SettlType	Ν	Indicates are:	order settlement period. Valid values
			Value	Meaning
			0	Normal
			1	Immediate
			Absence settlemen	of this field is interpreted as normal t period
210	MaxShow	Ν	not sent, $\frac{1}{210=0}$ si	the disclosed volume of the order. If it is assumed equal to $OrderQty(38)$. hould be provided in amends of orders without $18=q$ (release from
			suspensio	A 1
54	Side	Y	Side of th	e order.
			Value	Meaning
			1	Buy
			2	Sell
			5	Sell short
			R	Buy to cover
			be returne	
60	TransactTime	Y	Time this	order request was initiated.
Standard T	railer			

The following table contains the extra and custom tags that can be sent in this message.

Tag	Field Name	R	Description
		e	
		q	
5506	BoardID	N	Identifies board. Absence of this field is interpreted as the default value 'M' (the main board).
5561	MBListID	N	Not required. If given, it will be used for clearing purposes.
1724	OrderOrigination	N	Indicates order origination. Valid values are:
1724 Olderon	orderorigination	nongination N	Value Meaning

					Order is not submitted using Direct Electronic Access (DEA) Order is submitted using Direct Electronic Access (DEA) of this field is interpreted as "order is not using Direct Electronic Access (DEA)".
2:	593	NoOrderAttribute s	N	Number o	f order attributes.
•	2594	OrderAttributeTy pe	N	Indicates of Value	order attribute type. Valid values are: Meaning Risk Reduction
					if NoOrderAttributes(2593) is greater
•	2595	OrderAttributeVa	N		order attribute value. Valid values are:
		lue		Value	Meaning
				Y	True
				N	False (Default value)
				Required than 0.	if NoOrderAttributes(2593) is greater

5.1.3. Order Cancel Request

The OrderCancelRequest (F) message is used to request the cancellation of the entire remaining quantity of an order. An order cancellation only applies to the remaining quantity of the order. If the order to be cancelled was partially filled, the cancellation has no effect on the previous trades.

Upon successful order cancellation, an ExecutionReport (8) is returned. Otherwise, an OrderCancelReject (9) is returned explaining the reason of rejection.

Tag	Field Name	Req	Description	
Standard H	eader			
35	MsgType	Y	F = OrderCancelRequest	
Message Body				
37	OrderID	Y	Unique identifier of the order as assigned by the exchange.	
41	OrigClOrdID	Y	Client specified original identifier of the order. Max size is 16-char. Note: OrigClOrdID is	

				validated but the unique identifier of the order is OrderID.		
11		ClOrdID	Y	Client specified identifier of the order. May size is 16-char.		
453		NoPartyIDs	Y	Number of party identifiers.		
•	448	PartyID	Y			
•	447	PartyIDSource	Y	Default value = D (Proprietary/Custom Code)		
➡ 452 PartyRole		PartyRole	Y	Role of the specified PartyID(448).		
				Value Meaning		
				1 Executing Firm		
				36 Entering trader (Trader ID)		
15		Currency	N	Not used.		
Componen t		Instrument	Y			
•	48	SecurityID	Y	Security identification		
▶ 22		SecurityIDSource	Y	Identifies class or source of the SecurityID.		
				Value Meaning		
				8 Exchange Symbol		
				A Bloomberg Symbol		
•	207	SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters		
58		Text	N	Additionally supports the ISO8859-7 (Latin/Greek alphabet) character encoding.		
54		Side	Y	Side of the order.ValueMeaning1Buy2Sell5Sell shortRBuy to cover		
60		TransactTime	Y	Time this order cancel request was initiated.		
				The this of der cancer request was intrated.		

The following table contains the extra and custom tags that can be sent in this message.

Tag Field Name Req Description

	ot required. If given, it will be used for clearing rposes.
--	-------------------------------------------------------------

5.1.4. Execution Report

The ExecutionReport(8) is sent to the client upon:

- receipt of NewOrderSingle (D) message
- receipt of OrderCancel/ReplaceRequest(D) message
- successful receipt of OrderCancelRequest () message
- trade completion on an order entered by the client

There are also cases where an unsolicited ExecutionReport (8) is sent to the client. These cases are described in detail in chapter 5.8.

Tag	Field Name	Req	Description		
Standard He	Standard Header				
35	MsgType	Y	8 = ExecutionReport		
Message Body					
37	OrderID	Y	Unique identifier of the order as assigned by the exchange.		
198	SecondaryOrderID	N	Unique application message id. Used in recovery mechanism.		
41	OrigClOrdID	N	ClOrdID of the previously accepted order (NOT the initial order of the day) when formatting or replacing an order. Max size is 16-char.		
11	ClOrdID	N	Client specified identifier of the order. Max size is 16-char. In Quote related reports, this field contains the QuoteMsgID field entered during quote entry/change. In Combo related reports, this field contains the ClOrdID field entered during combo order entry/change.		
17	ExecID	Y	Server specified unique identifier of the message.		

			 If ExecType (150) is Trade, Trade Cancel or Trade Correct, this field is 8 characters long and contains the following: The first 6 characters contain the TradeNumber. The 7th character is equal to ExecType(150) field The 8th character is 'S' in case of sell side fill and 'B' in case of buy side fill 	
19	ExecRefId	N	Reference to the execution being cancelled/changed. Required if ExecType (150) is Trade Cancel or Trade Correct. In case of a trade report related execution reports, ExecRefID refers to the last TradeReportID of the trade report.	
150	ExecType	Υ	Describes the purpose of the execution report.ValueMeaning0New4Cancelled5Replace8Rejected9SuspendedCExpiredDRestated (unsolicited order cancellations/changes)FTradeGTrade CorrectHTrade Cancel	
453	NoPartyIDs	Y	Number of party identifiers.	

•	448	PartyID	Y		
⇒	447	PartyIDSource	Y	Class or source of the PartyID(448) value.	
				Value	Meaning
				D	D (Proprietary/Custom Code)
					Used for the PartyRole values 1, 4, 17, 36 and 37
				Р	Short code identifier
					Used for the PartyRole value 3, 12, 26 and 122
	452	PartyRole	Y	Role of th	ne specified PartyID(448).
	432	PartyRole		Value	Meaning
				1	Executing Firm
				3	Client ID
					(MIFID II: Client identification code)
				4	Clearing Firm
				12	Executing trader
					(MIFID II: Execution within firm)
				17	Contra Firm
				26	Correspondent broker (MIFID II: Non-executing broker)
				36	Entering trader (Trader ID)
				37	Contra Trader
				122	Investment Decision Maker
					(MIFID II: Investment decision within firm)
	2376	PartyRoleQualifier	N	Qualifier of the specified PartyRole (452).	
	2370			Value	Meaning
				22	Algorithm
					Used for the PartyRole values 12 and 122
				23	Firm or legal entity
					Used for the PartyRole value 3
				24	Natural person

					Used for the PartyRole values 3, 12 and 122
1		Account	Y	Investor II	D
15		Currency	N	Not used.	
32 LastQty		N		bought/sold on this (last) fill. if ExecType = Trade or Trade	
31		LastPx	N		is (last) fill. Required if ExecType = Trade Correct.
528		OrderCapacity	Ν	Indicates of	order capacity. Valid values are:
520		orderCapacity		Value	Meaning
				А	Agency (AOTC)
				Р	Principal (DEAL)
				R	Riskless principal (MTCH)
				Absence of	of this field is interpreted as agency
Comp	onent	Instrument	Y	Not supplied if ExecType = 8	
⇒	48	SecurityID	Y	Security id	dentification
•	22	SecurityIDSource	Y		class or source of the SecurityID ymbol(5521) if given.
				Value	Meaning
				8	Exchange Symbol
				А	Bloomberg Symbol
•	207	SecurityExchange	Y	Values are characters	e given by ATHEX. Max length is 4

40	OrdType	N	Type of the	ne order.
			Value	Meaning
			1	Market
			3	Stop
			4	Stop Limit
			7	Limit or Better
			А	On Close
			ATHEX StopSymb SecurityS Also, ATI tag Stop	Orders (OrdType=3 or OrdType=4) FIX Server will add the tags bol(5521) with value the Stop ymbol or Stop Index of the order. HEX FIX Server will set the value of SymbolType(5527) 'S' (Stop On or 'I' (Stop On Index).
59	TimeInForce	N	Value	Meaning
			0	Day
			1	Good Till Cancel (GTC)
			2	At the Opening
			3	Immediate Or Cancel (IOC)
			4	Fill Or Kill (FOK)
			6	Good Till Date (GTD)
			Not suppl	ied if ExecType is F, 4, 5, 9.
432	ExpireDate	Ν	Date th TimeInFo	e order expires. Required if orce (59) is GTD (6)

39	OrdStatus Y		entry/cha	the execution report is an order nge/cancel confirmation, it indicates of the order.
			Value	Meaning
			0	New
			1	Partially filled
			2	Filled
			4	Cancelled
			8	Rejected
			9	Suspended
			С	Expired
			N	Not released (user defined value)
			Ι	Inactive (user defined value)
378	ExecRestatementR	Ν	Required	if ExecType = D (Restated).
	eason		Value	Meaning
			1	GT renewal/restatement
			2	Verbal change
			4	Broker Option
58	Text	N	Additiona (Latin/Gr	ally supports the ISO8859-7 eek alphabet) character encoding.
44	Price	N		
99	StopPx	N	stop or sto	is used to specify the stop price of a op limit order (it will be present only lType(40)=3 or 4).
38	OrderQty	Ν	This tag i order.	s used to specify the quantity of the

77	PositionEffect	Ν	For use in derivatives omnibus accounting.Indicates whether the resulting position after a trade should be an opening or a closing position. Valid values are:ValueMeaningOOpenCClose
63	SettlType	N	Indicates order settlement period. Valid values are: Value Meaning
			Value Meaning 0 Normal
			1 Immediate
			Absence of this field is interpreted as normal settlement period
210	MaxShow	N	Denotes the disclosed volume of the order. Required if ExecType is not 8/F/G/H. No default value for this field in ExecutionReports.
336	TradingSessionID	Ν	Security phase identification. Sent only in case of trade. Possible values are:
			Value Meaning
			O Opening Trading Phase
			T Continuous Trading Phase
			A At the Closing Price trading Phase
			C Closing Price Continuous Trading Phase
151	LeavesQty	Y	Quantity open for further execution.
14	CumQty	Y	Total quantity filled.
6	AvgPx	Y	Calculated average price of all fills on this order.

54	Side	N	Side of th	e order.
			Value	Meaning
			1	Buy
			2	Sell
			5	Sell short
			R	Buy to cover
			not return	ExecType=8, values '5' and 'R' are red. Instead '5' is mapped to '2' and pped to '1'.
851	LastLiquidityInd	N		e only on OrdStatus of Partial or d if BoardID(5506) = 'M' (Main
			Value	Meaning
			1	Added Liquidity
			2	Removed Liquidity
			4	Auction (user defined value)
60	TransactTime	Y	Time this	order request was initiated.
381	GrossTradeAmt	N	Notional a	amount
Standard Tr	ailer	1	1	

Tag	Field Name	Req	Description	on
5501	OrigSource	N	A 1 charac source of	cter alphanumeric type indicating the the Order.
			Value	Meaning
			С	CTCI – API / ATHEX FIX Server
			М	ORAMA
			R	MRW (ATHEX supervision application)
			[space]	OASIS

5506	DeendID	NT	Idontifica	board Abaanaa of this field in
5506	BoardID	N		board. Absence of this field is d as the default value 'M' (the main
5509	OrderRelFlag	N	Possible v	
			1: Normal	l
			2: Quote	
			3: Combo	
5510	OrderRefID	N	Quote/Co	will be present only in case of mbo related reports and it should be entify the original quote/combo order ng:
			thi of	OrderRelFlag(5509) = '2' (QUOTE), is field will contain tha QuoteID(117) entered/updated quote (see uoteStatusReport message).
			thi en	OrderRelFlag(5509) = '3' (Combo), is field will contain tha OrderID(37) of tered/updated combo order (see tecutionReport message).
5512	GOIFlag	N	Group of	investor flag (Not used)
5521	StopSymbol	N		o orders, this is the instrument tion of the stop symbol. For class or this field, check tag 22.
5522	SecurityStatus	Ν	Security s	tatus. Possible values are:
			Value	Meaning
			А	Active
			N	Not active
			S	Suspended
			Н	Halted
			R	Resumed (Resumed Pre-opening of a Halt)
5527	StopSymbolType	N		values are 'I' for stop on index order and op on symbol orders.

5520	A THE VT as do Taur	N	Trues of the	- de
5529	ATHEXTradeTyp e	Ν	Type of tr	
			For possit Tags)	ble values see section 5.6 (Custom Fix
5532	RejectReasonCod e	Ν		to a member firm the reason that a action could not take place.
5545	CurrentCreditVal ue	Ν	Current cr	edit value of the clearing firm
5561	MBListID	N	Not requir purposes.	red. If given, it will be used for clearing
5508	CancelReasonCo de	N		eter alpha field used to indicate the reason cancellation.
			Possible v	alues are:
			"C" car request	ncelled by CTCI / ATHEX FIX Server
			"M" car	ncelled by ORAMA request
			"R" car	ncelled by MRW request
			"I" car	ncellation of IOC order
			"F" car	ncellation of FOK order
			"P" car	ncellation of MKT order
			"O" car	ncellation of ATO order
			"L" car	ncellation of Life order
			"S" car	cellation of Covered Sale Order by CSD
			"X" ma Server	ass cancellation by CTCI / ATHEX FIX
			"Y" ma	ass cancellation by ORAMA
			"Z" ma	ass cancellation by MRW
1724	OrderOrigination	N	Indicates	order origination. Valid values are:
	SiderOrigination	14	Value	Meaning
			0	Order is not submitted using Direct Electronic Access (DEA)

				5 Absence of submitted (DEA)".	Order is submitted using Direct Electronic Access (DEA) of this field is interpreted as "order is not using Direct Electronic Access	
2593	3	NoOrderAttribute s	N	Number of order attributes.		
•	2594	OrderAttributeTy	N	Indicates Value	order attribute type. Valid values are: Meaning	
		pe		2	Liquidity provision activity order	
				3	Risk Reduction	
				4	Algorithmic order	
				Required than 0.	if NoOrderAttributes(2593) is greater	
⇒	2595	OrderAttributeVa	Ν	Indicates	order attribute value. Valid values are:	
	lue		Value	Meaning		
			Y	True		
				N	False (Default value)	
				Required than 0.	if NoOrderAttributes(2593) is greater	
645		MktBidPx	Ν	Current b	est bid price.	
				Special ca	ases:	
				ATO: -10	02.0000	
				ATC: -1003.0000		
646		MktOfferPx	Ν	Current b	est offer price.	
				Special ca	ases:	
				ATO: -10	002.0000	
				ATC: -10	03.0000	
134		BidSize	N	Current b	est bid size	
135		OfferSize	N	Current b	est offer size	

266	8	NoTrdRegPublic ations	N	Number o	of trade publication reasons.
•	2669	TrdRegPublicatio nType	N		alue – 0 (Pre-trade transparency waiver) if NoTrdRegPublications(2668) > 0.
⇒	2670	TrdRegPublicatio	N	Possible v	values are:
		nReason		Value	Meaning
				0	No preceding order in book as transaction price set within average spread of a liquid instrument (NLIQ)
				1	No preceding order in book as transaction price depends on system-set reference price for an illiquid Instrument (OLIQ)
				2	No preceding order in book as transaction price is subject to conditions other than current market price (PRIC)
				3	No public price preceding order as public reference price was used for matching orders (RFPT)
				7	Deferral due to "Illiquid instrument" (ILQD)
				5	No public price deferral due to "Size specific" (SIZE)
5604	4	ATHEXSessionI D		Unique id	entification of the originating session.

5.1.5. Order Cancel Reject

The OrderCancelReject (9) explaining the reason of rejection is returned upon rejection of OrderCancelRequest (F).

Tag	Field Name	Req	Description
Standard H	leader		
35	MsgType	Y	9 = OrderCancelReject

Message B	ody		
37	OrderID	Y	Unique identifier of the order as assigned by the exchange.
198	SecondaryOrderID	N	Unique application message id. Used in recovery mechanism.
11	ClOrdID	Y	Client specified identifier of the order. Max size is 16-char.
41	OrigClOrdID	Y	ClOrdID of the previously accepted order (NOT the initial order of the day) when formatting or replacing an order. Max size is 16-char.
39	OrdStatus	Y	Value Meaning
			0 New
			1 Partially filled
			2 Filled
			4 Cancelled
			8 Rejected
			9 Suspended
			C Expired
			N Not released (user defined value)
			I Inactive (user defined value)
1	Account	N	Investor ID
434	CxlRejResponseTo	Y	'1' = Order Cancel Request
			'2' = Order Cancel/Replace Request
102	CxlRejReason	N	
58	Text	N	Additionally supports the ISO8859-7 (Latin/Greek alphabet) character encoding.
60	TransactTime	Y	Time this order request was initiated.
Standard Tr	ailer		

Tag	Field Name	Req	Description		
207	SecurityExchange	N	Values are given by ATHEX. Max length is 4 characters		
5532	RejectReasonCode	Ν	Indicates to a member firm the reason that a requested action could not take place.		
5561	MBListID	Ν	Not required. If given, it will be used for clearing purposes.		
5604	ATHEXSessionID		Unique identification of the originating session.		

The following table contains the extra and custom tags that can be sent in this message.

5.2. Mass Order Handling

5.2.1. Order Mass Cancel Request

The OrderMassCancelRequest (q) is used to request **mass cancellation of orders (per Security Exchange)**. Inactive orders are not affected by mass cancellation. Note that an order cancellation only applies to the remaining quantity of the order. If the order to be cancelled was partially filled, the cancellation has no effect on the previous trades.

The following filters (by MassCancelRequestType) are supported:

- Cancellation of all active orders belonging to member and a particular venue.
- Cancellation of all active orders belonging to member for a particular instrument.
- Cancellation of all active orders belonging to member for a particular underlying instrument.
- Cancellation of all active orders belonging to member for a particular Account (tag 1) and a particular venue.
- Cancellation of all active orders belonging to member for a particular Client ID (PartyRole 3) and a particular venue.
- Cancellation of all active orders belonging to member for a particular algorithmic ID (this refers to algorithmic orders, identified through party roles InvestmentDecisionID or ExecutionWithinFirmID) and a particular venue.

Tag MassCancelRequestType (530) signifies which of the remaining tags should be completed (the rest should be omitted). PartyRoles 1 and 36 (Firm and Trader) should be completed in all cases:

MassCancelRequestType	Tags to be completed
1 – security	SecurityID(48)

	SecurityIDSource (22)
	SecurityExchange (207)
2 – underlying security	SecurityID(48)
	SecurityIDSource (22)
	SecurityExchange (207)
7 – all orders	SecurityExchange (207)
W – all orders by Account	SecurityExchange (207)
	Account (1)
X – all orders by Client Id	SecurityExchange (207)
X – an orders by Chent Id	Client ID (Party Role 3)
Y – all orders on ExecutionWithinFirmID	SecurityExchange (207)
	ExecutionWithinFirmID(PartyRole 12)
	Note: Only algorithmic (ExecutionWithinFirmID Qualifier) IDs are applicable for mass cancellation.
Z – all orders on InvestmentDecisionID	SecurityExchange (207)
	InvestmentDecisionID(PartyRole 122)
	Note: Only algorithmic InvestmentDecisionID Qualifier) IDs are applicable for mass cancellation

An OrderMassCancelReport Message (r) is sent to the member firm by the exchange if the message has been received.

At the point of the OrderMassCancelReport transmission, no order has been affected yet. For each order subsequently cancelled a separate ExecutionReport message will be sent to the client.

Tag	Field Name	Req	Description	
Standard Header				
35	MsgType	Y	q = OrderMassCancelRequest	
Message Bo	dy			
11	ClOrdID	Y	Client specified identifier of the order. Max size is 16-char.	

530	530 MassCancelReque stType		Y	Type of c	ancellation requested	
				Value	Meaning	
				1	Cancel orders for a security	
				2	Cancel orders by an underlying security	
				7	Cancel all orders for a particular venue	
				W	Cancel all orders by Account and a particular venue	
				Х	Cancel all orders by Party Role 3 (Client Id) and a particular venue	
				Y	Cancel all orders by PartyRole 12 (Executing trader) and a particular venue	
				Z	Cancel all orders by PartyRole 122 (Investment decision within firm) and a particular venue	
453		NoPartyIDs	Y	Number of party identifiers.		
⇒	448	PartyID	Y			
⇒	447	PartyIDSource	Y	Class or s	source of the PartyID(448) value.	
				Value	Meaning	
				D	D (Proprietary/Custom Code)	
					Used for the PartyRole values 1 and 36	
				Р	Short code identifier	
					Used for the PartyRole value 3, 12 and 122	
⇒	452	PartyRole	Y	Role of th	ne specified PartyID(448).	
				Value	Meaning	
				1	Executing Firm	
				36	Entering trader (Trader ID)	
				3	Only used if $530 = X$	
					Client ID	

	237	Deate Dele Quelli <i>f</i> ice	N	12 122	(MIFID II: Client identification code) (optional)Only used if 530 = YExecuting trader (MIFID II: Execution within firm) (optional)Only used if 530 = ZInvestment Decision Maker
	6	PartyRoleQualifier	IN	•	d if $530 = X$, Y or Z. of the specified PartyRole (452).
				Value	Meaning
				22	Algorithm
					Used for the PartyRole values 12 and 122
				23	Firm or legal entity
					Used for the PartyRole value 3
				24	Natural person Used for the PartyRole values 3, 12 and 122
Comp t	onen	Instrument	Y		
⇒	48	SecurityID	Ν	Security i	dentification
⇒	22	SecurityIDSource	Ν	Identifies	class or source of the SecurityID.
				Value	Meaning
				8	Exchange Symbol
				Α	Bloomberg Symbol
•	207	SecurityExchange	Y	Values ar character	re given by ATHEX. Max length is 4
1		Account	N		
		Text	Ν	Additiona (Latin/Gr	ally supports the ISO8859-7 eek alphabet) character encoding.

60	TransactTime	Y	
			Time this order cancel request was initiated.
Standard T	railer		

5.2.2. Order Mass Cancel Report

The OrderMassCancelReport(r) is sent to client upon receipt of OrderMassCancel (q) message.

Tag	Field Name	Req	Descripti	on	
Standard Hea	der				
35	MsgType	Y	r = OrderMassCancelReport		
Message Body	7				
37	OrderId	Y		the value of ClOrdID(11) of OrderMassCancelRequest.	
198	SecondaryOrderI D	N	-	application message id. Used in mechanism.	
530	MassCancelRequ	Y	Type of cancellation requested:		
	estType		Value	Meaning	
			1	Cancel orders for a security	
			2	Cancel orders by underlying	
			7	Cancel all orders of a particular venue	
			W	Cancel all orders by Account for a particular venue	
			X	Cancel all orders by Party Role 3 (Client Id) for a particular venue	
		Y	Cancel all orders by Party Role 12 (Executing trader) for a particular venue		
			Z	Cancel all orders by Party Role 122 (Investion decision within firm) for a particular venue	

531		MassCancelResp	Y	Action be	eing attempted:	
		onse		Value	Meaning	
				0	Request Rejected	
				1	Cancelling orders for a security	
				2	Cancelling orders by underlying	
				7	Cancelling all orders	
				W	Cancelling all orders by Account	
				X	Cancelling all orders by Party Role 3 (Client Id)	
				Y	Cancelling all orders by Party Role 12 (Executing trader)	
				Z	Cancelling all orders by Party Role 122 (Investment decision within firm)	
453 NoPartyIDs		NoPartyIDs	Y	Number of party identifiers.		
•	448	PartyID	Y			
•	447	PartyIDSource	Y	Class or s	source of the PartyID(448) value.	
				Value	Meaning	
				D	D (Proprietary/Custom Code) Used for the PartyRole values 1, 4, and 36	
				Р	Short code identifier Used for the PartyRole value 3, 12, 26 and 122	
_	452	PartyRole	Y	Role of the	he specified PartyID(448).	
-	452	T artykole	1	Value	Meaning	
				1	Executing Firm	
				3	Client ID (MIFID II: Client identification code)	
				12	Executing trader (MIFID II: Execution within firm)	

				36	Entering trader (Trader ID)
				122	Investment Decision Maker (MIFID II: Investment decision within firm)
58		Text	N	Additiona (Latin/Gre	lly supports the ISO8859-7 eek alphabet) character encoding.
60TransactTimeYTime the		Time this	order request was initiated.		
Stand	Standard Trailer				

Tag	Field Name	Req	Description	on
5501	OrigSource	Ν	A 1 charac source of	cter alphanumeric type indicating the the Order.
			Value	Meaning
			С	CTCI – API / ATHEX FIX Server
			М	ORAMA
			R	MRW (ATHEX supervision application)
5508	CancelReasonCo de	N	A single (1) character alpha field used to indicate the reason for order cancellation. Possible values are: "X" mass cancellation by CTCI / ATHEX FIX Server "Y" mass cancellation by ORAMA "Z" mass cancellation by MRW	
5532	RejectReasonCod e	N	Indicates to a member firm the reason that a requested action could not take place. Required if MassCancelResponse (531) = ((Rejected).	
5604	ATHEXSessionI D			entification of the originating session.

5.3. Quotation Negotiation

5.3.1. Quote

The Quote (S) message is used by the Members to enter a new quote or update an existing one.

A QuoteStatusReport (AI) is returned either on successful quote entry/update or rejection.

Tag		Field Name	Req	Descripti	ion
Stand	ard He	eader	•		
35		MsgType	Y	S = Quote	
Messa	ige Boo	ly			
117		QuoteID	N	Identifier of the quote entry. For new quotes this tag must be omitted whereas the valid QuoteId returned by the first quote entry must be used for changing existing quotes	
15		Currency	N	Not used.	
453	_	NoPartyIDs	Y	Number of	of party identifiers.
•	448	PartyID	Y		
•	447	PartyIDSource	Y	Class or s Value D	Source of the PartyID(448) value.MeaningD (Proprietary/Custom Code)Used for the PartyRole values1, 4, and 36Short code identifierUsed for the PartyRole value 3,12, 26 and 122
•	452	PartyRole	Y	Role of the Value	ne specified PartyID(448). Meaning
				1	Executing Firm
				3	Client ID (MIFID II: Client identification code)
				4	Clearing Firm

			1	1		
				12	Executing trader (MIFID II: Execution within firm)	
				26	Correspondent broker (MIFID II: Non-executing broker)	
				36	Entering trader (Trader ID)	
				122	Investment Decision Maker (MIFID II: Investment decision within firm)	
•	2376	PartyRoleQualifie	Ν	Qualifier	of the specified PartyRole (452).	
		r		Value	Meaning	
				22	Algorithm Used for the PartyRole values 12 and 122	
				23	Firm or legal entity Used for the PartyRole value 3	
				24	Natural person Used for the PartyRole values 3, 12 and 122	
1		Account	Y	Investor ID		
Comp	onent	Instrument	Y			
⇒	48	SecurityID	Y	Security i	dentification	
⇒	22	SecurityIDSource	Y	Identifies	class or source of the SecurityID.	
				Value	Meaning	
				8	Exchange Symbol	
				А	Bloomberg Symbol	
•	207	SecurityExchange	Y	Values are characters	e given by ATHEX. Max length is 4	
58		Text	N	Additiona (Latin/Gro	Illy supports the ISO8859-7 eek alphabet) character encoding.	

			Side of quote.
54	Side	Ν	
			Value Meaning
			Buy 1
			2 Sell
			Absence of this field is interpreted as both sides.
132	BidPx	N	Bid price. Required if BidSize (134) is specified.
134	BidSize	Ν	Bid quantity. Required if BidPx (132) is specified.
133	OfferPX	N	Offer price. Required if OfferSize (135) is specified.
135	OfferSize	N	Offer quantity. Required if OfferPx (133) is specified.
Standard Tr	ailer		

Tag	Field N	lame	Req	Description	on
1166	QuoteN	IsgID	Y	-	ecified identifier of the quote. User-defined FIX 5.0 SP2.
1724	Ordor	minimation	NI	Indicates	order origination. Valid values are:
1724	OrderOrigination 1		Ν	Value	Meaning
				0	Order is not submitted using Direct Electronic Access (DEA)
				5	Order is submitted using Direct Electronic Access (DEA)
					of this field is interpreted as "order is not using Direct Electronic Access (DEA)".
2593	2593 NoOrderAttribute N		Number of order attributes.		
				Indicates order attribute type. Valid value	
•	2594	OrderAtt ributeTy	Ν	Value	Meaning
		pe		4	Algorithmic order

				Required 0.	if NoOrderAttributes(2593) is greater than	
⇒	2595	OrderAtt	N	Indicates	order attribute value. Valid values are:	
		ributeVal		Value	Meaning	
		ue		Y	True	
				Ν	False (Default value)	
				Required 0.	if NoOrderAttributes(2593) is greater than	
5580	BidCor edging	nmodityH Flag	Ν	Indicates whether the bid side of a quote reduces risk. Valid values are:		
				Value	Meaning	
				Ν	It doesn't reduce risk	
				Y	It reduces risk	
				Absence reduction	of this field is interpreted as 'N' (no risk).	
5581	OfferC Hedgin	ommodity gFlag	•		whether the offer side of a quote reduces risk.	
				Value	Meaning	
				Ν	It doesn't reduce risk	
				Y	It reduces risk	
				Absence reduction	of this field is interpreted as 'N' (no risk).	

5.3.2. QuoteCancel

The QuoteCancel (Z) message is used by the Members to either cancel an existing quote or request **mass cancellation of quotes (per Security Exchange)**.

In case of single quote cancellation, a QuoteStatusReport (AI) is returned either on successful cancellation or rejection.

In case of mass quote cancellation, a MassQuoteAcknowledgment (b) is returned in case of acceptance, or ExecutionReport (8) is returned in case of rejection.

Below, the mass cancellation of quotes is described

The following filters (by QuoteCancelType) are supported:

- Cancellation of all active quotes belonging to member and a particular venue.
- Cancellation of all active quotes belonging to member for a particular instrument.
- Cancellation of all active quotes belonging to member for a particular underlying instrument.
- Cancellation of all active quotes belonging to member for a particular Account (tag 1) and a particular venue.
- Cancellation of all active quotes belonging to member for a particular Client ID (PartyRole 3) and a particular venue.
- Cancellation of all active quotes belonging to member for a particular algorithmic id (this refers to algorithmic orders, identified through party roles InvestmentDecisionID or ExecutionWithinFirmID) and a particular venue.

Tag QuoteCancelType (298) signifies which of the remaining tags should be completed (the rest should be omitted). PartyRoles 1 and 36 (Firm and Trader) should be completed in all cases:

QuoteCancelType	Tags to be completed
1 – security	SecurityID(48)
	SecurityIDSource (22)
	SecurityExchange (207)
3 – underlying security	SecurityID(48)
	SecurityIDSource (22)
	SecurityExchange (207)
4 – all quotes	SecurityExchange (207)
W – all quotes by Account	SecurityExchange (207)
	Account (1)
X - all quotes by Client Id	SecurityExchange (207)
	ClientID (Party Role 3)
Y – all quotes on ExecutionWithinFirmID	SecurityExchange (207)
	ExecutionWithinFirmID (PartyRole 12)
	Note: Only algorithmic (ExecutionWithinFirmID Qualifier) IDs are applicable for mass cancellation.
Z – all quotes on InvestmentDecisionID	SecurityExchange (207)

InvestmentDecisionID (PartyRole 122)
Note: Only algorithmic InvestmentDecisionID Qualifier) IDs are applicable for mass cancellation

A MassQuoteAcknowledgment message (b) is sent to the member firm by the exchange if the message has been received.

At the point of the MassQuoteAcknowledgment transmission, no quote has been affected yet. For each quote subsequently cancelled, a separate QuoteStatusReport message will be sent to the client.

Tag	Field Name	Req	Descripti	on	
Standard	Header				
35	MsgType	Y	Z = QuoteCancel		
Message I	Message Body				
117	QuoteID	N		of the quote entry. Required if 298=1. n all other cases (mass cancellation).	
15	Currency	N	Not used.		
298	QuoteCancelType	Y	Type of q	uote cancel request	
			Value	Meaning	
			1	Cancel for Instrument	
			3	Cancel for Underlying	
			4	Cancel all Quotes of a particular venue	
			W	Cancel quotes by Account and a particular venue	
			X	Cancel quotes Party Role 3 (Client Id) and a particular venue	
			Y	Cancel quotes by PartyRole 12 (Executing trader) and a particular venue	
			Z	Cancel quotes by PartyRole 122 (Investment decision within firm) and a particular venue	
453	NoPartyIDs	Y	Number of	of party identifiers.	

⇒	448	PartyID	Y		
•	447	PartyIDSource	Y	Class or s	source of the PartyID(448) value.
				Value	Meaning
				D	D (Proprietary/Custom Code)
					Used for the PartyRole values 1 and 36
				Р	Short code identifier
					Used for the PartyRole values 3, 12 and 122
⇒	452	PartyRole	Y	Role of the	ne specified PartyID(448).
				Value	Meaning
				1	Executing Firm
				36	Entering trader (Trader ID)
				3	Only used if 298 = X
					Client ID (MIFID II: Client identification code) (optional)
				12	Only used if 298 = Y
					Executing trader
					(MIFID II: Execution within firm) (optional)
				122	Only used if $298 = Z$
					Investment Decision Maker (MIFID II: Investment decision within firm) (optional)
⇒	2376	PartyRoleQualifie r	Ν		d if 298 = X, Y or Z. of the specified PartyRole (452).
				Value	Meaning
				22	Algorithm
					Used for the PartyRole values 12 and 122
				23	Firm or legal entity Used for the PartyRole value 3
				24	Natural person

				Used for the PartyRole values 3, 12 and 122
1 Account		N	Required if 298 = W. Investor ID	
295		NoQuoteEntries	Y	Specifies the number of quote entries specified. The value in this field should always be "1".
Comp	onent	Instrument	Y	
•	48	SecurityID	N	Security identification
•	22	SecurityIDSource	N	Identifies class or source of the SecurityID.
				Value Meaning
				8 Exchange Symbol
				A Bloomberg Symbol
•	207	SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters

Tag	Field Name	Req	Description
1166	QuoteMsgID	Y	Client specified identifier of the quote. User-defined tag from FIX 5.0 SP2.
58	Text	Ν	Additionally supports the ISO8859-7 (Latin/Greek alphabet) character encoding.

5.3.3. QuoteStatusReport

The QuoteStatusReport (AI) is sent to the client upon:

- receipt of Quote (S) requesting quote entry/update
- receipt of QuoteCancel (Z) message requesting single quote cancellation.

• receipt of QuoteCancel (Z) message requesting mass quote cancellation for each cancelled quote

Tag		Field Name	Req	Descripti	on	
Stand	ard He	eader				
35 MsgType		Y	AI = Quo	teStatusReport		
Message Body						
117 QuoteID		Y	Identifier	of the quote entry.		
297 QuoteStatus		Y	Identifies	the status of the quote.		
				Value	Meaning	
				0	Accepted	
				5	Rejected	
				6	Removed from Market	
				17	Cancelled (user defined value)	
453		NoPartyIDs	Y	Number of party identifiers.		
⇒	448	PartyID	Y			
•	447	PartyIDSource	Y	Class or s	ource of the PartyID(448) value.	
				Value	Meaning	
				D	D (Proprietary/Custom Code) Used for the PartyRole values 1, 4, and 36	
				Р	Short code identifier Used for the PartyRole value 3, 12, 26 and 122	
⇒	452	PartyRole	Y	Role of th	ne specified PartyID(448).	
				Value	Meaning	
				1	Executing Firm	
				3	Client ID (MIFID II: Client identification code)	
				4	Clearing Firm	

				12	Executing trader (MIFID II: Execution within firm)
				26	Correspondent broker (MIFID II: Non-executing broker)
				36	Entering trader (Trader ID)
				122	Investment Decision Maker
					(MIFID II: Investment decision within firm)
•	2376	PartyRoleQualifier	Ν	Qualifier	of the specified PartyRole (452).
				Value	Meaning
				22	Algorithm
					Used for the PartyRole values 12 and 122
				23	Firm or legal entity
					Used for the PartyRole value 3
				24	Natural person
					Used for the PartyRole values 3, 12 and 122
1		Account	Ν	Investor I	D
58		Text	N		ally supports the ISO8859-7 eek alphabet) character encoding.
54		Side	Ν	Side of qu	lote.
				Value	Meaning
				1	Buy
				2	Sell
				Absence of sides. In c omitted (i	of this field is interpreted as both cases of QuoteCancel this tag will be i.e., even if the Quote cancelled had open, both sides are considered).
Comp	onent	Instrument	Y		
			1	1	

⇒	22	SecurityIDSource	Y	Identifies class or source of the SecurityID.		
				Value	Meaning	
				8	Exchange Symbol	
				А	Bloomberg Symbol	
•	207	SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters		
132		BidPx	N	Bid price. Required if BidSize (134) is specified.		
134		BidSize	N	Bid quantity. Required if BidPx (132) is specified.		
133 OfferPX		OfferPX	N	Offer prise	ice. Required if OfferSize (135) is	
135		OfferSize	N	Offer quantity. Required if OfferPx (133) is specified.		
60 TransactTime		Y	Time this	order request was initiated.		
Stand	Standard Trailer					

Tag	Field Name	Req	Descriptio	on	
1166	QuoteMsgID	Y	-	ecified identifier of the quote. User- g from FIX 5.0 SP2.	
5532	RejectReasonCode	Ν	Indicates to a member firm the reason that a requested action could not take place.		
			Required i	if QuoteStatus(297) = Rejected (5).	
198	SecondaryOrderID	Ν	Unique application message id. Used in recovery mechanism.		
1724	OrderOrigination	N	Indicates of	order origination. Valid values are:	
1/24	OrderOrigination	1	Value	Meaning	
			0	Order is not submitted using Direct Electronic Access (DEA)	
			5	Order is submitted using Direct Electronic Access (DEA)	
				of this field is interpreted as "order is not using Direct Electronic Access (DEA)".	

5545	CurrentCreditValue		Ν	Current ci	Current credit value of the clearing firm			
2593	NoOrderAttributes		N	Number of order attributes.				
				Indicates order attribute type. Valid values are:				
•	2594	OrderAttrib uteType	Ν	Value	Meaning			
		uterype		4	Algorithmic order			
				Required than 0.	if NoOrderAttributes(2593) is greater			
⇒	2595	OrderAttrib	Ν	Indicates	order attribute value. Valid values are:			
		uteValue		Value	Meaning			
				Y	True			
				Ν	False (Default value)			
				Required than 0.	if NoOrderAttributes(2593) is greater			
5580	BidCommodityHedg ingFlag		Ν	Indicates whether the bid side of a quote reduces risk. Valid values are:				
				Value	Meaning			
				Ν	It doesn't reduce risk			
				Y	It reduces risk			
				Absence of reduction)	of this field is interpreted as 'N' (no risk).			
5581	OfferC dgingF	ommodityHe lag	Ν	Indicates v Valid valu	whether the offer side of a quote reduces risk.			
				Value	Meaning			
				Ν	It doesn't reduce risk			
				Y	It reduces risk			
				Absence of reduction	of this field is interpreted as 'N' (no risk).			
5604	ATHE	XSessionID		Unique id	lentification of the originating session.			

5.3.4. MassQuoteAcknowledgment

The MassQuoteAcknowledgement (b) is sent to the client upon receipt of a QuoteCancel (Z) message requesting mass cancellation of quotes.

Tag		Field Name	Req	Description
Stand	ard He	eader		
35		MsgType	Y	b = MassQuoteAcknowledgement
Messa	age Bod	ly		
298		QuoteCancelType	Y	Type of quote cancel requestValueMeaning1Cancel for Instrument3Cancel for Underlying4Cancel all Quotes of a particular venueWCancel quotes by Account and a particular venueWCancel quotes Party Role 3 (Client Id) and a particular venueYCancel quotes by PartyRole 12 (Executing trader) and a particular venueZCancel quotes by PartyRole 122 (Investment decision within firm)
117		QuoteID	N	Assumes the value of QuoteMsgID(1166) of
297		QuoteStatus	Y	corresponding QuoteCancel. Identifies the status of the quote. Value Meaning 0 Accepted 5 Rejected
453		NoPartyIDs	Y	Number of party identifiers.
⇒	448	PartyID	Y	
•	447	PartyIDSource	Y	Class or source of the PartyID(448) value. Value Meaning

				D	D (Proprietary/Custom Code) Used for the PartyRole values 1, 4, and 36
				Р	Short code identifier Used for the PartyRole value 3, 12, 26 and 122
⇒	452	PartyRole	Y	Role of the	he specified PartyID(448).
				Value	Meaning
				1	Executing Firm
				3	Client ID (MIFID II: Client identification code)
				4	Clearing Firm
				12	Executing trader (MIFID II: Execution within firm)
				26	Correspondent broker (MIFID II: Non-executing broker)
				36	Entering trader (Trader ID)
				122	Investment Decision Maker (MIFID II: Investment decision within firm)
⇒	2376	PartyRoleQualifier	Ν	Qualifier	of the specified PartyRole (452).
				Value	Meaning
				22	Algorithm Used for the PartyRole values 12 and 122
				23	Firm or legal entity Used for the PartyRole value 3
				24	Natural person Used for the PartyRole values 3, 12 and 122
58		Text	N		ally supports the ISO8859-7 reek alphabet) character encoding.
Comp	onent	Instrument	Y		
	48	SecurityID	Ν		identification

⇒	22	SecurityIDSource	Ν	Identifies	class or source of the SecurityID.	
				Value	Meaning	
				8	Exchange Symbol	
				А	Bloomberg Symbol	
•	207	SecurityExchange	N	Values are given by ATHEX. Max length is 4 characters		
60	60 Transact		Y	Time this	order request was initiated.	
Stand	Standard Trailer					

Tag	Field Name	Req	Descripti	on	
5501	OrigSource	Ν		cter alphanumeric type indicating the the Order.	
			Value	Meaning	
			С	CTCI – API / ATHEX FIX Server	
			М	ORAMA	
			R	MRW (ATHEX supervision application)	
5508	CancelReasonCode	Ν	A single (1) character alpha field used to indicate the reason for order cancellation.		
			Possible v	alues are:	
			"X" ma Server	ass cancellation by CTCI / ATHEX FIX	
			"Y" ma	ass cancellation by ORAMA	
			"Z" ma	ass cancellation by MRW	
198	SecondaryOrderID	N	Unique aj mechanisi	oplication message id. Used in recovery m.	
5604	ATHEXSessionID		Unique id	entification of the originating session.	

5.3.5. QuoteRequest

The QuoteRequest (R) message is used:

- by the client to enter a quote request.
- by the exchange to inform the client that its QuoteRequest was successful

• by the exchange to inform all eligible market makers of their obligation to enter a quote

If the QuoteRequest (R) is rejected, a QuoteRequestReject (AG) is returned to client.

For more details on quote request functionality, please refer to chapter 10.2.

Tag				Field Name	Re q	Descript	ion
Stan	Idaro	d Head	er				
35			MsgTy	pe	Y	R = Quot	eRequest
Mes	sage	Body					
131			QuoteF	ReqID	Y	Client s quote rec	specified identifier for quest.
146			NoRela	ntedSym	Y	to be rea	of instruments for which quotes are quested. The value in this field ways be "1".
•	Co ent	mpon	Instru	ment	Y		
•	•	48	Securit	yID	Y		
⇒	⇒	22	Securit	yIDSource	Y	Identifies	class or source of the SecurityID
						Value	Meaning
						8	Exchange Symbol
						А	Bloomberg Symbol
•	•	207	Securit	yExchange	Y	Values ar is 4 chara	re given by ATHEX. Max length acters
•	454	1	NoSecu	ırityAltID	Ν	Number ovalue: 1	of SecurityAltID entries. Default
•	•	455	Securit	yAltID	N		
•	•	456	Securit	yAltIDSource	N	Identifies SecurityA	class or source of the AltID
						Value	Meaning
						8	Exchange Symbol
						А	Bloomberg Symbol
•	· 54		Side		N	Side of re	equested quote.
						Value	Meaning
						1	Buy

					2 Sell Absence of this field is interpreted as both sides.		
⇒	38		OrderQty	Ν	Quantity ordered		
•	Con ent	npon	Parties	Y			
•	453		NoPartyIDs	Y	Number of party identifiers. Should be 2.		
•	•	448	PartyID	Y			
•	•	447	PartyIDSource	Y	Default value = D (Proprietary/Custom Code)		
•	•	452	PartyRole	Y	Role of the specified PartyID(448).ValueMeaning1Executing Firm36Entering trader (Trader ID)		
60	50 TransactTime		N	Time this quote request was accepted.			
	Standard Trailer N Time this quote request was accepted.						

Tag	Field Name	Req	Descripti	on	
198	SecondaryOrderID	N	Unique application message id. Used in recovery mechanism.		
5604	ATHEXSessionID		Unique identification of the originating session.		
5574	ATHEXMsgType	Ν	ATHEXN Value	AsgType. Possible values are: Meaning	
			TJ	Quote Request accepted/rejected by OASIS Trading Platform	
			ТР	Quote Request accepted/rejected by Surveillance System	
			ТК	Quote Request directed to Market Maker	

* The QuoteRequest message issued by a trading firm is sent to the OASIS and then to all eligible market makers. Also, the same message is sent back to the sending firm as a confirmation.

5.3.6. QuoteRequestReject

The QuoteRequestReject (AG) is sent to the client upon rejection of a QuoteRequest (R) message.

For more details on quote request functionality, please refer to chapter 10.2.

Tag	F	Field Name	Req	Descripti	on
Star	ndard H	leader			
35	35 MsgType		Y	AG = Que	oteRequestReject
Mes	sage Bo	ody			
131		QuoteReqID	Y		
658		QuoteRequestReje ctReason	Y		uote Request was rejected. alue = 99 (Other)
146		NoRelatedSym	Y	Specifies	the number of repeating symbols The value in this field will always be
Com t	ponen	Instrument	Y		
•	48	SecurityID	Y		
•	22	SecurityIDSource	Y	Identifies	class or source of the SecurityID.
				Value	Meaning
				8	Exchange Symbol
				А	Bloomberg Symbol
•	207	SecurityExchange	Y	Values are	e given by ATHEX.
453		NoPartyIDs	Y	Number o	f party identifiers.
•	448	PartyID	Y		
•	447	PartyIDSource	Y	Default va	alue = D (Proprietary/Custom Code)
•	452	PartyRole	Y	Role of the specified PartyID(448).	
				Value	Meaning
				1	Executing Firm
				36	Entering trader (Trader ID)

60	TransactTime	Y	Time this quote request was rejected.			
Standard Trailer						

Tag	Field Name	Req	Description		
5532	RejectReasonCode	N	Indicates to a member firm the reason that a requested action could not take place.		
198	SecondaryOrderID	N	Unique application message id. Used in recovery mechanism.		
5574	ATHEXMsgType	Ν	ATHEXMsgType. Possible values are:		
			TJ	Quote Request accepted/rejected by OASIS Trading Platform	
			ТР	Quote Request accepted/rejected by Surveillance System	
5604	ATHEXSessionID		Unique identification of the originating session.		

5.3.7. News (Market Maker Alarm)

This form of News (B) message is sent to market makers in case they neglect their quotation responsibilities (see chapter 10.1).

Tag	Field Name	Req	Description				
Standard Header							
35	MsgType	Y	B = News				
Message Body							
42	OrigTime	N	Time of message origination.				
148	Headline	Y	Reason for notification. Valid values are:				
			Value	Meaning			
			W	Quote Warning			
			А	Quote Alarm			
				·			

146	146		NoRelatedSym	Y	Specifies the number of repeating symbols specified. The value is this field will always be "1".		
Co	mpo	onent	Instrument	Y			
•	48		SecurityID	Y	Exchange Symbol		
•	22		SecurityIDSource	Y	Identifies class or source of the SecurityID Default value: 8 (Exchange Symbol)		
•	454		NoSecurityAltID	N	Number of SecurityAltID entries. Default value: 1		
•	•	455	SecurityAltID	N	Bloomberg Symbol		
•	•	456	SecurityAltIDSource	Ν	Identifies class or source of the SecurityAltID Default value: A (Bloomberg Symbol)		
•	→ 207		SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters		
33	33		NoLinesOfText	Y	Number of lines of text (always 1)		
•	➡ 58		Text	Y	Message note. In this case, it shall be the meaning of the AlarmReason.		
Sta	Standard Trailer						

The following table contains the extra and custom tags that can be sent in this message.

Tag	Field Name	Req	Descripti	Description			
5562	AlarmReason	N	Used onl (Quote A	y in case of Headline(148) = "A" larm)			
			Value	Meaning			
			1	Prices are missing			
			2	BID price is missing			
			3	ASK price is missing			
			4	The price spread is too big			
			5	Quantities are too small			

			6	BID quantity is too small
			7	ASK quantity is too small
			8	BID order price missing
			9	ASK order price missing
			А	BID order price is outside quote prices
			В	ASK order price is outside quote prices
			С	Order prices are outside quote prices
			D	BID order quantity is too small
			Е	ASK order quantity is too small
			F	Order quantities are too small
				his field is given, the meaning text lso displayed in the Text (58) field.
198	SecondaryOrderID	N	Unique	application message id. Used in mechanism.

5.3.8. News (Suspend/Resume Market Maker's Responsibility)

This form of News (B) message is sent to market makers to inform them of any change in their quotation responsibilities, namely when their quotation responsibility is suspended or resumed (see chapter 10.1).

Tag	Field Name	Req	Description			
Standard Hea	ıder					
35	MsgType	Y	B = News			
Message Body	Message Body					
42	OrigTime	N	Time of message origination.			

148	148		Headline	Y	Reason for notification. Valid values are:		
					ValueMeaningSSuspend quotation responsibilityRResume quotation responsibility		
146	146		NoRelatedSym	Y	Specifies the number of repeating symbols specified. The value in this field will always be "1".		
Con	npoi	nent	Instrument	Y			
•	48		SecurityID	Y	Exchange Symbol		
•	22		SecurityIDSource	Y	Identifies class or source of the SecurityID		
					Default value: 8 (Exchange Symbol)		
•	454	4	NoSecurityAltID	Ν	Number of SecurityAltID entries. Default value: 1		
⇒	•	455	SecurityAltID	N	Bloomberg Symbol		
•	•	456	SecurityAltIDSource	N	Identifies class or source of the SecurityAltID. Default value: A (Bloomberg Symbol)		
•	207		SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters		
33			NoLinesOfText	Y	Number of lines of text (always 1)		
•	→ 58 1		Text	Y	Message note. In this case, it shall be the meaning of the ReasonOfSuspension if Headline(148)='S', otherwise it shall be "Resumed".		
Star	ndar	d Tra	iller				

The follo	The following table contains the extra and custom tags that can be sent in this message.						
Tag	Field Name	Req	Description				

5502	MarketID	N	Identifies the market when QuotationResponsibilityLevel(5563) = 'M'. See section 5.6			
5563	QuotationResponsibility Level	Ν	Identifies Value M I F	 the quotation responsibility level Meaning Market Instrument Firm 		
			U	Underlying		
5564	ReasonOfSuspension		UUnderlyingIdentifies the reason for quote responsibility suspension. Sent only if Headline(148)='S' (Suspend quotation responsibility)1 = Manual suspension2 = Suspension because of auction3 = Suspension because of limit up 4 = Suspension because of limit down5 = Minimum daily order volume has been covered			
198	SecondaryOrderID	N	-	application message id. Used in mechanism.		

5.4. Trade Reports

5.4.1. Trade Capture Report (TCR)

The TradeCaptureReport (AE) message is used:

- by the seller client to enter a trade report.
- by the seller client to cancel a trade report that he has previously entered
- by the buyer to accept or decline a trade report previously entered by the seller
- by the exchange to inform the counterparty of the status of the trade report previously entered/cancelled/accepted/declined

If the TradeCaptureReport (AE) is accepted or rejected by the exchange, a TradeCaptureReportAck (AR) is returned to the initiator.

For more details on trade report functionality, please refer to chapter 11.

Tag	Field Name	Re q	Description		
Standard H	Ieader		•		
35	MsgType	Y	AE = Trade Capture Report		
Message Bo	ody				
571	TradeReportID	Y	Firm's identifier. Entered by the member in the incoming TCR message and echoed by the trading system in confirmation messages.		
880	TrdMatchID	N	Identifier assigned to a trade by a matching system.		
572	TradeReportRefID	Ν	Used in edit transactions to refer to previous TradeReportID.		
487	TradeReportTrans	Y	Type of transaction being reported.		
	Туре		Value Meaning		
			0 New		
			1 Cancel		
			2 Replace		
856	TradeReportType	Y	Type of trade report.		
			Value Meaning		
			0 Submit		
			1 Alleged		
			2 Accept		
			3 Decline		
			5 No/Was (i.e. Expired)		
			6 Trade Report Cancel		
32	LastQty	N	Traded quantity. Required for all messages published from the system and trade report submissions. The system will not validate the LastQty submitted for a trade report cancellation with the original values. It is not possible to submit trades with zero or negative value for LastQty(32).		
31	LastPx	N	Traded price specified in the instrument's trading currency. Required for all messages published from the system and trade report submissions.		

				It is not possible to submit trades with $pagative value for Left Pr(21)$			
15		Currency	N	negative value for LastPx(31) Not used.			
Component		Instrument	Y				
•	48	SecurityID	Y	Exchange Symbol			
•	22	SecurityIDSource	Y	Identifies class or source of the SecurityID.			
				Value Meaning			
				8 Exchange Symbol			
				A Bloomberg Symbol			
•	207	SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters			
573	·	MatchStatus	N	Will be populated in all messages from the system.			
				Value Meaning			
				0 Matched			
				1 Unmatched			
552		NoSides	Y	The number of sides in the Trade Capture Report. In case of a trade report entry (487=0), this should be equal to '2'. In all other cases, '1' is also possible.			
	- 4	G: 1		Side of the order.			
-	54	Side	Y	Value Meaning			
				1 Buy			
				2 Sell			
				5 Sell short			
				R Buy to cover			
•	1	Account	N	Investor ID			

•	1724		OrderOrigination	N	Indicates are:	order origination. Valid values		
					Value	Meaning		
					0	Order is not submitted using Direct Electronic Access (DEA)		
					5	Order is submitted using Direct Electronic Access (DEA)		
						of this field is interpreted as "order mitted using Direct Electronic DEA)".		
-	528		OrderCapacity	N	Indicates	order capacity. Valid values are:		
ŗ	528		orderCapacity		Value	Meaning		
					А	Agency (AOTC)		
					Р	Principal (DEAL)		
					R	Riskless principal (MTCH)		
					Absence of this field is interpreted as agency.			
•	453		NoPartyIDs	Y	Number of	of party identifiers.		
•	•	448	PartyID	Y	Identifier	of the party.		
•	•	447	PartyIDSource	Y	Class or source of the PartyID(448) value.			
					Value	Meaning		
					D	D (Proprietary/Custom Code)		
						Used for the PartyRole values 1, 4, 17, 18, 36, 37, 39 and 124		
					Р	Short code identifier		
						Used for the PartyRole value 3, 12, 26, 122, 123, 125 and 126		

⇒	•	452	PartyRole	Y	Role of th	ne specified PartyID(448).
					Value	Meaning
					1	Executing Firm
					3	Client ID
						(MIFID II: Client identification code)
					4	Clearing Firm
					12	Executing trader
						(MIFID II: Execution within firm)
					26	Correspondent broker (MIFID II: Non-executing broker)
					36	Entering trader (Trader ID)
					122	Investment Decision Maker
						(MIFID II: Investment decision within firm)
•	+	2376	PartyRoleQualifier	N	Qualifier	of the specified PartyRole (452).
					Value	Meaning
					22	Algorithm
						Used for the PartyRole values 12, 37, 122 and 125
					23	Firm or legal entity
						Used for the PartyRole values 3 and 126
					24	Natural person
						Used for the PartyRole values 3, 12, 37, 122, 125 and 126
⇒	77		PositionEffect	Ν	For use in	n derivatives omnibus accounting.
					after a tra	whether the resulting position de should be an opening or a osition. Valid values are:
					Value	Meaning
					0	Open
					С	Close
•	2593		NoOrderAttributes	N	Namban	of order attributes.

•	•	2594	OrderAttributeTyp e	N	Indicates order attribute type. Valid values are:			
					Value	Meaning		
					3	Risk Reduction		
					Required greater th	if NoOrderAttributes(2593) is nan 0.		
•	•	2595	OrderAttributeVal ue	N	Indicates are:	order attribute value. Valid values		
					Value	Meaning		
					Y	True		
					Ν	False (Default value)		
					Required greater th	if NoOrderAttributes(2593) is nan 0.		
198			SecondaryOrderID	N	Unique application message id. Used in recovery mechanism.			
570			PreviouslyReporte d			if the trade capture report was y reported to the counterparty.		
					Value	Meaning		
					N	Not reported to the counterparty		
					Y	Previously reported to the counterparty ("DUPL")		
60			TransactTime	N	Time the trade, cancellation or correction occurred. Required for messages sent by the server			
Stan	ndaro	d Traile	er					

The following table contains the extra and custom tags that can be sent in this message.

Tag	Field Name	R e q	Description
5506	BoardID	N	Identifies board. Absence of this field is interpreted as the default value 'M' (the main board).

	5529	ATHEXTradeType	Y	-	oort Type. For possible values see 6 (Custom Fix Tags)
	5545	CurrentCreditValue	N	Current c	redit value of the clearing firm
	1839	TradePriceCondition	N		if the trade capture report is a vidend transaction. Valid values
				Value	Meaning
				13	Special dividend transaction (SDIV)
					of this field is interpreted as no vidend transaction
	2668	NoTrdRegPublication s	N	Number o	f trade publication reasons.
•	2669	TrdRegPublicationTy pe	N	DefaultVa waiver)	alue -0 (Pre-trade transparency
				Required i 0.	if NoTrdRegPublications(2668) >

•	2670	TrdRegPublicationRe	N	Possible	values are:
		ason		Value	Meaning
				0	No preceding order in book as transaction price set within average spread of a liquid instrument (NLIQ)
				1	No preceding order in book as transaction price depends on system-set reference price for an illiquid Instrument (OLIQ)
				2	No preceding order in book as transaction price is subject to conditions other than current market price (PRIC)
				3	No public price preceding order as public reference price was used for matching orders (RFPT)
				7	Deferral due to "Illiquid instrument" (ILQD)
				5	No public price deferral due to "Size specific" (SIZE)
560)4	ATHEXSessionID		Unique session.	identification of the originating

5.4.2. Trade Capture Report Ack (TCRA)

The TradeCaptureReportAck (AR) is sent to client upon receipt of TradeCaptureReport (AE) message.

For more details on trade report functionality, please refer to chapter 11.

Tag	Field Name	Req	Description
Standard Hea	der		
35	MsgType	Y	AR = Trade Capture Report Ack

Messa	ge Body	y			
571		TradeReportID	Y	Unique Id	lentifier of the TCR
880		TrdMatchID	Y	Identifier system.	assigned to a trade by a matching
572		TradeReportRefI D	N	incoming	entifier. Entered by the member in TCR message and echoed by the stem in confirmation messages.
856		TradeReportType	Y		mitted with the trade report.
150		ЕхесТуре	Y	Describes report ack	the purpose of the trade capture
				Value	Meaning
				0	New
				4	Cancelled
				5	Replace
				С	Expired
573		MatchStatus	N	Will be po system.	opulated in all messages from the
				Value	Meaning
				0	Matched
				1	Unmatched
939		TrdRptStatus		Trade Report Status	
				Value	Meaning
				0	Accepted
				1	Rejected
Comp	onent	Instrument	Y		
•	48	SecurityID	Y	Exchange	Symbol
•	22	SecurityIDSource	Y	Identifies	class or source of the SecurityID.
				Value	Meaning
				8	Exchange Symbol
				А	Bloomberg Symbol

•	207	SecurityExchange	Y	Values are characters	e given by ATHEX. Max length is 4
58		Text	N	Text speci	ifying the reason for the rejection.
32		LastQty	N	Value submitted with the trade report.	
31		LastPx	N	Value submitted with the trade report.	
77		PositionEffect	Ν	Indicates trade shou	derivatives omnibus accounting. whether the resulting position after a ild be an opening or a closing Valid values are:
				Value	Meaning
				0	Open
				С	Close
198		SecondaryOrderI D	N		application message id. Used in nechanism.
528		OrderCapacity	N	Indicates	order capacity. Valid values are:
526		OrderCapacity	IN	Value	Meaning
				А	Agency (AOTC)
				Р	Principal (DEAL)
				R	Riskless principal (MTCH)
				Absence of	of this field is interpreted as agency
60		TransactTime	Ν	This will I	be the time stamped by the server.
Standa	rd Tra	iler			

The following table contains the extra and custom tags that can be sent in this message.

Tag	Field Name	Req	Description
5532	RejectReasonCod e	N	Code further specifying the reason for rejection. Used if TrdRptStatus (939) is Rejected (1).
5506	BoardID	N	Identifies board. Absence of this field is interpreted as the default value 'M' (the main board).
5529	ATHEXTradeTyp e	Y	Trade Report Type. For possible values see section 5.6 (Custom Fix Tags)

5545	CurrentCreditVal ue	N	Current	credit value of the clearing firm
1724	OrderOrigination	N	Indicates	order origination. Valid values are:
1/24	OrderOrigination	1	Value	Meaning
			0	Order is not submitted using Direct Electronic Access (DEA)
			5	Order is submitted using Direct Electronic Access (DEA)
				of this field is interpreted as "order is itted using Direct Electronic Access
5604	ATHEXSessionI D		Unique ic session.	dentification of the originating

5.5. Market Data Messages

5.5.1. SecurityStatus (Security Status)

For information on when this message is sent to the client, please see chapter 6.2.3.

Ta	g	Field Name	Re q	Description
		Standard Header	Y	MsgType = f
Cor	nponent	Instrument	Y	
•	48	SecurityID	Y	Exchange Symbol
•	22	SecurityIDSource	Y	Identifies class or source of the SecurityID. Value Meaning 8 Exchange Symbol A Bloomberg Symbol
•	207	SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters
Cor	nponent	SecAltIDGroup	Ν	

•	454	Ļ	NoSecurityAltID	N	Number of SecurityAltID entries. Default value: 1
•	•	455	SecurityAltID	N	Bloomberg Symbol
•	•	456	SecurityAltIDSou rce	N	Identifies the class or source of the SecurityAltID Default value: A (Bloomberg Symbol)
60	•		TransactTime	N	This will be the time stamped by the server.
			Standard Trailer	Y	

The following table contains the custom tags that can be received in this message.

Tag	Field Name	Req	Description
5522	SecurityStatus	Y	See Section 5.6
5511	PhaseID	Y	See Section 5.6
5530	SecurityPrice	Y	See Section 5.6
5531	ATHEXHaltReaso n	Y	See Section 5.6
5502	MarketID	Y	See Section 5.6
198	SecondaryOrderID	Ν	Unique application message id. Used in recovery mechanism.
5574	ATHEXMsgType	N	ATHEXMsgType. Possible values are:
			Value Meaning
			CA Security status message

5.5.2. SecurityStatus (Security Prices)

This message is sent to the client:

- at the beginning of the trading day for each security traded in OASIS
- whenever floor/ceiling prices change for a security

TagField NameReq	Description
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			Standard Header	Y	MsgType = f	
Co	Component		Instrument	Y		
	48	8	SecurityID	Y		
22		2	SecurityIDSource	Y	Identifies class or source of the SecurityID	
					Default value: 8 (Exchange Symbol)	
	20	07	SecurityExchange	Y		
Co	ompo	onent	SecAltIDGroup	Ν		
	•	454	NoSecurityAltID	Ν	Number of SecurityAltID entries. Default value: 1	
•	•	455	SecurityAltID	N	Bloomberg Symbol	
•	•	456	SecurityAltIDSour ce	Ν	Identifies the class or source of the SecurityAltID Default value: A (Bloomberg Symbol)	
333		3	LowPx	Y	Indicates the minimum possible price of the instrument.	
332		2	HighPx	Y	Indicates the maximum possible price of the instrument	
			Standard Trailer	Y		

The following table contains the custom tags that can be received in this message.

Tag	Field Name	Req	Description			
5530	SecurityPrice	Y	See Section 5.6			
198	SecondaryOrderID	Ν	Unique application message id. Used in recovery mechanism.			
159	AccruedInterestAmt	N	Accrued Interest			
5574	ATHEXMsgType	Ν	ATHEXMsgType. Possible values are:			
			Value Meaning			
			CD Security prices message			

5.5.3. TradingSessionStatus

For information on when this message is sent to the client, please see chapter 6.2.3.

Tag	Field Name	Req	Description		
	Standard Header	Y	MsgType = h		
336	TradingSessionID	Y	A 1 character alphanumeric field indicating the market/board status. Possible values :		
			For the main board: • 'P' : Pre-Call		
			• 'J' : Calculated projected opening price		
			• 'T' : Continuous/Auction event		
			• 'C' : Closing price trading		
			• 'R' : Run-off		
			• 'E' : End of trading		
			• 'H' : Halt		
			• 'S': Stop (Used only in Auction Market)		
			For the other boards:		
			• 'O' : Open		
			• 'E' : End		
340	TradSesStatus	Y	Valid values are: 1 = Halted 2 = Open 3 = Closed 4 = Pre-Open 5 = Pre-Close		
	Standard Trailer	Y			

The following table contains the custom tags that can be received in this message.

Tag	Field Name	Req	Description
5502	MarketID	Y	See Section 5.6
5506	BoardID	Y	See Section 5.6
207	SecurityExchange	Y	

198 SecondaryOrderID		-	application mechanism.	U	id.	Used	in
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5.5.4. News (Credit Limit Info)

For information on when this message is sent to client, please see chapters 6.1.4 and 6.2.3.1.

Tag		Field Name	Req	Description	
		Standard Header	Y	B = News	
148		Headline	Y	Reason for notification. Valid values are	
				Value Meaning	
				C Credit Limit Information	
3	3	NoLinesOfText	Y	Number of lines of text (always 1)	
→ 58		Text	Y	Default value = "Credit Limit Information"	
		Standard Trailer	Y		

The following table contains the extra and custom tags that can be received in this message.

Tag		Field Name	Req	Description	
453		NoPartyIDs	Y	Number of party identifiers.	
•	447	PartyIDSource	Y	Default value = D (Proprietary/Custom Code)	
*	452	PartyRole	Y	Role of the specified PartyID(448). Value Meaning 1 Executing Firm 4 Clearing Firm	
•	448	PartyID	Y		
	5550	CreditLimit	Y	See Section 5.6	
5558 Clear		ClearingSpace	Y	See Section 5.6	

5.5.5. News (Message Note)

This message is sent to client whenever the exchange wants to send a note.

Та	g	Field Name	Req	Description		
		Standard Header	Y	B = News		
148	3	Headline	Y	Reason for notification. Valid values are:ValueMeaningMMessage Note		
33		NoLinesOfText	Y	Number of lines of text (always 1)		
•	58	Text	Y	Message note		
		Standard Trailer	Y			

The following table contains the extra and custom tags that can be received in this message.

Tag	Field Name	Req	Description
198	SecondaryOrderID	Ν	Unique application message id. Used in recovery mechanism.
5577	NoteType	Ν	A single character alphanumeric field to identify the nature of the news message: Possible values are: "0": Free text message from the exchange "1": Warning. This informs the member firm that its rejections have reached half of the limit. Action should be taken to eliminate the cause of excessive rejections from the member.

			"2": Throttling parameters change. This informs the member firm that a change in their throttling parameters (TransPerSecond & OutstandingMsgs) has been made.
5601	TransPerSecond	Ν	Max number of transactions per second permitted for the session.
5602	OutstandingMsgs	Ν	Max number of unconfirmed transactions
5603	ExchangeID	Ν	It has the Exchange ID value whenever NoteType takes the value of "0"

5.5.6. Advertisement (Hit & take order information)

The Advertisement (7) is sent to the client to inform him of a Hit&Take order entry/update/cancellation.

Tag		Field Name	Req	Description	on
		Standard Header	Y	7 = Adver	rtisement
2		AdvId	Y	Unique id	entifier of Advertisement message.
5		AdvTransType	Y	Advertisement message transaction type Default value = N (New)	
Comp	onent	Instrument	Y		
⇒	48	SecurityID	Y	Security identification	
•	22	SecurityIDSource	Y		the class or source of the D and StopSymbol(5521) if given.
				Value	Meaning
				8	Exchange Symbol
				A Bloomberg Symbol	
•	207	SecurityExchange	Y	Values are given by ATHEX. Max length is 4 characters	

4	AdvSide	Y	
53	Quantity	Y	
44	Price		
	Standard Trailer	Y	

The following table contains the extra and custom tags that can be received in this message.

Tag	Field Name	Req	Descripti	ion
198	SecondaryOrderID	N		application message id. Used in mechanism.
37	OrderID	Y	Unique ic the excha	lentifier of the order as assigned by nge.
210	MaxShow	Y	Denotes t	he disclosed volume of the order.
39	OrdStatus	Y	Indicates values are	the status of the order. Possible
			Value	Meaning
			0	New
			9	Suspended
			2	Filled
			4	Cancelled
			N	Not released (user defined value)
			Ι	Inactive (user defined value)
5506	BoardID	Y	Identifies	board.
5582	SpecialConditions	Y		the special conditions of the hit and r. Valid values are: Meaning
			A	All Or None
			M	Minimum Fill
			0	Multiples Of

5583 Co	onditionVolume	Y	Indicates hit&take o		conditional	volume	of	the
---------	----------------	---	-------------------------	--	-------------	--------	----	-----

5.6. Custom Fix Tags

Several custom FIX tags (> 5000) are used to support ATHEX's business logic. The following table presents these tags with a short description of the values they can hold.

Tag	Field Name	Datatype	Description
5501	OrigSource	Char	Source of the Order. Possible values :
			'C': CTCI –ODL / ATHEX FIX Server
			'M': ORAMA
			'R': MRW (ATHEX supervision application).
			ʻ ʻ: OASIS
5502	MarketID	Char	Trading market. For possible values, please refer to ATHEX RDS files:
			https://www.athexgroup.gr/en/rds
			This market should have such a status so as to accept orders (namely its status should not be: "R", "E", "H", "S").
5506	BoardID	Char	Trading board.
			Possible Values:
			"M" Main board
			"S" Special conditions board
			"B" Report Only board
			"F" Forced sales board
5508	CancelReasonC	Char	Reason for order cancellation.
	ode		Possible values are:
			"C" cancelled by CTCI / ATHEX FIX Server request

		1	
			"M" cancelled by ORAMA request
			"R" cancelled by MRW request
			"I" cancellation of IOC order
			"F" cancellation of FOK order
			"P" cancellation of MKT order
			"O" cancellation of ATO order
			"L" cancellation of Life order
			"S" cancellation of Covered Sale Order by CSD
			"X" mass cancellation by CTCI / ATHEX FIX Server
			"Y" mass cancellation by ORAMA
			"Z" mass cancellation by MRW
5509	OrderRelFlag	Int	Order Relation flag:
			"1" Normal
			"2" Quote
			"3" Combo
			"4" Trade Report
5510	OrderRefID	String	This field will be present only in case of Quote/Combo related reports and it should be used to identify the original quote/combo order as following:
			• If OrderRelFlag(5509) = '2' (QUOTE), this field will contain tha QuoteID(117) of entered/updated quote (see QuoteStatusReport message).
			• If OrderRelFlag(5509) = '3' (Combo), this field will contain tha OrderID(37) of entered/updated combo order (see ExecutionReport message).
5511	PhaseID	Char	Trading phase.
			Possible values are:

			" " Start of day (Before the Pre-opening)
			"P" Pre-opening Trading Phase
			"O" Opening Trading Phase
			"T" Continuous Trading Phase
			"A" At the Closing Price trading Phase
			"C" Closing Price Continuous Trading Phase
			"E" End Of Trading Phase
			"S" Stop phase (Use in auction market)
5512	GOIFlag	Boolean	Group Of Investor flag (Not used)
5521	StopSymbol	String	Index or Security ID related to the stop condition. (Max 15 characters)
5522	SecurityStatus	Char	Indicates whether the security is active or not.
			Possible values are:
			"A" Active
			"N" Not active
			"S" Suspended
			"H" Halted
			"R" resumed (Resumed Pre-opening of a Halt)
5527	StopSymbolTyp	Char	Indicates type of tag 5521 (StopSymbol)
	e		Possible values are 'I' for stop on index order and 'S' for stop on symbol orders. Absence of this tag means 'S' i.e., stop on symbol.
5529	ATHEXTradeTy	String	Type of trade (max 2 characters)
	ре		Possible values:
			Execution Reports:
			"MB" Main Board Trade
			"MO" Main Board Opening Trade

· · · ·	
	"MC" Main Board Closing Trade
	"MM" Main Board, Combination to Combination Trade
	"ST" Special Board Trade
	"OL" Odd-lot Board Trade
	"FS" Forced sale Board Trade
	Trade Capture Reports:
	"RA" Trade report Method 6-1
	"RD" Trade report Spot-1
	"RU" Trade report Spot-2
	"RR" Trade report Settlement – Incomplete Buy
	"RS" Trade report Settlement – Incomplete Sell
	"RB" Trade report Method 6-1 Same Day Settlement
	"RM" Trade report Method 6-1 Special Fees
	"RN" Trade report Method 6-1 Special Fees & Same Day Settlement
	"RL" Trade Report Lending – Borrowing
	"RC" Trade report method 6-1, No CCP (deprecated)
	"RG" Trade report method 6-1, No CCP & Same Day Settlement (deprecated)
	"RT" Trade Report Lending – Borrowing, Market Making
	"RF" Trade Report Lending – Borrowing, Failed Trade
	"RE" Trade Report Method 7-1 Derivatives market
	"RQ" Trade Report – Other (can only be entered by ATHEX internal users)

5530	SecurityPrice	Price	Security price whenever "Security Status" message is sent (see also Price).
			Possible values:
			At the beginning of the Pre-Opening phase - Start of day price
			At the beginning of the Opening phase - Zeroes
			At the beginning of the Continuous phase - Opening price
			At the beginning of the Closing phase - Zeroes
			At the beginning of the Closing price phase – Closing price
			At the End of Trading – Closing price
			At a resumption – Resumed Opening price
			In all other cases – Last sale price
5531	ATHEXHaltRea	String	Cause of the halt or suspension.
	son		For possible values, please refer to HaltReasonCode in Appendix A. Field Description
5532	RejectReasonCo	Int	Reason that a requested action could not take place.
	de		For possible values, please refer to RejectReasonCode in Appendix A. Field Description
5550	CreditLimit	Amt	Credit limit assigned to the clearing firm
5545	CurrentCreditVa lue	Amt	Current credit value of the clearing firm
5558	ClearingSpace	String	Clearing space identifier.
5561	MBListID	String	Member-specific identifier for grouping of orders (clearing procedure instructions). (max 6- characters)

5562	AlarmReason	Char	Used only in case of Headline(148) = "A" (Quote Alarm).
			This attribute may take one of the following values:
			"1" Prices are missing
			"2" BID price is missing
			"3" ASK price is missing
			"4" The price spread is too big
			"5" Quantities are too small
			"6" BID quantity is too small
			"7" ASK quantity is too small
			"8" BID order price missing
			"9" ASK order price missing
			"A" BID order price is outside quote prices
			"B" ASK order price is outside quote prices
			"C" Order prices are outside quote prices
			"D" BID order quantity is too small
			"E" ASK order quantity is too small
			"F" Order quantities are too small
5563	QuotationRespo	Char	Quotation responsibility level.
	nsibility Level		Possible values:
			"M" Market
			"I" Instrument. The particular responsibility also refers to all instruments which are based on (derived from) instrument in matter.
			"F" Firm
5564	ReasonOfSuspe nsion	Int	Reason for quote responsibility suspension. Sent only if Headline(148)='S' (Suspend quotation responsibility)

		1		
				al suspension nsion because of auction
			"3" Suspe	nsion because of limit up
			"4" Suspe	nsion because of limit down
				num daily order volume has been covered
5572	DaysAvrgTrdVa 1	Amt		laily turnover for a specific security
5574	ATHEXMsgTyp	N	ATHEXM	IsgType. Possible values are:
	e		Value	Meaning
			TJ	Quote Request accepted/rejected by OASIS Trading Platform
			TP	Quote Request accepted/rejected by Surveillance System
			ТК	Quote Request directed to Market Maker
			CA	Security status message
			CD	Security prices message
5577	NoteType	Char	Indicates t	he nature of the news message:
			Possible v	alues are:
			"0": Free	text message from the exchange
			firm that Server had disabling	ttling warning. This informs the member its rejections produced by the OASIS ve reached half of the limit resulting in of its connection. Action should be taken te the cause of excessive rejections from er.
			the memb	ttling parameters change. This Informs per firm that a change in their throttling s (TransPerSecond & OutstandingMsgs) nade.
5578	SecurityISIN	String	Security's	ISIN code. (max 12-characters)

5580	BidCommodity HedgingFlag	Char	Indicates whether the bid side of a quote reduces risk. Possible values: "N": It doesn't reduce risk (default value) "Y": It reduces risk		
5581	OfferCommodit yHedgingFlag	Char	Indicates whether the offer side of a quote reduces risk. Possible values: "N": It doesn't reduce risk (default value) "Y": It reduces risk		
5582	SpecialConditio ns	Char	Identifies the special conditions of the hit and take order. Valid values are:ValueMeaningAAll Or NoneMMinimum FillOMultiples Of		
5583	ConditionVolum e	Qty	Indicates the conditional volume of the hit&take order.		
5601	TransPerSecond	Int	Max number of transactions per second permitted for the session.		
5602	OutstandingMsg s	Int	Max number of unconfirmed transactions		
5603	ExchangeID	Char	It has the Exchange ID value whenever NoteType takes the value of "0"		
5604	ATHEXSessionI D	String	Unique identification of the originating session.		

5.7. OrdType and TimeInForce Combinations

In the table bellow, all combinations of the FIX fields OrdType(40) and TimeInForce(59) are described.

OrdType	TimeInForce	Description
1	0	MKT order, no conditions, valid only for current day
1	1	MKT order, no conditions, time validity is good till cancel
1	2	ATO order, no conditions, valid only for current day
1	3	<i>MKT</i> order, time validity = Immediate Or Cancel
1	4	MKT order, time validity = Fill Or Kill
1	6	MKT order, no conditions, time validity is good till date
7	0	LIMIT order, no conditions, valid only for current day
7	1	LIMIT order, no conditions, time validity is good till cancel
7	2	INVALID COMBINATION
7	3	LIMIT order, time validity = Immediate Or Cancel
7	4	LIMIT order, time validity = Fill Or Kill
7	6	LIMIT order, time validity = good till date
3	0	MKT order, stop on security or index, valid only for current day
3	1	MKT order, stop on security or index, time validity = good till cancel
3	2	INVALID COMBINATION
3	3	INVALID COMBINATION
3	4	INVALID COMBINATION
3	6	MKT order, stop on security or index, time validity = good till date
4	0	LIMIT order, stop on security or index, valid only for current day
4	1	LIMIT order, stop on security or index, time validity = good till cancel
4	2	INVALID COMBINATION
4	3	INVALID COMBINATION
4	4	INVALID COMBINATION
4	6	<i>LIMIT order, stop on security or index, time validity = good till date</i>
А	0	ATC order, no conditions, valid only for current day

А	1	INVALID COMBINATION
А	2	INVALID COMBINATION
А	3	INVALID COMBINATION
Λ	5	
А	4	INVALID COMBINATION
А	6	INVALID COMBINATION
Q	0	LIMIT order, special conditions (see tag 5582), valid only for current day
Q	1	INVALID COMBINATION
Q	2	INVALID COMBINATION
Q	3	INVALID COMBINATION
Q	4	INVALID COMBINATION
Q	6	INVALID COMBINATION

5.8. Unsolicited order changes

The following actions induce unsolicited (ExecType = 'D') ExecutionReport messages. Tag 378 (ExecRestatementReason) is also provided in such Execution reports as indicated by the table below:

	Executio	n Report	
ЕхесТуре	OrdStatus	ExecRestatementReason	Event Description of Order Activation / Inactivation
D (Restated)	I (Inactive)	l (GT renewal/restatement)	A life order becomes inactive by the trading system when, at the start of trading session, it does not pass the validation rules (price limits, credit limit etc)
		4 (Broker Option)	An order becomes inactive by the trading system when it is fully executed ($MaxShow(210) = 0$) but the OrderQty(38) is still greater than zero
	'4' (Cancelled)	4 (Broker Option)	FOK/IOC/Market order cancellation by the trading system as of unfulfilled condition
	'C' (Expired)	l (GT renewal/restatement)	Expired life order (either due to order expiry date or series expiration)

	0 (New)	l (GT renewal/restatement)	A valid life order is restated at the beginning of subsequent days.
		4 (Broker Option)	Stop/ATC order released
	I (Inactive)	2 (Verbal Change)	An order is deactivated on demand by ATHEX member staff.
	4 (Cancelled)	2 (Verbal Change)	An order is cancelled on demand by ATHEX member staff.
	1 (Partially Filled)	4 (Broker Option)	Market order partially filled, restated as 'limit or better' at last match price
	N (Not Released)	l (GT renewal/restatement)	A valid not-released life order is restated at the beginning of subsequent days.

5.9. Application messages data flow

Application messages sent by the client to ATHEX FIX Server will cause the confirmation or rejection messages to be sent as listed in the following table:

s/n	Messages sent	Messages received
1	NewOrderSingle	ExecutionReport indicating whether the order was accepted or rejected. If the incoming order meets the matching criteria and a trade is produced, then an extra ExecutionReport indicating the trade will be received.
2	OrderCancelRequest	ExecutionReport in case the order cancellation was accepted, OrderCancelReject otherwise.
3	OrderCancel/Replace Request	ExecutionReport indicating whether the order amendment was accepted or rejected. If the changed order meets the matching criteria and a trade is produced, then an extra ExecutionReport indicating the trade will be received.

4	OrderMassCancelRequest	OrderMassCancelReport indicating whether the OrderMassCancelRequest was accepted or not.
		For each cancelled order, an ExecutionReport message will also be received.
5	TradeCaptureReport	TradeCaptureReportAck indicating whether the pre-agreed trade was accepted by the marketplace or not.
		If accepted, then a TradeCaptureReport is sent to the counterparty.
		Special conditions apply to trade report handling. Please refer to chapter 11 for more information.
6	Quote	QuoteStatusReport indicating whether the quote was accepted or not.
		Please refer to chapter 10.1 for more information.
7	QuoteCancel	If QuoteCancel is a single quote canelation, a QuoteStatusReport indicating whether the quote cancellation was accepted or not is sent.
		If the QuoteCancel is a mass quote cancellation request, in case of acceptance, the MassQuoteAcknowledgement is sent to the client, and then for each quote subsequently cancelled, a separate QuoteStatusReport message will be sent to the client. In case of rejection, an ExecutionReport is sent.
		Please refer to chapter 10.1 for more information.
8	QuoteRequest	QuoteRequest if accepted by the marketplace, QuoteRequestReject otherwise.
		If QuoteRequest was accepted, Market Makers will also receive a QuoteRequest message informing them of their obligations.

The application messages referenced in the above table are described in chapter 5.

6. Instructions for implementing business logic

6.1. General Concepts of the OASIS system

6.1.1. Tick size mechanism

Trading in OASIS is restricted to 'valid' prices. The validity of a price depends, amongst others, on the 'price tick'. This is defined as the minimum allowed price deviation and the difference between two valid prices is bound to be a multiple of the designated tick size.

This restriction applies to:

- every order sent to the system.
- the entry of the opening price following a Corporate Action, the price of which should always be at a valid tick.

If for some reason a value that does not correspond to a valid price tick is produced (e.g., while calculating the securities floor and ceiling), then the value is rounded to a valid price tick. For the calculation of floor prices, they are rounded upwards to the nearest price tick, while for the calculation of ceiling prices, they are rounded downwards to the previous price tick. This rounding rule rounds towards the interior of the range denoted by the floor/ceiling pair.

The opening prices of securities traded in the system are already placed at a valid price tick. If the provided opening price of a security is not placed at a valid price tick, the system itself rounds it to the nearest price tick. If the price is equidistant from the nearest price ticks, then it is rounded downwards.

The table with the price ticks currently in the System is presented in chapter 9.

6.1.2. *Lot size*

For each security traded in OASIS a Lot Size has been set.

The securities are traded at a volume multiple of the minimum lot size on the Main Boards and at a lower quantity of the minimum lot size on the Odd Lot Boards.

The entry of orders with:

- a lower quantity than
- integer multiple of
- non-integer multiple of

the Lot Size (Mixed Lot) is allowed on the Pre-Agreed Trades boards. The entry of orders through the ATHEX FIX Server is not allowed on those Boards though.

6.1.3. Order Priority Change

When an order is changed through an Order Cancel/Replace Request message, the time **priority** of the order shall change:

- If the order price changes
- If the order Disclosed Volume increases

In both cases the order timestamp is updated.

6.1.4. Member Credit Limit

The system checks the total value of orders executed or not for each member.

Each Member has a daily amount as the maximum limit of the transaction's value. This amount is communicated to the Member at the beginning of each trading day and each time this limit is readjusted by ATHEX (see message News - Credit Limit Info, paragraph 5.5.4).

Each time the Member's user enters a new order/quote or changes / edits an existing order/quote or when he enters/accepts a trade report, or when a trade is made, the current accumulated credit value consumed by the Member (per Clearing Firm) is communicated to the Member through the following messages:

- ExecutionReport (see paragraph 5.1.4).
- QuoteStatusReport (see paragraph 5.3.3).
- TradeCaptureReport (see paragraph 5.4.1).
- TradeCaptureReportAck (see paragraph 5.4.2).

The system does not allow the entry of an order/quote/trade report by the member which causes the member's credit limit to be exceeded. In the event of sending a new order/ quote/trade report message or a message to change an order/quote resulting in the current credit value exceeding this limit, the OASIS Server will reject the order and will return an ExecutionReport(8) message with an "081" error code in RejectReasonCode(5532).

6.2. Make use of the information sent by the OASIS Server

The Member's application should use the information received from the OASIS Server in order to know the status of an order it has sent, cancelled or changed, the trades made, the system, markets and securities status, and finally the incorrect messages it has sent and the reasons for which these were rejected by the OASIS Server.

6.2.1. *Confirmation messages*

Chapter 5 described (among others) the confirmation messages sent by the OASIS Server to the Member's application.

The Member's application must:

- Manage the confirmation or rejection for each message it has sent.
- Use the confirmation messages so that it knows the status of the orders/quotes sent to the OASIS Server. In this way, through the confirmation messages, it is capable to know the "evolution" of an order/quote (i.e., entered, partially executed, changed, cancelled), as well as its status at any given time (i.e., order elements, matched volume, remaining volume etc.). In this way, sending incorrect messages is avoided (i.e., attempting to cancel a fully executed order). Section 6.1.4 describes the messages sent to the Members communicating the accumulated credit value consumed but also the daily allowable credit limit value, enabling the Member to track and avoid orders that will cause the exceeding of this limit.
- Use the confirmation messages so that it knows the status of the trade reports sent to the OASIS Server. In this way, through the TradeCaptureReport (AE) / TradeCaptureReportAck (AR) messages, it is capable to know if the requested trade report is entered/approved/disapproved/requested for cancel/expired.

6.2.2. Associating trades to orders

In general, any trade (ExecutionReport) refers to the participating order through field OrderID. Due to their inherently composite nature, this does NOT apply to trades originating from quotes or standard combination orders.

To appropriately associate incoming trade messages (ExecutionReport) to orders using exchange identifiers, the client application should adhere to the following logic. On reception of an ExecutionReport denoting a trade, inspect fields OrderRelFlag and OrderRefID and act accordingly:

(ExecutionReport) OrderRelFlag	(ExecutionReport) Index field	Map to
Normal – 'N'	OrderID or ClOrdID	(ExecutionReport) OrderID or ClOrdID
Quote – 'Q'	OrderRefID	(QuoteStatusReport) QuoteID
		*refers to the quotation responsibility
Combination – 'C'	OrderRefID	(ExecutionReport) OrderID

	*refers to the combination's
	OrderID

Note that in trades (ExecutionReport), the field OrderRefID refers to the origination quote responsibility and combination order in respective cases.

6.2.3. Status messages

Paragraph 5.5 described the status messages sent by the OASIS Server to the Member's application.

The Member's application must:

- Use the Security Prices messages to know the change in the allowed price fluctuation percentage, if this has been made during the current session.
- Use the SecurityStatus and TradingSessionStatus to know the markets and securities status. Prior to sending an order/quote entry/change or a trade report, the market, board and security status should be verified. The following paragraphs will examine in detail the time when these messages are sent.
- Use the Credit Limit Information messages to know its daily trading session credit limit.
- Use the Hit & Take Order Information messages to know the available orders that can be hit with a NewOrderSingle message
- Use the Exchange Notes messages (News) to receive useful information from ATHEX.

6.2.3.1. Credit limit information and security information

At system startup, each client will receive information of the securities that are available for trading. More specifically, for each traded security, a SecurityStatus (see chapter 5.5.1) and a Security Prices (see chapter 5.5.2) message will be received.

Additionally, Credit Limit Info (News) messages informing of the available credit limit (see chapters 5.5.4 and 6.1.4) will be received. Credit Limit Info messages will also be received in case of a change in the available credit limit.

6.2.3.2. Market/Board status change (TradingSessionStatus messages)

To send a new order/quote, to edit an order/quote or to change an order/quote or to perform a trade report (pre agreed price trade), **the board in which the order/quote/trade report will be entered must have a status which allows it to accept it.** Specifically, its status (TradingSessionID tag) should not be: "R", "E", "H", "S" if it is a main board and it should be "O" (open) if it is not a main board. Otherwise, the message will be rejected.

Figure 6-1 presents the transition of the various types of board among the various statuses during a typical trading session, as well as the TradingSessionStatus messages sent to the Member' applications. These figures also show the SecurityStatus messages sent which concern the securities negotiated in the various boards. In the paragraph that follows, we will examine in more detail the SecurityStatus messages.

The Market timing (namely the time when the statuses of the various boards change) is given in Appendix B, OASIS Server parameters, Paragraph 9.3.

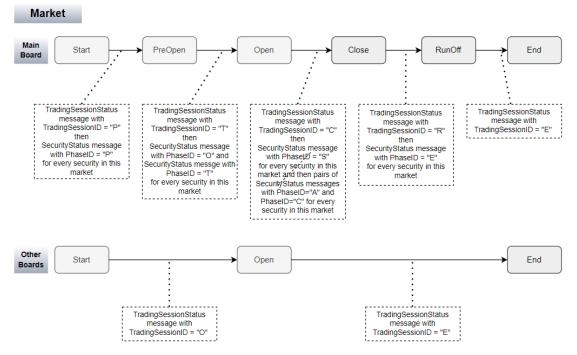


Figure 6-1 Boards Status Change

Figure 6-1 describes the Boards status change during a typical trading session. Should for any reason the operation of a Market temporarily be halted, a TradingSessionStatus message will be sent with TradingSessionID = "H". In this case, no order/quote/trade report can be entered/updated/cancelled for that specific market and the application must wait until the reception of a TradingSessionStatus message with a new Status.

6.2.3.3. Security status change

Each security monitors the status of the Main Board of the Market in which it belongs, and it is for that reason that each time that the status of a market's main board changes, this market's securities' Phase ID(5511) change as well.

Figure 6-1 shows the SecurityStatus messages sent during the board transitions

A security may be totally suspended or halted, should the ATHEX surveillance deem that such action is necessary. The difference between total suspension and halting lies in the fact that the duration of halting can not exceed one day, in contrast with the duration of the total suspension. SecurityStatus messages with SecurityStatus(5522) = "S" or "H" respectively are sent for the Members' applications to be informed.

Alternatively, the given security might be assigned a non active status during which no action whatsoever may be taken regarding this security. In this case, a SecurityStatus message with SecurityStatus(5522)= "N" is sent.

Upon withdrawal of a suspension or non active status, the security reverts to its previous phase before the suspension/deactivation. The withdrawal is either made automatically (resume) in the event of a temporary suspension, or manually (active) in the other two cases. It is possible for a security to transit from a suspension status to another suspension status or even to a non active status. Furthermore, a security may revert from the non active status to a suspension status.

Thus, no assumption may be made regarding the possible sequence / correlation of these statuses of a security and **the general tactics that always maintain the last status of each security should be followed** and upon that information the decision of whether an attempted action would or would not be accepted should be based.

6.2.4. *Rejections*

When an application message is being rejected by the OASIS Server, one of the following messages will be sent back to the client:

- ExecutionReport messages with ExecType(150) = 8 (Rejected)
- OrderCancelReject message
- TradeCaptureReportAck message with TrdRptStatus(939) = 1 (Rejected)

The purpose of the rejection message is to inform the Member application that the message received by the OASIS Server has not been accepted.

The programmer should always respect and **use the error code** which may be returned by any message sent to OASIS. It is always bad practice to ignore these codes because they either lead to the termination of the connection (if not handled correctly) or they lead to the unnecessary execution of larger parts of code, until the error is detected somewhere else. A possible side effect of the non timely diagnosis of such errors is also the increased number of rejections, because a program that ignores rejections will probably continue to send invalid messages.

<u>NOTE</u>

For more information on the business logic, please refer to <u>ATHEX Rulebook</u> and the relevant <u>ATHEX Resolutions</u>.

6.3. Business logic and verifications before sending messages

Chapter 5 presented a detailed description of the messages sent by the members' applications to ATHEX FIX Server. **It is required** that the Members' applications verify the messages they send, both in terms of **formatting** and **content**. The values of the fields should be within the range of the **possible field values**, as these were defined in Chapter 5.

In the following section, additional instructions are given concerning the completion of Application messages addressed to OASIS.

6.3.1. Usage of Parties component

The Parties component is included in various application messages and is composed of the following fields:

- NoPartyIDs (453): Number of party identifiers
- PartyID(448): Party identifier/code
- PartyIDSource (447): Class or source of the PartyID(448) value
- PartyRole (452): Role of the specified PartyID(448)
- PartyRoleQualifier (2376): Qualifier of the specified PartyRole (452)

For trade reports (TradeCaptureReport message) this section is repeated twice for each side.

PartyRole value	PartyID	PartyIDSource value	PartyRoleQualifier values
1	Executing Firm A 4-character alphanumeric field indicating the member sending/receiving the message to/from the target Venue. It is set forth by ATHEX.	D Proprietary/Cu stom Code	Not used for this PartyRole
3	Client ID (MIFID II: Client identification code) A 10-character numeric field indicating the short code used to identify the client of the member or participant of the trading venue. Valid values are 0 (NONE), 1 (AGGR), 2 (PNAL) and the range between 4 and 4294967295. <u>NOTE:</u> If value is 0 (NONE) or 1 (AGGR) or 2 (PNAL), no PartyRoleQualifier shall be applied.	P Short code identifier	23 – Firm or legal entity 24 – Natural person
4	Clearing Firm A 4-character alphanumeric field indicating the clearing sub- account ID.	D Proprietary/Cu stom Code	Not used for this PartyRole

The table below describes the usage of these fields:

	Valid values are set forth by ATHEX.		
12	Executing trader (MIFID II: Execution within firm) A 10-character numeric field indicating the short code used to identify the person or algorithm within the member or participant of the trading venue who is responsible for the execution of the transaction resulting from the order. Valid values are 3 (NORE) and the range between 4 and 4294967295. <u>NOTE:</u> If value is 3 (NORE), no PartyRoleQualifier shall be applied.	P Short code identifier	22 – Algorithm 24 – Natural person
26	Correspondent broker (MIFID II: Non-executing broker) A 10-character numeric field indicating the short code used to identify the person or participant of the trading venue who routed the order on behalf of and in the name of another member or participant of the trading venue. Valid values are 0 (NONE), 3 (CLIENT) and the range between 4 and 4294967295.	P Short code identifier	Not used for this PartyRole
36	Entering trader (Trader ID) A 5-character alphanumeric field that identifies a specific user. This field identifies the individual trader authorized to use the system, as registered with OASIS. It is set forth by ATHEX.	D Proprietary/Cu stom Code	Not used for this PartyRole
122	Investment Decision Maker (MIFID II: Investment decision within firm) A 10-character numeric field indicating the short code used to identify the person or the algorithm within the member or	P Short code identifier	22 – Algorithm 24 – Natural person

participant of the trading venue who is responsible for the	
investment decision. Valid values	
are 0 (NONE) and the range between 4 and 4294967295.	
<u>NOTE:</u> If value is 0 (NONE), no PartyRoleQualifier shall be	
applied.	

6.3.2. Usage of OrderAttributeGrp component

Component OrderAttributeGrp is composed of the fields:

- NoOrderAttributes (2593)
- OrderAttributeType (2594)
- OrderAttributeValue (2595)

6.3.3. Usage of TrdRegPublicationGrp component

The TrdRegPublicationGrp component is used to express trade publication reasons that are required by regulatory agencies. Reasons may include deferrals, exemptions, waivers, etc.

This component is included in the TradeCaptureReport(AE) message only for waiver indicators (MiFID-II requirement).

It is composed of the following fields:

- NoTrdRegPublications(2668): Number of regulatory publication rules in repeating group.
- TrdRegPublicationType(2669): Specifies the type of regulatory trade publication. DefaultValue – 0 (Pre-trade transparency waiver). Required if NoTrdRegPublications(2668) > 0.
- TrdRegPublicationReason(2670): Additional reason for trade publication type specified in TrdRegPublicationType(2669). Valid values are:

Value	Meaning
0	No preceding order in book as transaction price set within average spread of a liquid instrument (NLIQ)
1	No preceding order in book as transaction price depends on system- set reference price for an illiquid Instrument (OLIQ)
2	No preceding order in book as transaction price is subject to conditions other than current market price (PRIC)

3	No public price preceding order as public reference price was used for matching orders (RFPT)
7	Deferral due to "Illiquid instrument" (ILQD)
5	No public price deferral due to "Size specific" (SIZE)

6.3.4. *NewOrderSingle*

For correct usage of the Parties component see chapter 6.3.1.

Additional limitations / verifications that need to be performed for some fields of this message are given.

6.3.4.1. SecurityExchange

This should be a valid venue id as specified in the International Standard ISO 10383.

6.3.4.2. **SecurityID**

It is completed with the identification of the security for which the order is being entered. The class or source of the SecurityID is identified by the SecurityIDSource field (see below). The security needs to be active (SecurityStatus = "A" or "R"), and it should be in a trading phase which allows the entering of an order (PhaseID = "P", "O", "T", "C"). At any time, the Member's application should know the status of a security by using the information it receives through the SecurityStatus messages.

6.3.4.3. SecurityIDSource

It is completed with the class or source of the SecurityID. It may take the following values:

- "8": Exchange Symbol
- "A": Bloomberg Symbol.

6.3.4.4. **BoardID**

The code of the board in which the order will be entered. For possible values, please refer to ATHEX RDS files.

This board should have such a status to accept orders. Specifically, the TradingSessionID(336) field of TradingSessionStatus message should not be: "R", "E", "H", "S" if it is a main board and it should have equal to "O" if it is not a main board.

Appendix B, OASIS Server parameters presents the orders allowed in the form of a table depending on a board type.

6.3.4.5. **Price**

This property is completed with the order price. This price should be a valid price tick (see Paragraph 9.1.7) and it should be equal to or more than the price floor and less than or equal to the price ceiling.

In cases of negative price values (as used in combination orders) the sign (-) is incorporated in this field, reducing the numeric part to 4.4 format. The negative sign should occupy the first character of the integer part but should be omitted in positive values. E.g., a price of "-1.23" translates to "-00012300".

If the order is of the MKT, ATO or ATC type, this field should not be submitted.

6.3.4.6. **OrderQty**

If the BoardID property mentioned earlier is "M" and thus we enter an order in the main board, the OrderQty field must be a multiple of the security Lot Size (see Paragraph 6.1.2).

Otherwise, if the BoardID property mentioned is "O", the OrderQty field needs to be less than the security Lot Size and greater than 0.

A Mixed Lot Volume (a volume greater than the Lot Size but not an integral multiple) is not allowed.

6.3.4.7. MaxShow

This field denoted the disclosed volume of the order.

If we set a condition in the order, namely the SpecialConditions property is different than "N", or the order entered is MKT / ATO, or the order concerns odd-lot, MaxShow should be equal to the OrderQty field.

Otherwise, it should be a multiple of the Lot Size and less than or equal to the OrderQty field.

It should be noted that an order with a MaxShow less than the OrderQty field, as soon as it is executed for the number of items indicated in the MaxShow field, it changes to non-active.

6.3.4.8. **ConditionVolume**

This field is used when entering a hit and take order of type "Minimum Fill" or "Multiples of".

More specifically, when we set the SpecialConditions field to 'M' (Minimum Fill) or "O" (Multiples of), the ConditionVolume must be set too and will denote the conditional volume.

ConditionVolume shall be less than or equal to OrderQty.

6.3.4.9. OrdType and TimeInForce

Please refer to chapter 5.7 for valid combinations of these field values and their meaning.

6.3.4.10. SpecialConditions

This field is used when entering a hit and take order and may take the following values:

- "A": for All Or None (Apply only Special board)
- "M": for Minimum Fill (Apply only Special board)
- "O": for Multiple of (Apply only Special board)

6.3.4.11. StopSymbol

If the attribute SpecialConditions has a value of "S" or "D", then the StopSymbol attribute is filled using the identification of the Security or Index included in the condition. The Security must be active (Security Status other than "N").

In any other case StopSymbol = " (12 blanks)

6.3.4.12. **StopPx**

If the order to be entered is a Stop or Stop Limit order, then the StopPx field gets the value which if reached or exceeded by the Stop Symbol the order will be activated.

If the order is a sell order (Side = "2") then the StopPx should be less than the Security or Index Last Price used as StopSymbol.

If the order is a buy order (Side = "1") then the StopPrice should be greater than the Security or Index Last Price used as StopSymbol.

Given that the ATHEX FIX Server does not provide market data feed information, the Member's application should always use the price information coming from another source to verify the correctness of the StopPx field.

6.3.4.13. ClOrdID

This attribute should be completed using 16 characters and it is intended for internal use by the member.

6.3.4.14. **OrderNote**

This attribute should be completed using 25 characters and it is intended for internal use by the member.

6.3.4.15. **MBListID**

This attribute may be completed using 6 characters and it is intended for clearing procedure instructions.

6.3.4.16. PositionEffect

This attribute indicates whether the resulting position after a trade should be an opening or a closing position. This field must contain a valid value in all cases; however, it will be ignored for non-derivative products.

- "O": open
- "C": close (netting)

6.3.4.17. **SettlType**

This attribute indicates the order settlement period. It is especially used in the repos (lending) market to indicate the necessity of immediate settlement of the corresponding order in case of a failed trade

- "1": Immediate Settlement
- "0": Normal settlement period

6.3.4.18. **RefOrderID**

This tag is used to hit or take a specific order and specifies the OrderID of the order to be hit or taken.

Required if OrdType = "Q" (Hit & take order selection).

Information on the hit&take orders entered, updated, or cancelled can be found using the received Advertisement (7) messages (see chapter 5.5.6).

6.3.4.19. **RefOrderIDSource**

Required if RefOrderID is submitted.

6.3.5. OrderCancel/Replace Request

This message is used for amending an order or suspending/releasing it.

When the order is to be suspended or released from suspension, no other attribute of the order can be changed during the same transaction, with the exception of the MaxShow field in case of order release (ExecInst="q"). In all other cases (absence of ExecInst field), absence of any non-required field means that the corresponding order attribute is not to be changed.

Clearing Firm (see PartyRole 4) cannot be changed, and it shall be identical to the one submitted during order entry.

All MiFID-II related parties can be changed, through the Parties component (see chapter 6.3.1).

6.3.5.1. Initial Verifications

Before changing an order using the OrderCancel/Replace Request message, it should be verified whether the Order to be changed is still Open in the Market which means that:

- The order has not been completely matched (there exists an unexecuted part) (OrdStatus <> "2").
- It has not been previously cancelled (OrdStatus <> "4") or expired (OrdStatus <> "C").

For the Member's application to know the order status, it should use the confirmation (ExecutionReport) messages as described in paragraph 6.2.1.

Also, the system should not be Halted.

Furthermore, for each attribute of the OrderChange object the following should hold true:

6.3.5.2. SecurityExchange

This should be a valid venue id as specified in the International Standard ISO 10383.

The value of this field should be the same as that of the equivalent field of the order that we want to change

6.3.5.3. **BoardID**

The value of this field should be the same as that of the equivalent field of the order that we want to change.

This Board should have such a status to accept orders. Specifically, the TradingSessionID(336) field of TradingSessionStatus message should not be: "R", "E", "H", "S" if it is a main board and it should have equal to "O" if it is not a main board.

6.3.5.4. SecurityID

The value of this field should be the same as that of the equivalent field of the order that we want to change.

In addition, the specified security needs to be active (SecurityStatus = "A" or "R"), and it should be in a trading phase which allows the entering of an order (PhaseID = "P", "O", "T", "C"). At any time, the Member's application may know the status of a security by using the information it receives through the Security Status messages.

6.3.5.5. SecurityIDSource

The value of this field should be the same as that of the equivalent field of the order that we want to change.

6.3.5.6. **OrderID**

The OrderID should be the same as the OrderID(37) of the ExecutionReport(8) message that was sent as a confirmation by the OASIS Server upon the entry of the order.

6.3.5.7. OrigClOrdID

This field should be completed using 16 characters and should be blank or the same as the ClOrdID of the order, received in the previous confirmation message (ExecutionReport) for this order.

<u>Note:</u> OrigClOrdID is validated (if not blank) but the unique identifier of the order is OrderID.

6.3.5.8. **ClOrdID**

This field should be completed using 16 characters and it is intended for internal use by the Member.

The value of this field may differ from the equivalent value of the field of the initial order.

6.3.5.9. **ExecInst**

Used only for order suspension/release from suspension. If this tag is submitted, other fields cannot be changed in the same transaction, except for MaxShow when ExecInst=q (provision of MaxShow is required in this case).

6.3.5.10. **Price**

This field should be completed with the new price of the order. This price should be at a valid price tick (see Paragraph 6.1.1) and it should be greater or equal to the floor price and less or equal than the ceiling price.

In cases of negative price values (as used in combination orders) the sign (-) is incorporated in this field, reducing the numeric part to 4.4 format. The negative sign should occupy the first character of the integer part but should be omitted in positive values. E.g., a price of "-1.23" translates to "-00012300".

If the order is of the MKT, ATO or ATC type, this field should not be submitted.

6.3.5.11. **OrderQty**

If the initial order has been partially executed, the OrderQty attribute should be greater than the Matched Volume (the number of the items for which a trade has been made):

ChangedVolume > Matched Volume >= 0

The Member's application should receive the Matched Volume through the Trade Confirmation (ExecutionReport) messages (CumQty field).

In addition, as in the case of a new order entry, should the BoardID attribute have an "M" value and thus we enter an order in the main board, the OrderQty attribute should be a multiple of the Lot Size of the security (see Paragraph 6.1.2). Otherwise, if the BoardID attribute is "O", the OrderQty attribute needs to be less than the security Lot Size and greater than 0. A Mixed Lot Volume (namely a volume greater than the Lot Size but not an integral multiple) is not allowed.

6.3.5.12. MaxShow

The MaxShow should be a multiple of the Lot Size, greater than 0 and less or equal than the order's items for which no trade has been made:

0 < MaxShow <= Remaining Volume

where Remaining Volume = MaxShow – CumQty

In the case of an order where one of the following applies:

- SpecialConditions not equal to "N".
- The order is MKT / ATO.
- The order concerns odd-lot.

The MaxShow should be equal to the Remaining Volume:

MaxShow = Remaining Volume

where Remaining Volume = OrderQty – CumQty

6.3.5.13. AccountID

It is filled with the code of the client who gave the order. It might also differ from that of the initial order. All characters must be upper case.

6.3.5.14. Side

Valid Order's side transitions are the following:

2 (Sell) \rightarrow 5 (Short sell)

1 (Buy) \rightarrow R (Buy to cover)

6.3.5.15. OrdType and TimeInForce

The values of these fields may differ from the equivalent values of the initial order. Please refer to chapters 5.7 and 5.1.2 for valid combinations of these field values and their meaning.

Note that change between stop and non-stop types is not available. For example, assuming the original order was a Stop market order, using OrdType to "7" or "4" will change the order to Stop *limit* (the stop condition is retained).

6.3.5.16. **ExpireDate**

This field is completed with the date (YYYYMMDD) on which the order will expire. This date must be later than the current date.

If this date falls on a weekend or a non-working day, the OASIS Server will replace it with the exact previous working day.

6.3.5.17. **MBListID**

This field may be completed using 6 characters and it is intended for clearing procedure instructions.

6.3.5.18. **PositionEffect**

This attribute indicates whether the resulting position after a trade should be an opening or a closing position. This field must contain a valid value in all cases; however, it will be ignored for non-derivative products.

- "O": open
- "C": close (netting)

6.3.5.19. **SettlType**

This attribute indicates the order settlement period. It is especially used in the repos (lending) market to indicate the necessity of immediate settlement of the corresponding order in case of fail trade

- "1": Immediate Settlement
- "0": Normal settlement period

6.3.5.20. Remarks

The following order elements are not available for change by the OrderCancel/Replace Request message:

- 1. Side (with the exceptions described in 6.3.5.14)
- 2. ConditionVolume
- 3. SpecialConditions
- 4. StopSymbol
- 5. StopPx

Should there be a need for changes in the above fields, then the order should be cancelled, and a new order should be entered.

6.3.6. OrderCancelRequest (order cancellation)

6.3.6.1. Initial Verifications

Before the OrderCancelRequest message is sent, it should be verified whether the order to be cancelled has not one of the following statuses:

- It has already been cancelled (OrdStatus = "4").
- The order has been completely matched and no unexecuted part of it exists (OrdStatus = "2").

For the Member's application to know the order status, it should use the confirmation messages (ExecutionReport messages) described in Paragraph 6.2.1.

Order cancellation is not permitted while subject security is in PhaseID 'E' (end-of-trading) as well as phase 'S'* (Stop). *only applicable on main type market securities.

Furthermore, for each field of the OrderCancelRequest message the following should hold true:

6.3.6.2. **VenueID**

This should be a valid venue id as specified in the International Standard ISO 10383.

6.3.6.3. **BoardID**

The value of this field should be the same as that of the equivalent field of the order that we want to cancel/activate/deactivate.

6.3.6.4. SecurityExchange

The value of this field should be the same as that of the equivalent field of the order that we want to cancel/activate/deactivate.

6.3.6.5. SecurityID

The value of this field should be the same as that of the equivalent field of the order that we want to cancel/activate/deactivate.

6.3.6.6. SecurityIDSource

The value of this field should be the same as that of the equivalent field of the order that we want to cancel.

6.3.6.7. **OrderID**

This field should be the same as the OrderID of the ExecutionReport message that was sent as a confirmation by the OASIS Server upon the entry of the order.

6.3.6.8. OrigClOrdID

This field should be completed using 16 characters and should be blank or the same as the ClOrdID of the order, received in the previous confirmation message (ExecutionReport) for this order.

6.3.6.9. ClOrdID

This field should be completed using 16 characters and it is intended for internal use by the member.

6.3.6.10. **MBLListID**

This field should be completed using 6 characters and it is intended for clearing procedure instructions.

6.3.7. Trade Report Entry

6.3.7.1. Initial Verifications

The sending of the TradeCaptureReport(AE) message to the OASIS Server should be done only if the system has not Halted.

This message is used by a member firm to **enter a 1-firm Trade Report or a 2-firm Trade Report**. In the case of a 2-firm Trade Report, only the seller is allowed to send this message and identify the buyer side (PartyRole 1 and 36 in Parties component of the buy side).

Note that in TradeCaptureReport(AE) message there is a Parties component for each side (sell/short sell and buy/buy to cover). Each participant

This message is also used in order to:

- Approve or disapprove the trade report in case the member is the buyer side.
- Request for trade report cancellation if the member is the seller side.

If the trade entered/approved/disapproved/cancelled, report has been а TradeCaptureReportAck(AR) is returned by OASIS to the member taking the action and TradeCaptureReport(AE) to the counterparty member. Otherwise, a TradeCaptureReportAck (AR) is sent to the member firm with a reason code explaining why the request was not accepted.

The reception of a TradeCaptureReport(AE) with TradeReportStatus field equal to "1" (alleged) from a member's application denotes the entry of a trade report from another (or the same) member.

Once the trade report is registered with OASIS:

• 1-firm Trade Report is completed.

• 2-firm Trade Report is pending approval from buyer side member. The buyer can complete the trade, through a TradeCaptureReport(AE) action discussed below.

A unique trade number is generated by OASIS.

In trade reporting, field TradeReportID can be both

- The (TradeCaptureReportAck) echo of the client-side originated identifier (TradeCaptureReport) TradeReportID (i.e., in responses to the client).
- The trading system identifier of a TradeCaptureReport in messages originating from the trading system.

Field TradeReportRefID(572) (TradeCaptureReport and TradeCaptureReportAck) is at all times used to refer to the previous TradeReportID(571) in a sequence of trade reporting messages.

For more information on messages exchanged in all cases of trade reporting, please refer to chapter 11.

Next, the limitations / verifications that need to be performed for some fields of the TradeCaptureReport(AE) message are given.

6.3.7.2. **TradeReportID**

This property is completed using 16 characters and it is intended for internal use by the member.

6.3.7.3. **TrdMatchID**

The TrdMatchID of the TradeCaptureReport message should be the same as the TrdMatchID of the message (TradeCaptureReportAck) that was sent as a confirmation by the OASIS Server upon the entry of a new trade report using the initial TradeCaptureReportmessage by the seller.

This field identifies the trade number of the trade report to be approved/disapproved/cancelled. If TradeReportType == "0" (Submit) then it must be omitted.

6.3.7.4. TradeReportRefID

This property is completed using 16 characters and it is intended for internal use by the member. This field is at all times used to refer to the previous TradeReportID(571) in a sequence of trade reporting messages.

6.3.7.5. TradeReportTransType, TradeReportType

For valid use of these fields, please refer to chapter 11.

6.3.7.6. SecurityExchange

This should be a valid venue id as specified in the International Standard ISO 10383.

6.3.7.7. **BoardID**

The code of the board in which the trade report will be entered. For trade reports only the value "B" (report only board) is allowed.

This board should have a status = Open (TradSesStatus ="2", TadingSessionID = "O").

Chapter 9.4 presents the orders allowed in the form of a table depending on a board type.

6.3.7.8. **SecurityID**

It is completed with the identification of the security for which the trade report is being entered. The class or source of the SecurityID is identified by the SecurityIDSource field (see below). The security needs to be active (Security Status = "A" or "R") and it should be in a trading phase which allows the entering of a trade report (PhaseID = "P", "O", "T", "C"). At any time, the Member's application should know the status of a security by using the information it receives through the Security Status messages.

6.3.7.9. SecurityIDSource

It is completed with the class or source of the SecurityID. It may take the following values:

- "8": Exchange Symbol
- "A": Bloomberg Symbol

6.3.7.10. LastPx

This property is completed with the order preagreed price. This price should be a valid price tick (see Paragraph 6.1.1).

6.3.7.11. LastQty

This property is completed with the preagreed price trade volume.

6.3.7.12. Account

Each side completes its own code.

6.3.7.13. **TradeType**

This field indicates the trade report method. For valid values see section 5.6.

6.3.7.14. NoTrdRegPublications, TrdRegPublicationType, TrdRegPublicationReason

Please refer to chapter 6.3.3.

6.3.8. Quote Entry/Change

6.3.8.1. Initial Verifications

The sending of the Quote(S) message to the OASIS Server should be done only if the system has not Halted.

This message is used in order to:

- enter a new quote on a specific security.
- change an existing quote on a specific security.

Once a quote on a specific security is entered, it is assigned a quote identification (QuoteID field) which is communicated to the member (market maker) through the QuoteStatusReport(AI) message returned as confirmation to the initial Quote(S) message.

If the member wishes to change or cancel (see paragraph 6.3.9) an existing quote, then he should refer to this quote using this identification.

Next, the limitations / verifications that need to be performed for some fields of the Quote message are given.

6.3.8.2. Side

This field indicates which sides of the quote are filled and, if given, may take one of the following values:

- "1": buy side only
- "2": sell side only

If it is omitted, both sides are given.

6.3.8.3. Account

It shall be completed with the code of the client.

6.3.8.4. SecurityExchange

This should be a valid venue id as specified in the International Standard ISO 10383.

6.3.8.5. SecurityID

It is completed with the identification of the security for which the quote is being entered. The class or source of the SecurityID is identified by the SecurityIDSource field (see below). The security needs to be active (SecurityStatus = "A" or "R") and it should be in a trading phase which allows the entering/update of a quote (PhaseID = "P", "O", "T", "C"). At any time, the Member's application should know the status of a security by using the information it receives through the SecurityStatus messages.

6.3.8.6. SecurityIDSource

It is completed with the class or source of the SecurityID. It may take the following values:

- "8": Exchange Symbol
- "A": Bloomberg Symbol.

6.3.8.7. **BidPx**

This field is completed with the price of the buy side of the quote. This price should be a valid price tick (see Paragraph 9.1.7) and it should be equal to or more than the price floor and less than or equal to the price ceiling.

6.3.8.8. **BidSize**

This field is completed with the disclosed volume of the buy side of the quote. If the BoardID property mentioned earlier is "M" and thus we enter a quote in the main board, this field must be a multiple of the security Lot Size (see Paragraph 9.1.3).

Otherwise, if the BoardID property mentioned is "O", the field needs to be less than the security Lot Size and greater than 0.

A Mixed Lot Volume (a volume greater than the Lot Size but not an integral multiple) is not allowed.

6.3.8.9. **OfferPx**

This field is completed with the price of the sell side of the quote. This price should be a valid price tick (see Paragraph 9.1.7) and it should be equal to or more than the price floor and less than or equal to the price ceiling.

6.3.8.10. **OfferSize**

This field is completed with the disclosed volume of the sell side of the quote. If the BoardID property mentioned earlier is "M" and thus we enter a quote in the main board, this field must be a multiple of the security Lot Size (see Paragraph 9.1.3).

Otherwise, if the BoardID field mentioned is "O", this field needs to be less than the security Lot Size and greater than 0.

A Mixed Lot Volume (a volume greater than the Lot Size but not an integral multiple) is not allowed.

6.3.8.11. QuoteID

This field should be a valid quote identification (in case of quote change). For new quotes, this tag must be omitted.

A valid quote identification shall be returned in a previous QuoteStatusReport message when a quote for the specific security has been initially entered.

6.3.8.12. QuoteMsgID

This attribute should be completed using 16 characters and it is intended for internal use by the member.

6.3.9. Quote Cancel

6.3.9.1. Initial Verifications

The sending of the QuoteCancel(Z) message to the OASIS Server should be done only if the system has not Halted.

This message is used to cancel an existing quote.

Once a quote on a specific security is entered, it is assigned a quote identification (QuoteID field) which is communicated to the member (market maker) through the QuoteStatusReport(AI) returned as confirmation to the initial Quote(S) message.

If the member wishes to cancel an existing quote, then he should refer to this quote using this identification.

Next, the limitations / verifications that need to be performed for some fields of the QuoteCancel object are given.

6.3.9.2. SecurityExchange

This should be a valid venue id as specified in the International Standard ISO 10383. The value of this attribute should be the same as that of the equivalent attribute of the quote that we want to cancel.

6.3.9.3. SecurityID

The value of this attribute should be the same as that of the equivalent attribute of the quote that we want to cancel.

6.3.9.4. SecurityIDSource

The value of this attribute should be the same as that of the equivalent attribute of the quote that we want to cancel.

6.3.9.5. **QuoteID**

This attribute should be the identification of the quote that we want to cancel.

6.3.9.6. **QuoteMsgID**

This attribute should be completed using 16 characters and it is intended for internal use by the member.

6.3.10. Mass Order/Quote Cancel

Mass order/quote cancellation can be achieved by sending an (OrderMassCancelRequest/QuoteCancel) message to the server. The client has an option between several modes/filters to use for the cancellation:

- All orders/quotes of a particular venue
- Orders on an instrument, or Orders/Quotes on an underlying instrument (i.e., orders/quotes on futures/options on the specified underlying)
- Orders/Quotes on behalf of a particular customer and a particular venue.
 - By Account Id
 - By Client Id (Mifid II)
- Algorithmic orders/quotes of a particular venue
 - By Investment Decision Id (Mifid II)
 - By Execution Within Firm Id (Mifid II)

Field MassCancelRequestType/ QuoteCancelType signifies which of the above modes is chosen. Accordingly, the below indicated relevant fields should be completed (fields regarding other modes should be omitted). All modes apply on individual Venues (SecurityExchange) only, therefore supplying field SecurityExchange is mandatory in all cases:

MassCancelRequestType/ QuoteCancelType	Fields to be completed
1 – all orders/quotes by instrument	SecurityExchange
	SecurityID
	SecurityIDSource
2/3 – all orders/quotes by underlying	SecurityExchange
	SecurityID
	SecurityIDSource
7/4 – all orders/quotes of a particular venue	SecurityExchange
W – all orders/quotes by Account for a	SecurityExchange
particular venue	Account
X – all orders/quotes by Client Id for a	SecurityExchange
particular venue	ClientID
	ClientIDQualifier

Y – all orders/quotes on ExecutionWithinFirmID for a particular venue	ExecutionWithinFirmID ExecutionWithinFirmIDQualifier Note: Only algorithmic (ExecutionWithinFirmIDQualifier) IDs are
Z – all orders/quotes on InvestmentDecisionID for a particular venue	applicable for mass cancellationSecurityExchangeInvestmentDecisionIDInvestmentDecisionIDQualifierNote:Onlyalgorithmic(InvestmentDecisionIDQualifier)IDsareapplicable for mass cancellation.

Successful Mass Cancellations will always be responded to by an OrderMassCancelReport/MassQuoteAcknowledgment message followed by several ExecutionReport/QuoteStatusReport messages, one for each order/quote cancelled. Note that at the point of the ExecutionReport/QuoteStatusReport transmission, no order/quote has been affected yet.

Unsuccessful Mass Cancellations will be responded to with an OrderMassCancelReport/MassQuoteAcknowledgment message.

Mass Cancellation does not affect inactive orders.

6.3.10.1. ClOrdID

This field should be completed using 16 characters and it is intended for internal use by the member. In this case it should be used to identify the mass cancellation transaction rather than a specific order.

Guidelines on other fields of these messages can be found in the sections above.

7. Technical information and guidelines

7.1. FIX Client Application Development

In non-common instances of reduced system performance due to stress or technical issues, it may be the case that the ATHEX FIX Server will not be able to transmit messages to the exchange. Under such circumstances messages sent by the client are subject to buffering *on TCP level* (TCP buffer). Therefore, it is possible that a client application may receive TCP level rejections (e.g. error code returns to a Send() call of the client; see WSAEWOULDBLOCK error 10035).

The FIX client should be capable of appropriately handling TCP errors and retransmit orders or adjust transmission rates accordingly.

It is also very important to note that ATHEX FIX Server will not initiate the sending of any pending messages (usually SecurityStatus and SecurityPrices messages) after Logon procedures unless it receives a Resend Request message.

7.2. Guidelines summary

In short, applications should consider and appropriately handle:

- 1. The **market configuration** (at all relevant levels: system, market, securities, members, users etc.)
- 2. The **status** of the system, markets, boards, and securities at any time.
- 3. The **possible values** that the parameters could take at any time.
- 4. The system's **confirmation messages**.
- 5. The **rejects** sent by the OASIS server.
- 6. The **syntactic correctness and the possible values** of the fields of the messages sent to the system.
- 7. TCP level return codes.

Practically, all the above aim at minimising to the greatest possible extent the rejections sent by the central system and the load that these might constitute for the common network and computer infrastructure of the ATHEX.

For the efficient use of the ATHEX FIX Server for connection of ATHEX member's applications to the OASIS, it must be noted that:

- 1. OrderID field is the only reference key for a specific order.
- 2. FIX sessions can be of the following two categories:

• Trading session

Supports order/quote/trade report management. Each session of this type will receive information for all its own orders/quotes/trade reports

• Drop-copy session

It allows a Member to receive all application messages directed to all its sessions. A Member is not allowed to send any application message through the drop-copy session.

8. Appendix A. Field Description

In this appendix there is a detailed description of the fields that exist in the application messages (see chapter 5).

Field	Tag	Descript	ion
Account	1	A 12-character alpha field describing the user account of the order.	
AccruedInterestAmt	159	Indicates	the accrued interest of a bond.
AdvId	2	Unique id	dentifier of Advertisement message.
AdvSide	4	Side of a	hit&take order.
AdvTransType	5	Advertise value = N	ement message transaction type. Default I (New)
AlarmReason	5562	Alarm).	y in case of Headline(148) = "A" (Quote values are:
		Value	Meaning
		1	Prices are missing
		2	BID price is missing
		3	ASK price is missing
		4	The price spread is too big
		5	Quantities are too small
		6	BID quantity is too small
		7 ASK quantity is too small	
		8 BID order price missing	
		9 ASK order price missing	
		Α	BID order price is outside quote prices
		В	ASK order price is outside quote prices
		С	Order prices are outside quote prices
		D	BID order quantity is too small
		Е	ASK order quantity is too small
		F	Order quantities are too small
			is field is given, the meaning text field is ayed in the Text(58) field.

ATHEXMsgType	5574	ATHEXN	AsgType. Possible values are:
		Value	Meaning
		TJ	Quote Request accepted/rejected by OASIS Trading Platform
		ТР	Quote Request accepted/rejected by Surveillance System
		TK	Quote Request directed to Market Maker
		CA	Security status message
		CD	Security prices message
ATHEXSessionID	5604	Unique ic	lentification of the originating session.
ATHEXTradeType	5529	of trade r	acter alphanumeric field to identify the type
		Value	Meaning
		MB	Main Board Tra
		MO	Main Board Opening Trade
		MC	Main Board Closing Trade
		MM	Main Board, Combination to Combination Trade
		ST	Special Board Trade
		OL	Odd-lot Board Trade
		FS	Forced sale Board Trade
			values for TradeCaptureReport and otureReportAck messages are:
		Value	Meaning
		RA	Trade report Method 6-1
		RD	Trade report Spot-1
		RU	Trade report Spot-2
		RR	Trade report Settlement - Incomplete Buy
		RS	Trade report Settlement - Incomplete Sell
		RB	Trade report Method 6-1 Same Day Settlement

		RM	Trade report only Method 6-1 Special Fees
		RN	Trade report Method 6-1 Special Fees & Same Day Settlement
		RL	Trade Report Lending – Borrowing
		RC	Trade report Method 6-1, No CCP (deprecated)
		RG	Trade report Method 6-1, No CCP & Same Day Settlement (deprecated)
		RT	Trade Report Lending – Borrowing, Market Making
		RF	Trade Report Lending – Borrowing, Failed Trade
		RE	Trade Report Method 7-1 - Derivatives market
		RQ	Trade Report - Other (can only be entered by ATHEX internal users)
AvgPx	6	Calculated average price of all fills on this order. Format is 5.4. Possible values: 0 <= n <= 99,999.9999	
BidCommodityHedgingFlag	5580	Indicates whether the bid side of a quote reduces risk. Valid values are:	
		Value	Meaning
		N	It doesn't reduce risk
		Y	It reduces risk
		Absence of this field is interpreted as 'N' (no risk reduction).	
BidPx	132	Bid price. Required if BidSize (134) is specified. Format is 5.4.	
		Possible values: 0 <= n <= 99,999.9999	
BidSize	134	Current best bid size.	
BoardID	5506	A single character field that identifies the trading board. Valid values are:	
		Value Meaning	
		М	Main board

		C	Special conditions board	
		S	Special conditions board	
		В	Report Only board	
		F	Forced sales board	
			of this field is interpreted as the default (the main board).	
CancelReasonCode	5508		cter field used to indicate the reason for te cancellation.	
		Possible values are:		
		Value	Meaning	
		С	cancelled by CTCI / ATHEX FIX Server request	
		М	cancelled by ORAMA request	
		R	cancelled by MRW request	
		Ι	cancellation of IOC order	
		F	cancellation of FOK order	
		Р	cancellation of MKT order	
		0	cancellation of ATO order	
		L	cancellation of Life order	
		S	cancellation of Covered Sale Order by CSD	
		Х	mass cancellation by CTCI / ATHEX FIX Server	
		Y	mass cancellation by ORAMA	
		Z	mass cancellation by MRW	
ClearingSpace	5558	Clearing space identifier.		
ClOrdID	11	Client specified identifier of the order. Max size is 16-char.		
ConditionVolume	5583	Indicates the conditional volume of the hit&take order.		
		Required if SpecialConditions (5582) is submitted and its value is either 'M' (Minimum Fill) or 'O' (Multiples of).		
CreditLimit	5550	Credit lim	it assigned to the clearing firm.	
CumQty	14	Total qua	ntity filled.	
		Possible values: 1 <= n <= 999,999,999,999		

Currency	15	Not used.		
CurrentCreditValue	5545	Current credit value of the clearing firm.		
CxlRejResponseTo	434	Identifies the type of request that a Cancel Reject is in response to. Possible values are:		
		Value	Meaning	
		1	Order Cancel Request	
		2	Order Cancel/Replace Request	
CxlRejReason	102	Code to i	dentify the reason for cancel rejection.	
ExchangeID	5603		the Exchange ID value whenever $e(5577) = 0.$	
ExecID	17	 Server specified unique identifier of the message. If ExecType (150) is Trade, Trade Cancel or Trade Correct, this field is 8 characters long and contains the following: The first 6 characters contain the trade number as it is uniquely assigned to each trade by OASIS server. The 7th character is equal to ExecType(150) field The 8th character is 'S' in case of sell side fill and 'B' in case of buy side fill Used only for order suspension/release from 		
		 suspension. If the tag ExecInst is used, other fields of an order cannot be changed in the same transaction, with the exception of MaxShow when ExecInst=q (provision of MaxShow is required in this case). Valid values are shown below: 		
		Value	Meaning	
		S	Suspend	
		q	Release from suspension (user defined value)	
ExecRefId	19	Reference to the execution being cancelled/changed. Required if ExecType (150) is Trade Cancel or Trade Correct. In case of trade report related execution reports, ExecRefID refers to the last TradeReportID of the		

ExecRestatementReason	378	The reason for restatement when an ExecutionReport is sent with ExecType(150) = D (Restated) or used when communicating an unsolicited order change/cancellation (see chapter 5.8). Valid values are:		
		Value	Meaning	
		1	GT renewal/restatement	
		2	Verbal change	
		4	Broker Option	
ЕхесТуре	150		s the purpose of the nReport/TradeCaptureReportAck. Valid e:	
		Value	Meaning	
		0	New	
		4	Cancelled	
		5	Replace	
		8	Rejected	
		9	Suspended	
		С	Expired	
		D	Restated (unsolicited order cancellations/changes)	
		F	Trade	
		G	Trade Correct	
		Н	Trade Cancel	
ExpireDate	432	Date the order expires (format YYYYMMDD). Required if TimeInForce (59) is GTD (6).		
GOIFlag	5512	Group of investor flag (Not used).		
GrossTradeAmt	381	Notional amount.		
ATHEXHaltReason	5531	A 2-character alphanumeric field indicating the cause of the halt or suspension.Possible values are:		
		Value	Meaning	
		00	not applicable	
		01	Halt	

		02	Coiling
		02	Ceiling
		03	Floor
		04	War
		05	Politics
		06	Technical
		07	Terrorism
		08	Various
		09	Religion
		10	Celebration
		11	Earthquake
		12	Volatility Interruption
		13	Series Expiration
Headline	148	Reason for notification. Possible values are:	
		Value	Meaning
		М	Message Note
		С	Credit Limit Information
		S	Suspend quotation responsibility
		R	Resume quotation responsibility
		W	Quote Warning
		А	Quote Alarm
HighPx	332	Indicates	the maximum possible price of the
		Format is	
			values: 0 <= n <= 99,999.9999
LastLiquidityInd	851	Indicator to identify whether this fill was a result of liquidity provider providing or liquidity taker taking	
		the liquid	
		Applicable only on OrdStatus of Partial or Filled an if BoardID(5506) = 'M' (Main board).	
		Value	Meaning
		1	Added Liquidity
		2	Removed Liquidity
		4	Auction (user defined value)

LastPx	31	 Price of this (last) fill. Required if ExecType = Trade or Trade Correct. Format is 5.4. Possible values: 0 <= n <= 99,999.9999 	
LastQty	32	Quantity bought/sold on this (last) fill. Required if ExecType = Trade or Trade Correct. Possible values: 1 <= n <= 999,999,999,999	
LeavesQty	151	Quantity open for further execution. Possible values: 1 <= n <= 999,999,999,999	
LowPx	333	Indicates the minimum possible price of the instrument. Format is 5.4. Possible values: 0 <= n <= 99,999.9999	
MarketID	5502	A single character field identifying market. For possible values, please refer to ATHEX RDS files: <u>https://www.athexgroup.gr/en/rds</u>	
MassCancelRequestType	530	Type of cancellation requested. Valid values are:	
		Value	Meaning
		1	Cancel orders for a security
		2	Cancel orders by the underlying security
		7	Cancel all orders for a particular venue
		W	Cancel all orders by Account and a particular venue
		X	Cancel all orders by Party Role 3 (Client Id) and a particular venue
		Y	Cancel all orders by PartyRole 12 (Executing trader) and a particular venue
		Z	Cancel all orders by PartyRole 122 (Investment decision within firm) and a particular venue

MassCancelResponse 531		Specifies the action taken as a result of the OrderMassCancelRequest.		
		Possible values are:		
		Value	Meaning	
		0	Request Rejected	
		1	Cancelling orders for a security	
		2	Cancelling orders by the underlying	
		7	Cancelling all orders	
		W	Cancelling all orders by Account	
		X	Cancelling all orders by Party Role 3 (Client Id)	
		Y	Cancelling all orders by Party Role 12 (Executing trader)	
		Z	Cancelling all orders by Party Role 122 (Investment decision within firm)	
MatchStatus	573	The status of this trade. It is populated in all messages from the system. Possible values are:		
		Value	Meaning	
		0	Matched	
		1	Unmatched	
MaxShow	210	A 12-character numeric field denoting the disclosed volume of the order. If not sent, it is assumed equal to OrderQty(38). If equal to 0, then it denotes an inactive order.		
MBListID	5561	A 6-character alphanumeric field used for clearing purposes.		
MktBidPx	645	Current best bid price.		
		Format is	5.4.	
		Special cases: ATO: -1002.0000		
		ATC: -1003.0000		
MktOfferPx	646	Current best offer price.		
		Format is 5.4.		
		Special c		
		ATO: -1002.0000 ATC: -1003.0000		
		A1C1003.0000		

NoLinesOfText	33	Number of lines of text (always 1)		
NoOrderAttributes	2593	Number of order attributes.		
NoPartyIDs	453	Number of party identifiers.		
NoQuoteEntries	295	The number of quote entries for a QuoteSet. The value of this field should always be "1".		
NoRelatedSym	146	Specifies the number of repeating symbols specified. The value in this field will always be "1".		
NoSecurityAltID	454	Number of	of SecurityAltID entries. Default value: 1	
NoSides	552	The number of sides in the Trade Capture Report. In case of trade report entry (487=0), this should be equal to '2'. In all other cases, '1' is also possible.		
NoteType 557		news mes	A single character field to identify the nature of the news message: Possible values are:	
		Value	Meaning	
		0	Free text message from the exchange	
		1	Warning. This informs the member firm that its rejections produced by the OASIS Server with have reached half of the limit. Action should be taken to eliminate the cause of excessive rejections from the member.	
		2	Throttling parameters change. This informs the member firm that a change in their throttling parameters (TransPerSecond & OutstandingMsgs) has been made.	
NoTrdRegPublications	2668	Number of trade publication reasons.		
OfferCommodityHedgingFla g	5581		whether the offer side of a quote reduces d values are:	
		Value	Meaning	
		Ν	It doesn't reduce risk	
		Y	It reduces risk	
		Absence of reduction	of this field is interpreted as 'N' (no risk).	
OfferPX	133	Offer price. Required if OfferSize (135) is specified. Format is 5.4.		

		Possible	values: 0 <= n <= 99,999.9999	
OfferSize	135	Offer quantity. Required if OfferPx (133) is specified.		
		Possible	values: 1 <= n <= 999,999,999,999	
OrderAttributeType	2594	Indicates	order attribute type. Valid values are:	
		Value	Meaning	
		2	Liquidity provision activity order	
		3	Risk Reduction	
		4	Algorithmic order	
		Required 0.	if NoOrderAttributes(2593) is greater than	
OrderAttributeValue	2595	Indicates	order attribute value. Valid values are:	
		Value	Meaning	
		Y	True	
		N	False (Default value)	
		Required 0.	if NoOrderAttributes(2593) is greater than	
OrderCapacity	528	Indicates order capacity. Valid values are:		
		Value	Meaning	
		А	Agency (AOTC)	
		Р	Principal (DEAL)	
		R	Riskless principal (MTCH)	
		Absence	of this field is interpreted as agency.	
OrderOrigination	1724	Indicates order origination. Valid values are:		
		Value	Meaning	
		0	Order is not submitted using Direct Electronic Access (DEA)	
		5	Order is submitted using Direct Electronic Access (DEA)	
			of this field is interpreted as "order is not l using Direct Electronic Access (DEA)".	
OrderRefID	5510	 This field will be present only in case of Quote/Combo related reports and it should be used identify the original quote/combo order as followin If OrderRelFlag(5509) = '2' (QUOTE), this field will contain tha QuoteID(117) of 		

		 entered/updated quote (see QuoteStatusReport message). If OrderRelFlag(5509) = '3' (Combo), this field will contain tha OrderID(37) of entered/updated combo order (see ExecutionReport message). 		
OrderRelFlag	5509		dicating the order relation (see chapter ssible values are:	
		Value	Meaning	
		1	Normal	
		2	Quote	
		3	Combo	
OrderQty	38	quantity of	racter numeric field used to specify the of the order. values: $1 \le n \le 999,999,999,999$	
OrdStatus	39	Identifies the current status of the order. Valid valu are:		
		Value	Meaning	
		0	New	
		9	Suspended	
		1	Partially filled	
		2	Filled	
		4	Cancelled	
		8	Rejected	
		С	Expired	
		Ν	Not released (user defined value)	
		Ι	Inactive (user defined value)	
OrdType	40	Type of the	he order. Valid values are:	
		Value	Meaning	
		1	Market	
		7	Limit or Better	
		3	Stop	
		4	Stop Limit	
		А	On Close	
		Q	Hit & take order selection	

OrigClOrdID	41	Client specified original identifier of the order. Max size is 16-char. Note: OrigClOrdID is validated but the unique identifier of the order is OrderID.	
OrigSource	5501	A 1 character alphanumeric type indicating the source of the Order. Valid values are:	
		Value	Meaning
		С	CTCI –API / ATHEX FIX Server
		М	ORAMAORAMA
		R	MRW (ATHEX supervision application)
		[space]	OASIS
OrigTime	42	Time of message origination.	
		Format is	"YYYYMMDDhhmmssdddddd".
OutstandingMsgs	5602	Max number of unconfirmed transactions permitted per firm.	
PartyID	448	Party identifier/code.	
		For more information on valid values, please refer chapter 6.3.1.	
PartyIDSource	447	Class or s	ource of the PartyID(448) value.
		For more information on valid values, please refer to chapter 6.3.1.	
		Valid valu	les are:
		Value Meaning	
		D	D (Proprietary/Custom Code)
			Used for the PartyRole values 1, 4, and 36
		Р	Short code identifier
			Used for the PartyRole values 3, 12, 26 and 122

PartyRole	452	Role of th	ne specified PartyID(448).		
		For more information on valid values, please refer to			
		chapter 6.3.1.			
		Valid val	ues are:		
		Value	Meaning		
		1	Executing Firm		
		3	Client ID		
			(MIFID II: Client identification code)		
		4	Clearing Firm		
		12	Executing trader		
			(MIFID II: Execution within firm)		
		26	Correspondent broker (MIFID II: Non- executing broker)		
		36	Entering trader (Trader ID)		
		122	Investment Decision Maker		
			(MIFID II: Investment decision within firm)		
PartyRoleQualifier	2376	Qualifier	of the specified PartyRole (452).		
		Valid val			
		Value	Meaning		
		22	Algorithm		
			Used for the PartyRole values 12 and 122		
		23	Firm or legal entity		
			Used for the PartyRole value 3		
		24	Natural person		
			Used for the PartyRole values 3, 12 and 122		
		For more chapter 6	information on valid values, please refer to .3.1.		

PhaseID	5511	Trading phase.	
		Possible v	
		Value	Meaning
		[space]	Start of day (Before the Pre-opening)
		"Р"	Pre-opening Trading Phase
		"O"	Opening Trading Phase
		"T"	Continuous Trading Phase
		"A"	At the Closing Price trading Phase
		"С"	Closing Price Continuous Trading Phase
		"Е"	End Of Trading Phase
		"S"	Stop phase (Use in auction market)
PositionEffect	77	For use in	derivatives omnibus accounting.
			whether the resulting position after a trade an opening or a closing position. Valid ::
		Value	Meaning
		0	Open
		С	Close
		Absence of position.	of this field is interpreted as an opening
PreviouslyReported	570		if the trade capture report was previously o the counterparty. Valid values are:
		Value	Meaning
		N	Not reported to the counterparty
		Y	Previously reported to the counterparty ("DUPL")
Price	44		c field that indicates the price of an order or mat is 5.4.
		Possible v	values: 0 <= n <= 99,999.9999
		(combinat this field, The negat the intege values. E.	where negative pricing is applicable tion trading) the sign (-) is incorporated in reducing the numeric part to 4.4 format. ive sign should occupy the first character of r part, but should be omitted in positive g., a price of "-1.23" translates to "- " while possible values are:

		-1,000.0000<= n <= 99,999.9999, excluding zero (reserved).		
Quantity	53	Total quantity of a hit&take order. Possible values: 1 <= n <= 999,999,999,999		
QuotationResponsibility Level	5563	Identifies the quotation responsibility level. Pos values are:		
		Value	Meaning	
		М	Market	
		Ι	Instrument	
		F	Firm	
		U	Underlying	
QuoteCancelType	298	Type of c	uote cancel request. Valid values are:	
		Value	Meaning	
		1	Cancel for Instrument	
		3	Cancel for Underlying	
		4	Cancel all Quotes of a particular venue	
		W	Cancel quotes by Account and a particular venue	
		X	Cancel quotes Party Role 3 (Client Id) and a particular venue	
		Y	Cancel quotes by PartyRole 12 (Executing trader) and a particular venue	
		Z	Cancel quotes by PartyRole 122 (Investment decision within firm) and a particular venue	
QuoteID	117		racters numeric field identifying the quote ut the current trading day.	
		For new quotes this tag must be omitted whereas valid QuoteID returned by the first quote entry mu be used for changing existing quotes		
QuoteMsgID	1166	Client specified identifier of the quote (see chapter 6.2.2).		
QuoteReqID	131	Client spe	ecified identifier of the quote request.	
QuoteRequestRejectReason	658	Reason Quote Request was rejected. Default value = 99 (Other)		

QuoteStatus	297	Identifies	the status of the quote. Possible values are:
		Value	Meaning
		0	Accepted
		5	Rejected
		6	Removed from Market
		17	Cancelled (user defined value)
ReasonOfSuspension	5564	suspensio	the reason for quote responsibility on. Sent only if Headline(148)='S' (Suspend responsibility). Possible values are:
		Value	Meaning
		1	Manual suspension
		2	Suspension because of auction
		3	Suspension because of limit up
		4	Suspension because of limit down
		5	Minimum daily order volume has been covered
RefOrderID	1080	This tag i being hit	s used to specify the OrderID of the order or taken.
		Required selection)	if OrdType = "Q" (Hit & take order).
RefOrderIDSource	1081	Used to specify what identifier to use when hitti (taking) a specific order.	
		Required is 1 (Orde	if RefOrderID is submitted. Default value er ID)
RejectReasonCode	5532	A 3-character numeric field used to indicate member firm the reason that a requested acti not take place. Possible values are:	
		Value	Meaning
		001	Incorrect Message Type
		002	Incorrect Member ID
		003	Member not active
		004	Member suspended
		005	Incorrect Trader ID
		006	Trader not active

007	Trader suspended
008	Trader does not belong to this member
009	Trader unauthorized for this action
010	Incorrect Market ID
011	Market not active
012	Incorrect Board ID
013	Incorrect Security
014	Security not active
015	Security suspended
016	Security halted
017	Security paused
018	Security in Blackout period
019	Security does not participate in this phase
020	The trade in the security has not started yet
021	The trade in the security ended
022	Can not do this action
023	Incorrect Price Type
024	Price Type does not consists with the phase
025	Price below Floor
026	Price above Ceiling
027	Incorrect Tick size (spread)
028	Price not allowed for the Price Type
029	Order Volume too small (Lot size)
030	Order Volume too big (Reject threshold)
031	Order new volume less than the matched volume
032	Action not allowed by this type of user
033	Incorrect Side
034	Incorrect P/C flag
035	Incorrect Order Number

036	Order already matched
037	Order already cancelled
038	Order suspended
039	Order not suspended
040	Order not approved
040	Order already approved
041	Order status is open
042	-
	Order status is not open
044	Incorrect Condition
045	Incorrect Lifetime
046	Incorrect Trade Number
047	Trade already cancelled
048	Trade not cancelled
049	Incorrect Volume
050	Incorrect Price
051	Incorrect Published Volume
052	Disable Condition order
053	Disable Life order
054	Disable Price Type order
055	Order already disapproved
056	Incorrect Phase ID
057	Incorrect Member Order Number
058	Msg contains non-Ascii character[s]
059	Trader did not login
060	Login attempt from a used IP address
061	Login attempt from an invalid IP address
062	Invalid Link Number
063	Invalid Index
064	Invalid Index Sequence Number
065	Gap between Order price and Last Sale too big
066	Login attempt using your account

067	Market is invalid for this user
068	Odd lot orders do not trade in this phase
069	Invalid trade status
070	User has access to none of the markets
071	Incorrect Customer Id
072	Market is invalid for this member firm
073	Incorrect stop order values
074	Incorrect StopIndex order values
075	Incorrect MF/MOF volume
076	No order field was changed
077	The board is currently disabled
078	Invalid supervisor for the trader
079	The board does not trade at this time
080	No supervisor exists to approve the order
081	Firm credit limit reject
082	Invalid order type
083	Order value outside allowed limits
084	Incorrect floor/ceiling adjustment percentage
085	Order belongs to a rpt-only trade
086	Order status is expired
087	The system is currently not active
088	Order status is neither open nor not- released
089	Incorrect clearing member
090	Incorrect trade value
091	Short transaction not allowed for security
092	Short sell below or equal to last price
093	Reserved
094	Reserved
095	Reserved

096	Incorrect Trade Report Type
097	Reserved
108	Reserved
109	Reserved
110	Reserved
110	Reserved
112	Reserved
112	Reserved
113	Reserved
	Reserved
115	
116	Reserved
117	Reserved
118	Technical problem
119	Unidentified Error
122	Reserved
124	Incorrect Venue ID
125	Incorrect Clearing Space ID
126	Incorrect Clearing Sub-Account ID
127	Incorrect value for Clearing Account ID
128	Incorrect action for Market Maker
129	Incorrect Quote Request
130	Quotation Responsibility Active
131	Incorrect value for Security ID Source
132	Incorrect value for GOI flag
133	Incorrect value for Settlement Type flag
134	Incorrect value for Position Effect flag
135	Incorrect value for Short Sell flag
136	Reject sponsored trading
137	Quotation responsibility upon request does not exist
138	Quotation responsibilities suspended
139	Valid quote already exists

140	Incorrect quote request (other reason)
141	Can not do this action. Order is Bait
142	At least one series in the combo system is inactive
143	Can not do this action. Covered Sale Order
144	Invalid lifetime for Covered Sale Order
145	Invalid condition for Covered Sale Order
146	Incorrect value for ListID field
147	Incorrect value for Direct Electronic Access field
148	Incorrect value for Client Id Qualifier
149	Incorrect value for Investment Decision Id Qualifier
150	Incorrect value for Execution Within Firm Id Qualifier
151	Incorrect value for Trading Capacity field
152	Incorrect value for Liquidity Provision field
153	Incorrect value for Client Id
154	Incorrect value for Investment Decision Id field
155	Incorrect value for Execution Within Firm Id field
156	Incorrect value for Non-Executing Broker Id field
157	Incorrect value for Special Dividend flag
158	Incorrect value for Duplicative Trade Report flag
159	Incorrect value for Algo flag field
160	Incorrect value for Mass Cancellation Request Type field
161	Incorrect value for Exchange ID

		162	Incorrect value for Commodity Hedging flag field
SecurityAltID	455		g Symbol. cter alphanumeric field).
SecurityAltIDSource	456		class or source of the SecurityAltID. alue: A (Bloomberg Symbol)
SecurityID	48	security's	racter alphanumeric field, indicating identification. Value of SecurityID is t on field SecurityIDSource.
SecurityIDSource	22		class or source of the SecurityID and pol (5521) if given.
		Value	Meaning
		8	Exchange Symbol
		А	Bloomberg Symbol
SecurityExchange	207	Values ar	e given by ATHEX. Max length is 4
SecurityPrice	5530	Security price whenever Security Status message is sent. Possible values:	
		At the beginning of the Pre-Opening phase - Start of day price	
		At the beginning of the Opening phase - Zeroes	
		At the beginning of the Continuous phase - Opening price	
		At the beginning of the Closing phase - Zeroes At the beginning of the Closing price phase – Closing price	
		-	d of Trading – Closing price
		At a resur	nption – Resumed Opening price
		In all othe	er cases – Last sale price

		Format is 5.4.		
		Possible values: 0 <= n <= 99,999.9999		
SecurityStatus	5522	Security	status. Possible values are:	
		Value	Meaning	
		А	Active	
		Ν	Not active	
		S	Suspended	
		Н	Halted	
		R	Resumed (Resumed Pre-opening of a Halt)	
SettlType	63	Indicates	order settlement period. Valid values are:	
		Value	Meaning	
		0	Normal	
		1	Immediate	
		Absence settlemer	of this field is interpreted as normal nt period.	
Side	54	Side of the order. Valid values are:		
		Value	Meaning	
		1	Buy	
		2	Sell	
		5	Sell short	
		R	Buy to cover	
		In case of quote, absence of this field is interpreted a both sides.		
SpecialConditions	5582	Identifies the special conditions of the hit and take order to be entered. Valid values are:		
		Value	Meaning	
		А	All Or None	
		М	Minimum Fill	
		0	Multiples Of	
StopPx	99	A numeric field that indicates a stop price or index value in a Stop Security/Index order. When this valu is reached the order is released.		
		Required	if OrdType=3 or OrdType=4.	

		For valid values and format, please refer to field		
		Price (44). Format is 5.4.		
		Pormat is 5.4. Possible values: 0 <= n <= 99,999.9999		
StopSymbol	5521	_	y if OrdType=3 or OrdType=4.	
StopSymbol	5521	For stop of	orders, this is the instrument identification p symbol. If not supplied, the value of tag	
		For class	or source of this field, check tag 22.	
StopSymbolType	5527	Used only Valid val	y if OrdType=3 or OrdType=4. ues are:	
		Value	Meaning	
		Ι	Stop on index order	
		S	Stop on symbol order	
		• •	be=3 or OrdType=4 and this field is not 'S' will be assumed ("Stop on symbol")	
Text	58	Free form	hat text string (up to 25 characters).	
TimeInForce	59	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. Val values are:		
		Value	Meaning	
		0	Day	
		1	Good Till Cancel (GTC)	
		2	At the Opening	
		3	Immediate Or Cancel (IOC)	
		4	Fill Or Kill (FOK)	
		6	Good Till Date (GTD)	
TradePriceCondition	1839	Indicates if the trade capture report is a special dividend transaction. Valid values are:		
		Value	Meaning	
		13	Special dividend transaction (SDIV)	
			of this field is interpreted as no special transaction	
TradeReportID	571	Unique identifier of TradeCaptureReport. Entered by the member in incoming TradeCaptureReport		

		messages and echoed by trading system in confirmation messages.	
TradeReportRefID	572	Reference trade capture report identifier used with CANCEL and REPLACE transaction types.Used in edit transactions (trade reports) to refer to previous TradeReportID.	
TradeReportTrans Type	487	Type of tr	ansaction being reported. Valid values are:
		Value	Meaning
		0	New
		1	Cancel
		2 Replace	
TradeReportType	856	Type of trade report. Valid values are:	
		Value Meaning	
		0 Submit	
		1	Alleged
		2	Accept
		3	Decline
		5	No/Was (i.e. Expired)
		6	Trade Report Cancel

TradingSessionID	336	Security r	phase identification.	
		When sent in TradingSessionStatus message,		
		possible values for the main board are:		
		Value Meaning		
		Р	Pre-Call	
		J	Calculated projected opening price	
		Т	Continuous/Auction event	
		С	Closing price trading	
		R	Run-off	
		Е	End of trading	
		Н	Halt	
		S	'S' : Stop (Used only in Auction Market)	
		When sent in TradingSessionStatus message, possible values for the other boards are:		
		Value Meaning		
		O Open		
		Е	End	
		When sent in ExecutionReport message (only in case of trade), it may take the following values:		
		Value Meaning		
		0	Opening Trading Phase	
		Т	Continuous Trading Phase	
		А	At the Closing Price trading Phase	
		С	Closing Price Continuous Trading Phase	
TradSesStatus	340	State of the trading session. Possible values are:		
		Value Meaning		
		1	Halted	
		2	Open	
		3	Closed	
		4	Pre-Open	
		5	Pre-Close	

TransactTime	60	Timestamp when the business transaction represented by the message occurred. Format is "YYYYMMDDhhmmssdddddd".		
TransPerSecond	5601	Max num the sessio	ber of transactions per second permitted for on.	
TrdMatchID	880	server wh within a t	A 6-character numeric field assigned by the OASIS server which is used to uniquely identify every trade within a trading day. Possible Values: 1 <= n <=999999	
TrdRegPublicationReason	2670	in TrdRe	Additional reason for trade publication type specified in TrdRegPublicationType(2669). Possible values are:	
		Value	Meaning	
		0	No preceding order in book as transaction price set within average spread of a liquid instrument (NLIQ)	
		1 No preceding order in book as transaction price depends on system-se reference price for an illiquid Instrume (OLIQ)		
		2 No preceding order in book as transaction price is subject to conditions other than current market price (PRICE)		
		3 No public price preceding order as public reference price was used for matching orders (RFPT)		
		7	Deferral due to "Illiquid instrument" (ILQD)	
		5	No public priceDeferral due to "Size specific" (SIZE)	
TrdRegPublicationType	2669	Specifies the type of regulatory trade publication. DefaultValue – 0 (Pre-trade transparency waiver) Required if NoTrdRegPublications(2668) > 0.		

9. Appendix B, OASIS Server parameters

9.1. Parameters

For the Member's applications to be informed about the configuration of the System they should store some information about the System, the Markets, the Securities, the Venues and the Indexes.

The values of Parameters for the:

- Securities
- Indexes

that are frequently changed are provided by the OASIS-ORAMA application.

The current parameters of the OASIS Server System and of the Market the system implements, are the following at the relevant levels:

Field	Description	OASIS
General		
Base currency	The base currency used for trading.	EURO
Credit Limit		
Calculation Method	The selection of the credit limit calculation method	Risk for derivatives: ATHEXClear Resolution 5 Risk for securities: ATHEXClear Resolution 6 <u>https://athexgroup.gr/web</u> / <u>guest/athexclear-</u> <u>resolutions</u>
Validation %	After a member reaches this percentage of the allowed daily credit limit, no more orders can be entered unless the member's daily value limit is increased.	

9.1.1. System

9.1.2.	Markets
···	111 000 10000

<i>J.1.2. Hurkets</i>	
Field	Description
General	
Market ID	The market's unique ID. Not null. Cannot be edited.
Main market type	The type of the main market for this market.
Symbol English	The English symbol for the market.
Symbol Hellenic	The Hellenic symbol for the market.
Name English	The English name for the market.
Name Hellenic	The Hellenic name for the market.
Valid Boards	The valid boards for the market.
Valid order types	The valid order type for the market.
Rules	
Market Change Warning Period	The time that a warning message is sent before a trading state finishes.
Minimum Order Value	The minimum value (price * volume) that orders are allowed to have in the market.
Maximum Order Value	The maximum value (price * volume) that orders are allowed to have in the market.
Closing Price	
Calculate closing price method	The way of valuation of the financial instruments' closing.

9.1.3. Securities

The following information is kept about each security.

Field	Description	Notes		
General				
ISIN	The unique ISIN security.	Duplicate Key allowed. Valid non-derivative p	only	for

Field	Description	Notes
English symbol	The system wide symbol of the security in English.	This field must be unique amongst all securities.
English name	The security's name in English.	
Hellenic symbol	The security's symbol in Greek.	
Hellenic name	The security's name in Greek.	
Price	The Last Price of the Security	
Bloomberg symbol	The Bloomberg security's identification	Duplicate Key is not allowed.
Security Status	The status of security	Active / Not active / Suspended / Halted / Resumed
Expiration date	The expiration date of a warrant or right	
Lot size	The trading unit for the specific security (lowest denomination).	
Floor/Ceiling		
Floor	Minimum percentage of allowed price.	https://athexgroup.gr/athex -21-30
		ATHEX Resolution 22
Ceiling	Maximum percentage of allowed price.	https://athexgroup.gr/athex -21-30
		ATHEX Resolution 22

9.1.4. *Members*

The following information is kept about each Member.

Field	Description	Notes
ID	The Member's ID	Duplicate Key is not allowed.
Credit Limit	The credit limit value	

Status		Active / Inactive / Suspended
English Name	The English name of the member	
Hellenic Name	The Hellenic name of the member	

9.1.5. Traders

The following information is kept about each Trader.

Field	Description	Notes
ID	The User's ID	Duplicate Key is not allowed.
English Name	The user's English Name	
Hellenic Name	The user's Hellenic Name	
Member	The Member ID of the Member firm the user is associated with.	The Member ID
Status	The user status	Active / Inactive / Suspended

9.1.6. *Indexes*

The following information is kept about each Index.

Field	Description	Notes
English Symbol	The English Symbol for the index	
English Name	The English Name for the index	
Hellenic Symbol	The Hellenic Symbol for the index	
Hellenic Name	The Hellenic Name for the index	
ISIN	The ISIN code for the index	Duplicate ISIN code is not allowed.
Index Value	The Index value	

9.1.7. Price Tick

Field	Description	Notes

Lower Bound	The lower price boundary for which the price tick is eligible.	
Upper Bound	The upper price boundary for which the price tick is eligible.	
Tick	The price tick.	

It should be noted that a different price tick may be set for different securities. As MiFID II dictates, the valid tick size is calculated using the Average Daily Number of Transactions (ADNT) and the relevant table of RTS 11, ANNEX.

9.1.8.	Halt Reason	Codes

Halt Reason ID	English Description
01	Halt
02	Ceiling
03	Floor
04	War
05	Politics
06	Technical
07	Terrorism
08	Various
09	Religion
10	Celebration
11	Earthquake
12	Volatility Interrupter
13	Series Expiration

9.1.9. Holidays

Field	Description	OASIS
Holiday Date	The date of the holiday	Duplicate Key is not allowed.
Description	The description of the holiday	

If an order is sent with Expiration Date on a weekend or holiday, the system sets as Expiration Date the last working date before the date initially set.

9.2. Trading model

The details of ATHEX Trading Model (existing Markets, Trading Boards etc.) are presented in <u>ATHEX Rulebook</u> as it stands and the relevant <u>ATHEX Resolutions</u>.

9.3. Time schedule for system-markets

The time schedule for Systems and Markets is presented in <u>ATHEX Resolution 22</u> as it stands and can be found in ATHEX web site, at <u>ATHEX market schedule</u>.

9.4. Order Types

The types of orders allowed in the System Boards during the various Trading Phases appear in the following table.

			Main	Boards	Special Terms Board	Forced Sales Board
Order Price	Order Condition	Order Duration	CAM	CAM M	Hit & Take method	Hit & Take method
Market		Good for Day	Х	Х		
	No Condition	Good Till Date	Х	Х		
		Good Till Cancel	Х	Х		
		Good for Day	Х	Х		
	Stop on Index	Good Till Date	Х	Х		
		Good Till Cancel	Х	Х		
		Good for Day	X	Х		
	Stop on Security	Good Till Date	X	Х		
	becunty	Good Till Cancel	X	Х		
	Immediate or Cancel	Good for Day		Х		
	Fill or Kill	Good for Day		Х		
Limit		Good for Day	Х	X		Х
	No Condition	Good Till Date	X	Х		
		Good Till Cancel	X	Х		
		Good for Day	X	Х		
	Stop on Index	Good Till Date	Х	Х		
		Good Till Cancel	Х	Х		
		Good for Day	X	Х		
	Stop on Security	Good Till Date	X	Х		
	becunty	Good Till Cancel	X	Х		
	Immediate or Cancel	Good for Day		X		
	Fill or Kill	Good for Day		Х		
	All or None	Good for Day			X	
	Minimum Fill	Good for Day			X	

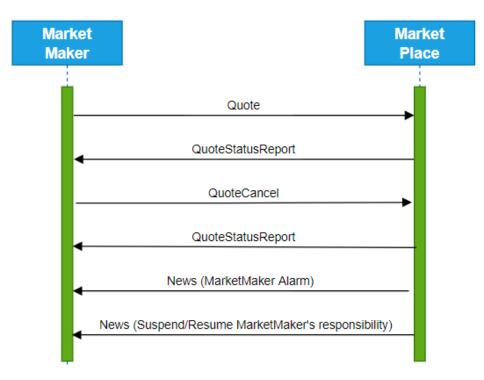
	Multiples of	Good for Day			Х	
ATO	No Condition	Good for Day	Х			
ATC	No Condition	Good for Day	Х	Х		

<u>Note:</u> The trade reports are entered in the "Report only" board, they have no condition, and their duration is daily.

For issues in relation to the information contained in this appendix and general issues concerning the ATHEX Trading Model, Trading Members or the software developers may raise a ticket via the official ATHEX Ticketing System, JIRA Service Desk <u>https://servicedesk.athexgroup.gr/servicedesk/customer/portal/201</u> and more specifically, via the section "**TRADING related issues**".

10. Appendix C. Sequence Diagrams for Quotation Negotiation.

The following sequence diagram demonstrates Quotation Negotiation handling. This chapter intends to analyse the way the Trading System processes Quotation Negotiation related messages and to make clear the correct use of these messages from the members and the market makers in order to complete the quote request and quote entry/change/cancel the procedure.



10.1. Single Quote Entry/Change/Cancel

Figure 10-1 Quote Entry / Change / Cancel

10.2. Quote Request

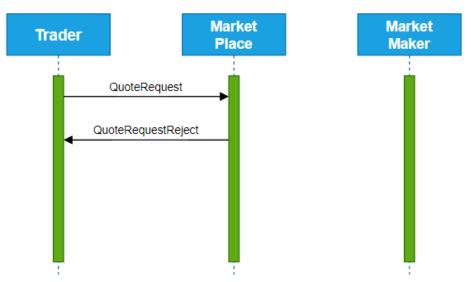


Figure 10-2 Quote Request Rejected (1st phase rejection)



Figure 10-3 Quote Request Rejected (2nd phase rejection)

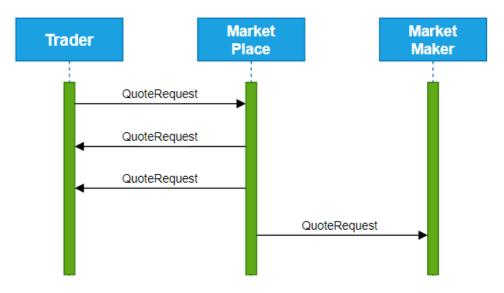


Figure 10-4 Quote Request Accepted

11. Appendix D. Sequence Diagrams for Trade Report procedure Examples.

The following sequence diagrams demonstrate Trade Report procedure examples. This chapter intends to analyse the way the Trading System processes TradeCaptureReport message and to make clear the correct use of this message from the counterparties in order to complete the Trade Report procedure.

11.1. Trade Report Approval

Seller inserts a TradeCaptureReport and buyer approves.

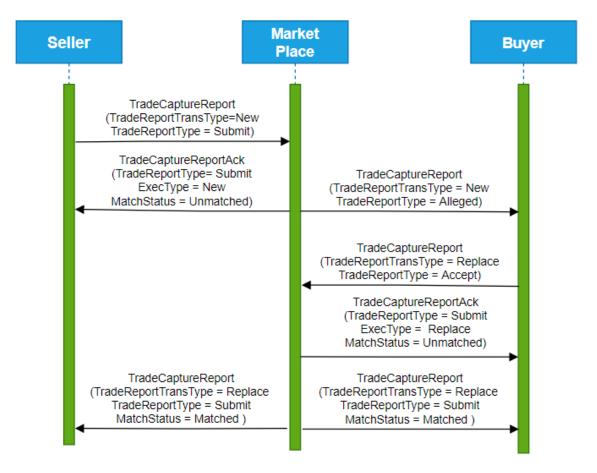


Figure 11-1 Trade Report Approval

11.2. Trade Report Disapproval

Seller inserts a TradeCaptureReport and buyer disapproves.

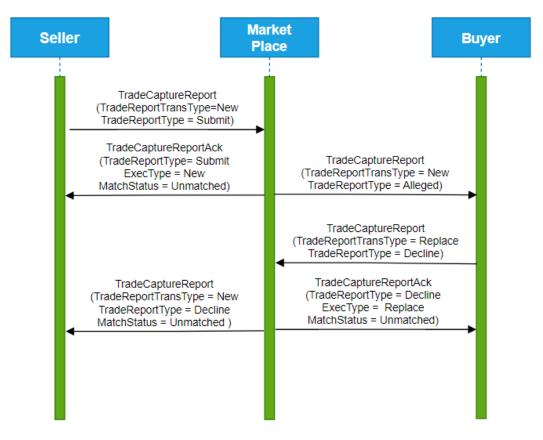


Figure 11-2 Trade Report Disapproval

11.3. Trade Report Cancellation

Seller inserts a new trade report (using a TradeCaptureReport message) and cancels it (using another TradeCaptureReport message) before the buyer's approval.

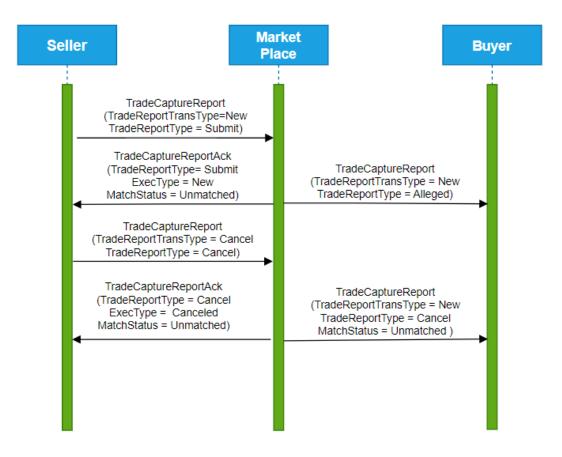


Figure 11-3 Trade Report Cancellation

11.4. Trade Report Expiration

Seller inserts a new trade report (using a TradeReportEntry message) and Approval Timeout expires in Trading System. Trade expires.

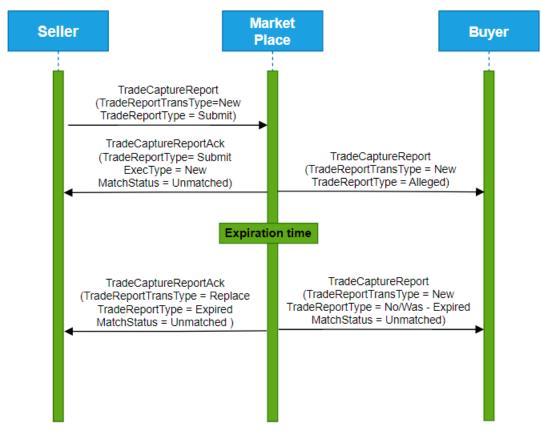


Figure 11-4 Trade Report Expiration

11.5. Intra-Firm Trade Report

The seller and the buyer reside in the same member firm. The firm inserts the TradeReportEntry message. The trade is completed.

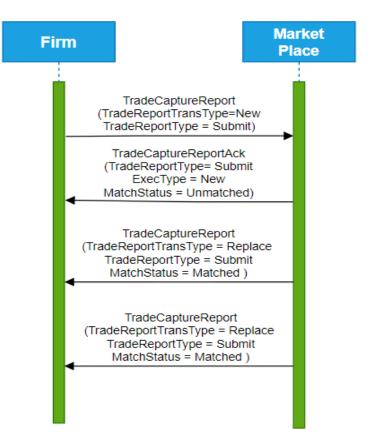


Figure 11-5 Intra-Firm Trade Report

12. Appendix E. Glossary of Terms

This glossary intends to familiarise programmers with the most common terminology.

Term	Definition
All or None, All or Nothing (AON)	Buy or sell order marked to signify that no partial matching is to be executed. The order will not be automatically cancelled, however if a complete match is not executed; to accomplish that, the order entry must be marked FOK (Fill or Kill).
At the Open (ATO) order	An order that is to be executed at the Opening Price.
At the Close (ATC) order	A market order that is to be executed at the closing price on the exchange of the stock named in the order. If it is not executed, the order is cancelled.
Average price	The average price per share of all trades resulting from a single order. This is a general definition, and it depends on the case whether the term "Average" means Volume Weighted or something else.
BBO	See "Best bid and offer."
Best bid and offer	"BBO" The highest price a buyer is willing to pay, and the lowest price a seller is willing to offer, with the quantity they're willing to trade.
Better, or	An order qualifier that is generally assumed to mean "limit price or better." An order will execute at a price no worse than the specified limit price and may execute at a better price (higher selling price for a sell order or a lower buying price for a buy order).
Block Trades (or Big Packages)	A Block trade is defined as a bilateral trade in excess of a pre-defined value for the product. This trade is done by participants that have selected one another by themselves.

Board	A logical trading area within a market wherein specific trading procedure is utilised. In the OASIS the following are included:		
	Main Board		
	Odd Lot Board		
	• Special Terms (Hit & Take) Board		
	• Agreed Price Board (Trade Report (Pre-Agreed) and Cross Trade)		
	Forced Sales		
Broadcasts	Broadcasts are items of public information generated centrally at the Exchange that are transmitted to the market participants in real-time (for example order book changes).		
Broker (or Trader)	An ATHEX authorised individual who belongs to a Member and buys and sells financial instruments for the member's own account or on Client's behalf.		
Call Auction	The time when an Auction Price is calculated, and orders entered during a Call Auction Phase are executed.		
Call Auction Method (CAM)	In the call auction method, the system will initially accept all valid order types and execute the orders that can be executed at the calculated "auction" price, after having calculated the "call" or "open" price for each security.		
Ceiling	The maximum price a security can trade at during the day.		
Closing Price	The price of the last transaction concluded.		
Continues Automatic Matching Method (CAMM)	In continuous trading, trades are continuously and automatically being concluded by the system, by executing in real time orders given by the members.		
Contra	Contra broker, order, side. The counterpart or counterparty to a trade. The buying broker enters a buy order. The contra side is the contra broker (seller) who entered the contra order (sell order) to which the buy order is matched.		

Day order	An order term which specifies that an order's unexecuted quantity should be automatically cancelled by the system at the end of the trading day.
Depth	See "market depth."
Disclosed volume	Or "published volume" This is the quantity of an order that is included in a quote and publicly disseminated.
DSS	Dematerialised Securities System
Duration (Order)	An order term specifying how long unexecuted portions of an order are to stay in the order book before being cancelled. A "day" order has an order lifetime of the trading day it was entered, and any unexecuted quantities will be cancelled at the end of the trading day. Other terms include Good unTil Cancelled (GTC) and Good Till Date (GTD).
Equity	Ownership interest possessed by shareholders. (Stock or Fixed Income)
ETS	The Equities Trading Server.
Fill or kill (FOK) order	An order condition specifying that the order must be cancelled if its entire volume cannot be immediately matched (the order may match against one or more contras).
Floor	The minimum price a security can trade at during the day.
Forced Sales	Type of trading facilitated by the ATHEX to meet the need of selling securities upon judicial or statutory request at irregular time periods in the ATHEX.
Good unTil Cancel (GTC order)	A good until cancel order remains in effect until it is matched or cancelled. Unmatched and un-cancelled GTC orders remain in the system for as long as their price is within the ceiling/floor limits for a security. The system will automatically cancel any GTC orders during the start-up period with limit prices outside of the ceiling floor/ limits for a security. For as long as the order is within the ceiling/floor limits it will remain in force there is no expiration of GTC orders.

Good unTil Date (GTD order)	A good until date order allows the trader to enter a specific date when the order will expire. Unmatched and un-cancelled GTD orders remain in the system for as long as their price is within the ceiling/floor limits for a security. The system will automatically cancel any GTD orders during the start-up period with limit prices outside of the ceiling floor/ limits for a security.
Good unTil Phase, (GTP order)	A GTP order is good only for the phase (state) in which it is entered.
Hit and Take trading method	By applying this method, the member has two choices; either to enter its order, or to choose to trade with an order already recorded in the system.
Immediate or cancel (IOC)	An order condition which requires immediate execution at the specified price. Any part of the order that cannot be matched immediately is automatically cancelled.
Index	See "market index."
Lifetime, Life	See Duration (Order).
Limit down/up	Maximum price movement up and down for a security or an instrument.
Limit order, (LMT)	An order with a specified maximum price or "priced order." An order which specifies the maximum price which a buyer will pay or the minimum price a seller will accept.
Limit price	The maximum price at which an order may be executed. For example, a sell limit order can only be executed at the limit price or higher. Similarly, a buy limit order can be executed only at the limit price or lower.
Lot	The standard unit of trade (e.g., 10). It constitutes a regular unit of trade for a particular security.
Lot – Odd Lot	Securities trade made for less than the Round Lot.
Lot – Round Lot	Unit of trading on a securities exchange.
Market	The valid combination of groups of securities to be traded in a regulated manner by participating Members.

Market control	A term which refers to administrative functions such as opening the market, suspending trading, closing the market, etc.
Market depth	The display of all the available prices in the market, along with the aggregated number of shares available to these prices.
Market index	A market index is a statistical measure, often a weighted average, where individual securities are weighted by their market capitalisation or percentage of the overall marketplace.
Market open	The starting time when orders can be entered.
Member	An ATHEX regulated firm company that engages in brokerage activities.
Minimum Fill, (MF order)	A Minimum Fill order required that a minimum quantity is required for the execution of this order. An order with a minimum fill condition is executed only if the minimum volume (value for Fixed Income securities) can be satisfied.
OASIS	ATHEX trading platform
Odd lot	An order or trade for less than one round lot.
Opening price	The price of the first trade of the trading day (whenever happens) in a security, or the price calculated by the trading system at the opening phase (pre-opening phase).
Opening volume	The number of shares of the first trade in a security during the opening process. If no orders are matched during the opening process, this field is left blank throughout the trading day.
ORAMA	The Order Routing Applicaction is the member's application needed to access the OASIS.
Order	A commitment to buy or sell a specified quantity of a security at an indicated price, subject to any attached terms or conditions. When two orders match, a trade is created.

Order driven	A term describing a market where the price is directly determined by participant orders matching without intermediation, as opposed to a "price" or "quote" driven market where participant orders are matched against market maker quotes.
Order match	The process of comparing orders in the order book to create trades.
Order Types	The individual types and attributes of an order defined by the ATHEX and entered by Members into OASIS, in order to trade in a regulated manner
Partial	Or "partial fill." Partial execution of an order which leaves an unfilled quantity on the order.
Position limit	Maximum amount of securities (position) that can be acquired by an individual holder or group of holders.
Pre – Agreed Trading (Trade Reporting)	This method supports report only trading between the members.
Pre – Open Period	The period which precedes the Call Auction. During the Pre-Call period orders are allowed to be entered into the system and quotes will be sent to members, but no matching (trading) will take place. Applicable only to Order Driven Trading
Right	Privilege granted to existing shareholders of a corporation. When a company proceeds to a share capital increase, one or more separate securities are created called "right (-s)". The right or the rights of each share are traded separately in the market, for a period of at least one-month. The commencement and the duration of this period are externally defined by the company and are determined by the supervisory authorities of the ATHEX along with the opening price of the right.
Round lot	An order whose size is composed of one or more even round lots as defined by the rules of the ATHEX.
Rulebook	The official document governing the operation of ATHEX Regulated Markets of Securities and Derivatives
	https://athexgroup.gr/athex-regulations

Resolutions	Any decision issued in implementation of the ATHEX Rulebook by the Board of Directors of ATHEX or any other duly authorized body of ATHEX and posted on the ATHEX website.
	https://athexgroup.gr/athex-resolutions
Share	Unit of equity ownership in a corporation. This ownership is represented by a stock certificate, which names the company and the shareholder. There are many different types of shares such as: common, preferred, bearer, registered.
Stock	Ownership of a Corporation represented by Shares that are claimed on the corporation's earnings and assets.
Surveillance	The process of monitoring trading activity and investigating activity to ensure that the rules are being followed.
Tick	Smallest possible price movement of a security.
Tick size	The legal price increment for a given price range, i.e., the price spread increment.
Trade	An agreement to deliver securities/contracts in order to receive money & vice versa.
Trade number	A unique number assigned to each trade by the system.
Trading halt	A situation where trading is temporarily stopped in one or more securities with the expectation the security will resume trading at some time during the same trading day.
Trading Method	The method by which financial instruments are traded by Members. The OASIS Trading Methods are: Continuous Automatic Order Matching (CAMM), Call Auction (CAM), Hit & Take, Trade Reporting, Cross, Forced Sales, Quote Driven with Market Makers.
Trading Phases (or Trading Periods)	A timeframe period wherein a specific activity is allowed to be conducted on a market. For example: Start-up, pre-open phase, continuous trading, closing price trading, and market runoff.

Trading Procedures	The logical grouping of Trading Methods that has common characteristics. The OASIS Trading Procedures are: Order Driven, Agreed Price, Special Auctions, Hit & Take, and Quote Driven.
	XOrder Server allows the market participants to have indirect market access to the trading servers of the Exchanges connected to XNet