MARKET
DATA FEED

OASIS MDFS Message Reference

Version: 0.12

Revision History

Version	Date	Description
0.12	2024/03/11	UAT release.

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1.   Introduction

This document describes the format of FIX messages disseminated through the MDFS. The data format follows the FIX 5.0 SP2 specification. Some messages, tags and tag values from FIX Extension Packs the FIX 5.0 SP2 specification are utilized in MDFS messages. If a message, tag or value is not marked as custom and is not included in the FIX 5.0 SP2 specification, then details about it can be found at the latest version of the FIX Specification.

Note: Values in the Data Type column correspond to the FIX Datatypes available here.
Note: Cells with a **Yellow Background** indicate custom tags.
Cells with an **Orange Background** indicate custom values.
Cells with a **Green Background** indicate tags that are not included in that message type in the standard FIX specification.

2.   FIX Message Specification

2.1.   Header

Note: Included at the beginning of all messages. Only the tag 35=MsgType is included in subsequent tables.

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	8	BeginString	Y	String	FIXT.1.1
→	9	BodyLength	Y	Length	
→	35	MsgType	Y	String	3 = Reject 5 = Logout A = Logon B = News BW = ApplicationMessageRequest BX = ApplicationMessageRequestAck BY = ApplicationMessageReport f = SecurityStatus h = TradingSessionStatus W = MarketDataSnapshotFullRefresh X = MarketDataIncrementalRefresh Custom Values: UMDR = MulticastDataRetransmission
→	49	SenderCompID	Y	String	
→	56	TargetCompID	Y	String	
→	34	MsgSeqNum	Y	SeqNum	
→	52	SendingTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	369	LastMsgSeqNumProcessed		SeqNum	Note: Used for Snapshot Synchronization. Contains the value of the tag 34 = MsgSeqNum of the last message processed during the generation of this message.
→	20009	ATHEXSnapshotIndicator		Int	0 = Start of cycle 1 = End of cycle 2 = Start and end of cycle (applies when the cycle is comprised of a single message)
→	20010	ATHEXFragmentIndicator		Int	0 = Start of fragmented message 1 = Middle of fragmented message 2 = End of fragmented message
Component End					

2.2.   Trailer

Note: Included at the end of all messages. It is omitted in subsequent tables.

Tag	Name	R	Data Type	Value
Component	StandardTrailer	Y		
→	10	CheckSum	Y	String	
Component End				

2.3.   0 = Heartbeat

This message is transmitted when no other messages have been transmitted in the past 30 seconds. Heartbeat messages always have tag "34=MsgSeqNum" with value set to "0" and are omitted in TCP Retransmission.

Tag	Name	R	Data Type	Value
Component	StandardHeader	Y		
→	35	MsgType	Y	String	0 = Heartbeat
→	34	MsgSeqNum	Y	SeqNum	0
Component End				

2.4.   f = SecurityStatus

These messages are transmitted to notify of changes in an instrument's phase and/or status.

Tag	Name	R	Data Type	Value
Component	StandardHeader	Y		
→ 35	MsgType	Y	String	f = SecurityStatus
Component End				
Component	Instrument	Y		
→ 55	Symbol	Y	String	Note: Alphanumeric Characters.
→ 167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→ 207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→ 20001	ATHEXMarketID	Y	Char	
Component End				
625	TradingSessionSubID		String	1 = Pre-Trading 2 = Opening or opening auction 3 = (Continuous) Trading 4 = Closing or Closing Auction Custom Values: 101 = Start 102 = ATC Orders Are Released in Order Book

Tag	Name	R	Data Type	Value
				103 = End
				104 = Stop
				Note: Corresponds to the Instrument's Phase.
326	SecurityTradingStatus		Int	2 = Trading Halt
				3 = Resume
				Custom Values:
				101 = Active
				102 = Suspend
327	HaltReason		Int	Custom Values:
				101 = Exchange
				102 = Volatility Interrupter
60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

2.5. h = TradingSessionStatus

These messages are transmitted to signify changes to a market's status.

Tag	Name	R	Data Type	Value
Component	**StandardHeader**	Y		
→ 35	MsgType	Y	String	h = TradingSessionStatus
Component End				
207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
20001	ATHEXMarketID	Y	Char	
20002	ATHEXBoardID	Y	Char	B = Pre-Agreed
				F = Forced Sales (With the Hit and Take Method)
				M = Main
				O = Odd Lot
				S = Special Terms (With the Hit and Take Method)
336	TradingSessionID	Y	String	1 = Day
625	TradingSessionSubID	Y	String	1 = Pre-Trading
				2 = Opening or opening auction
				3 = (Continuous) Trading
				4 = Closing or Closing Auction
				Custom Values:
				103 = End
				104 = Stop
				105 = Projected Auction
				106 = Run Off
				107 = Halt
				Note: the values "2 = Opening or opening auction" and "103 = End" apply to the Board specified in tag "20002=ATHEXBoardID" and are only sent for boards other than "M = Main"
340	TradSesStatus	Y	Int	1 = Halted
				2 = Open
				3 = Closed
				4 = Pre-Open
				5 = Pre-Close
60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

2.6. B = News

These messages contain news/announcements from the exchange.

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	B = News
Component End					
1474		LanguageCode	Y	Language	Note: ISO 639-1 Language Code en = English el = Greek
148		Headline	Y	String	
Component		**LinesOfTextGrp**	Y		
→	**RG Start** 33	NoLinesOfText	Y	NumInGroup	Note: Integer.
→	→ 58	Text	Y	String	
→	**RG End**				
Component End					
60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

2.7. W = MarketDataSnapshotFullRefresh

These messages are transmitted through the snapshot multicast groups and contain all the pertinent information needed to get the current state of an instrument and its order books.

If a multicast group has no data to send (e.g. when no trades have occurred in a snapshot group for trades) an empty message with the tag "20009 = ATHEXSnapshotIndicator" with a value of "2 = Start and end of cycle" will be sent to indicate the empty cycle.

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType		Int	1 = Top of Book 2 = Price Depth 3 = Order Depth
Component			**Instrument**			
→	55		Symbol		String	Note: Alphanumeric Characters.
→	167		SecurityType		String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future INDEX = General type for a contract based on an established index MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond INAV = ETF Indicative Net Asset Value
→	207		SecurityExchange		Exchange	Note: Venue ID (ISO 10383 MIC).
→	231		ContractMultiplier		Float	Note: Nominal Value for bonds.
→	159		AccruedInterestAmt		Amt	Note: For Bonds.
→	20001		ATHEXMarketID		Char	
Component End						
Component			**MDFullGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType		Char	0 = Bid 1 = Offer 2 = Trade 3 = Index Value 4 = Opening Price 5 = Closing Price 7 = Trading Session High Price 8 = Trading Session Low Price e = Previous Closing Price (Start of Day Price) g = Threshold Limits and Price Banding J = Empty Book Custom Values: u = Projected Closing Price

→	→					v = Projected Auction Price w = Auction Price x = Trading Session Last Price (The last price with which the given Instrument was traded, during the trading day) y = Total Volume (The sum of the volumes of all Instrument trades occurred, during the trading day) z = Total Value (The total value traded in the given Market for the given Instrument, during the trading day)
→	→	20002	ATHEXBoardID		Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
→	→	270	MDEntryPx		Price	
→	→	271	MDEntrySize		Qty	Note: Used to Represent Total Volume for MDEntryType = y (Total Volume).
→	→	1023	MDPriceLevel		Int	
→	→	346	NumberOfOrders		Int	
→	→	290	MDEntryPositionNo		Int	
→	→	37	OrderID		String	Note: 8 Numeric Characters. Unique for the day.
→	→	39	OrdStatus		Char	4 = Cancelled C = Expired Custom Values: I = Inactive N = Not Released O = Open
→	→	14	CumQty		Qty	Note: Matched Volume.
→	→	59	TimeInForce		Char	0 = Day (or Session) 1 = Good Till Cancel (GTC) 2 = At the Opening (OPG) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD) 7 = At the Close
→	→	40	OrdType		Char	1 = Market 3 = Stop 4 = Stop Limit 7 = Limit or Better
→	→	20003	ATHEXSpecialCondition		Char	A = All or None I = Stop Index M = Minimum Fill O = Multiple of S = Stop Instrument
→	→	20004	ATHEXConditionVolume		Qty	Note: Used to represent volume when ATHEXSpecialCondition = M or ATHEXSpecialCondition = O.
→	→	20005	ATHEXOrderEntryDate		UTCDateOnly	Note: YYYYMMDD format.

→	→		277	TradeCondition	String	0 = Cancel
→	→		1003	TradeID	String	Note: 6 Numeric Characters. Unique for the day.
→	→		1024	MDOriginType	Int	0 = Book 1 = Off-Book 3 = Quote Driven Market 5 = Auction Driven Market
→	→		625	TradingSessionSubID	String	2 = Opening or Opening Auction 3 = (Continuous) Trading 4 = Closing or Closing Auction 5 = Post-Trading
→	→		1115	OrderCategory	Char	3 = Privately Negotiated Trade
→	→	Component		**TrdRegPublicationGrp**		
→	→	→	RG 2668	**NoTrdRegPublications**	NumInGroup	
→	→	→	→ 2669	TrdRegPublicationType	Int	0 = Pre-Trade Transparency Waiver
→	→	→	→ 2670	TrdRegPublicationReason	Int	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 (OILQ) 2 = No Preceding Order in Book as Transaction Price Is Subject to Conditions Other Than Current Market Price (PRIC) 3 = No Public Price for Preceding Order as Public Reference Price Was Used for Matching Orders (RFPT) 4 = No Public Price Quoted as Instrument Is Illiquid (ILQD) 5 = No Public Price Quoted Due to Size (SIZE)
→	→	→	RG End			
→	→	Component End				
→	→	Component		**TradePriceConditionGrp**		
→	→	→	RG 1838	**NoTradePriceConditions**	NumInGroup	
→	→	→	→ 1839	TradePriceCondition	Int	13 = Special Dividend
→	→	→	RG End			
→	→	Component End				
→	→		2667	AlgorithmicTradeIndicator	Int	0 = Non-Algorithmic Trade 1 = Algorithmic Trade
→	→		1390	TradePublishIndicator	Int	1 = Publish Trade
→	→		570	PreviouslyReported	Boolean	N = Not Reported to Counterparty or Market Y = Previously Reported to Counterparty or Market
→	→		20006	ATHEXTotalVolume	Qty	Note: The total number of stocks/contracts traded up to that point.
→	→		20007	ATHEXTradeValue	Qty	Note: Notional Amount.
→	→		20008	ATHEXIndexType	Char	B = Base

		Tag		Name	R	Data Type	Value
							C = Closing O = Opening T = Trading
→	→	**Component**		**PriceLimits**			
→	→	→	1148	LowLimitPrice		Price	Note: Floor Price.
→	→	→	1149	HighLimitPrice		Price	Note: Ceiling Price.
→	→	**Component End**					
→	→	60		TransactTime		UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

2.8.   X = MarketDataIncrementalRefresh

These messages are transmitted via the incremental multicast groups throughout the trading session to signify trades, orders, price levels, index values, start of day prices, high/low limits, closing prices, instrument summaries and auction prices .

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType		Int	1 = Top of Book 2 = Price Depth 3 = Order Depth
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change 2 = Delete 3 = Delete Thru 4 = Delete From 5 = Overlay
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future INDEX = General type for a contract based on an established index MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond INAV = ETF Indicative Net Asset Value
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	231	ContractMultiplier		Float	Note: Nominal Value for Bonds.
→	→	→	159	AccruedInterestAmt		Amt	Note: For Bonds.

→	→	→	20001	ATHEXMarketID		Char		
→	→	**Component End**						
→	→		269	MDEntryType	Y	Char		0 = Bid 1 = Offer 2 = Trade 3 = Index Value 4 = Opening Price 5 = Closing Price 7 = Trading Session High Price 8 = Trading Session Low Price e = Previous Closing Price (Start of Day Price) g = Threshold Limits and Price Banding J = Empty Book Custom Values: u = Projected Closing Price v = Projected Auction Price w = Auction Price x = Trading Session Last Price (The last price with which the given Instrument was traded, during the trading day) y = Total Volume (The sum of the volumes of all Instrument trades occurred, during the trading day) z = Total Value (The total value traded in the given Market for the given Instrument, during the trading day)
→	→		20002	ATHEXBoardID		Char		B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
→	→		270	MDEntryPx		Price		
→	→		271	MDEntrySize		Qty		Note: Used to Represent Total Volume for MDEntryType = y (Total Volume) .
→	→		1023	MDPriceLevel		Int		
→	→		346	NumberOfOrders		Int		
→	→		290	MDEntryPositionNo		Int		
→	→		37	OrderID		String		Note: 8 Numeric Characters. Unique for the day.
→	→		39	OrdStatus		Char		4 = Cancelled C = Expired Custom Values: I = Inactive N = Not Released O = Open
→	→		14	CumQty		Qty		Note: Matched Volume.

→	→	59		TimeInForce		Char		0 = Day (or Session) 1 = Good Till Cancel (GTC) 2 = At the Opening (OPG) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD) 7 = At the Close
→	→	40		OrdType		Char		1 = Market 3 = Stop 4 = Stop Limit 7 = Limit or Better
→	→	20003		ATHEXSpecialCondition		Char		A = All or None I = Stop Index M = Minimum Fill O = Multiple of S = Stop Instrument
→	→	20004		ATHEXConditionVolume		Qty		Note: Used to represent volume when ATHEXSpecialCondition = M or ATHEXSpecialCondition = O.
→	→	20005		ATHEXOrderEntryDate		UTCDateOnly		Note: YYYYMMDD format.
→	→	277		TradeCondition		String		0 = Cancel
→	→	1003		TradeID		String		Note: 6 Numeric Characters. Unique for the day
→	→	1024		MDOriginType		Int		0 = Book 1 = Off-Book 3 = Quote Driven Market 5 = Auction Driven Market
→	→	625		TradingSessionSubID		String		2 = Opening or Opening Auction 3 = (Continuous) Trading 4 = Closing or Closing Auction 5 = Post-Trading
→	→	1115		OrderCategory		Char		3 = Privately Negotiated Trade
→	→	**Component**		**TrdRegPublicationGrp**				
→	→	→	**RG 2668**	**NoTrdRegPublications**		NumInGroup		
→	→	→	→	2669	TrdRegPublicationType	Int		0 = Pre-Trade Transparency Waiver
→	→	→	→	2670	TrdRegPublicationReason	Int		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 (OILQ) 2 = No Preceding Order in Book as Transaction Price Is Subject to Conditions Other Than Current Market Price (PRIC) 3 = No Public Price for Preceding Order as Public Reference Price Was Used for Matching Orders (RFPT) 4 = No Public Price Quoted as Instrument Is Illiquid (ILQD) 5 = No Public Price Quoted Due to Size (SIZE)
→	→	→	**RG End**					

→	→	**Component End**						
→	→	**Component**		**TradePriceConditionGrp**				
→	→	→	**RG 1838**	**NoTradePriceConditions**		NumInGroup		
→	→	→	→	1839	TradePriceCondition		Int	13 = Special Dividend
→	→	→	**RG End**					
→	→	**Component End**						
→	→	2667		AlgorithmicTradeIndicator		Int		0 = Non-Algorithmic Trade 1 = Algorithmic Trade
→	→	1390		TradePublishIndicator		Int		1 = Publish Trade
→	→	570		PreviouslyReported		Boolean		N = Not Reported to Counterparty or Market Y = Previously Reported to Counterparty or Market
→	→	20006		ATHEXTotalVolume		Qty		Note: The total number of stocks/contracts traded up to that point.
→	→	20007		ATHEXTradeValue		Qty		Note: Notional Amount.
→	→	20008		ATHEXIndexType		Char		B = Base Index C = Closing Index O = Opening Index T = Trading Index
→	→	**Component**		**PriceLimits**				
→	→	→	1148	LowLimitPrice		Price		Note: Floor Price.
→	→	→	1149	HighLimitPrice		Price		Note: Ceiling Price.
→	→	**Component End**						
→	→	60		TransactTime		Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**							
Component End								

3. Incremental Messages by Group Type

This section contains the layout of various incremental messages sent by the MDFS according to the multicast group type.

3.1. General

This group will send messages that relate to the trading session status, security status, index values, start of day prices, high/low limits, closing prices, instrument summaries, auction prices and news.

3.1.1. Trading Session Status

A message will be transmitted to signify changes to a market's status. The message will have the following format:

Tag	Name	R	Data Type	Value
Component	StandardHeader	Y		
→ 35	MsgType	Y	String	h = TradingSessionStatus
Component End				
207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
20001	ATHEXMarketID	Y	Char	
20002	ATHEXBoardID	Y	Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
336	TradingSessionID	Y	String	1 = Day
625	TradingSessionSubID	Y	String	1 = Pre-Trading 2 = Opening or opening auction 3 = (Continuous) Trading 4 = Closing or Closing Auction Custom Values: 103 = End 104 = Stop 105 = Projected Auction 106 = Run Off 107 = Halt Note: the values "2 = Opening or opening auction" and "103 = End" apply to the Board specified in tag "20002=ATHEXBoardID" and are only sent for boards other than "M = Main"
340	TradSesStatus	Y	Int	1 = Halted 2 = Open 3 = Closed 4 = Pre-Open 5 = Pre-Close
60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

3.1.2. Security Status

A message will be transmitted to notify of changes in an instrument's phase or status. The message will have the following format:

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	f = SecurityStatus
Component End					
Component		**Instrument**	Y		
→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001	ATHEXMarketID	Y	Char	
Component End					
625		TradingSessionSubID		String	1 = Pre-Trading 2 = Opening or opening auction 3 = (Continuous) Trading 4 = Closing or Closing Auction Custom Values: 101 = Start 102 = ATC Orders Are Released in Order Book 103 = End 104 = Stop Note: Corresponds to the Instrument's Phase.
326		SecurityTradingStatus		Int	2 = Trading Halt 3 = Resume Custom Values: 101 = Active 102 = Suspend
327		HaltReason		Int	Custom Values: 101 = Exchange 102 = Volatility Interrupter
60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

3.1.3. Index Value

A message will be transmitted every time the trading platform calculates the value of an index. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	INDEX = General type for a contract based on an established index Custom Values: INAV = ETF Indicative Net Asset Value
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	3 = Index Value
→	→	270		MDEntryPx	Y	Price	
→	→	20008		ATHEXIndexType	Y	Char	B = Base Index C = Closing Index O = Opening Index T = Trading Index
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.1.4. Start of Day Price

A message will be transmitted at the beginning of the trading day. It contains two repeating groups, one containing the start of day price, and one containing the high/low limits. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	231	ContractMultiplier		Float	Note: Nominal Value for bonds.
→	→	→	159	AccruedInterestAmt		Amt	Note: For Bonds.
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	e = Previous Closing Price (Start of Day Price) g = Threshold limits and price banding
→	→	270		MDEntryPx		Price	
→	→	**Component**		**PriceLimits**			
→	→	→	1148	LowLimitPrice		Price	Note: Floor Price.
→	→	→	1149	HighLimitPrice		Price	Note: Ceiling Price.
→	→	**Component End**					
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.1.5.   High/Low Limit Modification

A message will be transmitted if the static high and low limits for the given instrument change. The message will only contain the tags "1148= LowLimitPrice" and/or "1149= HighLimitPrice" if their value has changed. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	g = Threshold limits and price banding
→	→	**Component**		**PriceLimits**			
→	→	→	1148	LowLimitPrice		Price	Note: Floor Price.
→	→	→	1149	HighLimitPrice		Price	Note: Ceiling Price.
→	→	**Component End**					
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.1.6. Closing Price

A message regarding an instrument's closing price will be transmitted in the following occasions:

- **Closing Price:** The closing price has been calculated by the trading platform. If for any reason the trading platform recalculates the closing price of an instrument, then the MDFS will disseminate a new closing price message for the given instrument with the new price.
- **Projected Closing Price:** This value applies only to markets that have a closing auction phase and only if their listed instruments are set up to follow a given set of closing auction rules. One such message will be transmitted whenever the projected closing price or volume changes. Please note that the trading platform uses a given set of business rules to derive these values and these values can be equal to:
  - o The projected auction price and volume
  - o The alternative closing price and volume computed by the exchange's algorithm of choice. Although the alternative closing price will always be greater than zero the same does not hold true for its volume. The volume can equal to zero if there is no order matching at the given price.

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	5 = Closing price Custom Values: u = Projected Closing Price
→	→	270		MDEntryPx	Y	Price	
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.1.7. Instrument Summary

A message will be transmitted for each instrument right after the corresponding market status changes to end of day. It will one contain repeating group of each type specified in the values for field "269 = MDEntryType", excluding any that have been sent before and have not changed

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	4 = Opening Price 5 = Closing Price 7 = Trading session high price 8 = Trading session low price e = Previous Closing Price (Start of Day Price) Custom Values: x = Trading Session Last Price (The last price with which the given Instrument was traded, during the trading day) y = Total Volume (The sum of the volumes of all Instrument trades occurred, during the trading day) z = Total Value (The total value traded in the given Market for the given Instrument, during the trading day)
→	→	270		MDEntryPx		Price	Note: Used for all MDEntryTypes Except for Total Volume.
→	→	271		MDEntrySize		Qty	Note: Only used for MDEntryType = y (Total Volume) to Represent Total Volume.
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.1.8.   Auction Price

A message regarding an instrument's auction price will be transmitted in the following occasions:

- **Projected Auction Price:** The trading platform allows a market to have a projected auction price calculation phase. During that phase, the trading platform will calculate and send the projected auction price for each instrument participating in this market, whenever the instrument's number of matchable orders changes. Such messages will also be sent for a security during an auction caused by a volatility interrupter or other halt reason.
- **Auction Price:** Whenever a market opens from an auction the trading platform will calculate and send the auction open price for all instruments listed under this market. Only one such message will be sent for each instrument after each auction opening. One such message will also be sent for an instrument if it opens from an auction caused by a volatility interrupter or other halt reason. Please note that such a message will not be sent at the opening of a closing auction if the closing price becomes derived fromalgorithm and not from the opening of that auction

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change 2 = Delete
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	Custom Values: v = Projected Auction Price w = Auction Price
→	→	270		MDEntryPx	Y	Price	
→	→	271		MDEntrySize	Y	Qty	
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.1.9. News

A message will be transmitted to disseminate news/announcements from the exchange. The message will have the following format:

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	B = News
Component End					
1474		LanguageCode	Y	Language	Note: ISO 639-1 Language Code en = English el = Greek
148		Headline	Y	String	
Component		**LinesOfTextGrp**	Y		
→	**RG Start** 33	NoLinesOfText	Y	NumInGroup	Note: Integer.
→	→ 58	Text	Y	String	
→	**RG End**				
Component End					
60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

3.2. Order Depth

This group will send messages that contain all the necessary instructions needed to maintain each instrument's order depth book.

3.2.1. Empty Book

A message instructing the client to empty the order depth book of an instrument. These messages are sent at the start of the trading session for instruments that have no active orders. This message will also be sent after the unlikely event of a MDFS failure, where all order books will need to be emptied to avoid possible corruption.

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType	Y	Int	3 = Order Depth
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	J = Empty book
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.2.2.   Order Depth Update

A message signifying an order will be transmitted in the following occasions:

- At the beginning of the trading session if the order's lifetime spans multiples days (where tag "59 = TimeInForce" has a value of "1 = Good Till Cancel (GTC)" or "6 = Good Till Date (GTD)")
- When a new order is entered in the trading platform
- When an already placed order is changed (e.g. order status, volume, price etc.). In this case tags "37 = OrderID" and "20005 = ATHEXOrderEntryDate" fields can be used to relate the reported modification with the original order.

This message type is not transmitted for combinations.

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType	Y	Int	3 = Order Depth
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change 2 = Delete 3 = Delete Thru 4 = Delete From 5 = Overlay
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	0 = Bid 1 = Offer
→	→	20002		ATHEXBoardID	Y	Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
→	→	270		MDEntryPx		Price	
→	→	271		MDEntrySize	Y	Qty	

→	→	290	MDEntryPositionNo	Y	Int	
→	→	37	OrderID	Y	String	Note: 8 Numeric Characters. Unique for the day.
→	→	39	OrdStatus	Y	Char	4 = Cancelled C = Expired Custom Values: I = Inactive N = Not Released O = Open
→	→	14	CumQty	Y	Qty	Note: Matched Volume.
→	→	59	TimeInForce	Y	Char	0 = Day (or Session) 1 = Good Till Cancel (GTC) 2 = At the Opening (OPG) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD) 7 = At the Close
→	→	40	OrdType		Char	1 = Market 3 = Stop 4 = Stop Limit 7 = Limit or Better
→	→	20003	ATHEXSpecialCondition		Char	A = All or None I = Stop Index M = Minimum Fill O = Multiple of S = Stop Instrument
→	→	20004	ATHEXConditionVolume		Qty	Note: Used to represent volume when ATHEXSpecialCondition = M or ATHEXSpecialCondition = O.
→	→	20005	ATHEXOrderEntryDate	Y	UTCDateOnly	Note: YYYYMMDD format.
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

3.3. Top of Book

This group will send messages that contain all the necessary instructions needed to maintain each instrument's top of book.

3.3.1. Empty Book

A message instructing the client to empty the top of book of an instrument. These messages are sent at the start of the trading session for instruments that have no active orders. This message will also be sent after the unlikely event of a MDFS failure, where all order books will need to be emptied to avoid possible corruption.

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType	Y	Int	1 = Top of Book
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	J = Empty book
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.3.2. Top of Book Update

A message will be transmitted whenever the is a change at an instrument's top of book. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType	Y	Int	1 = Top of Book
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change 2 = Delete 5 = Overlay
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	0 = Bid 1 = Offer
→	→	270		MDEntryPx	Y	Price	
→	→	271		MDEntrySize	Y	Qty	
→	→	346		NumberOfOrders	Y	Int	
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.4. Price Depth 5/10

This group will send messages that contain all the necessary instructions needed to maintain each instrument's Price Depth 5/10 book.

3.4.1. Empty Book

A message instructing the client to empty the price depth 5/10 book of an instrument. These messages are sent at the start of the trading session for instruments that have no active orders. This message will also be sent after the unlikely event of a MDFS failure, where all order books will need to be emptied to avoid possible corruption.

The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType	Y	Int	2 = Price Depth
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	J = Empty book
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.4.2. Price Depth Update

A message will be transmitted whenever one or more price levels of an instrument's price depth 5/10 book are changed. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
1021				MDBookType	Y	Int	2 = Price Depth
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer
→	→	279		MDUpdateAction	Y	Char	0 = New 1 = Change 2 = Delete 3 = Delete Thru 4 = Delete From 5 = Overlay
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC)..
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	0 = Bid 1 = Offer
→	→	270		MDEntryPx	Y	Price	
→	→	271		MDEntrySize	Y	Qty	
→	→	1023		MDPriceLevel	Y	Int	
→	→	346		NumberOfOrders	Y	Int	
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.5. Trades

This group will send messages that contain details of trades or trade cancellations for each instrument.

3.5.1. Trade

A message will be transmitted in the event of a trade or trade cancellation. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New 2 = Delete
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	→	→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	→	→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	→	→	20001	ATHEXMarketID	Y	Char	
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	2 = Trade
→	→	20002		ATHEXBoardID	Y	Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
→	→	270		MDEntryPx	Y	Price	
→	→	271		MDEntrySize	Y	Qty	
→	→	277		TradeCondition		String	0 = Cancel
→	→	1003		TradeID	Y	String	Note: 6 Numeric Characters. Unique for the day.
→	→	1024		MDOriginType	Y	Int	0 = Book 1 = Off-Book 3 = Quote Driven Market 5 = Auction Driven Market
→	→	625		TradingSessionSubID	Y	String	2 = Opening or Opening Auction 3 = (Continuous) Trading 4 = Closing or Closing Auction 5 = Post-Trading

→	→	1115		OrderCategory		Char		3 = Privately Negotiated Trade
→	→	**Component**		**TrdRegPublicationGrp**				
→	→	→	**RG 2668**	**NoTrdRegPublications**		NumInGroup		
→	→	→	→ 2669	TrdRegPublicationType		Int		0 = Pre-Trade Transparency Waiver
→	→	→	→ 2670	TrdRegPublicationReason		Int		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 (OILQ) 2 = No Preceding Order in Book as Transaction Price Is Subject to Conditions Other Than Current Market Price (PRIC) 3 = No Public Price for Preceding Order as Public Reference Price Was Used for Matching Orders (RFPT) 4 = No Public Price Quoted as Instrument Is Illiquid (ILQD) 5 = No Public Price Quoted Due to Size (SIZE)
→	→	→	**RG End**					
→	→	**Component End**						
→	→	**Component**		**TradePriceConditionGrp**				
→	→	→	**RG 1838**	**NoTradePriceConditions**		NumInGroup		
→	→	→	→ 1839	TradePriceCondition		Int		13 = Special Dividend
→	→	→	**RG End**					
→	→	**Component End**						
→	→	2667		AlgorithmicTradeIndicator	Y	Int		0 = Non-Algorithmic Trade 1 = Algorithmic Trade
→	→	1390		TradePublishIndicator	Y	Int		1 = Publish Trade
→	→	570		PreviouslyReported	Y	Boolean		N = Not Reported to Counterparty or Market Y = Previously Reported to Counterparty or Market
→	→	20006		ATHEXTotalVolume	Y	Qty		Note: The total number of stocks/contracts traded up to that point.
→	→	20007		ATHEXTradeValue	Y	Qty		Note: Notional Amount.
→	→	60		TransactTime	Y	UTCTimestamp		Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**							
Component End								

3.6.   FTSE (Special Group)

This is a special group that disseminates the index value of the FTSE index and is exclusive to the XATH venue.

3.6.1.   Index Value

A message will be transmitted every time the trading platform calculates the value of the FTSE index. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	FTSE
→	→	→	167	SecurityType	Y	String	INDEX = General type for a contract based on an established index
→	→	→	207	SecurityExchange	Y	Exchange	XATH
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	3 = Index Value
→	→	270		MDEntryPx	Y	Price	
→	→	20008		ATHEXIndexType	Y	Char	B = Base Index C = Closing Index O = Opening Index T = Trading Index
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.7.   MXGRR General (Special Group)

This is a special group that disseminates the base & closing index value of the MXGRR index and is exclusive to the XATH venue.

3.7.1.   Index Value

A message will be transmitted when the trading platform calculates the base or closing index value of the MXGRR index. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	MXGRR
→	→	→	167	SecurityType	Y	String	INDEX = General type for a contract based on an established index
→	→	→	207	SecurityExchange	Y	Exchange	XATH
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	3 = Index Value
→	→	270		MDEntryPx	Y	Price	
→	→	20008		ATHEXIndexType	Y	Char	B = Base Index C = Closing Index
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

3.8. MXGRR Updates (Special Group)

This is a special group that disseminates the opening & trading index value of the MXGRR index and is exclusive to the XATH venue.

3.8.1. Index Value

A message will be transmitted whenever the trading platform calculates the opening or trading index value of the MXGRR index. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	X = MarketDataIncrementalRefresh
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	279		MDUpdateAction	Y	Char	0 = New
→	→	**Component**		**Instrument**	Y		
→	→	→	55	Symbol	Y	String	MXGRR
→	→	→	167	SecurityType	Y	String	INDEX = General type for a contract based on an established index
→	→	→	207	SecurityExchange	Y	Exchange	XATH
→	→	**Component End**					
→	→	269		MDEntryType	Y	Char	3 = Index Value
→	→	270		MDEntryPx	Y	Price	
→	→	20008		ATHEXIndexType	Y	Char	O = Opening Index T = Trading Index
→	→	60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**						
Component End							

4.   Snapshot Messages by Group Type

This section contains the layout of various Snapshot messages sent by the MDFS according to the multicast group type.

4.1.   General

This group disseminates messages that relate to the current Trading Session Status, Security Status, Index Values, Instrument Info and News.

4.1.1.   Trading Session Status

This message contains a market's current status. The message will have the following format:

Tag	Name	R	Data Type	Value
Component	StandardHeader	Y		
→ 35	MsgType	Y	String	h = TradingSessionStatus
Component End				
207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
20001	ATHEXMarketID	Y	Char	
20002	ATHEXBoardID	Y	Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
336	TradingSessionID	Y	String	1 = Day
625	TradingSessionSubID	Y	String	1 = Pre-Trading 2 = Opening or opening auction 3 = (Continuous) Trading 4 = Closing or Closing Auction Custom Values: 103 = End 104 = Stop 105 = Projected Auction 106 = Run Off 107 = Halt Note: the values "2 = Opening or opening auction" and "103 = End" apply to the Board specified in tag "20002=ATHEXBoardID" and are only sent for boards other than "M = Main"
340	TradSesStatus	Y	Int	1 = Halted 2 = Open 3 = Closed 4 = Pre-Open 5 = Pre-Close
60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

4.1.2.   Security Status

This message contains an instrument's current status and/or phase. The message will have the following format:

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	f = SecurityStatus
Component End					
Component		**Instrument**	Y		
→	55	Symbol	Y	String	Note: Alphanumeric Characters.
→	167	SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207	SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001	ATHEXMarketID	Y	Char	
Component End					
625		TradingSessionSubID		String	1 = Pre-Trading 2 = Opening or opening auction 3 = (Continuous) Trading 4 = Closing or Closing Auction Custom Values: 101 = Start 102 = ATC Orders Are Released in Order Book 103 = End 104 = Stop Note: Corresponds to the Instrument's Phase.
326		SecurityTradingStatus		Int	2 = Trading Halt 3 = Resume Custom Values: 101 = Active 102 = Suspend
327		HaltReason		Int	Custom Values: 101 = Exchange 102 = Volatility Interrupter
60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

4.1.3.   Index Value

This message contains all the index value updates for the day for an index. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	INDEX = General type for a contract based on an established index Custom Values: INAV = ETF Indicative Net Asset Value
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	3 = Index Value
→	→	270	MDEntryPx	Y	Price	
→	→	20008	ATHEXIndexType	Y	Char	B = Base Index C = Closing Index O = Opening Index T = Trading Index
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.1.4. Instrument Info

This message contains the current high/low limits, start of day price, closing price, summary, and the latest auction price for an instrument. The message will have the following format:

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End							
Component				**Instrument**	Y		
→	55			Symbol	Y	String	Note: Alphanumeric Characters.
→	167			SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207			SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	231			ContractMultiplier		Float	Note: Nominal Value for bonds.
→	159			AccruedInterestAmt		Amt	Note: For Bonds.
→	20001			ATHEXMarketID	Y	Char	
Component End							
Component				**MDIncGrp**	Y		
→	**RG** 268			NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269		MDEntryType	Y	Char	4 = Opening Price 5 = Closing Price 7 = Trading Session High Price 8 = Trading Session Low Price e = Previous Closing Price (Start of Day Price) g = Threshold Limits and Price Banding Custom Values: u = Projected Closing Price v = Projected Auction Price w = Auction Price x = Trading Session Last Price (The last price with which the given Instrument was traded, during the trading day) y = Total Volume (The sum of the volumes of all Instrument trades occurred, during the trading day) z = Total Value (The total value traded in the given Market for the given Instrument, during the trading day)
→	→	270		MDEntryPx		Price	
→	→	271		MDEntrySize		Qty	
→	→	**Component**		**PriceLimits**			
→	→	→	1148	LowLimitPrice		Price	Note: Floor Price.
→	→	→	1149	HighLimitPrice		Price	Note: Ceiling Price.

Tag			Name	R	Data Type	Value
→	→	**Component End**				
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.1.5. News

This message contains news/announcements from the exchange. The message will have the following format:

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	B = News
Component End					
1474		LanguageCode	Y	Language	Note: ISO 639-1 Language Code en = English el = Greek
148		Headline	Y	String	
Component		**LinesOfTextGrp**	Y		
→	**RG Start** 33	NoLinesOfText	Y	NumInGroup	Note: Integer.
→	→ 58	Text	Y	String	
→	**RG End**				
Component End					
60		TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.

4.2. Order Depth

This group disseminates the instructions needed to construct each instrument's order depth book at its current state.

4.2.1. Empty Book

This message is sent whenever the order depth book of an instrument is empty when the snapshot cycle is disseminated. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType	Y	Int	3 = Order Depth
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	J = Empty book
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.2.2.   Order Depth Update

This message contains the necessary instructions needed to construct an instrument's order depth book at its current state.

This message type is not transmitted for combinations.

The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType	Y	Int	3 = Order Depth
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	0 = Bid 1 = Offer
→	→	20002	ATHEXBoardID	Y	Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
→	→	270	MDEntryPx		Price	
→	→	271	MDEntrySize	Y	Qty	
→	→	290	MDEntryPositionNo	Y	Int	
→	→	37	OrderID	Y	String	Note: 8 Numeric Characters. Unique for the day.
→	→	39	OrdStatus	Y	Char	4 = Cancelled C = Expired Custom Values: I = Inactive N = Not Released O = Open
→	→	14	CumQty	Y	Qty	Note: Matched Volume.

→	→	59	TimeInForce	Y	Char	0 = Day (or Session) 1 = Good Till Cancel (GTC) 2 = At the Opening (OPG) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD) 7 = At the Close
→	→	40	OrdType		Char	1 = Market 3 = Stop 4 = Stop Limit 7 = Limit or Better
→	→	20003	ATHEXSpecialCondition		Char	A = All or None I = Stop Index M = Minimum Fill O = Multiple of S = Stop Instrument
→	→	20004	ATHEXConditionVolume		Qty	Note: Used to represent volume when ATHEXSpecialCondition = M or ATHEXSpecialCondition = O.
→	→	20005	ATHEXOrderEntryDate	Y	UTCDateOnly	Note: YYYYMMDD format.
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	RG End					
Component End						

4.3.   Top of Book

This group disseminates the instructions needed to construct each instrument's top of book at its current state.

4.3.1.   Empty Book

This message is sent whenever the top of book of an instrument is empty when the snapshot cycle is disseminated. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType	Y	Int	1 = Top of Book
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	J = Empty book
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.3.2. Top of Book Update

This message contains the necessary instructions needed to construct an instrument's top of book at its current state. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType	Y	Int	1 = Top of Book
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	0 = Bid 1 = Offer
→	→	270	MDEntryPx	Y	Price	
→	→	271	MDEntrySize	Y	Qty	
→	→	346	NumberOfOrders	Y	Int	
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.4. Price Depth 5/10

This group disseminates the instructions needed to construct each instrument's price depth 5/10 book at its current state.

4.4.1. Empty Book

This message is sent whenever the price depth 5/10 of an instrument is empty when the snapshot cycle is disseminated. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType	Y	Int	2 = Price Depth
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	J = Empty book
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.4.2.   Price Depth Update

This message contains the necessary instructions needed to construct an instrument's price depth 5/10 book at its current state. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
1021			MDBookType	Y	Int	2 = Price Depth
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer
→	→	269	MDEntryType	Y	Char	0 = Bid 1 = Offer
→	→	270	MDEntryPx	Y	Price	
→	→	271	MDEntrySize	Y	Qty	
→	→	1023	MDPriceLevel	Y	Int	
→	→	346	NumberOfOrders	Y	Int	
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.5. Trades

This group disseminates all trades and trade cancellations that have happened so far in the current trading session for each instrument.

4.5.1. Trade

This message contains the details of a trade or trade cancellation that happened during the current trading session. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
Component			**Instrument**	Y		
→	55		Symbol	Y	String	Note: Alphanumeric Characters.
→	167		SecurityType	Y	String	CS = Common Stock ETF = Exchange Traded Fund FUT = Future MLEG = Multileg Instrument OPT = Option REPO = Repurchase WAR = Warrant Custom Values: BOND = Bond
→	207		SecurityExchange	Y	Exchange	Note: Venue ID (ISO 10383 MIC).
→	20001		ATHEXMarketID	Y	Char	
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	2 = Trade
→	→	20002	ATHEXBoardID	Y	Char	B = Pre-Agreed F = Forced Sales (With the Hit and Take Method) M = Main O = Odd Lot S = Special Terms (With the Hit and Take Method)
→	→	270	MDEntryPx	Y	Price	
→	→	271	MDEntrySize	Y	Qty	
→	→	277	TradeCondition		String	0 = Cancel
→	→	1003	TradeID	Y	String	Note: 6 Numeric Characters. Unique for the day.
→	→	1024	MDOriginType	Y	Int	0 = Book 1 = Off-Book 3 = Quote Driven Market 5 = Auction Driven Market
→	→	625	TradingSessionSubID	Y	String	2 = Opening or Opening Auction 3 = (Continuous) Trading 4 = Closing or Closing Auction 5 = Post-Trading
→	→	1115	OrderCategory		Char	3 = Privately Negotiated Trade

				Tag	Name	Req	Type	Description
→	→		**Component**		**TrdRegPublicationGrp**			
→	→	→	**RG 2668**		**NoTrdRegPublications**		NumInGroup	
→	→	→	→	2669	TrdRegPublicationType		Int	0 = Pre-Trade Transparency Waiver
→	→	→	→	2670	TrdRegPublicationReason		Int	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 (OILQ) 2 = No Preceding Order in Book as Transaction Price Is Subject to Conditions Other Than Current Market Price (PRIC) 3 = No Public Price for Preceding Order as Public Reference Price Was Used for Matching Orders (RFPT) 4 = No Public Price Quoted as Instrument Is Illiquid (ILQD) 5 = No Public Price Quoted Due to Size (SIZE)
→	→	→	**RG End**					
→	→	**Component End**						
→	→		**Component**		**TradePriceConditionGrp**			
→	→	→	**RG 1838**		**NoTradePriceConditions**		NumInGroup	
→	→	→	→	1839	TradePriceCondition		Int	13 = Special Dividend
→	→	→	**RG End**					
→	→	**Component End**						
→	→			2667	AlgorithmicTradeIndicator	Y	Int	0 = Non-Algorithmic Trade 1 = Algorithmic Trade
→	→			1390	TradePublishIndicator	Y	Int	1 = Publish Trade
→	→			570	PreviouslyReported	Y	Boolean	N = Not Reported to Counterparty or Market Y = Previously Reported to Counterparty or Market
→	→			20006	ATHEXTotalVolume	Y	Qty	Note: The total number of stocks/contracts traded up to that point.
→	→			20007	ATHEXTradeValue	Y	Qty	Note: Notional Amount.
→	→			60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**							
Component End								

4.6. FTSE (Special Group)

This is a special group that disseminates the index value of the FTSE index for the current session and is exclusive to the XATH venue.

4.6.1. Index Value

This message contains the index value for the FTSE index for the current session. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			StandardHeader	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
Component			Instrument	Y		
→	55		Symbol	Y	String	FTSE
→	167		SecurityType	Y	String	INDEX = General type for a contract based on an established index
→	207		SecurityExchange	Y	Exchange	XATH
Component End						
Component			MDIncGrp	Y		
→	RG 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	3 = Index Value
→	→	270	MDEntryPx	Y	Price	
→	→	20008	ATHEXIndexType	Y	Char	B = Base Index C = Closing Index O = Opening Index T = Trading Index
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	RG End					
Component End						

4.7.   MXGRR General (Special Group)

This is a special group that disseminates the base & closing index value for the MXGRR index for the current session and is exclusive to the XATH venue.

4.7.1.   Index Value

This message contains the base or closing index value of the MXGRR index for the current session. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
Component			**Instrument**	Y		
→	55		Symbol	Y	String	MXGRR
→	167		SecurityType	Y	String	INDEX = General type for a contract based on an established index
→	207		SecurityExchange	Y	Exchange	XATH
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	3 = Index Value
→	→	270	MDEntryPx	Y	Price	
→	→	20008	ATHEXIndexType	Y	Char	B = Base Index C = Closing Index
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

4.8.   MXGRR Updates (Special Group)

This is a special group that disseminates the opening & trading index value for the MXGRR index for the current session and is exclusive to the XATH venue.

4.8.1.   Index Value

This message contains the opening or trading index value of the MXGRR index for the current session. The message will have the following format:

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	W = MarketDataSnapshotFullRefresh
Component End						
Component			**Instrument**	Y		
→	55		Symbol	Y	String	MXGRR
→	167		SecurityType	Y	String	INDEX = General type for a contract based on an established index
→	207		SecurityExchange	Y	Exchange	XATH
Component End						
Component			**MDIncGrp**	Y		
→	**RG** 268		NoMDEntries	Y	NumInGroup	Note: Integer.
→	→	269	MDEntryType	Y	Char	3 = Index Value
→	→	270	MDEntryPx	Y	Price	
→	→	20008	ATHEXIndexType	Y	Char	O = Opening Index T = Trading Index
→	→	60	TransactTime	Y	UTCTimestamp	Note: YYYYMMDD-HH:MM:SS.ssssss format.
→	**RG End**					
Component End						

5. TCP/IP Retransmission Service Messages

This section contains the format of FIX messages used exclusively by the TCP/IP Retransmission Service. The "Header" and "Trailer" components of these messages are identical to the ones described in section 2 of this document.

5.1. 3 = Reject

The TCP/IP Retransmission Service will send this message as a response to an invalid "BW = ApplicationMessageRequest" message.

Tag		Name	R	Data Type	Value
Component		StandardHeader	Y		
→	35	MsgType	Y	String	3 = Reject
Component End					
45		RefSeqNum	Y	SeqNum	Note: Reference message sequence number.
58		Text	Y	String	Note: Text explaining the rejection reason.

5.2. 5 = Logout

The TCP/IP Retransmission Service will send this message as a response to a failed logon attempt or after the retransmission has been completed.

Tag		Name	R	Data Type	Value
Component		StandardHeader	Y		
→	35	MsgType	Y	String	5 = Logout
Component End					
58		Text	Y	String	Note: Text explaining the logout reason.

5.3. A = Logon

This message is sent by the client as the first message when opening a session with the TCP/IP Retransmission Service. The TCP/IP Retransmission Service will also send this message as a response to a successful logon attempt.

Tag		Name	R	Data Type	Value
Component		StandardHeader	Y		
→	35	MsgType	Y	String	A = Logon
Component End					
98		EncryptMethod	Y	Int	
108		HeartBtInt	Y	Int	Note: Value will always be "0". No heartbeat messages will be sent via the retransmission service.
1137		DefaultApplVerID	Y	String	9 = FIX50SP2
553		Username	Y	String	
554		Password	Y	String	
925		NewPassword		String	Note: This tag must be filled when sending the first logon message in order to change the user's password from the default value. The user may also fill this tag any time they wish to change their password.

5.4.   BW = ApplicationMessageRequest

The client should send this message, following a successful logon attempt, to request the retransmission of a range of messages from a multicast group.

Note: The password must be at least 12 characters long and contain at least one of each: uppercase letters, lowercase letters, numbers, and special characters.

5.4.   BW = ApplicationMessageRequest

The client should send this message, following a successful logon attempt, to request the retransmission of a range of messages from a multicast group.

Tag				Name	R	Data Type	Value
Component				**StandardHeader**	Y		
→	35			MsgType	Y	String	BW = ApplicationMessageRequest
Component End							
1346				ApplReqID	Y	String	Note: Unique identifier for request. The first request of the day should contain the value "1" and each subsequent request should contain the previous request's ID incremented by 1.
1347				ApplReqType	Y	Int	0 = Retransmission of application messages for the specified Applications.
Component				**ApplIDRequestGrp**	Y		
→	**RG Start** 1351			**NoApplIDs**	Y		Note: Value must always be "1".
→	→	1355		RefApplID	Y	String	Note: Identifier for the Multicast Group to request the retransmission of messages from. It can contain either the ID contained in tag "56=TargetCompID" in incremental messages sent in that group, or the IP of that group. Only incremental group identifiers are accepted.
→	→	1182		ApplBegSeqNum	Y	SeqNum	Note: Message sequence number of first message in range to be retransmitted.
→	→	1183		ApplEndSeqNum	Y	SeqNum	Note: Message sequence number of last message in range to be retransmitted. If the value is "0", messages will be retransmitted until either the limit per request is reached, or until there are no more messages left to send for the requested multicast group.
→	**RG End**						
Component End							

5.5. BX = ApplicationMessageRequestAck

The TCP/IP Retransmission Service will send this message as a response to a valid "ApplicationMessageRequest" message.

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	BX = ApplicationMessageRequestAck
Component End					
1353		ApplResponseID	Y	String	Note: Unique identifier for the request acknowledgement. The value will be a copy of the associated request's tag "1346 = ApplReqID" value with the character "A" appended.

5.6. BY = ApplicationMessageReport

The TCP/IP Retransmission Service will send this message to the client inform them about the end of a retransmission.

Tag			Name	R	Data Type	Value
Component			**StandardHeader**	Y		
→	35		MsgType	Y	String	BY = ApplicationMessageReport
Component End						
1356			ApplReportID	Y	String	Note: Unique identifier for report. The value will be a copy of the associated request's tag "1346 = ApplReqID" value with the character "R" appended.
1426			ApplReportType	Y	Int	3 = Application message re-send completed.
Component			**ApplIDReportGrp**	Y		
→	**RG Start** 1351		**NoApplIDs**	Y		Note: Value will always be "1".
→	→	1357	RefApplLastSeqNum	Y	SeqNum	Note: The message sequence number of the last message in the retransmission.
→	**RG End**					
Component End						

5.7. UMDR = MulticastDataRetransmission

The TCP/IP Retransmission Service will send these messages to retransmit the requested messages.

Tag		Name	R	Data Type	Value
Component		**StandardHeader**	Y		
→	35	MsgType	Y	String	Custom Values: UMDR = MulticastDataRetransmission
Component End					
95		RawDataLength	Y	Length	Note: Number of bytes in raw data field. Will always be the first tag after the header.
96		RawData	Y	Data	Note: Contains a message as it was transmitted via multicast.