CME Group

A CME/Chicago Board of Trade Company

Market Data Platform FIX/FAST

FIX Message Specifications

Version: 1.10

Last Release: 11/7/08

Contents

CME Market Data Format FIX Message Specification

FIX Header (across messages)

Header

Tag	FIX Name	Format	Valid Values	Description
35	MsgType	String (2)	35 = 0 35 = 5 35 = A 35 = B 35 = d 35 = f 35 = R 35 = V 35 = W 35 = X 35 = Y	Defines message type. 35 = 0 – Heartbeat 35=5 – Logout 35=A – Logon 35=B - News 35 = d - Security Definition 35 = f - Security Status 35 = R - Quote Request 35=V – Market Data Request 35=W – Market Data Snapshot Full Refresh 35 = X - Market Data Incremental Refresh 35=Y – Market Data Request Reject
1128	ApplVerID	String (1)	8 = FIX.5.0.SP1	Specifies the service pack release being applied at message level.
49	SenderCompID	String (7)	CME	Assigned value used to identify firm sending message.
34	MsgSeqNum	SeqNum (9)		Integer message sequence number.
43	PossDupFlag	Boolean (1)	Y = Possible duplicate N = Original transmission	This tag is used in cases of CME internal component failure to indicate a possible retransmission of a duplicate message with the same sequence number. This tag is important in instances that a message is received with duplicate sequence numbers. CME will resend messages to guarantee all messages reach client systems. Two messages will not be sent with the same sequence number without this flag on at least one of them. In addition, it is possible to miss the **original transmission** and see the **possible duplicate** only.
52	SendingTime	UTCTimestamp (21)		Time of message transmission (always expressed in UTC (Coordinated Universal Time)

Heartbeat (35=0)

There is no body for this message.

This message is only the header with the message type 0.

This message is sequenced like any other message.

Logout (35=5)

Tag	FIX Name	Format	Valid Values	Description
1180	ApplFeedID	REPLAY		The REPLAY feed. Used to identify a regular message versus a replayed message on the TCP Replay feed.
58	Text	String (180)		Free Format text string. May include logout confirmation or reason for logout.

Logon (35=A) – from customer to CME

Tag	FIX Name	Format	Valid Values	Description
553	Username	String (100)		Userid or username.
554	Password	String (100)		Password or passphrase.
1137	DefaultApplVerID	String (1)	8 = FIX.5.0.SP1	Specifies the service pack release being applied, by default, to message at the session level.

Logon (35=A) – from CME to customer

Tag	FIX Name	Format	Valid Values	Description
1180	ApplFeedID	REPLAY		The REPLAY feed. Used to identify a regular message versus a replayed message on the TCP Replay feed.
98	EncryptMethod	Int (1)	0 = None	CME does not use encryption, so this value is always set to 0.
108	HeartBtInt	Int (3)		Heartbeat interval (seconds).
1137	DefaultApplVerID	String (1)	8 = FIX.5.0.SP1	Specifies the service pack release being applied, by default, to message at the session level.

News (35=B)

Tag	FIX Name	Format	Valid Values	Description
147	Headline	String (10)		The headline of a News message
33	NoLinesOfText	String (1)		Number of repeating Text entries.
Repeating Group				
→58	Text	String (180)		Free form text to explain the market event or notification.

Security Definition (35=d)

Tag	FIX Name	Format	Valid Values	Description
911	TotNumReports	Int (9)		Total number of reports returned in response to a request.
864	NoEvents	NumInGroup (5)		Number of repeating EventType entries.
Repeating Group				
→865	EventType	Int (1)	5 = Activation 7 = Last eligible trade date	Code to represent the type of event.
→866	EventDate	LocalMktDate (8)		Date of event.
→1145	EventTime	UTCTimeOnly (12)		Time of event. Note – This value needs to be zero-padded from the left until there are a full 9 digits.
1150	TradingReferencePrice	Price (20)		The value may be the settlement price or closing price of the prior trading day.
1149	HighLimitPrice	Price (20)		Upper price threshold for the instrument. Orders submitted with prices above the upper limit will be rejected.
1148	LowLimitPrice	Price (20)		Lower price threshold for the instrument. Orders submitted with prices below the lower limit will be rejected.
1151	SecurityGroup	String (6)		Product Code

Tag	FIX Name	Format	Valid Values	Description
1180	ApplID	String (50)		The channel ID as defined in the XML Configuration File.
9779	UserDefinedInstrument	String (1)	Y = User defined instrument N = Not a user defined instrument	Identifies user-defined instruments. If the value is not present, the default is N.
55	Symbol	String (6)		Instrument Group Code.
107	SecurityDesc	String (20)		Security description.
48	SecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 22-SecurityIDSource.
22	SecurityIDSource	String (1)	8 = Exch Symb	Identifies source of tag 48-SecurityID value. This value is always 8 for CME and is required if tag 48- SecurityID is specified.
207	SecurityExchange	Exchange (4)	XOCH : One Chicago, LLC XCBT : Chicago Board Of Trade XCME : Chicago Mercantile Exchange XNYM : New York Mercantile Exchange XCEC : Commodities Exchange Center XKBT : Kansas City Board Of Trade XMGE : Minneapolis Grain Exchange XWCE : Winnipeg Commodity Exchange, The	Market used to help identify a security.

Tag	FIX Name	Format	Valid Values	Description
			XFMS: FXMarketSpace	
461	CFICode	String (6)	6 bytes populated as follows: Future Outright Byte 1 = F Byte 2 = F, C, or X Byte 3 = I, C, D, A, M, or X Byte 4 = X Byte 5 = S Byte 6 = X Option Outright Byte 1 = O Byte 2 = C, P, or X Byte 3 = A, E, or X Byte 4 = F, or X Byte 5 = P Byte 6 = S 6 bytes populated as follows: Future Spread Byte 1 = F Byte 2 = M Byte 3 = I, C, D, A, M, or X Byte 4 = X Byte 5 = S Byte 6 = X Option Spread Byte 1 = O Byte 2 = M Byte 3 = X Byte 4 = F, or X Byte 5 = P Byte 6 = S	Indicates the type of security using ISO 10962 standard, Classification of Financial Instruments (CFI code) values. ISO 10962 is maintained by ANNA (Association of National Numbering Agencies) acting as Registration Authority. Byte 1: Future Outright or Future Spread: F = Futures Option Outright or Option Spread: O = Options Byte 2: Future Outright or Future Spread: F = Financial Futures C = Commodity Futures X = Unknown Option Outright or Option Spread: C = Call P = Put X = Unknown M = Other Byte 3: Future Outright or Future Spread: I = Indices C = Currencies D = Interest rate/notional debt. sec A = Agriculture M = Other Option Outright or Option Spread: A = American E = European X = Unknown Byte 4: Future Outright or Future Spread: X = Unknown Option Outright or Option Spread: F = Futures X = Unknown Byte 5: Future Outright or Future Spread:

Tag	FIX Name	Format	Valid Values	Description
				S = Standardized terms Option Outright or Option Spread: P = Physical Byte 6: Future Outright or Future Spread: X = Not applicable Option Outright or Option Spread: S = Standardized terms
462	UnderlyingProduct	Int (2)	2=Commodity/Agriculture 4=Currency 5=Equity 12=Other 14=Interest Rate 15=FX Cash 16=Energy 17=Metals	Indicates the high-level security complex.
827	ExpirationCycle	Int (1)	0 = Expire on Trading Session Close 2 = Expiration at given date	Indicates if the instrument expires at the trading session close, or at a specified last eligible trade date. Note that Last Eligible Trade Date is expressed using tag 865-EventType, tag 866-EventDate, and tag 1145-EventTime.
1147	UnitOfMeasureQty	Float (20)		Under development.
202	StrikePrice	Price (20)		Strike Price for an Option.
947	StrikeCurrency	Currency (3)		Currency in which the StrikePrice is denominated.
562	MinTradeVol	Qty (9)		The minimum trading volume for a security.
1140	MaxTradeVol	Qty (9)		The maximum trading volume for a security.
15	Currency	Currency (3)		Identifies currency used for price. Absence of this field is interpreted as the default for the security. It is recommended that systems provide the currency value whenever possible.
120	SettlCurrency	Currency (3)		Identifies currency used for settlement price.
1141	NoMdFeedTypes	Int (1)		Number of repeating FeedType entries.

Tag	FIX Name	Format	Valid Values	Description
Repeating Group				
→1022	MDFeedType	String (3)	GBX	Globex feed type.
→264	MarketDepth	Int (1)		Identifies the depth of book.
1142	MatchAlgorithm	String (1)	F = FIFO A = Allocation C = Currency Calendar T = Lead Market Maker with top S = Lead Market Maker without top X = LMM Pro Rata Y = LMM Pro Rata with top percentage, top min eligible and top max	Matching Algorithm – CME assigned values.
762	SecuritySubType	String (5)		Strategy type.
711	NoUnderlyings	NumInGroup (1)		Number of underlying legs that make up the security.
Repeating Group				
→311	UnderlyingSymbol	String (6)	[N/A]	Underlying security's Symbol. See tag 55-Symbol for description. When present, this is equal to [N/A].
→309	UnderlyingSecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 305-UnderlyingSecurityIDSource.
→305	UnderlyingSecurityIDSource	String (1)		Identifies source of tag 309-UnderlyingSecurityID value. This value is always 8 for CME and is required tag 309-UnderlyingSecurityID is specified.
1143	MaxPriceVariation	Price (20)		Differential value for price banding.
1144	ImpliedMarketIndicator	Int (1)	0 = Not Implied 3 = Implied In&Out	Indicates if instrument is implied or not. If the instrument is implied, the type of synthetic instrument is noted (Implied In & Out).

Tag	FIX Name	Format	Valid Values	Description
870	NbInstAttrib	NumInGroup (5)		Number of repeating InstrAttribType entries.
Repeating Group				
→871	InstAttribType	Int (2)	23 = Variable Tick Table 24 = Eligibility 25= MainFraction 26= Sub Fraction 27= Display Price Precision	Code to represent the type of instrument attribute.
→872	InstAttribValue	String (2)	For 871=23: Variable Tick Table Index Code – Refer to APPX for values. For 871=24: 1: Electronic Match Eligible 2: Order Cross Eligible 3: Block Trade Eligible 4: EFP Eligible 5: EBF Eligible 6: EFS Eligible 7: EFR Eligible 8: OTC Eligible 9: iLink Indicative Mass Quoting Eligible 10: Negsative Strike Eligible 11: Negative Price Outright Eligible 13: Volatility Quoted Option 14: RFQ Cross Eligible 16: Zero Price Outright Eligible For 871=25: Price Denominator For 871=26: Price Numerator	Attribute value appropriate to the InstrAttribType (87) field.

Tag	FIX Name	Format	Valid Values	Description
			Fraction For 871=27: Number of Decimals in Displayed Price	
200	MaturityMonthYear	month-year (6)		This field provides the actual calendar date for contract maturity - month and year (used for standardized futures and options). Format: YYYYMM (i.e. 200712). For strategies (i.e. spreads), this field will contain the earliest leg maturity.
969	MinPriceIncrement	Float (20)		Minimum price fluctuation for a security price. This is not sent for VTT eligible instruments.
1146	MinPriceIncrementAmount	Amt (20)		Under development.
9787	DisplayFactor	Float (20)		Multiplier to convert electronic prices sent over fix to display prices.
9850	MinCabPrice	Price (20)		Price to submit for cabinet orders.
555	NoLegs	NumInGroup (3)		Number of Instrument Leg repeating group instances.
Repeating Group				
→600	LegSymbol	String (6)	[N\A] = spread UDS = instrument group of leg	Multileg instrument's individual security's Symbol. See tag 55-Symbol for description. This tag is only sent with a spread.
→623	LegRatioQty	Float (20)		The ratio of quantity for this individual leg relative to the entire multileg security.
→624	LegSide	Char (1)	1 = Buy 2 = Sell	The side of this individual leg (multileg security).
→608	LegCFICode	String (6)		Multileg instrument's individual security's CFICode.
→764	LegSecuritySubType	String (5)		
→602	LegSecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 603-LegSecurityIDSource.
→603	LegSecurityIDSource	String (1)	8 = Exch Symb	Identifies source of tag 602-LegSecurityID value. This value is always 8 for CME and is required if tag 602-LegSecurityID is specified.
→556	LegCurrency	Currency (3)		Currency associated with a particular Leg's quantity
→610	LegMaturityMonthYear	month-year (6)		Multileg instrument's individual security's MaturityMonthYear. See tag 200-MaturityMonthYear for description.
→612	LegStrikePrice	Price (20)		Multileg instrument's individual security's StrikePrice. See tag 202-StrikePrice (202) field for description.
→942	LegStrikeCurrency	Currency (3)		Currency in which the strike price of an instrument leg of a multileg instrument is denominated.
→566	LegPrice	Price (20)		Price for a futures leg of a covered. See Price (44) field for description
→1017	LegOptionDelta	Float (20)		Option Delta. This is for futures leg of covered.

Security Status (35=f)

Tag	FIX Name	Format	Valid Values	Description
55	Symbol	String (6)		Globex instrument group.
48	SecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 22-SecurityIDSource.
22	SecurityIDSource	String (1)	8 = Exch Symb	Identifies source of tag 48-SecurityID value. This value is always 8 for CME and is required if tag 48- SecurityID is specified.
332	HighPx	Price (20)		Upper price threshold for the instrument. Orders submitted with prices above the upper limit will be rejected.
333	LowPx	Price (20)		Lower price threshold for the instrument. Orders submitted with prices below the lower limit will be rejected.
326	SecurityTradingStatus	Int (2)	2 = Trading Halt 5 = Price Indication 17 = Ready to trade (start of session) 18 = Not Available for trading (end of session) 20 = Unknown or Invalid 21 = Pre-Open 22 = Opening Rotation 24 = Pre-Cross 25 = Cross 26 = No-Cancel	Identifies the trading status applicable to the transaction.

Quote Request (35=R)

Tag	FIX Name	Format	Valid Values	Description
146	NoRelatedSym	NumInGroup (5)	1	Indicates the number of repeating symbols specified.
→55	Symbol	String (6)		Ticker symbol.
→38	OrderQty	Qty (9)		Quantity requested.
→54	Side	Char (1)	1 = Buy 2 = Sell	Side requested.
→60	TransactTime	UTCTimestamp (21)		Time of execution/order creation, expressed in UTC (Coordinated Universal Time, also known as "GMT")
→48	SecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 22-SecurityIDSource.
→22	SecurityIDSource	String (1)	8 = Exch Symb	Identifies source of tag 48-SecurityID value. This value is always 8 for CME and is required if tag 48- SecurityID is specified.
→537	QuoteType	Int (1)	0 = Indicative 1 = Tradable	Type of quote requested.
131	QuoteReqID	String (23)		Quote request ID defined by the exchange.

Market Data Request (35=V)

Tag	FIX Name	Format	Valid Values	Description
1180	ApplFeedID	String (50)		The channel ID from the XML Configuration File for which this request is done.
262	MDReqID	String (32)		Unique identifier for Market Data Request.
1182	ApplBeginSeqNo	SeqNum (9)		Message sequence number of first message in range to be re-sent. If the request is for a single message, ApplBeginSeqNo (tag 1182) and ApplEndSeqNo (tag 1183) are the same.
1183	ApplEndSeqNo	SeqNum (9)		Message sequence number of last message in range to be re-sent. If the request is for a single message, BeginSeqNo (tag 7) and EndSeqNo (tag 16) are the same. The maximum number of messages that can be requested is 2000.

Market Data Snapshot Full Refresh (35=W)

Body

Tag	FIX Name	Format	Valid Values	Description
83	RptSeq	Int (1)		Sequence number per Instrument update, which contains the same data as the corresponding RptSeq in the Market Data Incremental Refresh (tag 35-MsgType=X).
369	LastMsgSeqNumProcessed	SeqNum (9)		The last sequence number of real-time channel as of the time the snapshot was generated. This is used to synchronize the snapshot with the real-time feed.
911	TotNumReports	Int (9)		Total number or reports returned in response to a request.
1021	MDBookType	Int (1)	2 = Price Depth	Describes the type of book for which the feed is intended.
48	SecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 22-SecurityIDSource.
22	SecurityIDSource	String (1)	8 = Exch Symbol	Identifies source of tag 48-SecurityID value. This value is always 8 for CME and is required if tag 48- SecurityID is specified.
268	NoMDEntries	NumInGroup (5)		Number of FIX Market Data Snapshot Full Refresh Data Blocks in the Market Data Snapshot Full Refresh message.

FIX Market Data Snapshot Full Refresh Repeating Group (Data Block)

Tag	FIX Name	Format	Valid Values	Description
→269	MDEntryType	Char (1)	0 = Bid 1 = Offer 2 = Trade 7 = Trading Session High Price 8 = Trading Session Low Price N = Session High Bid O = Session Low Offer	Type Market Data entry.
→270	MDEntryPx	Price (20)		Price of the Market Data Entry.
→271	MDEntrySize	Qty (9)		Quantity or volume represented by the Market Data Entry.
→276	QuoteCondition	MultipleValueString 2 (1)	K = Implied C = Exchange Best	Space-delimited list of conditions describing a quote.
→277	TradeCondition	MultipleValueString 2 (1)	U = Exchange Last	Space-delimited list of conditions describing a trade. Omit tag 277 when specifying the last trade price.
→1023	MDPriceLevel	Int (1)		Position in the book.
→346	NumberOfOrders	Int (9)		Number of orders in the market.
→336	TradingSessionID	String (1)	0 = Pre-opening 1 = Opening Mode 2 = Continuous Trading Mode	Identifier for Trading Session.
→1020	TradeVolume	Qty (9)		Total traded volume since the beginning of the session. If this tag is not present, then there is no volume.
→274	TickDirection	Char (1)	0 = Plus Tick 2 = Minus Tick	Direction of the tick. If there is no value present, then there is no change.
→451	NetChgPrevDay	PriceOffset (20)		Net change from previous day’s closing price vs. last traded price.

Market Data Incremental Refresh (35=X)

Body

Tag	FIX Name	Format	Valid Values	Description
75	TradeDate	LocalMktDate (8)		Indicates date of trade referenced in this message in YYYYMMDD format. Absence of this field indicates current day (expressed in local time at place of trade).
268	NoMDEntries	NumInGroup (5)		Number of FIX Market Data Incremental Refresh Data Blocks in the Market Data Incremental Refresh message.

FIX Market Data Incremental Refresh Repeating Group (Data Block)

Tag	FIX Name	Format	Valid Values	Description
→279	MDUpdateAction	Char (1)	0 = New 1 = Change 2 = Delete 5 = Overlay	Type of Market Data update action.
→269	MDEntryType	Char (1)	0 = Bid 1 = Offer 2 = Trade 4 = Opening Price 5 = Closing Price 6 = Settlement Price 7 = Trading Session High Price 8 = Trading Session Low Price E = Simulated Sell F = Simulated Buy M = Prior N = Session High Bid O = Session Low Offer	Type of Market Data entry.
→286	OpenCloseSettleFlag	MultipleValueString (1)	4 = Entry From Prev Business Day 5 = Theoretical Price	Flag to indicate the type of entry (4 for settlement price and 5 for theoretical price)

Tag	FIX Name	Format	Valid Values	Description
→83	RptSeq	Int (1)		Sequence number per Instrument update.
→276	QuoteCondition	MultipleValueString2 (1)	K = Implied C = Exchange Best	Space-delimited list of conditions describing a quote.
→277	TradeCondition	MultipleValueString2 (1)	E=Opening Trade W = Ex-Pit Price 1 = Price calculated by Globex	Space-delimited list of conditions describing a trade. Tag 277 is not sent for a last trade price.
→1023	MDPriceLevel	Int (2)		Position in the book.
→273	MDEntryTime	UTCTimeOnly (12)		Time of Market Data Entry. Note – This value needs to be zero-padded from the left until there are a full 9 digits.
→271	MDEntrySize	Qty (12)		Quantity or volume represented by the Market Data Entry.
→270	MDEntryPx	Price (20)		Price of the Market Data Entry.
→346	NumberOfOrders	Int (7)		Number of orders in the market.
→48	SecurityID	String (12)		Unique instrument ID as qualified by the exchange per tag 22-SecurityIDSource.
→22	SecurityIDSource	String (1)	8 = Exch Symbol	Identifies source of tag 48-SecurityID value. This value is always 8 for CME and is required if tag 48- SecurityID is specified.
→336	TradingSessionID	String (1)	0 = Pre-opening 1 = Opening Mode 2 = Continuous Trading Mode	Identifier for Trading Session.
→274	TickDirection	Char (1)	0 = Plus Tick 2 = Minus Tick	Direction of the tick. If there is no value present, then there is no change.
→451	NetChgPrevDay	PriceOffset (20)		Net change from previous day's closing price vs. last traded price.
→1020	TradeVolume	Qty (12)		Total traded volume since the beginning of the session.
→1070	MDQuoteType	Int (1)	0 = Indicative	Identifies the type of quote.
→5797	AggressorSide	Char (1)	1 = Buy	Indicates which side is aggressor of the trade. If there is no value present, then there is

Tag	FIX Name	Format	Valid Values	Description
			2 = Sell	no aggressor.
➔5799	MatchEventIndicator	Char (1)	1 = Beginning of Globex event 2=End of Globex event	Indicates the beginning or the end of a Globex event. If there is no value present, then the message is not at the beginning or the end of a Globex event. **Note:** For this release, only 1 is a valid value. 2 will become a valid value in a future release.

Appendix

Variable Tick Table

The variable tick table is used primarily for options contracts to provide reflective ticks based on price fluctuations in the premium. As the price (P) moves across various ranges, the tick varies to provide appropriate trading ranges.

Variable Tick Table Index Code	**Current Price (P)**	**Tick Size**
01	P < -500	10
01	-500 ≤ P ≤ 500	5
01	P > 500	10
02	0 ≤ P ≤ 5	0.5
02	P > 5	1
03	0 ≤ P ≤ 10	1
03	P > 10	2
04	P < -500	25
04	-500 ≤ P ≤ 500	5
04	P > 500	25
05	Any	1
06	Any	*2*
07	Any	*1*
09	The 09 Variable Tick Index Code indicates that the spread is eligible to trade in 0.5 (half-tick) increments when any of the leg settlement prices are equal to or less than 5.0 full ticks.	
10	P < -300	25
10	-300 ≤ P ≤ 300	5
10	P > 300	25
11	P < -300	10
11	-300 ≤ P ≤ 300	5
11	P > 300	10
12	P < -5	0.50
12	-5 ≤ P ≤ 5	0.25
12	P > 5	0.50

Common Data Blocks - Market Data Incremental Refresh (tag 35-MsgType = X)

The following sections contain a list of tags found in the common data blocks for book updates or statistics.

Note – refer to the template for the correct order of tags.

Book Update Data Block - 5-Deep Book

A FIX message sent to update the top of book will update one side only. The tags normally sent for a book update data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 1023-MDPriceLevel
- tag 273-MDEntryTime
- tag 271-MDEntrySize
- tag 270-MDEntryPx
- tag 346-NumberOfOrders
- tag 48-SecurityID
- tag 22-SecurityIDSource
- tag 336-TradingSessionID

Book Update Data Block - 2-Deep Book

A FIX message sent to update the top of book will update one side only. The tags normally sent for a book update data block are:

Note: tag 346-NumberOfOrders is not included in this data block.

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 276-QuoteCondition
- tag 1023-MDPriceLevel
- tag 273-MDEntryTime

- tag 271-MDEntrySize
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource
- tag 336-TradingSessionID

Book Update Data Block - 1-Deep Book

A FIX message sent to update a 1-deep book updates one side only. The tags normally sent for a 1-deep book data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 1023-MDPriceLevel
- tag 273-MDEntryTime
- tag 271-MDEntrySize
- tag 270-MDEntryPx
- tag 346-NumberOfOrders
- tag48-SecurityID
- tag22-SecurityIDSource
- tag 336-TradingSessionID

Book Update Data Block - Indicative Prices

A FIX message sent to update the 1-deep book updates one side only. The tags normally sent for a 1-deep book data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 1070-MDQuoteType
- tag 1023-MDPriceLevel
- tag 273-MDEntryTime
- tag 271-MDEntrySize
- tag 270-MDEntryPx

- tag 346-NumberOfOrders
- tag48-SecurityID
- tag22-SecurityIDSource

Last Best Price

The tags normally sent for a last best price data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource
- tag 276-QuoteCondition

Note: Tag 277 – TradeCondition is **not** sent for a last best price data block.

Session High and Low Trade Price

The tags normally sent for a session high and low trade price data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource

Best High Bid and Best Low Ask

The tags normally sent for a best high bid and best low ask data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq

- tag 273-MDEntryTime
- tag 271-MDEntrySize
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource

Closing and Settlement Price

The tags normally sent for closing and settlement price data blocks are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource

Pre-Opening Statistics - Prior

The tags normally sent for a prior data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource
- tag 336-TradingSessionID
- tag 274-TickDirection
- tag 451-NetChgPrevDay

Pre-Opening Statistics - Opening

The tags normally sent for an opening data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource

Pre-Opening Statistics - Simulated Sell

The tags normally sent for a simulated sell data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 271-MDEntrySize
- tag 48-SecurityID
- tag 22-SecurityIDSource

Pre-Opening Statistics - Simulated Buy

The tags normally sent for a simulated buy data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 270-MDEntryPx
- tag 271-MDEntrySize
- tag 48-SecurityID
- tag 22-SecurityIDSource

Trade

The tags normally sent for a prior data block are:

- tag 279-MDUpdateAction
- tag 269-MDEntryType
- tag 83-RptSeq
- tag 273-MDEntryTime
- tag 271-MDEntrySize
- tag 270-MDEntryPx
- tag 48-SecurityID
- tag 22-SecurityIDSource
- tag 1020-TradeVolume
- tag 274-TickDirection
- tag 451-NetChgPrevDay
- tag 277-TradeCondition

Note: Tag 277 – TradeCondition is **not** sent for a last best price data block.

Revision History

Initial Release	Version	Last Update	Author	Description
3/16/07	1.0	N/A	LM	Initial Release
3/16/07	1.1	5/2/07	LM	Added lengths for all tags.
3/16/07	1.2	6/11/07	LM	Added the following message types: 35=W – Market Data Snapshot Full Refresh 35=A – Logon 35=5 – Logout 35=V – Market Data Request 35=Y – Market Data Request Reject 35=B – News Added a note to tag 996 regarding transposed number.
3/16/07	1.3	8/6/07	LM	▪ Added value 26 to tag 326-SecurityTradingStatus. ▪ Updated tag 871-InstAttribType and tag 872InstAttribValue. ▪ Added Appendix. ▪ Added value 2 to tag 1021-MDBookType. ▪ Modified tag 996-MinPriceIncrement to tag 969-MinPriceIncrement and removed note regarding this error. Updated tag 461-CFICode. ▪ Added tag 462-UnderlyingProduct. ▪ Replaced 35=A Logon with 35=A Logon (from customer to CME) and 35=A Logon (from CME to customer) ▪ Added tag 1180-ApplFeedID to 35=V Market Data Request ▪ Modified tag 7-BeginSeqNo to tag 1182-ApplBeginSeqNo in 35=V Market Data Request. Modified tag 16-EndSeqNo to tag 1183-ApplEndSeqNo in 35=V Market Data Request. ▪ Added tag 1180-ApplFeedID to 35=Y Market Data Request Reject. ▪ Added tag 120-SettlCurrency to 35=d Security Definition. ▪ Added tag 207-SecurityExchange to 35=d Security Definition. ▪ Added tag 9850-MinCabPrice to 35=d Security Definition. ▪ Replaced tag 1070-MDQuoteType with tag 537-QuoteType in 35=R Quote Request
3/16/07	1.4	9/14/07	LM	Added valid value 0 to tag 336-TradingSessionID.
3/16/07	1.5	10/31/07	LM	Modified description for tag 1147 – Under development. Modified description for tag 1180 – for 35=V Added tag 537 to repeating group.

3/16/07	1.6	2/1/08	CR/DJ	Rebrand with CME Group. Updated Variable Tick Table values. Updated tag 277 and 872 descriptions. Updated tag 969 and tag 1146 descriptions.
3/16/07	1.7	6/12/08	NU	Added tag 83-RptSeq to 35=W. Added value 'E' to tag 277 in 35=X. Added tag 9779-UserDefinedInstrument to 35=d. Added tag 1180-ApplID to 35=d. Modified description for tag 1146–Under development in 35=d
3/16/07	1.8	8/20/08	DT	Replaced 35=D with 35=d in TOC. Added "U" value to tag 277:TradeCondition for 35=W message and removed other values. Added tag 5797-AggressorSide to 35=X. Added tag 5799-MatchEventIndicator to 35=X. Removed tag 271-MDEntrySize from last best price data block.
3/16/07	1.9	10/10/2008	DT	Removed Market Data Request Reject (35=Y) message.
3/16/07	1.10	11/7/08	DT	Updated tag 55-Symbol description for Security Definition (35=d) message. Updated tag 1151-SecurityGroup description for Security Definition (35=d) message.