HISTORICAL FULL BOOK - DERIVATIVES MARKET (SOM) (CSV FORMAT)

Update History

No.	Issue Date	Details
1	2015-11-02	First Issue
1.1	2016-07-04	Data Enrichment - Section 4 – Revised as Null Value will also be found in Trade Amendment (356) message - Section 4 – Clarify field values of Price and Quantity in Trade Amendment (356) message for cancelled trades already “given up”
2	2017-01-16	Revised Edition with the following updates: - Sections 5 – Include a new type of information - Derivatives Market Alert (MC177_All_YYYYMMDD) in the file
3	2018-04-16	Data Enrichment - Section 1 – Add new fields “CommodityID” and “TickStepSize” - Section 1 – Add field “PriceQuotationFactor” for Series (Extended) (304) message - Section 1 – Add a filler

The Historical Full Book - Derivatives Market (SOM) (CSV Format) includes 5 types of information – (1) Derivatives Reference Data, (2) Derivatives Status, (3) Derivatives Full Order Book, (4) Derivatives Block Trade and Trade Amendment and (5) Derivatives Market Alert data. Please refer to the below sub-sections for the details of the 5 types of information.

The following table lists out the data files to be found in each issue:

File Name	Contents
SOM Products	
MC102_All_YYYYMMDD.csv	Derivatives Static Reference (Instrument Group 1)
MC202_All_YYYYMMDD.csv	Derivatives Static Reference (Instrument Group 2)
MC152_All_YYYYMMDD.csv	Derivatives Static Reference (All instruments, additional instrument static information to above)
MC162_All_YYYYMMDD.csv	Derivatives Status
MC122_All_YYYYMMDD.csv	Derivatives Full Order Book file (Instrument Group 1)
MC222_All_YYYYMMDD.csv	Derivatives Full Order Book file (Instrument Group 2)
MC168_All_YYYYMMDD.csv	Derivatives Block Trades and Trade Amendments
MC177_All_YYYYMMDD.csv	Derivatives Market Alert

1) YYYYMMDD is the date of file

2) If there is no record in the file, a dummy file with zero-length size will be provided.

1. Derivatives Reference

Filename :

- MC152_All_yyyymmdd.csv

		Source : OMD			
Data Field	Format	Channel	Message	Element Name	Remarks
Date / Time	YYYYMMDD HHMMSSTTT	152	Packet Header	SendTime Convert from UTC to HKT	
Message Type	Integer Variable length	152	301 Commodity 302 Class 304 Series (Extended	MsgType	301 - Commodity 302 - Class 304 - Series (Extended)
Commodity Code	Integer Variable length	152	301 Commodity 302 Class 304 Series (Extended)	CommodityCode	
Decimal in Underlying Price	Integer Variable length	152	301 Commodity	DecimalInUnderlying Price	Empty for message type 302, 304
ISIN Code	Character Variable length	152	301 Commodity 304 Series (Extended)	ISINCode	Empty for message type 302
Trading Currency	Character Variable length	152	301 Commodity 302 Class	BaseCurrency	See Currency Values in section 3.1.2 of OMD-D Interface Specification for full details. Empty for message type 304
Underlying Price Unit	Integer Variable length	152	301 Commodity	UnderlyingPriceUnit	1 - Price 2 - Yield 3 - Points 4 - Yield Diff 5 - IMM Index

					6 - Basis Points 7 - Inverted Yield 8 - Percentage of Nominal 9 - Dirty Price Empty for message type 302, 304
Commodity Name	Character Variable length	152	301 Commodity	CommodityName	Empty for message type 302, 304
Nominal Value	Numeric Variable length	152	301 Commodity	NominalValue	Empty for message type 302, 304
Underlying Code	Numeric Variable length	152	301 Commodity	UnderlyingCode	Empty for message type 302, 304
Underlying Type	Integer Variable length	152	301 Commodity	UnderlyingType	1 - Stock 2 - Currency 3 - Interest rate 4 - Energy 5 - Soft and Agrics 6 - Metal 7 -Stock Index 8 -Currency Index 9 - Interest Rate Index 10 - Energy Index 11 - Softs and Agrics Index 12 - Metal Index Empty for message type 302, 304
Effective Tomorrow	Integer Variable length	152	301 Commodity 302 Class 304 Series (Extended)	EffectiveTomorrow	0 - False 1 - True
Country Identifier	Integer Variable length	152	302 Class 304 Series (Extended)	Country	Empty for message type 301
Market Code	Integer Variable length	152	302 Class 304 Series (Extended)	Market	See section 8.4 of OMD-D Interface Specification for a list of possible values Empty for message type 301
Instrument Group	Integer Variable length	152	302 Class 304 Series (Extended)	InstrumentGroup	See section 8.3 of OMD-D Interface Specification for a list of possible values Empty for message type 301
Modifier	Integer Variable length	152	302 Class 304 Series (Extended)	Modifier	Empty for message type 301
Price Quotation Factor	Integer Variable length	152	302 Class 304 Series (Extended)	PriceQuotationFactor	Empty for message type 301
Contract Size	Integer Variable length	152	302 Class 304 Series (Extended)	ContractSize	Empty for message type 301
Decimal In Strike Price	Integer Variable length	152	302 Class	DecimalInStrikePrice	Empty for message type 301, 304
Decimal In Contract Size	Integer Variable length	152	302 Class	DecimalInContractSize	Empty for message type 301, 304

Decimal In Premium	Integer Variable length	152	302 Class	DecimalInPremium	Empty for message type 301, 304
Ranking Type	Integer Variable length	152	302 Class	RankingType	1 - Price, Time 2 - Inverted Price, Time 3 - Price, Traders before MM, Time 4 - Inverted Price, Traders before MM, Time 5 - Price, MM before Traders, Time 6 - Inverted Price, MM before Traders, Time 7 - Price, Baits before Normal Orders, Time 8 - Inverted Price, Baits before Normal Orders, Time 11 - Price, Own Orders, Time 12 - Inverted Price, Own Orders, Time Empty for message type 301, 304
Tradable	Integer Variable length	152	302 Class	Tradable	1 - Yes 2 – No Empty for message type 301, 304
Premium Unit for Price	Integer Variable length	152	302 Class	PremiumUnit4Price	1 - Price 2 - Yield 3 - Points 4 - Yield Diff 5 - IMM Index 6 - Basis Points 7 - Inverted Yield 8 - Percentage of Nominal 9 - Dirty Price Empty for message type 301, 304
Instrument Class ID	Character Variable length	152	302 Class	InstrumentClassID	Empty for message type 301, 304
Instrument Class Name	Character Variable length	152	302 Class	InstrumentClassName	Empty for message type 301, 304
Represented as Fractions	Character Variable length	152	302 Class	IsFractions	Y - Yes N – No Empty for message type 301, 304
Settlement Currency ID	Character Variable length	152	302 Class	SettlementCurrencyID	See Currency Values in section 3.1.2 of OMD-D Interface Specification for full details. Empty for message type 301, 304
Order Book ID	Integer Variable length	152	304 Series (Extended)	OrderBookID	0 - If Not Available Empty for message type 301, 302
Symbol	Character Variable length	152	304 Series (Extended)	Symbol	Empty for message type 301, 302
Expiration Date	Integer Variable length	152	304 Series (Extended)	ExpirationDate	Empty for message type 301, 302

Strike Price	Numeric Variable length	152	304 Series (Extended)	StrikePrice	Decimal places determined from Class Definition field "DecimalInStrikePrice" Not applicable for Combo Series. Empty for message type 301, 302
Series Status	Integer Variable length	152	304 Series (Extended)	SeriesStatus	0 - If Not Available 1 - Active (both expired and not expired) 2 - Suspended (temporarily stopped) 3 - Issued 4 - Delisted Empty for message type 301, 302
Effective Expiration Date	Character Variable length	152	304 Series (Extended)	EffectiveExpDate	YYYYMMDD " " 8 blank spaces if not available Empty for message type 301, 302
Last trading date/time of the Series	YYYYMMDD HHMMSS	152	304 Series (Extended)	DateTimeLastTrading	Convert from UTC to HKT Empty for message type 301, 302
Commodity ID	Character Variable length	151	301 Commodity	CommodityID	Empty for message type 302, 304
Tick Step Size	Integer Variable length	151	302 Class	TickStepSize	Empty for message type 301,304
Filler	Character Variable length	151	304 Series (Extended)	Filler	Empty for message type 301, 302

Filename :
- MC102_All_yyyymmdd.csv
- MC202_All_yyyymmdd.csv

		Source : OMD			
Data Field	Format	Channel	Message	Element Name	Remarks
Date / Time	YYYYMMDD HHMMSSTTT	102,202	Packet Header	SendTime Convert from UTC to HKT	
Message Type	Integer Variable length	102,202	303 Series (Base) 305 Combination	MsgType	303 – Series (Base) 305 - Combination
Order Book ID	Integer Variable length	102,202	303 Series (Base) 305 Combinations	OrderbookID	
Symbol	Character Variable length	102,202	303 Series (Base)	Symbol	Empty for message type 305
Financial Product	Integer Variable length	102,202	303 Series (Base)	FinancialProduct	1 - Option 2 - Forward 3 - Future 4 - FRA 5 - Cash

					6 - Payment 7 - Exchange Rate 8 - Interest Rate Swap 9 - REPO 10 - Synthetic Box Leg/Reference 11 - Standard Combination 12 - Guarantee 13 - OTC General 14 - Equity Warrant 15 - Security Lending Empty for message type 305
Number Of Decimals Price	Integer Variable length	102,202	303 Series (Base)	NumberOfDecimals Price	Empty for message type 305
Number Of Legs	Integer Variable length	102,202	303 Series (Base)	NumberOfLegs	Empty for message type 305
Strike Price	Numeric Variable length	102,202	303 Series (Base)	StrikePrice	Decimal places determined from Class Definition (302) field "DecimalsInStrikePrice". Not applicable for Combo Series. Empty for message type 305
Expiration Date	Character Variable length	102,202	303 Series (Base)	ExpirationDate	YYYYMMDD Empty for message type 305
Filler	Integer Variable length	102,202	303 Series (Base)	Filler	Empty for message type 305
Put Or Call Type	Integer Variable length	102,202	303 Series (Base)	PutOrCall	0 - Undefined 1 - Call 2 - Put Empty for message type 305
Order Book ID of the leg	Integer Variable length	102,202	305 Combination	LegOrderbookID	Empty for message type 303
Leg Side	Character Variable length	102,202	305 Combination	LegSide	B - As Defined C – Opposite Empty for message type 303
Leg Ratio	Integer Variable length	102,202	305 Combination	LegRatio	Empty for message type 303

2. Derivatives Status

Filename :
- MC162_All_yyyymmdd.csv

		Source : OMD			
Data Field	Format	Channel	Message	Element Name	Remarks
Date / Time	YYYYMMDD HHMMSSTTT	162	Packet Header	SendTime Convert from UTC to HKT	
Message Type	Integer Variable length	162	320 Market Status 321 Series Status	MsgType	320 - Market Status 321 - Series Status

			322 Commodity Status		322 - Commodity Status
State Level	Integer Variable length	162	320 Market Status	StateLevel	1 - Market 2 - Instrument Type 3 - Instrument Class 4 - Instrument Series 5 - Underlying 99 - End of Business Day Empty for message type 321, 322
Market Code	Integer Variable length	162	320 Market Status	Market	See section 8.4 of OMD-D Interface Specification for a list of possible values 0 - If Not Available Empty for message type 321, 322
Instrument Group	Integer Variable length	162	320 Market Status	Instrument	See section 8.3 of OMD-D Interface Specification for a list of possible values 0 - If Not Available Empty for message type 321, 322
Order book ID	Integer Variable length	162	320 Market Status 321 Series Status	OrderbookID	0 - If Not Available Empty for message type 322
Commodity Code	Integer Variable length	162	320 Market Status 322 Commodity Status	CommodityCode	0 - If Not Available Empty for message type 321
Local Start Date	Character Variable length	162	320 Market Status	ActualStartDate	YYYYMMDD Empty for message type 321, 322
Local Start Time	Character Variable length	162	320 Market Status	ActualStartTime	HHMMSS Empty for message type 321, 322
Planned Start Date	Character Variable length	162	320 Market Status	PlannedStartDate	YYYYMMDD Empty for message type 321, 322
Planned Start Time	Character Variable length	162	320 Market Status	PlannedStartTime	HHMMSS Empty for message type 321, 322
Seconds to the next state change	Integer Variable length	162	320 Market Status	SecondsToStateChange	0 - If Not Available Empty for message type 321, 322
State Type	Integer Variable length	162	320 Market Status	State	See full list of states within section 8.1 of OMD-D Interface Specification If StateLevel is 4 0 End of the Current State If StateLevel is 1, 2 or 3 0 If Not Available Empty for message type 321, 322
Priority of the State	Integer Variable length	162	320 Market Status	Priority	0 - If Not Available Empty for message type 321, 322

Series Suspended	Character Variable length	162	321 Series Status 322 Commodity Status	Suspended	Y - Yes N - No Empty for message type 320

3. Derivatives Full Order Book

Filename :
- MC122_All_yyyymmdd.csv
- MC222_All_yyyymmdd.csv

		Source : OMD			
Data Field	Format	Channel	Message	Element Name	Remarks
Date / Time	YYYYMMDD HHMMSSTTT	122,222	Packet Header	SendTime Convert from UTC to HKT	
Message Type	Integer Variable length	122,222	330 Add Order 331 Modify Order 332 Delete Order 335 Order Book Clear 350 Trade 364 Calculated Opening Price	MsgType	330 - Add Order 331 - Modify Order 332 - Delete Order 335 - Order Book Clear 350 - Trade 364 - Calculated Opening Price
Order Book ID	Integer Variable length	122,222	330 Add Order 331 Modify Order 332 Delete Order 335 Order Book Clear 350 Trade 364 Calculated Opening Price	OrderbookID	
Order ID	Integer Variable length	122,222	330 Add Order 331 Modify Order 332 Delete Order 350 Trade	OrderID	Empty for message type 335,364
Price	Integer Variable length	122,222	330 Add Order 331 Modify Order 350 Trade	Price	Empty for message type 332,335,364
Quantity	Integer Variable length	122,222	330 Add Order 331 Modify Order 350 Trade	Quantity	Empty for message type 332,335,364
Side	Integer Variable length	122,222	330 Add Order 331 Modify Order 332 Delete Order	Side	0 - Bid 1 - Offer Empty for message type 335,350,364
Lot Type	Integer Variable length	122,222	330 Add Order	LotType	Lot Type. Values: 0 - Undefined* 1 - Odd Lot 2 - Round Lot 3 - Block Lot 4 - All or None Lot

					Empty for message type 331,332,335,350 364
Order Type	Integer Variable length Bitmap	122,222	330 Add Order 331 Modify Order	OrderType	Additional order attributes. Values: 0 - Not applicable 1 - Force 2 - Short Sell f 4 - Market Bid 8 - Price Stabilization 16 - Override Crossing 32 - Undisclosed 1024 - Fill-and-kill immediately 2048 - Firm color disabled 4096 - Convert to aggressive (if locked market) 8192 - Bait/implied order Empty for message type 332,335,350, 364
Order Book Position	Integer Variable length	122,222	330 Add Order 331 Modify Order	OrderBookPosition	Empty for message type 332, 335, 350, 364
Match ID	Integer Variable length	122,222	350 Trade	TradeID	Empty for message type 330, 331, 332, 335, 364
Combo Group ID	Integer Variable length	122,222	350 Trade	ComboGroupID	Empty for message type 330, 331, 332, 335, 364
Side of Order Matched	Integer Variable length	122,222	350 Trade	Side	0 - Not Available 1 - Not Defined 2 - Buy Order 3- Sell Order Empty for message type 330, 331, 332, 335, 364
Deal Type	Integer Variable length Bitmap	122,222	350 Trade	DealType	0 - None 1 - Printable 2 - Occurred at Cross 4 - Reported Trade Empty for message type 330, 331, 332, 335, 364
Trade Condition	Integer Variable length Bitmap	122,222	350 Trade	TradeCondition	0 - None 1 - Late Trade 2 - Internal Trade / Crossing 8 - Buy Write 16 - Off Market Empty for message type 330, 331, 332, 335, 364
Deal Info	Integer Variable length Bitmap	122,222	350 Trade	DealInfo	0 - None 1 - Reported Trade Empty for message type 330, 331, 332, 335, 364
Trade Time	YYYYMMDD HHMMSSTTT	122,222	350 Trade	TradeTime	Convert from UTC to HKT Empty for message type 330, 331, 332, 335, 364

Calculated Opening Price (COP)	Integer Variable length	122,222	364 Calculated Opening Price	CalculatedOpeningPrice	Decimal places determined from Series Definition Base field 'NumberOfDecimalsPrice' Empty for message type 330, 331, 332, 335, 350
COP Quantity	Integer Variable length	122,222	364 Calculated Opening Price	Quantity	Empty for message type 330, 331, 332, 335, 350

4. Block Trade and Trade Amendment

Filename :
- MC168_All_yyyymmdd.csv

		Source : OMD			
Data Field	Format	Channel	Message	Element Name	Remarks
Date / Time	YYYYMMDD HHMMSSTTT	168	Packet Header	SendTime Convert from UTC to HKT	
Message Type	Integer Variable length	168	350 Trade 356 Trade Amendment	MsgType	350 - Trade 356 - Trade Amendment
Order Book ID	Integer Variable length	168	350 Trade	OrderbookID	Empty for message type 356
Order ID	Integer Variable length	168	350 Trade	OrderID	Empty for message type 356
Traded Price	Integer Variable length	168	350 Trade 356 Trade Amendment	Price	"NULL" means not available
Match ID	Integer Variable length	168	350 Trade 356 Trade Amendment	TradeID	
Combo Group ID	Integer Variable length	168	350 Trade 356 Trade Amendment	ComboGroupID	
Side of Order Matched	Integer Variable length	168	350 Trade	Side	0 - Not Available 1 - Not Defined 2 - Buy Order 3 - Sell Order Empty for message type 356
Deal Type	Integer Variable length Bitmap	168	350 Trade	DealType	0 - None 1 - Printable 2 - Occurred at Cross 4 - Reported Trade Empty for message type 356
Trade Condition	Integer Variable length Bitmap	168	350 Trade	TradeCondition	0 - None 1 - Late Trade 2 - Internal Trade / Crossing 8 - Buy Write 16 - Off Market

					Empty for message type 356
Deal Info	Integer Variable length Bitmap	168	350 Trade	DealInfo	0 - None 1 - Reported Trade Empty for message type 356
Quantity	Integer Variable length	168	350 Trade 356 Trade Amendment	Quantity	‘’0” means not available if Price is “NULL”
Trade Time	YYYYMMDD HHMMSSTTT	168	350 Trade 356 Trade Amendment	TradeTime	Convert from UTC to HKT
Trade State	Integer Variable length	168	356 Trade Amendment	TradeState	1 - Deleted (with given up trade). The trade has been deleted. 2 - Rectified. The trade has been rectified. 3 - Deleted. The trade has been deleted. Empty for message type 350

5. Derivatives Market Alert

Filename :

- MC177_All_yyyymmdd.csv

		Source : OMD			
Data Field	Format	Channel	Message	Element Name	Remarks
Date / Time	YYYYMMDD HHMMSSTTT	177	Packet Header	SendTime Convert from UTC to HKT	
Message Type	Integer Variable length	177	323 Market Alert	MsgType	
Reference ID for this alert	Integer Variable length	177	323 Market Alert	AlertID	
Source ID	Integer Variable length	177	323 Market Alert	Source	
Header	Character Variable length	177	323 Market Alert	Header	Converted to UNICODE
Last Fragment	X(1)	177	323 Market Alert	LastFragment	
Information Type	Integer Variable length	177	323 Market Alert	InfoType	
Priority	Integer Variable length	177	323 Market Alert	Priority	
No of Line	Integer Variable length	177	323 Market Alert	NoLines	
Content - Line 1	Character Variable length	177	323 Market Alert	NoLines	Converted to UNICODE
Content - Line 2	Character Variable length	177	323 Market Alert	NoLines	Converted to UNICODE

Content - Line 3	Character Variable length	177	323 Market Alert	NoLines	Converted to UNICODE