# HISTORICAL FULL BOOK (SECURITIES MARKET) (CSV FORMAT)

## Update History

| No. | Issue Date | Details |
|---|---|---|
| 1 | 2016-07-25 | First Issue |
| 2 | 2018-01-22 | Revised Edition with the following updates, with effect from the issue of 05 February 2018:<br>• Section Overview<br>- Update content description for files<br>- Remove irrelevant descriptions of this product<br>• Section 2<br>- Remove Security Status (21) message<br>- Rename section name<br>• Section 3<br>- Add Security Status (21) message & fillers |

The Historical Full Book includes 4 types of information – (1) Securities Reference data, (2) Trading Session Status data, (3) Securities Full Order Book data and (4) Securities Market Odd Lot Order data. Please refer to the below sub-sections for the details of the 4 types of information.

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

| File Name | Contents |
|---|---|
| MC01_AllFB_YYYYMMDD.csv | Securities Reference |
| MC02_AllFB_YYYYMMDD.csv | Trading Session Status |
| MC30_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #1 |
| MC31_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #2 |
| MC32_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #3 |
| MC33_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #4 |
| MC34_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #5 |
| MC35_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #6 |
| MC36_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #7 |
| MC37_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #8 |
| MC38_AllFB_YYYYMMDD.csv | Securities Full Order Book file for Stock group #9 |
| MC70_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #1 |
| MC71_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #2 |
| MC72_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #3 |
| MC73_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #4 |
| MC74_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #5 |
| MC75_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #6 |
| MC76_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #7 |
| MC77_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #8 |
| MC78_AllFB_YYYYMMDD.csv | Securities Market Odd Lot Order file for Stock group #9 |

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. Securities Reference

Filename :

- MC01_AllFB_yyyymmdd.csv

| | | Source: OMD | | | |
|---|---|---|---|---|---|
| Data Field | Format | Channel | Message | Element Name | Remarks |
| Date / Time | YYYYMMDD HHMMSSTTT | 1 | Packet Header | SendTime<br>Convert from UTC to HKT | |
| Message Type | Integer<br>Variable length | 1 | 10 Market Definition<br>11 Security Definition<br>13 Liquidity Provider<br>14 Currency Rate | MsgType | |
| Security Code | Integer<br>Variable length | 1 | 11 Security Definition<br>13 Liquidity Provider | SecurityCode | Empty for message type 10, 14 |
| Market Code | Character<br>Variable length | 1 | 10 Market Definition<br>11 Security Definition | MarketCode | Empty for message type 13, 14 |

| | | | | | |
|---|---|---|---|---|---|
| Market Name | Character Variable length | 1 | 10 Market Definition | MarketName | Empty for message type 11, 13, 14 |
| Currency Code | Character Variable length | 1 | 10 Market Definition<br>11 Security Definition<br>14 Currency Rate | Currency Code | Empty for message type 13 |
| Number Of Securities | Integer Variable length | 1 | 10 Market Definition | NumberOfSecurities | Empty for message type 11, 13, 14 |
| ISIN Code | Character Variable length | 1 | 11 Security Definition | ISINCode | Empty for message type 10, 13, 14 |
| Instrument Type | Character Variable length | 1 | 11 Security Definition | InstrumentType | Empty for message type 10, 13, 14 |
| Spread Table Code | Character Variable length | 1 | 11 Security Definition | SpreadTableCode | Empty for message type 10, 13, 14 |
| Security Short Name | Characters Variable length | 1 | 11 Security Definition | SecurityShortName | Empty for message type 10, 13, 14 |
| Security Name (GCCS) | Character Variable length | 1 | 11 Security Definition | SecurityNameGCCS | Convert to Unicode<br>Empty for message type 10, 13, 14 |
| Security Name (GB) | Character Variable length | 1 | 11 Security Definition | SecurityNameGB | Convert to Unicode<br>Empty for message type 10, 13, 14 |
| Lot Size | Integer Variable length | 1 | 11 Security Definition | LotSize | Empty for message type 10, 13, 14 |
| Previous Closing Price | Numeric Variable length | 1 | 11 Security Definition | PreviousClosingPrice | Empty for message type 10, 13, 14 |
| VCM Flag | X(1) | 1 | 11 Security Definition | VCM Flag | Empty for message type 10, 13, 14<br>Empty before the effective of CAS & VCM |
| Short Sell Flag | X(1) | 1 | 11 Security Definition | ShortSellFlag | Empty for message type 10, 13, 14 |
| CAS Flag | X(1) | 1 | 11 Security Definition | CAS Flag | Empty for message type 10, 13, 14<br>Empty before the effective of CAS & VCM |
| CCASS Flag | X(1) | 1 | 11 Security Definition | CCASSFlag | Empty for message type 10, 13, 14 |
| Dummy Security Flag | X(1) | 1 | 11 Security Definition | DummySecurityFlag | Empty for message type 10, 13, 14 |
| Test Security Flag | X(1) | 1 | 11 Security Definition | TestSecurityFlag | Empty for message type 10, 13, 14 |
| Stamp Duty Flag | X(1) | 1 | 11 Security Definition | StampDutyFlag | Empty for message type 10, 13, 14 |
| Listing Date | Integer Variable length | 1 | 11 Security Definition | ListingDate | Empty for message type 10, 13, 14 |
| Delisting Date | Integer Variable length | 1 | 11 Security Definition | DelistingDate | Empty for message type 10, 13, 14 |
| Free Text | Character Variable length | 1 | 11 Security Definition | FreeText | Empty for message type 10, 13, 14 |
| Bonds Specific Data | | | | | |
| EFN Flag | X(1) | 1 | 11 Security Definition | EFNFlag | Empty for message type 10, 13, 14 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Accrued Interest | Numeric Variable length | 1 | 11 | Security Definition | AccruedInterest | Empty for message type 10, 13, 14 |
| Coupon Rate | Numeric Variable length | 1 | 11 | Security Definition | CouponRate | Empty for message type 10, 13, 14 |
| Warrants, Basket Warrants and Structured Product Specific Data | | | | | | |
| Conversion Ratio | Numeric Variable length | 1 | 11 | Security Definition | ConversionRatio | Empty for message type 10, 13, 14 |
| Strike Price | Numeric Variable length | 1 | 11 | Security Definition | StrikePrice | Empty for message type 10, 13, 14 |
| Maturity Date | Integer Variable length | 1 | 11 | Security Definition | MaturityDate | Empty for message type 10, 13, 14 |
| Call Put Flag | X(1) | 1 | 11 | Security Definition | CallPutFlag | Empty for message type 10, 13, 14 |
| Style | X(1) | 1 | 11 | Security Definition | Style | Empty for message type 10, 13, 14 |
| No of Underlying Securities | Integer Variable length | 1 | 11 | Security Definition | NoUnderlyingSecurities | Empty for message type 10, 13, 14 |
| Underlying Security Code | Integer Variable length | 1 | 11 | Security Definition | UnderlyingSecurityCode | Empty for message type 10, 13, 14 |
| Underlying Security Weight | Integer Variable length | 1 | 11 | Security Definition | UnderlyingSecurityWeight | Empty for message type 10, 13, 14 |
| Currency Factor Conversion | Integer Variable length | 1 | 14 | Currency Rate | CurrencyFactor | Empty for message type 10, 11, 13 |
| Currency Rate | Integer Variable length | 1 | 14 | Currency Rate | CurrencyRate | Empty for message type 10, 11, 13 |
| Number of Liquidity Providers | Integer Variable length | 1 | 13 | Liquidity Provider | NoLiquidityProviders | Empty for message type 10, 11, 14 |
| Broker number of the Liquidity Providers | Integer Variable length | 1 | 13 | Liquidity Provider | LPBrokerNumber | Empty for message type 10, 11, 14 |

## 2. Trading Session Status

Filename:

- MC02_AllFB_yyyymmdd.csv

| | | Source: OMD | | | | |
|---|---|---|---|---|---|---|
| Data Field | Format | Channel | Message | | Element Name | Remarks |
| Date / Time | YYYYMMDD HHMMSSTTT | 2 | | Packet Header | SendTime Convert from UTC to HKT | |
| Message Type | Integer Variable length | 2 | 20 | Trading Session Status | MsgType | |
| Market Code | Character Variable length | 2 | 20 | Trading Session Status | MarketCode | |
| Trading Session ID | Integer Variable length | 2 | 20 | Trading Session Status | TradingSessionID | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Trading Session Sub-identifier | Integer Variable length | 2 | 20 | Trading Session Status | TradingSessionSubID | |
| Trading Session Status | Integer Variable length | 2 | 20 | Trading Session Status | TradingSesStatus | |
| Trading Session Control Flag | X(1) | 2 | 20 | Trading Session Status | TradingSesControlFlag | |
| Start Date Time | YYYYMMDD HHMMSSTTT | 2 | 20 | Trading Session Status | StartDateTime | |
| End Date Time | YYYYMMDD HHMMSSTTT | 2 | 20 | Trading Session Status | EndDateTime | |
| Filler | | 2 | | | | Empty for message type 20 |
| Filler | | 2 | | | | Empty for message type 20 |

## 3. Securities Full Order Book

Filename :

- MC30_AllFB_yyyymmdd.csv
- MC31_AllFB_yyyymmdd.csv
- MC32_AllFB_yyyymmdd.csv
- MC33_AllFB_yyyymmdd.csv
- MC34_AllFB_yyyymmdd.csv
- MC35_AllFB_yyyymmdd.csv
- MC36_AllFB_yyyymmdd.csv
- MC37_AllFB_yyyymmdd.csv
- MC38_AllFB_yyyymmdd.csv

| | | Source : OMD | | | |
|---|---|---|---|---|---|
| Data Field | Format | Channel | Message | Element Name | Remarks |
| Date / Time | YYYYMMDD HHMMSSTTT | 30-38 | Packet Header | SendTime Convert from UTC to HKT | |
| Message Type | Integer Variable length | 30-38 | 50 Trade<br>51 Trade Cancel<br>30 Add Order<br>31 Modify Order<br>32 Delete Order<br>41 Indicative Equilibrium Price<br>23 VCM Trigger<br>43 Reference Price<br>56 Order Imbalance<br>21 Security Status | MsgType | |
| Security Code | Integer Variable length | 30-38 | 50 Trade<br>51 Trade Cancel<br>30 Add Order<br>31 Modify Order<br>32 Delete Order<br>41 Indicative Equilibrium Price<br>23 VCM Trigger | SecurityCode | |

| | | | | | |
|---|---|---|---|---|---|
| | | | 43 Reference Price<br>56 Order Imbalance<br>21 Security Status | | |
| Trade ID | Integer<br>Variable length | 30-38 | 50 Trade<br>51 Trade Cancel | TradeID | Empty for message type 30,31,32,41,23,43,56,21 |
| Order ID | Integer<br>Variable length | 30-38 | 30 Add Order<br>31 Modify Order<br>32 Delete Order | OrderId | Empty for message type 50,51,41,23,43,56,21 |
| Price | Integer<br>Variable length | 30-38 | 50 Trade<br>30 Add Order<br>41 Indicative Equilibrium Price | Price | Empty for message type 51,31,32,23,43,56,21 |
| Quantity | Integer<br>Variable length | 30-38 | 50 Trade<br>30 Add Order<br>31 Modify Order | Quantity | Empty for message type 51,32.41,23,43,56,21 |
| Trade Type | Integer<br>Variable length | 30-38 | 50 Trade | TrdType | Empty for message type 51,30,31,32.41,23,43,56,21 |
| Trade Time | YYYYMMDD HHMMSS | 30-38 | 50 Trade | TradeTime | Empty for message type 51,30,31,32.41,23,43,56,21<br><br>Convert from UTC to HKT |
| Side | Integer<br>Variable length | 30-38 | 30 Add Order<br>31 Modify Order<br>32 Delete Order | Side | Empty for message type 50,51,41,23,43,56,21 |
| Order Type | Integer<br>Variable length<br>Bitmap | 30-38 | 30 Add Order | OrderType | Empty for message type 50,51,31,32,41,23,43,56,21 |
| Order Book Position | Integer<br>Variable length | 30-38 | 30 Add Order<br>31 Modify Order | OrderBookPosition | Empty for message type 50,51,32,41,23,43,56,21 |
| Aggregated number of shares | Integer<br>Variable length | 30-38 | 41 Indicative Equilibrium Price | AggregateQuantity | Empty for message type 50,51,30,31,32,23,43,56,21 |
| Cooling off period Start Time | YYYYMMDD HHMMSS | 30-38 | 23 VCM Trigger | CoolingOffStartTime | Empty for message type 50,51,30,31,32,41,43,56,21 |
| Cooling off period End Time | YYYYMMDD HHMMSS | 30-38 | 23 VCM Trigger | CoolingOffEndTime | Empty for message type 50,51,30,31,32,41,43,56,21 |
| VCM Reference Price | Integer<br>Variable length | 30-38 | 23 VCM Trigger | VCMReferencePrice | Empty for message type 50,51,30,31,32,41,43,56,21 |
| VCM Lower Price | Integer<br>Variable length | 30-38 | 23 VCM Trigger | VCMLowerPrice | Empty for message type 50,51,30,31,32,41,43,56,21 |
| VCM Upper Price | Integer<br>Variable length | 30-38 | 23 VCM Trigger | VCMUpperPrice | Empty for message type 50,51,30,31,32,41,43,56,21 |
| Reference Price | Integer<br>Variable length | 30-38 | 43 Reference Price | ReferencePrice | Empty for message type 50,51,30,31,32,41,23,56,21 |
| Lower Price | Integer<br>Variable length | 30-38 | 43 Reference Price | LowerPrice | Empty for message type 50,51,30,31,32,41,23,56,21 |
| Upper Price | Integer<br>Variable length | 30-38 | 43 Reference Price | UpperPrice | Empty for message type 50,51,30,31,32,41,23,56,21 |
| Order Imbalance Direction | X(1) | 30-38 | 56 Order Imbalance | OrderImbalanceDirection | Empty for message type 50,51,30,31,32,41,23,43,21 |

| | | | | | |
|---|---|---|---|---|---|
| Order Imbalance Quantity | Integer Variable length | 30-38 | 56 Order Imbalance | OrderImbalanceQuantity | Empty for message type 50,51,30,31,32,41,23,43,21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Suspension Indicator | Integer Variable length | 30-38 | 21 Security Status | SuspensionIndicator | Empty for message type 50,51,30,31,32,41,23,43,56 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |
| Filler | | 30-38 | | | Empty for message type 50,51,30,31,32,41,23,43,56, 21 |

# 4. Securities Market Odd Lot Order

Filename :

- MC70_AllFB_yyyymmdd.csv
- MC71_AllFB_yyyymmdd.csv
- MC72_AllFB_yyyymmdd.csv
- MC73_AllFB_yyyymmdd.csv
- MC74_AllFB_yyyymmdd.csv
- MC75_AllFB_yyyymmdd.csv
- MC76_AllFB_yyyymmdd.csv
- MC77_AllFB_yyyymmdd.csv
- MC78_AllFB_yyyymmdd.csv

| | | Source : OMD | | | |
|---|---|---|---|---|---|
| Data Field | Format | Channel | Message | Element Name | Remarks |
| Date / Time | YYYYMMDD HHMMSSTTT | 70-78 | Packet Header | SendTime<br>Convert from UTC to HKT | |
| Message Type | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order<br>34 Delete Odd Lot Order | MsgType | |
| Security Code | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order<br>34 Delete Odd Lot Order | SecurityCode | |
| Order ID | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order<br>34 Delete Odd Lot Order | OrderId | |
| Price | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order | Price | Empty for message type 34 |
| Quantity | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order | Quantity | Empty for message type 34 |
| Broker ID | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order<br>34 Delete Odd Lot Order | BrokerID | |
| Side | Integer<br>Variable length | 70-78 | 33 Add Odd Lot Order<br>34 Delete Odd Lot Order | Side | |