

# **Updating history**

| No. | Issue Date | Details  |
|-----|------------|--|
| 1   | 2003-04-01 | First issue  |
| 2   | 2005-04-28 | Appendix 2 – Type of Securities Change the description of stock type 0306 from "Warrants - Derivative Warrants for Gold" to "Warrants - Derivative Warrants for Mineral" |
| 3   | 2005-07-04 | Add Appendix 4 – Spread Table  |
| 4   | 2006-07-31 | Appendix 4 – Spread Table Include the latest version of the spread table   |
| 5   | 2007-12-06 | Stock Information File – Discontinuation of Industry Classification effective from 2 January 2008  |



File Specification – Bid and Ask Record – Main Board & GEM

## Data structure - April 2003 to December 2007

The data provided in Bid and Ask Record – Main Board & GEM are presented in 2 types of files:

- 1) Bid and ask file; and
- 2) Stock information file.

The Bid and ask file is the core data file, while the stock information file provides static information on securities. The data files are provided in fixed length text format.

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

| File name               | Contents   |
|-------------------------|--|
| ba_mb_ <i>yyyymmdd</i>  | Trade file for Main Board stocks for the trading day yyyymmdd (e.g. 20030402 for 2 April 2003) |
| ba_gem_ <i>yyyymmdd</i> | Trade file for GEM (Growth Enterprise Market) stocks for the trading day <i>yyyymmdd</i>       |
| mast_mb_ <i>yyyymm</i>  | Stock information file for Main Board stocks   |
| mast_gem_ <i>yyyymm</i> | Stock information file for GEM stocks  |



# 1. Bid and ask file

| Item no. | Field name | Layout   | Description   |
|----------|------------|--|---|
| 1        | STKCODE    | Character<br>5 bytes                           | Code assigned to the stock. This code is not unique since codes assigned to delisted stocks can be reused.                          |
|          |            | Character 1 byte                               |   |
| 2        | STK_ID     | Character 9 bytes                              | Unique identifier assigned to the stock   |
|          |            | Character 1 byte                               |   |
| 3        | DATE       | Character<br>8 bytes                           | Date of the trading day. Format is YYYYMMDD where   |
|          |            |  | YYYY - year<br>MM - month<br>DD - day   |
|          |            | Character 1 byte                               |   |
| 4        | TIME       | Character<br>6 bytes                           | Time when the information was recorded. Format is HHMMSS where  |
|          |            |  | HH - hour<br>MM - minute<br>SS - second   |
|          |            | Character 1 byte                               |   |
| 5        | DATA_CODE  | Character<br>2 bytes                           | To identify the data item. See data table code in Appendix 3 for possible values  |
|          |            | Character 1 byte                               |   |
| 6        | DATA_VALUE | Numeric<br>16 bytes<br>Picture is<br>9(12).999 | Value of the data item identified by the above data code. This field will contain all "9"s, i.e. 9999999999999999999999999999999999 |

Total data length 51 bytes



## 2. Stock information file

| Itom no  | Field name | Lavout                | Description  |
|----------|------------|-----------------------|--|
| Item no. | Field name | Character             | Description  |
| 1        | STKCODE    | Character<br>5 bytes  | Code assigned to the stock. This code is not unique since codes assigned to delisted stocks can be reused.   |
|          |            | Character 1 byte      |  |
| 2        | STK_ID     | Character<br>9 bytes  | Unique identifier assigned to the stock  |
|          |            | Character<br>1 byte   |  |
| 3        | DATE       | Character<br>8 bytes  | Date of the trading day. Format is YYYYMMDD where  |
|          |            |                       | YYYY - year<br>MM - month<br>DD - day  |
|          |            | Character<br>1 byte   |  |
| 4        | FULL_ID    | Character<br>12 bytes | Unique identifier assigned to the stock, made up of the prefix 'HK', the above stock ID and a check digit  |
|          |            | Character<br>1 byte   |  |
| 5        | CLASS      | Numeric<br>1 byte     | Industry classification of the stock, based on the Exchange's definition, as at the end of the month.  |
|          |            |                       | <ul> <li>1 - Finance</li> <li>2 - Utilities</li> <li>3 - Properties</li> <li>4 - Consolidated enterprises</li> <li>5 - Industries</li> <li>6 - Hotels</li> <li>7 - Others</li> </ul> |
|          |            |                       | This data item is not applicable to warrants, debt securities and unit trusts  |
|          |            |                       | This data item is not applicable to GEM stocks   |
|          |            |                       | This data item contains blank only for Trading Date since 2 January 2008 after the discontinuation of industry classification by the Exchange  |
|          |            | Character 1 byte      |  |



File Specification – Bid and Ask Record – Main Board & GEM

| Item no. | Field name | Layout                | Description   |
|----------|------------|-----------------------|---|
| 6        | FULL NAME  | Character<br>60 bytes | Full name of stock  |
|          |            | Character 1 byte      |   |
| 7        | STATUS     | Character 1 byte      | To indicate active/non-active parallel trade counter  |
|          |            |                       | ' ' - no parallel trade counter 'A' - active 'N' - non-active                                   |
|          |            | Character<br>1 byte   |   |
| 8        | TRAD_CURR  | Numeric<br>2 bytes    | Trading currency of stock See currency table in Appendix 1 for valid values                     |
|          |            | Character<br>1 byte   |   |
| 9        | MERGE_TO   | Character<br>5 bytes  | Stock code of the parallel trade counter, applicable to stocks with parallel trade counter only |
|          |            |                       | Blank if no parallel trade counter  |
|          |            | Character 1 byte      |   |
| 10       | SE_TYPE    | Character<br>4 bytes  | Code assigned to indicate the type of securities  |
|          |            |                       | See table in Appendix 2 for valid values  |

Total data length 116 bytes



# **Currency table**

| Code | Description                 | Unit  |
|------|-----------------------------|-------|
| 00   | Hong Kong Dollars           | 1     |
| 01   | Australian Dollars          | 1     |
| 02   | Austrian Schillings         | 1     |
| 03   | Bangladesh Takas            | 1     |
| 04   | Bahraini Dinars             | 1     |
| 05   | Belgian Francs "Commercial" | 1     |
| 06   | Belgian Francs "Financial"  | 1     |
| 07   | Brunei Dollars              | 1     |
| 08   | Burmese Kyats               | 1     |
| 09   | Canadian Dollars            | 1     |
| 10   | Sri Lanka Rupees            | 1     |
| 11   | Chinese Renminbi            | 1     |
| 12   | Cypriot Pounds              | 1     |
| 13   | Danish Kroners              | 1     |
| 14   | Deutsche Marks              | 1     |
| 15   | Dutch Guilders              | 1     |
| 16   | Fiji Dollars                | 1     |
| 17   | Finnish Markkas             | 1     |
| 18   | French Francs               | 1     |
| 19   | Indian Rupees               | 1     |
| 20   | Indonesian Rupiahs          | 1     |
| 21   | Italian Lire                | 1,000 |
| 22   | Japanese Yen                | 1,000 |
| 23   | Kuwaiti Dinars              | 1     |
| 24   | Kenyan Shillings            | 1     |
| 25   | Lebanese Pounds             | 1     |
| 26   | Mauritius Rupees            | 1     |
| 27   | Malaysian Dollars           | 1     |
| 28   | New Zealand Dollars         | 1     |
| 29   | Nigerian Naira              | 1     |
| 30   | Norwegian Kroners           | 1     |
| 31   | Omani Rials                 | 1     |
| 32   | Pakistan Rupees             | 1     |
| 33   | Philippine Pesos            | 1     |
| 34   | Portuguese Escudos          | 1     |
| 35   | Qatar Riyals                | 1     |
| 36   | Saudi Arabian Riyals        | 1     |



# Currency table (cont.)

| Code | Description            | Unit |
|------|------------------------|------|
|      |                        |      |
| 37   | Seychelles Rupees      | 1    |
| 38   | Singapore Dollars      | 1    |
| 39   | Sierra Leone Leones    | 1    |
| 40   | South African Rands    | 1    |
| 41   | South Korean Won       | 1    |
| 42   | Spanish Pesetas        | 1    |
| 43   | Sterling Pounds        | 1    |
| 44   | Swedish Kroners        | 1    |
| 45   | Swiss Francs           | 1    |
| 46   | Thailand Bahts         | 1    |
| 47   | U.A.E Dirhams          | 1    |
| 48   | US Dollars             | 1    |
| 49   | Irish Punt             | 1    |
| 50   | Special Drawing Rights | 1    |
| 51   | Macau Patacas          | 1    |
| 52   | Brazil Cruzeiros       | 1    |
| 53   | ECU                    | 1    |
| 54   | Euro                   | 1    |



# Types of securities

| Code | Description   |
|------|---|
|      |   |
| 0101 | Ordinary Shares   |
| 0102 | Ordinary Shares - Investment Company                    |
| 0201 | Preference Shares                                       |
| 0301 | Warrants - Equity Warrants                              |
| 0302 | Warrants - Equity Warrants Issued by Investment Company |
| 0303 | Warrants - Derivative Warrants for Stock                |
| 0304 | Warrants - Derivative Warrants for Index                |
| 0305 | Warrants - Derivative Warrants for Currency             |
| 0306 | Warrants - Derivative Warrants for Mineral              |
| 0307 | Equity Linked Instruments                               |
| 0401 | Debt Securities   |
| 0501 | Unit Trusts   |
| 0601 | Rights  |



# Data code table

| Data Code | Description   | Length | Maximum value |
|-----------|---|--------|---------------|
| EP        | Equilibrium price The price at which the maximum number of shares can be traded if matching occurs at that time during the pre-opening trading session  | 8      | 9999.999      |
| EV        | Equilibrium volume The number of shares that would be traded at the equilibrium price   | 12     | 999999999999  |
| CA        | Current ask price / Last ask price<br>Current ask price is given if the<br>primary sell queue (V1) > 0; last ask<br>price if otherwise  | 8      | 9999.999      |
| СВ        | Current bid price / Last bid price<br>Current bid price is given if the<br>primary buy queue (U1) > 0; last bid<br>price if otherwise   | 8      | 9999.999      |
| HP        | Day-to-second highest price   | 8      | 9999.999      |
| LP        | Day-to-second lowest price  | 8      | 9999.999      |
| NP / CP   | Nominal price / Closing price The nominal price and the closing price are never available at the same time. Only the nominal price is available during the day until the last second whereupon it will be replaced by the closing price | 8      | 9999.999      |
| PC        | Previous closing price  | 8      | 9999.999      |
| RP        | Last recorded price   | 8      | 9999.999      |
| SU        | Stock suspension indicator 0 = stock not suspended 1 = stock suspended  | 1      | 9             |
| TS        | Day-to-second shares traded   | 12     | 99999999999   |



# Data code table (cont.)

| Data Code | Description                   | Length | Maximum value |
|-----------|-------------------------------|--------|---------------|
| TT        | Day-to-second turnover        | 12     | 99999999999   |
| U1        | Primary buy queue length      | 3      | 999           |
| U2        | Secondary buy queue length    | 3      | 999           |
| U3        | Third buy queue length        | 3      | 999           |
| U4        | Fourth buy queue length       | 3      | 999           |
| U5        | Fifth buy queue length        | 3      | 999           |
| V1        | Primary sell queue length     | 3      | 999           |
| V2        | Secondary sell queue length   | 3      | 999           |
| V3        | Third sell queue length       | 3      | 999           |
| V4        | Fourth sell queue length      | 3      | 999           |
| V5        | Fifth sell queue length       | 3      | 999           |
| X1        | Primary buy queue quantity    | 8      | 99999999      |
| X2        | Secondary buy queue quantity  | 8      | 99999999      |
| X3        | Third buy queue quantity      | 8      | 99999999      |
| X4        | Fourth buy queue quantity     | 8      | 99999999      |
| X5        | Fifth buy queue quantity      | 8      | 99999999      |
| Y1        | Primary sell queue quantity   | 8      | 99999999      |
| Y2        | Secondary sell queue quantity | 8      | 99999999      |
| Y3        | Third sell queue quantity     | 8      | 99999999      |
| Y4        | Fourth sell queue quantity    | 8      | 99999999      |
| Y5        | Fifth sell queue quantity     | 8      | 99999999      |

File Specification - Bid and Ask Record - Main Board & GEM

#### **APPENDIX 4**

# Spread Table – the Second Schedule of the Rules of the Exchange Spread Table - Effective 24 July 2006 (applicable to all types of currencies)

## Part A

All securities, other than those securities covered under Part B and/or Part C, shall be traded in accordance with the following scale of spreads:

## Currency unit

| From | 0.01     | to | 0.25     | <br>0.001 |
|------|----------|----|----------|-----------|
| Over | 0.25     | to | 0.50     | <br>0.005 |
| Over | 0.50     | to | 10.00    | <br>0.010 |
| Over | 10.00    | to | 20.00    | <br>0.020 |
| Over | 20.00    | to | 100.00   | <br>0.050 |
| Over | 100.00   | to | 200.00   | <br>0.100 |
| Over | 200.00   | to | 500.00   | <br>0.200 |
| Over | 500.00   | to | 1,000.00 | <br>0.500 |
| Over | 1,000.00 | to | 2,000.00 | <br>1.000 |
| Over | 2,000.00 | to | 5,000.00 | <br>2.000 |
| Over | 5,000.00 | to | 9,995.00 | <br>5.000 |

## Part B

Securities which are authorised by the Exchange to be traded in accordance with the scale of spreads in this Part B and all debt securities shall be traded in accordance with the following scale of spreads:

Currency unit — 0.050 — 0.050

#### Part C

Exchange Traded Options shall be traded in accordance with the scale of spreads as set out in the Operational Trading Procedures.



# Spread Table - From 04 July 2005 to 21 July 2006 (applicable to all types of currencies) Part A

All securities, other than those securities covered under Part B and/or Part C, shall be traded in accordance with the following scale of spreads:

## Currency unit

| From | 0.01     | to | 0.25     | <br>0.001 |
|------|----------|----|----------|-----------|
| Over | 0.25     | to | 0.50     | <br>0.005 |
| Over | 0.50     | to | 2.00     | <br>0.010 |
| Over | 2.00     | to | 5.00     | <br>0.025 |
| Over | 5.00     | to | 100.00   | <br>0.050 |
| Over | 100.00   | to | 200.00   | <br>0.100 |
| Over | 200.00   | to | 500.00   | <br>0.200 |
| Over | 500.00   | to | 1,000.00 | <br>0.500 |
| Over | 1,000.00 | to | 2,000.00 | <br>1.000 |
| Over | 2,000.00 | to | 5,000.00 | <br>2.000 |
| Over | 5,000.00 | to | 9,995.00 | <br>5.000 |

#### Part B

Securities which are authorised by the Exchange to be traded in accordance with the scale of spreads in this Part B and all debt securities shall be traded in accordance with the following scale of spreads:

Currency unit — 0.050 — 0.050

#### Part C

Exchange Traded Options shall be traded in accordance with the scale of spreads as set out in the Operational Trading Procedures.



## Spread Table - Before 04 July 2005

## Part A

For all securities, other than those securities which the Exchange has authorised to trade in accordance with the scale of spreads set out in Part B and Part C.

| From HK\$ | 0.01     | to | HK\$ 0.25 | <br>HK\$0.001 |
|-----------|----------|----|-----------|---------------|
| Over      | 0.25     | to | 0.50      | <br>0.005     |
| Over      | 0.50     | to | 2.00      | <br>0.010     |
| Over      | 2.00     | to | 5.00      | <br>0.025     |
| Over      | 5.00     | to | 30.00     | <br>0.050     |
| Over      | 30.00    | to | 50.00     | <br>0.100     |
| Over      | 50.00    | to | 100.00    | <br>0.250     |
| Over      | 100.00   | to | 200.00    | <br>0.500     |
| Over      | 200.00   | to | 1,000.00  | <br>1.000     |
| Over      | 1,000.00 | to | 9,995.00  | <br>2.500     |

#### Part B

For all debt securities which are authorised by the Exchange to trade in accordance with the following scale of spreads.

From HK\$0.50 to HK\$9,999.95 - HK\$0.050

#### Part C

For Exchange Traded Options, an Exchange Participant shall trade in accordance with the scale of spreads as set out in the Operational Trading Procedures.