Data structure – May 1996 to 20 October 2000

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*yymmdd*.txt	Trade file for Main Board stocks for the trading day *yymmdd* (e.g. 030402 for 2 April 2003)
GB*yyyymm*.txt	Trade file for GEM (Growth Enterprise Market) stocks for the trading day *yyyymm*
MAST*yymm*.txt	Stock information file for Main Board stocks as at the end of the month yymm
GMASy*ymm*.txt	Stock information file for GEM stocks as at the end of the month yymm

1. Bid and ask file

Item no.	Field name	Layout	Description
1	STKCODE	Character 5 bytes	Code assigned to the stock. This code is not unique since codes assigned to delisted stocks can be re-used.
		Character 1 byte	
2	STK_ID	Character 9 bytes	Unique identifier assigned to the stock
		Character 1 byte	
3	DATE	Character 8 bytes	Date of the trading day. Format is YYYYMMDD where YYYY - year MM - month DD - day
		Character 1 byte	
4	TIME	Character 6 bytes	Time when the information was recorded. Format is HHMMSS where HH - hour MM - minute SS - second
		Character 1 byte	
5	DATA_CODE	Character 2 bytes	To identify the data item. See data table code in Appendix 3 for possible values
		Character 1 byte	
4	DATA_VALUE	Numeric 14 bytes Picture is 9(10).999	Value of the data item identified by the above data code. This field will contain all “9”s, i.e. 999999999999.999 if the value overflows. For maximum value of each data code, see data code table in Appendix 3

Total data length 49 bytes

2. Stock information file

Item no.	Field name	Layout	Description
1	STKCODE	Character 5 bytes	Code assigned to the stock. This code is not unique since codes assigned to delisted stocks can be re-used.
2	STK_ID	Character 9 bytes	Unique identifier assigned to the stock
3	FULL_ID	Character 12 bytes	Unique identifier assigned to the stock, made up of the prefix 'HK', the above stock ID and a check digit
4	CLASS	Numeric 1 byte	Industry classification of the stock, based on the Exchange's definition, as at the end of the month. 1 - Finance 2 - Utilities 3 - Properties 4 - Consolidated enterprises 5 - Industries 6 - Hotels 7 - Others This data item is not applicable to warrants, debt securities and unit trusts **This data item is not applicable to GEM stocks**
5	FULL NAME	Character 60 bytes	Full name of stock
6	STATUS	Character 1 byte	To indicate active/non-active parallel trade counter as at the end of the month ' ' – no parallel trade counter 'A' – active 'N' – non-active
7	TRAD_CURR	Numeric 2 bytes	To indicate the currency in which the stock is traded as at the end of the month See currency table in Appendix 1 for valid values

Item no.	Field name	Layout	Description
8	HSI	Character 1 byte	Classification of Hang Seng Index / Hang Seng MidCap 50 Index / Hang Seng 100 Index constituent stocks as at the end of the month 1- 4 - HSI / HS100 constituent stock 1 - HSI-Finance 2 - HSI-Utilities 3 - HSI-Properties 4 - HSI-Commerce and industry 8 - HSMCI constituent stock 9 - HS100 (non HSI) constituent stock 0 - Others **This data item is not applicable to GEM stocks**
9	AOI	Character 1 byte	Classification of All Ordinaries Index constituent stocks as at the end of the month 0 - non AOI constituent stock 1 - Finance 2 - Utilities 3 - Properties 4 - Consolidated enterprises 5 - Industries 6 - Hotels 7 – Others **This data item is not applicable to GEM stocks**
10	MERGE_TO	Character 5 bytes	Stock code of the parallel trade counter, applicable to stocks with parallel trade counter only Blank if no parallel trade counter
11	SE_TYPE	Character 4 bytes	Code assigned to indicate the type of securities See table in Appendix 2 for valid values

Total data length 101 bytes

APPENDIX 1

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

APPENDIX 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

APPENDIX 2

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 Gold
0307	Equity Linked Instruments
0401	Debt Securities
0501	Unit Trusts
0601	Rights

APPENDIX 3

Data code table

Data Code	Description	Length	Maximum value
CA	Current ask price / Last ask price Current ask price is given if the primary sell queue (V1) > 0; last ask price if otherwise.	8	9999.999
CB	Current bid price / Last bid price Current bid price is given if the primary buy queue (U1) > 0; last bid 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	10	9999999999
TT	Day-to-second turnover	10	9999999999
U1	Primary buy queue length	3	999
U2	Secondary buy queue length	3	999
U3	Third buy queue length	3	999

APPENDIX 3

Data code table (cont.)

Data Code	Description	Length	Maximum value
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