Data structure - November 2002 to May 2006

The data provided in Bid and Ask Record – Equity Index Futures/Options are presented in 3 types of files:

1) Bid and ask data file;
2) Product master file; and
3) Contract master file.

The bid and ask data file is the core data file, while the latter two files provide static information on each contract covered in the tick-by-tick data file. For convenient data retrieval, the data files are provided in both fixed length text (.txt) and comma separated values (.csv). These 2 files only differ in format, but identical in data contents.

The data files are zipped into a single file for delivery. The following table lists out the data files to be found within the zipped file:

File name	Contents
*yyyymm*_01_BA.txt *yyyymm*_01_BA.csv	Bid and ask data file for Equity Index Futures/Options (e.g. Hang Seng Index Futures) for the trading month *yyyymm* (e.g. 200304 for April 2003)
*yyyymm*_01_MP.txt *yyyymm*_01_MP.csv	Product master file for Equity Index Futures/Options
*yyyymm*_01_MC.txt *yyyymm*_01_MC.csv	Contract master file for Equity Index Futures/Options

1. Bid and ask data file

Item no.	Field name	Layout	Description
1	CLASS_CODE	Character 6 bytes	Unique identifier assigned to the product class, such as "HSI" for Hang Seng Index
2	FUT_OPT	Character 1 bytes	To indicate if "Futures" or "Options" "F" - Futures "O' - Options
3	EXPIRY_MTH	Character 4 bytes	Expiry month of the contract. Format is YYMM where YY - last 2 digit of the year MM - month For example, "0311" for November 2003
4	STRIKE_PRC	Numeric 17 bytes Picture is 9(8).9(8)	Exercise price (or strike price) for "Options" contracts only Zero for "Futures" contracts
5	CALL_PUT	Character 1 bytes	"Call" / "Put" type for "Options" contracts "C" - Call Options "P" - Put Options " " - Futures
6	DATE	Character 8 bytes	Date of the trading day Format is YYYYMMDD where YYYY - year MM - month DD - day
7	TIME	Numeric 6 bytes	Time of the event which caused the change in bid/ask information. Format is HHMMSS where HH - hour MM - minute SS - second
8	BID_ASK	Character 1 bytes	To indicate if the best price presented in the next item (item 9) is a "Bid" price or an "Ask" Price "B" - Bid "A" - Ask
9	PRICE	Numeric 17 bytes Picture is 9(8).9(8)	Best price recorded at the time

Item no.	Field name	Layout	Description
10	QUANTITY	Numeric 10 bytes Picture is 9(10)	Total number of contracts associated with the best price at the time

Total data length 71 bytes

2. Product master file

Item no.	Field name	Layout	Description
1	CLASS_CODE	Character 6 bytes	Unique identifier assigned to the product class
2	FUT_OPT	Character 1 bytes	To indicate if "Futures" or "Options" "F" - Futures "O' - Options
3	DATE	Character 8 bytes	Reference date for the product details provided in this record. Format is YYYYMMDD where YYYY - year MM - month DD - day
4	PROD_NAME	Character 50 bytes	Name of the derivatives product class. Normally the name of the underlying stock.
5	DATE_FROM	Character 8 bytes	Launch date of the derivatives product Format is YYYYMMDD BLANK for class codes generated as the result of capital adjustment of the underlying stock.
6	DATE_TO	Character 8 bytes	Last trading date of the derivatives product. BLANK for active products.
7	EX_STYLE	Character 1 byte	Exercise style of the derivatives product "A" - American "E" - European
8	CURRENCY	Character 3 bytes	▪ Currency of the multiplier if it is a dollar amount; OR ▪ Trading currency of the underlying stock if the multiplier is not a dollar amount "HK " - Hong Kong Dollars "US " - US Dollars "YN " - Japanese Yen "WO " - Korean Won "NT " - New Taiwan Dollar
9	MULTIPLIER	Numeric 17 bytes Picture is 9(8).9(8)	The standard contract size in the number of underlying shares

Total data length 102 bytes

3. Contract master file

Item no.	Field name	Layout	Description
1	CLASS_CODE	Character 6 bytes	Unique identifier assigned to the product class
2	FUT_OPT	Character 1 bytes	To indicate if "Futures" or "Options" "F" - Futures "O' - Options
3	EXPIRY_MTH	Character 4 bytes	Expiry month of the contract. Format is YYMM where YY - last 2 digit of the year MM - month For example, "0311" stands for November 2003
4	STRIKE_PRC	Numeric 17 bytes Picture is 9(8).9(8)	Exercise price (or strike price) for "Options" contracts only Zero for "Futures" contracts
5	CALL_PUT	Character 1 bytes	"Call" / "Put" type for "Options" contracts "C" - Call Options "P" - Put Options " " - Futures
6	DATE	Character 8 bytes	Reference date for the contract details provided in this record. Format is YYYYMMDD where YYYY - year MM - month DD - day
7	EXPIRY_DATE	Character 8 bytes	Expiry date of the contract Format is YYYYMMDD
8	CON_SIZE	Numeric 17 bytes Picture is 9(8).9(8)	Number of underlying shares represented by a contract
9	DATE_FROM	Character 8 bytes	First trading date of the contract Format is YYYYMMDD
10	DATE_TO	Character 8 bytes	Last trading date of the contract Format is YYYYMMDD
11	Filler	Character 20 bytes	Reserved field

Total data length 98 bytes