

File Transfer Function

TENDER INSTRUCTION BATCH FILE LAYOUT

INTRODUCTION:

The Tender Instruction File Transfer function is available to Participants to upload the Tender Instruction Batch File to CCASS. This function helps Participants with high transaction volumes to avoid duplicating efforts in manually keying tender instructions into CCASS. This section shows the tender instruction batch file layout adopted by CCASS.

DESIGN STANDARD:

- a) All interchange files are of fixed length records. If the total number of bytes in a record is less than the record length, the record will be packed with spaces to make up the length. Every record must have a record delimiter of carriage return and line feed (ASCII hexadecimal value X'0D0A') at the end.

The characters that can be contained in the file are as follows.

- digit : 0 to 9
- alphabets : a to z, A to Z
- special symbols : SPACE / + - ? : () , ' .
- record delimiter of carriage return and line feed
- a 1-character End-of-File Marker at the end of file (normally ASCII hexadecimal value X'1A')

- b) All interchange files are sequential files. There are two categories of records: detail and control records.

Detail records contain user information. A record checksum is calculated for each detail record by summing the data contents of essential numeric fields. It is calculated by the sender and checked by the receiver. Control header contains information such as participant ID, file name, etc., relevant to the file as a whole. Control trailer further protects the file using count of detail records and hash totals. Should there be any inconsistency in the record checksums, count of detail records or hash totals, the whole file will be discarded.

Different types of records are indicated by the first byte in the records.

- c) The maximum length of the record checksum in the detail record, the count of detail records and hash totals in the control trailer record are all confined to the data size value specified in the data size column of the record layout. The implied decimal point of a numeric field, as well as the sign, if any, is ignored. Should overflow occur, the leading digit will be discarded.
- d) The maximum size of the batch file is limited to 2 mega bytes or 8002 lines including the header and trailer control records. Batch file with file size or number of lines exceeded this limit will be rejected.

Section 5.12

Tender Instruction Batch File Layout

TENDER INSTRUCTION BATCH FILE

This file contains the detailed information of tender instructions prepared by Participants' internal system, which will be uploaded to the CCASS host computer for tender instruction batch file input processing. Each record contains 160 bytes, followed by a 2-byte record delimiter.

Control Record:

<u>Data Item</u>	<u>Data Size</u>	<u>Remarks</u>
Record type	X(1)	"0" = control header
File Indicator	9(4)	Mandatory, unique indicator assigned by Participant, cannot be re-used within same day
Participant ID	X(6)	Must input, if Sender BIC field is blank
Sender BIC	X(8)	Optional field - Default as blank
Stock code	X(5)	Must input with leading spaces, i.e. " 8" for stock code 8; if ISIN field is blank
ISIN	X(12)	Even with ISIN entered, " 0" should be entered for numeric field validation.
Participant own file reference	X(15)	Optional field - Default as blank
File transmission date	9(8)	YYYYMMDD
File name	X(15)	"EFN UPL FILE"
Filler	X(86)	Spaces

Detail Record:

<u>Data Item</u>	<u>Data Size</u>	<u>Remarks</u>
Record type	X(1)	"1" = detail record
Price bid in %	9(3)V9(2)	
Tender instruction quantity	9(11)	
Beneficiary owner	X(32)	
HKID or Business Registration	X(9)	
Number of Beneficiary Owner		
Broker number	9(4)	should be 0000 for Clearing Participants which are also Exchange Participants
Remarks - 1	X(35)	
Remarks - 2	X(35)	
Filler	X(10)	
Record checksum	9(18)	Sum of price bid, tender instruction quantity & broker number

Control Record:

<u>Data Item</u>	<u>Data Size</u>	<u>Remarks</u>
Record Type	X(1)	"9" = control trailer
Total Number of Detail Records	9(9)	
Sum of all price bids	9(14)	
Sum of all tender instruction quantities	9(18)	
Sum of all broker numbers	9(13)	
Filler	X(105)	Spaces