

File Transfer Function

ATI BATCH FILE LAYOUT

INTRODUCTION:

The ATI File Transfer function is available to participants to upload the Account Transfer Instruction (ATI) Batch File to CCASS. This function helps participants with high transaction volumes to avoid duplicating efforts in manually rekeying ATIs into CCASS. This section shows the ATI 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. 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.

ACCOUNT TRANSFER INSTRUCTION BATCH FILE

This file contains the detailed information of ATIs prepared by participants' internal system, which will be uploaded to the CCASS host computer for ATI batch file input processing. Each record contains 99 bytes, followed by a 2-byte record delimiter.

<u>Data item</u>	<u>Data size</u>	<u>Remarks</u>
Control Record		
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
Participant own file reference	X(15)	
File Transmission date	9(8)	YYYYMMDD
File name	X(15)	"ATI BATCH INPUT"
Filler	X(42)	Spaces
Detail Record		
Record type	X(1)	"1" = detail records
Stock code	9(5)	Even with ISIN entered, "00000" should be entered for numeric field validation.
ISIN	X(12)	Optional field - Default as blank
From A/C number	X(8)	- If "From A/C number" is less than 8 digits, it should be padded with leading blank spaces or zeroes. E.g. A/C 1 should be formatted as " 1" (7 spaces + "1") or "00000001" - Must not be any SSA with Statement Service (account number starting from 21 onwards)
To A/C number	X(8)	- If "To A/C number" is less than 8 digits, it should be padded with leading blank spaces or zeroes. E.g. A/C 1 should be formatted as " 1" (7 spaces + "1") or "00000001" - Must not be any SSA with Statement Service (account number starting from 21 onwards)
Transfer quantity	9(11)	
Remarks	X(40)	
Record checksum	9(14)	Sum of stock code and transfer quantity
Control Record		
Record type	X(1)	"2" = control trailer
Total number of detail records	9(4)	
Sum of all stock codes	9(7)	
Sum of all transfer quantities	9(14)	

<u>Data item</u>	<u>Data size</u>	<u>Remarks</u>
Sum of all record checksums	9(17)	
Filler	X(56)	Spaces