

BDA DEMAT UPLOAD SPECIFICATION

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1 INTRODUCTION

Members are currently able to upload data to BDA via FTP files, but this service is limited to certain transactional and reference data, namely financial transactions, deal allocations and credit limits. The JSE is in the process of automating the current upload process via FTP and increasing the current service offering. The automation and new service offering is aimed to improve operational efficiencies with-in a members back office.

2 OBJECTIVE

The objective of this document is to provide the members with the ability to upload DEMAT positions.

3 SCOPE

The scope of this document is to provide the members with the details i.e. all the various data elements that will be included in the new DEMAT Upload Card Code. Out of scope of this document is the automation of the FTP process and any other data uploads that may be developed.

4 VERSION CONTROL

Version	Updated By	Date	Reason for changes
0.1	Nasheen Sharma	25 September 2014	Document Created
0.2	Barbara Teasdale	16 August 2016	Change to the number of e-mail addresses permitted from 999 to 10
0.3	Barbara Teasdale	15 December 2016	Addition of detail on the Response files

5 COPYRIGHT

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6 DEMAT UPLOAD CARD CODES

As an enabler for T+3 and also in an effort to improve operational efficiencies within members back offices, the JSE will develop a new upload facility that will allow the members to automate the creation of demat holdings on control client accounts without having to bring in fictitious paper shares and then go through a process in BDA to demat the holding.

The new upload facility is specific to IPO's (Initial Public Offer) and DRIP's (Dividend Re-Investment Plan) where members have to manually create resultant holdings on clients' accounts.

6.1 Subscription

The Demat Upload file is available by subscription at a cost of R1000.00. To subscribe please sent an e-mail to Customersupport@jse.co.za

6.2 Processing Rules

The following basic processing rules apply when capturing an upload:

- Only upload positions on accounts of type C
- Upload on electronically settled shares
- Only new positions can be created via the upload. No closing of positions will be catered for.
- Scrip that is not dematerialised will be excluded.
- The cost price will not be processed using the actual or average method of cost calculation; we will only use a PFV cost, if provided.
- If an upload file is received between 6am and 18h45pm then DEMAT position will be updated immediately
- The DEMAT position will only be updated once each record has passed all its validation rules for all the fields

Failure to comply with the stated basic rules will result in the record not being updated and an error message being written to COMPR (online enquiry) and PCOMPR report and passed back on the line [that generated the error] in the response file i.e. the line that failed will have the error reason appended to it.

The tables and card codes contain the Field Names, Field Descriptions, data types, data lengths, validations and validation logic that will be used to upload data to create a demat position.

6.3 Automated Submission of Upload

A Member is required to FTP the upload dataset to the JSE. On completion of the FTP upload, a batch job will automatically be submitted (via CONTROL-O) to process the uploaded records. There is no requirement for users to schedule the processing of the upload file via RPROC.

The dataset to be uploaded will have the following format:

BBAP.SPRD.UPLOAD.XXX.DEMAT, the 'XXX' depicting the relevant 2 or 3 character broker alpha code.

- The user performing the upload requires FTP access i.e. a FTP username and password. If the member already has a FTP sign on, the same FTP sign-on can be used.
- The user will need to request access to the new upload dataset to enable them to make use of the automated submission.
- The member may also request an additional FTP sign-ons if required.

6.3.1 E-mail Address Set up

Members will need to capture relevant email addresses to which the responses are to be mailed for the UPLOAD. This would be done via the function T.EML against the process type of DEMATU.

A maximum of 10 e-mail addresses can be set up.

Each new e-mail address would require a new sequence number (i.e. SEQ of 001, the suffix of DEMATU, displayed below).

```
OPTN: T.EML          BCS/A: GENERAL TABLE MAINTENANCE          25SEPT14 11:09:29
ACTN:                AAA          A99
TABLE: E-MAIL ADDRESS          START BROWSING FROM:
                                INCL DEACTIVATED: N

F BRK PROCS /SEQ  DESCRIPTION
_ 01 DEMATU001 XXXX2@COMPANY\_EMAIL1.CO.ZA
_ 01 DEMATU002 XXXX2@COMPANY\_EMAIL2.CO.ZA
```

6.3.2 Error Reporting on COMPR and PCOMPR

A member will be notified via the captured e-mail address whether the job has been successfully processed. If not successful, the reasons per line can be found on COMPR or on the report PCOMPR with error format code of DMTU

```
OPTN: COMPR                BCS/A: COMMON ERROR ENQUIRY                25SEPT14 13:18:07
ACTN:                      AAA      A81
ERROR FORMAT CODE: DMTU    ERROR PROCESS DATE: 20120102
FTP Demat upload errors - real time

PF1 HELP PF2 RETURN PF4 MENU  PF5 TABLES PF7/8 PAGE  PF11 -->  PF12 QUIT
```

6.3.3 Response Dataset

In addition to the COMPR notifications, a response dataset will be created with the same dataset name as the upload file with the SEQUENCE number (as passed on the header record) appended to the end of the original file name.

Example:

BBAP.SPRD.UPLOAD.XXX.DEMAT.SYYYYYYY

The 'XXX' depicting the relevant 2 or 3 character broker alpha code

The 'SYYYYYYY' depicting the sequence number as passed on the header record, prefixed with S. See below for the record layout

It is recommended that sequence numbers are not reused. No verification is made on sequence numbers with respect to missing sequences. This is solely used to match an upload file to its respective response file. Should a sequence number be repeated by a member in that day then the response file will have the same sequence number in it. The broker will only be able upload a new file once the previous file has been processed, regardless of the sequence number. The file will be overwritten, but all files submitted by the broker will be stored in a GDG cycle for the Broker.

The response file will also be stored in a GDG cycle for the Broker. The number of cycles is still to be determined.

Response File Record Layout

BDA FIELD NAME	LENGTH	VALUE	DESCRIPTION
CARD CODE	9(3)	999	
BRK-CDE	9(3)		Broker Numeric Code
DATE	9(8)		Process Date
TIME	9(6)		Process Time
TOTAL RECORDS	9(9)		Total Number of Records excluding Header and Trailer Records
RECORDS PROCESSED	9(9)		Total Number of Successfully Processed Records
RECORDS REJECTED	9(9)		Total Number of Rejected Records
FILLER	X(653)		Spaces
COUNT OF MSGS FOR LINE	9(3)		Count of number of messages in this line, if multiple errors the line will be repeated for each error
ERROR MESSAGE	X(50)		Error message code

TOTAL LENGTH	700
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Field Name	Data Type and length
CARD-CDE	9(3)
BRK-CDE	9(3)
DATE	9(8)
TIME	9(6)
TOTAL RECORDS	9(9)
RECORDS PROCESSED	9(9)
RECORDS REJECTED	9(9)
FILLER	X(653)
COUNT OF MSGS FOR LINE	9(3)
ERROR MESSAGE	X(50)

Below is a list of all possible errors that will result in the entire file being rejected.

'RECORD RECEIVED AFTER TRAILER'
 'DUPLICATE TRAILER RECEIVED'
 'BRK CDE NOT SAME AS HDR'
 'TRAILER REC TOTAL NOT SAME AS RECS SENT'
 'TRAILER NOT RECEIVED'

6.3.4 Archiving

Each file uploaded will be archived onto the daily upload file backup.

The response file will also be archived onto a daily response upload file backup. The length of archive is still to be determined.

6.3.5 Response Codes

Response	Response Description
000	Successfully updated
001	Invalid Card Code Number
002	Warning: Card Code Number required
003	Invalid Broker Code
004	Warning: Broker Code required
005	Invalid Upload Type
006	Warning: Upload Type required
007	Invalid Account Code
008	Warning: Account Code required
009	Invalid Account Type – must be C only
010	Warning: Instrument Type required
011	Warning: Instrument Alpha required
012	Warning: Instrument Version required
013	Invalid Instrument Type

014	Invalid Instrument Alpha
015	Invalid Instrument Version
016	Invalid Share Qty
017	Warning: Share Qty required
018	Warning: Share Qty must be preceded by a valid sign
019	Invalid Portfolio Cost
020	Warning: Portfolio Cost must be preceded by a valid sign
021	Warning: Portfolio Cost must have valid decimals
022	Instrument not electronically settled
023	Member cannot process Controlled clients
024	No trailer record – file rejected
025	Technical error – no changes were applied – contact CSS

6.4 Demat Position Details

6.4.1 Header Record – Card Code 000

The first record on the file to be uploaded is the header record. All numeric fields must be filled with numbers. If there is no value they must be zero filled and not left empty. If an incorrect process date is specified the file will not be processed.

BDA FIELD NAME	LENGTH	VALUE	DESCRIPTION
CARD CODE	9(3)	000	
BRK-CDE	9(3)		Broker Numeric Code
DATE	9(8)		Upload Date
TIME	9(6)		Upload Time
PREFIX	X(1)	"S"	Hard Coded Prefix for Sequence Number
SEQ-NO	X(7)		Sequence Number
FILLER	X(72)		Spaces

TOTAL LENGTH	100
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Field Details

Field Name	Field Description	CTL	NCTL	Data Type	Data Length	Data Validation	Logic Validation
		(M/O/CO/S)	(M/O/CO/S)				
CARD CODE	Card Code Number	M	M	NUMERIC	9(3)	000	0
BRK-CDE	Broker Code	M	M	NUMERIC	9(3)	Validate against BROKM	Must be a valid, active Broker
DATE	Upload Date	M	M	NUMERIC	9(8)	CCYYMMDD	
TIME	Upload Time	M	M	NUMERIC	9(6)	HHMMSS	
PREFIX	Sequence Number Prefix	M	M	CHARACTER	X(1)	"S"	Hard Coded
SEQ-NO	Sequence Number	M	M	CHARACTER	X(7)		
FILLER	Filler	M	M	CHARACTER	X(72)	Spaces	

6.4.2 Trailer Record

BDA FIELD NAME	LENGTH	VALUE	DESCRIPTION
CARD CODE	9(3)	999	
BRK-CDE	9(3)		Broker Numeric Code
DATE	9(8)		Process Date
TIME	9(6)		Process Time
TOTAL RECORDS	9(9)		Total Number of Records excluding Header and Trailer Records
RECORDS PROCESSED	9(9)		Total Number of Successfully Processed Records
RECORDS REJECTED	9(9)		Total Number of Rejected Records
FILLER	X(53)		Spaces

TOTAL LENGTH	100
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Field Details

Field Name	Field Description	CTL	NCTL	Data Type	Data Length	Data Validation	Logic Validation
		(M/O/CO/S)	(M/O/CO/S)				
CARD CODE	Card Code Number	M	M	NUMERIC	9(3)	999	999
BRK-CDE	Broker Code	M	M	CHARACTER	X(3)	Validate against BROKM	Must be a valid, active Broker
DATE	Process Date	M	M	CHARACTER	9(8)	CCYYMMDD	
TIME	Process Time	M	M	NUMERIC	9(6)	HHMMSS	
TOTAL RECORDS	Total number of records(excluding any header and trailer records)	M	M	NUMERIC	9(9)	Total number of records(excluding any header and trailer records)	Must be filled to ensure all the records received. Total number of records(excluding any header and trailer records) Ensure the total number of records tie back to the total number passed in file. If not, reject the whole file.
RECORDS PROCESSED	Total number of successfully processed records	M	M	NUMERIC	9(9)	Total number of successfully processed records	Number of successfully processed records (including sub headers, all records between the header and trailer records)
RECORDS REJECTED	Total number of rejected records	M	M	NUMERIC	9(9)	Total number of rejected records	Number of rejected records (including sub headers, all records between the header and

							trailer records)
FILLER	Filler	M	M	CHARACTER	X(53)	Spaces	

6.4.3 Demat Share Upload – Card Code 030

BDA FIELD NAME	LENGTH VALUE	DESCRIPTION
CARD-CDE	9(3)	030 Card code 030
BRK-CDE	X(3)	Broker code
ACC-CDE	9(7)	Account code
INSTR-TYP	X(1)	Instrument Type
INSTR-ALPHA	X(6)	Instrument Alpha
INSTR-VER	9(3)	Instrument Version
SHARE-QTY	9(11)	Quantity of Shares
PFV-COST	9(15)	Portfolio Cost (Include decimals – Cost in cents)
FILLER	X(51)	Spaces

TOTAL LENGTH	100
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Field Details

Field Name	Field Description	CTL M,O,CO,S	Data Type	Data Length	Data Validation	Logic Validation
CARD-CDE	Card Code number	M	NUMERIC	9(3)	030	
BRK-CDE	Broker Code	M	CHARACTER	X(3)	Against BROKM	Must be a valid, active Broker, and linked to the file broker code
ACC-CDE	Account Code	M	NUMERIC	9(7)	Against CLMNT	Must be a valid, active Account
INSTR-TYP	Instrument Type	M	CHARACTER	X(1)	Against INSTM	Instrument Type ‘E’ only
INSTR-ALPHA	Instrument Alpha	M	CHARACTER	X(6)	Against INSTM	Must be a valid, active electronically-settled instrument
INSTR-VERSION	Instrument Version	M	CHARACTER	X(3)	Against INSTM	Must be a valid, active electronically-settled instrument
SHR-QTY	Quantity of Shares	M	NUMERIC	9(11)		
PFV-COST	Portfolio Cost	O	NUMERIC	9(15)		Cost is in cents (decimals included at end)

FILLER		M	CHARACTER	X(51)	Spaces	
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Note: O = Optional M = Mandatory S = System Generated CO = Conditionally Optional

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