



CPPS Interface File Specification

31st May 2016

Version 1.6

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MAIN CHANGE SHEET

Rev	Date	Description of Change
Rev 1	10 th September 2015	- Initial
Rev 2	04 th December 2015	-Added Reject Reason sheet in Appendix 1.1.5
Rev 3	15 February 2016	-Updated Reject Reason sheet in Appendix 1.1.5 -Updated File Format for CSV and XML Appendix 1.1.3.1, 1.1.3.3, 1.1.4
Rev 4	19 th February 2016	- Length and format changes for Serial number, SAN and Cheque issue date
Rev 6	31st May 2016	Added 3 optional fields in the CIIF file – Section 1.1.3.3 and 1.1.4
Rev 7	30 th June 2016	Added format for CIIF file in CSV format under Appendix 1.1.2 Added note in section 1.1.4 for order sequence of CSV fields

Note: This document has the following change sheet section.

- **Main Change Sheet.**
This section tracks all the changes in the document excluding the changes in the Appendix section.
- **Appendix Change Sheet.**
This section tracks all the changes in the Appendix section.

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1 Interface with CPPS Enabled Banks System

Appx 1.1 CPPS ITEM INPUT FILE (CIIF)

CIIF files are file contain items which the Banks want to perform validation against. These files can be in

1. XML format
2. CSV format

One CIIF File will contain a group of items (typically 250 items) for the same bank. The bank may present more than one CIIF file at any time.

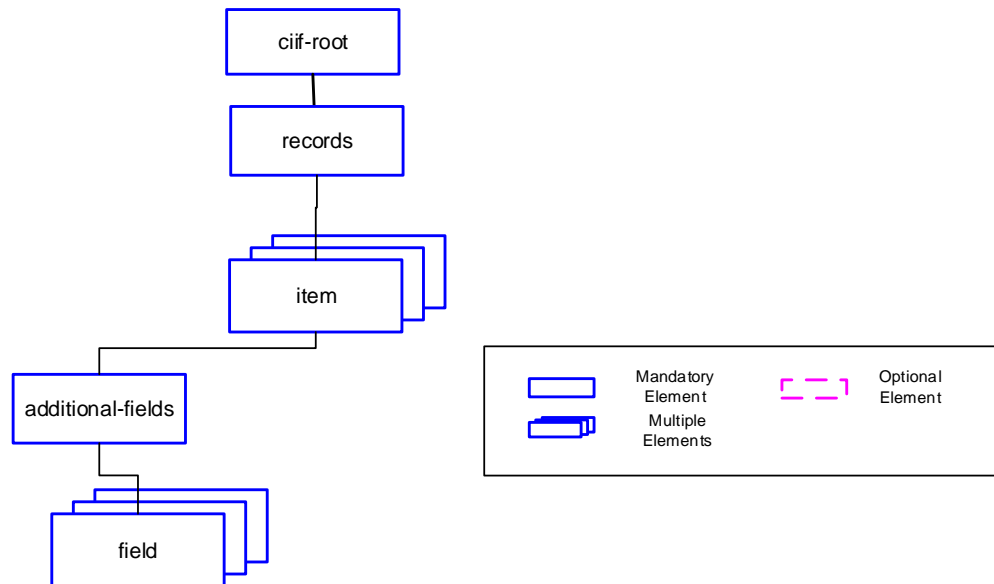
The format of the same are explained below:

Appx 1.1.1 File Name Convention

B1	<p>The CIIF File name shall use the following naming convention:</p> <p style="padding-left: 40px;"><i>CIIF_DraweeBranchCode_FileId.xml</i></p> <p>where:</p> <p style="padding-left: 40px;">CIIF CPPS ITEM INPUT FILE. This is a mandatory prefix for any CIIF file.</p> <p style="padding-left: 40px;">DraweeBranchCode -- Branch code of the drawee</p> <p style="padding-left: 40px;">FileId -- File ID</p> <p style="padding-left: 40px;">.xml -- Is a mandatory file type suffix</p>
B2	<p>CIIF files can also be sent in CSV format. The filename for CSV's will be</p> <p style="padding-left: 40px;"><i>CIIF_DraweeBranchCode_FileId_Version.csv</i></p> <p>where:</p> <p style="padding-left: 40px;">CIIF CPPS ITEM INPUT FILE. This is a mandatory prefix for any CIIF file.</p> <p style="padding-left: 40px;">DraweeBranchCode -- Branch code of the drawee</p> <p style="padding-left: 40px;">FileId -- File ID</p> <p style="padding-left: 40px;">Version -- Defines the version of the CSV for validation. Different versions may have different set of columns in the CSV.</p> <p style="padding-left: 40px;">.csv -- Is a mandatory file type suffix</p>

Appx 1.1.2 File Structure

CPPS Input Item File Structure



A1	<p>The CPPS Item Input File structure shall be:</p> <pre> <ciif-root ... > <records ... > <item ... > [<additional-fields> <field....> ... </additional-fields>] </item> ... </records> </ciif-root> </pre>
	<p>Elements “ciif-root”, “records”, “item” are mandatory. Tags in are optional.</p>

A sample CIIF file is shown below (XML Format):

```
<?xml version="1.0"?>
<ciif-root version="1.0" fileid="1" testindicator="P"
draweebranchroutingno="110011111">
  <records>
    <item payeeaccno="123456789" serialno="000001" issue-
date="15012015" amount="1500" transcode="123" draweebankname="State Bank of
India" draweebranchroutingno="110101111" payeeName="Mr. Adesh Shah"
san="1235437" >
      <additional-fields>
        <field name="abc" value="xyz"/>
        <field name="pqr" value="klm"/>
      </additional-fields>
    </item>
    <item payeeaccno="123456789" serialno="324548" cheque-issue-
date="26022016" amount="1200" draweebankname="State Bank of India"
draweebranchroutingno="110011111" san="123453" />
  </records>
</ciif-root>
```

A sample CIIF file is shown below (CSV Format):

```
PayeeAccountNumber, SerialNumber, IssueDate, Amount, Transactioncode, DraweeBankName, DraweeBranchRoutingNumber, PayeeName, San, Optional1, Optional2, Optional3
50011, 011231, 14042016, 390587, 10, HDFC Bank, 110240001, Xyz abc, 123456, , ,
50211, 011232, 14042016, 150000, 10, HDFC Bank, 110240002, Xyz abc, 123456, , ,
```

Appx 1.1.3 CIIF XML Elements and Attributes

Appx 1.1.3.1 ciif-root

This is the root node of the XML file. It has the following attributes

Attributes of ciif-root

Attribute Name	Description/Format	Value (default)	Type	Size		Usage
				Min	Max	
Version	Version of this Interface definition–		N	1.2	3.2	M
Fileid	Running number to uniquely identify the file.		AN	1	10	M
draweebranchroutingno	Branch code of the		NS	9	9	M

Attribute Name	Description/ Format	Value (default)	Type	Size		Usag e
				Min	Max	
	drawee					
Testfileindicator	Production / Testing file indicator	Must be "P"	A	1	1	M

Appx 1.1.3.2 Records

This element has no attributes and is a holder element of items.

Appx 1.1.3.3 Item

Note: The field's combination below form a unique item. Repetition of the same will lead to item duplication.

<serialno>< draweebranchroutingno >< amount>

Attributes of Item Attribute Name	Description/ Format	Value (default) <i>Special Condition</i>	Type	Size		Usag e
				Min	Max	
Payeeaccno	Account Number of the Payee	Must be greater than 0.	NS	1	25	M
serialno	Instrument number	<i>Must be greater than 0.</i> <i>Should be zero padded to match the length</i>	NS	6	6	M
issue-date	Instrument Date	<i>Date should be in DDMMYYYY format</i> Should not be older than 90 days	NS	8	8	M
amount	Amount		N	1	18	M
transcode	Transaction Code		NS	2	3	M
draweebankname	Drawee Bank Name	Should allow following special characters _, blank space,', comma, full stop	AN	1	50	O
draweebranchroutingno	Routing number of the drawee branch	<i>Must be greater than 0</i>	NS	9	9	M

Attributes of ItemAttribute Name	Description/Format	Value (default) <i>Special Condition</i>	Type	Size		Usag e
				Min	Max	
payee name	Name of the Payee	Should allow following special characters a-z,A-Z,0-9,_, blank space,', comma, full stop	AN	1	50	O
san	Short Account Number	<i>Must be greater than 0</i> <i>Should be zero padded to match the length upto 6 digits</i>	NS	6	7	O
Optional1	Filler	Should allow following special characters a-z,A-Z,0-9,_, blank space,', comma, full stop	AN	1	50	O
Optional2	Filler	Should allow following special characters a-z,A-Z,0-9,_, blank space,', comma, full stop	AN	1	25	O
Optional3	Filler	Should allow following special characters a-z,A-Z,0-9,_, blank space,', comma, full stop	AN	1	10	O

Appx 1.1.3.4 Additional Fields

To support extension, the CIIF file supports the tag <additional-fields> which has no attributes. It has child elements <field>.

Appx 1.1.3.5 Field

The field tag has following attributes:

Attributes of ItemAttribute Name	Description/ Format
Name	User defined
Value	User defined

The validation of CIIF containing variable data represented by additional-fields tag MUST be supported by XSD provided by the bank which can validate the contents of such name-value pair represented by the <field> tag.

Appx 1.1.4 Format for CSV file

The CIIF file in CSV format shall contain the following heading fields. Each field must be separated by ,(comma).

Column Heading	Description/ Format	Value (default) <i>Special Condition</i>	Type	Size		Usage
				Min	Max	
PayeeAccountNumber	Account Number of the Payee	Must be greater than 0.	NS	1	25	M
SerialNumber	Instrument number	<i>Must be greater than 0.</i> <i>Should be zero padded to match the length</i>	NS	6	6	M
IssueDate	Instrument Date	<i>Date should be in DDMMYYYY format</i> Should not be older than 90 days	NS	8	8	M
Amount	Amount		N	1	18	M
Transactioncode	Transaction Code		NS	2	3	M

Column Heading	Description/ Format	Value (default) <i>Special Condition</i>	Type	Size		Usage
				Min	Max	
DraweeBankName	Drawee Bank Name	Should allow following special characters A-Z,a-z,0-9,_, blank space,', comma ¹ , full stop	AN	1	50	O
DraweeBranchRoutingNumber	Routing number of the drawee branch	<i>Must be greater than 0</i>	NS	9	9	M
PayeeName	Name of the Payee	Should allow following special characters A-Z,a-z,0-9,_, blank space,', comma ¹ , full stop	AN	1	50	O
SAN	Short Account Number	<i>Must be greater than 0</i> <i>Should be zero padded to match the length upto 6 digits</i>	NS	6	7	O
Optional1	Filler	Should allow following special characters A-Z,a-z,0-9,_, blank space,', comma ¹ , full stop	AN	1	50	O

Column Heading	Description/ Format	Value (default) <i>Special Condition</i>	Type	Size		Usage
				Min	Max	
Optional2	Filler	Should allow following special characters A-Z,a-z,0-9,_, blank space,', comma ¹ , full stop	AN	1	25	O
Optional3	Filler	Should allow following special characters A-Z,a-z,0-9,_, blank space,', comma ¹ , full stop	AN	1	10	O

¹-- field having character "comma," in value should be enclosed within ""(double quotes).

Note: All the column Headers are mandatory. In case of blank or null fields, values should be presented as null with comma separator.

The order of the fields should be as mentioned below:

PayeeAccountNumber, SerialNumber, IssueDate, Amount, Transactioncode, DraweeBankName, DraweeBranchRoutingNumber, PayeeName, San, Optional1, Optional2, Optional3

Appx 1.1.5 Response files

CPPS must output Response file in the same format as Input file format i.e if XML CIIF file was presented then RES file must be in XML format.

The attribute **filestatus** can be one among

- 0 - File accepted.
- 1 - Entire file rejected due to format inconsistencies.
- 4 - Item level rejection.

Appx 1.1.5.1 For XML response files the format is:

A1	<p>The CPPS Item Input File Response file structure shall be:</p> <pre> <ciif-response ... > <records ... > <item ... > [<additional-fields> <field....> ... </additional-fields>] </item> ... </records> </ciif-response > </pre>
----	---

Appx 1.1.5.1.1 ciif-response

Attribute Name	Description/ Format	Value (default)	Type	Size		Usag e
				Min	Max	
version	Version of this Interface definition		N	1.2	3.2	M
fileid	Running number to uniquely identify the file.		AN	1	10	M
filestatus	Status of the file whether accepted = 0, File Level Rejection=1 or Item Level rejection=2		N	1	1	M

Appx 1.1.5.1.2 Reject Reason

In case of Item Level Rejection, the XML structure must include all the rejected items in the same XML tag format as in the CIIF input file format except that each item will carry an extra attribute “rejectreason”. The value of rejectreason is mapped in CPPS database and is to be decided by the CPPS design based on what was the reason for rejection.

The following chart provides Status Code and Reject Reason code.

FILE STATUS (CODE)	FILESTATUS (DESCRIPTION)	REJECT REASON (CODE)	Error Resolution to be done by Bank
0	File Loaded successfully and All items passed validation at CHI	N.A.	N.A.
1	Invalid file format	N.A.	Rectify File format as per IFS and resubmit the file with a new file name. Possible errors include: - content failures as a result of XSD validation - items with Clearing Type other than stated in filename
2	Invalid file name format	N.A.	Rectify file naming convention as per IFS and resubmit the file with a new file name
3	Duplicate file	N.A.	File with similar name is already uploaded in the system
4	Items rejected	1	Duplicate instruments – Instrument already available in system
4	Items Rejected	2	Incorrect Drawee bank – Drawee bank does not match with the masters
4	Items Rejected	3	Already Paid instrument-Instrument already available with Presentment flag
4	Items Rejected	4	Stale cheque

Thus a sample <item> tag will look like:

```
<item payeeaccno="123456789" serialno="000001" issue-date="15022016" amount="1500"
transcode="123" draweebankname="State Bank of India"
draweebranchroutingno="110101111" payeeaname="Mr. Adesh Shah" san="1235437"
rejectreason="1"/>
```

Appx 1.1.5.1.3 Incase of Successful items

```
<?xml version="1.0" encoding="UTF-8"?>
<ciif-response version="1.0" fileid="1" filestatus="0"/>
```

Appx 1.1.5.1.4 Incase of File Level rejection

```
<?xml version="1.0" encoding="UTF-8"?>
<ciif-response version="1.0" fileid ="1" filestatus ="1"/>
```

Appx 1.1.5.1.5 Incase of Item level rejections

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<ciif-response version="1.0" fileid ="1" filestatus ="4">
```

```
<records>
```

```
<item payeeaccno="123456789" serialno ="000001" issue-date="23012015" amount="1500"
transcode="123" draweebankname="State Bank of India" draweebranchroutingno="110101111"
payeeaname="Mr. Adesh Shah" san="1235436" rejectreason="1"/>
```

```
<item payeeaccno="123456789" serialno ="000002" issue-date="03062015" amount="1200"
transcode="12" draweebankname="State Bank of India" draweebranchroutingno="110101111" payeeaname="Mr.
Adesh Shah" san="123543" rejectreason="2"/>
```

```
</records>
```

```
</ciif-response>
```

Appx 1.1.5.2 CSV response file

Appx 1.1.5.2.1 Successful validation

The CSV will contain just 1 column i.e FileStatus with 1 row with value 0.

```
FileStatus
```

```
0
```

Appx 1.1.5.2.2 File rejection, the response file will contain:

```
FileStatus
```

```
1
```

Appx 1.1.5.2.3 Item level rejections

The RESponse CSV must contain the entire item details as presented to CPPS along with 1 additional column at the end "Reject Reason". For example

```
Payee Account Number,Cheque Number,Cheque issue date,Amount,Transaction
code,Drawee Bank Name,Drawee Branch Code,Payee Name,SAN,Reject Reason
```

```
234543543,423424,05062015,1410,115,STATE BANK OF INDIA,110002000,Mumbai
Development Centre,4233228,10
```

```
341432432,432324,16052015,134209,10,STATE BANK OF INDIA,110002000,Amit
Patil,534535,20
```