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| **State Bank of Pakistan** |
| **Banking Conduct and Consumer Protection Department** |
| **eCIB v2.0 Data File Format Specifications for Capturing Loan Applications** |

**Introduction**

This document describes the format for capturing Loan Applications data – an additional datasets under eCIB v2.0 that is to be submitted by member Financial Institutions (FIs) through SBP Data Acquisition Portal (DAP).

This dataset is required to capture loan applications received by the member FIs on a relatively higher frequency than the monthly reporting of main eCIB data. This will facilitate the member FIs to see how many other FIs the prospective borrowers has approached recently and how much potential exposure the borrower has applied for, which is yet to be reflected in its credit worthiness report.

FIs are required to capture and generate the required data from their information systems (either core-banking or credit management systems etc.). The member FIs may need to upgrade their information systems to be able to capture and generate the required data on a frequency determined by eCIB on this format. The FIs are required to submit the data from a single designated point such as head office.

**Target Audience**

The target audience of this document includes the following staff of member FIs (in order of relevance):

1. Information systems management specialists, especially those who work directly with eCIB data reporting or credit management systems of the FIs. This include the third party vendors who are working for the member FIs on eCIB data reporting.
2. Business domain experts of credit management systems or eCIB reporting
3. Other users of member FIs who have a stake in eCIB data and its reporting

**General Guidelines**

The desired data file is a collection of multiple comma separated datasets. A dataset is simply a data table encapsulating a business concept such as Individual Loan Application or Corporate Loan Application. Each dataset begins with a header comprising of field names. Each record in a dataset is recognized by its first field called 'RECORD\_TYPE', which is always the first field in every record. For example, sample of typical data file with 3 datasets is provided below:

 *--------------- start of data file (not part of data file) -------------*

 **record\_type, field1, field2**

 “H”, “row1\_val1”, “row1\_val2”

 **record\_type, field1, field2, field3, field4**

 “I\_A”, “row1\_val1”, “row1\_val2”,” row1\_val3”, “row1\_val4”

 “I\_A”, “row2\_val1”, “row2\_val2”, “row3\_val3”, “row4\_val4”

 “I\_A”, .., .., .., ..

 “I\_A”, .., .., .., ..

 **record\_type, field1, field2, field3**

 “C\_A”, “row1\_val1”, “row1\_val2”, “row1\_val3”

 “C\_A”, “row2\_val1”, “row2\_val2”, “row3\_val3”

 “C\_A”, .., .., .., ..

 “C\_A”, .., .., .., ..

 “C\_A”, .., .., .., ..

 *---------------- end of data file (not part of data file)--------------*

### Technical Specifications

While preparing the data file, following needs to be ensured:

1. The data file must be a single file consisting of all datasets described in the subsequent sections of the document.
2. Field sequence **must** exactly be the same as given in this document
3. Field names **should** be the same as given in document
4. Each field must be separated by a comma “,”
5. Value of each field must be enclosed within double quotes (“”). If double quotes happened to be part of a field’s value, it must be escaped by a backslash (“\”) character.
6. Due to the high volume and size of the data, the data file must be compressed using a standard zip utility before submitting on DAP.
7. The compressed name of the file should be eCIB2-Loan-Apps-YYYY-MM-DD-[FI Code].zip

Some important attributes defined under Data File Format Specifications are discussed here.

### Supported Data Types

The table below provides an overview of the supported data types.

|  |  |
| --- | --- |
| **Data Type** | **Format** |
| **Date** | All dates must be in the format of **YYYY-MM-DD** i.e. exactly 4 digits for year followed by a hyphen “-“, followed by 2 digits for month, followed by a hyphen “-“, and finally followed by 2 digits for day. For example: “2014-03-01” for March 01, 2014. It should consist of only date value while time value is not required. |
| **Text** | The values in all fields with this type can be composed of any valid combination of characters available on a standard keyboard. Double quote (“) characters must be escaped by a preceding \ (backslash) character. For example: “They said \“no,\””. |
| **Numeric Text** | Composed of only valid combination of natural numbers without any thousand separator. All leading zeroes must be included in the data and readable by human eyes. For examples, “13000”, “053” etc. |
| **Decimal Text** | Composed of only valid combination of numbers with decimal places. Thousand separators are not allowed For example: “0.56”, “5009.353” |
| **Amount** | Any non-negative “Decimal Text” in unit PKR. For example “100000.00” |

### Data Format Definition

The following table describes the data format attributes that are used in this document.

|  |  |
| --- | --- |
| **Attributes** | **Description** |
| **Required** | **“Yes”** indicates that this field must have some non-empty value. **“No”** indicates that this is an optional field, field can be left blank. |
| **Maximum Length** | Maximum length of character to be allowed in field. |
| **Format** | **Yes**, it must have some format as described in section.**None (**or if not given**)** means field has no specific required format |
| **Sample Value** | This provides an example of the expected data |

### Datasets Specifications

The required data file may consist of at most 3 datasets. Below is a list of all datasets with their associated record types accepted by the system:

| **S. No.** | **Dataset** | **Record Type**  |
| --- | --- | --- |
| 1 | File Header | H |
| 2 | Individual Borrower’s Loan Application | I\_A |
| 3 | Corporate Borrower’s Loan Application | C\_A |

This section describes of each of the required dataset in detail.

### File Header Information (Record Type = “H”)

**Purpose:** This dataset used to capture file header identifying the financial institution by its code and the reporting period

**Expected Number of Records:** Exactly one

**Description:** This is a mandatory dataset and must be the part of the data file with exactly one record of its type. . This also contains the version of the data file specifications against which the data file is generated. The is also used to verify any changes in the data file after it is generated by the source systems by way of verifying the checksum value when the file is uploaded to eCIB.

#### **Dataset Fields**

| **Field Sequence No.** | **Field** | **Description** | **Data Format** |
| --- | --- | --- | --- |
|  | RECORD\_TYPE | Code that specifies the type of record. There must be exactly one record in a csv file for Record Type “H” | Required: YesExpected Value = “H” |
|  | FI\_CODE | A unique code assigned to each Financial Institutions that is submitting file to SBP | Required: YesData Type: Numeric TextMaximum Length: 15Sample Value: “14” |
|  | AS\_OF\_DATE | It is reporting date of individual and corporate borrower reporting to eCIB system. Currently it is the date of submitting month. | Required: YesData Type: Date |
|  | VERSION | This field specifies the version of Data Format Specifications changes. | Required: YesData Type: TextSample: “2021.08.01” |

### Individual Borrower - Loan Application Information (Record Type = “I\_A”)

**Purpose:** This dataset is used to capture loan application data of individual borrower.

**Expected Number of Records:** Many

**Description:** Each record corresponds to the loan applications received by a member FI from individual borrower.

#### **Dataset Fields**

| **Field Sequence No.** | **Field** | **Description** | **Data Format** |
| --- | --- | --- | --- |
|  | RECORD\_TYPE | Code that specifies the type of record. While providing individual borrower profile information, its value must be equal to ”I\_A”. | Required: YesExpected Value: ”I\_A” |
|  | INDIVIDUAL\_BRWR\_CODE | This field specifies a Business key for individual borrower..For resident or non-resident Pakistani nationals, a borrower key is assigned to each borrower in the order given below: 1. CNIC
2. NICOP
3. OLD NIC

For foreign nationals, individual borrower key is assigned in the preference of below order:1. Passport #
2. POC

It must be noted that any corrections / changes to the keys must be shared subsequently through Rectification datasets. | Required: YesData Type: TextMaximum Length: 30Format: Yes [CNIC/ NICOP/PASSPORT/POC]Sample Value: “38201-4589517-9” |
|  | CNIC | This field specifies Computerized National Identity Card Number of BorrowerAt least one of the keys from CNIC, NICOP, NIC\_OLD for Pakistani Nationals or Passport No or POC for foreign national must be provided. | Required: No (Conditional Required)Data Type: Text Maximum Length: 15Format: Yes [xxxxx-xxxxxxx-x]Sample Value: “12345-1234567-1” |
|  | NICOP | This field specifies National Identity Card for Overseas Pakistanis (NICOP)At least one of the keys from CNIC, NICOP, NIC\_OLD for Pakistani Nationals or Passport No or POC for foreign national must be provided. | Required: No(Conditional Required)Data Type: Text Maximum Length: 15Format: Yes [xxxxx-xxxxxxx-x]Sample Value: “12345-1234567-1” |
|  | NIC\_OLD | This field specifies Old National Identity Card Number of BorrowerAt least one of the keys from CNIC, NICOP, NIC\_OLD for Pakistani Nationals or Passport No or POC for foreign national must be provided. | Required: No (Conditional Required)Data Type: Text Maximum Length: 13Format: Yes [xxx-xx-xxxxxx]Sample Value: “123-99-123456” |
|  | PASSPORT\_NO | This field specifies Passport Number of foreign borrowerAt least one of the keys from CNIC, NICOP, NIC\_OLD for Pakistani Nationals or Passport No or POC for foreign national must be provided. | Required: No(Conditional Required)Data Type: TextMaximum Length: 30 |
|  | POC | This field specifies Pakistan Origin Card of foreign borrowerAt least one of the keys from CNIC, NICOP, NIC\_OLD for Pakistani Nationals or Passport No or POC for foreign national must be provided. | Required: No(Conditional Required)Data Type: TextMaximum Length: 15 |
|  | NATIONALITY | This field specifies Nationality of the borrower. | Required: YesData Type: TextMaximum Length: 1Valid values: Only valid codes as available (P= Pakistani, F= Foreign National)Sample Value: “P” |
|  | PASSPORT\_COUNTRY\_CODE | This field specifies Passport country Code of Foreign borrower | Required: YesData Type: TextMaximum Length: 3Valid Values: (Select from Country Codes, ISO31661 Alpha-3 Code)Sample Value: “PAK” – For Pakistan |
|  | NAME | This field specifies Name of borrower | Required: YesData Type: TextMaximum Length: 60 |
|  | TAX\_NO | This field specifies National Tax Number of the borrower | Required: NoData Type: TextMaximum Length: 15Sample Value: “12345678” |
|  | FATHER\_NAME | This field specifies Father or Husband's name of the borrower | Required: YesData Type: TextMaximum Length: 60Sample Value: “M Abdul Malik” |
|  | OCCUPATION | This field specifies Occupation of the borrower.  | Required: NoData Type: TextMaximum Length: 1Valid Values: Only valid codes as available (B=Business/Professional, S=Salaried, U= Un-employed, O=Other)Sample Value: “S” |
|  | INSTREF | This field specifies Institution Own Reference of FI | Required: NoData Type: TextMaximum Length: 20Sample Value: “0123456789”  |
|  | LOAN\_TYPE | This field specifies T=Term Loan, E=Ever Green | Required: NoData Type: TextMaximum Length: 1Only valid codes as available (“T”=Term Loan, “E”=Ever Green)Sample Value: “T” |
|  | SECURED | This field specifies Secured = S, Unsecured = U | Required: NoData Type: TextMaximum Length: 1Only valid codes as available (Secured = “S”, Unsecured = “U”)Sample Value: “S” |
|  | AMOUNT | This field specifies Amount of the credit facility | Required: YesData Type: Numeric TextMaximum Length: 11Sample Value: “9999” |
|  | STATUS | This field specifies the current status of credit application. | Required: YesData Type: TextMaximum Length: 1Only valid codes as available (“A”=Applied, “I”=In-process, “G”=Granted, “R”=Rejected)Sample Value: “A” |
|  | STATUS\_DATE | This field specifies Date on which the credit facility was approved/renewed to the borrower | Required: NoData Type: Date  |
|  | SBP\_SCHEME\_TYPE\_CODE | This field specifies SBP Scheme Type like youth scheme or etc... (Select value from Annexure-6) | Required: NoData Type: Numeric TextMaximum Length: 2Valid values: (Select value from given “Annexure-6”)Sample Value: “10” |
|  | APPLICATION\_DATE | This field specifies Date on which the credit facility applied. | Required: NoData Type: Date  |
|  | FINANCIAL\_MODE | This field specifies Mode of Financing, 1=Conventional, 2= Islamic | Required: YesData Type: Numeric TextMaximum Length: 1Valid values: “1”=Conventional, “2”= IslamicSample Value: “2” |
|  | APPLICATION\_CODE | This field specifies the application code of individual borrower loan application, it must be unique across FI | Required: YesData Type: Text |
|  | BRANCH\_CODE | This field specifies Branch Code, Branch code should be active and valid code as given by SBP. | Required: YesData Type: TextMaximum Length: 15 |
|  | PRODUCT\_CODE | This field specifies Product code. | Required: YesData Type: Numeric TextMaximum Length: 2Format: NoneValid values: (Select value from given “Annexure-4”)Sample Value: “5” |

### Corporate Borrower – Loan Application Information (Record Type = “C\_A”)

**Purpose:** This dataset is used to capture loan application data of corporate borrower on a frequency determined by SBP from time to time.

**Expected Number of Records:** Many

**Description:** Each record corresponds to the loan applications received by a member FI from corporate borrower.

#### **Dataset Fields**

| **Field Sequence No.** | **Field** | **Description** | **Data Format** |
| --- | --- | --- | --- |
|  | RECORD\_TYPE | Code that specifies the type of record. For such records, its value must be equal to “C\_A. | Required: Yes Expected value = “C\_A” |
|  | CORPORATE\_BRWR\_CODE | This field specifies Borrower's Code | Required: YesData Type: Numeric TextMaximum Length: 7Sample Value: “1234567” |
|  | CORPORATE\_BRWR\_CUIN | This field specifies CUIN of borrower issued by SECP | Required: NoData Type: Numeric TextMaximum Length: 10Sample Value: “123456790” |
|  | BRWR\_REGISTRATION\_NO | This field specifies Registration number of borrower/partnership issued by registrar | Required: NoData Type: TextMaximum Length: 15 |
|  | NAME | This field specifies Name of borrower | Required: YesData Type: TextMaximum Length: 60Sample Value: “ABC Company” |
|  | BORROWER\_TYPE | This field specifies Borrower's Type (Select value from Annexure-1) | Required: YesData Type: TextMaximum Length: 2Sample Value: “15” |
|  | TAX\_NO | This field specifies National Tax Number of borrower | Required: NoData Type: TextMaximum Length: 15Sample Value: “12345678” |
|  | BUSINESS\_CODE | This field specifies Business Code of the borrower(Select value from Annexure-2) | Required: YesData Type: Numeric TextMaximum Length: 2Valid Values: (Select value from Annexure-2)Sample Value: “79” |
|  | BRANCH\_CODE | This field specifies Branch Code, Branch code should be active and valid code as given by SBP. | Required: YesData Type: TextMaximum Length: 15 |
|  | PRODUCT\_CODE | This field specifies Product code. | Required: YesData Type: Numeric TextMaximum Length: 2Format: NoneValid values: (Select value from given “Annexure-4”)Sample Value: “5” |
|  | APPLICATION\_DATE | This field specifies Date on which the credit facility was applied. | Required: NoData Type: Date  |
|  | SECURED | This field specifies Secured = S, Unsecured = U | Required: NoData Type: TextMaximum Length: 1Valid Values: (Secured = “S”, Unsecured = “U”)Sample Value: “S” |
|  | AMOUNT | This field specifies Amount applied of the credit facility | Required: NoData Type: Numeric Text Maximum Length: 11Sample Value: “9999” |
|  | STATUS | This field specifies the current status of credit application. | Required: YesData Type: TextMaximum Length: 1Only valid codes as available (“A”=Applied, “I”=In-process, “G”=Granted, “R”=Rejected)Sample Value: “A” |
|  | STATUS\_DATE | This field specifies Date on which the credit facility was approved/renewed to the borrower | Required: NoData Type: Date  |
|  | NATURE\_OF\_FACILITY | This field specifies Nature of Facility, Fund Based = F, Non Fund Based = N | Required: NoData Type: TextMaximum Length: 1Valid Values: (Fund Based = “F”, Non Fund Based = “N”)Sample Value: “F” |
|  | SBP\_SCHEME\_TYPE\_CODE | This field specifies SBP Scheme Type like youth scheme or etc... (Select value from Annexure-6) | Required: NoData Type: Numeric TextMaximum Length: 2Valid values: (Select value from given “Annexure-6”)Sample Value: “10” |
|  | FINANCIAL\_MODE | This field specifies Mode of Financing, 1=Conventional, 2= Islamic | Required: YesData Type: Numeric TextMaximum Length: 1Valid Values: 1 OR 2Sample Value: “2” |
|  | APPLICATION\_CODE | This field specifies the application code of individual borrower loan application, it must be unique across FI | Required: YesData Type: Text |
|  | INSTREF | This field specifies Institution Own Reference of FI | Required: NoData Type: TextMaximum Length: 20Sample Value: “0123456789”  |

### Abbreviations/Glossary of Terms

| **Term/Acronym** | **Description/Definition/Explanation** |
| --- | --- |
| CNIC | Computerized National Identity Card |
| NICOP | National Identity Card for Overseas Pakistanis |
| POC | Pakistan Origin Card |
| CSV | Comma Separated values |
| CUIN | Computer Generated Unique Identification Number |
| DAP | Data Acquisition Portal |
| eCIB | Electronic Credit Information Bureau |
| FI | Financial Institution |
| SBP | State Bank Of Pakistan |
| SECP | Securities and Exchange Commission of Pakistan |

# **Annexures**

Following annexure with list of values are given in Excel document “eCIB v2.0 Data Collection Formats Annexures.xlsx”.

|  |  |  |
| --- | --- | --- |
| **S. No** | **Description** | **Reference Worksheet**  |
|  | Type of Borrower to be used for Corporate Profile | Annexure -1 |
|  | List of Business Codes | Annexure -2 |
|  | Type of Loan Products | Annexure -4 |
|  | Type of State Bank Of Pakistan Loan Scheme | Annexure -6 |
|  | List of Country Codes | Annexure -7 |

**Note:** Not required is given in IT related terms, however it does not mean that FIs are not required to report such fields.