

# **REPORTING RETURNS TO THE CENTRAL BANK IN XML**

**Explanatory information on how to report returns to the Central Bank by  
uploading files (in XML format) to the Online Reporting system.**

## **TABLE OF CONTENTS**

<b>1 XML FILES FOR FILE UPLOAD TO THE CENTRAL BANK.....</b>	<b>3</b>
1.1 WHAT IS TO BE REPORTED?.....	3
1.2 LOADING A FILE .....	3
1.3 FILE AND DATA VALIDATION.....	4
1.3.1 <i>File name validation</i> .....	4
1.3.2 <i>Schema validation</i> .....	5
1.3.3 <i>On-Form / Cross Form Validation Rules</i> .....	5
1.4 Status of Returns.....	5
1.4.1 <i>Revising Data</i> .....	6
1.5 STRUCTURE OF XML INSTANCE DOCUMENTS .....	6
1.5.1 <i>Encoding</i> .....	7
1.5.2 <i>Root Element</i> .....	7
1.5.3 <i>Template Element</i> .....	7
1.5.4 <i>Row Element</i> .....	8
1.5.5 <i>Column Element</i> .....	8
<b>2 EXAMPLE: SAMPLE XML INSTANCE FILE .....</b>	<b>9</b>
<b>3 ADDENDUM .....</b>	<b>9</b>
3.1 RETURNS.....	9
3.1.1 <i>Return templates</i> .....	9

## **1 XML files for File Upload to the Central Bank**

The Central Bank will provide an XML file upload facility for RS2, RC2, RV2, SQ2 MR1 and CDR returns on the Online Reporting website. All XML files containing these return instances must be generated in accordance with the rules specified in the appropriate schema(s).

### **1.1 What is to be reported?**

The sections included in each return are listed in Section 3.1 of this document.

Each template will only be reported once. Each template is made up of a number of rows and columns. All templates have a fixed predefined number of columns and rows. Each item within a template can be identified by a combination of row number and column number.

Templates can be Mandatory or Optional depending on whether the return is monthly or quarterly.

### **1.2 Loading a file**

Files can be uploaded from the relevant Return Type data page on the Online Reporting system. The user will be asked to browse to the file for upload on their local system. Once the file for upload is selected, clicking on the "Load File" button will upload the file.

Files that are uploaded will be added to a queue and processed as soon as possible, but the length of time this takes will depend on the system's activity at that time.

Once a file has been processed, the system will send an email notification to the email address specified in the user's profile, informing them that the file has been processed. For security reasons, the email notification will not include any further details. If the user has logged out of the system, they or another authorised user from the firm must log in to the system to view further details of the status and any errors that may have occurred.

The status of uploaded files can be viewed on the system's File Load History page at any time, and could be:

1. **Queued** – the file is in a queue awaiting processing

2. **Processing** – the file is currently being processed
3. **Complete** – the file has been processed and was:
  - a. *Rejected* – the entire file was rejected because:
    - The file name did not follow the naming convention
    - The file did not contain valid XML according to the relevant schema
  - b. *Partially Rejected* – the file was valid, but the content failed to satisfy the validation rules that are not enforced by the schema.
  - c. *Accepted* – the file was loaded successfully

When a return has been successfully loaded to the system, it must be signed off before it is submitted to the Central Bank.

### **1.3 File and Data Validation**

Validation is applied at a number of different points in a file upload.

#### *1.3.1 File name validation*

Return files must follow the following naming convention:

XML files for returns must adhere to the following naming convention:

#### **Cnnnnn\_YYYYMMDD\_RS2.xml**

- Cnnnnn represents the **reporting institution** submitting the return. This will be allocated to each reporting institution before they use the system for the first time.
- YYYYMMDD represents the **reporting date**.
- RS2 represents the RS2 return.

Files that do not follow the correct naming convention will be immediately rejected by the system. No further processing will take place.

### *1.3.2 Schema validation*

The XML file must be valid according to the relevant XML schema defined by the Central Bank. Reporting firms should ensure that files have been checked against this schema before loading to the Online Reporting system.

The schema sets out the structural and data type rules for each template in the return. If a template contains a row or column number that is greater than the predefined number of rows and columns, the file will fail the schema validation.

Every column in every template has a predefined data type. Data entered in all rows for a particular column must match the predefined data type. If a file contains any data type errors the file will fail the schema validation.

If an XML file fails the schema validation, it will be rejected. Details of the errors can be seen on the File Load History page of the Online Reporting system.

### *1.3.3 On-Form / Cross Form Validation Rules*

The Central Bank has defined its own set of validation rules for each template, which ensures all data submitted are correct and are of a high quality. These rules will be applied in the file processing when the data is being loaded.

The system will check to see whether the data contains any errors – such as a total field that does not match the sum of its components (this is known as On-Form Validation).

If any of these rules are broken, the data will still be loaded to the system but the return will have a status of 'Partially Rejected'.

## **1.4 Status of Returns**

Returns loaded to the system can have the following status:

- **Blank** – no data has been entered for any template on the return.
- **Invalid** – at least one template on the return has been saved with errors.
- **Valid** – all mandatory templates have been completed and all optional templates entered contain valid data. The return is now ready to be signed off.

- **Signed Off** – the return has been signed off by someone with signoff access and have been submitted to the Central Bank. No further updates can be made unless the return is unlocked by the Central Bank.
- **Unlocked** – the return has been unlocked by the Central Bank so that revisions can be made by the reporting firm.

When a return has been unlocked, it can be reloaded as required by the reporting firm. The same process must be repeated to sign off and submit the return.

Any template that has a status other than *Signed Off* can be edited at any time by uploading a file containing the relevant updates or revisions.

#### *1.4.3 Revising Data*

If a reporting firm needs to revise data after it has been signed off, they must contact the Central Bank to unlock the relevant return and template(s).

To unlock residents returns reporting agents should contact the Central Bank at <mailto:creditinst@centralbank.ie> for returns RS2, RC2, RV2 and SQ2 and <mailto:statistics@centralbank.ie> for Returns MR1 and CDR.

When the return has been unlocked the data can be resubmitted by uploading the relevant XML instance document files or make corrections via a downloaded Excel file.

For file upload, the relevant file should be resubmitted through the Online Reporting system. Any xml files resubmitted for a return that has not been unlocked will be rejected.

### **1.5 Structure of XML instance documents**

XML instances submitted to the Central Bank are governed by the basic rules and regulations defined by XML.

Detailed below are the additional requirements specific to the Central Bank that must be observed when submitting returns in XML format.

**It is absolutely necessary to follow the details below.** Any details required which are not contained in the XML file or any additional unexpected information supplied in the XML file will result in the XML file being rejected.

### *1.5.1 Encoding*

It is necessary to specify the *encoding* attribute in the prologue of an XML instance document. In this connection it is a fundamental requirement that "UTF-8" is entered as the character encoding.

Typically this will appear as:

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

```
<xs:BSO>  
  <Row number="1">  
    <Column number="1">1</Column>  
    <Column number="2">3892</Column>  
    <Column number="3">3893</Column>  
  </Row>  
</xs:BSO>  
</RS2Return>
```

### *1.5.2 Root Element*

The root element must take the following form:-

```
<RS2Return xmlns:xs="http://www.centralbank.ie/Schemas/Statistics/2014-07/data"  
reportingDate="2014-08-01">
```

The root element should contain the following attributes:

- reporting Date - Mandatory date in ISO 8601 extended format (YYYY-MM-DD).
- Namespace - xmlns:xs="<http://www.centralbank.ie/Schemas/Statistics/2014-07/data>"

### *1.5.3 Template Element*

Each Residents return form is represented by separate **<Template>** elements. Each **<Template>** element will contain a mandatory ID attribute to identify the form being reported i.e. **<BSO>**, **<IES>** etc. Each **<Template>** element should contain up to a maximum of the number of **<Row>** elements relevant to that form.

#### *1.5.4 Row Element*

The `<Row>` element should contain a `<Column>` element and a "number" attribute. The value of the number attribute cannot exceed the maximum number of rows allowed in that template. The row number cannot previously have been assigned to another row within that form.

#### *1.5.5 Column Element*

The `<Column>` element will contain a number attribute to identify the column being reported. This value of this attribute will be the column number within a particular `<Row>` element. This element will contain the item value to be reported.

For Example:-

```
<xs:BSO>
  <Row number="1">
    <Column number="1">1</Column>
    <Column number="2">3892</Column>
    <Column number="3">3893</Column>
  </Row>
</xs:BSO>
</RS2Return>
```



## **2 Example: Sample XML instance file**

A number of sample XML instance files have been published with the set of schema.

## **3 Addendum**

### **3.1 Returns**

#### *3.1.1 Return formats*

<b>Return</b>	<b>Return Description</b>
RS2	Resident Offices Return 2014
<b>Format Monthly</b>	<b>Format Description</b>
BSO	Balance Sheet Overview
IES	Balance Sheet - Irish resident, Euro
INS	Balance Sheet - Irish Resident, Non-Euro
OES	Balance Sheet - Other Monetary Union Member State, Euro
ONS	Balance Sheet - Other Monetary Union Member State, Non Euro
RWS	Balance Sheet - Rest of World Resident, All Currency
REQ	Reserve Requirement Calculation
LAM	Amortisation of Loans to Irish Residents
MWR	Formal Write Downs/Write Offs
OBS	Off Balance Sheet
MSC	Securitisation Activities
<b>Format Quarterly</b>	
QSC	Services Securitised Loans – by location of FVC
QSA	Sector analysis of Selected Liabilities and Assets
QCO	Country Breakdown
QCU	Currency Breakdown

**CBI**  
**October 2014**

IRR	Interest Rate reset
<b>Return</b>	<b>Return Description</b>
RC2	Reclassification Adjustments Form 2014
<b>Format Monthly</b>	<b>Format Description</b>
IEC	Balance Sheet Reclassifications - Irish Resident, Euro
INC	Balance Sheet Reclassifications - Irish Resident, Non Euro
OEC	Balance Sheet Reclassifications - Other Euro Area Member State Resident, Euro
ONC	Balance Sheet Reclassifications - Other Euro Area Member State Resident, Non Euro
RWC	Balance Sheet Reclassifications - Rest of World Resident, All Currencies
SCC	Reclassifications Outstanding Stock of Securitised Loans
OBC	Off Balance Sheet Reclassifications
<b>Format Quarterly</b>	<b>Format Description</b>
IPC	Reclassifications - Sector Analysis of Selected Liabilities and Assets
IRC	Reclassifications - Interest Rate Reset
<b>Return</b>	<b>Return Description</b>
RV2	Revaluation Adjustment Return 2014
<b>Format Monthly</b>	<b>Format Description</b>
REV	Revaluation Adjustments
SCL	Revaluation Adjustments for Securitised Loans
<b>Format Quarterly</b>	<b>Format Description</b>
REG	Revaluation Adjustment for Government Credit
SER	Securitisation – Write downs at time of loan transfer

**CBI**  
**October 2014**

<b>Return</b>	<b>Return Description</b>
SQ2	Quarterly Analysis of Lending and Deposits 2014
<b>Format Quarterly</b>	<b>Format Description</b>
IEQ	Irish Resident Details, All Currencies
OEQ	Other Monetary Union Resident Details, All Currency
RWQ	Rest of World Resident details, All Currency
RVR	Quarterly Revaluations Adjustment - Irish Resident Details
RVN	Quarterly Revaluations Adjustment - Non-Irish Resident Details
RCI	Quarterly Reclassification/Net Flow of Loans Securitised/Transferred Adjustment Irish Resident Details
RCN	Quarterly Reclassification/Net Flow of Loans Securitised/Transferred Adjustment Non- Irish Resident Details
RMQ	Quarterly Residential Mortgage Analysis
RMA	Quarterly Residential Mortgage Analysis Reclassifications/Net Flow of Loans Securitised
SMQ	Quarterly SME Lending Analysis
<b>Return</b>	<b>Return Description</b>
MR1	Interest Rate Return 2014
<b>Format Monthly</b>	<b>Format Description</b>

**CBI**  
**October 2014**

OIR	Outstanding Amounts
NIR	New Business
ORM	Outstanding Amounts – Residual Maturity
RNG	Renegotiated Loans
<b>Format Quarterly</b>	<b>Format Description</b>
SM1	Lending to Irish Residents Small and Medium Size Enterprises – Sectoral
RMR	Lending to Irish Resident Households for House Purchase
<b>Return</b>	<b>Return Description</b>
CRD	Credit/Debit Card Return
<b>Format</b>	<b>Format Description</b>
CR1	Credit Card Volumes
CR2	Credit Card New Spending Transactions / Indebtedness
DR1	Debit Card Volumes
DR2	Debit Card New Spending