



SOFTWARE REQUIREMENT SPECIFICATION

FOR

CBS Multiple Enhancement

SSO: LRRD-052

NBR - SSO - Tax Submission Report

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*Users should not delete the content

Document Revision History

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0.1	27/07/2020	Initial Draft	Shaikat Barua Humira Akhter	Tawhid Jayed

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1 INTRODUCTION

1.1 OVERVIEW

Standard Chartered Bank and data edge limited has mutually agreed to implement a system named CBS Multiple Enhancement Automation. Using this system user can generate monthly reports for Bangladesh Bank, which are now manually generated.

1.2 PURPOSE

The purpose of the system is to generate reports for Bangladesh Bank with the data uploaded by their stakeholders.

1.3 REFERENCES

Sr. No.	Reference Name
1	LRRD-052 : NBR - SSO - Tax Submission Report

1.4 DEFINITIONS

As per Bangladesh Bank's guidelines.

2 SCOPE

2.1 SYSTEM OVERVIEW

Currently the "LRRD-052: NBR - SSO - Tax Submission Report" report generation process is manual.

2.2 PROPOSED SYSTEM OVERVIEW



For this report, input data will be provided by **uploading input excel file**. There will be a UX for uploading file from authorized users' workstations. There will also be provisions for intermittent data saving, data correction and final report generation.

2.3 DOCUMENT OVERVIEW

The document covers process flow of the existing system and the proposed system, user interface, data flow diagram, risk and Securities Services reporting system. This document can also help to prepare test case design.

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2.4 REFERENCED DOCUMENTS

S/N	Document Title	Version	Sample Document
1	LRRD--052_ NBR - SSO - Tax Submission Report	0.1	N/A
2	BRD_SSO-LRRD-052	N/A	N/A
3	SSO-LRRD-052_Input	N/A	 SSO-LRRD-052_Input.xlsx
4	SSO-LRRD-052_Output	N/A	 SSO-LRRD-052_Output.xlsx

3 REQUIREMENTS

3.1 FUNCTIONAL REQUIREMENTS

3.1.1 DATA INPUT

Maker will upload source input excel file in 'Master Data' page and FRS System will store the uploaded input data. Maker will fetch source input data and will give manual input in some fields then send them to the Checker for approval. Checker can approve data and generate report or reject data which will be sent back to the Maker for data correction.

3.1.2 DATA OUTPUT

Single output file will be generated for this report

The sample output format is provided in the file:

- SSO-LRRD-052_Output

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3.1.3 SOURCE DEFINITION-DATA MAPPING

3.1.3.1 NBR - SSO - Tax Submission Report

Report Field Name	Description	Source Field Name (From Input_047)	Data Source Name	Calculation if Required
S/N	Serial No.	Auto System Generated	N/A	N/A
Name	Name	Security Account Name	SSO-LRRD-052_Input	N/A
Address	Address	Address	SSO-LRRD-052_Input	N/A
TIN	TIN	"Not Applicable" (Static)	Static	N/A
Date of tax deduction/collection	Date of tax deduction/collection	Manual Entry	Manual Entry	N/A
Source of deduction/collection	Source of deduction/collection	"Sales proceeds of Securities (Capital Gain)" (Static)	Static	N/A
Section	Section	"56" (Static)	Static	N/A
Amount paid/credited	Amount paid/credited	Amount	SSO-LRRD-052_Input	N/A
Amount of tax deducted/collected	Amount of tax deducted/collected	Amount	SSO-LRRD-052_Input	N/A
Challan No.	Challan No.	Manual Entry	Manual Entry	N/A
Challan Date	Challan Date	Manual Entry	Manual Entry	N/A
Bank Name	Bank Name	"Sonali Bank" (Static, Editable)	Editable Field/Static	N/A
Amount	Amount	Amount	SSO-LRRD-052_Input	N/A
Remarks (if any)	Remarks	Manual Entry	Manual Entry	N/A

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3.1.4 APPROVAL PROCESS OF DATA

The workflow of upload input file, manual entry, correction and final approval will be passed through “Maker – Checker” mechanism such that the Checker will verify them. Nevertheless, the Checker can edit no value. The checker will be able to either approve or reject the submitted data. If approver rejects any submitted data, Maker has to rectify the rejected fields again.

3.1.5 REPORT GENERATION

Use Case	Report Generation
Actors	System Admin, System User
Descriptions	The system will allow user to prepare report for Bangladesh Bank using processed customer information from database.
Preconditions	All data submission should be approved by approver user.
Post-conditions	➤ Will show report generation completed message.
Flow	➤ User will upload input excel file and also manually enter some value. ➤ User will click on Submit button. ➤ User will conduct actions for generating report.
Output formats	➤ Excel

3.1.6 THE DATA FLOW DIAGRAM:

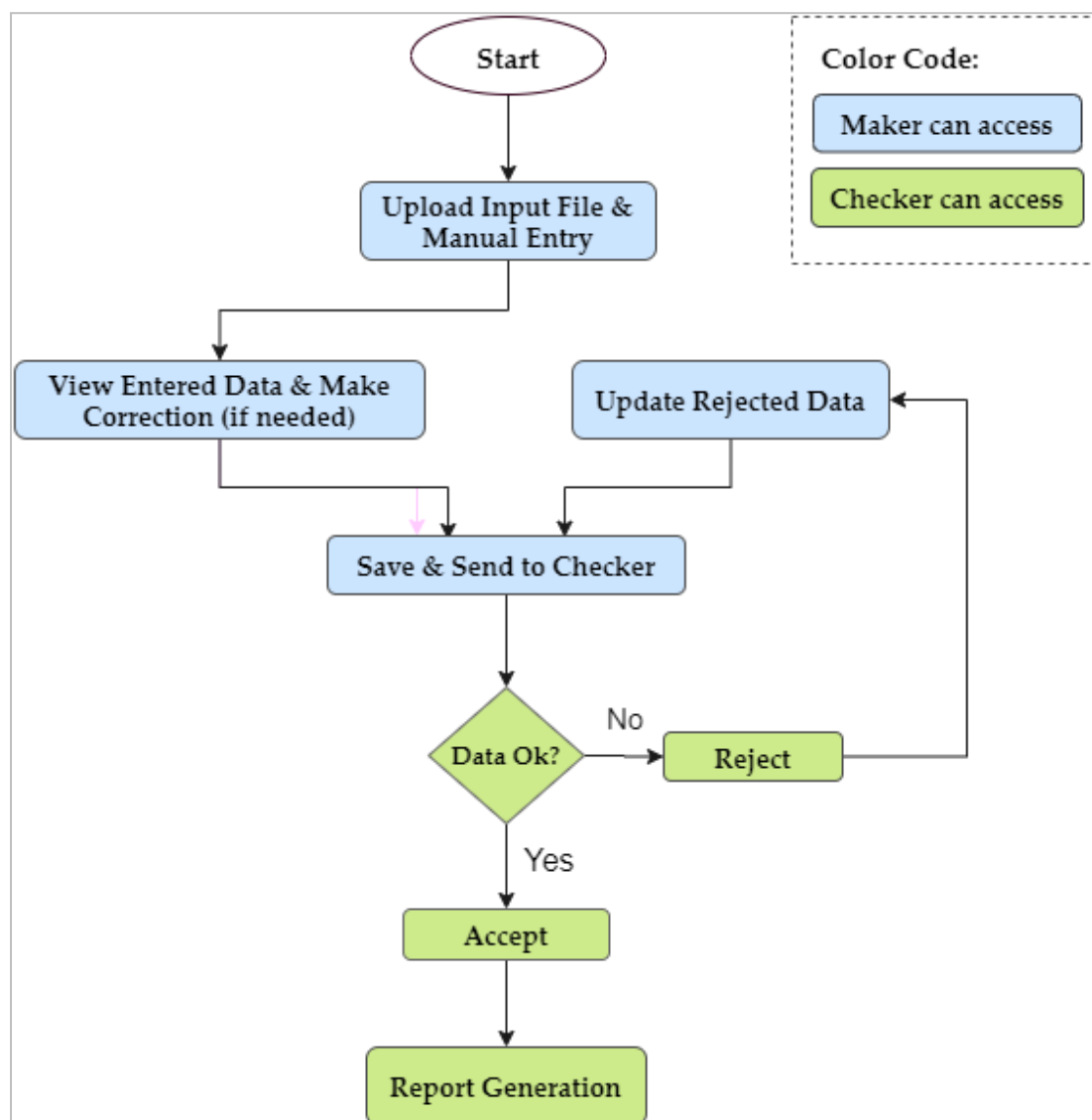


Figure 1: Data Flow Diagram

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3.2 EXTERNAL INTERFACE REQUIREMENTS

N/A

3.3 DATA REQUIREMENTS

All input data will be provided through manual entry and from uploaded input excel file.

3.4 LOOK AND FEEL REQUIREMENTS

Prototype of interface design for the new application is given below:

3.4.1 DATA UPLOAD PAGE (MAKER):

Maker will upload input file SSO-LRRD-052_Input.xlsx through this page.



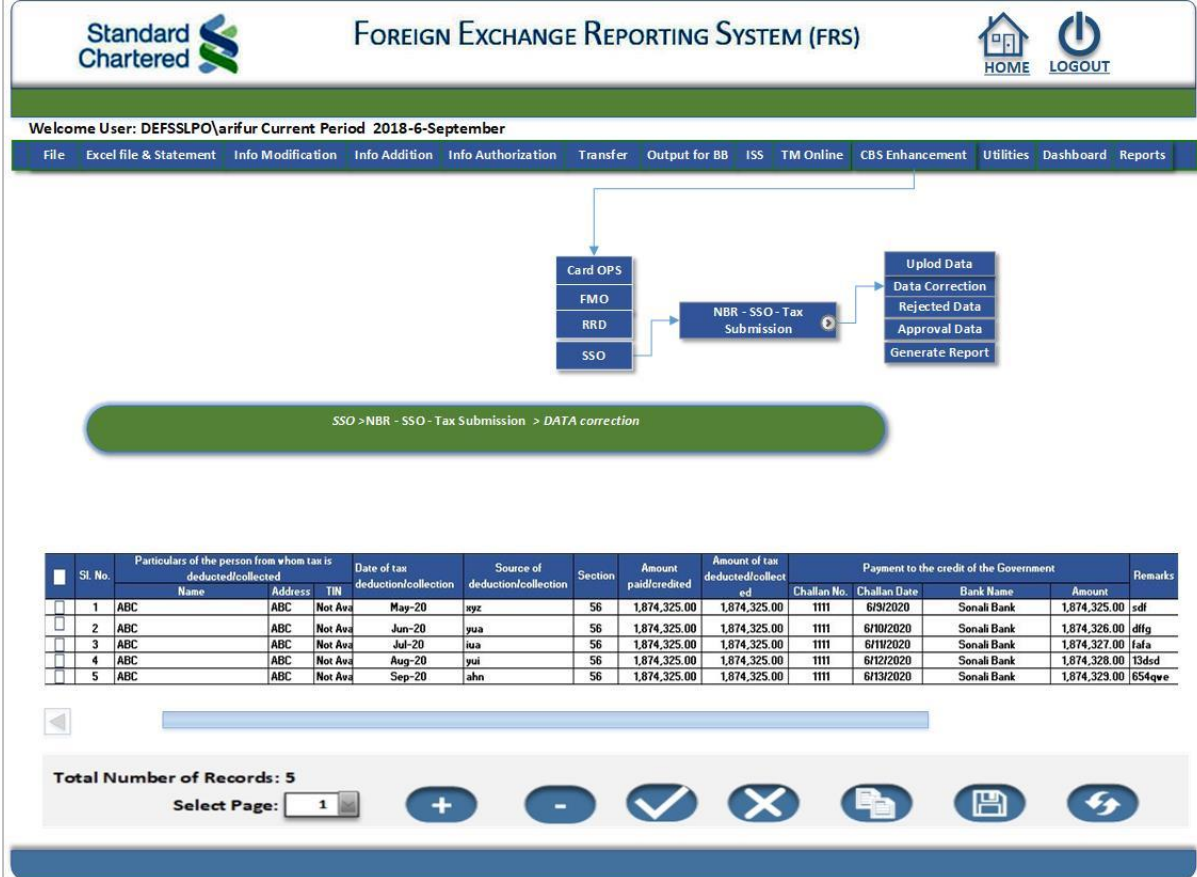
The screenshot displays the 'FOREIGN EXCHANGE REPORTING SYSTEM (FRS)' interface. At the top, there's a header with the Standard Chartered logo and user information: 'Welcome User: DEFSSLPO\arifur Current Period 2018-6-September'. A navigation bar contains various menu items. The main content area features a flowchart showing the process flow: Card OPS (FMO, RRD, SSO) leads to NBR - SSO - Tax Submission, which then leads to Upload Data (Data Correction, Rejected Data, Approval Data, Generate Report). Below the flowchart, a green bar indicates the current path: 'SSO > NBR-SSO-TAX > UPLOAD Data'. The 'Select File' section shows 'No file selected' and a 'Browse' button. The 'Select Sheet' section has a dropdown menu and 'Load Sheet' and 'Show Data' buttons. A large grey rectangular area is positioned below these sections, and a 'Save Data' button is located at the bottom center.

Figure 2: Data Upload Page

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3.4.2 DATA CORRECTION PAGE (MAKER):

If require, Maker can edit the previously entered data from this page. After reviewing and editing maker will send data to **Data Approval** page for authorization.



Standard Chartered **FOREIGN EXCHANGE REPORTING SYSTEM (FRS)** HOME LOGOUT

Welcome User: DEFSSLPO\arifur Current Period 2018-6-September

File Excel file & Statement Info Modification Info Addition Info Authorization Transfer Output for BB ISS TM Online CBS Enhancement Utilities Dashboard Reports

Card OPS
FMO
RRD
SSO

NBR - SSO - Tax Submission

Upload Data
Data Correction
Rejected Data
Approval Data
Generate Report

SSO > NBR - SSO - Tax Submission > DATA correction

SL No.	Particulars of the person from whom tax is deducted/collected			Date of tax deduction/collected	Source of deduction/collected	Section	Amount paid/credited	Amount of tax deducted/collected	Payment to the credit of the Government				Remarks
	Name	Address	TIN						Challen No.	Challen Date	Bank Name	Amount	
1	ABC	ABC	Not Ava	May-20	xyz	56	1,874,325.00	1,874,325.00	1111	6/9/2020	Sonali Bank	1,874,325.00	sdf
2	ABC	ABC	Not Ava	Jun-20	yua	56	1,874,325.00	1,874,325.00	1111	6/10/2020	Sonali Bank	1,874,326.00	dflg
3	ABC	ABC	Not Ava	Jul-20	iua	56	1,874,325.00	1,874,325.00	1111	6/11/2020	Sonali Bank	1,874,327.00	lafa
4	ABC	ABC	Not Ava	Aug-20	yui	56	1,874,325.00	1,874,325.00	1111	6/12/2020	Sonali Bank	1,874,328.00	13dsd
5	ABC	ABC	Not Ava	Sep-20	ahn	56	1,874,325.00	1,874,325.00	1111	6/13/2020	Sonali Bank	1,874,329.00	654qve

Total Number of Records: 5
Select Page: 1

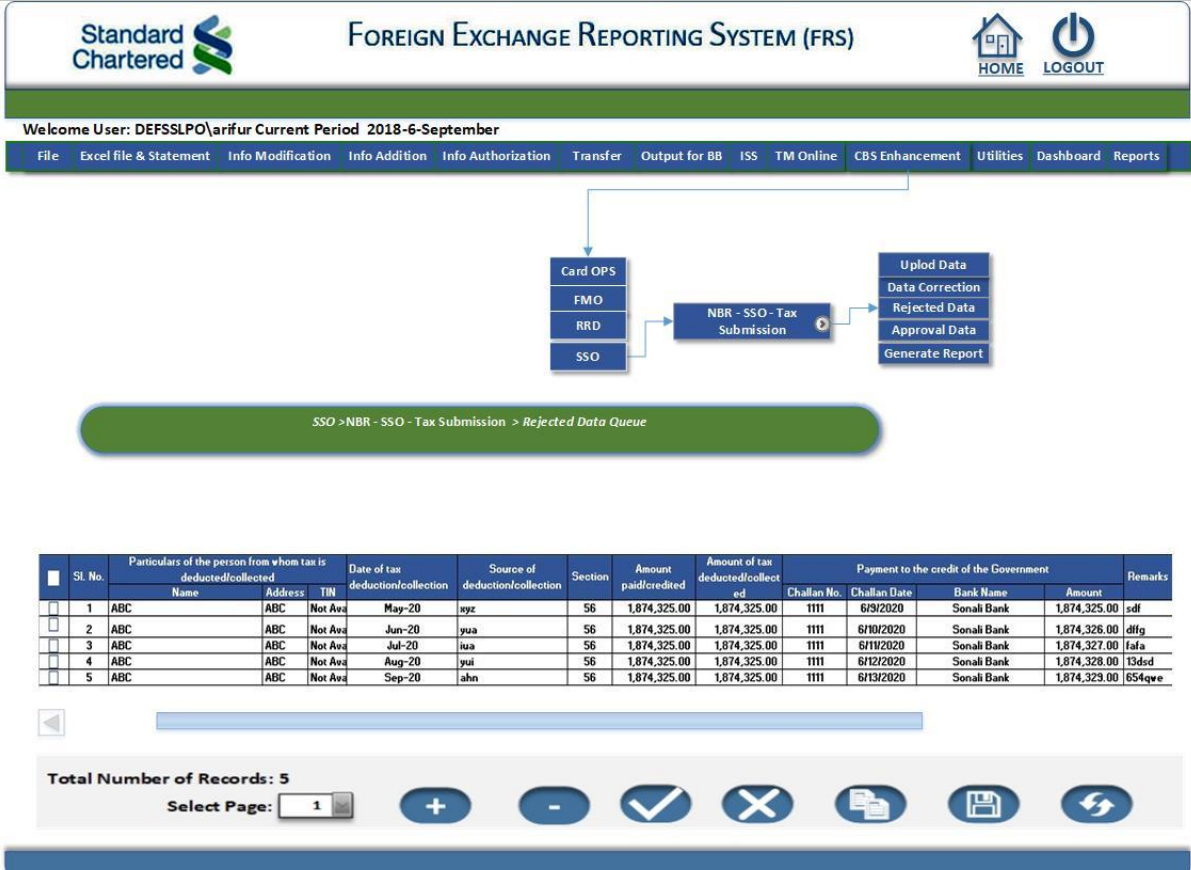
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Figure 5: Data Correction Page

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3.4.3 REJECTED DATA PAGE (MAKER):

From this page user will rectify data which are rejected from checker end from **Data Approval** page. After reviewing and editing maker will again send data to **Data Approval** page for authorization.



Welcome User: DEFSSLPO\arifur Current Period 2018-6-September

File Excel file & Statement Info Modification Info Addition Info Authorization Transfer Output for BB ISS TM Online CBS Enhancement Utilities Dashboard Reports

Card OPS
FMO
RRD
SSO

NBR - SSO - Tax Submission

Upload Data
Data Correction
Rejected Data
Approval Data
Generate Report

SSO > NBR - SSO - Tax Submission > Rejected Data Queue

Sl. No.	Particulars of the person from whom tax is deducted/collected			Date of tax deduction/collected	Source of deduction/collected	Section	Amount paid/credited	Amount of tax deducted/collected	Challan No.	Challan Date	Bank Name	Amount	Remarks
	Name	Address	TIN										
1	ABC	ABC	Not Ava	May-20	xyz	56	1,874,325.00	1,874,325.00	1111	6/9/2020	Sonali Bank	1,874,325.00	sdf
2	ABC	ABC	Not Ava	Jun-20	yua	56	1,874,325.00	1,874,325.00	1111	6/10/2020	Sonali Bank	1,874,326.00	dflg
3	ABC	ABC	Not Ava	Jul-20	lua	56	1,874,325.00	1,874,325.00	1111	6/11/2020	Sonali Bank	1,874,327.00	lafa
4	ABC	ABC	Not Ava	Aug-20	yui	56	1,874,325.00	1,874,325.00	1111	6/12/2020	Sonali Bank	1,874,328.00	13dsd
5	ABC	ABC	Not Ava	Sep-20	ahn	56	1,874,325.00	1,874,325.00	1111	6/13/2020	Sonali Bank	1,874,329.00	654qve

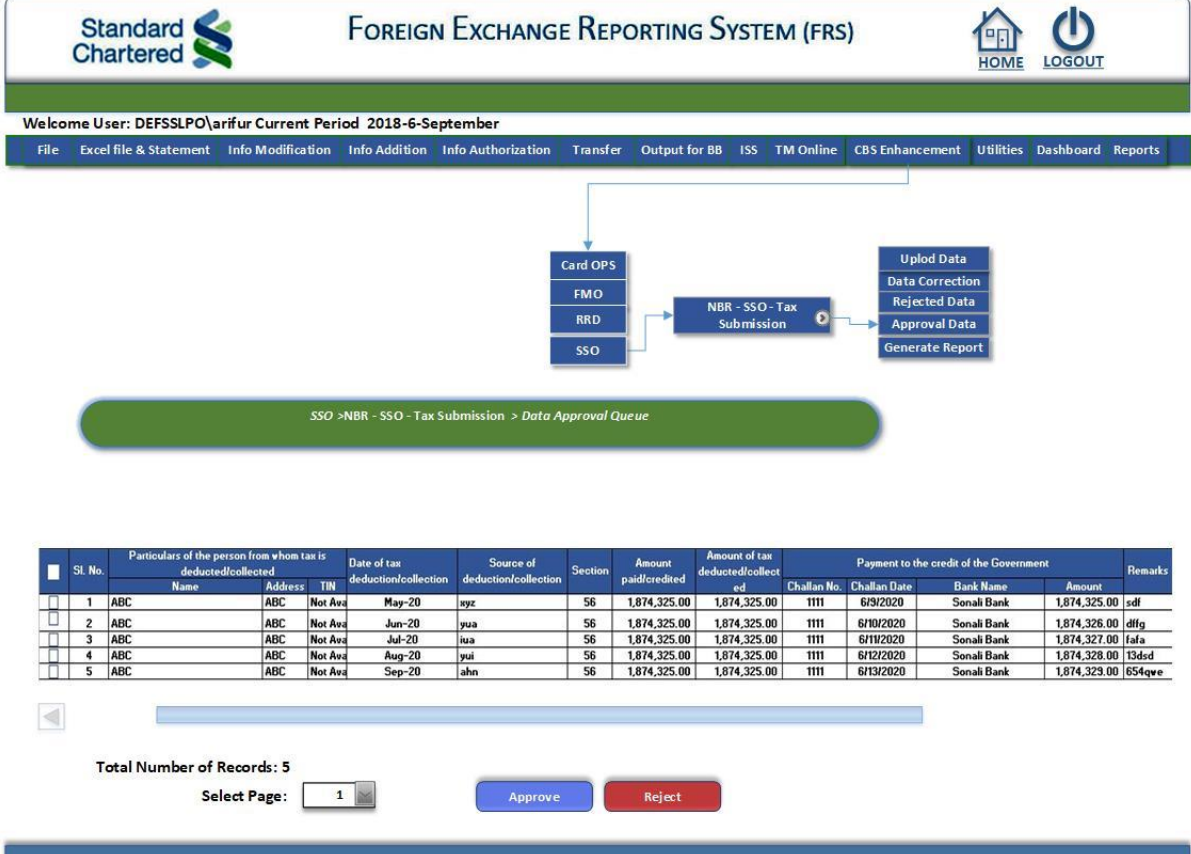
Total Number of Records: 5
Select Page: 1

Figure 6: Rejected Data Page

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3.4.4 APPROVED DATA PAGE (CHECKER):

In this page, the Checker will view the submitted data by the Maker. The checker will be able to either approve or reject the submitted data. However, no value can be edited. If approver rejects any submitted data, Maker has to rectify the rejected fields again.



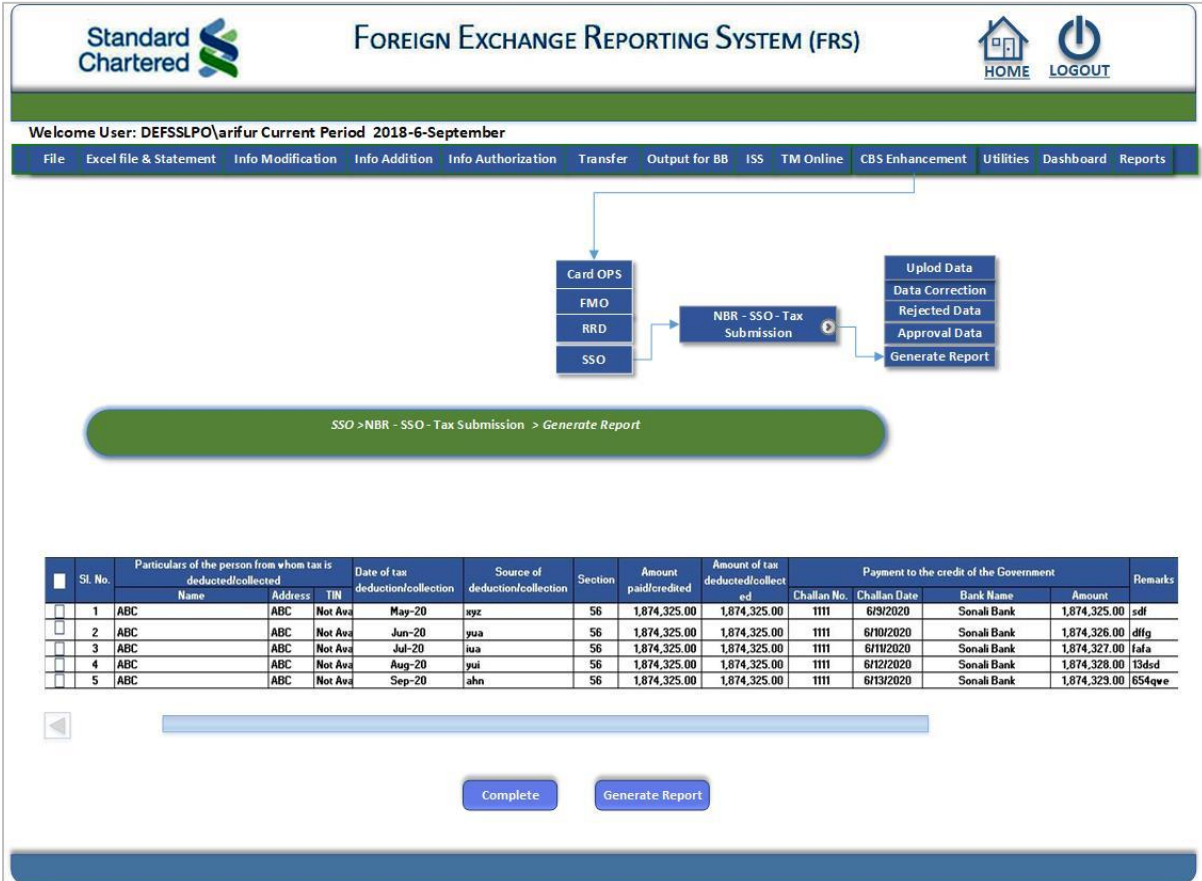
The screenshot displays the 'FOREIGN EXCHANGE REPORTING SYSTEM (FRS)' interface. At the top, there is a header with the 'Standard Chartered' logo, the system name, and navigation links for 'HOME' and 'LOGOUT'. Below the header, a welcome message reads: 'Welcome User: DEFSSLPO\arifur Current Period 2018-6-September'. A menu bar contains various options: 'File', 'Excel file & Statement', 'Info Modification', 'Info Addition', 'Info Authorization', 'Transfer', 'Output for BB', 'ISS', 'TM Online', 'CBS Enhancement', 'Utilities', 'Dashboard', and 'Reports'. A central flowchart shows the process: 'Card OPS' (FMO, RRD, SSO) leads to 'NBR - SSO - Tax Submission', which then leads to 'Upload Data' (Data Correction, Rejected Data, Approval Data, Generate Report). Below the flowchart, a green banner indicates the current path: 'SSO >NBR - SSO - Tax Submission > Data Approval Queue'. The main section features a table with 14 columns: 'Sl. No.', 'Particulars of the person from whom tax is deducted/collected' (Name, Address, TIN), 'Date of tax deduction/collected', 'Source of deduction/collected', 'Section', 'Amount paid/credited', 'Amount of tax deducted/collected', 'Challan No.', 'Challan Date', 'Bank Name', 'Amount', and 'Remarks'. The table contains 5 rows of data. Below the table, a pagination bar shows 'Total Number of Records: 5' and 'Select Page: 1'. At the bottom, there are 'Approve' and 'Reject' buttons.

Sl. No.	Particulars of the person from whom tax is deducted/collected	Date of tax deduction/collected	Source of deduction/collected	Section	Amount paid/credited	Amount of tax deducted/collected	Challan No.	Challan Date	Bank Name	Amount	Remarks
1	ABC ABC Not Ava	May-20	xyz	56	1,874,325.00	1,874,325.00	1111	6/9/2020	Sonali Bank	1,874,325.00	sdf
2	ABC ABC Not Ava	Jun-20	yua	56	1,874,325.00	1,874,325.00	1111	6/10/2020	Sonali Bank	1,874,326.00	dflg
3	ABC ABC Not Ava	Jul-20	iua	56	1,874,325.00	1,874,325.00	1111	6/11/2020	Sonali Bank	1,874,327.00	fafa
4	ABC ABC Not Ava	Aug-20	yui	56	1,874,325.00	1,874,325.00	1111	6/12/2020	Sonali Bank	1,874,328.00	13dsd
5	ABC ABC Not Ava	Sep-20	ahn	56	1,874,325.00	1,874,325.00	1111	6/13/2020	Sonali Bank	1,874,323.00	654qve

Figure 7: Approved Data Page

3.4.5 REPORT GENERATION PAGE (CHECKER):

Single report to be generated as excel format from this module:



The screenshot displays the 'FOREIGN EXCHANGE REPORTING SYSTEM (FRS)' interface. At the top, it shows the 'Standard Chartered' logo and a welcome message for user 'DEFSSLPO\arifur' for the current period '2018-6-September'. A navigation menu includes options like 'File', 'Excel file & Statement', 'Info Modification', 'Info Addition', 'Info Authorization', 'Transfer', 'Output for BB', 'ISS', 'TM Online', 'CBS Enhancement', 'Utilities', 'Dashboard', and 'Reports'.

A flowchart illustrates the process: 'Card OPS' (containing FMO, RRD, and SSO) leads to 'NBR - SSO - Tax Submission', which then leads to 'Generate Report'. A secondary path from 'Reports' in the menu also leads to 'Generate Report'. A box on the right contains 'Upload Data', 'Data Correction', 'Rejected Data', 'Approval Data', and 'Generate Report'.

A green banner indicates the path: 'SSO > NBR - SSO - Tax Submission > Generate Report'.

Below the flowchart is a table with 14 columns: Sl. No., Particulars of the person from whom tax is deducted/collected (Name, Address, TIN), Date of tax deduction/collected, Source of deduction/collected, Section, Amount paid/credited, Amount of tax deducted/collected, Payment to the credit of the Government (Challan No., Challan Date, Bank Name, Amount), and Remarks. The table contains 5 rows of data, all with an amount of 1,874,325.00.

At the bottom, there are 'Complete' and 'Generate Report' buttons.

Sl. No.	Particulars of the person from whom tax is deducted/collected	Date of tax deduction/collected	Source of deduction/collected	Section	Amount paid/credited	Amount of tax deducted/collected	Payment to the credit of the Government	Remarks					
	Name	Address	TIN				Challan No.	Challan Date	Bank Name	Amount			
1	ABC	ABC	Not Ava	May-20	xyz	56	1,874,325.00	1,874,325.00	1111	6/9/2020	Sonali Bank	1,874,325.00	sdf
2	ABC	ABC	Not Ava	Jun-20	yua	56	1,874,325.00	1,874,325.00	1111	6/10/2020	Sonali Bank	1,874,326.00	dflg
3	ABC	ABC	Not Ava	Jul-20	iua	56	1,874,325.00	1,874,325.00	1111	6/11/2020	Sonali Bank	1,874,327.00	fafa
4	ABC	ABC	Not Ava	Aug-20	yui	56	1,874,325.00	1,874,325.00	1111	6/12/2020	Sonali Bank	1,874,328.00	13dsd
5	ABC	ABC	Not Ava	Sep-20	ahn	56	1,874,325.00	1,874,325.00	1111	6/13/2020	Sonali Bank	1,874,323.00	654qwe

Figure 8: Report Generation Page

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3.5 SECURITY REQUIREMENTS

Implement Role in User Management Module:

SSO module will use FRS authentication and authorization system. User's role will be set according to user's operation like files upload, approval and viewing different types of reports. An Administrator has all privileges to maintain user management module, role management and other security issues.

Application Architecture:

The Module Called "SSO" will be added into the existing FRS system which is already running at SCB Bangladesh. So, the application architecture bases on the existing FRS system.

3.6 ENVIRONMENT REQUIREMENTS

3.6.1 HARDWARE REQUIREMENTS

As a part of FRS system SSO will use same hardware and network facilities as FRS system currently using.

3.6.2 SOFTWARE REQUIREMENTS

SSO module is developed in ASP.Net technology using MS Visual Studio IDE which is same as current FRS system. So the software environment will be same as FRS for SSO module.

3.7 PERFORMANCE REQUIREMENTS

3.7.1 RESPONSE TIME

Job / Task / Event Name	Response Time (Range of Values)		Unit of Measurement
	Upper Range	Lower Range	
Upload excel file	12 seconds	3 seconds	1000 records
Report Generation	60 seconds	2 seconds	1 report

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3.7.2 RECOVERY TIME

If network, database and application server stay ready then the recovery time of application is two hours.

3.8 GENERIC CONSTRAINTS

The SSO Module always has to interact with the FRS System. Also net working should be available.

3.9 STATUTORY & REGULATORY REQUIREMENTS

The rules and regulations will be maintained as per SCB suggestions.

3.10 OTHER REQUIREMENTS

N/A

4 RISKS, ASSUMPTIONS AND DEPENDENCIES

#	Risk	Explanation	Solution	Practise
1	Requirement Deviation	As the project progresses features that were not identified at the beginning of the project may emerge that can change estimates and timelines.	We will follow Signed Off – Requirement Specification Document. Any change beyond Signed- off document will be managed thru change management Procedure.	dataedge has started to follow CMMI processes which will help to manage and deliver quality products to client.
2	Missing Delivery	Missing the project delivery deadlines and milestones.	Stakeholders' will be informed periodically about	dataedge team will follow work breakdown

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#	Risk	Explanation	Solution	Practise
	Scheduled		the project status including issues, concerns and risks.	structure schedule (WBS Schedule). For any kind of variance team will overwork to maintain schedule.
3	Integration with FRS System	SSO will be developed within existing FRS System architecture. Existing Authorization System may not fulfill FMO requirements more over conflict may emerge for different functional and technical requirements of two projects.	SSO and FRS team will work together to overcome all technical and functional difficulty.	Testing team will test the whole application and correlate with the development teams about issues or concerns.

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5 USER DOCUMENTATION AND TRAINING

Documentation List:

SL.No#	Particular
1	SRS for SSO

Training Schedule:

N/A

6 ABBREVIATIONS AND ACRONYMS

Sr. No.	Abbreviations /Terms	Elaboration
1	SRS	System Requirement Specification
2	BRD	Business Requirements Definition
3	FRS	Foreign Exchange Reporting System
4	SSO	Securities Services Operation

7 APPENDIX (ADDITIONAL DATA)

N/A

8 SIGN OFF