

Doc. Name	TEST PLAN AND PROCEDURE		
Project			
Doc. No.	DTP xx xxx xxxx	Section/Group	
Control Status*		Copy No.**	

Functional designation of approving authority	Group Head/Section Head/Project Leader	Functional designation of issuing authority	Project Leader
For any clarifications/corrections/amendments in this document please contact issuing authority			

Issue History				
Issue No.	Effective From(Date)	Reason for Re-issue	Total Doc. Pages	Date of consolidation of review outputs
1	__/__/----	NA		__/__/----

Approved By: _____
 (Functional designation)
 Date of approval: __/__/----

Notes:

* Mark control status as “Controlled Copy if read from version control system” in document maintained as softcopy.

** “Copy No” field needs to be filled only when hard copies of the document are distributed as controlled copies. In such cases, mark control status as “Controlled” and Copy No as serial numerals: ex: 1, 2, 3 etc.

Copyright

No part of this document may be reproduced in any form without the prior permission in writing of issuing authority

Contents

1	Introduction.....	2
1.1	Product/Project Name.....	2
1.2	Project Code.....	2
1.3	Definitions.....	2
1.4	Abbreviations.....	2
1.5	References.....	2
2	Brief description of component (module) or system.....	2
3	Test scope and objectives.....	2
4	Applicable documents including standards.....	2
5	Resources requirements.....	2
5.1	Hardware.....	2
5.2	Software.....	2
5.3	Tools.....	3
6	Test constraints & Risk Factors and Impact of these on testing.....	3
7	Test Plan.....	3
8	Test Procedure.....	4
8.1	Module1/ Subsystem1.....	4
8.2	Module2/ Subsystem2.....	5
8.3	Module n/ Subsystem n.....	5

LIST OF ANNEXURE

Sl. No.	Title/Name of annexure	Issue/Rev No.	Machine path and file name if the annexure is maintained as soft copy	No. of pages
1.				
2.				

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:1

1 Introduction

1.1 Product/Project Name

VARUNAMAALAA-Work package 2-Software Modules-Storage and GUI

1.2 Project Code

HTG058B

1.3 Definitions

1.4 Abbreviations

1.5 References

2 Brief description of component (module) or system

The objective of the system is to design and develop software platform for capture, archival, analysis, and visualization of marine acoustic ambient noise live data for continuous monitoring of EEZ of India. There is a need for the establishment of an onshore Data Reception Centre (DRC) for processing, analysis and archiving of Marine Ambient Acoustic data. The proposed software system is being developed as part of this initiative and involves storage, management, and processing of data from various system components in the underwater network (such as hydrophones, under water pressure sensors, temperature sensors, depth sensors) and from different components in DRC. The data captured include data from various sensors, health and status information and security related data.

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:2

3 Test scope and objectives

This test plan covers the verification and validation activities for the identified software modules within the application. The testing will be conducted on both frontend (UI) and backend (API/database) components, with emphasis on functional correctness, usability, security, and performance.

The scope includes the following:

- Functional testing of user-facing dashboards with playlist
- Backend validation including database operations, API responses, and role-based access control
- UI behavior testing across supported browsers and screen resolutions
- Input validation and error-handling mechanisms
- Integration testing between frontend and backend components
- Security testing for common vulnerabilities such as SQL Injection, Cross-Site Scripting (XSS), and unauthorized access
- Regression testing for any fixes or enhancements
- Usability testing for layout, messages, and user feedback
- Testing of non-functional aspects such as response time

Test Objectives

The main objectives of the testing are:

- To ensure that each visualization dashboard performs as per the approved specifications and business requirements.
- To detect and report defects in visualization , integration, and user experience at the earliest stage.
- To validate that the data result of each Api is working correctly.
- To confirm that Date ,time , longitude and Latitude and simulated values behave as expected.
- To validate the consistency and accuracy of data retrieved, or manipulated via the UI or API.
- To ensure that any changes, fixes, or enhancements do not introduce regressions in existing functionality.

Testing activities will be performed systematically as per the defined test strategy, with traceability to requirements and coverage across critical workflows.

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:3

4 Applicable documents including standards

(other than Centre's QMS documents)

<SPS reference to SRS>

5 Resources requirements

5.1 Hardware

(Identify the computer hardware and network requirements needed to complete test activities.)

Test Server Hardware Requirements

Component	Minimum Specification
-----------	-----------------------

Application Server	- CPU: 2 cores
--------------------	----------------

Client Machine Requirements (For Testers)

Component	Minimum Requirement	Recommended
CPU	Dual-core	Quad-core
RAM	4 GB	8 GB
Disk Space	10 GB free	SSD with 20 GB free
OS	Windows 10+, Ubuntu 20.04+, or macOS 11+	Same as minimum

Browsers	Latest stable versions of Chrome, Firefox, Edge	Chrome recommended
Network Tools	Browser DevTools, Postman, cURL	For API/HTTP debugging

Network Requirements

Requirement	Details
Internal Network Access	Required to access internal test servers, databases, and APIs
Bandwidth	Minimum 10 Mbps for stable dashboard rendering and API testing
Firewall & Proxy Configuration	Must allow access to Grafana dashboards and test APIs

5.2 Software

(Identify the software requirements needed to complete testing activities.)

Component	Description
Web-based Acoustic Data Management App for DRC	Frontend UI and backend APIs responsible for CRUD operations, authentication, data workflows
Grafana Dashboard	Visual analytics and data series representation based on backend APIs or database queries

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:5

5.3 Tools

(Identify the special software tools, techniques, and methodologies employed in the testing efforts. The purpose and use of each tool shall be described)

Tool/Software	Purpose	Notes
Web Browser (Chrome, Firefox, Edge)	Manual UI testing	With DevTools for inspection
Postman	API testing and automation	for backend REST API validation
JMeter	Load testing for APIs and Grafana endpoints	Simulate concurrent users
Grafana UI	Visualization validation	Used for dashboard functionality and data accuracy
OWASP ZAP / Burp Suite	Security testing (XSS, SQLi)	Active scanning for common vulnerabilities
Database Client (Oracle SQL Developer, DBeaver)	Backend database validation	Query and verify test data

Test Management Tool
(Redmine)

Test case tracking
and defect
reporting

6 Test constraints & Risk Factors and Impact of these on testing

Constraint	Description	Impact on Testing
Oracle Express Edition (XE) Limitations	Oracle XE has restrictions such as 2 CPU threads, 2 GB RAM usage, 12 GB user data limit, and no support for advanced features (e.g., partitioning, parallel execution).	Performance testing is constrained
Limited Access to Production-like Data	Use of simulated or incomplete test data due to real hardware access restrictions	May not uncover data-related issues visible only in real-world scenarios
Incomplete Requirements	Requirements for some modules or dashboards may be evolving	Increases rework due to changing test cases or test data needs
Tool Limitations	commercial or advanced test automation and security tools are not used	Limits automation scope
Dependency on External Systems	API integrations, external DBs	Testing blocked if upstream/downstream services are unavailable or unstable

7 Test Plan

(It is not mandatory to follow the table format given below. Any other convenient format may be used. But it shall be ensured that all details given in the columns below are addressed in the test plan prepared.)

SI No	Purpose of test	Brief Description of Planned Test
Visualization -UI		
Dashboard Playlist with Oceanmet , Acoustic and Mission details		
8.1	Visualise the dashboard playlist display with the frequent refresh time. whether the data is plotting with correct points in frequent intervals or not. whether the simulated data is fetching correctly to the visualization , or previousdata scenario and no data scenario in the visualization.	Testing will cover: - Positive scenarios such as fetching all the data and visualization displays with white colour. - Refreshing of data in regular intervals. - Negative scenarios such as Partial Data or No data is simulated and fetching from database and it should shows the previous data in red colour for the next refreshtime. - After particular time of refresh , if still data is not fetching, No DATA should be displayed in Dashboards, indicating that No Data is simulated. Key aspects to be tested include: - API Validations - Refresh time verification - Proper display of previous data - Compatibility across major browsers and devices
Visualization -DB		
Dashboard Playlist with Oceanmet , Acoustic and Mission details with API		
8.2	Fetch the Simulated Data for Visualization through API Calls and	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:8

SI No	Purpose of test	Brief Description of Planned Test
Visualization -UI		
Dashboard Playlist with Oceanmet , Acoustic and Mission details		
8.2		

8 Test Procedure

8.1 Login

Diagram(s) showing the test set up may preferably be included and referenced in the test cases.

(It is not mandatory to follow the table format given below. Any other convenient format may be used. But it shall be ensured that all details given in the columns below are addressed in the test procedure prepared.)

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.1	8.1.1		Username: valid; Password: valid				- Navigate to the login page - Enter valid username and password - Click the "Login" button	User is successfully logged in and redirected to the dashboard	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:10

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.1.2		Username: invalid; Password : valid				- Navigate to the login page - Enter invalid username and valid password - Click the "Login" button	An error message should be displayed indicating Invalid username or password and the user should not be logged in.	
	8.1.3		Username: valid; Password : invalid				- Navigate to the login page - Enter valid username and invalid password - Click the "Login" button	Error message indicating password is incorrect	
	8.1.4		Username: invalid; Password : invalid				- Navigate to the login page - Enter invalid username and invalid password - Click the "Login" button	Error message indicating enter a valid username and password should be displayed	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.1.5		Username:empty ; Password : enter valid password				1. Navigate to the login page 2. Empty username and enter valid password 3. Click the "Login" button	Error message indicating username is required	
	8.1.6		Username: enter valid username; Password:empty				1. Navigate to the login page 2. Enter the username and empty password 3. Click the "Login" button	Error message indicating password is required	
	8.1.7		Username:empty; Password : empty				1. Navigate to the login page 2. Empty username and empty password 3. Click the "Login" button	An error message should appear indicating that both fields are required	
	8.1.8		Enter any password				1. Enter a password in the password field and observe	Password should be masked (as dots or asterisks)	

Test No*	Test Case No. [§]	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.1.9		Verify the login page by pressing the Back button of the Browser. It should not allow you to enter into the system once you log out.				1. Click Back button of the Browser	Go to the login page and User should login again	

* Test No may be plain serial number OR any suitable identifier which can easily identify the test scenario (eg TN_Login; TN_PowerSupply etc)

§ Test Case No = Test No followed by ‘ ’ , followed by a serial number (Eg: If Test No X has 3 test cases, Test Case No may be given as X.1, X.2 and X.3)

If requirements have Ids or numbers, use that. If not, section numbers of the Requirement Specification document or Preliminary Design document can be used)

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:13

8.2 Change Password

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.2	8.2.1		New password: valid ; confirm password:valid				1. Navigate to the password reset page. 2. Enter a valid password in the New Password field. 3. Enter the same valid password in the Confirm Password field. 4. Click Submit.	Password should be changed successfully, and a confirmation message should be displayed and go to the Login Page	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.2.2	New password : invalid ; Confirm Password : invalid					1. Navigate to the password reset page. 2. Enter an invalid password in the New Password field (weak format). 3. Enter the same invalid password in the Confirm Password field. 4. Click Submit.	Password change should fail, and an error message should display, indicating that the password format is invalid.	
	8.2.3	New password :valid; Confirm Password : invalid					1. Navigate to the password reset page. 2. Enter a valid password in the New Password field. 3. Enter a different invalid password in the Confirm Password field. 4. Click Submit.	Password change should fail, and an error message should display, indicating that the passwords do not match.	

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.2.4	New password : invalid ; Confirm Password : valid					1. Navigate to the password reset page. 2. Enter an invalid password in the New Password field. 3. Enter a valid password in the Confirm Password field. 4. Click Submit.	Password change should fail, and an error message should display, indicating that the passwords do not match.	
	8.2.5	New password :empty; Confirm Password : valid					1. Navigate to the password reset page 2. Leave the New Password field empty. 3. Enter a valid password in the Confirm Password field. 4. Click Submit.	Password change should fail, and an error message should display, indicating that the New Password field cannot be empty..	

Test No*	Test Case No.\$	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.2.6	New password : valid ; Confirm Password : empty					1. Navigate to the password reset page. 2. Enter a valid password in the New Password field. 3. Leave the Confirm Password field empty. 4. Click Submit.	Password change should fail, and an error message should display, indicating that the "Confirm Password" field cannot be empty.	
	8.2.7	New password : empty ; Confirm Password : empty					1. Navigate to the password reset page. 2. Leave both New Password and Confirm Password fields empty. 3. Click Submit.	An error message should display, indicating that both fields cannot be empty.	

8.3 Mission

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.3	8.3.1		Mission Name				1. Navigate to mission creation page 2. Enter Mission name	The Mission Name field should allow input, and the user should be able to enter a valid mission name	
	8.3.2		Mission Name- Invalid Input				1. Navigate to mission creation page 2. Enter Invalid Mission name(special characters or empty input).	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.3.3		Code				1. Navigate to mission creation page 2. Enter Mission name and the first three letters of the mission name will be generated as code	The first three letters of the mission name should automatically be generated as the Code	
	8.3.4		Institution				1. .Navigate to mission creation page 2. .Select the institution from the selection list	The institution field should allow input, and the user should be able to select a valid institution.	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:18

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.3.5		Verify functionality of Add New Institution				- Navigate to mission creation page - Click the Add New button.	A new entry page for institution should open, allowing the user to input data for creating a new record.	
	8.3.6		Description				- Navigate to mission creation page - Enter Description	The description field should allow input, and the user should be able to enter the description	
	8.3.7		Verify Save button functionality				- Navigate to the mission creation page - Enter valid data in all required fields. - Click the Save button.	All entered data should be saved successfully, a success message should be displayed	
	8.3.8		Save- after entering all the fields				- Navigate to the mission creation page - Enter all the fields - Click Save Button	The entered data should be saved successfully, and a confirmation message should be displayed.	
	8.3.9		Save- after entering all the mandatory fields only				- Navigate to the mission creation page - Enter all the mandatory fields - Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:19

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.3.10		Save- without entering all the fields				1. Navigate to the mission creation page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.3.11		Save- without entering the mandatory fields				1. Navigate to the mission creation page 2. Empty all the mandatory fields 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.3.12		Verify Clear button functionality				1. Navigate to the mission creation page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	
	8.3.13		Verify Edit button functionality				1. Navigate to the mission creation page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:20

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.3.14		Verify Update button functionality				1. Navigate to the mission creation page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.3.15		Verify Delete button functionality				1. Navigate to the mission creation page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	
	8.3.16		Delete-yes				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
	8.3.17		Delete-No				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:21

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.3.18		Verify Search button functionality				- Navigate to the Mission Creation page - Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.3.19		Verify Previous button functionality				- Go to page 2 or any later page. - Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	
	8.3.20		Verify Next button functionality				- Make sure you are on any page except the last page. - Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	
	8.3.21		Full screen view of application				Click full screen icon from dashboard	Full screen will be displayed.	
	8.3.22		Settings				Click Settings	Settings should be displayed	
	8.3.23		Back button of the Browser				Click Back Button of the Browser	It should directed to homepage	

Test No*	Test Case No.\$	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.3.24		Code- auto-generated				1. Navigate to the mission creation page 2. Enter mission name 3. Observe the Code field.	The Code field should automatically be filled with the first three letters of the mission name	
	8.3.25		Code- auto-generated				1. Navigate to the mission creation page 2. Enter mission name with space (starting,ending or middle) of a word 3. Observe the Code field.	it should be considered and the data should be saved	
	8.3.26		Refresh button of the browser				1. Click the refresh button of the browser	The page should reload, and any unsaved data in the form should be cleared or reset and also the user should remain on the same page	

8.4 Institution

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.4	8.4.1		Institution Name				1. Navigate to the Institution page 2. Enter valid Institution Name. 3. Click the Save button.	The Institution Name field should allow input, and the user should be able to enter a valid institution name	
	8.4.2		Institution Name-invalid				1. Navigate to the Institution page 2. Enter Invalid Institution name(special characters or empty input). 3. Click the Save button.	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.4.3		Institution Address				1. Navigate to the Institution page 2. Enter valid Institution Address. 3. Click the Save button.	The Institution Address field should allow input, and the user should be able to enter a valid institution address	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:24

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.4.4		Institution Address- Invalid				1. Navigate to the Institution page 2. Enter Invalid Institution Address (special characters or empty input). 3. Click the Save button.	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.4.5		Verify Save button functionality				1. Navigate to the Institution page 2. Enter valid data in all required fields. 3. Click the Save button.	All entered data should be saved successfully, a success message should be displayed	
	8.4.6		Save- after entering all the fields				1. Navigate to the Institution page 1. Enter all the fields 2. Click Save Button	The entered data should be saved successfully, and a confirmation message should be displayed.	
	8.4.7		Save- after entering all the mandatory fields only				1. Navigate to the Institution page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:25

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.4.8		Save- without entering all the fields				1. Navigate to the Institution page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.4.9		Save- without entering the mandatory fields fields				1. Navigate to the Institution page 2. Empty all the mandatory fields. 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.4.10		Verify Clear button functionality				1. Navigate to the Institution page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	
	8.4.11		Verify Edit button functionality				1. Navigate to the Institution page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:26

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.4.12		Verify Update button functionality				1. Navigate to the Institution page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.4.13		Verify Delete button functionality				1. Navigate to the Institution page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	
	8.4.14		Delete-yes				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:27

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.4.15		Delete-No				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	
	8.4.16		Verify Search button functionality				1. Navigate to the institution page 2. Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.4.17		Verify Previous button functionality				1. Go to page 2 or any later page. 2. Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	
	8.4.18		Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:28

8.5 Parameter Configuration

Test No*	Test Case No. ^{\$}	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.5	8.5.1		Platform Name				- Navigate to the Parameter Configuration page - Enter Platform name	The Platform Name field should allow input, and the user should be able to enter a valid Platform name	
	8.5.2		Platform Name-Invalid				- Navigate to the Parameter Configuration page - Enter the invalid Platform name	A validation error message should be displayed indicating invalid Platform Name and the data should not be saved.	
	8.5.3		Unit				- Navigate to the Parameter Configuration page - Select Unit from the dropdown list	The Unit field should allow input, and the user should be able to select a valid Unit.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:29

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.5.4		Parameter Type				- Navigate to the Parameter Configuration page - Select Parameter Type from the dropdown list	The Parameter type field should allow input, and the user should be able to select a valid Parameter type.	
	8.5.5		Datatype				- Navigate to the Parameter Configuration page - Select Datatype from the dropdown list	The Datatype field should allow input, and the user should be able to select a valid datatype.	
	8.5.6		Verify Save button functionality				- Navigate to the Parameter Configuration page - Enter valid data in all required fields. - Click the Save button.	All entered data should be saved successfully, a success message should be displayed	
	8.5.7		Save- after entering all the fields				- Navigate to the Parameter Configuration page - Enter all the fields - Click Save Button	The entered data should be saved successfully, and a confirmation message should be displayed.	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.5.8		Save- after entering all the mandatory fields only				1. Navigate to the Parameter Configuration page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	
	8.5.9		Save- without entering all the fields				1. Navigate to the Parameter Configuration page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.5.10		Save- without entering the mandatory fields fields				1. Navigate to the Parameter Configuration page 2. Empty all the mandatory fields 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.5.11		Verify Clear button functionality				1. Navigate to the Parameter Configuration page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.5.12		Verify Update button functionality				1. Navigate to the Parameter Configuration page 1. Click the Edit button 2. Modify one or more fields. 3. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.5.13		Verify Edit button functionality				1. Navigate to the Parameter Configuration page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	
	8.5.14		Verify Delete button functionality				1. Navigate to the Parameter Configuration page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.5.15		Delete-yes				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
	8.5.16		Delete-No				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	
	8.5.17		Verify Search button functionality				- Navigate to the Parameter Configuration page - Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.5.18		Verify Previous button functionality				- Go to page 2 or any later page. - Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:33

Test No*	Test Case No.\$	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.5.19		Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

8.6 Data Format

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.6	8.6.1		Format Name				- Navigate to Data Format page - Enter the Format Name	The Format Name field should allow input, and the user should be able to enter a valid Platform name	
	8.6.2		Format Name				- Navigate to Data Format page - Enter the invalid Format Name	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.6.3		File Type				- Navigate to Data Format page - Select the File Type form the dropdown list	The File Type field should allow input, and the user should be able to select a valid Format Type.	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:35

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.6.4		Data Type				- Navigate to Data Format page - Select the Data Type from the dropdown list	The Data type field should allow input, and the user should be able to select a valid Data type.	
	8.6.5		Encrypt - ON				- Navigate to Data Format page - Click the toggle button to turn ON Encryption	The toggle button should switch to the ON position, indicating that encryption is now enabled	
	8.6.6		Encrypt - OFF				- Navigate to Data Format page - Click the toggle button to turn OFF Encryption	The toggle button should switch to the OFF position, indicating that encryption is now disabled	
	8.6.7		Verify Save button functionality				- Navigate to the Data Format page - Enter valid data in all required fields. - Click the Save button.	All entered data should be saved successfully, a success message should be displayed	
	8.6.8		Save- after entering all the fields				- Navigate to the Data Format page - Enter all the fields - Click Save Button	The entered data should be saved successfully, and a confirmation message should be displayed.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:36

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.6.9		Save- after entering all the mandatory fields only				1. Navigate to the Data Format page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	
	8.6.10		Save- without entering all the fields				1. Navigate to the Data Format page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.6.11		Save- without entering the mandatory fields fields				1. Navigate to the Data Format page 2. Empty all the mandatory fields 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.6.12		Verify Clear button functionality				1. Navigate to the Data Format page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:37

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.6.13		Verify Edit button functionality				1. Navigate to the Data Format page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	
	8.6.14		Verify Update button functionality				1. Navigate to the Data Format page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.6.15		Verify Delete button functionality				1. Navigate to the Data Format page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.6.16		Delete-yes				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
	8.6.17		Delete-No				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	
	8.6.18		Verify Search button functionality				- Navigate to the Data Format page - Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.6.19		Verify Previous button functionality				- Go to page 2 or any later page. - Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.6.20		Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

8.7 Data Source

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.7	8.7.1		Data source Name				- Navigate to Data Source Page - Enter the Data source Name	The Data Source Name field should allow input, and the user should be able to enter a valid Data Source name	
	8.7.2		Data source Name-Invalid				- Navigate to Data Source Page - Enter the Data source Name	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.7.3		Verify Save button functionality				- Navigate to the Data Source Page - Enter valid data in all required fields. - Click the Save button.	All entered data should be saved successfully, a success message should be displayed	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:41

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.7.4		Save- after entering all the fields				1. Navigate to the Data Source Page 2. Enter all the fields 3. Click Save Button	The entered data should be saved successfully, and a confirmation message should be displayed.	
	8.7.5		Save- after entering all the mandatory fields only				1. Navigate to the Data Source Page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	
	8.7.6		Save- without entering the mandatory fields				1. Navigate to the Data Source Page 2. Empty all the mandatory fields 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.7.7		Verify Clear button functionality				1. Navigate to the Data Source Page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.7.8		Verify Edit button functionality				1. Navigate to the Data Source Page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	
	8.7.9		Verify Update button functionality				1. Navigate to the Data Source page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.7.10		Verify Delete button functionality				1. Navigate to the Data Source Page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:43

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.7.11		Delete-yes				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
	8.7.12		Delete-No				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	
	8.7.13		Verify Search button functionality				- Navigate to the Data Source page - Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.7.14		Verify Previous button functionality				- Go to page 2 or any later page. - Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:44

Test No*	Test Case No.\$	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.7.15		Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

8.8 Sensor Configuration

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.8	8.8.1		Equipment				- Navigate to Sensor Configuration Page - Select Equipment from the dropdown list	The Equipment field should allow input, and the user should be able to select a valid Equipment	
	8.8.2		Sensor Label				- Navigate to Sensor Configuration Page - Enter the Sensor Label	The Sensor Label field should allow input, and the user should be able to enter a valid Sensor Label	
	8.8.3		Sensor Label-Invalid				- Navigate to Sensor Configuration Page - Enter the invalid Sensor Label	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.8.4		Make Number				- Navigate to Sensor Configuration Page - Enter the Make Number	The Make Number field should allow input, and the user should be able to enter a valid Make Number	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:46

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.8.5		Make Number -Invalid Data				1. Navigate to Sensor Configuration Page 2. Enter the invalid Make Number (special characters, too short/long input, or empty value).	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.8.6		Model Number				1. Navigate to Sensor Configuration Page 2. Enter the Model Number	The Model Number field should allow input, and the user should be able to enter a valid Model Number	
	8.8.7		Model Number- Invalid data				1. Navigate to Sensor Configuration Page 2. Enter the Model Number(special characters, too short/long input, or empty value).	An appropriate validation error message should be displayed, and the data should not be saved until the input is corrected.	
	8.8.8		Serial Number				1. Navigate to Sensor Configuration Page 2. Enter the Serial Number	The Serial Number field should allow input, and the user should be able to enter a valid Serial Number	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:47

Test No*	Test Case No. ^{\$}	Requirement No/Id [#]	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.8.9		Serial Number- Invalid data				1. Navigate to Sensor Configuration Page 2. Enter the invalid Serial Number	An appropriate validation error message should be displayed, and the data should not be saved until the input is corrected.	
	8.8.10		Verify Save button functionality				1. Navigate to the Sensor ConfigurationPage 2. Enter valid data in all required fields. 3. Click the Save button.	All entered data should be saved successfully, a success message should be displayed	
	8.8.11		Save- after entering all the fields				1. Navigate to the Sensor Configuration Page 2. Enter all the fields 3. Click Save Button	The entered data should be saved successfully, and a confirmation message should be displayed.	
	8.8.12		Save- after entering all the mandatory fields only				1. Navigate to the Sensor Configuration Page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	

Test No*	Test Case No.\$	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.8.13		Save- without entering all the fields				1. Navigate to the Sensor Configuration Page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.8.14		Save- without entering the mandatory fields				1. Navigate to the Sensor Configuration Page 2. Empty all the mandatory fields 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.8.15		Verify Clear button functionality				1. Navigate to the Sensor Configuration Page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	
	8.8.16		Verify Edit button functionality				1. Navigate to the Sensor Configuration Page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.8.17		Verify Update button functionality				1. Navigate to the Sensor Configuration page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.8.18		Verify Delete button functionality				1. Navigate to the Sensor Configuration Page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	
	8.8.19		Delete-yes				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
	8.8.20		Delete-No				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:50

Test No*	Test Case No.\$	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Cauti on	Test Procedure (Steps)	Expected Results	Remarks
	8.8.21		Verify Search button functionality				1. Navigate to the Sensor Configuration page 2. Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.8.22		Verify Previous button functionality				1. Go to page 2 or any later page. 2. Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	
	8.8.23		Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

8.9 User Management

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.9	8.9.1		Username				- Navigate to User Management Page - Enter the username	Username field accepts valid input and displays no error message. If invalid input is entered, an appropriate error message is shown.	
	8.9.2		Username- Invalid data				Enter the invalid username	An appropriate error message should be displayed, and the data should not be saved until corrected.	
	8.9.3		Employee ID				Enter the Employee ID	Employee ID field accepts valid input and displays no error message. If invalid input is entered, an appropriate error message is shown.	
	8.9.4		Employee ID-Invalid data				Enter the invalid Employee ID	An appropriate error message should be displayed, and the data should not be saved until corrected.	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:52

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.5		Password				1. Enter the Password	Password field accepts input and meets the required complexity rules, no error message if valid	
	8.9.6		Password- Invalid data				1. Enter an invalid password (too short, missing special characters, all lowercase, etc.)	A validation error message should be displayed indicating Password must meet complexity requirements, and the password should not be accepted until corrected.	
	8.9.7		Confirm Password				1. Enter the Confirm Password	Confirm Password matches the Password field. If it doesn't, an error message indicating passwords do not match is displayed.	
	8.9.8		Confirm Password- Invalid data				1. Enter a valid password. 2. Enter a different or invalid value in the Confirm Password field.	An error message should be displayed indicating Passwords do not match, and the form should not be submitted.	
	8.9.9		First Name				1. Enter the First Name	First Name field accepts valid alphabetic input without error.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:53

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.10		First Name- Invalid data				1. Enter invalid data in First Name (numbers, special characters, or leave it blank).	A validation error message should be displayed First Name must contain only letters"), and the data should not be saved.	
	8.9.11		Last Name				1. Enter the Last Name	Last Name field accepts valid alphabetic input without error.	
	8.9.12		Last Name- Invalid data				1. Enter invalid data in Last Name (numbers, special characters, or leave it blank).	A validation error message should be displayed Name must contain only letters"), and the data should not be saved.	
	8.9.13		Mobile				1. Enter the Mobile Number	Mobile Number field accepts only numeric input of valid length. If invalid, an error message appears.	
	8.9.14		Mobile- Invalid data				1. Enter an invalid mobile number (too short, letters, or special characters). 2. Click the Save or Submit button.	A validation error message should be displayed indicating invalid mobile number and the data should not be saved.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:54

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.15		Email				1. Enter the Email ID	Email ID field accepts a properly formatted email address. Invalid formats show an error message.	
	8.9.16		Email- Invalid data				1. Enter an invalid email (user@, @domain .com, userdomain .com).	A validation error message should be displayed indicating invalid Email and the data should not be saved.	
	8.9.17		Role(s)				1. Select the role from Role(s)		
	8.9.18		Default Role				1. Check the first selected role is displayed as default role		
	8.9.19		User Account Expiry Date				1. Select the User Account Expiry Date	Date picker allows selecting a valid expiry date; invalid or past dates should be blocked or show an error.	
	8.9.20		Office Landline				1. Enter the Office Landline	Accepts numeric input in correct format; invalid input triggers an error message.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:55

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.21		Office Landline- Invalid data				1. Enter an invalid number (alphabets, too short/long, missing area code, or special characters).	A validation error message should be displayed indicating invalid Office Landline number, and the data should not be saved.	
	8.9.22		Extension Number				1. Enter the Extension Number	Accepts numeric input; non-numeric or invalid formats show an error.	
	8.9.23		Extension Number- Invalid data				1. Enter an invalid value (letters, special characters, too short/long)	A validation error message should be displayed indicating invalid extension number, and the data should not be saved.	
	8.9.24		Mobile Number(1)				1. Enter the Mobile Number(1)	Optional or additional Mobile Number (1) field accepts only numeric input of valid length. If invalid, an error message appears.	
	8.9.25		Mobile Number(1)- Invalid data				1. Enter an invalid Mobile number(1) (alphabets, too short/long, missing area code, or special characters).	A validation error message should be displayed indicating invalid mobile number(1), and the data should not be saved.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:56

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.26		Mobile Number(2)				1. Enter the Mobile Number(2)	Optional or additional Mobile Number(2) field accepts only numeric input of valid length. If invalid, an error message appears.	
	8.9.27		Mobile Number(2)- Invalid data				1. Enter an invalid Mobile number(2) (alphabets, too short/long, missing area code, or special characters).	A validation error message should be displayed indicating invalid mobile number(2), and the data should not be saved.	
	8.9.28		Internal Mail-ID				1. Enter the Internal Mail-ID	The Internal Mail-ID field accepts a properly formatted email address. Invalid formats show an error message.	
	8.9.29		Internal Mail-ID- Invalid data				1. Enter an invalid internal email (user@, @domain.com, userdomain.com).	A validation error message should be displayed indicating invalid internal Email and the data should not be saved.	
	8.9.30		Official Mail-ID				1. Enter the Official Mail-ID	The Official Mail-ID field accepts a properly formatted email address. Invalid formats show an error message.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:57

Test No*	Test Case No.\$	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.31		Official Mail-ID- Invalid data				1. Enter an invalid official email (user@, @domain.com, userdomain.com).	A validation error message should be displayed indicating invalid official Email and the data should not be saved.	
	8.9.32		Any Other Mail-ID				1. Enter the Any Other Mail-ID	Other Mail-ID fields accept a properly formatted email address. Invalid formats show an error message.	
	8.9.33		Any Other Mail-ID- Invalid data				2. Enter an invalid email (user@, @domain.com, userdomain.com).	A validation error message should be displayed indicating invalid Email and the data should not be saved.	
	8.9.34		Verify Save button functionality				1. Navigate to the User Management Page 2. Enter valid data in all required fields. 3. Click the Save button.	All entered data should be saved successfully, a success message should be displayed	
	8.9.35		Save- after entering all the fields				1. Navigate to the User Management Page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:58

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.36		Save- after entering all the mandatory fields only				1. Navigate to the User Management Page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.9.37		Save- without entering all the fields				1. Navigate to the User Management Page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
	8.9.38		Save- without entering the mandatory fields fields				1. Navigate to the User Management Page 2. Empty all the mandatory fields 3. Click Save Button	An error message should be displayed indicating that mandatory fields are required, and the form should not be submitted.	
	8.9.39		Verify Clear button functionality				1. Navigate to the User Management Page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.40		Verify Edit button functionality				1. Navigate to the User Management Page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	
	8.9.41		Verify Update button functionality				1. Navigate to the User Management page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
	8.9.42		Verify Delete button functionality				1. Navigate to the User Management Page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.43		Delete-yes				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
	8.9.44		Delete-No				1. Click delete 2. A message will appear "Are you sure you want to delete this entry?" 3. Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	
	8.9.45		Verify Search button functionality				1. Navigate to the User Management page 2. Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
	8.9.46		Verify Previous button functionality				1. Go to page 2 or any later page. 2. Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:61

Test No*	Test Case No. ^{\$}	Requirement No/Id #	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
	8.9.47		Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:62

8.9.1 Roles

Test No*	Test Case No. [§]	Requirement No/I d#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.9.1	8.9.1.1		Roles				1. Navigate to Roles page 2. Select the Role from the dropdown list	The Equipment field should allow input, and the user should be able to select a valid Equipment	

8.9.2 Role Configuration

Test No*	Test Case No. [§]	Requirement No/I d#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
8.9.2	8.9.2.1		Role				- Navigate to the Role Configuration page - Enter the Role	The ROle field should allow input, and the user should be able to enter a valid Data Source name	
			Roles- Invalid				- Navigate to the Role Configuration page - Enter the invalid Role	An appropriate validation error message should be displayed, and the data should not be saved until the input is corrected.	
			Description				- Navigate to mission creation page - Enter Description	The description field should allow input, and the user should be able to enter the description	
			Verify Save button functionality				- Navigate to the Role Configuration Page - Enter valid data in all required fields. - Click the Save button.	All entered data should be saved successfully, a success message should be displayed	

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:64

Test No*	Test Case No.⁵	Requirement No/I d#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
			Save- after entering all the fields				1. Navigate to the Role Configuration Page 2. Enter all the mandatory fields 3. Click Save Button	The entered mandatory fields should be saved successfully, and a success message should be displayed.	
			Save- after entering all the mandatory fields only				1. Navigate to the Role Configuration Page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
			Save- without entering all the fields				1. Navigate to the Role Configuration Page 2. Empty all the fields 3. Click Save Button	An error message should be displayed indicating that all mandatory fields are required, and the data should not be saved.	
			Save- without entering the mandatory fields fields				1. Navigate to the Role Configuration Page 2. Enter valid data into all fields. 3. Click the Clear button.	All input fields should be cleared or reset to default, no data should be saved, and the user should remain on the same page.	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:65

Test No*	Test Case No.⁵	Requirement No/I d#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
			Verify Edit button functionality				1. Navigate to the Role Configuration Page 2. Click the Edit button for a specific record. 3. Modify the desired fields. 4. Click the Save button.	The selected record should become editable, changes should be saved successfully, a success message should be displayed, and the updated data should reflect in the record.	
			Verify Update button functionality				1. Navigate to the Role Configuration page 2. Click the Edit button 3. Modify one or more fields. 4. Click the Update button.	The updated data should be saved successfully, a success message should be displayed, and the updated information should reflect in the record.	
			Verify Delete button functionality				1. Navigate to the Role Configuration Page 2. Click the Delete button for a specific record. 3. Confirm the deletion in the confirmation dialog	The selected record should be permanently removed from the system, a confirmation message should appear, and the record should no longer be visible in the list	

Test No*	Test Case No.\$	Requirement No/I d#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
			Delete-yes				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "yes"	On clicking "Delete" and confirming with "Yes," the selected entry should be removed successfully.	
			Delete-No				- Click delete - A message will appear "Are you sure you want to delete this entry?" - Click "No"	On clicking "Delete" and then selecting "No," the entry should not be removed and no changes should occur.	
			Verify Search button functionality				- Navigate to the Role Configuration page - Enter a valid keyword in the search field	The system should display matching records based on the entered keyword and exclude all non-matching records.	
			Verify Previous button functionality				- Go to page 2 or any later page. - Click the Previous button	The table should navigate to the previous page of records, and the displayed data should update accordingly	

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:67

Test No*	Test Case No.\$	Requirement No/I d#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks
			Verify Next button functionality				1. Make sure you are on any page except the last page. 2. Click the Next button.	The table should navigate to the next page of records, updating the displayed data accordingly.	

8.10

Doc. Name: Test Plan and Procedure		
Doc. No.: DTP xx xxx xxxx	Doc. Issue No.: 01	Page No.:68

Test No*	Test Case No.⁵	Requirement No/Id#	Test Inputs	Test Set Up (Show reference to drawing)	Other Requirements (Include equipments to be used)	Caution	Test Procedure (Steps)	Expected Results	Remarks

8.11 m

8.12

|

|

|

Doc. Name: Test Plan and Procedure

Doc. No.: DTP xx xxx xxxx

Doc. Issue No.: 01

Page No.:69