SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC)

SADC ICT OBSERVATORY
DATABASE AND WEB PORTAL SYSTEM

User Manual for
SADC Secretariat and
System Administrators

March 2023

Southern African Development Community (SADC)

SADC ICT Observatory Database and Web Portal System

User Manual for

SADC Secretariat and System Administrators

Submitted to: SADC Secretariat

Document Information

Version	Submit date	Prepared by
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TABLE OF CONTENTS

List of Figures

ABBREVIATIONS AND ACRONYMS

Acronym	Description
CRASA	Communication Regulators' Association of Southern Africa
CVC	Centralized Version Control
ITU	International Telecommunication Union
MICT	Ministry responsible for ICT
NRA	National Regulatory Authority
NSO	National Statistics Office
SADC	Southern African Development Community
SAPOA	Southern African Postal Operators Association
SATA	Southern African Telecommunications Association
SPO ICT	Senior Programme Officer ICT
UAT	User Acceptance Test
WCMG	Web Content Management Guideline

1. INTRODUCTION

SADC ICT Observatory is one of the flagship projects from the Digital SADC 2027[1], the ICT Chapter of the SADC Regional Infrastructure Development Master Plan (RIDMP) whose objective is to become the central point of reference for reliable, accurate and up-to-date collection and dissemination of ICT indicators, measurement, benchmarking, and reports both for decision making as well as to determine the best interventions for the region.

To achieve these objectives, SADC's ICT Observatory Database and Web Portal is developed with the main aim of facilitating easy data entry, information access and reporting by Member States and stakeholders as well as for visibility and decision-making.

This manual focus on how to use the Web Portal and Database System to manage ICT indicators data, ensure data quality and publishing of data for use by the public and stakeholders with vested interest on the subject.

Overview of the platform

The platform is an ICT Observatory web portal and database which is structured around two main components: the Frontend and the Backend of the platform.

- The Frontend is the public side of the database where data for ICT Observatory indicators can be found. Here you can view the dashboard that contains charts for data that have been published as well as query the database to view and download data in multiple formats.
- The Backend is where data is managed. It provides features to enter, validate, and publish data. Data that are published in the Backend can then be viewed in the Frontend.

SADC's ICT Observatory Web Portal can be accessed through www.ictobservatory.sadc.int

Users and Permissions

Users will have different permissions and access levels depending on their roles. This will help to ensure consistency and accuracy of data that is entered into the system and shared. The roles include:

Super Users: This user has unrestricted access to all commands, files, directories, and resources. Super Users can

- **Manage Users:** create, activate, deactivate users and user accounts. In addition, they can assign roles and permissions to users.
- **Manage Groups:** can create and assign permissions to groups.

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[1]https://www.sadc.int/document/regional-infrastructure-development-master-plan-ict-sector-plan-2012

- **Administration:** overall administration of the system including managing Reporting Periods, Member States, Organisations, Focus Areas, Indicators, Charts, and Publishing/Unpublishing data

Member State Representatives: Member State Representatives can view all published data. They will also be able to enter indicator data for their own State through the data entry form in the Backend section of the portal. Member State Representatives will not have the permissions to publish data as this will be done by the SADC Secretariat following review of any new or updated data.

SADC Secretariat: SADC Secretariat will be able to create Focus Areas, Indicators etc.. In addition, these users can also review and validate any new or updated data that have been submitted by Member State or Organisation representatives. These users can also approve or reject data, before publishing for all to view.

Organisations / Implementing Agencies:

Groups

There are four types of groups that authenticated users can belong to. These are Admins, SADC, Member States and Organisations. Permissions for each user is set at the group stage. Details on Groups and Group management can be found in the System Administration section of this manual.

Structure of Web-Portal: Frontend and Backend:

The Web-Portal is structured to have a public and private (authenticated access)

Frontend:

The Frontend of the web-portal does not require authentication and is visible to the public at large. The frontend can be accessed without having to log in through the www.ictobservatory.sadc.int.

Here, you can view the Dashboard filtered by year (Figure 1: Dashboard) as well as query and view data (Figure 2: Query Data) using multiple criteria. (see General Manual #2: Using the Frontend for more).
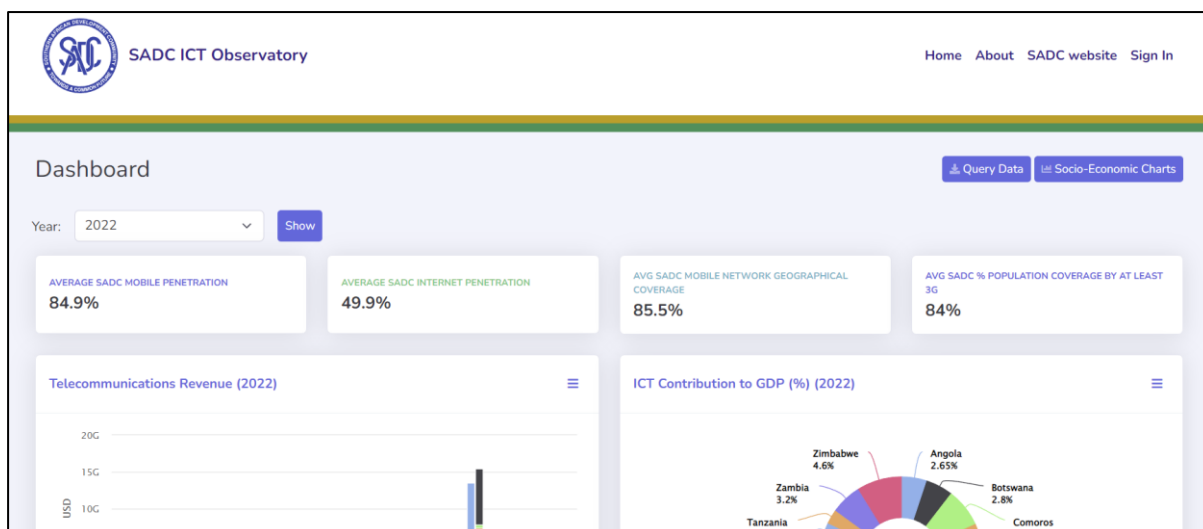
Figure 1: Dashboard
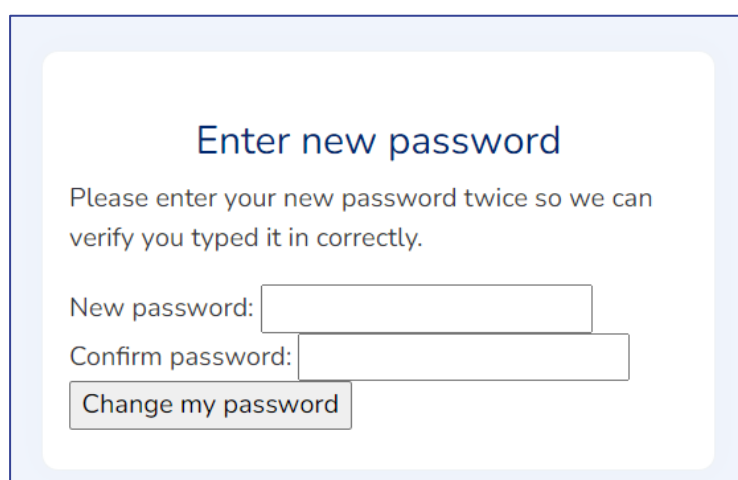

Figure 2: Query Data

Backend:

The Backend of the web-portal contains data management items that are accessible only by authenticated users. User accounts are created and assigned roles by the Super User/System Administrator. Once a user account is created for a particular user, the user will receive a password setting instruction through email with a link that redirects to the password setting page (see General Manual #1: Logging into the portal for more).

2. GENERAL MANUAL #1: LOGGING INTO THE PORTAL

Before you will be able to log into the portal, the Administrator of the portal will create an account for you using your email address and you'll need to set your password as per the instructions listed below.

Setting your password (First time users)

When an account is created for you at the www.ictobservatory.sadc.int, you will receive an email asking you to set your password for your account at SADC ICT Observatory with a link. Clicking on the link will take you a web page so that you can set your password.

Enter new password

Please enter your new password twice so we can verify you typed it in correctly.

New password: [   ]
Confirm password: [   ]
[Change my password]


♀ Password requirements

SADC's Password Policy states that a strong password should be created for each account using SADC's systems. Below are the password setting requirements.

Length: a minimum of 12 characters

Combination of characters: alpha-numeric characters with a minimum of one uppercase letter, one numeric character and one special character.

Logging into the system

Once you've set your password, you can log into the system by clicking on the Login button at the top right part of the portal's landing page.

SADC ICT Observatory   Home   About   SADC website   Sign In
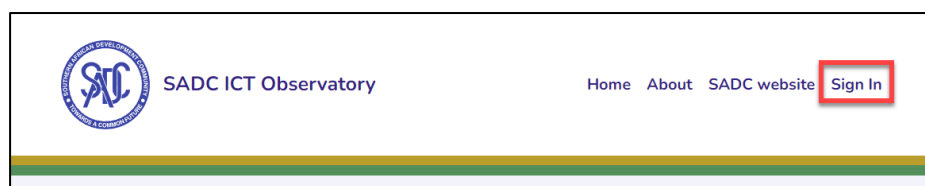
Use the email address associated with your password to log in.

Note that logging in from the Frontend will take you directly to the Backend of the platform. Once logged in, you can easily move from the Frontend to the Backend.
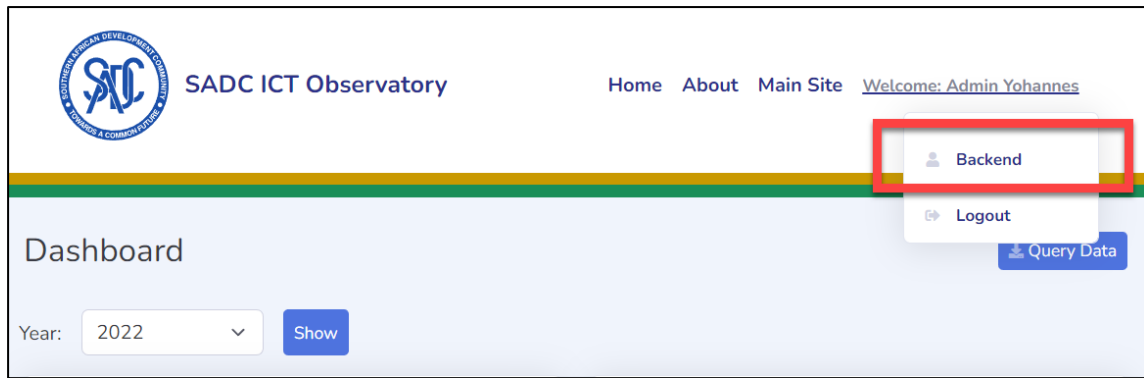
Moving between the Frontend and Backend

Once you are logged in, you will have access to all features in the Frontend plus access to the Backend. The Backend permissions would depend on the type of user which you are.

If you are in the Backend and want to go to the Frontend, simply click on the Frontend button in the left-hand pane of the screen.
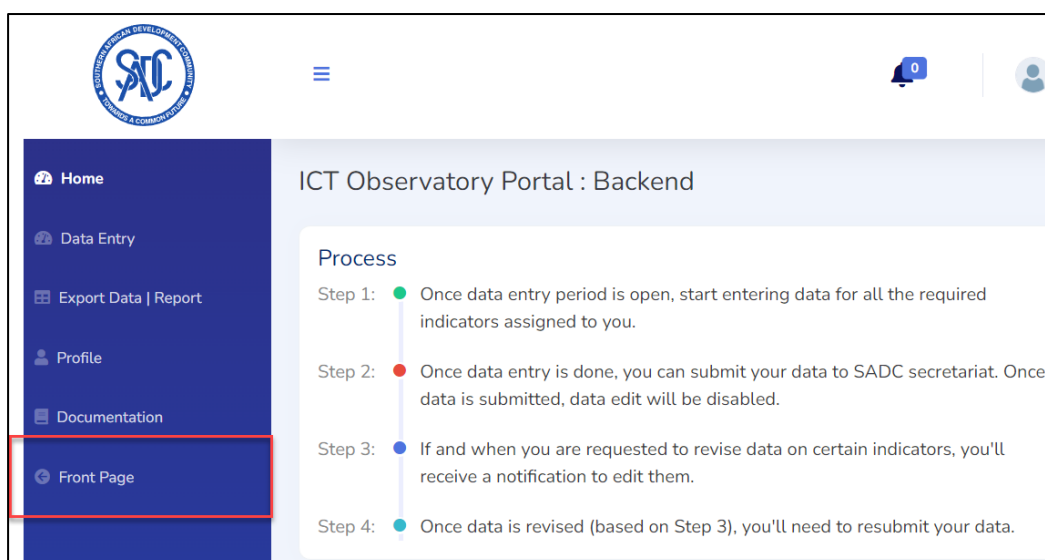
If you are in the Frontend and want to go to the Backend, simply click on the welcome button which you can find in the top right section of the front page.

To log out, simply click on the Logout button that can be found when you click on your username on the top right section of both the Frontend and Backend
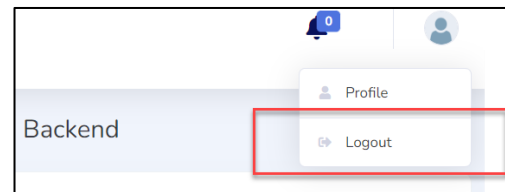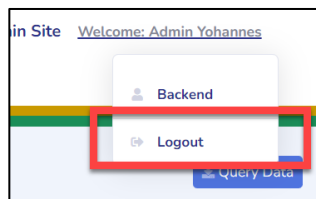
3. GENERAL MANUAL #2: USING THE FRONTEND

As can be seen from the figure below, the Frontend of the portal has multiple features. There are navigation and login buttons on the top-right section ①, year filter dropdown box ②, Query Data button that will redirect you to the query page ③, the charts section that contains 16 selected charts ④, and link to additional dashboard that contains charts related to socio-economic indicators ⑤. Each of these sections will be described in detail in the upcoming sections.
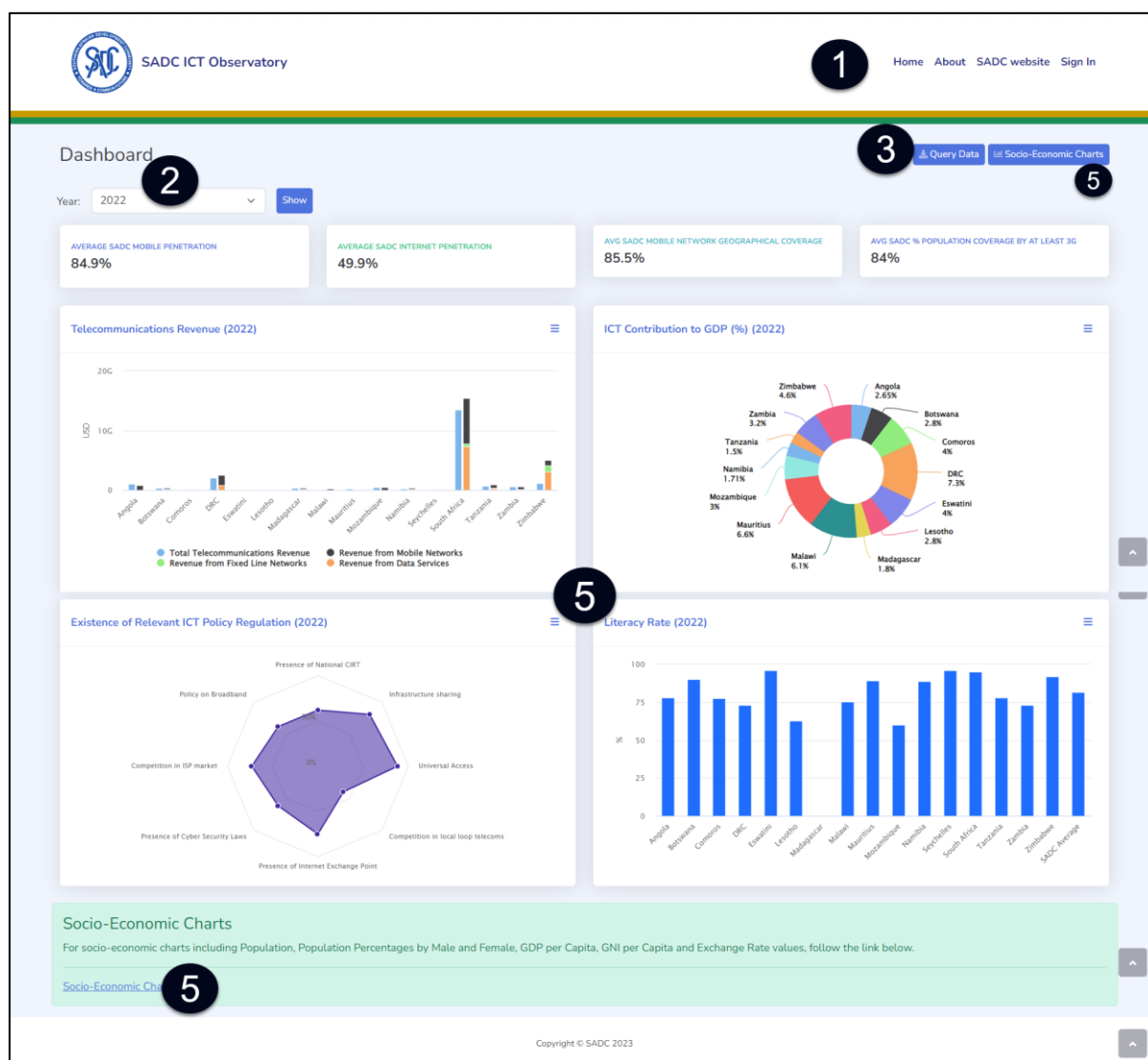

Figure 3: Frontend

① Navigation Links

There are four navigational links on the top-right section of the Frontend. The Home page is a link to the front page, About button will take you to the About section of the web-portal, Main Site will redirect you to the main site of SADC (www.sadc.int), clicking on the Login button will open up the login page for authenticating users.

② Year Filter

Users can change the data displayed in the charts and score card section by changing the Year through the Year dropdown filter. By default, the Year shows the latest published year's data.
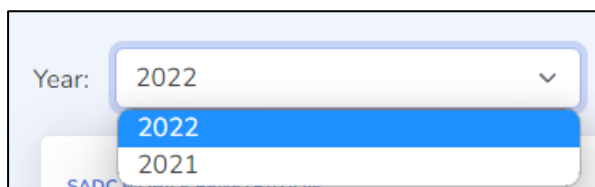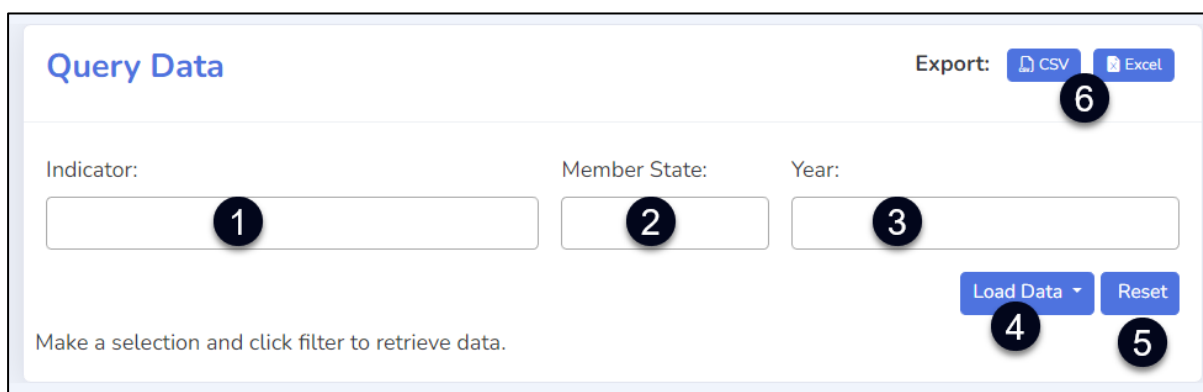

Figure 4: Year dropdown filter

③ Query Data

The Query Data button will redirect you to the Query Data page as shown below.

On this page, there are three dropdown boxes that enables you to filter data, once you select the desired Indicators ①, Member States ② and Year ③, you can click on the Filter ④ button to load results. You can load results for USD adjusted data (for currency data) or data in local currency. The Reset ⑤ button will reset all selections made. You can Export ⑥ the data using the CSV and Excel buttons to export as CSV and Excel Workbook respectively.
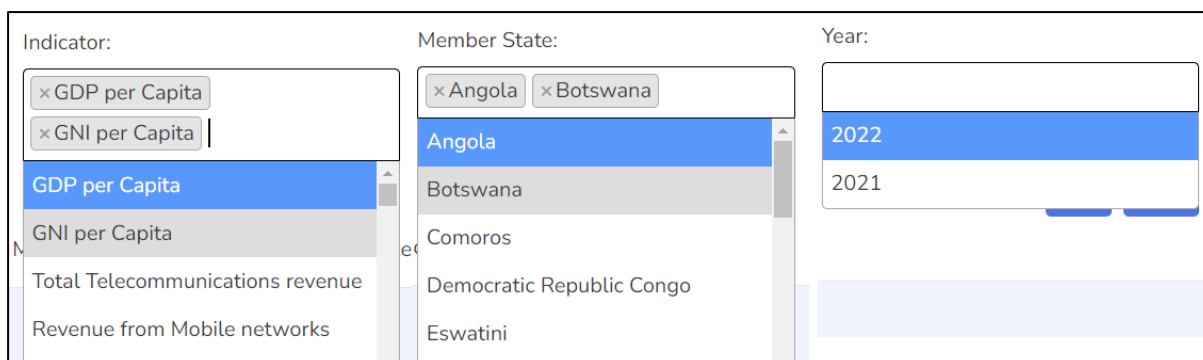

Figure 5: Making selections

For each of the dropdown boxes, you can select either one or multiple data elements as can be seen in the figure above. Once you are happy with your selection, click on the Filter button to load the data (see Figure 6: Data loaded based on selected filters below)
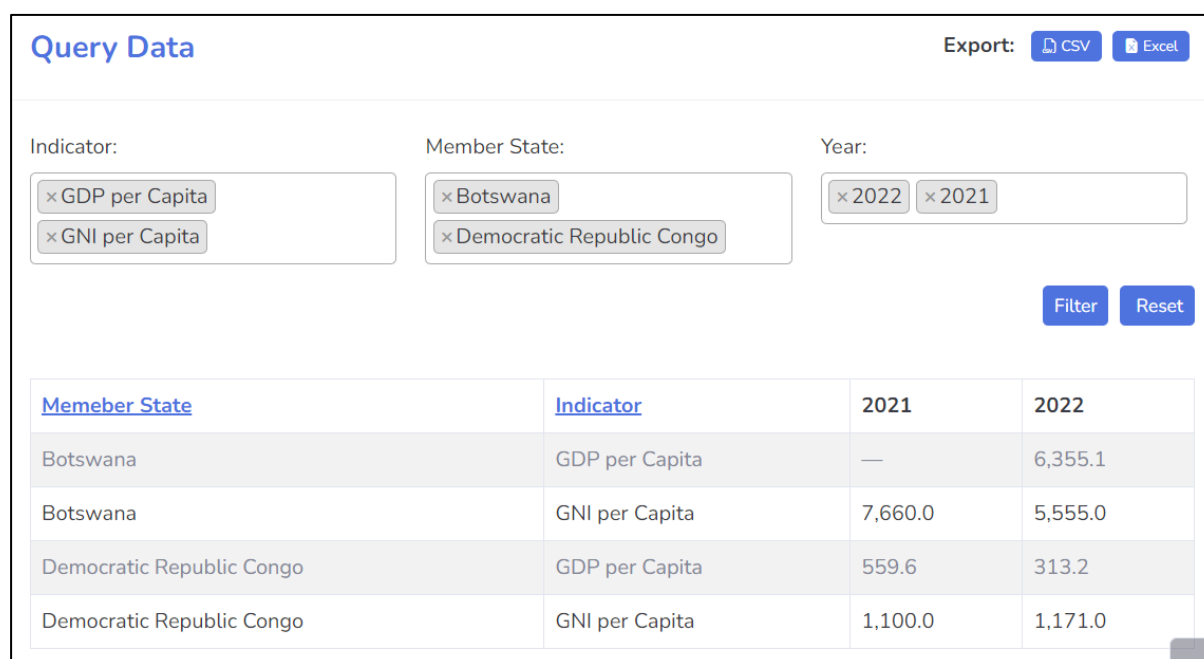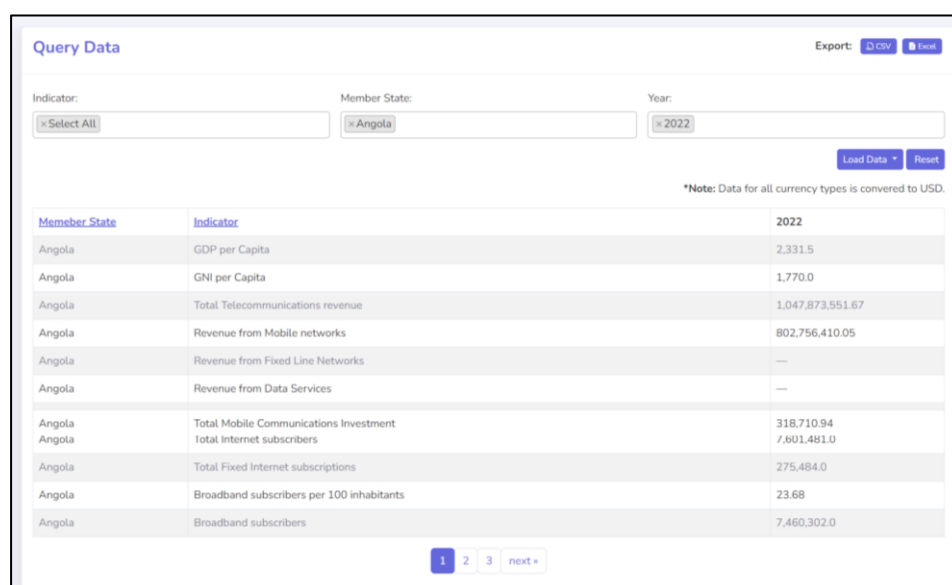

Query Data   Export: [CSV] [Excel]

Indicator: Member State: Year:

[×GDP per Capita]   [×Botswana]   [×2022] [×2021]
[×GNI per Capita]   [×Democratic Republic Congo]

                                                                  [Filter] [Reset]

Memeber State	Indicator	2021	2022
Botswana	GDP per Capita	—	6,355.1
Botswana	GNI per Capita	7,660.0	5,555.0
Democratic Republic Congo	GDP per Capita	559.6	313.2
Democratic Republic Congo	GNI per Capita	1,100.0	1,171.0

Figure 6: Data loaded based on selected filters

Select All: For all filters, you can choose the Select All value to ensure all filters are included. For example, if you choose select all in the indicator selection dropdown, all the indicators will be included.

Query Data   Export: [CSV] [Excel]

Indicator: Member State: Year:
[×Select All]   [×Angola]   [×2022]

                                                         [Load Data ▾] [Reset]

*Note: Data for all currency types is convered to USD.

Memeber State	Indicator	2022
Angola	GDP per Capita	2,331.5
Angola	GNI per Capita	1,770.0
Angola	Total Telecommunications revenue	1,047,873,551.67
Angola	Revenue from Mobile networks	802,756,410.05
Angola	Revenue from Fixed Line Networks	—
Angola	Revenue from Data Services	—
Angola	Total Mobile Communications Investment	318,710.94
Angola	Total Internet subscribers	7,601,481.0
Angola	Total Fixed Internet subscriptions	275,484.0
Angola	Broadband subscribers per 100 inhabitants	23.68
Angola	Broadband subscribers	7,460,302.0

[1] [2] [3] [next »]

If you want to export the filtered data, click on either the CSV or Excel button to export and save the data to your computer as can be seen in the figure below. The naming of the file will be automatic based on the date and time of the request.
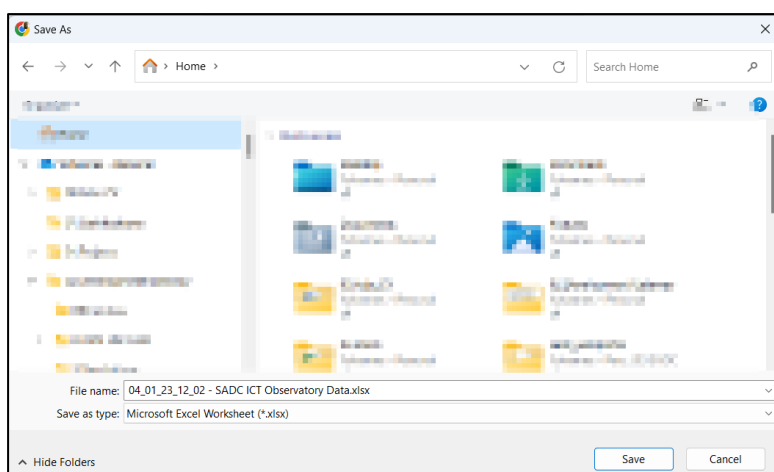
Figure 7: Saving the exported data

As can be seen below, the exported file will contain all the data that is loaded into the Query Data page.

④ Charts

The Charts section contain 16 charts arranged in an 8 by 2 matrix as well as four score cards. All charts have multiple features that let's us view the chart in a full-screen view, download the chart and data in multiple formats, quick view of the data and interactive selection of indicators for multi-indicator charts. Below is a detailed look at these features.
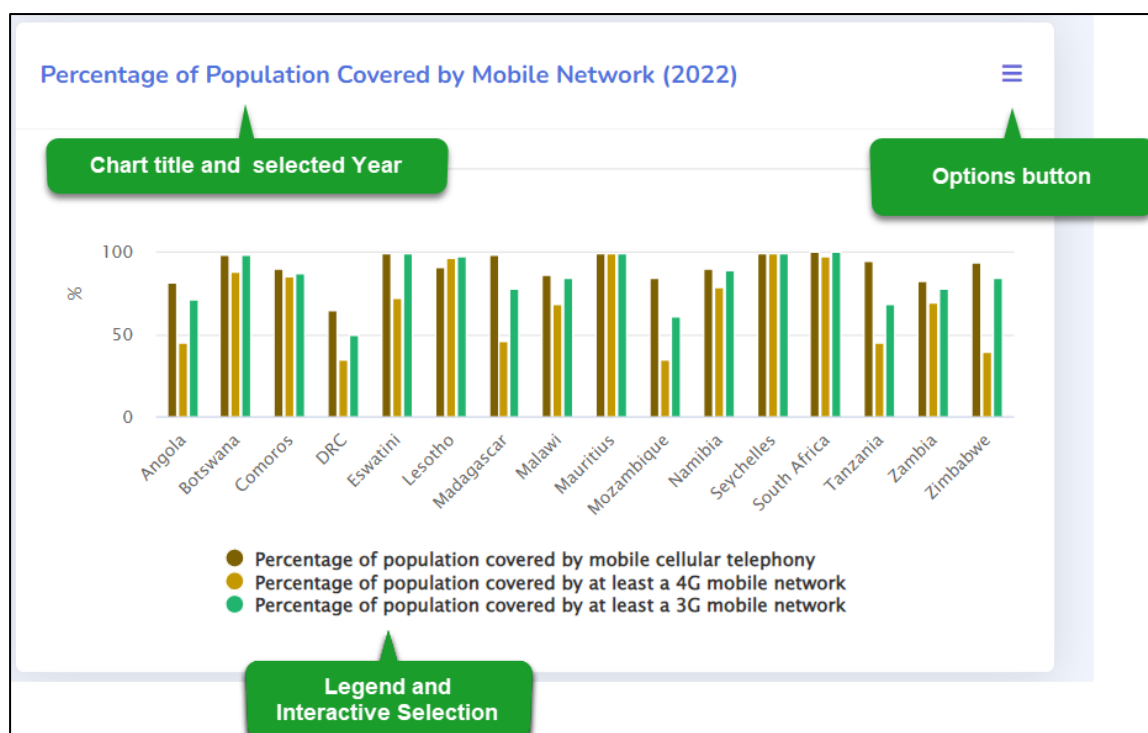
1. **Chart Title (Year):** The chart title is the title of each chart and the Year of the data the chart.

2. **Options button:** clicking on the options button will open up a menu with a list of multiple buttons as can be seen below.
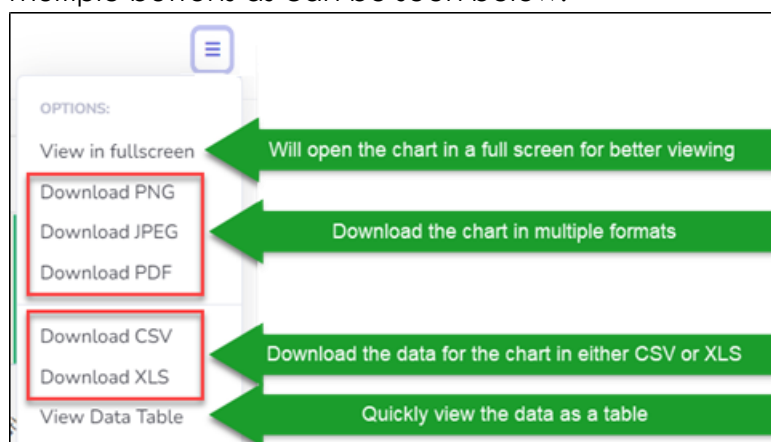
Figure 8: Options for charts

For example, in the figure below, we can see the Data Table for the selected chart. To hide the Data Table, click again on the View Data Table button from the Options menu.
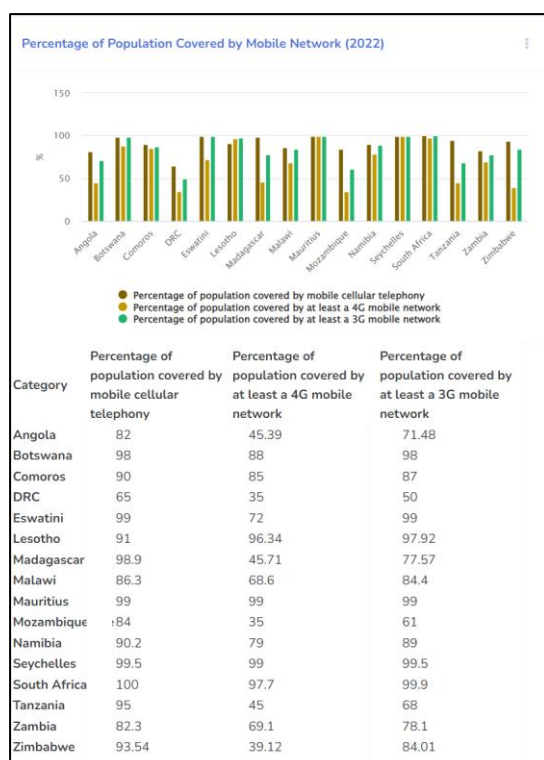
Figure 9: Chart with Data Table view

3. **Interactive Selection:** for charts plotted with more than one indicator, you can use the chart Legend area to hide/show indicators. Clicking on one each legend entry will toggle the indicator from shown to hide and vice versa.

For example, in the figure below, it can be seen that the second indicator in the legend (Percentage of population covered by at least 4G mobile network) is greyed out. Correspondingly, there are only two bars in the charts area while the greyed out indicator is hidden from view. To reveal the indicator, click again on the indicator in the Legend area.
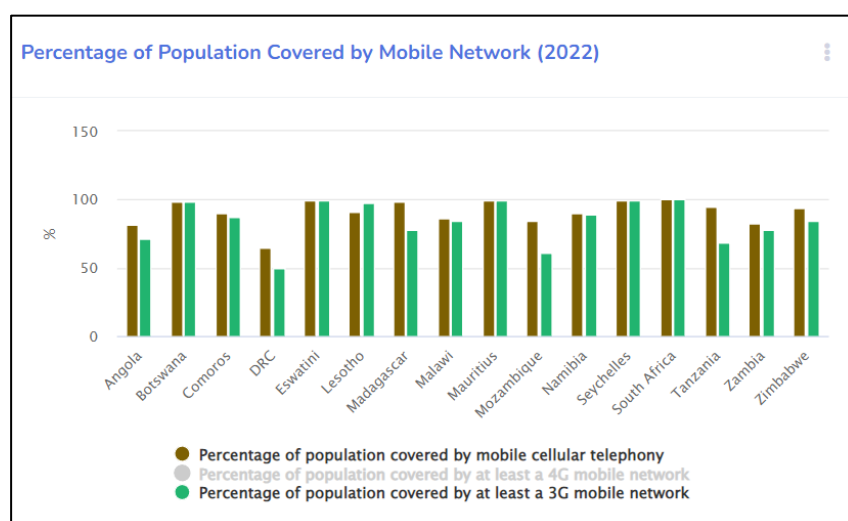
Figure 10: Toggle indicators from view to hide and vice versa

⑤ Socio-Economic Charts

Clicking on the Socio-Economic link will redirect you to another dashboard that contains five charts related to Population, GDP/GNI and Exchange Rate data for the selected year.
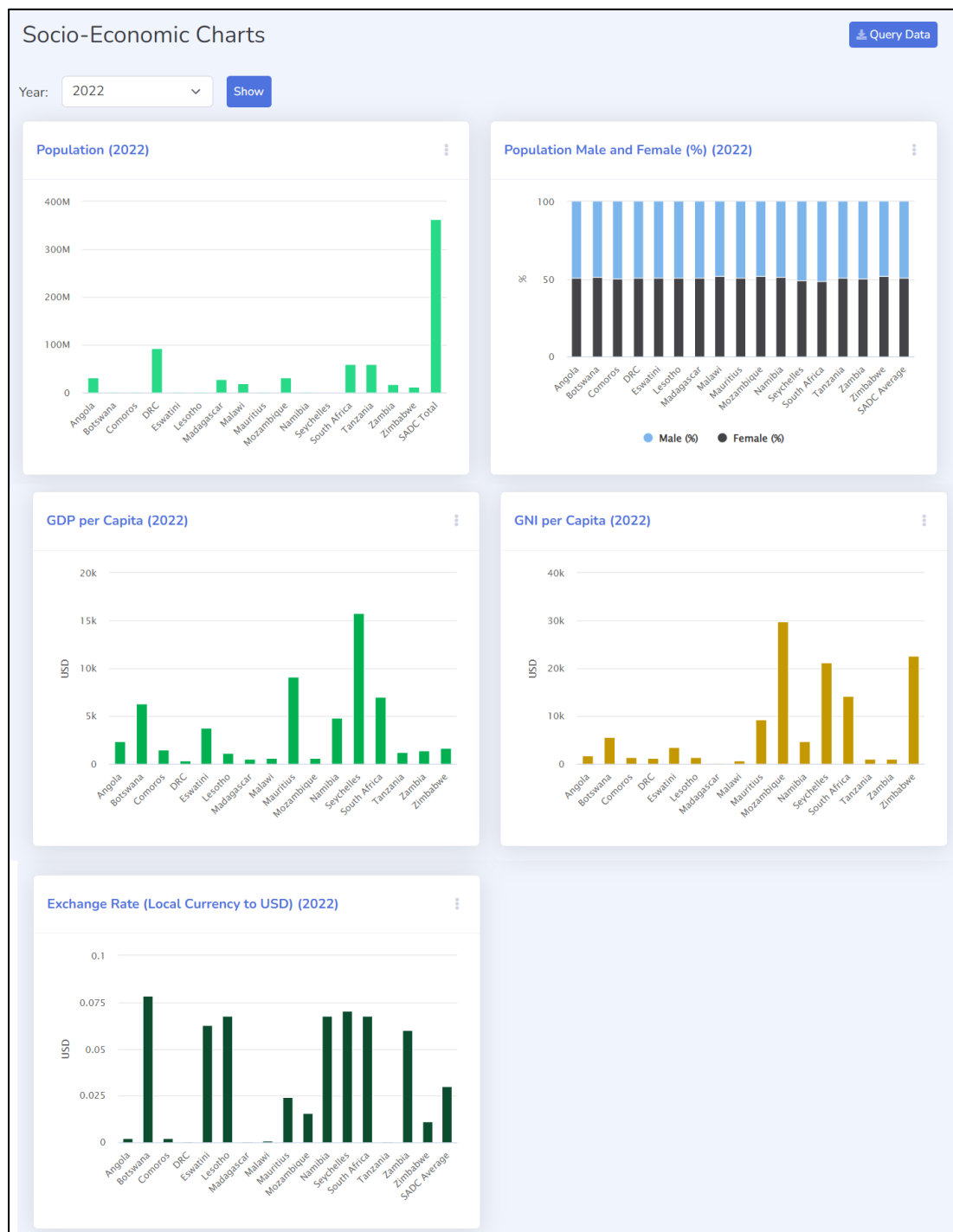
Figure 11: Socio-Economic Charts

4. BACKEND ADMINISTRATION

When you log into the system through the log in page, you'll automatically be directed to the Backend page of the portal.

Depending on the type of user you are logged in as, you'll see different features.

Super Users
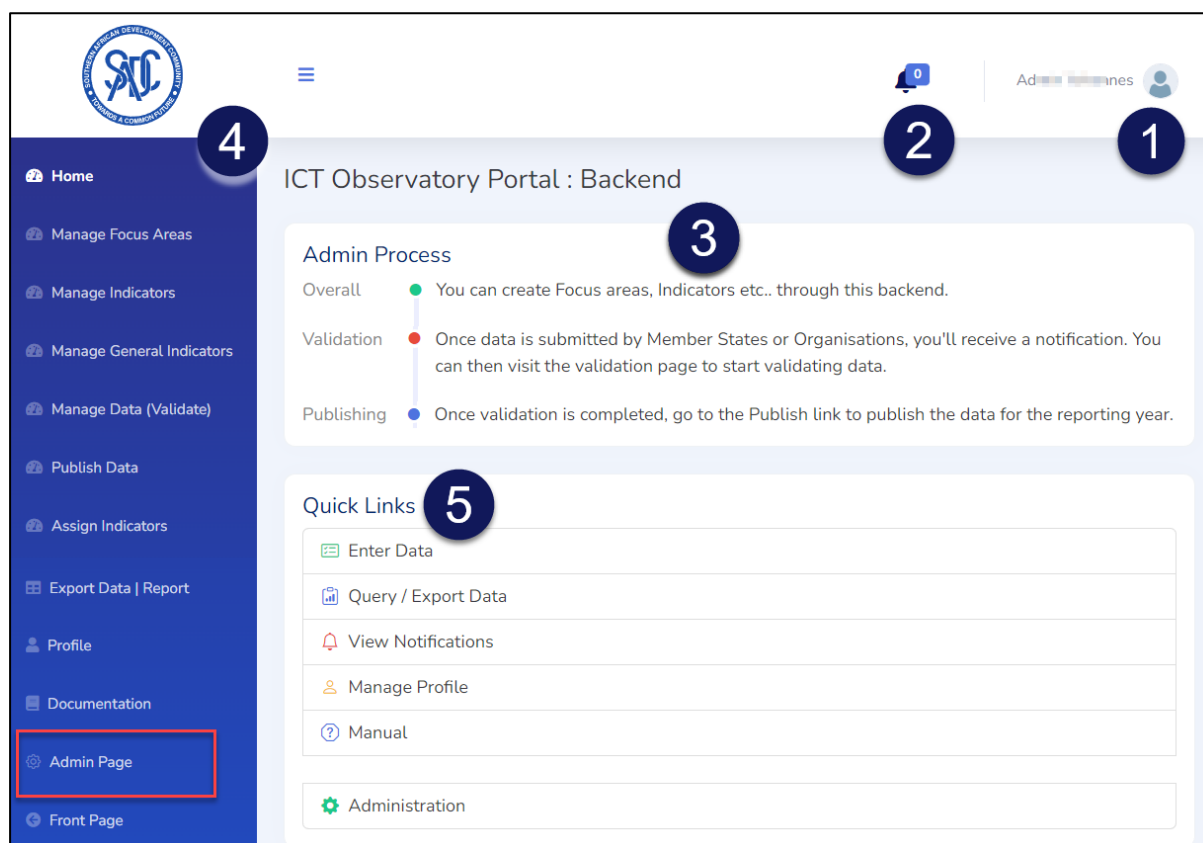
The figure above shows the Backend when logged into the portal as a Super User / System Administrator. One notable difference between Super Users and SADC secretariat users is the former have a link that redirects them to the Administration Page of the portal (see annotated box in the figure above).

① Full Name of the logged in user. Clicking on this link will open a menu where with Profile and Logout buttons. The Profile button will redirect you to the Profile page (see figure below) where you can review your profile information as well as change password. The Logout button is used to logout of the system.
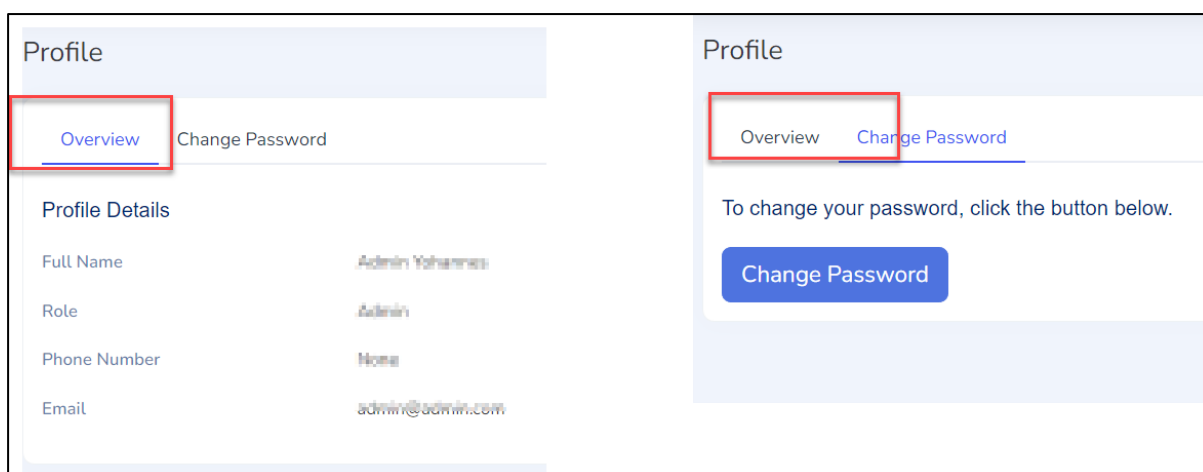
Figure 12: Profile Overview and Change Password Tabs

② Notification centre: This is where your unread notifications live. The notification badge will inform you of the number of notifications received. Clicking on the Notifications icon will open a list of recent unread notifications. You can click on the Mail icon to mark all notifications as Read. To see all notifications received, click on the Show All Notifications Icon to go to the Notification Centre Page.
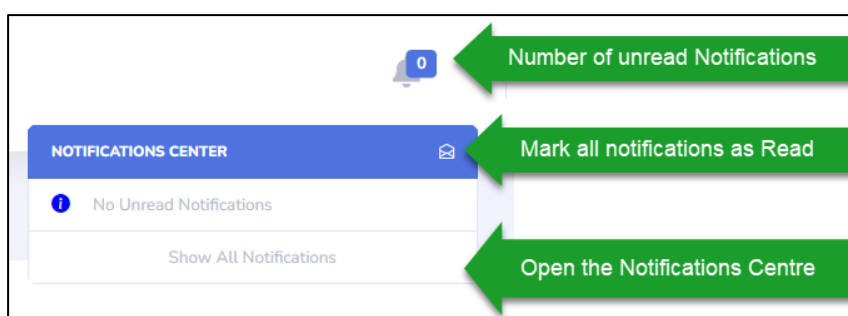
③ Lists a quick overview of what activities the Logged in user can complete.

④ The left panel contains multiple buttons that enables you to Administer the system. Each button is described in detail in the next sections.

⑤ Contains a quick links for ease of navigation.

SADC Secretariat

Users assigned to the SADC group have the same features as System Administrators with only two differences as annotated in red boxes in the figure below. SADC secretariat users have a data entry form for entering General Indicator data ①, data that is especially used for some charts. In addition, Days Remaining ② show the number of days left before for the current reporting period ends (on the right-side panel)
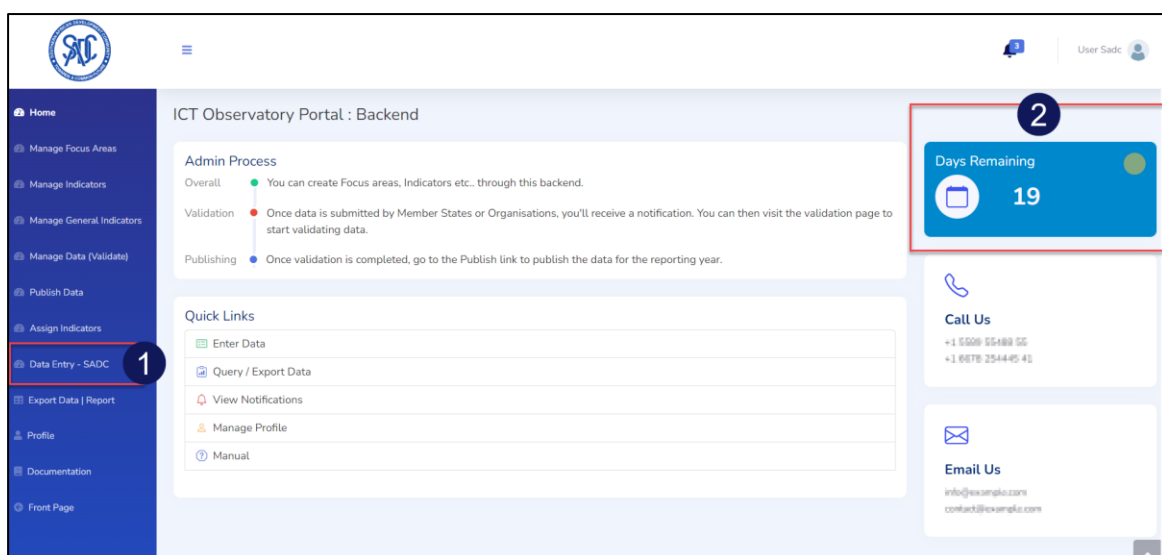
Data-Portal Management:

As described above, the left-side panel of the Backend, when either Super Users or SADC secretariat users log in has multiple links that enables overall management of Focus Areas, Indicators, Validation and Publishing of data. Each of these functionalities are described in detail below.

Manage Focus Areas

The Manage Focus Areas page contains a list of Focus Areas currently available in the system. The Status column shows the status of each Focus Area as Active/Inactive.

💡	**Active vs Inactive**
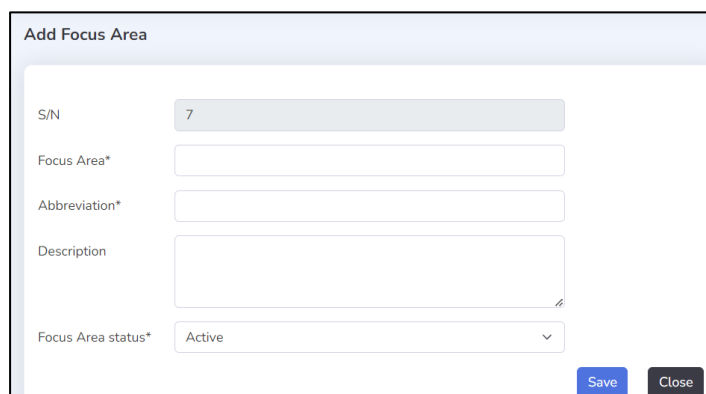
Please note that only Focus Areas with an Active status will be available for data entry on Members States or Organisations Backend section.

The total number of indicators per Focus Area, how many of them are Core or Extended, Required or Optional and Active vs Archived is provided as a summary in their corresponding columns. The Edit column contains a button that opens up an Edit page for updating Focus Areas.

S/N	Focus Area	Status	Total # of Indicators	Core	Extended	Required	Optional	Active	Archived	Edit
1	ICT in Economics	Active	13	13	0	13	0	13	0	✏️
2	Infrastructure and Connectivity	Active	23	23	0	23	0	23	0	✏️
3	Access to, Use and Affordability of ICT	Active	5	5	0	5	0	5	0	✏️
4	ICT Policy and Regulation	Inactive	8	8	0	8	0	8	0	✏️
5	Education and Skills	Inactive	7	7	0	1	6	7	0	✏️
6	e-Services and ICT in Business	Active	4	4	0	0	4	4	0	✏️

Adding Focus Area

Clicking on the Add New button on the Manage Focus Areas page will open up a form that enables users to add new Focus Area into the system. The serial number is automatically populated based on incremental numbering of available Focus Areas. Fields with an asterisk (*) next to their label are required to be completed (Focus Area, Abbreviation and Focus Area Status). After completing all the fields, click on the Save button to save the Focus Area to the database.
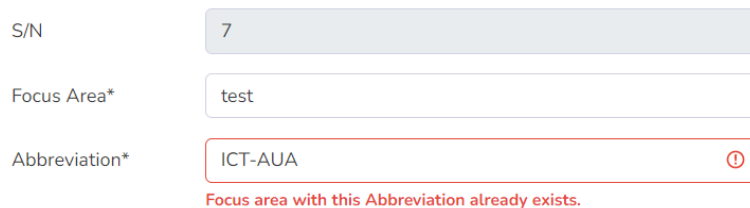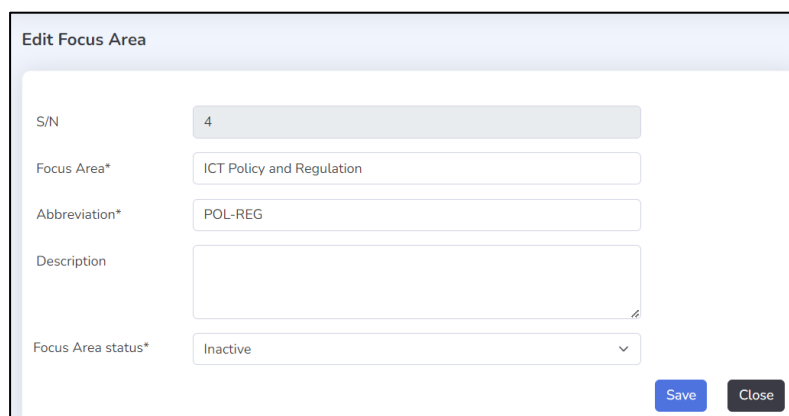
Abbreviation

Abbreviations are used to denote indicators that belong to a particular Focus Area and are Unique for each Focus Area. If you try to enter the same abbreviation more than once, the system will inform you of this error.

Editing Focus Area

Clicking on the Edit icon will open the Edit Focus Area form for the each corresponding Focus Area per row. You can make changes to the Focus Area in this form and click on the Save button to save your changes into the database.

Manage Indicators

The Manage Indicators form contains a list of Indictors categorised by Focus Area. This form is used to add and edit Indicators into the database. You can also export the list of indicators as a CSV or Excel spreadsheet using CSV and Excel buttons found on the right-side just above the table.

To view the definition for each indicator, click on the eye icon in the Definition column.

Add Indicator

Clicking on the Add New button the Manage Indicators page will open up a form that enables you to add new indicators into the system.

- The Focus Area dropdown contains a list of Focus Areas created (as per the previous section).

- Indicator number is automatically completed for you once you select a Focus Area. It is created by concatenating the selected Focus Areas abbreviation and incremental numbering per Focus Area. However, please note that you can edit the auto populated number by your own if necessary.

- Various data types are available as an option including Currency, Whole Number, Decimal, Percentage and Select (e.g. Yes/No). Here, you should select the appropriate data type for the indicator you are creating.
- The Status dropdown is used to set the status of an indicator as Active or Archived. Please note that only Active indicators are available for data entry.
- The Required dropdown box is set to True by default. If an indicator is set as Required, users will be required to either enter data for them or set them as N/A before being able to submit their data to SADC.
- The "Indicator assigned to" dropdown box will be used to differentiate between indicator data that will need to be completed by either Members States or Organisations.

Field names denoted by asterisk are required to be completed before saving the indicator into the database. These are Focus Area, Indicator Number, Indicator, Data Type, Definition, Indicator type, Status, Is Required? and Indicator assigned to.

💡	**Data Type: Select**

On the Data type dropdown, if you choose Select (Yes/No) data type, another field appears just below it (Choices) to let you fill out the options for the indicator. Use comma separated items into the field as options that can be selected by Users.

During data entry (by either Member States or Organisations that the indicator is assigned to), the choices will be available as dropdown items.

Edit Indicator

Clicking on the Edit button for a particular indicator will open the Edit Indicator page as shown below. You can make necessary changes here and click on the Save button to save your changed back to the database.

Assign Indicators

This button will open the Indicator Assignment page. Indicators that have Organisations on the Indicator assigned to field (Manage Indicators), will be listed here. To assign a particular indicator to an Organisation, click on the Assign to dropdown box which contains all the active Organisations found in the database.

Manage General Indicators

General Indicators are indicators that are specifically used to store data that will be entered by SADC secretariat. For example, the Africa Average Internet Bandwidth Per Internet User indicator is used as in the International Internet Bandwidth Per Internet User.

Manage Data (Validate)

The Manage Data (Validate) button opens the Review and Validate Indicator Data page (see figure below).

Once Member States or Organisations submit their data, users with the role of Super Users or SADC secretariat can review and validate the data that is submitted.

There are three validation statues for submitted data.

1. **Ready for validation**: this is the default status set when users submit data. It is shown in black badge as can be seen above.
2. **Validated**: this status represents data that is accepted as valid by SADC. Validated data are indicated in Green.
3. **Returned for revision**: indicators with this status tags are those that are deemed to be not valid and sent back to those who entered the data for revision. Indicated in Red background.

Validate

To validate a data, click on the icon in the Validate column. The status will automatically change to Validated upon click.

Send for Revision

To send back the data for revision, click on the icon in the Return for Revision column. This will open a dialog window where you can enter your reason for returning the data for revision.

Return for Revision	
Comment	
	Close **Send**

When you send an indicator data for revision, the respective responsible body will get a notification on the portal as well as through their email address asking them to revise the particular data.

Filtering

Since there will be a lot of data that will be need to be reviewed, you can use the filtering dropdown boxes to filter the list by Member States, Focus Areas, Indicators or Validation Status.

Member State	Focus Area	S/N	Indicator	Data	Validation Status

Viewing Detailed Information

Clicking on the + button on the left (first)column of the Manage Data (Validate) page will open a modal page that shows the details about the selected indicator. The details include when the data is last updated and by whom.
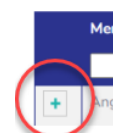
Details	
Reporting Year	2022
Indicator	GDP per Capita
Member State	Angola
Data	2331.50
Comments	
Submitted	True
Validation Status	Validated
Last Update	Nov. 13, 2022, 11:21 a.m.
Updated By	Admin Yohannes
	Close

Exporting

You can use the exporting buttons located to the right just above the table to export the selected data to various formats. You can also use the Copy button to copy the data to your clipboard.

Publish Data

To be accessible to the public, all indicator data for a particular year will need to be published. Once published, they will show up on the Frontend section of the web ports.

The Publish Data link will open a page that enables you to publish / unpublish all data for a particular year. The eye icon in the Publish /Unpublish column will toggle the status state from Published to Unpublished and vice versa. Once you publish data for a particular year, navigate to the Frontend to view the dashboard corresponding to it.

Publish / Unpublish Data
Only validated Indicators will be published!

Reporting Year	Ready for validation	Returned for Revision	Validated	Total	Status	Publish / Unpublish
2022		-	960	960	Published	⊘
2021		-	812	812	Not published	⊘

Data Entry - SADC

This link will be used to enter data for the General Indicators that SADC is responsible for populating. Select the indicator that you'd like to enter data for from the Indicator dropdown box and use the Data field to fill out the respective data. Once done, click on the Save button to save the data to the database.

Data Entry Form

General Indicators: SADC   **Year: 2023**

Indicator   Data

| --------- ▼ |

Africa Average Internet Bandwidth Per Internet User

Save   Close

5. SYSTEM ADMINISTRATION

In this section, how Super Users administer the system will be discussed. The topics include User Management, Portal Management and Groups. In the portal management section, there are various buttons that enables you to manage the data however, since most are very similar in nature (and are coved in detail in the Data Portal Management section of this manual), we'll cover the most important ones as the approach will stay the same for the others.
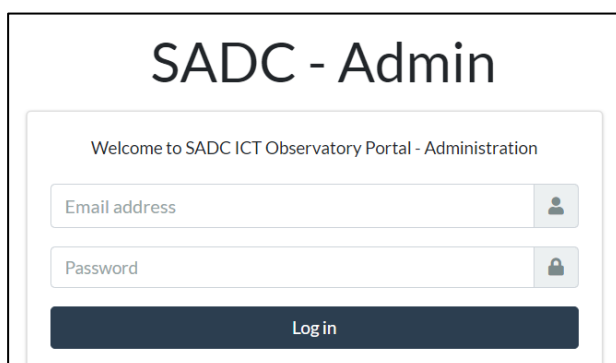
The System Administration Page

There are two ways you can navigate to the administration page.

1. If you are logged in to the Backend as a Super User, you'll find the Admin Page link at the left-side pane as shown in the figure below.
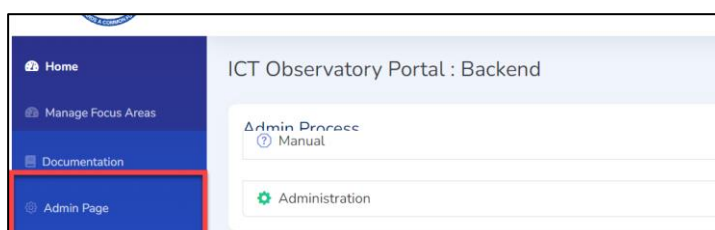
2. You can directly navigate to the administration page without having to log into the Backend. To do this, on the address bar of the browser, type www.ictobservatory.sadc.int/admin this will take you a page where you can log into the administration page. Use your email address and password and click the Log In button (see figure below).

Administration Dashboard

Once you are logged in to the administration page, you'll find a page as shown below.
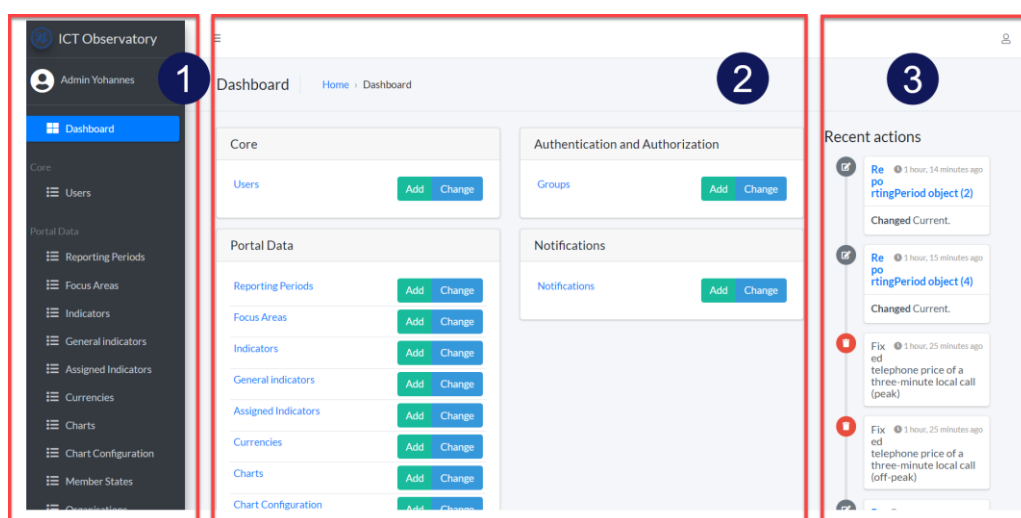
The administration page has three major components as can be seen above.

① The left-side pane contains all the buttons/links that will enable you to manage the portal.

② The middle pane contains similar buttons with additional shortcuts that will enable you to Add or Change data.

③ The right-side pane lists recent actions performed by users of the system.

Users

Clicking on the Users link either on the left-side or middle pane, will open the User management page as shown below. The Users page lists all available Users created in the system. Clicking on the email address of a particular user (Email address column) will open details of the selected user. There is also an Add User button on the top-right section of the page (Green button) which can be used to Add users into the system (see the next section for a detail description on how to add users).
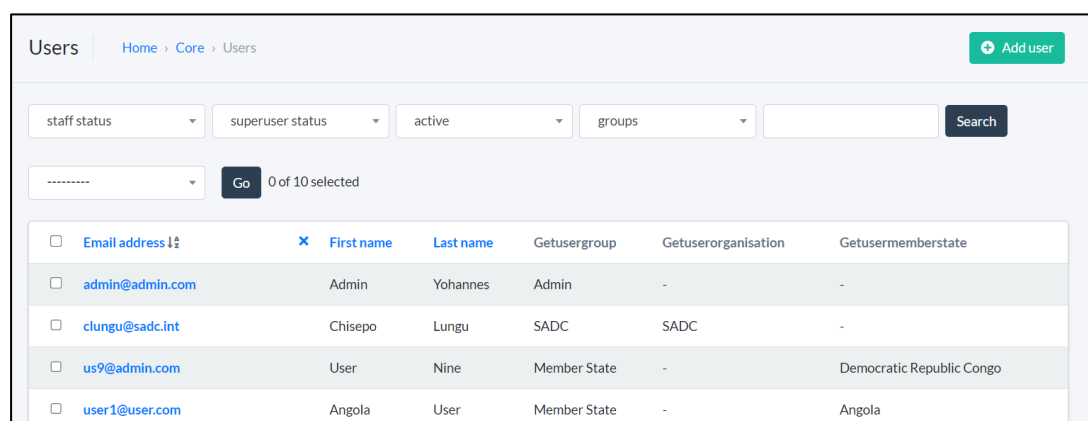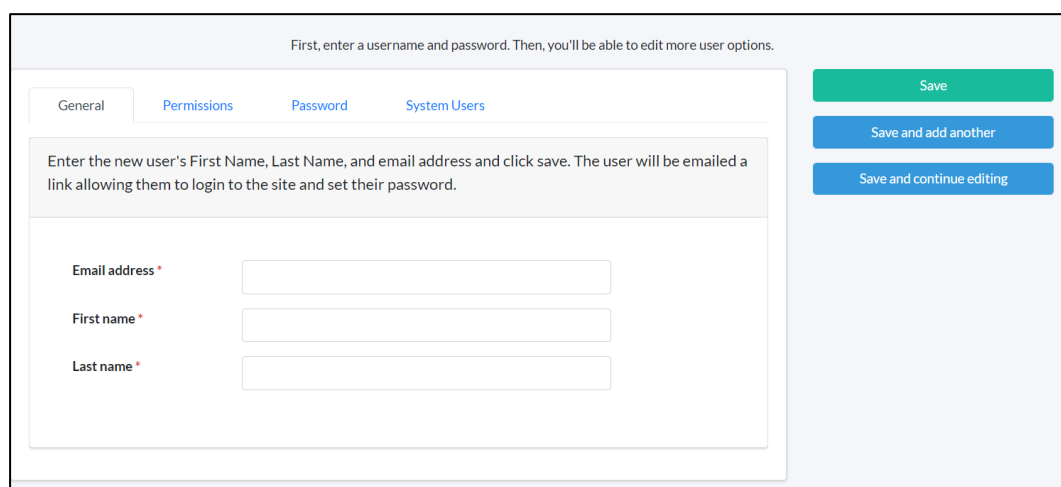
Adding New Users:

Adding new users involve multiple steps that will need to be followed carefully to ensure the created user has the correct role and permission on the system.

As can be seen from the figure below, the Add New User page has four tabs namely General, Permission, Password and System Users.

Tab: General

This is where you enter the email address, First and Last name of the user you want to create account for. All these fields are required. Once you've completed these fields, click on the Permissions tab to set permission for this particular users.

Tab: Permissions

This is where permissions for a user will be set.

Active: if this box is checked, the user can log into the system to access the Backend based on the permission set. To deactivate a user, uncheck this box.

Staff status: designates whether the user can log into this admin site.

Superuser status: if you check this box, the user will become a Super User and will have all permissions on the system.

Groups: there are four groups that a user can be assigned to as can be seen on the picture below. A user can be assigned to one or more groups.

To assign a Group for a user, click on one of the group names in the Available groups pane and use the forward arrow to assign it to a group.

It is necessary to assign users to groups. Users who are not assigned to any group will not be able to access any of the features on the Backend.

Tab: Password

The Password tab can be used to set a password for a user. However, since each user will be able to set their own password through a link that will be sent to them, do not use set a password for them.
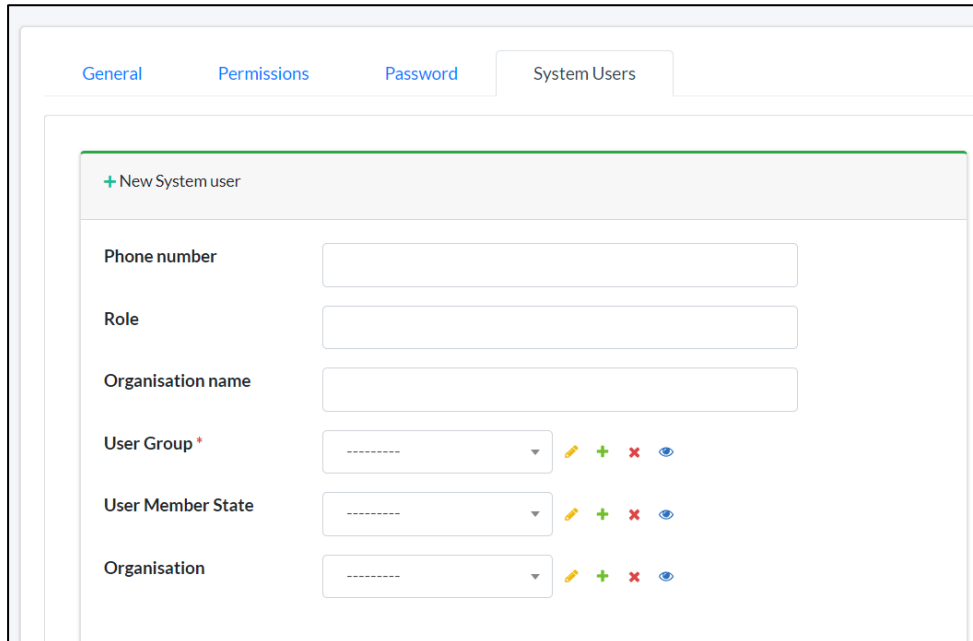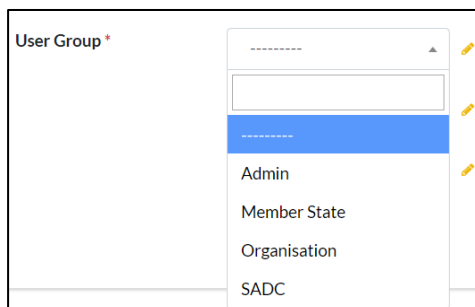
Tab: System Users
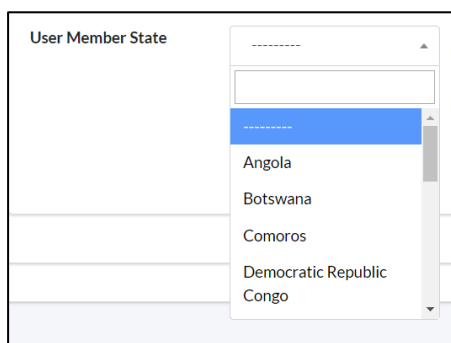
This is another very important section where you'll enter various information as well as assign users to either Member States or Organisations. Enter the user's Phone number, Role and Organisation name in the fields provided.
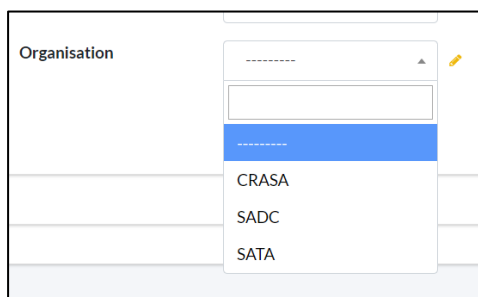
User Group: as you've done previously, select the User Group from the dropdown box.

User Member State: If in the User Group dropdown box, the selected value is Member States, you'll need to select the Member State the user belongs to in the User Member State field as shown below.
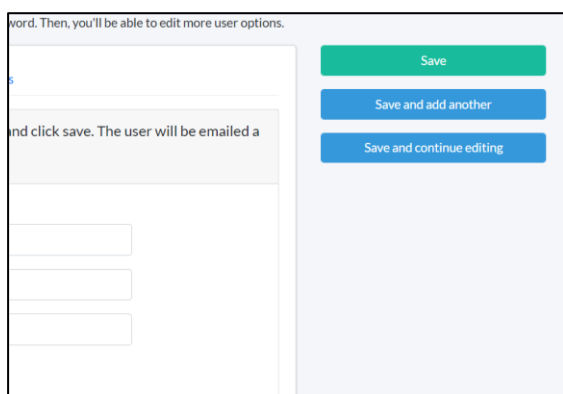
Organisation: If in the User Group dropdown box, the selected value is Organisations or SADC, you'll need to select the Organisation the user belongs to in the Organisation field as shown below.

Finalising User Creation

Once you've completed all the steps listed above, click on the Save button on the right side of the Add Users page as show below.

When you clicking on the Save button, the system will send an email to the email address provided asking the user to set their password with a link that will take them to the Set Password page (as described in the General Manual #1: Logging into the portal section).

Portal Data

Under the Portal Data section, there are multiple links that will enable you to manage the data for the portal. Most of these features are described in detail in the Data-Portal Management: section of this manual. There are however few items that are available only to Super Users as described below.

Reporting Periods

This is where you manage Reporting Periods. You can Add new reporting periods or set reporting periods as current as can be seen from the figure below,

Add Reporting Period

To add a new reporting period, click on the Add Reporting Period button located on the top-right section of the page (see figure above).

On the Add Reporting Period page (shown below), enter the Reporting Start and End dates in the designated fields.

The Current check box is used to denote if this is the current reporting period or not. If you check this, it will become the only active reporting period.

Currencies

If needed, this is where you can manage currency labels for each Member State.

Member States

The Member States page contains information about Member States created in the system. Whenever necessary you can edit names, short names as well as status (active, inactive).
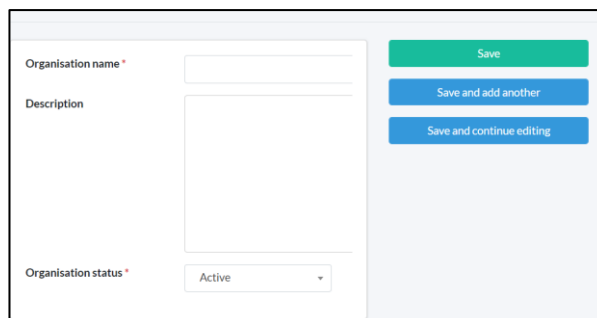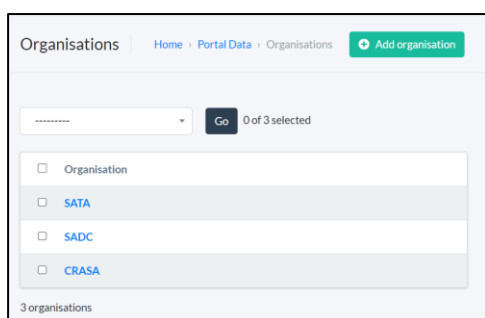

If a Member State's status is set as Inactive, it will not be available in both the Frontend and Backend sections of the web-portal.

Organisations

Similar to management of Member States as described above, this is where you manage Organisations in the system. You can add new organisations or deactivate existing ones whenever necessary through this page.

Indicator Data

The Indicator Date management page has three main components as can be seen below.

① You can use the filtering dropdown boxes to filter the data by Indicator, Member State and Reporting Year.

② The Actions dropdown box contains two actions that enables you to delete or validated selected indicator data (see below for more).

③ The table contains all the data available in the system.

Bulk Validation

In the Manage Indicator (Validate) section found in the Backend section of the web-portal, we have seen how System Admins / SADC secretariat validate data one indicator at a time.

If you want to validate multiple indicator data at once, you can use this page. All you need to do is select multiple items and from the action dropdown box, select the Mark Selected Data as Valid an click the Go button. This will validate all the selected indicators in bulk.
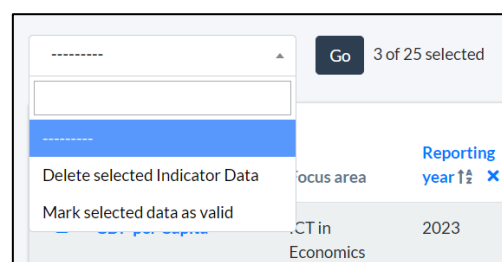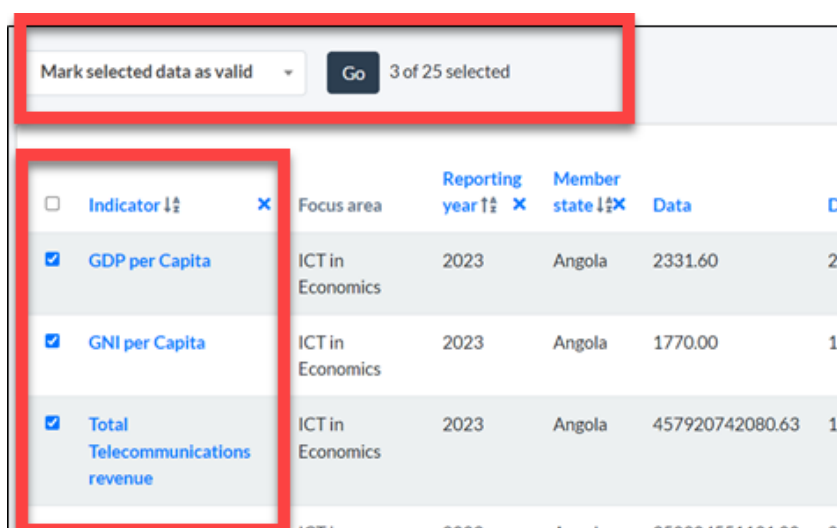
Un-submitting data

Similar to the bulk validation, system admins can un-submit any data that is submitted by mistake (which will open up the field for editing).
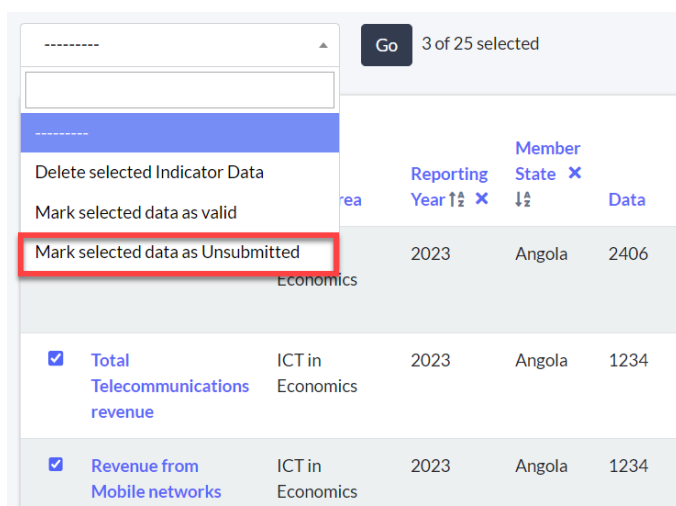
Backups

Source Code

The source code is being kept and version controlled on a GitHub repository which will be transferred completely to SADC once deployment on local server is made and tested to be successful. Any changes made to the source code, locally, should be pushed to the repository to ensure a proper backup and fallback mechanism is in place. You can read more about managing source codes in GitHub here.

Database backup

The database backup can be made in two ways.

The first, a manual backup can be done using a terminal and executing the following code inside the main installation folder.

> python manage.py dbbackup

This command, when executed will take a backup of the database and copy it into the designated location as specified in the settings of the system.

The second backup option is automated and will run every three months through a cron jobs that is configured for this purpose. Cron jobs are scheduled at recurring intervals, specified using a format based on unix-cron. You can define a schedule so that your job runs multiple times a day, or runs on specific days and months.

Best Practices

There is a mechanism set to protect accidental deletion of any data in the portal. This is done through a ON DELETE - PROTECT sql constraint. This means that if you want to delete related items, you'll first to delete the lowest item in the relationship. See example below.

Let's say you want to delete a particular Focus Area, if the focus area does not have any indicators associated with it, it can be deleted easily, however, if there is an indicator associated with it, you'll first need to delete the associated indicator. If the associated indicator has any data related to it, you'll need to delete all the data associated with it before you can delete the indicator and so on…

As a best practice, it is better to set Users, Focus Areas, Indicators, Member States, Organisations etc… as INACTIVE rather than deleting them. This will keep all records in the database as archived items but won't be shown in neither the Frontend nor Backend sections of the portal.

SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC)