CIS2 Documentation

User manual

May 24, 2024

CONTENTS

1	Introduction	1
2	Database objects2.1Products2.2Requirement2.3Data2.4Data provider	2 2 4 6 9
3	Users3.1User Registration3.2User Roles3.3User Teams3.4Change Password Option	12 12 13 13 14
4	Validation workflow4.1States4.2Requirement validation4.3Data validation4.4Data provider validation	15 15 17 17 17
5	Reports5.1Reports list5.2Database download5.3Report detail page5.4Pivot5.5Filtering data in Pivot5.6Special reports5.7Standard Report5.8Country Report	 18 18 19 19 21 21 22
6	Administration	24
7	Help page	26
8	Management 8.1 Ownership Transfer	27 28
9	Logging actions	29
10	Releases	30

11 Soft deletion

INTRODUCTION

This User Guide proposes to describe the way the application should be used and all the functionalities that are available within the application.

ots	Requirements Data Data providers Edit teammates Management Reports Hello, copernicus 9 Help Change password Administration Logou
A	bout
С	DPERNICUS IN SITU INFORMATION SYSTEM (CIS ²)
da	s ² is an open database designed to record the requirements of the Copernicus services, ESA, and EUMETSAT for in situ data, how far they are met, the origin of each dataset, how each aset is used, their importance, and the barriers to their seamless use, in order to provide a clear picture of what data is already available and what would be needed to deliver improved and re reliable products and monitoring services.
	e information derived from this database helps the main players (EU Commission, EEA, Copernicus governance bodies, Member States, etc.) to prioritise actions to further improve the allability, and sustainability of the necessary data. It also provides a basis for dialogue between these players and the Services about the definition of priorities.
	ross Copernicus as a whole, over 300 unique requirements have been identified, that have been linked to nearly 500 datasets and over 600 data providers; these datasets contribute to over 0 products.
Th	e following pages contain the detail contained in the database;
	Copernicus products to which in Situ data contribute What data are required for these products, including criteria for ranging from meeting minimum needs upwards Which datasets are used in practice, and The identity of the data providers.
Re	quirements for in Situ data can be expected to increase as new Service elements are developed, and the database is kept under regular review.
In :	situ data include:
	ospatial data, such as topographic maps (natural land surface and man-made features), hydrography, settlements, transport networks and land cover, digital elevation models, and aerial agery.
sal	servations are non-satellite measurements of physical parameters. These are either direct measurements of properties like temperature, wind, ozone, air quality, vegetation properties, ocear inity or ground based remote sensing data like soundings of the atmospheric composition. Observations are provided to Copernicus either as individual datasets or aggregated into gridded or 3- dimensional analysis fields.

Figure 1: Main application page

The first page, available at https://cis2.eea.europa.eu/, is the HomePage presented in *Figure 1*. The navigation menu is available on the top of the page and it can be used to navigate to the listing pages of Products, Requirements, Data, Data Providers, to make changes to the user's account or to consult an online help page.

TWO

DATABASE OBJECTS

The application holds the following main objects: Products, Requirements, Data, Data Provider. Those objects can have multiple relations between one another. Besides those objects, there are many picklists tables which hold various values to be used when defining an object.

2.1 Products

out Products Requ	lirements Data	Data providers	Edit teammates	Management	Reports	Hello, adr	nin 😯 Help	Change password	Administratio	on Log	out	<u>e</u>
Products											New p	produc
ILTERS												
	Entrusted Ent Excel	ity: All 🗸	Component: A	11 ~	Group: All v	Status: All	 ✓ Area: 	All 🗸				
	Excel	ity: All 🗸	Component: A		Group: All v	Status: All	✓ Area:	All 🗸	Sear	ch:	us 1	Ne
Save as PDF Save as	Excel	•	Component: A		Group: All v	Status: All			Sear		us 1 Area	Nex
Save as PDF Save as	Excel	•		1 ~		∳ Grou		Ali v â				Nex
Save as PDF Save as	Excel fies Service	Entrust			Component	 ♦ Grou Prod 	p	Ali v 🍵	Status		Area	Ne

Figure 2: Products listing page

2.1.1 Listing products

Products listing page can be accessed from the link in the navigation bar. The listing can be filtered using the dropdown options or by searching the products by their names. The filtered table can be exported then as a PDF or Excel document.

2.1.2 Creating new products

A new product can be created by clicking the button "New product" from the listing page. The form must be completed respecting the validation constraints. A product can be added only by an **user with administration rights**.

	list					
Produ	ct details				Edit product	Delete product
Name		Product 1				
Acronym		PRD1				
Description		Product 1 description	n			
Note		Note 1				
Status		Status 1				
Group 😯		Product group 1				
Area 😯		Area 1				
Component		Component 1 3				
Service		Service 1 0				
Service Entrusted Entit	ity	Service 1				
	-				Samely	
Entrusted Entif	nents				Search:	ous 1 Next
Entrusted Entif	Save as Excel		Relevant for	• Criticality		ous 1 Next

Figure 3: A product's detail page

2.1.3 Detail page of a product

A product's detail page can be accessed by clicking on the product's name in the listing table. All information concerning the product is displayed on this page. The table at the bottom of the page presents the requirements that product has a relation with. By clicking on the requirement name, the requirement detail page can be seen. This table can be filtered by searching the requirement's name. It can also be exported as either PDF or Excel document.

2.1.4 Updating an existing product

A product can be edited by clicking on the "Edit Product" button from a product's detail page. The form must again respect all validation constraints. A product can be updated only by an **user with administration rights**.

2.1.5 Deleting a product

A product can be deleted by clicking on the "Delete Product" button from a product's detail page. Another button must be clicked then to accept this change. A product can be deleted only by an user with administration rights.

2.2 Requirement

~~	uirom	onto								N	lew require
	quirem	ents									iew require
ΓEF	RS										
sen	nination: All	✓ Quality	y Control Procedure:	All V Group: All	V Product: All	✓ State:	All V Comp	onent: A	· ·	ĭ	
as	PDF Save as I	Excel									
										Search:	
										Search:	
1	10 rows 🗸 entri	ies								Previous	1
/ 1	10 rows 🗸 entri	ies								Previous	1
	10 rows ♀ entri Name	ies Dissemination [∲]	Quality Control Procedure	Group	Uncertainty ❻	Update Frequency 6	Timeliness Ø	Scale O	Horizontal resolution 9	Vertical resolution @	a 1 ⇒ State ?
)		A		Group Requirement group 1						Vertical	♦ State
)	Name	Dissemination	Procedure	Requirement group 1 Requirement group 1	9 1 1	Frequency 9	9 1 1			Vertical resolution O	♦ State
5	Name Requirement 1	Dissemination [⊕]	Procedure Quality control procedure 1	Requirement group 1 Requirement group 1 Requirement group 1	6 1 1 1	Frequency O	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 1 1 1 1 1	resolution O 1 1 1 1	Vertical resolution 0 T: 1 - B: 1 - G: 1	State 9 draft
5	Name Requirement 1 Requirement	Dissemination	Procedure Quality control procedure 1 Quality control	Requirement group 1 Requirement group 1 Requirement group 1 Requirement group 2	0 1 1 1 2	Frequency 6 1 1 1 2	0 1 1 1 2	0 1 1 1 2	resolution 9 1 1 2	Vertical resolution O	State 9 draft
)	Name Requirement 1	Dissemination [⊕]	Procedure Quality control procedure 1	Requirement group 1 Requirement group 1 Requirement group 1	6 1 1 1	Frequency O	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 1 1 1 1 1	resolution O 1 1 1 1	Vertical resolution 0 T: 1 - B: 1 - G: 1	State 9 draft
)	Name Requirement 1 Requirement	Dissemination [⊕]	Procedure Quality control procedure 1 Quality control	Requirement group 1 Requirement group 1 Requirement group 1 Requirement group 2 Requirement group 2	9 1 1 1 2 2	Frequency ④ 1 1 1 1 2 2 2	0 1 1 1 2 2	1 1 1 2 2	resolution ④ 1 1 1 2 2 2	Vertical resolution 0 T: 1 - B: 1 - G: 1	State O
D	Name Requirement 1 Requirement 2	Dissemination Dissemination 1	Procedure Quality control procedure 1 Quality control procedure 2	Requirement group 1 Requirement group 1 Requirement group 1 Requirement group 2 Requirement group 2 Requirement group 2	1 1 2 2 2	Frequency () 1 1 1 2 2 2 2	0 1 1 2 2 2 2	• 1 1 1 2 2 2	resolution 0	Vertical resolution 6 T: 1 - B: 1 - G: 1 T: 2 - B: 2 - G: 2	State O

Figure 4: Requirements listing page

2.2.1 Listing requirements

Requirements listing page can be accessed from the link in the navigation bar. The listing can be filtered using the dropdown options or by searching the requirements by their names. The filtered table can be exported then as a PDF or Excel document. For metrics columns a legend explaining the values meaning can be accessed by hovering over the information button.

2.2.2 Creating new requirements

A new requirement can be created by clicking the button "New requirement" from the listing page. The form must be completed respecting the validation constraints. For requirement, a special validation is implemented. There must be no duplicated requirement. This means that in order to create a new requirement, it must have at least one field(except for its name) which is different from another requirement already in the database.

2.2.3 Cloning a requirement

The clone option can be used if a new requirement to be created is very similar to one existing already in the application. The cloning form can be accessed by going to the detail page of the similar requirement and clicking on the Clone button. The form will be completed with data from the similar requirement. However, in order to save the new requirement, at least one field must be changed (except the name field).

2.2.4 Detail page of a requirement

A requirement's detail page can be accessed by clicking on the requirement's name in the listing table. All information concerning the requirement is displayed on this page. The metrics information is explained when hovering over the values. There are two tables at the bottom of the page. Both tables can be filtered by name and then exported as PDF or as Excel.

The first table concerns the relation with products. All products with which the requirement has a relation with are listed in this table.

Save as PDF Save a								
						Sea	arch:	
10 rows v er	ntries						Previous	1 Ne:
	tries	Relevant for	÷	Criticality \$	Barriers	Note	Previous	1 Ne
		Relevant for Relevance 2	¢	Criticality 0	Barriers Barrier 2	Note 1	Previous	1 Ne

Figure 5: Requirement Products relation table

Those relations must be unique, so between Product A and Requirement B there can be only a relation. There is an exception to this rule in case the Relevance parameter is different. There are two ways to add a new relation to products. First method is to click on the "Add requirement to product" button and then complete a form in which you select the product you want to use in that relation. The second method is to click on the "Add requirement to product group" button. In the form a product group can be selected. After form submission, relations will be created between the requirement and all the products that are in that product group. A relation will be created only if a relation does not exist between that product and that requirement, following the Relevance rule presented above. The relations can also be edited or deleted using the buttons attached to each row in the table.

The second table concerns the relation with data. All data with which the requirement has a relation with is listed in this table.

Similar to the products, new relations between the requirement and data can be created. There must be a unique relation between a requirement and a data. The relation can be edited or deleted using the buttons from the table.

						Previous	1	Next
Data					[Add require	ement to	data
Save as PDF	Save as Excel				Search			
Show 10 ♀ e	ntries				Search	Previous	1	Next
Data 🔺	Level of compliance	Note	Information costs	Handling costs				
Data 1	Compliance level 1	Note 1	Ø	8		ß	Ŵ	
						Previous	1	Next
	PROGRAMME OF THE EUROPEAN UNION	Operr	ICUS eyes on Earth	Implemented by	EEA			

Figure 6: Requirement Data relation table

2.2.5 Updating an existing requirement

A requirement can be edited by clicking on the "Edit Requirement" button from a requirement's detail page. The form must again respect all validation constraints, including the uniqueness of the requirements discussed in the Creating new requirements section.

2.2.6 Deleting a requirement

A requirement can be deleted by clicking on the "Delete Requirement" button from a requirement's detail page. Another button must be clicked then to accept this change.

2.3 Data

2.3.1 Listing data

Data listing page can be accessed from the link in the navigation bar. The listing can be filtered using the dropdown options or by searching data by its name. The filtered table can be exported then as a PDF or Excel document.

2.3.2 Creating new data

A new data can be created by clicking the button "New data" from the listing page. The form which is initially accessed has no validation. This was decided in order to allow partial data to be created in the application. However, if the user is sure about the data that he wants to introduce, he should use the form provided in *Figure 8*. There is a special validation rule for this form: at least an inspire theme or an essential variable.

ut Product	s Requirements Data	Data providers	Edit teammates	Management	Reports			Hello, admin 😯 Help Chi	ange password	Administration	Logout
ata											New
LTERS											
pdate Freq	uency: All 🗸	Area: All	✓ Timeliness:	All	✓ Data Polic	cy: All ~	Data type: All	✓ Data format: All	~		
-	Save as Excel	✓ Disser	All	∨ Req	uirement: All	✓ State	All V Compone	ent: All 🗸 🏛			
ve as PDF		✓ Disser	All All	✓ Req	uirement: All	✓ State:	All V Compone	nt: All 🗸 💼		Search:	revious 1 I
we as PDF	Save as Excel	Disser Area	All All		a Policy	 ✓ State Data type ∳ 	all ✓ Compone	Quality Control Procedur	e 🔶 D		revious 1 1
w 10 rows	Save as Excel			s 💠 Dat						Pr	
we as PDF	Save as Excel r entries Update Frequency	Area	Timeliness	s 🔶 Dat	a Policy 🔹	Data type ♦	Data format	Quality Control Procedur	Dis	Pr	🗧 State 🕄

Figure 7: Data Provider listing page

Add a new data

All fields marked with * are required.

This form has no mandatory fields! You can access the form with required validation here.

Name*

Name

Note

Note

Figure 8: Datalisting page

2.3.3 Cloning a data

The clone option can be used if the new data is very similar to one existing already in the application. The cloning form can be accessed by going to the detail page of the similar data and clicking on the Clone button. The form will be completed with data from the similar data.

Data details	Edit data Delete da Clone da
Name	Data 1
Note	Note 1
Update Frequency 🚱	Update frequency 1
Area 😯	Area 1
Temporal	09 Aug. 2023 - 20 Aug. 2023
Timeliness 🚱	Timeliness 1
Data Policy 😣	Data policy 1
Data type 🚱	Data type 1
Data format 😯	Data format 1
Quality Control Procedure 😣	Quality control procedure 1
Dissemination 😧	Dissemination 1
Inspire themes 😣	1: Inspire theme 1
Essential variables	Essential variables 1 - Component 1 - wefs
Geographical Coverage 🚱	Country 1
Status 😧	Status 1
State 😧	Draft Mark as rea
Created by	,

Figure 9: Data detail page

Detail page of data A data's detail page can be accessed by clicking on the data's name in the listing table. All information concerning the data is displayed on this page. If that data is just partially completed, a warning message will be displayed on the top of the page with a link to the editing page with full validation(*Figure 9*).

There are two tables at the bottom of the page. Both tables can be filtered by name and then exported as PDF or as Excel.

The first table concerns the relation with data provider. All data providers with which the data has a relation with are listed in this table. Those relations must be unique, so between Data A and DataProvider B there can be only one relation. By clicking on the button "Add data to data provider" and completing the form a new relation is added. The relation can be edited or deleted using the buttons from the table.

The second table concerns the relation with requirement. All requirements with which the data has a relation with is listed in this table. New relations can be created from requirement's page.

Data Providers					Add	data to data	orovider
Save as PDF Save as Excel					Search:		
Show 10 v entries					Pr	evious 1	Next
Data provider	A Role 😧		÷	Is network			
Data provider 1	Originator			8		ß	Ê
Save as PDF Save as Excel Show 10 v					Search:	evious 1 evious 1	Next
Requirement Level of compliace	Å	Note	Inform	nation costs	Handling co	sts	
Requirement 1 Compliance level 1		Note 1	0		8		
					Pr	evious 1	Next

Figure 10: Data detail page relations

2.3.4 Updating an existing data

A data can be edited by clicking on the "Edit Data" button from a data's detail page. Similar to the creation of new data, there are two forms: one with validation and one without.

2.3.5 Deleting data

Data can be deleted by clicking on the "Delete Requirement" button from a requirement's detail page. Another button must be clicked then to accept this change.

2.4 Data provider

There are two types of data providers: data provider network and data provider. The data provider network can have other data providers or data provider networks as its members. This structure is defined as so to maintain a hierarchy between data providers.

out Products Requirements Dat	a Data providers	Edit teammates Ma	anagement Reports			Hello, admir	Help Change passw	ord Administration Lo	gout U
Data providers							New	data provider New dat	a provider netwo
FILTERS									
Provider type: All V Is	network: All v	State: All V	Component: All	~	ŵ				
Save as PDF Save as Excel								Search:	ous 1 Ne
	Acronym 🕴	Edmo 😧 🛛 👌	Address	Phone 🕴	Email 🕴	Contact person	Provider type	Is network?	State 💡
Name Å		00.40					Provider type 1	8	draft
	DP1	2342							
Name A Data provider 1 Data provider 2	DP1	2342					Provider type 2	8	draft

Figure 11: Data provider listing

2.4.1 Listing data provider

Data provider listing page can be accessed from the link in the navigation bar. The listing can be filtered using the dropdown options or by searching data by its name. The filtered table can be exported then as a PDF or Excel document.

2.4.2 Creating a new data provider

A new data provider can be created by clicking the button "New data provider" from the listing page. A new data provider network can be created by clicking the button "New data provider network" from the listing page.

2.4.3 Detail page of data provider

A data provider's detail page can be accessed by clicking on the data provider's name in the listing table.

All information concerning the data provider is displayed on this page. There is a tables at the bottom of the page.It can be filtered by name and then exported as PDF or as Excel. **The table concerns the relation with data**. All data with which the data provider has a relation with is listed in this table.

2.4.4 Updating an existing data provider

A data provider can be edited by clicking on the "Edit Data Provider" button from a data provider's detail page. Different forms are used for data provider/data provider network.

2.4.5 Edit network members

A data provider network can have members. Its members can be edited by clicking on the "Edit network members". A network can't be its own member.

2.4.6 Deleting data provider

A data provider can be deleted by clicking on the "Delete Data provider" button from a data provider's detail page. Another button must be clicked then to accept this change.

THREE

USERS

3.1 User Registration

A new user can be added to the application only by an administrator. The administrator uses the form in *Figure 12* to create a new user with the chosen username and email. After creation, the person receives on the given email their login information, including a password set URL.

Home > Authentication and Authorization > Users > Add user						
Add user						
First, enter a username and password. Then, you'll be able to edit more user options.						
Email address:	Email					
Username:	Username Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.					
Personal info						
First name:	First Name					
Last name:	Last Name					
	Save and add another Save and continue editing SAVE					

Figure 12: User Registration Form

3.2 User Roles

There are multiple types of users in the application:

Administrator

The administrator can modify everything in the application, without restriction. This type of user also has access to an administrative pannel.

Picklists Editor

This user role allows a user to access a filtered version of the administrative pannel, for modifying the picklists. This user is only allowed to add/edit the picklists.

Product Editor

This user role allows a user to add or edit the products, similar to the way requirements, data and data providers are edited.

Regular Users

The user is restricted from accessing the administration section, the management section and create, update or delete any products.

The users have permission to edit or delete an object if they are the owner of it. Being the owner of an object means that the object was created by that specific user.

Read-Only User

The read-only user is a user that is included in the Read-only Group. This type of user can only view the objects and create and download reports, but they cannot add, edit or delete any information in the application.

Unauthenticated User

A guest to the application can view the objects and download the reports, but they cannot add/edit/delete any information from the application.

3.3 User Teams

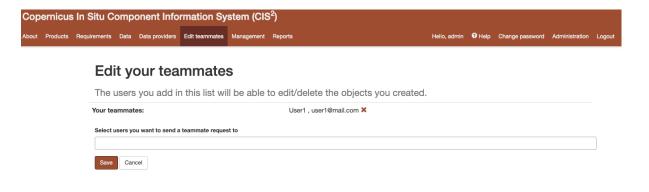


Figure 13: Teammates editing form

A user can add other users to his team. Adding a user to one's team gives that user permission to edit or delete all objects created by that user. Once a user A adds another user B to his team, the user B will also have user A in their team. A user can edit their teammates by accessing the edit teammates form from the navigation menu. Once a user sends a teammate request, the other user will receive an email containing a link. Only after the link is clicked, the two users will become teammates. (*Figure 13*)

3.4 Change Password Option

In case the account password was forgetten, the user can reset their password. An e-mail will be sent to the user's email account with a reset password link. The user will then be able to set their new password.

VALIDATION WORKFLOW

	move back to Draft mark as valid	Valid
Draft	mark as ready Ready for validation	
	request changes	Changes requested
	implement feedback	
		Legend
		Owner user or owner's teammate
		Other user

Requirement, Data and Data Provider are all passing through a validation workflow.

Figure 14: Workflow for Requirement, Data, Data Provider

4.1 States

Draft

This is the state that the object has on its creation. In this state the object and its relations are editable. The owner or one of their teammates can mark as ready the object.

Ready for validation

In this state the object and its relations cannot be edited. A user different from the owner or their teammates can either mark as valid the object and end the workflow or request changes if that user considers that there is missing information.

Changes requested

In this state the object and its relations cannot be edited. The owner or one of their teammates can get the object back to the draft state.

When an object's state is changed into "changes requested", the user requesting the changes can complete a feedback field in which they inform the owner of the object about the changes that should be made (*Figure 15*). The owner receives an e-mail that their object has requests for changes, the user that made those requests and what changes the user requested (from the feedback field). The users in the application can see this feedback when the object is in state "Changes requested" or "Draft" on the detail page of the object (*Figure 16*). This feedback can be cleared by the owner or their teammates if the object is an editable state.

Copernicus	n Situ Component Information System (CIS ²)				
About Products	Requirements Data Data providers Edit teammates Reports	Hello, user1	Help	Change password	Logout
	Data 1				
	Mark data as changes				
	A If you change this data, the following objects will also be marked as changes .				
	DataProviderRelation Data 1 - Data provider 1				
	Feedback "(use this field to inform the owner of the changes that should be made)				
	Please make the following changes: 1. Change 1 2. Change 2				
	Accept Cancel				

Figure 15: Request changes feedback field example

Data format 😣	Data format 1
Quality Control Procedure 🚱	Quality control procedure 1
Dissemination 😧	Dissemination 1
Inspire themes 😧	1: Inspire theme 1
Essential variables	Essential variables 1 - Component 1 - wefs
Geographical Coverage 🕢	Country 1
Status 😣	Status 1
State 🕄	Changes requested
	Feedback: Please make the following changes: 1. Change 1 2. Change 2
Created by	Admin,
Data Providers	

Figure 16: Example of display of a feedback left by a user

Valid

In this state the object and its relations cannot be edited. The workflow has ended and the object cannot be modified anymore. The object can be placed back in the "Draft" state if the users agree that more changes should be made to it.

4.2 Requirement validation

A requirement will go through the workflow together with its relations. Its relations the links to products and the links to data. The relations will always be in the same state as the requirement.

4.3 Data validation

Data will go through the workflow together with its relations. Its relations the links to data providers. The relations will always be in the same state as the data.

4.4 Data provider validation

A requirement will go through the workflow together with its relations. Its relations the links to products and the links to data. The relations will always be in the same state as the requirement.

FIVE

REPORTS

For exporting data in various formats, reports have been added to the application. The reports are generated by database queries. Those queries are established and implemented, so for any new report a request to the developing team must be made. The reports can be accessed by clicking on the "Reports" tab from the navigation menu.

5.1 Reports list

The reports' list can be accessed by clicking on the "Reports" tab from the navigation menu. This page consists from a list with all the reports defined in the application. Each report is defined by a name and contains a short description which describes what the report contains. An example of this page is available in Figure 17.

Ronorte

Re	ports	Download database Playground
UID	Name	Description
1	Products link with requirement	A report containing the list of products and their links to requirements, including information for each product and the link itself.
2	Products link with data	A report containing all the products and the data each product has relations with.
3	Products without data or requirement	A report containing products which don't have data or requirement.
4	Entrusted entity component statistics	This report contains information about how many requirements there are per entrusted entity and per component.
5	Data provider statistics	A list of all data providers which deliver data and a count of data delivered.
6	Requirement Areas	A list of all requirements and their related areas.



5.2 Database download

A database dump can be downloaded from the Reports' list page by clicking on the "Database download" button. This dump can than be used to manipulate the data with specialized tools.

5.3 Report detail page

On the report detail page has the name and description on the top part. After those there is a single tab, named "Pivot".

5.4 Pivot

A loading animation will be displayed until the pivot table loads. The available columns are displayed on the top of this table or on the left side, depending on the report.

Those columns can then be dragged under the area surrounded by a blue border in the Figure below. The columns will appear in the preview section in the order they were introduced. They can be rearanged to fit the user's need. The data displayed in each column is arranged in alphabetical order. The preview shows the user how the exported PDF/Excel file will look like. The pivot table can be exported in HTML, PDF or Excel format. (*Figure 18* and *Figure 19*).

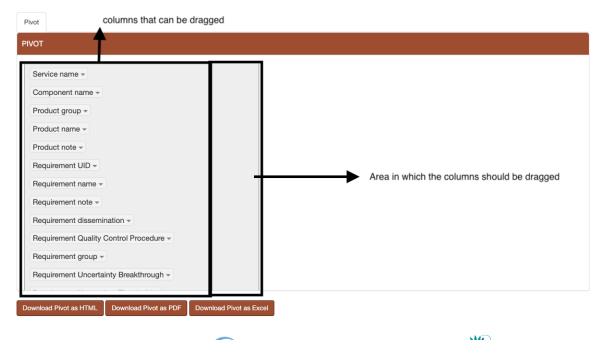


Figure 18: Report pivot - before dragging columns

5.5 Filtering data in Pivot

The data in the table can also filtered by clicking on the arrow next to the column name (Figure 20).

Pivot				
PIVOT				
Product group • Product name • Product note • Requirement UID • Requirement name • Requirement note • Requirement dissemination • Requirement Quality Control Procedure • Requirement Quality Control Procedure • Requirement Uncertainty Breakthrough • Requirement Uncertainty Threshold • Requirement Uncertainty Goal •	Service name Component name Toragged columns	Service name Component name Service 1 Component 1 Service 2 Component 2		Preview area
Download Pivot as HTML Download Pivot as PDF Down	load Pivot as Excel		Export buttons	

Figure 19: Report pivot - after dragging columns

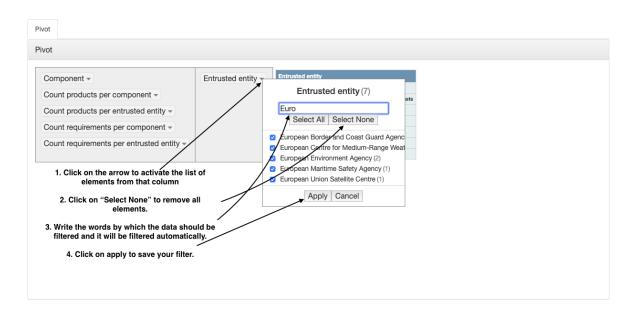


Figure 20: Report pivot - filter the data in the table

5.6 Special reports

The special reports are spreadsheet files that have unmerged cells and can be filtered afterwards with specialized tools. Those reports can be found on the Report's list page, on the top of the page. For each report there is a description explaining what type of data each report contains.

rnicus	In Situ C	omp	onent Info	ormation Sy	stem (CIS ²)				
Products	Requirements	Data	Data providers	Edit teammates	Reports	Hello, us	•1 🤁 Help	Change password	Logout	U
	Re	por	ts			Play	round D	ownload database		
			reports:							
					•	cells that can be filtered afterwards with specialized tools.				
					imns fror	products, requirements, data and data requirements for the following se	vices:			
			• •	nagement Service						
			s Land Monitorin							
	c) Co	pernicus	s Security Service	8						
	Do	wnload I	Excel							
	2.TI	nis rep	ort contains	all relevant colu	imns fror	products, requirements, data and data requirements for the following se	vices:			
	a) Co	pernicus	s Atmosphere Mo	onitoring Service						
	b) Co	opernicu	s Marine Environi	ment Monitoring Se	vice					
	c) Co	pernicu	s Climate Change	e Service						
	Do	wnload I	Excel							
	Sta	andai	rd Report							
	Co	untry	Report							

Figure 21: Special reports

5.7 Standard Report

The application also generates Standard Reports. Those reports present data that is filtered against the components of the 3 following services: Copernicus Emergency Management Service, Copernicus Land Monitoring Service and Copernicus Security Service. One exception is available for the For the Global Land Component as only 2 products are filtered for it (the Hot Spot Monitoring - Land Cover and Hot Spot Monitoring - Land Cover Change products).

The Standard Report is available under the Reports tab from the navigation menu followed by clicking on the link "Standard Report".

The user can then select one or more Components from the second dropdown to filter the data against. The first dropdown, Service, is used to filter the Components in the second dropdown in order to better identify which component is part of which service. (*Figure 22*) After setting the filters, the user has the option to either generate the Standard Report as a PDF or as an Excel file. The file will contain details regarding the component(s) that the data was filtered against and the date and time at which the report was generated.

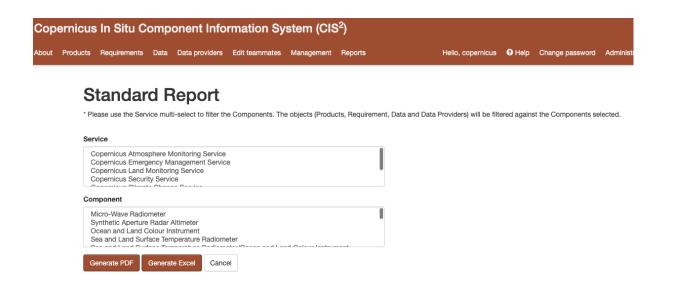


Figure 22: Standard report

5.8 Country Report

The application also generates Country Reports. Those reports present data that is filtered against the data providers that are part of the selected country.

The Country Report is available under the Reports tab from the navigation menu followed by clicking on the link "Country Report".

The user can then select one Country from the dropdown to filter the data against. (Figure 23)

After selecting the country, the user has the option to either generate the Country Report as a PDF or as an Excel file.

Hello, copernicus 😯 Help Change passw

Copernicus In Situ Component Information System (CIS²)

About Products Requirements Data Data providers Edit teammates Management Reports

Country Report

Countries

Afghanistan

Generate PDF Generate Excel Cancel

Figure 23: Country report

SIX

ADMINISTRATION

The administration panel can be accessed only by a user who has administration rights. Here, all objects, relations and picklists values can be modified without countraints.

Django administration

Site administration

AUTHENTICATION AND AUTHORIZATION		
Groups	+ Add	🤌 Change
Users	+ Add	🖋 Change
EXPLORER		
Queries	+ Add	🖋 Change
INSITU		
Components	+ Add	🤌 Change
Copernicus services	+ Add	🖋 Change
Data provider details	+ Add	🖋 Change
Data provider relations	+ Add	🖋 Change
Data providers	+ Add	🖋 Change
Data requirements	+ Add	🖋 Change
Datas	+ Add	🤌 Change
Entrusted entities	+ Add	🤌 Change
Metrics	+ Add	🔗 Change
Product requirements	+ Add	🖋 Change
Products	+ Add	🤌 Change

Figure 24: Administrator panel

SEVEN

HELP PAGE

The help page describes each value in the dropdowns used to fill the objects. The help page can be accessed from the navigation menu by clicking "Help". In the forms, the dropdown fields have attached a question mark. By clicking on that question mark you will access the help page.

Barrier

High level barriers used to illustrate the main reasons why a given in situ data requirement cannot be meet for the product in question.

name	description
Barrier 1	Description.
Barrier 2	Description.
Barrier 3	Description.
Barrier 4	Description
Barrier 5	Description.

Figure 25: An example table from help page

For Example, in *Figure 25* is one of the tables available on the Help page. Under the table title there is a small description of that field's purpose. In the table there is the name of each value and the description of what that value represents.

EIGHT

MANAGEMENT

Manage picklists and products

TRANSFER OWNERSHIP	
Previous owner:	
User1	~
New owner:	
Admin	~
Disable previous owner?	
O Yes	
○ No	
Transfer ownership	
EXPORT PICKLISTS	
Download all picklists	
IMPORT PICKLISTS	
Workbook	
Choose File No file chosen	
Import data	
EXPORT PRODUCTS	
Download all products	
IMPORT PRODUCTS	
Workbook	

Figure 26: Management section

The management section is accessible only to an user with administration rights. This section can be used to export all picklists or all products as an excel document. In order to import picklists or products, the user must first export them, edit the exported spreadsheet and then import it.

Statistics about the data can also be extracted on this page. The user can check, for a selectable period of time, how many objects were active, how many objects were created and how many objects were updated. The user has to select a start date for the period, an end date and the objects type they want the data to be shown for.

8.1 Ownership Transfer

When people are no longer working on the application data, their objects ownership needs to be transfered to a new active user. This can be easily done using a management feature. Using the form in *Figure 27*, an administrator should choose the previous user and the new user. All the objects, including the links between objects will be transfered to the new user. There is also an option to disable the previous user's account.

Manage picklists and products

TRANSFER OWNERSHIP	
Previous owner:	
User1	~
New owner:	
Admin	~
Disable previous owner?	
○ Yes	
○ No	
Transfer ownership	

Figure 27: Transfer ownership

NINE

LOGGING ACTIONS

All editing actions done by users are logged in Admin. That includes: editing, adding or deleting any object from the application will be stored. The log gives informations about the user, the action the user made and the object that was accessed. *Figure 28*

Home > Insiti	u › Logged actions					
Select lo	gged action to o	change		A	DD LOGGED ACTION	Ŧ
۹			Search			
Action:		♥ Go	0 of 100 selected			
LOGGE	D DATE	USER	ACTION	TARGET TYPE	ID TARGET EXT	TRA
Dec.	12, 2022, 8:27 p.m.	user1	created	relation between data and data provider	3000	
Dec.	12, 2022, 8:27 p.m.	user1	deleted	data	417	
Dec. 1	12, 2022, 8:26 p.m.	user1	created	relation between data and data provider	2999	
Dec.	12, 2022, 8:25 p.m.	user1	created	relation between data and data provider	2998	
Dec.	12, 2022, 8:25 p.m.	user1	deleted	data	420	
Dec.	12, 2022, 8:25 p.m.	user1	deleted	data	419	
Dec.	6, 2022, 10:46 a.m.	user2	changed state from draft to ready for	data provider	304	
Dec.	6, 2022, 10:46 a.m.	user2	updated	data provider network	304	
Dec.	6, 2022, 10:46 a.m.	user2	changed state from ready to draft for	data provider	304	

Figure 28: Loggging management

RELEASES

The application is released in versions. Each version has a month and year combination and a short description of the changes made during the last version. The releases can be visualised under the "Releases" tab from the About page.

The information derived from this database helps the main players (EU Commission, EEA, Copernicus governance bodies, Member States, etc.) to prioritise actions to further improve the availability, and sustainability of the necessary data. It also provides a basis for dialogue between these players and the Services about the definition of priorities.

Across Copernicus as a whole, over 300 unique requirements have been identified, that have been linked to nearly 500 datasets and over 600 data providers; these datasets contribute to over 600 products.

The following pages contain the detail contained in the database;

- Copernicus products to which In Situ data contribute
- What data are required for these products, including criteria for ranging from meeting minimum needs upwards
- Which datasets are used in practice, and
- The identity of the data providers.

Requirements for In Situ data can be expected to increase as new Service elements are developed, and the database is kept under regular review In situ data include:

in situ data include:

Geospatial data, such as topographic maps (natural land surface and man-made features), hydrography, settlements, transport networks and land cover, digital elevation models, and aerial imagery.

Observations are non-satellite measurements of physical parameters. These are either direct measurements of properties like temperature, wind, ozone, air quality, vegetation properties, ocean salinity or ground based remote sensing data like soundings of the atmospheric composition. Observations are provided to Copernicus either as individual datasets or aggregated into gridded 2- or 3- dimensional analysis fields.

RELEASES

November 2023

The CIS2 November 2023 release includes, in particular, the following updates:

- Revision of information for Data providers providing data to Copernicus Atmospheric Monitoring Service (CAMS)
- Revision of Sentinel-3 information (Land and Ocean) based on recent information from ESA and EUMETSAT
- Revision of datasets and products associated to Copernicus Emergency Management Service Risk and Recovery Mapping (CEMS-RRM)

Figure 29: Releases

ELEVEN

SOFT DELETION

The objects and relations are never deleted. They are instead marked as "deleted". The objects can be permanently deleted only by accessing the database directly.