

# PSI Graphical Interface Definitions



## PSI-GID

Version: 1.2.2  
Date: 2025-02-03  
Reference: PSI-GID  
Total Pages: 79

© 2025 The PSI Consortium, co-funded by ESA, released to public domain.

This document may only be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form, or by any means electronic, mechanical, photocopying or otherwise, in accordance with the terms of the Apache 2.0 license.

You have received a copy of this license together with this document.

## Table of Contents

1	Document Meta Information	<b>6</b>
1.1	Document Signature Table . . . . .	6
1.1.1	Document Change Record . . . . .	6
1.2	Documents . . . . .	7
1.2.1	Reference Documents . . . . .	7
2	Introduction	<b>8</b>
2.1	Document Scope . . . . .	9
2.1.1	Compiled Document . . . . .	9
2.1.2	Signature . . . . .	10
2.1.3	Development State . . . . .	10
2.1.4	PSI Release Notes . . . . .	10
2.1.5	Outlook . . . . .	12
2.1.6	Feedback and Contributions . . . . .	12
3	Provider Journey	<b>13</b>
3.1	Catalogs . . . . .	14
3.1.1	Resource Catalog . . . . .	14
3.1.2	Service Catalog . . . . .	17
3.1.3	Product Catalog . . . . .	19
3.2	Inventories . . . . .	23
3.2.1	Resource Inventory . . . . .	23
3.2.2	Service Inventory . . . . .	25
3.2.3	Product Inventory . . . . .	27
3.3	Customer Interactions . . . . .	29
3.3.1	Incoming Customer Inquiries . . . . .	29
3.3.2	Incoming Product Orders . . . . .	32
4	User Journey	<b>34</b>
4.1	Mission Creation . . . . .	34
4.1.1	Mission Creation - Gather Intelligence . . . . .	35
4.1.2	Mission Creation - Extend Mission . . . . .	38
4.2	Distributed Matchmaking . . . . .	45
4.3	Offered Products . . . . .	49
4.4	Shopping Cart . . . . .	54
4.5	Documents & Interactions . . . . .	55
4.5.1	Outgoing Customer Inquiries . . . . .	55
4.5.2	Outgoing Product Orders . . . . .	58
5	CGA	<b>60</b>
5.1	Distributed Matchmaking . . . . .	60
5.1.1	Mission Requests . . . . .	60
5.1.2	Offered Products . . . . .	62
6	Mission Management ODA Component	<b>65</b>
6.1	Top Level Mission Planning . . . . .	65
6.2	Sub-Mission Planning . . . . .	71

## List of Figures

1.1	DCR QR-Code . . . . .	7
2.1	The PSI consortium . . . . .	9
3.1	Provider Dashboard . . . . .	13
3.2	Catalog: Resources . . . . .	14
3.3	Catalog: Resources Details . . . . .	15
3.4	Catalog: File Upload . . . . .	16
3.5	Catalog: Services . . . . .	17
3.6	Catalog: Services Details . . . . .	18
3.7	Catalog: Products . . . . .	19
3.8	Catalog: Products Details . . . . .	20
3.9	Catalog: Offerings . . . . .	21
3.10	Catalog: Offerings Details . . . . .	22
3.11	Inventory: Resources . . . . .	23
3.12	Inventory: Resources Details . . . . .	24
3.13	Inventory: Services . . . . .	25
3.14	Inventory: Service Details . . . . .	26
3.15	Inventory: Products . . . . .	27
3.16	Inventory: Product Details . . . . .	28
3.17	Customer Interactions: Pending Requests . . . . .	29
3.18	Customer Interactions: Pending Requests Details . . . . .	30
3.19	Customer Interactions: Pending Request - Create Offering . . . . .	31
3.20	Customer Interactions: Orders . . . . .	32
3.21	Customer Interactions: Orders Details . . . . .	33
4.1	Mission Creation . . . . .	34
4.2	Mission Creation - Gather Intelligence . . . . .	35
4.3	Mission Creation - Add Service . . . . .	36
4.4	Mission Creation - Specify Service . . . . .	37
4.5	Mission Creation - Service Added . . . . .	38
4.6	Mission Creation - Define Services . . . . .	39
4.7	Mission Creation - Template Wildfire . . . . .	40
4.8	Mission Creation - Teams . . . . .	41
4.9	Mission Creation - Add new Team . . . . .	42
4.10	Mission Creation - Team Configuration . . . . .	42
4.11	Mission Creation - Add Service to Team . . . . .	43
4.12	Mission Creation - Configure Service . . . . .	44
4.13	Mission Creation - Team with Service . . . . .	44
4.14	Mission Creation - Mission Summary . . . . .	45
4.15	User Defined Mission . . . . .	46
4.16	User Defined Mission - Service Details . . . . .	47
4.17	User Defined Mission - Dialog . . . . .	48
4.18	Offered Products: User's Service Options . . . . .	49
4.19	Offered Products: User's Service Options Details - Immediate . . . . .	50
4.20	Offered Products: User's Options Details - On-Demand . . . . .	51
4.21	Offered Products: RFQ Modal . . . . .	52
4.22	Offered Products - Earth Observation . . . . .	52
4.23	Offered Products - Booking . . . . .	53
4.24	Shopping Cart . . . . .	54

4.25	Documents & Interactions: Request for Quote . . . . .	55
4.26	Documents & Interactions: Request for Quote - Details . . . . .	56
4.27	Documents & Interactions: Results after Re-calculation . . . . .	57
4.28	Documents & Interactions: Active Orders . . . . .	58
4.29	Documents & Interactions: Past Orders . . . . .	59
5.1	Mission Request . . . . .	60
5.2	Mission Request - Details . . . . .	61
5.3	Offered Products . . . . .	62
5.4	Offered Products - Details . . . . .	63
5.5	Offered Products - Filter Results 1 . . . . .	63
5.6	Offered Products - Filter Results 2 . . . . .	64
6.1	Open . . . . .	66
6.2	Open Blank . . . . .	67
6.3	Open Template . . . . .	68
6.4	Open template Wildfire . . . . .	68
6.5	Open Mission . . . . .	69
6.6	Open Mission Wildfire . . . . .	69
6.7	Enable Area Definition . . . . .	70
6.8	Open Party . . . . .	70
6.9	Open Party Organisation A . . . . .	71
6.10	Open Mission ABC . . . . .	72
6.11	Add Service . . . . .	72
6.12	Service Filter . . . . .	73
6.13	Mission Services . . . . .	73
6.14	Assign Service to Team . . . . .	74
6.15	Assign Service to Area . . . . .	74
6.16	Advanced Service Settings . . . . .	75
6.17	Mission View - Location . . . . .	75
6.18	Mission View - Calendar . . . . .	76
6.19	Mission View - Logical . . . . .	77
6.20	Teams . . . . .	77
6.21	Open Team . . . . .	78

## List of Tables

1.1	Signature Table. . . . .	6
1.2	DCR Table. . . . .	6
1.3	GIT Changelog Table. . . . .	6
1.4	Reference Documents. . . . .	7
3.1	Parameters of Dashboard View. . . . .	13
3.2	Parameters of all Catalog Resources Views. . . . .	14
3.3	Parameters of all Catalog Services Views. . . . .	17
3.4	Parameters of all Catalog Products and Offerings Views. . . . .	19
3.5	Parameters of all Inventory Products and Offerings Views. . . . .	23
3.6	Parameters of all Inventory Services Views. . . . .	25
3.7	Parameters of all Inventory Products and Offerings Views. . . . .	27
3.8	Parameters of all RFQ Views. . . . .	29
3.9	Parameters of all Customer Interaction Views. . . . .	32
4.1	Parameters of all Mission Creation Views - User. . . . .	34

4.2	Parameters of all Distributed Matchmaking Views - User . . . . .	45
4.3	Parameters of all Offered Products Views. . . . .	49
4.4	Parameters of the Shopping Cart View. . . . .	54
4.5	Parameters of all RFQ Views. . . . .	55
4.6	Parameters of all Ordered Products Views. . . . .	58
5.1	Parameters of all Distributed Matchmaking Views - CGA. . . . .	60
5.2	Parameters of all Offered Products Views. . . . .	62
6.1	Parameters of Top Level Mission Planning Views. . . . .	65
6.2	Parameters of Sub-Missions Planning Views. . . . .	71

# 1 Document Meta Information

## 1.1 Document Signature Table

	Name	Function	Company
Author	Bela Lars Müller	PSI Project Team	CGI
Author	Hendrik Oppenberg	Technical Officer	CGI
Author	Christine Gläßer	Liasion Manager	CGI
Approval	Rui Goncalves	Project Manager	SES
Approval	Wolfgang Robben	Project Manager	CGI
Checked	Pepijn Witte	Quality Assurance Manager	CGI

Table 1.1: Signature Table.

### 1.1.1 Document Change Record

#### 1.1.1.1 Changes

Date	Version	author	message
2024-01-25	MS7	Bela Lars Müller	Initial version
2024-09-11	MS8 [1.2.0]	Hendrik Oppenberg	Public release adjustments.
2024-12-12	MS9 [1.2.1]	Bela Mueller	Updates to mission definition and mission templating.
2025-02-03	MS10 [1.2.2]	Bela Mueller	Added sub-level mission planning.

Table 1.2: DCR Table.

#### 1.1.1.2 Source Control

Changes to this document are tracked electronically. No signature is required by the authors. The following information can prove the integrity of the document and reveal any change.

Repo	Date	Author	Branch	Hash

Table 1.3: GIT Changelog Table.



Figure 1.1: DCR QR-Code.

## 1.2 Documents

### 1.2.1 Reference Documents

Acronym	Reference	Title	Version
PSI-DL	PSI-DL	PSI CGI Document List	current MS (doc version)
PSI-TAD	PSI-TAD	PSI Terms, Abbreviations and Definitions	see before

Table 1.4: Reference Documents.

## 2 Introduction

The Pooling & Sharing Interfaces Definitions (PSID) project is an ESA co-funded effort to define a common standard for the interfaces of Pooling & Sharing Systems (PSS) for Satellite Communication (SatCom) services. A PSS is a digital platform for matchmaking (Gov)SatCom users' demands (both commercial and institutional) with (Gov)SatCom providers' offers. Bringing together multiple (Gov)SatCom providers in one platform makes the market transparent, thus allowing users to get an overview of the market and to compare different offers efficiently. Additionally, a PSS assists users with little knowledge about the (Gov)SatCom domain defining their requirements on the (Gov)SatCom services. Those two aspects combined allow for fast access to the services and an efficient usage of the available capacities. To accomplish this, a PSS steps in between the usual processes of finding a provider/supplier, requesting an offer, and ordering the desired products or services, either as a service broker or by pooling products and services from different providers and offering them as an intermediary or distributor. Subsequently, the PSS can be used to monitor the services and manage multiple missions in a single application.

Eventually, a PSS can also be used as (or manage) a community hub, i.e., a number of end users or customers with similar interest that *share* their common resources and utilize a commonly obtained *pool* of (Gov)SatCom capacities. This strategy increases the efficient usage of scarce resources further.

There are already different approaches on PSSs, that might lead to an unnecessary fragmentation of the market. Therefore, a common standard for the interfaces of a PSS is required to allow the interaction between those different PSSs and reduce the effort of (Gov)SatCom providers to offer their product and services via multiple PSSs to maximize their reach.

Such a standard needs to take care of the different interfaces involved in the aforementioned processes, i.e.,

1. an interface between PSS and resource providers (satellite operators, service providers, or other PSSs),
2. an interface between the PSS and users, and
3. an interface between PSS and its own governance.

The goal of this project is to mainly define aspect 1 and to develop a software mock-up as needed to validate the various interfaces being developed.

The PSI standard derives from the existing industry-standard “Open Digital Framework” of **TM Forum** alliance<sup>1</sup>. The “Open Digital Framework” is a reference framework for delivering online Information, Communications and Entertainment services to the telecom world. It empowers market participants to compete and cooperate. One of PSI’s goals is to make this existing standard fit for the world of satellite communication.

The consortium for this project consists of the service & technology providers SES Techcom and CGI, as well as of the (Gov)SatCom operators SES, Hellas Sat, Hispasat, Hisdesat, and LuxGovSat, and Inmarsat being both a service & technology provider and a (Gov)SatCom operator.

<sup>1</sup>See <https://www.tmforum.org/resources/reference/gb991-tm-forums-core-concepts-and-principles-v22-0-0/>

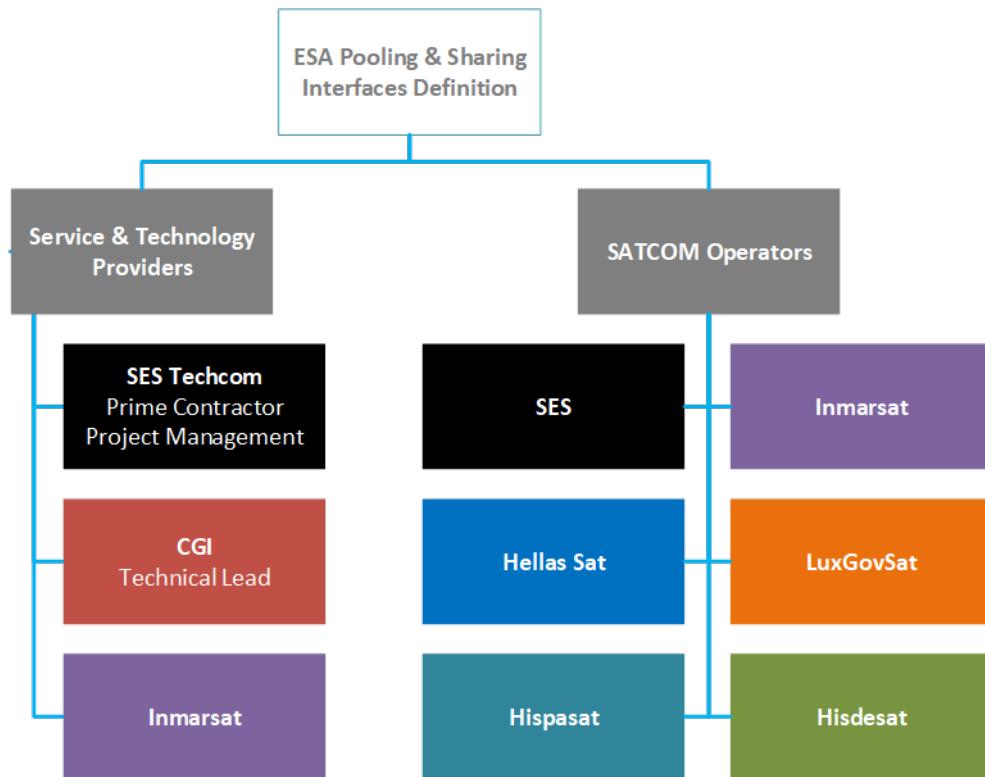


Figure 2.1: The PSI consortium.

## 2.1 Document Scope

This document contains the description the Graphical Interface of the Pooling & Sharing (PSI), how data **could** be presented and interaction between user and system **could** be implemented in a web frontend. The document is not aiming to be a strict set of requirements for the frontend, but a guide to get a better understanding of the processes that can be implemented with the APIs. Thus, the GID is to be understood as a guideline or inspiration for a frontend developer and as a supplement to understand the processes for a backend designer. Many more roles can take benefit from this kind of presentation, thus, this list of people who may benefit from this visual display of the processes goes on.

The following sections heavily refer to terms, abbreviations and definitions defined in the [PSI-TAD].

### 2.1.1 Compiled Document

**NOTE: THIS IS A COMPILED DOCUMENT<sup>2</sup>**

This document has been compiled/generated from external sources and is not being written as-is. Therefore, any changes made within this compiled version of the document will be lost upon recompilation!

To make (permanent) changes, edit the respective sources directly or contact the PSID team.

<sup>2</sup>Document compiled on 2025-02-12 11:45.

## 2.1.2 Signature

Changes to this document are tracked electronically. No signature is required by the authors. The information in the “Source Control” chapter can prove the integrity of the document and reveal any change.

## 2.1.3 Development State

Current document version is 1.2.2.

Next version is targeted for 2025-04-01.

## 2.1.4 PSI Release Notes

### 2.1.4.1 Introduction

Welcome to the third release of the Pooling and Sharing Interface API! Below, you'll find details about the features, enhancements, and other important aspects of this release.

### 2.1.4.2 Key Highlights

The focus of this release lies on **mission management**, to facilitate a common understanding of user requirement towards communication. It aims to complement the Inquiry API by providing workflows and *understanding* to service requirements. This is mainly a user-oriented API, but it also enables exchange of mission data between PSS systems and therefore cross-platform-market places. This could become a future focal point. Such data exchange would include actual user requirements (expressed as missions), as well as templates for such missions. By the use of templates, user mission creation is streamlined and allows a governance to safeguard, streamline or ease the process of user requirement gathering.

Together with the APIs, we are working on a Plug&Play component for P&S systems (Hubs, Brokers, Marketplaces...), based on ODA. This will be a standalone Micro-Frontend open to be integrated into existing OSS/BSS/PSS systems. A first draft is included in this release.

It will come with different views:

- Time based (e.g. mission timeline, Gantt-Chart, to express that is needed *when*)
- Geography based (e.g. mission zones or network nodes on a map to express what is needed *where*)
- Logical View (e.g. communication interdependency graph to express *how* the requirements will look like)

Another area of improvement is the **performance management API**.

A new API has been added that allows to request performance reports to an ongoing mission from the provider. That is: the report itself is generated on provider's systems. The API handles the request and exchange of the report. The report has to be in line with the product's SLA and allows monitoring of compliance. It allows also to define alarm thresholds and receive a push of threshold violations by the provider, avoiding a constant pull.

We also added the technical considerations and resulting decisions to the document set. This allows easier future evolution and maintenance of the standard.

### 2.1.4.3 What's New

- [PSI-GID] now contains descriptions about the ODA component for mission management
- [PSI-ICD] now contains new and updated APIs - see below!
- [PSI-ADR] first release of our decision records
- [PSI-TAD] now contains descriptions of concepts for user missions, as well as performance and alarm management
- [PSI-TOD] now contains new tasks and operations for user missions, performance and alarm management

#### 2.1.4.3.1 Newly added APIs

- PSID002 Mission Management
  - This customer-facing API allows them to manage missions and assign products, services and resources to them.
  - It can also serve as an entry point for the Customer Inquiry API to find matching products for their requirements.
- PSID143 Performance Monitoring
  - Based on MEF143 - Performance Monitoring API (Version 2.0.0-RC).
  - The performance monitoring allows a PSS or customer to request performance reports from a provider.
- PSID642 Alarm
  - Based on TMF642 - Alarm API (Version 4.1.0).
  - Allows the provider to notify a PSS or customer about detected problems with their products.

#### 2.1.4.3.2 Updates APIs

- PSID001 Customer Inquiry
  - Improved handling of places by adapting TMF Geography types.
- PSID620 Product Catalog
  - Based on TMF620 - Product Catalog Management API (Version 4.1.0).
  - Changed SLARef to ServiceLevelSpecificationRef
  - Streamlined GeoJSON types
- PSID633 Service Catalog
  - Based on TMF633 - Service Catalog Management API (Version 4.1.0).
  - Changed SLARef to ServiceLevelSpecificationRef
  - Streamlined GeoJSON types
- PSID634 Resource Catalog

- Based on TMF634 - Resource Catalog Management API (Version 4.1.0).
- Changed SLARef to ServiceLevelSpecificationRef
- Streamlined GeoJSON types
- PSID657 Service Quality Management
- Based on TMF657 - Service Quality Management API (Version 4.1.0).
- Add endpoints to manage KPIs that are supported by the PSS.

#### 2.1.4.3.3 Added Requirements

- MISSION requirement category
- REQ-06-03 Key Indicator Management
- REQ-06-04 Performance Monitoring Job Management
- REQ-06-05 Performance Monitoring Report Management
- REQ-06-06 Alarm Management

#### 2.1.4.4 Known Limitations

1. The Service Quality Management is rather basic. There is an ongoing effort to align this set of APIs with the results of a TM Forum Catalyst project. More information will follow in one of the next releases.
2. The Mission Management Service is at an early state. However, the available API implements basic mission management services, import and export. A full set of APIs to implement such a service are subject to an upcoming release. Refer also the [PSI-GID] to learn about the available API use cases.

### 2.1.5 Outlook

Currently, we are working on the next release with the following focal points:

- Finalize the mission management component
- Update the API baseline to TM Forum 5
- Converge with MEF schema for some selected APIs

### 2.1.6 Feedback and Contributions

We value your feedback! If you encounter any issues or have suggestions, please reach out. Additionally, we welcome contributions from the community.

# 3 Provider Journey

To interact with the system, the provider needs a graphical interface. The GUI provides a dashboard to get an initial overview and to get a quick-start for some action. Further views are catalog, inventory and customer interactions. The character of these views are described below.

Actor	Consumed API(s)
Provider	-

Table 3.1: Parameters of Dashboard View.

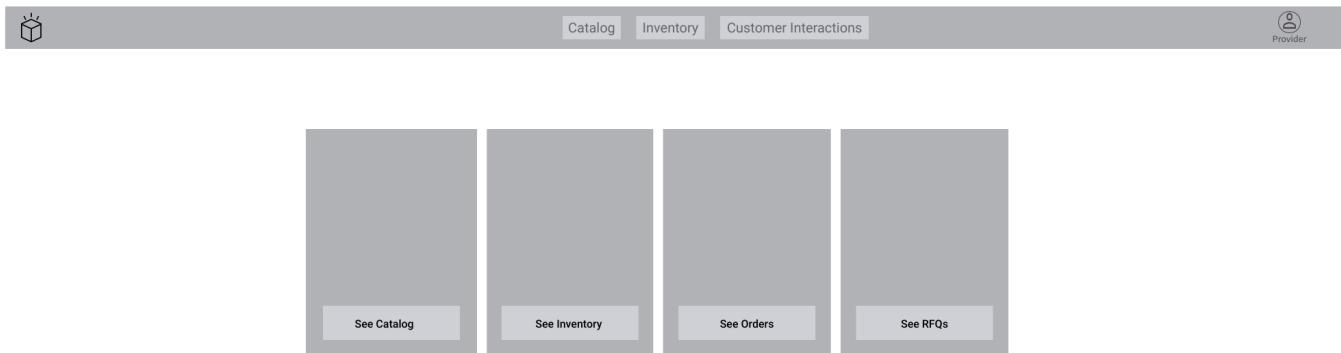


Figure 3.1: Provider Dashboard

The dashboard is the entry-point for all possible views and actions. It can scale alongside the application and might potentially also show metrics and statistics about certain topics. For now, it foresees quick actions, for example to see incoming RFQs directly.

## 3.1 Catalogs

### 3.1.1 Resource Catalog

Actor	Consumed API(s)
Provider	PSID634 Resource Catalog

Table 3.2: Parameters of all Catalog Resources Views.

Resources	Vendor	Category
SkyView T1234	SkyView Inc.	Terminals <input checked="" type="checkbox"/>
VIZSAT MEO	Constellation	Constellation <input checked="" type="checkbox"/>
PCN-1	Satellite	Satellite <input checked="" type="checkbox"/>

Figure 3.2: Catalog: Resources

The catalog view provides the catalogs for resources, services, products and offerings. The different catalogs can be accessed by the side-navigation on the left. The buttons below provide a file upload for files in a specific format (e.g., JSON or another structured file format that can be mapped to the M2M interface) and a direct switch to the inventory view. The figure above shows the catalog example for resources.



**Catalog**

**Resource**

- Services >
- Products >
- Offers >

**Upload File**

**Switch to Inventory**

Resources	Vendor	Category
SkyView T1234	SkyView Inc.	Terminals

Product Name: SkyView T1234

Description: This product specification defines the SkyView T1234 as a Customer Terminal

**Resource Specification**

Name:	SkyView T1234	Start.TX.Frequency	Start.RX.Frequency	TX.Gain
Description:	This resource specification defines the SkyView T1234 as a Customer Terminal.	Value: 13.75 GHz Value Type: double	Value: 10.7 GHz Value Type: double	Value: 43.5 GHz Value Type: double
Category:	Terminals	End.TX.Frequency	End.RX.Frequency	RX.Gain
Frequency	KU	Value: 14.5 GHz Value Type: double	Value: 12.75 GHz Value Type: double	Value: 42.0 GHz Value Type: double

**Figure 3.3: Catalog: Resources Details**

When clicking on the row, the panel for details opens below the row and displays the resource specifications, as shown in the figure above. The details can be closed by clicking on the row a second time.

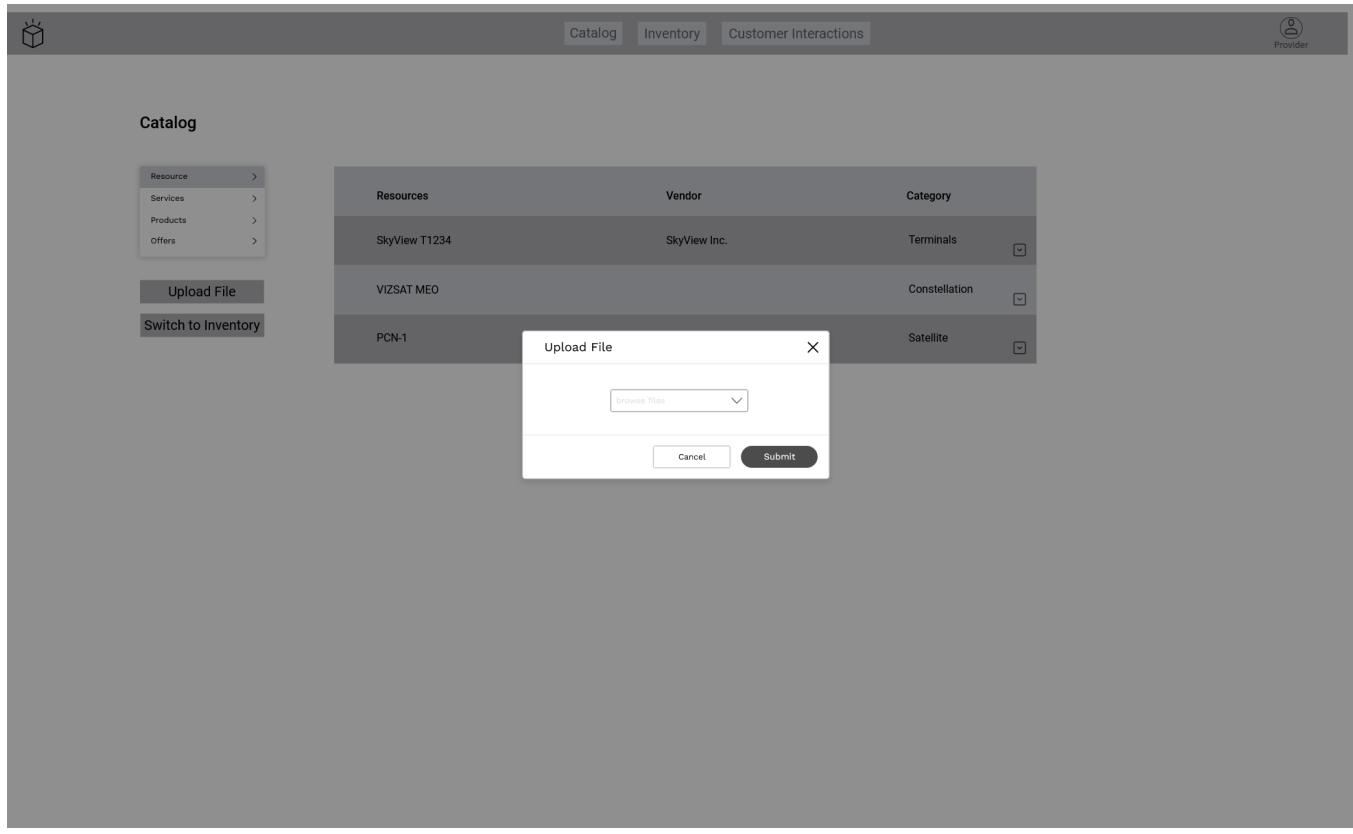


Figure 3.4: Catalog: File Upload

Though the catalog and the inventory data is provided by a database, which is maintained by the provider, it is foreseen to provide an option to upload files via the GUI as an alternative to the direct M2M interface. The image above shows the confirmation dialogue. This process is the same for all categories within catalog and inventory and their consumed APIs.

### 3.1.2 Service Catalog

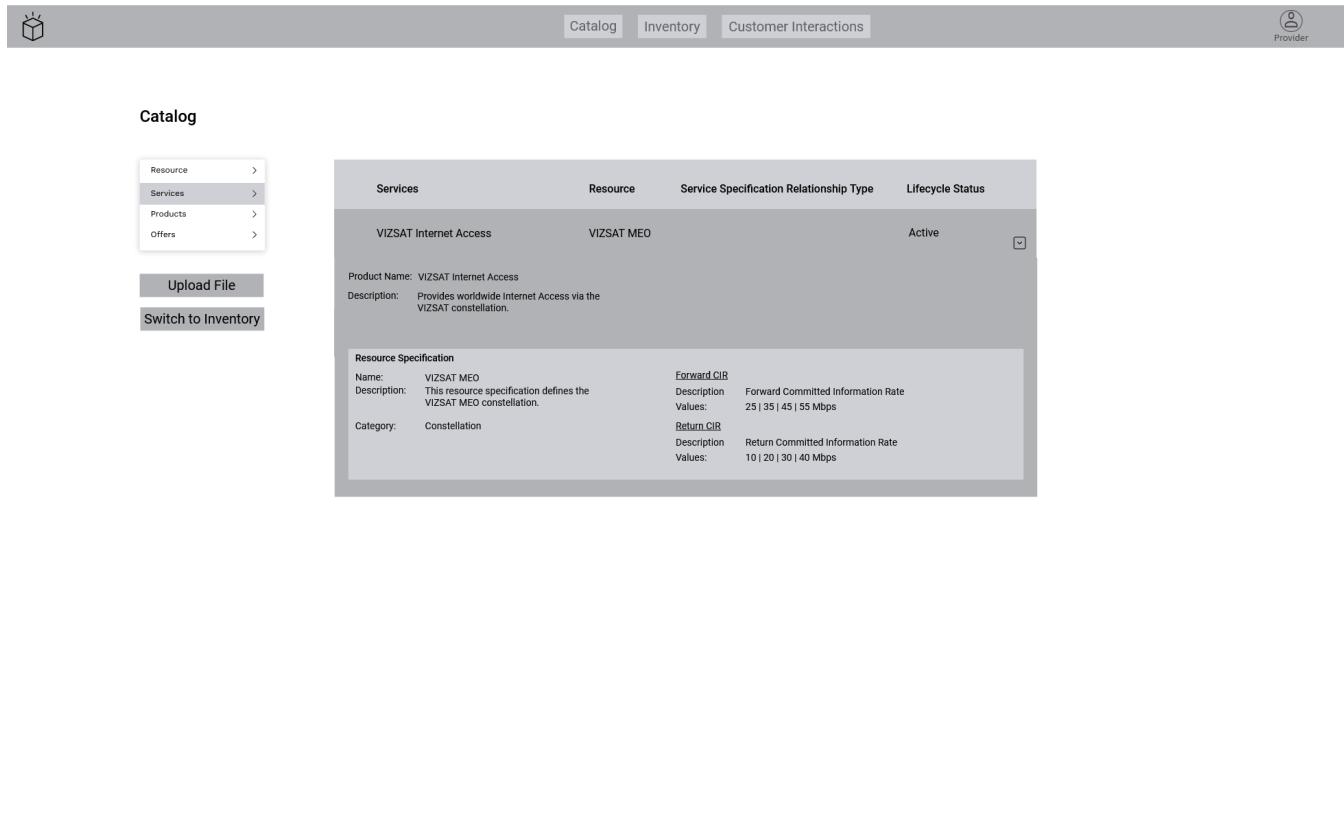
Actor	Consumed API(s)
Provider	PSID633 Service Catalog

Table 3.3: Parameters of all Catalog Services Views.

Services	Resource	Service Specification Relationship Type	Lifecycle Status
VIZSAT Internet Access	VIZSAT MEO	Active	<input checked="" type="checkbox"/>
VIZSAT VoIP Line	VIZSAT MEO	Depends on VIZSAT Internet Access	Active <input checked="" type="checkbox"/>
PCN-1 Site-2-Site IP-Trunk	PCN-1	Active	<input checked="" type="checkbox"/>

Figure 3.5: Catalog: Services

This view shows the list of all services that are part of the catalog.



The screenshot shows the PSI Graphical Interface Definitions interface. At the top, there's a navigation bar with tabs for Catalog, Inventory, and Customer Interactions. On the far right of the header is a user icon labeled "Provider". Below the header, on the left, is a sidebar with a tree view: Resource (selected), Services (highlighted in grey), Products, and Offers. Below the sidebar are two buttons: "Upload File" and "Switch to Inventory". The main content area displays a table for a service named "VIZSAT Internet Access". The table has columns for Services, Resource, Service Specification Relationship Type, and Lifecycle Status. The resource is "VIZSAT MEO" and its status is "Active". Below the table, there's a detailed description of the service: "Product Name: VIZSAT Internet Access" and "Description: Provides worldwide Internet Access via the VIZSAT constellation.". Underneath this, there's a section titled "Resource Specification" with two tables. The first table shows "Name: VIZSAT MEO" and "Description: This resource specification defines the VIZSAT MEO constellation." The second table shows "Forward CIR" with "Description: Forward Committed Information Rate" and "Values: 25 | 35 | 45 | 55 Mbps". The third table shows "Return CIR" with "Description: Return Committed Information Rate" and "Values: 10 | 20 | 30 | 40 Mbps".

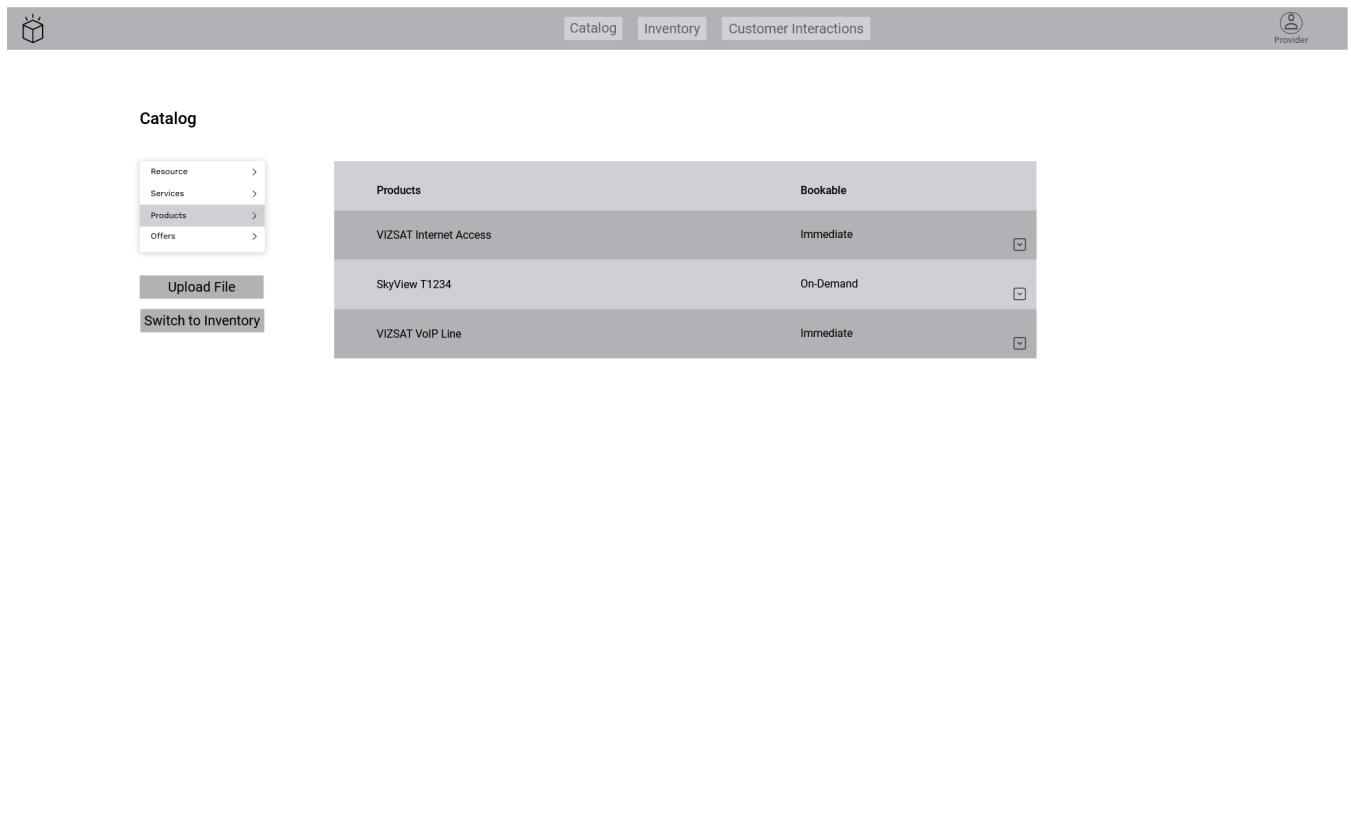
**Figure 3.6: Catalog: Services Details**

Similar to the resource details, the details of a specific service can be opened or closed by clicking on the row, as shown in the image above.

### 3.1.3 Product Catalog

Actor	Consumed API(s)
Provider	PSID620 Product Catalog

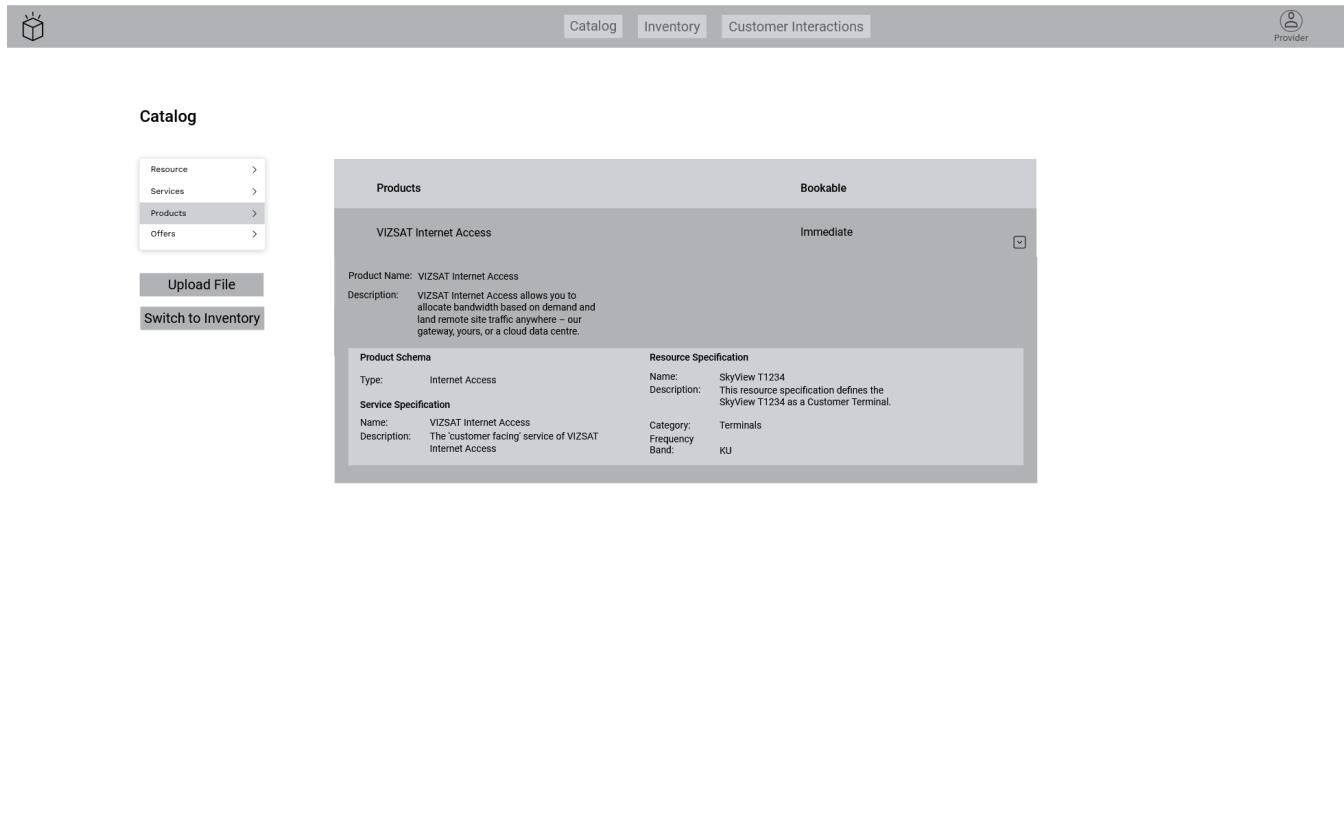
Table 3.4: Parameters of all Catalog Products and Offerings Views.



Products	Type	Bookable
VIZSAT Internet Access	On-Demand	<input checked="" type="checkbox"/>
SkyView T1234	On-Demand	<input checked="" type="checkbox"/>
VIZSAT VoIP Line	Immediate	<input checked="" type="checkbox"/>

Figure 3.7: Catalog: Products

This view shows the list of all products that are part of the catalog.



**Catalog**

**Products**      **Bookable**

VIZSAT Internet Access      Immediate

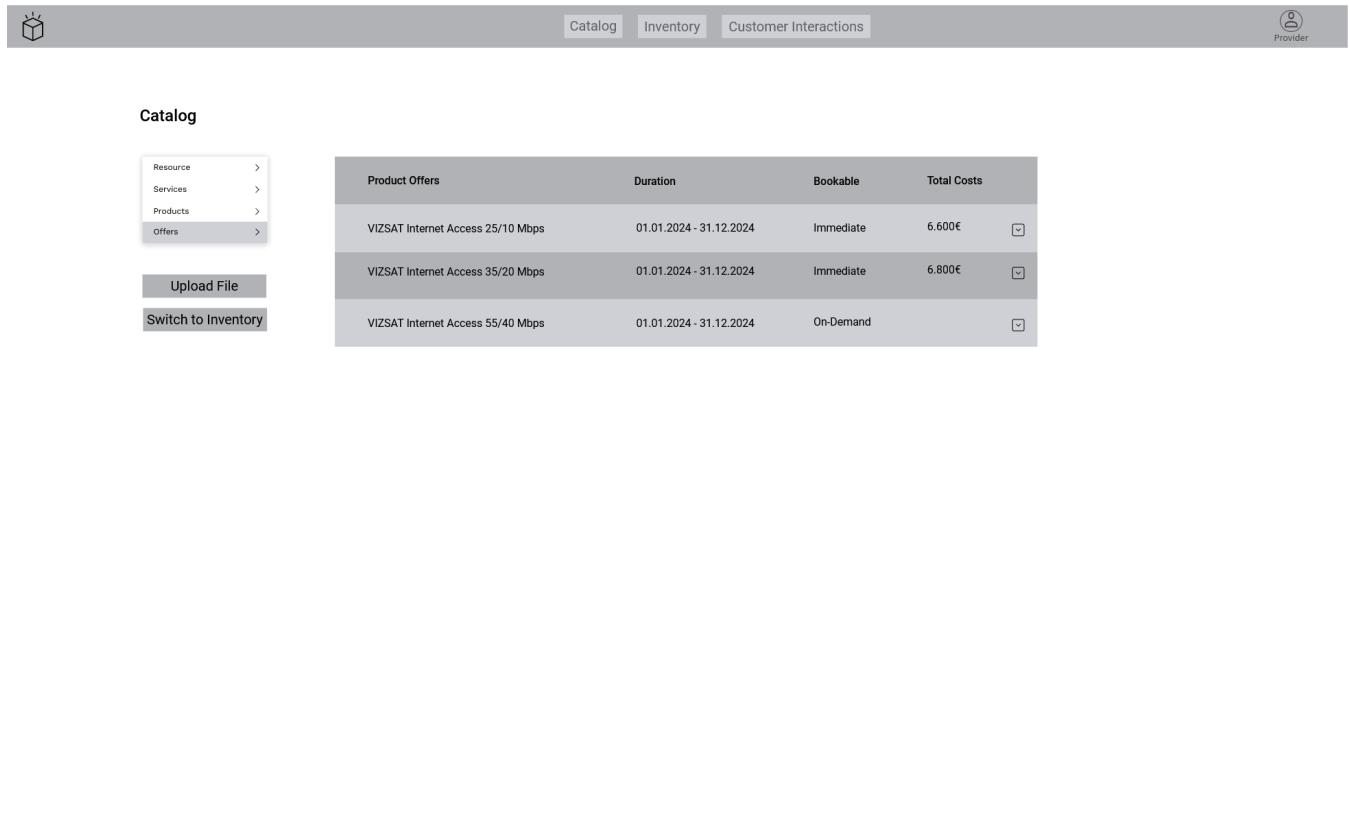
Product Name: VIZSAT Internet Access

Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and land remote site traffic anywhere – our gateway, yours, or a cloud data centre.

Product Schema	Resource Specification
Type: Internet Access	Name: SkyView T1234
Service Specification	
Name: VIZSAT Internet Access	Description: This resource specification defines the SkyView T1234 as a Customer Terminal.
Description: The customer facing service of VIZSAT Internet Access	Category: Terminals
	Frequency Band: KU

**Figure 3.8: Catalog: Products Details**

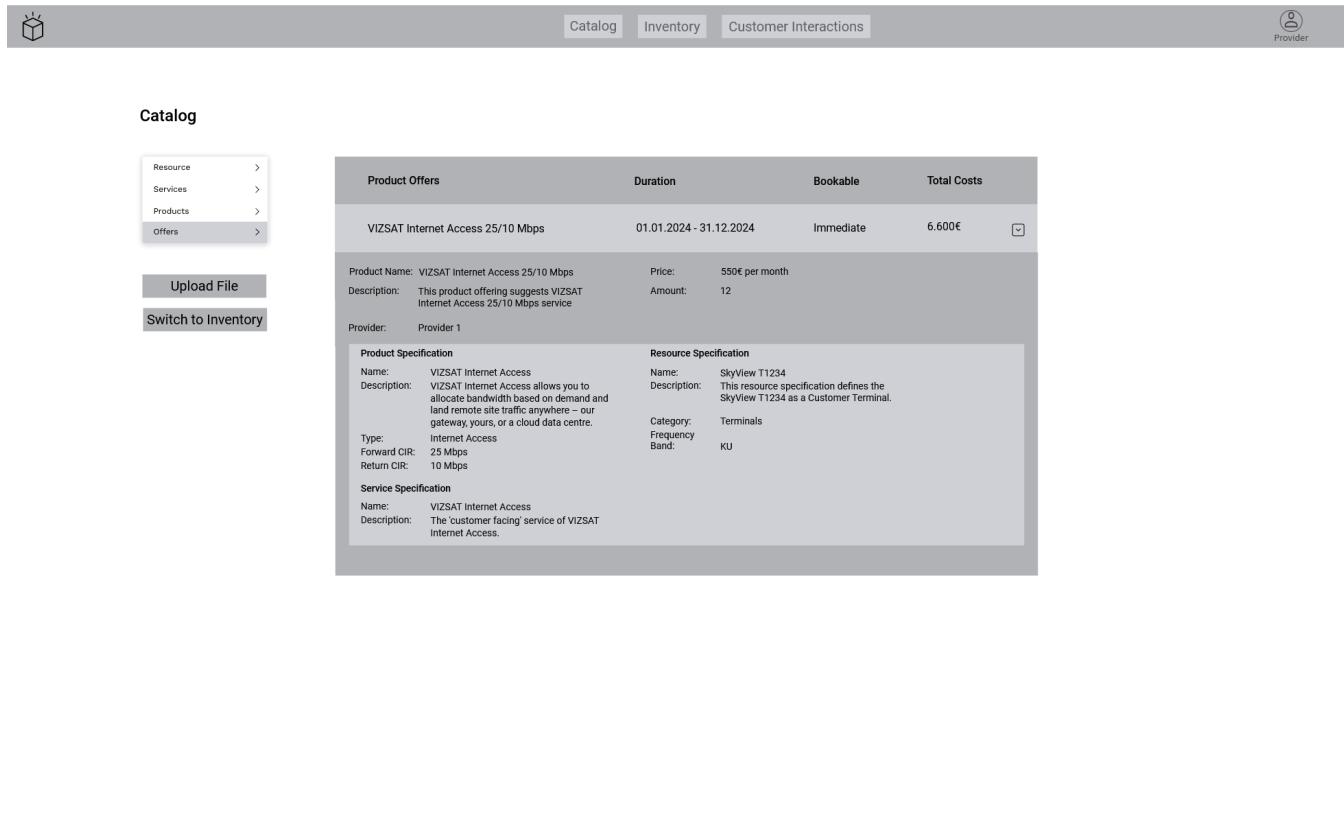
Similar to the resource and services details, the details of a specific product can be opened or closed by clicking on the row, as shown in the image above.



Product Offers	Duration	Bookable	Total Costs
VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	Immediate	6.600€ <input type="button" value="View Details"/>
VIZSAT Internet Access 35/20 Mbps	01.01.2024 - 31.12.2024	Immediate	6.800€ <input type="button" value="View Details"/>
VIZSAT Internet Access 55/40 Mbps	01.01.2024 - 31.12.2024	On-Demand	<input type="button" value="View Details"/>

**Figure 3.9: Catalog: Offerings**

This view shows the list of all offerings that are part of the catalog.



Product Offers	Duration	Bookable	Total Costs
VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	Immediate	6.600€

**Product Specification**

Name: VIZSAT Internet Access  
 Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and send remote site traffic anywhere – our gateway, yours, or a cloud data centre.  
 Type: Internet Access  
 Forward CIR: 25 Mbps  
 Return CIR: 10 Mbps

**Resource Specification**

Name: SkyView T1234  
 Description: This resource specification defines the SkyView T1234 as a Customer Terminal.  
 Category: Terminals  
 Frequency: KU

Figure 3.10: Catalog: Offerings Details

Additionally, the details of a specific offering can be opened or closed by clicking on the row, as shown in the image above.

## 3.2 Inventories

### 3.2.1 Resource Inventory

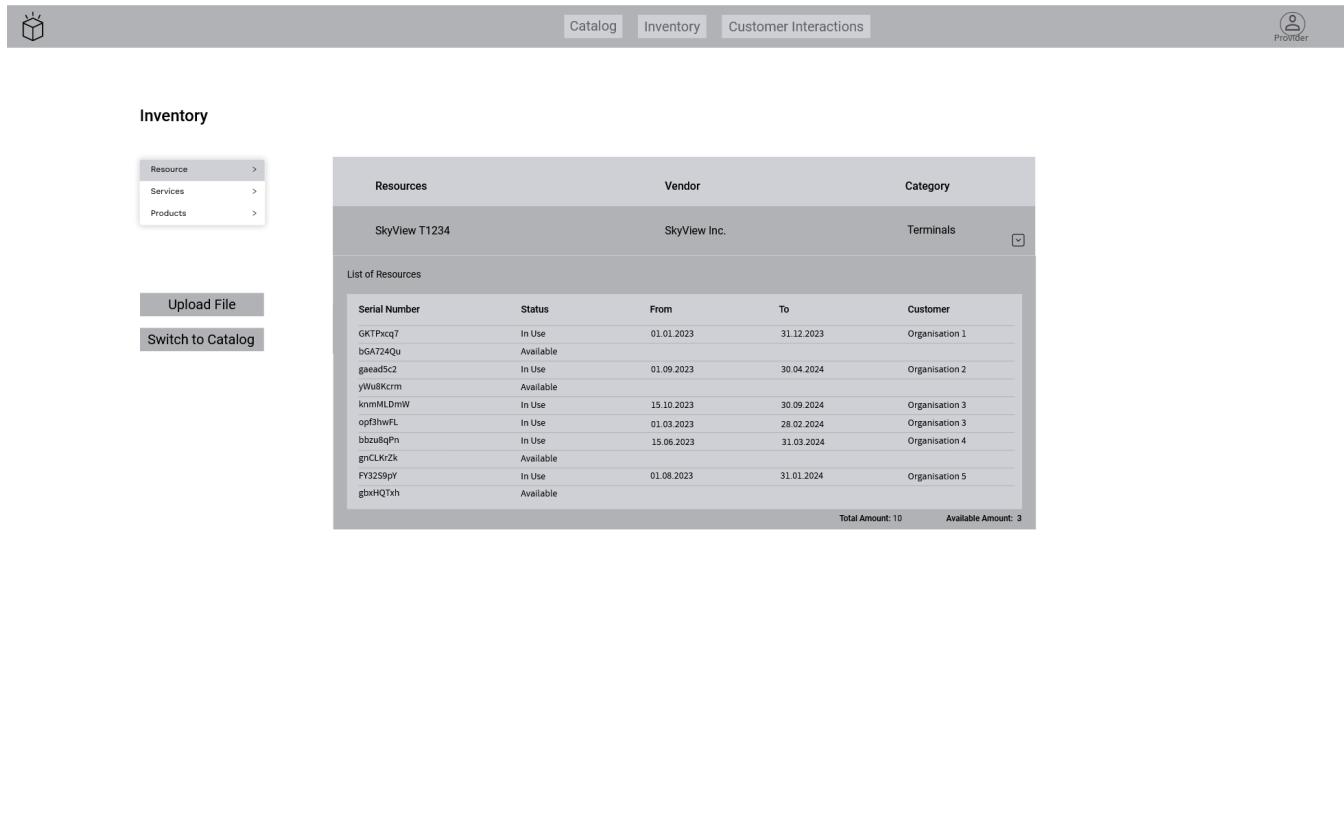
Actor	Consumed API(s)
Provider	PSID639 Resource Inventory

Table 3.5: Parameters of all Inventory Products and Offerings Views.

Resources	Vendor	Category
SkyView T1234	SkyView Inc.	Terminals <input checked="" type="checkbox"/>
VIZSAT MEO	VIZSAT	Constellation <input type="checkbox"/>
PCN-1	PCN	Satellite <input checked="" type="checkbox"/>

Figure 3.11: Inventory: Resources

The inventory view provides the inventory for resources, services, products, and offerings. The different categories can be accessed by the side-navigation on the left. The buttons below provide a file upload similar to the catalogs and a direct switch to the catalog view. The figure above shows the inventory example for resources.



The screenshot shows the PSI-GID Inventory interface. At the top, there is a navigation bar with tabs: Catalog, Inventory (which is selected), and Customer Interactions. On the far right of the navigation bar is a user icon labeled "Provider". Below the navigation bar, there is a sidebar on the left with a "Resource" dropdown menu containing "Services" and "Products" options, each with a right-pointing arrow. The main content area is titled "Inventory". It displays a table for "Resources" with columns: Resources, Vendor, and Category. One row is shown: "SkyView T1234" under Resources, "SkyView Inc." under Vendor, and "Terminals" under Category. Below this table is a section titled "List of Resources" containing a table with columns: Serial Number, Status, From, To, and Customer. The table lists ten resources, each with a unique identifier and status (e.g., In Use, Available). The "From" and "To" columns represent dates, and the "Customer" column lists five different organizations. At the bottom of the main content area, there are two status indicators: "Total Amount: 10" and "Available Amount: 3".

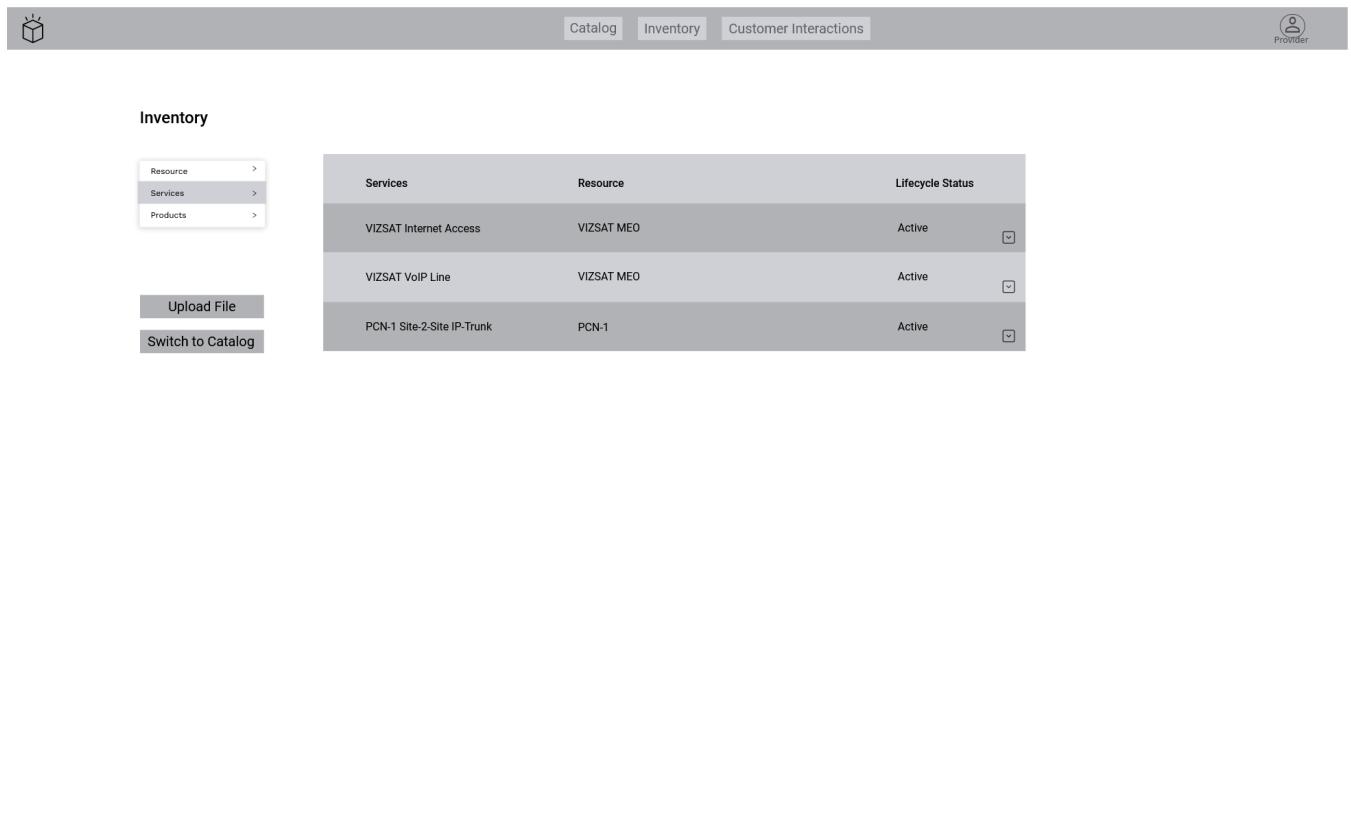
**Figure 3.12: Inventory: Resources Details**

When clicking on the row, the panel for details will open below the row and shows the list of resources, that are owned by the provider, as shown in the figure above. The details can be closed by clicking on the row a second time.

### 3.2.2 Service Inventory

Actor	Consumed API(s)
Provider	PSID638 Service Inventory

Table 3.6: Parameters of all Inventory Services Views.



Services	Resource	Lifecycle Status
VIZSAT Internet Access	VIZSAT MEO	Active
VIZSAT VoIP Line	VIZSAT MEO	Active
PCN-1 Site-2-Site IP-Trunk	PCN-1	Active

Figure 3.13: Inventory: Services

This view shows the list of all services that are part of the inventory. Note that only services being part of booked products can be part of the inventory.



Services	Resource	Lifecycle Status
VIZSAT Internet Access	VIZSAT MEO	Active

Customer	Mission	From	To
Organisation 1	New Mission XYZ	01.01.2023	31.12.2023
Organisation 2	New Mission 123	01.09.2023	30.04.2024
Organisation 3	New Mission 456	15.10.2023	30.09.2024
Organisation 3	New Mission 789	01.03.2023	28.02.2024

Total Amount: 4

**Figure 3.14: Inventory: Service Details**

Similar to the resource details, the details of a specific service can be opened or closed by clicking on the row, as shown in the image above. It shows a list of organisations that are using the specific service on their mission(s).

### 3.2.3 Product Inventory

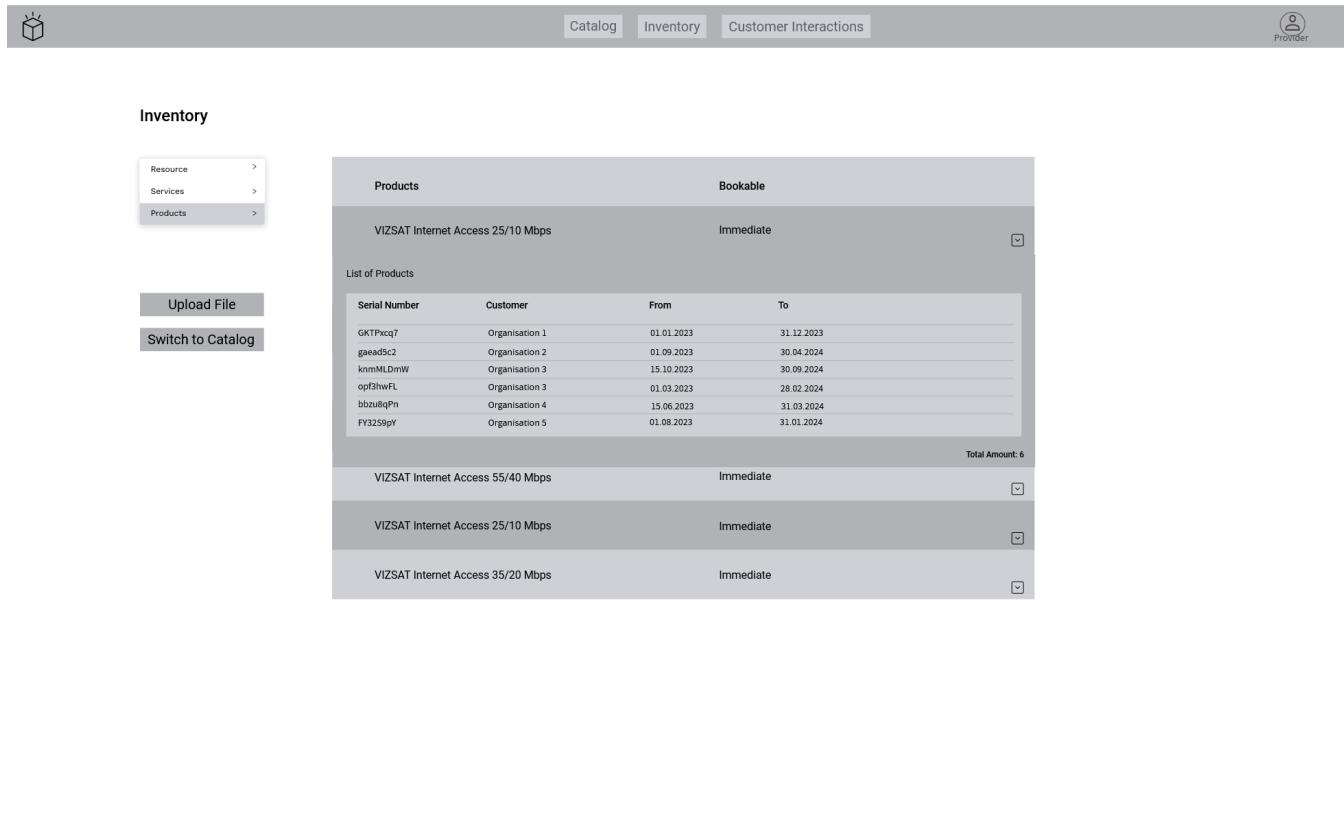
Actor	Consumed API(s)
Provider	PSID637 Product Inventory

Table 3.7: Parameters of all Inventory Products and Offerings Views.

Products	Bookable
VIZSAT Internet Access 25/10 Mbps	Immediate
VIZSAT Internet Access 35/20 Mbps	On-Demand
VIZSAT Internet Access 55/40 Mbps	On-Demand
VIZSAT Internet Access 25/10 Mbps	Immediate
VIZSAT Internet Access 35/20 Mbps	Immediate
VIZSAT Internet Access 55/40 Mbps	Immediate
VIZSAT Internet Access 25/10 Mbps	Immediate
VIZSAT Internet Access 35/20 Mbps	Immediate

Figure 3.15: Inventory: Products

This view shows the list of all products that are part of the inventory. As with services, products can only be part of the inventory if they have been booked.



Serial Number	Customer	From	To
GKTPccq7	Organisation 1	01.01.2023	31.12.2023
gaaed5c2	Organisation 2	01.09.2023	30.04.2024
kmnMLDmW	Organisation 3	15.10.2023	30.09.2024
opf3hwFL	Organisation 3	01.03.2023	28.02.2024
bbzu8qPn	Organisation 4	15.06.2023	31.03.2024
FY32S9rY	Organisation 5	01.08.2023	31.01.2024

Total Amount: 6

Product Name	Bookable
VIZSAT Internet Access 25/10 Mbps	Immediate
VIZSAT Internet Access 55/40 Mbps	Immediate
VIZSAT Internet Access 25/10 Mbps	Immediate
VIZSAT Internet Access 35/20 Mbps	Immediate

**Figure 3.16: Inventory: Product Details**

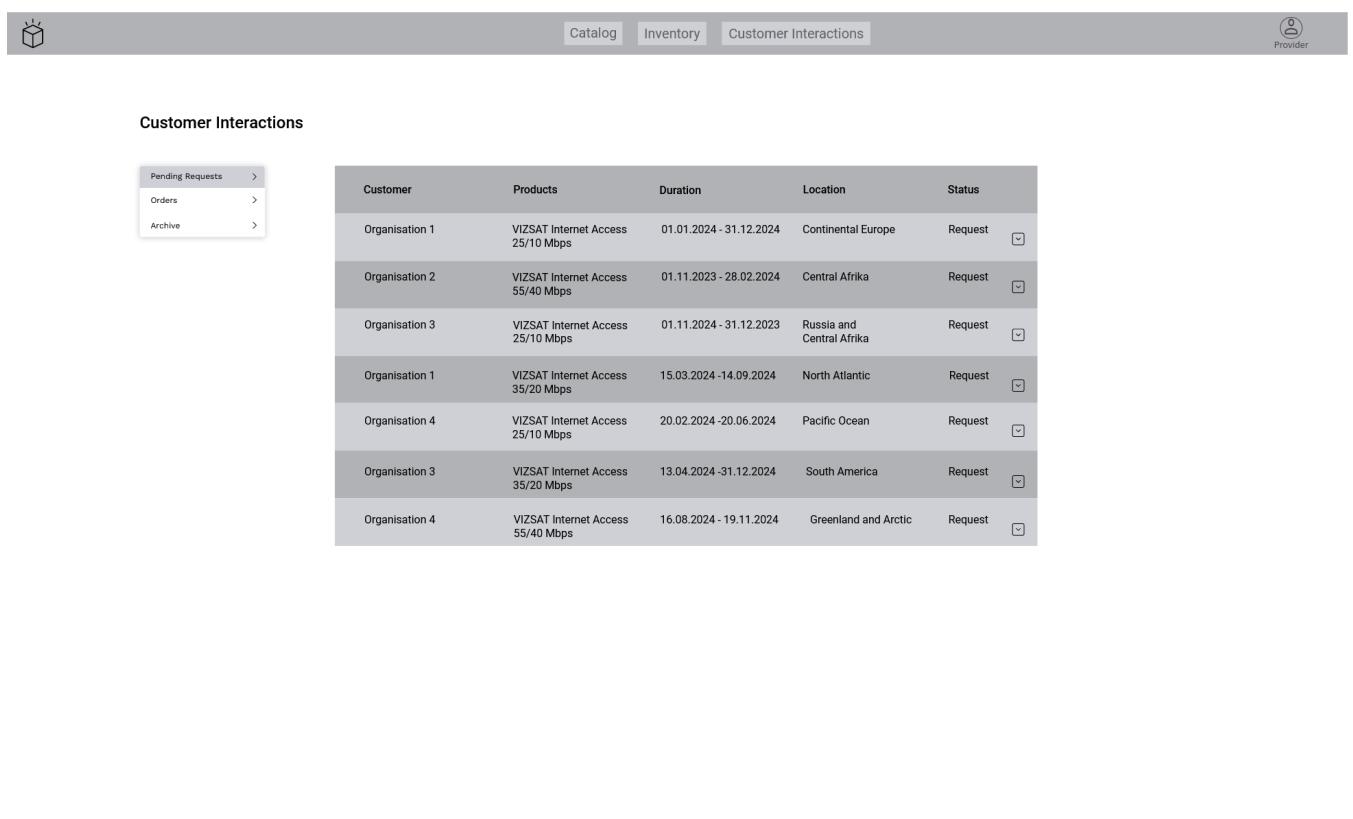
The opened detail panel shows the amount of booked products, the duration, and the booking organisation.

## 3.3 Customer Interactions

### 3.3.1 Incoming Customer Inquiries

Actor	Consumed API(s)
Provider	PSID001 Customer Inquiry

Table 3.8: Parameters of all RFQ Views.



Customer	Products	Duration	Location	Status
Organisation 1	VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	Continental Europe	Request
Organisation 2	VIZSAT Internet Access 55/40 Mbps	01.11.2023 - 28.02.2024	Central Afrika	Request
Organisation 3	VIZSAT Internet Access 25/10 Mbps	01.11.2024 - 31.12.2023	Russia and Central Afrika	Request
Organisation 1	VIZSAT Internet Access 35/20 Mbps	15.03.2024 - 14.09.2024	North Atlantic	Request
Organisation 4	VIZSAT Internet Access 25/10 Mbps	20.02.2024 - 20.06.2024	Pacific Ocean	Request
Organisation 3	VIZSAT Internet Access 35/20 Mbps	13.04.2024 - 31.12.2024	South America	Request
Organisation 4	VIZSAT Internet Access 55/40 Mbps	16.08.2024 - 19.11.2024	Greenland and Arctic	Request

Figure 3.17: Customer Interactions: Pending Requests

The customer interactions view provides the pending requests, the orders, and the archive. If required, an archive function can be added here. This might change in the future. The different categories can be accessed by the side-navigation on the left. The figure above shows the example for pending requests. This is indicated by the 'Status' column, where all entries are marked as 'Request'.

The screenshot shows the 'Customer Interactions' section of the PSI-GID interface. On the left, there's a sidebar with 'Pending Requests' (selected), 'Orders' (disabled), and 'Archive' (disabled). The main area displays a table with one row:

Customer	Products	Duration	Location	Status
Organisation 1	VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	Continental Europe	Request

Below the table, detailed product information is shown in two columns:

**Product Specification**  
 Name: VIZSAT Internet Access  
 Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and send remote site traffic anywhere – our gateway, yours, or a cloud data centre.  
 Type: Internet Access  
 Forward CIR: 25 Mbps  
 Return CIR: 10 Mbps

**Resource Specification**  
 Name: SkyView T1234  
 Description: This resource specification defines the SkyView T1234 as a Customer Terminal.  
 Category: Terminals  
 Frequency: KU

At the bottom right of the main panel are two buttons: 'Decline Request' and 'Offer Price'.

Figure 3.18: Customer Interactions: Pending Requests Details

When clicking on the row, the panel for details will open below the row and show the details of the request, shown in the figure above. The two options to proceed with the request are represented by the buttons at the bottom right. In case no offering can be made, for example because one or more resources are not available, the 'Decline Request' button can be clicked. The customer should get a notification about the denial. In case the provider wants to make an offering, they click the 'Offering Price' button. This leads to a dialogue that is described in the next figure. The details can be closed by clicking on the row a second time.

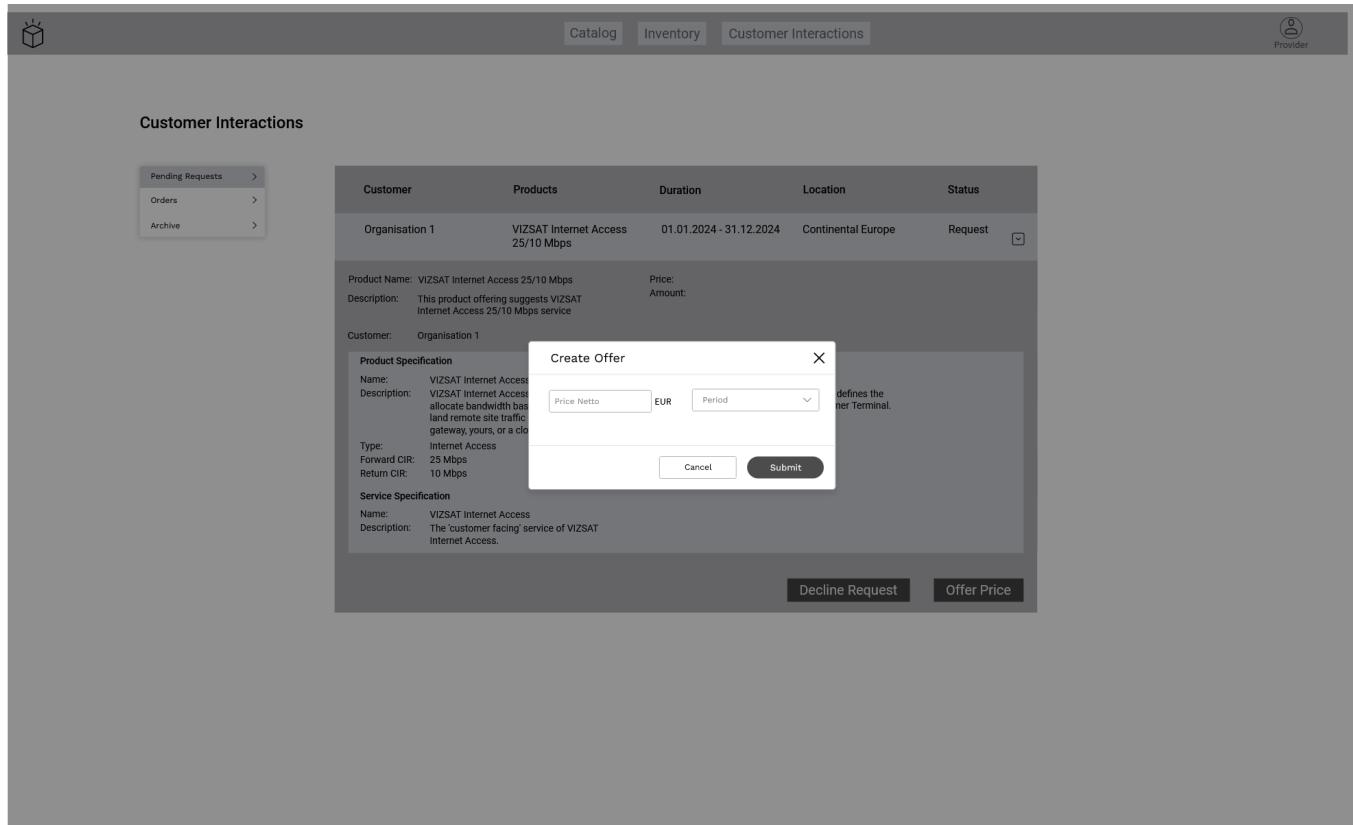


Figure 3.19: Customer Interactions: Pending Request - Create Offering

To create an offering, a price has to be entered and a period - like monthly - can be selected. After submitting, the offering is sent to the customer.

### 3.3.2 Incoming Product Orders

Actor	Consumed API(s)
Provider	PSID622 Product Ordering

Table 3.9: Parameters of all Customer Interaction Views.

Customer	Products	Duration	Zone
Organisation 1	VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	Continental Europe
Organisation 2	VIZSAT Internet Access 55/40 Mbps	01.11.2023 - 28.02.2024	Central Afrika
Organisation 3	VIZSAT Internet Access 25/10 Mbps	01.11.2024 - 31.12.2023	Russia and Central Afrika
Organisation 1	VIZSAT VoIP Line	15.03.2024-14.09.2024	North Atlantic
Organisation 4	VIZSAT VoIP Line	20.02.2024-20.06.2024	Pacific Ocean
Organisation 3	PCN-1 Site-2-Site IP-Trunk	13.04.2024-31.12.2024	South America
Organisation 4	PCN-1 Bandwidth	16.08.2024- 19.11.2024	Greenland and Arctic

Figure 3.20: Customer Interactions: Orders

This view shows the list of all placed orders.

**Customer Interactions**

Pending Requests >  
Orders >  
Archive >

Customer	Products	Duration	Zone
Organisation 1	VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	Continental Europe
Product Name: VIZSAT Internet Access 25/10 Mbps Description: This product offering suggests VIZSAT Internet Access 25/10 Mbps service. Provider: Provider 1			
<b>Product Specification</b> Name: VIZSAT Internet Access Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and send remote site traffic anywhere - our gateway, yours, or a cloud data centre. Type: Internet Access Forward CIR: 25 Mbps Return CIR: 10 Mbps		<b>Resource Specification</b> Name: SkyView T1234 Description: This resource specification defines the SkyView T1234 as a Customer Terminal. Category: Terminals Frequency Band: KU	
<b>Service Specification</b> Name: VIZSAT Internet Access Description: The customer-facing service of VIZSAT Internet Access.			

Figure 3.21: Customer Interactions: Orders Details

The details are displayed below the corresponding row and contain the necessary information to give a comprehensive overview of the order.

# 4 User Journey

## 4.1 Mission Creation

Actor	Consumed API(s)
User	PSID002 Mission API

Table 4.1: Parameters of all Mission Creation Views - User.

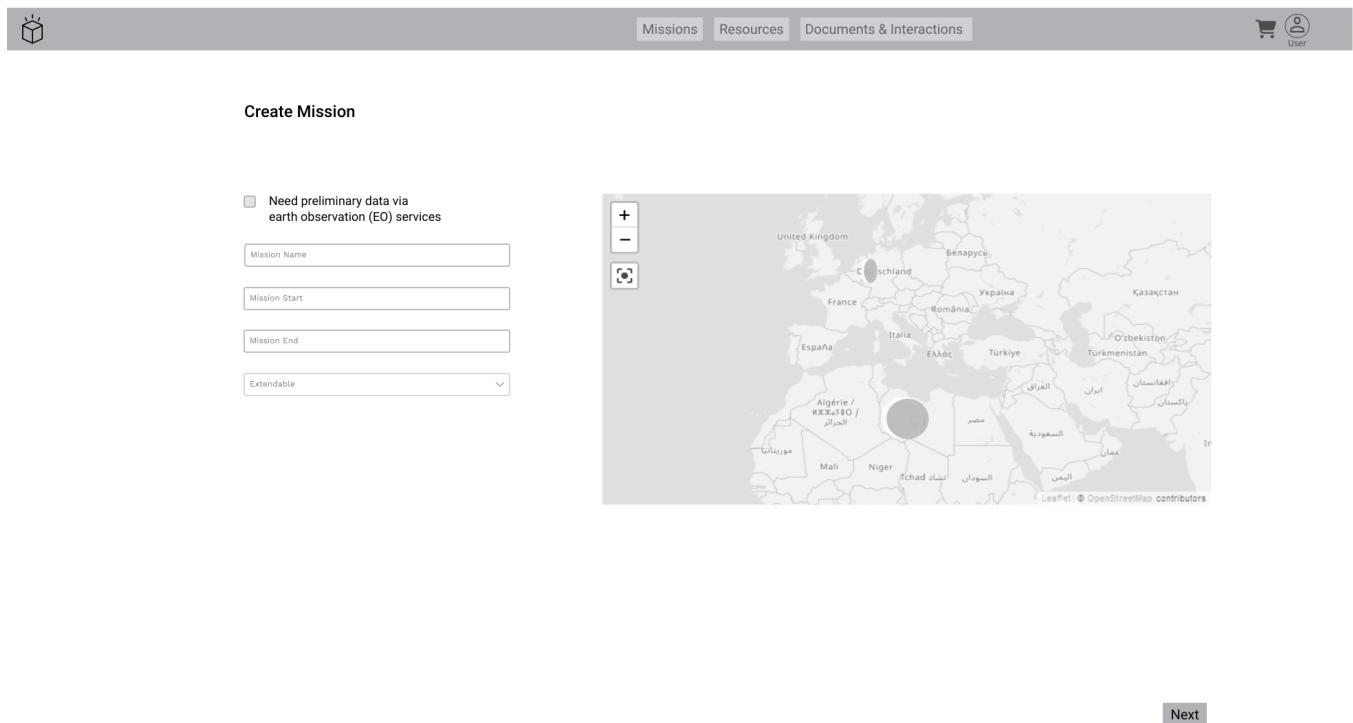


Figure 4.1: Mission Creation

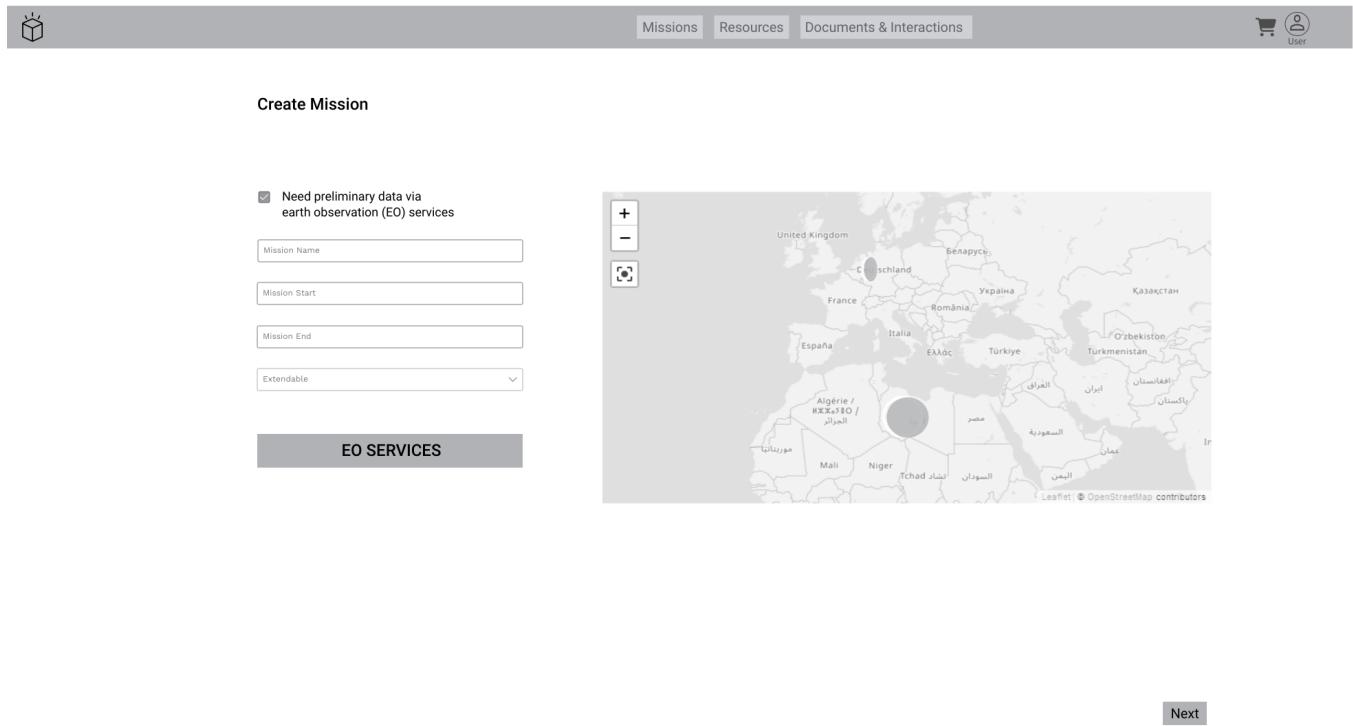
The user starts the creation of a mission by entering rudimental data such as

- defined mission zones (by drawing on the map),
- start and end date of the mission,
- extendability of the mission.

In the following chapters, we draw a scenario for crisis response situations in which the crisis responder

- needs to gather more information about the situation before sending teams into the field
- has gathered enough information and is able to get a fuller picture of the situation and expand the deployment to include teams and products

#### 4.1.1 Mission Creation - Gather Intelligence



Missions Resources Documents & Interactions

Create Mission

Need preliminary data via earth observation (EO) services

Mission Name:

Mission Start:

Mission End:

Extendable:

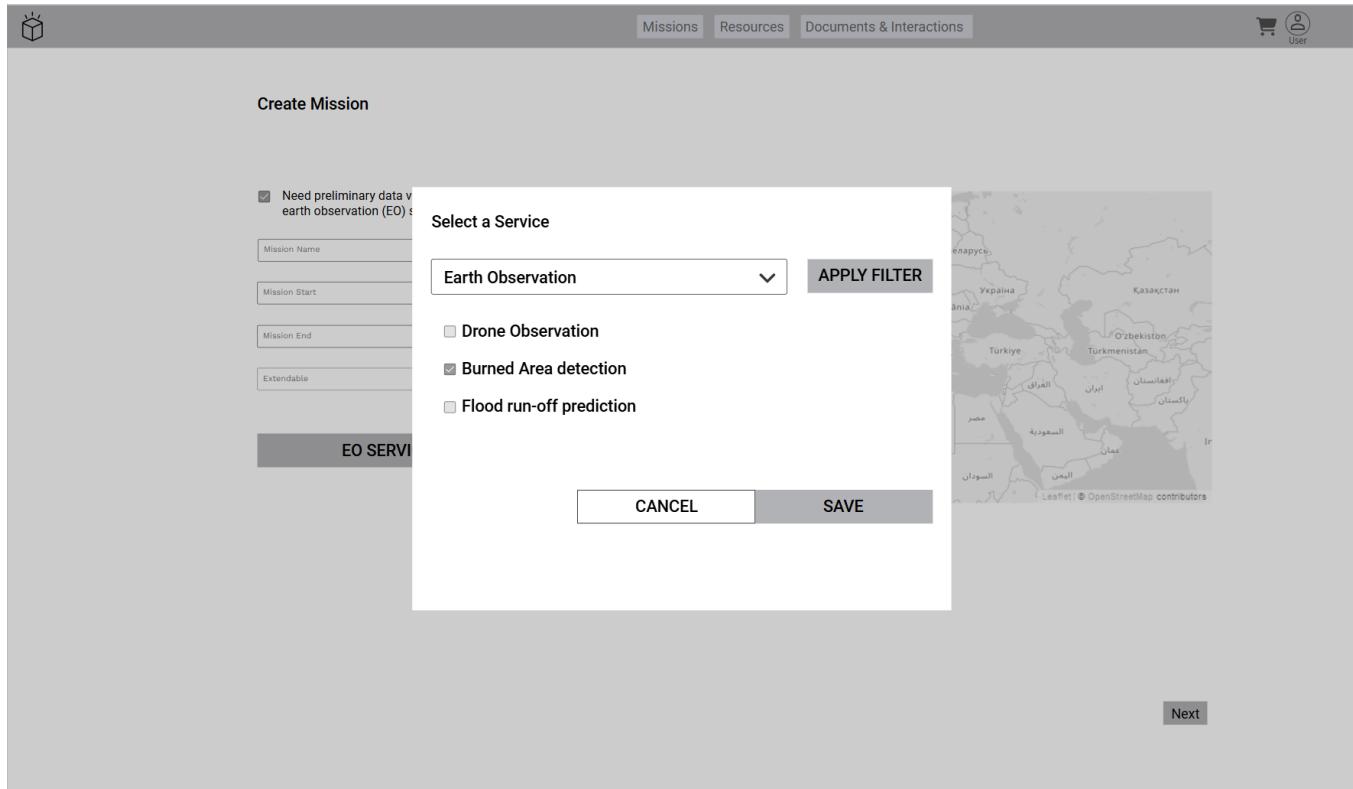
**EO SERVICES**

Map showing Europe and the Middle East with a central location highlighted.

Next

Figure 4.2: Mission Creation - Gather Intelligence

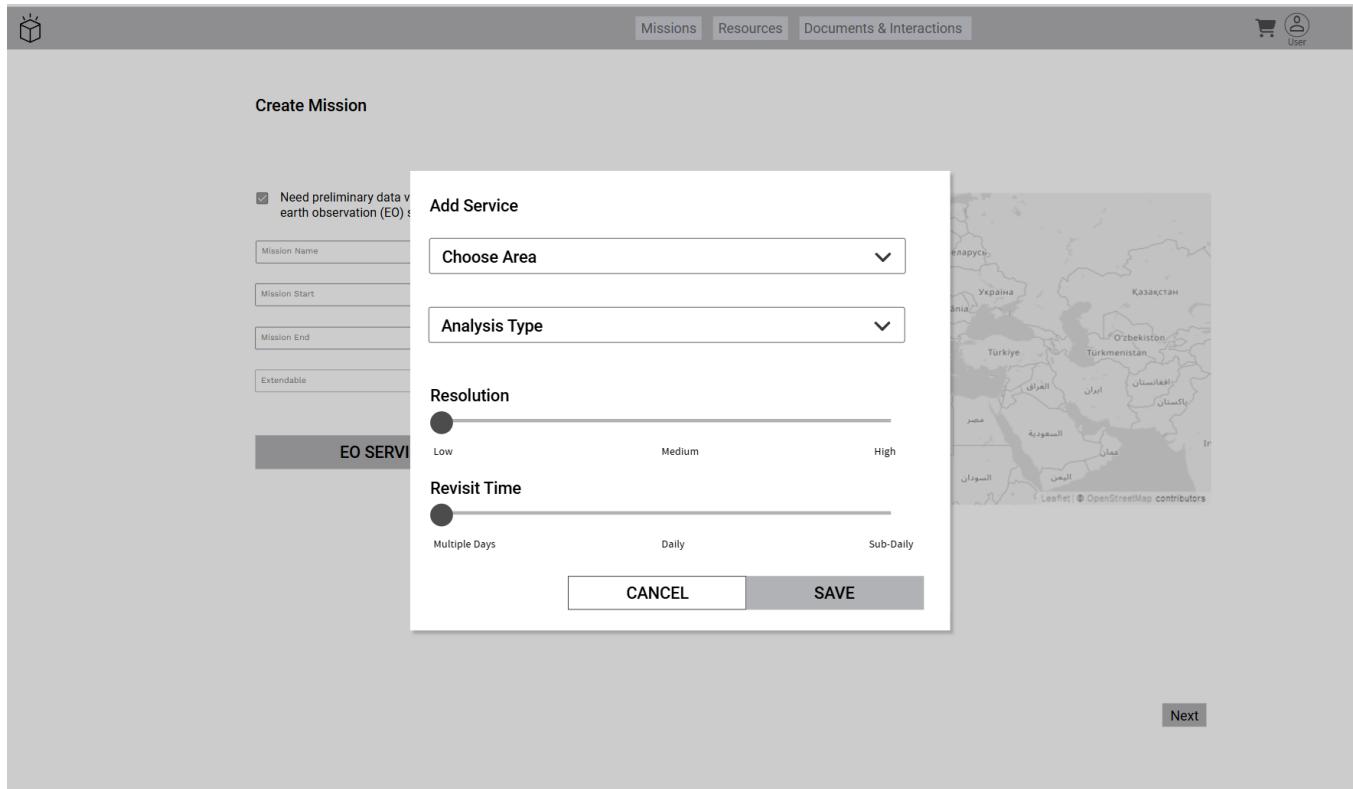
To gather intelligence in threatening situations while facing a crisis event, it is crucial to have access to e.g. earth observation products as a tool to get a better understanding of the crisis. Therefore, this example provides a shortcut to fast-booking earth observation products. By checking the checkbox “Need preliminary data via earth observation (EO) services”, the button “EO Services” appears below the input field.



The screenshot shows the 'Create Mission' interface. On the left, there's a sidebar with a cube icon, navigation tabs for 'Missions', 'Resources', and 'Documents & Interactions', and user icons for a shopping cart and profile. The main area has a title 'Create Mission'. On the right, there's a map of the Middle East. In the center, a modal dialog is open with the title 'Select a Service'. It contains a dropdown menu set to 'Earth Observation' with an 'APPLY FILTER' button. Below the dropdown are three service options: 'Drone Observation' (unchecked), 'Burned Area detection' (checked), and 'Flood run-off prediction' (unchecked). At the bottom of the dialog are 'CANCEL' and 'SAVE' buttons.

Figure 4.3: Mission Creation - Add Service

The button “EO Services” opens the service dialog with a preselected filter “Earth Observation”. A list of services is shown, and the user can select e.g. “Burned Area Detection”.



The screenshot shows the 'Create Mission' interface. On the left, there's a sidebar with 'EO SERVICES' and other mission configuration options. A central modal window is titled 'Add Service' and contains the following fields:

- Choose Area:** A dropdown menu.
- Analysis Type:** A dropdown menu.
- Resolution:** A slider scale from 'Low' to 'High'.
- Revisit Time:** A slider scale from 'Multiple Days' to 'Sub-Daily'.

At the bottom of the modal are 'CANCEL' and 'SAVE' buttons. The background of the main interface shows a map of Eurasia with country names in multiple languages. A 'Next' button is visible at the bottom right of the main interface.

Figure 4.4: Mission Creation - Specify Service

After applying the selection, the user can further specify the service according to their needs and save the configuration.

 Missions Resources Documents & Interactions  

**Create Mission**

Need preliminary data via earth observation (EO) services

Mission Name

Mission Start

Mission End

Extendable

**EO SERVICES**

Burned Area detection Edit  



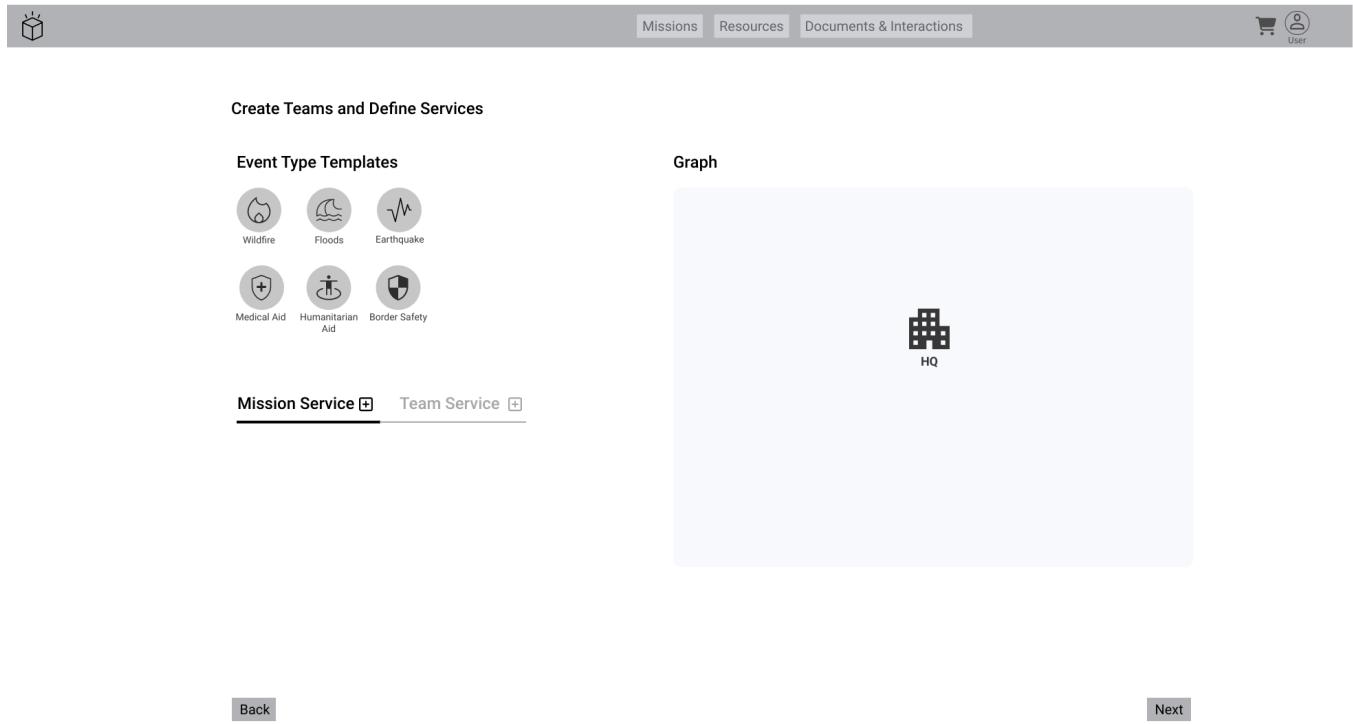
**Show Results**

**Figure 4.5: Mission Creation - Service Added**

The chosen service is shown in a list below the mission input fields.

## 4.1.2 Mission Creation - Extend Mission

With the last step from previous section, the Mission Creation, everything is in place to proceed by hitting the “next” button and performing the service definition.



Create Teams and Define Services

Event Type Templates

Missions Resources Documents & Interactions

Wildfire Floods Earthquake

Medical Aid Humanitarian Aid Border Safety

Graph

HQ

Mission Service   Team Service  

Back Next

Figure 4.6: Mission Creation - Define Services

The user can either choose a template, which offers pre-defined services, or add services to mission, team or both directly. For the next step, we choose a wildfire template to automatically put some services to the list.

**Create Teams and Define Services**

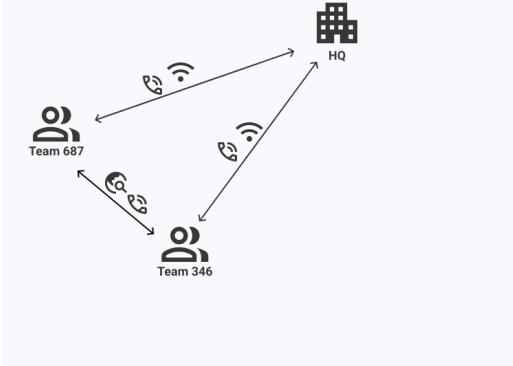
**Event Type Templates**

-  Wildfire
-  Floods
-  Earthquake
-  Medical Aid
-  Humanitarian Aid
-  Border Safety

**Mission Service**     **Team Service** 

- VSAT Landbased mobile M   
- VSAT Landbased fixed S   
- Drone Observation   

**Graph**



Team 687

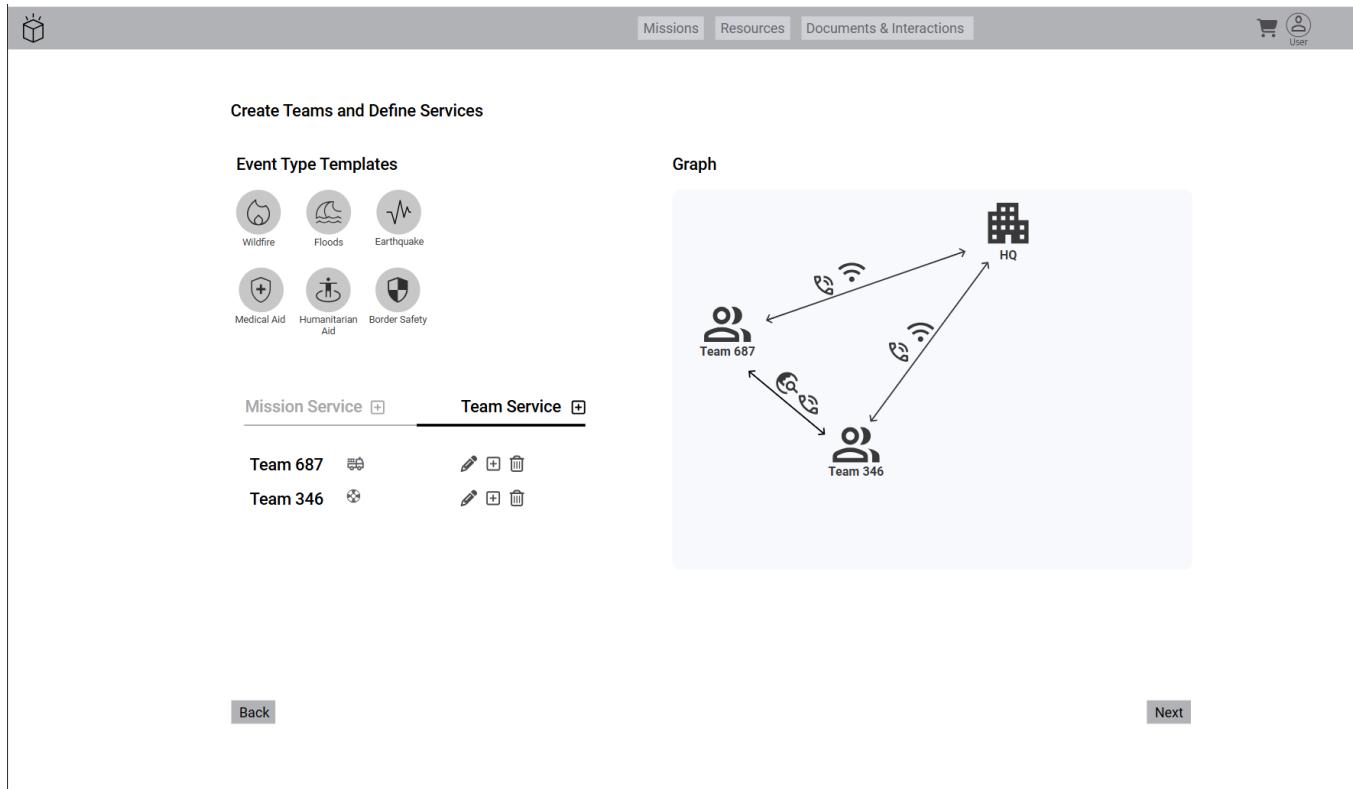
Team 346

HQ

**Back** **Next**

**Figure 4.7: Mission Creation - Template Wildfire**

Three services related to wildfire are put to the mission services list. This means, they are directly attached to the mission and not to a team. Any service could be moved to any team, that is part of the mission.



The screenshot shows the 'Create Teams and Define Services' section of the PSI-GID interface. At the top, there are tabs for 'Missions', 'Resources', and 'Documents & Interactions'. On the right, there are icons for a shopping cart and a user profile.

**Event Type Templates:**

- Wildfire
- Floods
- Earthquake
- Medical Aid
- Humanitarian Aid
- Border Safety

**Mission Service** (selected tab) and **Team Service** (button)

- Team 687
- Team 346

**Graph:**

```

graph TD
    HQ[HQ] --> Team687[Team 687]
    HQ --> Team346[Team 346]
    Team687 --> Team346
  
```

**Navigation:**

- Back
- Next

Figure 4.8: Mission Creation - Teams

By toggling the tab list, it is easy to change between mission services and team services. Also, the teams in the list are pre-selected through the template. The graph shows the teams and their services and how these services connect them. By clicking the “plus” icon-button beneath “team Services”, teams can be added to the mission.

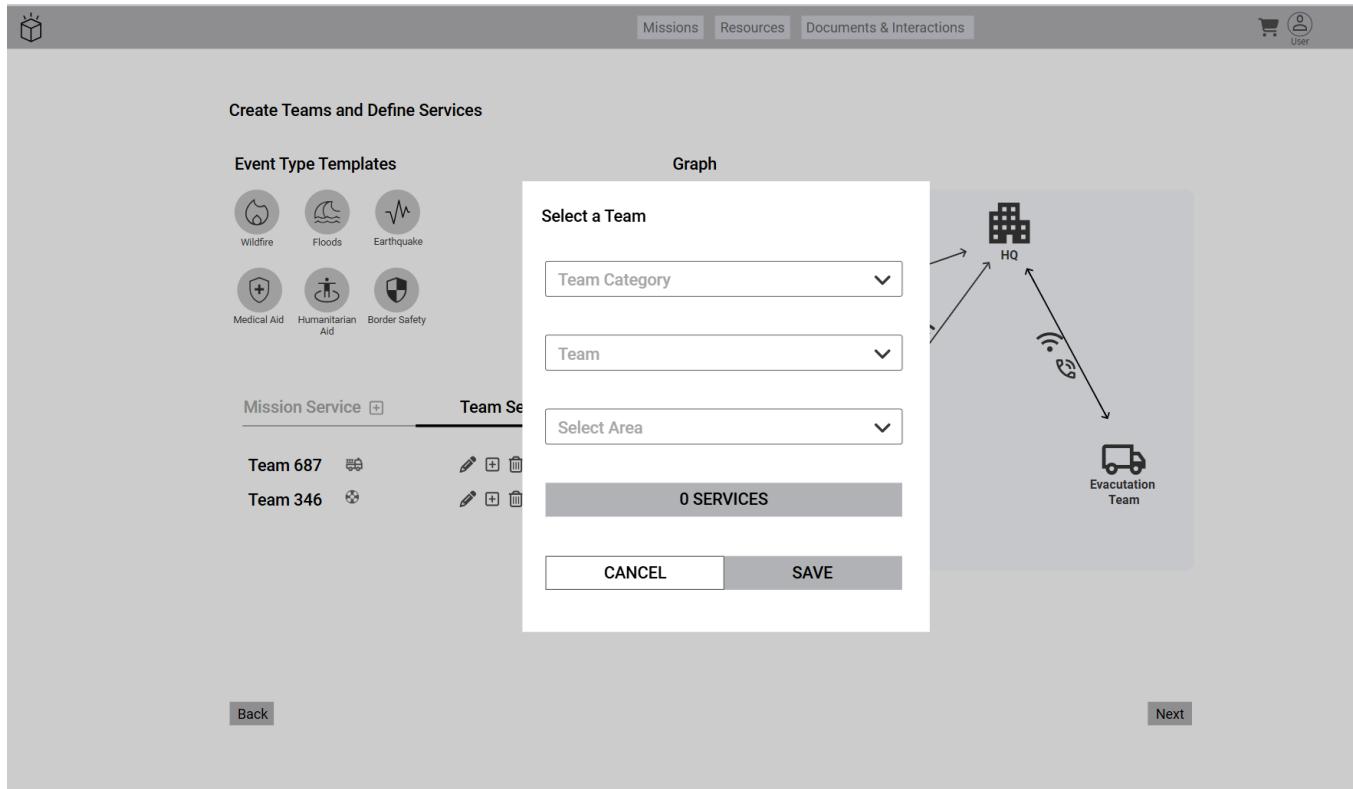


Figure 4.9: Mission Creation - Add new Team

A dialog provides the option to select a team. Teams in general are created by the governance or other stakeholders and could e.g. be uploaded as json file or it could be possible to integrate a “teams editor” to the system. This is currently not part of the PSID project but may be in the future.

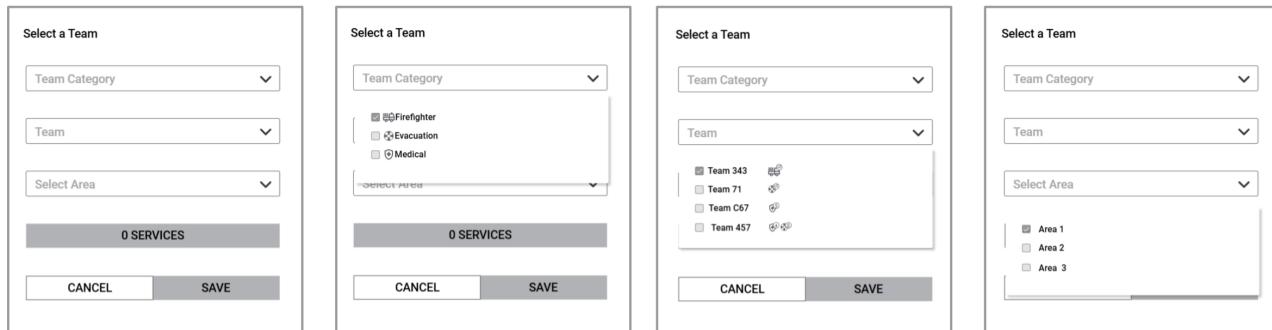


Figure 4.10: Mission Creation - Team Configuration

The image above shows the “Select a Team” component in detail. The user chooses the category, the team and the area.

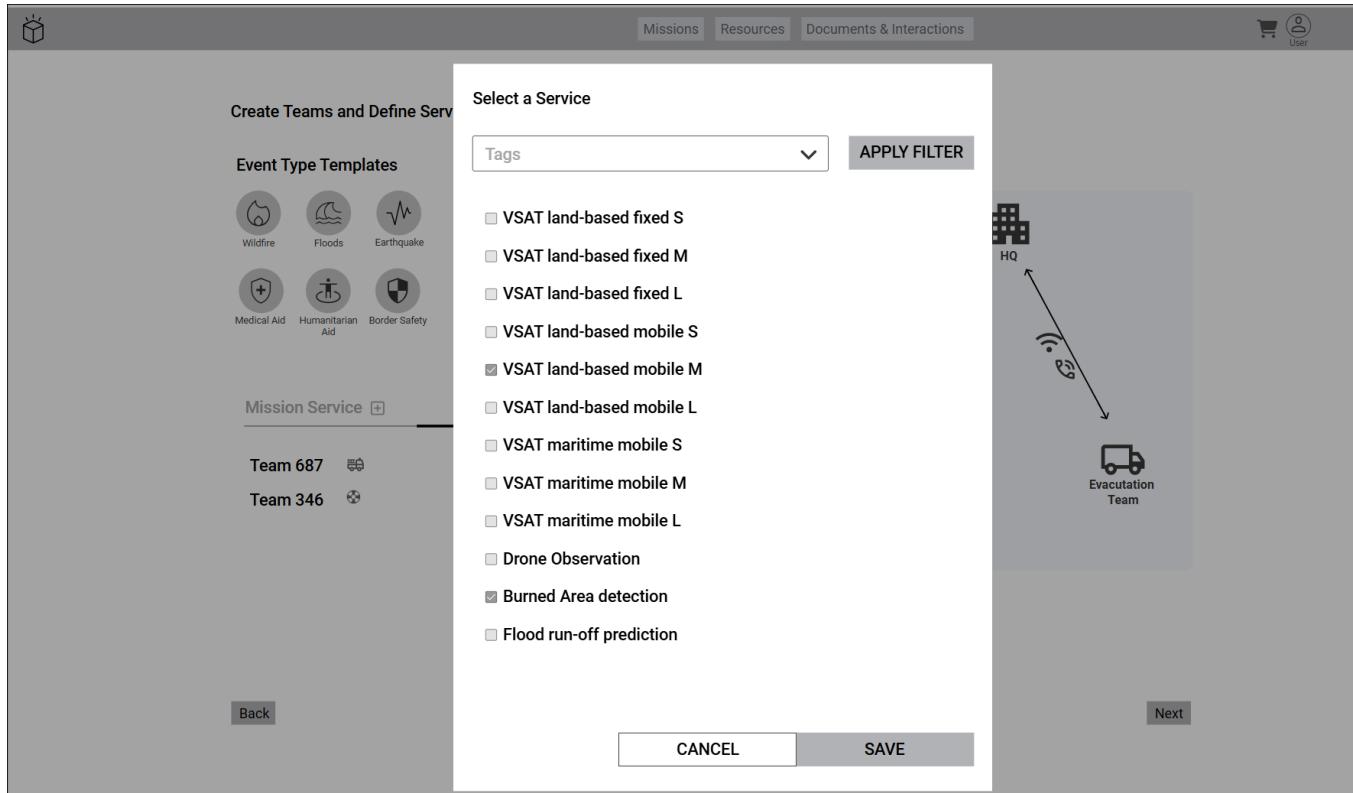


Figure 4.11: Mission Creation - Add Service to Team

Also, services can be attached to the team directly. When clicking the “SERVICES” button, a list of services is shown. This list can be filtered according to previously assigned tags.

Create Teams and Define Services

**Event Type Templates**

- Wildfire
- Floods
- Earthquake
- Medical Aid
- Humanitarian Aid
- Border Safety

Mission Service [+]

Team 687

Team 346

**Add Service**

Choose Area [+]

**Analysis Type**

- Raw Image
- Burned area detection
- Flooding
- Earthquake

**Resolution** [+]

Low High

**Revisit Time**

Multiple Days Daily Sub-Daily

CANCEL SAVE

Back Next

Figure 4.12: Mission Creation - Configure Service

The service can then be configured according to the user's needs.

Create Teams and Define Services

**Event Type Templates**

- Wildfire
- Floods
- Earthquake
- Medical Aid
- Humanitarian Aid
- Border Safety

Mission Service [+] Team Service [+]

Team 343

VSAT land-based mobile M

Burned Area detection

Team 687

Team 346

**Graph**

Back Next

Figure 4.13: Mission Creation - Team with Service

Then, the team is created and the teams' services are shown underneath the team. By clicking on “SAVE” the team is created. The assigned services are shown underneath the team. Once everything is ready, the user can continue with the summary of the mission by clicking on the “Next” button.

Team Name	Service Name	Type	Zone	Status	Monitoring	Actions
<input type="checkbox"/> Team 1	Burned Area detection 1	Burned Area detection	AOO	DRAFT	-	
<input type="checkbox"/> Team 2	My Internet Access 2	Internet Access	HQ	DRAFT	-	

Figure 4.14: Mission Creation - Mission Summary

The mission summary view gives a good overview over all defined items. Below ‘Services’, all user-specified services are listed. By clicking on a row, a details’ panel shows further details about the service. The user can still go back to make any changes or trigger the matchmaking process from here, by clicking on “Request Service Options for Mission”.

## 4.2 Distributed Matchmaking

Actor	Consumed API(s)
User	PSID001 Customer Inquiry

Table 4.2: Parameters of all Distributed Matchmaking Views - User.

The basis for the wireframes is the UCSM study (a CGI IP developed together with ESA).

Mission Summary for Mission 2024/03

#### Properties

Start Date  
02/29/2024

End Date  
03/31/2024

Extendable

#### Service Grades

Availability  
Standard

Security Level  
Restricted

Anti-Jamming  
Yes

#### Services

Name	Type	Zone	Status	Monitoring	Actions
<input type="checkbox"/> My Internet Access 1	Internet Access	AOO	DRAFT	-	
<input type="checkbox"/> My Internet Access 2	Internet Access	HQ	DRAFT	-	

Figure 4.15: User Defined Mission

For the user journey, the wireframes for PSID start just after the process of defining a mission. This image shows an example of how a user could have defined a mission to specify the communication needs. This includes at least

- defined mission zones (displayed on the map),
- start and end date of the mission,
- and service grades.

Below 'Services', all user-specified services are listed. By clicking on a row, a details' panel shows further details about the service.

Mission Summary for Mission 2024/03

#### Properties

Start Date  
02/29/2024

End Date  
03/31/2024

Extendable

#### Service Grades

Availability  
Standard

Security Level  
Restricted

Anti-Jamming  
Yes

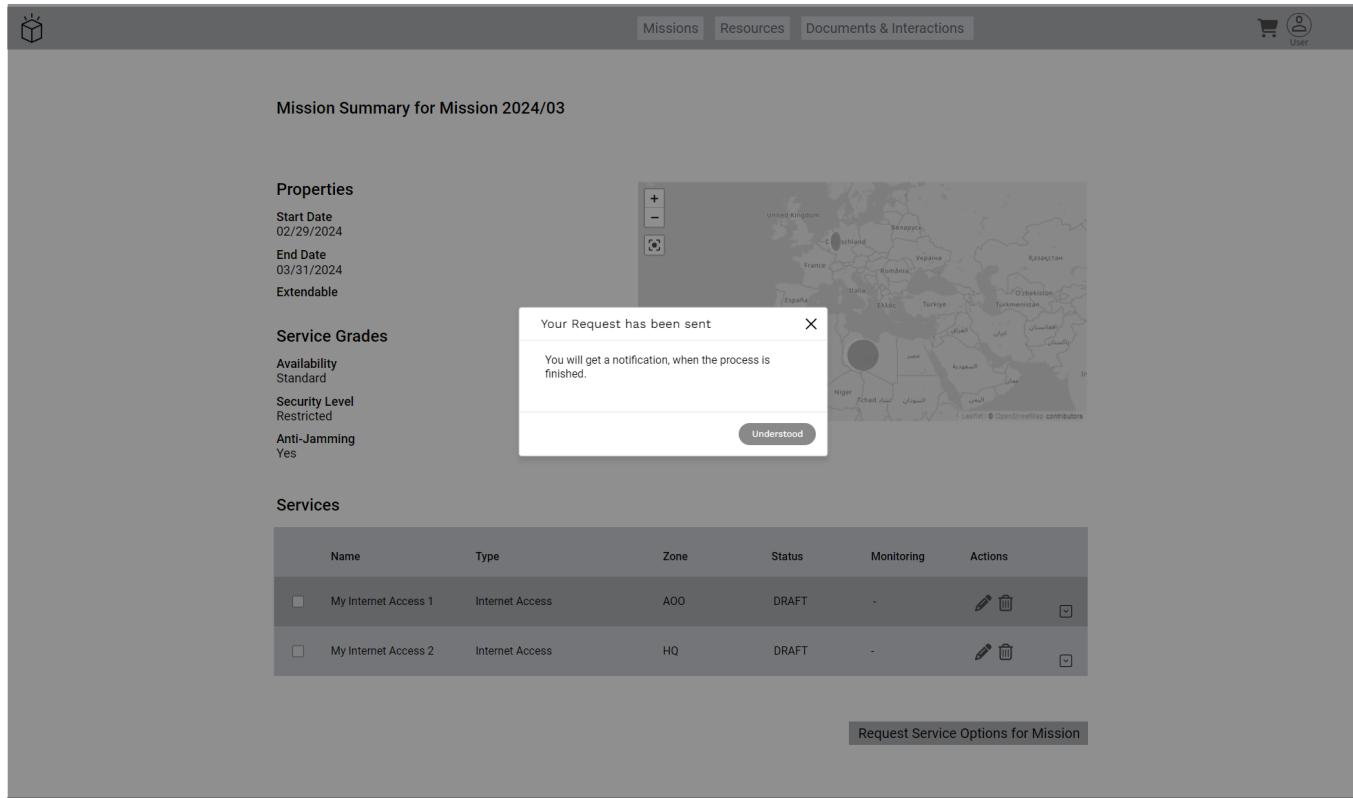
#### Services

Name	Type	Zone	Status	Monitoring	Actions
My Internet Access 1	Internet Access	A00	DRAFT	-	
Duration: 02/29/2024 - 03/01/2024 Frequency Band: KU Minimum Availability: Standard Forward/Return CIR: 25/10 Mbps					

[Request Service Options for Mission](#)

Figure 4.16: User Defined Mission - Service Details

In this case, the matchmaking process is performed by a third party (CGA), which could also act in a governmental role. When the user clicks the button ‘Request Service Option for Mission’, the request is sent to a third party which checks the request and, if the check passes, triggers the matchmaking.



**Missions** **Resources** **Documents & Interactions**

**User**

Mission Summary for Mission 2024/03

**Properties**

- Start Date: 02/29/2024
- End Date: 03/31/2024
- Extendable

**Service Grades**

- Availability: Standard
- Security Level: Restricted
- Anti-Jamming: Yes

**Services**

Name	Type	Zone	Status	Monitoring	Actions
<input type="checkbox"/> My Internet Access 1	Internet Access	A00	DRAFT	-	
<input type="checkbox"/> My Internet Access 2	Internet Access	HQ	DRAFT	-	

Request Service Options for Mission

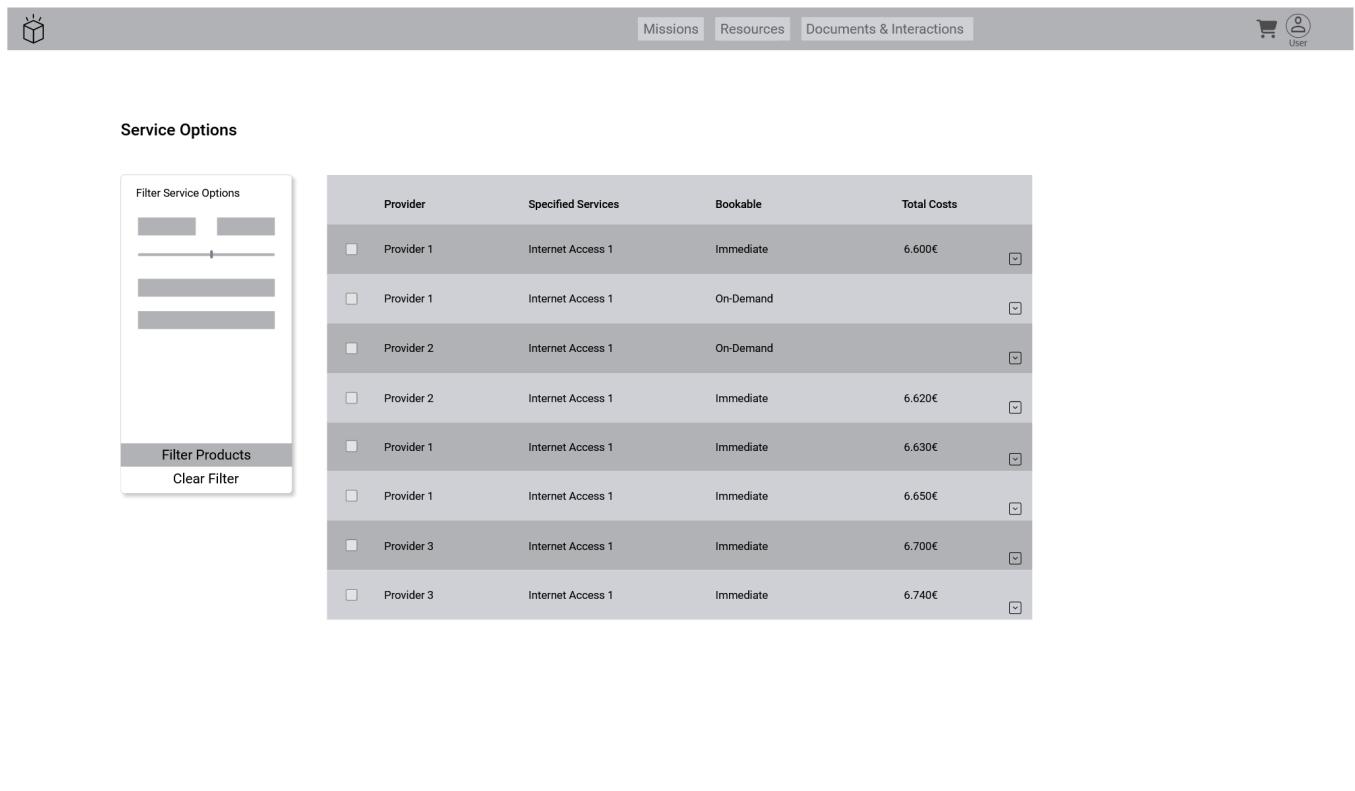
Figure 4.17: User Defined Mission - Dialog

The dialogue informs the user that the request successfully has been sent. Subsequently, the user is notified upon completion of the third-party process.

## 4.3 Offered Products

Actor	Consumed API(s)
User	PSID001 Customer Inquiry

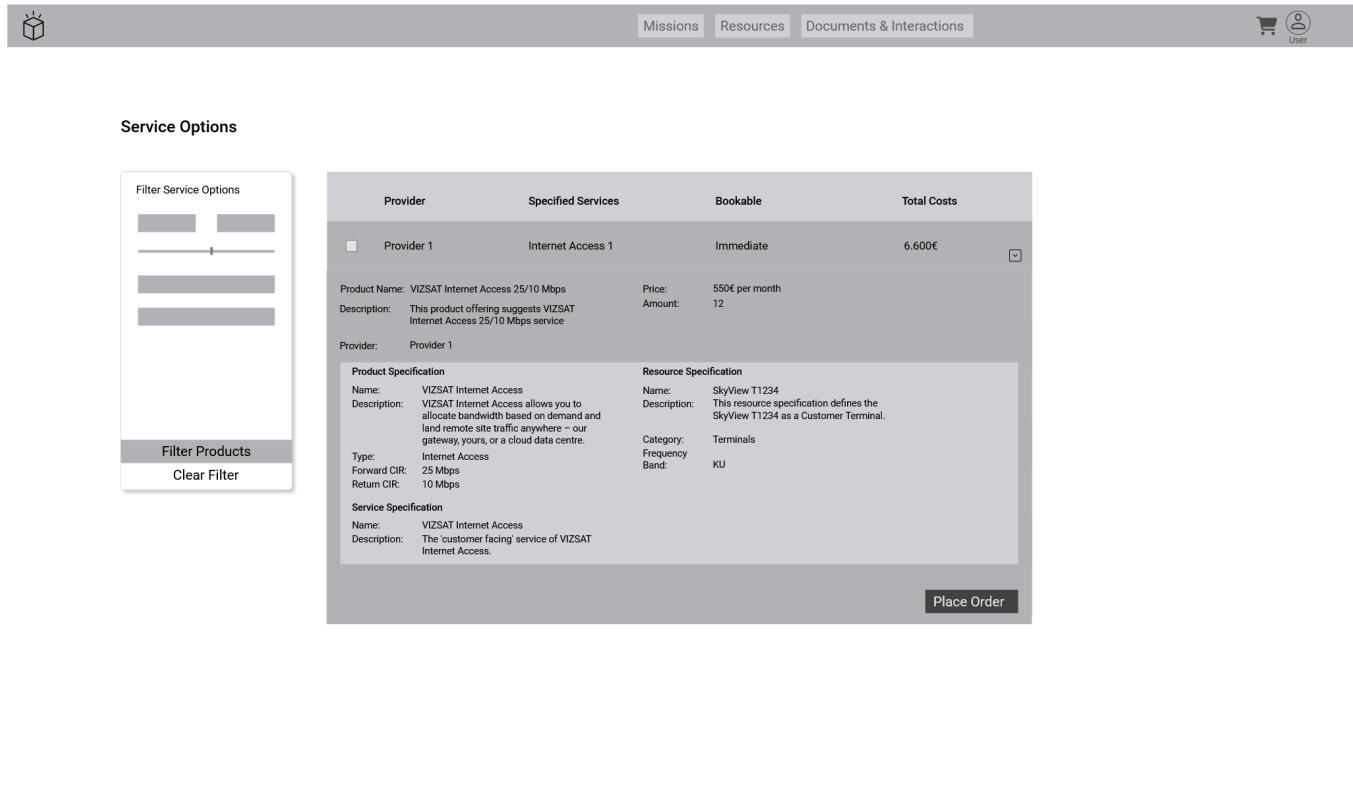
Table 4.3: Parameters of all Offered Products Views.



Provider	Specified Services	Bookable	Total Costs
Provider 1	Internet Access 1	Immediate	6.600€
Provider 1	Internet Access 1	On-Demand	
Provider 2	Internet Access 1	On-Demand	
Provider 2	Internet Access 1	Immediate	6.620€
Provider 1	Internet Access 1	Immediate	6.630€
Provider 1	Internet Access 1	Immediate	6.650€
Provider 3	Internet Access 1	Immediate	6.700€
Provider 3	Internet Access 1	Immediate	6.740€

Figure 4.18: Offered Products: User's Service Options

Once the third party described above has validated the mission specified by the user and triggered the matchmaking, the results are sent to the user. Shown above is the list of found service options.



**Service Options**

Provider	Specified Services	Bookable	Total Costs
Provider 1	Internet Access 1	Immediate	6.600€

Product Name: VIZSAT Internet Access 25/10 Mbps  
 Description: This product offering suggests VIZSAT Internet Access 25/10 Mbps service  
 Provider: Provider 1

**Product Specification**

Name: VIZSAT Internet Access  
 Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and send remote site traffic anywhere – our gateway, yours, or a cloud data centre.  
 Type: Internet Access  
 Forward CIR: 25 Mbps  
 Return CIR: 10 Mbps

**Resource Specification**

Name: SkyView T1234  
 Description: This resource specification defines the SkyView T1234 as a Customer Terminal.  
 Category: Terminals  
 Frequency Band: KU

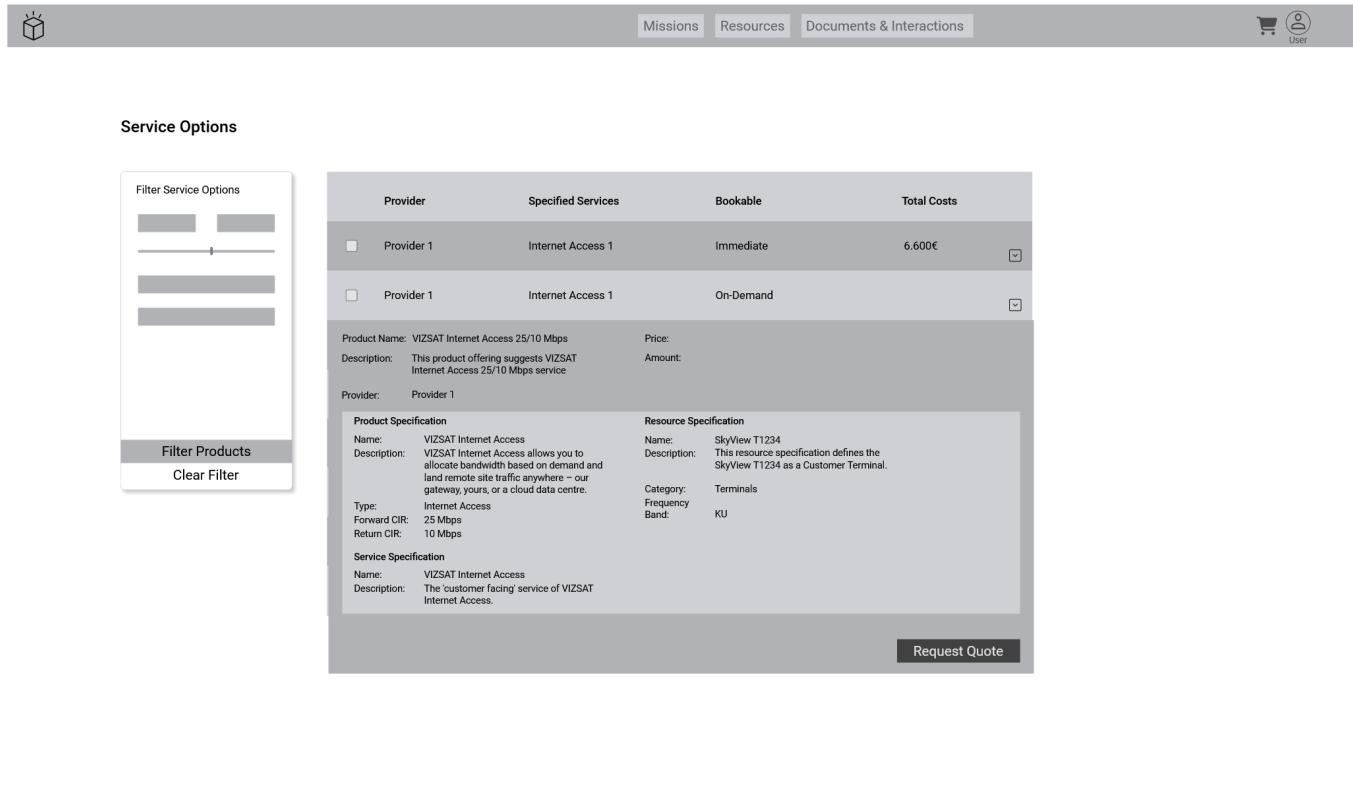
**Service Specification**

Name: VIZSAT Internet Access  
 Description: The 'customer facing' service of VIZSAT Internet Access.

**Place Order**

Figure 4.19: Offered Products: User's Service Options Details - Immediate

By clicking on the row, the detail panel opens below the row. The offering is immediately bookable. If the user decides to book it, they can click on the button in the lower right corner *Place Order*.



**Service Options**

**Filter Service Options**

**Provider**      **Specified Services**      **Bookable**      **Total Costs**

<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.600€
<input type="checkbox"/> Provider 1	Internet Access 1	On-Demand	

Product Name: VIZSAT Internet Access 25/10 Mbps  
 Description: This product offering suggests VIZSAT Internet Access 25/10 Mbps service  
 Provider: Provider 1

Resource Specification  
 Name: SkyView T1234  
 Description: This resource specification defines the SkyView T1234 as a Customer Terminal.  
 Category: Terminals  
 Frequency Band: KU

Product Specification  
 Name: VIZSAT Internet Access  
 Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and link remote site traffic anywhere – our gateway, yours, or a cloud data centre.  
 Type: Internet Access  
 Forward CIR: 25 Mbps  
 Return CIR: 10 Mbps

Service Specification  
 Name: VIZSAT Internet Access  
 Description: The 'customer facing' service of VIZSAT Internet Access.

**Request Quote**

Figure 4.20: Offered Products: User's Options Details - On-Demand

The image above shows the details of an on-demand service option. The user can trigger a *Request for Quote* (RFQ) to get an offering from the provider.

# PSI Graphical Interface Definitions



Provider	Specified Services	Bookable	Total Costs
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.600€
<input type="checkbox"/> Provider 1	Internet Access 1	On-Demand	

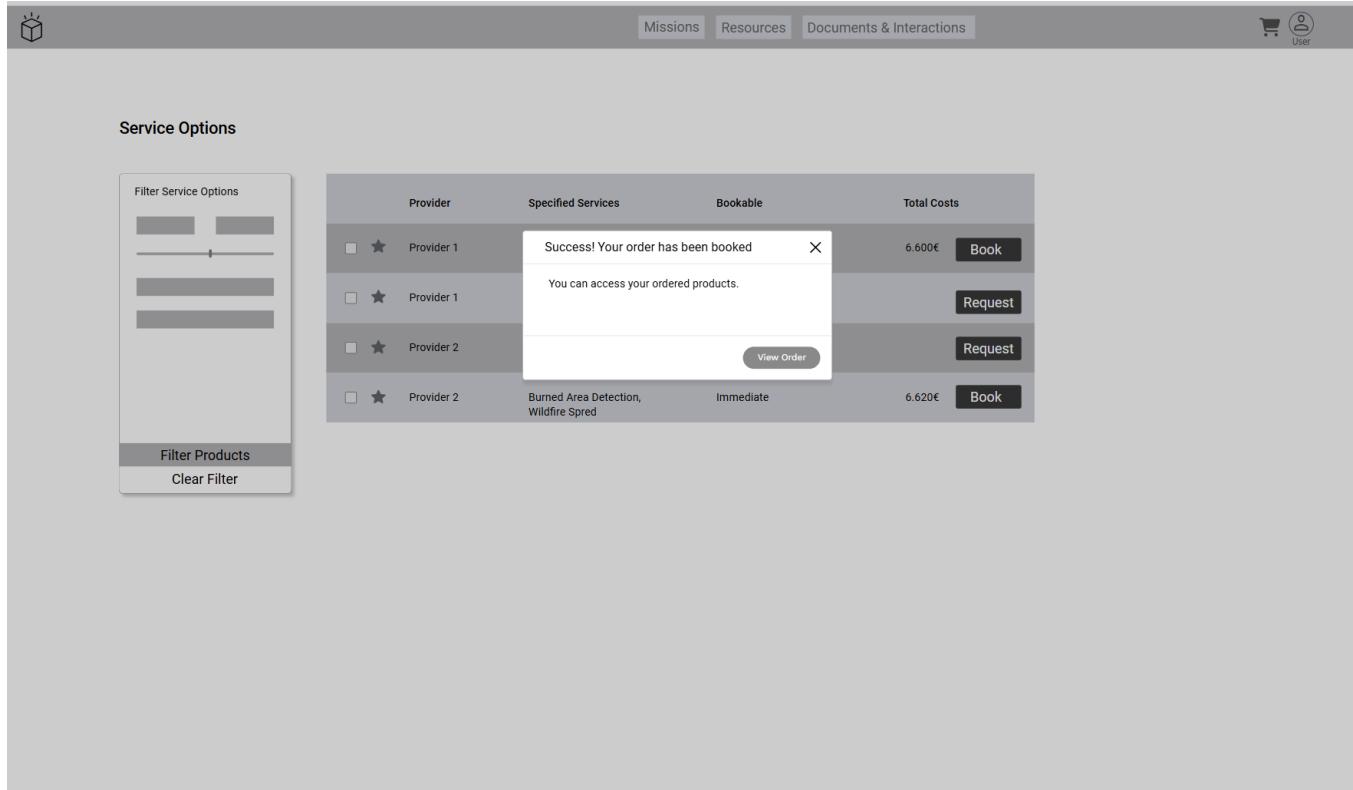
**Figure 4.21: Offered Products: RFQ Modal**

The RFQ must be confirmed by clicking the submit button to send the request to the provider.

Provider	Specified Services	Bookable	Total Costs	
<input type="checkbox"/> ★ Provider 1	Burned Area Detection, Wildfire Spred	Immediate	6.600€	<b>Book</b>
<input type="checkbox"/> ★ Provider 1	Burned Area Detection, Wildfire Spred	On-Demand		<b>Request</b>
<input type="checkbox"/> ★ Provider 2	Burned Area Detection, Wildfire Spred	On-Demand		<b>Request</b>
<input type="checkbox"/> ★ Provider 2	Burned Area Detection, Wildfire Spred	Immediate	6.620€	<b>Book</b>

**Figure 4.22: Offered Products - Earth Observation**

The product offers are not limited to SatCom products, only. By using the appropriate API, if available, any product can be integrated. The view above shows a list of offers for earth observation products. The system can also bundle products of different categories into a single offer.



The screenshot shows a user interface for managing service offers. At the top, there is a navigation bar with icons for Missions, Resources, Documents & Interactions, and a shopping cart icon labeled 'User'. Below the navigation bar, the main area is titled 'Service Options'.

On the left, there is a sidebar titled 'Filter Service Options' containing several filter buttons and a 'Filter Products' button at the bottom.

The main content area displays a table of service offers:

Provider	Specified Services	Bookable	Total Costs	
<input type="checkbox"/> ★ Provider 1	Success! Your order has been booked	X	6.600€	<b>Book</b>
<input type="checkbox"/> ★ Provider 1	You can access your ordered products.			<b>Request</b>
<input type="checkbox"/> ★ Provider 2		<b>View Order</b>		<b>Request</b>
<input type="checkbox"/> ★ Provider 2	Burned Area Detection, Wildfire Spred	Immediate	6.620€	<b>Book</b>

A modal dialog box is open over the second row, indicating a successful booking with the message: "Success! Your order has been booked" and "You can access your ordered products." It includes a close button "X" and a "View Order" button.

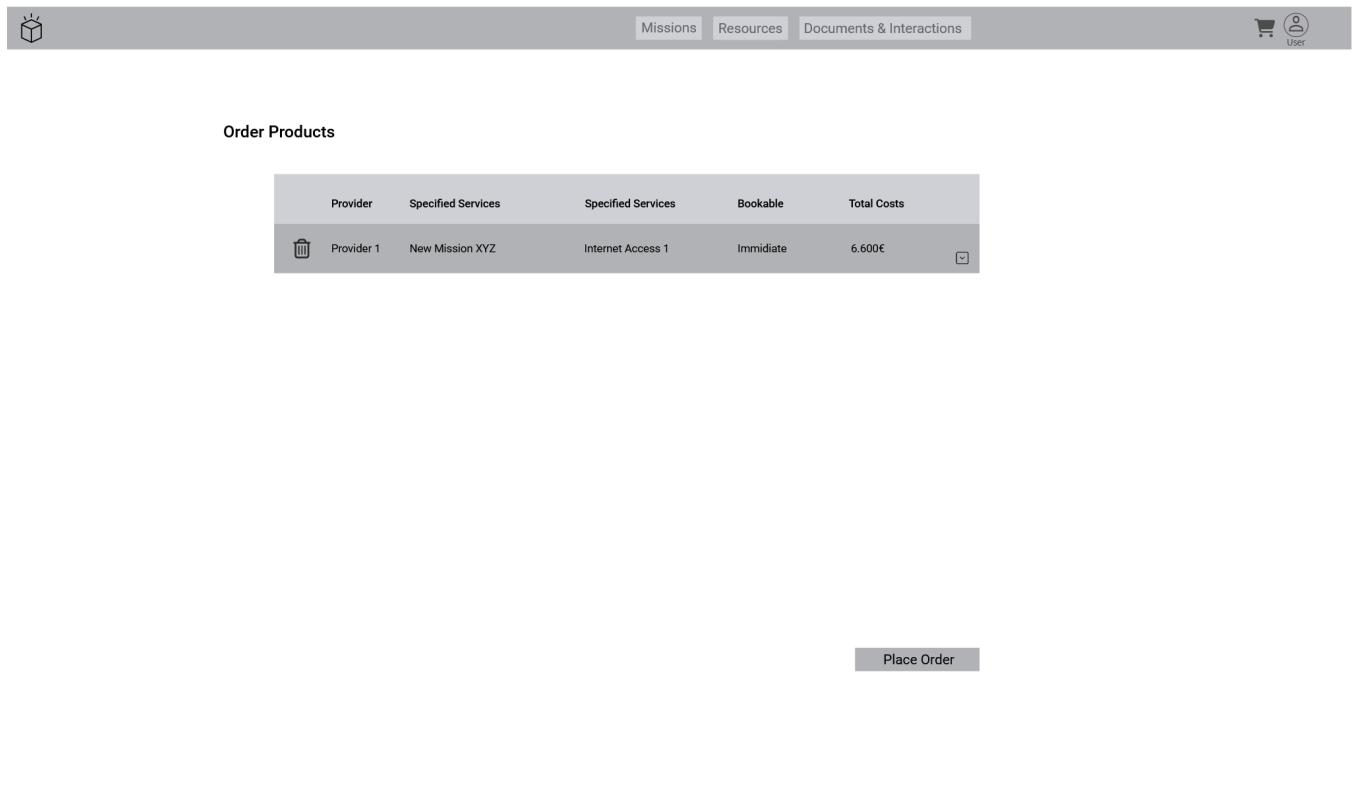
**Figure 4.23: Offered Products - Booking**

When the user decides to book an offer by clicking the “book” button, a dialog informs about the success of the booking - as shown above.

## 4.4 Shopping Cart

Actor	Consumed API(s)
User	PSID663 Shopping Cart

Table 4.4: Parameters of the Shopping Cart View.



Provider	Specified Services	Specified Services	Bookable	Total Costs
Provider 1	New Mission XYZ	Internet Access 1	Immediate	6.600€

Figure 4.24: Shopping Cart

The shopping cart stores all order items, ready to be ordered. For example, when the user selects a service option, which is immediately bookable, the order item will be stored in the shopping cart. They can store several order items there and checkout all at once.

## 4.5 Documents & Interactions

### 4.5.1 Outgoing Customer Inquiries

Actor	Consumed API(s)
User	PSID001 Customer Inquiry

Table 4.5: Parameters of all RFQ Views.

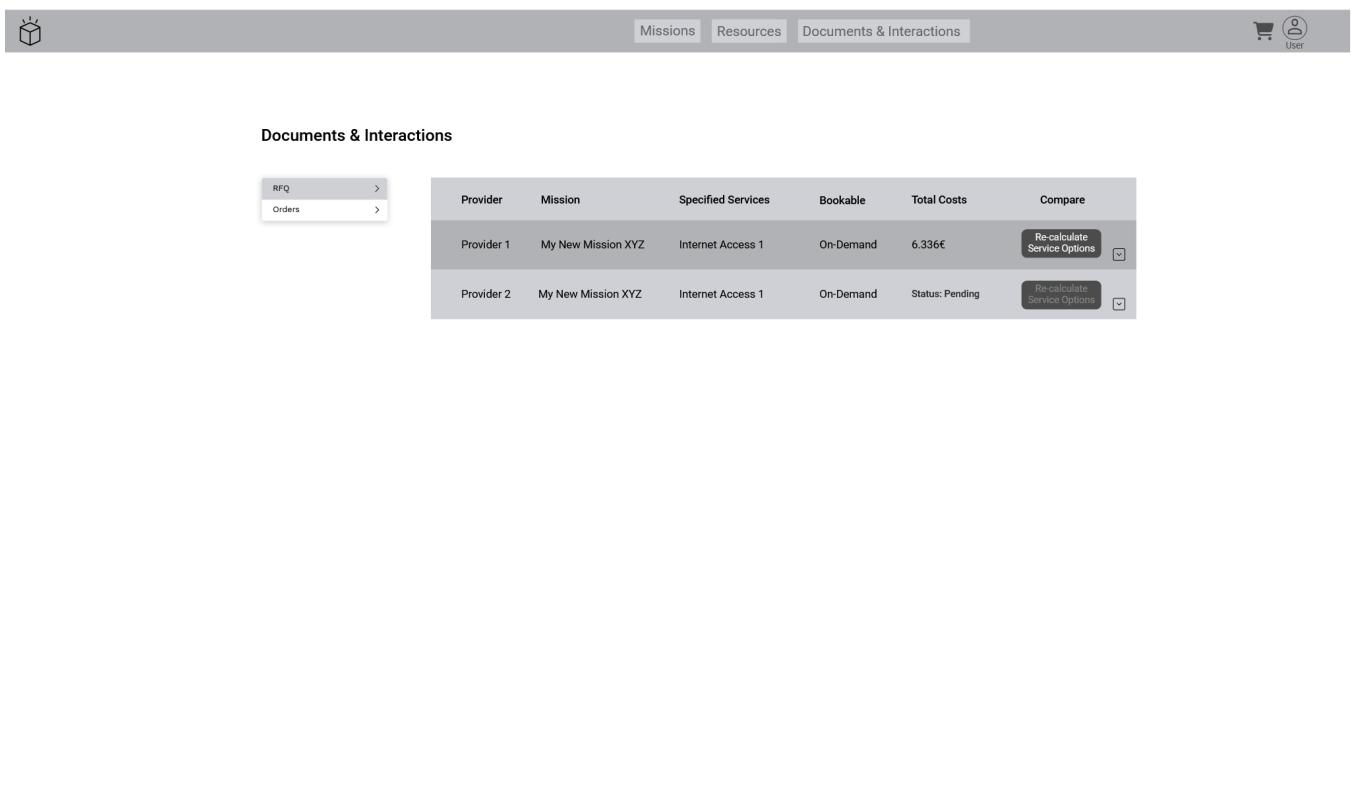
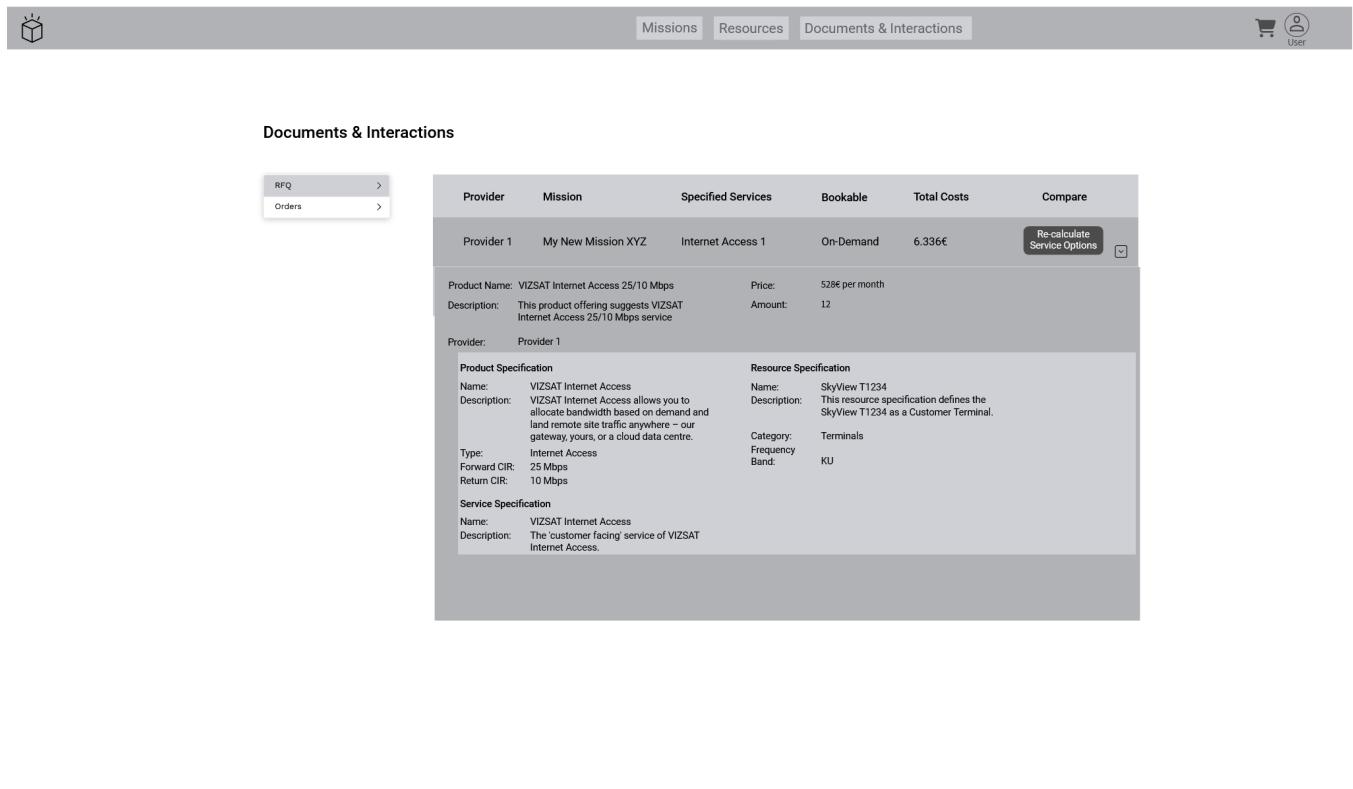


Figure 4.25: Documents & Interactions: Request for Quote

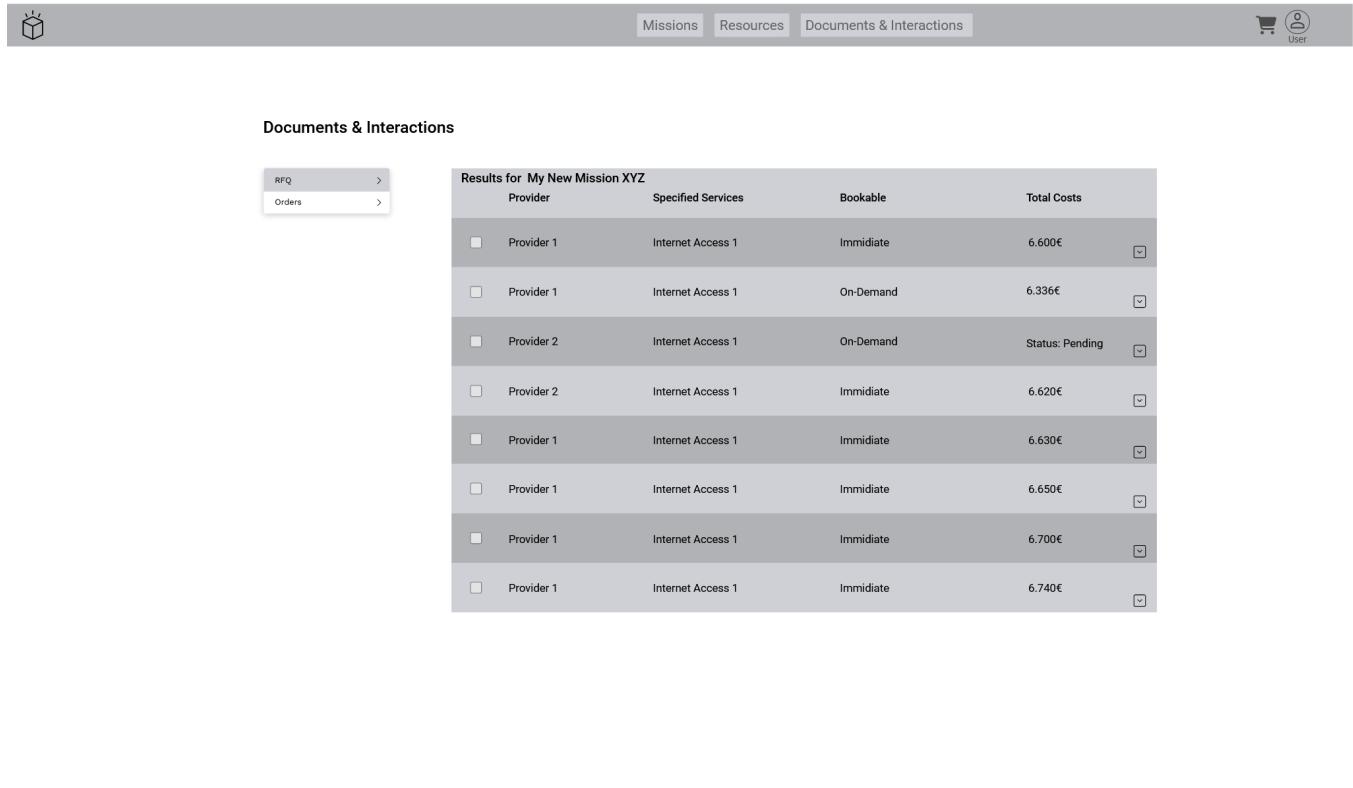
The ‘Documents & Interactions’ area provides all views concerning RFQs and orders. This can be navigated by the side navigation on the left. The image above shows the requested quotes. In the ‘Total Costs’ column, the initial value should be ‘status: pending’ because the provider did not answer the request yet. As soon as the provider makes an offering, it shall show the offered price and the button ‘Re-calculate Service Options’ is enabled. This gives the opportunity to trigger the matchmaking process again with the same parameters entered for the first calculation.



Provider	Mission	Specified Services	Bookable	Total Costs	Compare																																		
Provider 1	My New Mission XYZ	Internet Access 1	On-Demand	6.336€	<button>Re-calculate Service Options</button>																																		
Product Name: VIZSAT Internet Access 25/10 Mbps		Price:	528€ per month																																				
Description: This product offering suggests VIZSAT Internet Access 25/10 Mbps service		Amount:	12																																				
<p>Provider: Provider 1</p> <table border="1"> <thead> <tr> <th colspan="2">Product Specification</th> <th colspan="2">Resource Specification</th> </tr> </thead> <tbody> <tr> <td>Name:</td> <td>VIZSAT Internet Access</td> <td>Name:</td> <td>SkyView T1234</td> </tr> <tr> <td>Description:</td> <td>VIZSAT Internet Access allows you to allocate bandwidth based on demand and land remote site traffic anywhere – our gateway, yours, or a cloud data centre.</td> <td>Description:</td> <td>This resource specification defines the SkyView T1234 as a Customer Terminal.</td> </tr> <tr> <td>Type:</td> <td>Internet Access</td> <td>Category:</td> <td>Terminals</td> </tr> <tr> <td>Forward CIR:</td> <td>25 Mbps</td> <td>Frequency Band:</td> <td>KU</td> </tr> <tr> <td>Return CIR:</td> <td>10 Mbps</td> <td colspan="2"></td> </tr> <tr> <td colspan="4"> <p>Service Specification</p> <table border="1"> <thead> <tr> <th colspan="2">Service Specification</th> </tr> </thead> <tbody> <tr> <td>Name:</td> <td>VIZSAT Internet Access</td> </tr> <tr> <td>Description:</td> <td>The 'customer facing' service of VIZSAT Internet Access.</td> </tr> </tbody> </table> </td> </tr> </tbody> </table>						Product Specification		Resource Specification		Name:	VIZSAT Internet Access	Name:	SkyView T1234	Description:	VIZSAT Internet Access allows you to allocate bandwidth based on demand and land remote site traffic anywhere – our gateway, yours, or a cloud data centre.	Description:	This resource specification defines the SkyView T1234 as a Customer Terminal.	Type:	Internet Access	Category:	Terminals	Forward CIR:	25 Mbps	Frequency Band:	KU	Return CIR:	10 Mbps			<p>Service Specification</p> <table border="1"> <thead> <tr> <th colspan="2">Service Specification</th> </tr> </thead> <tbody> <tr> <td>Name:</td> <td>VIZSAT Internet Access</td> </tr> <tr> <td>Description:</td> <td>The 'customer facing' service of VIZSAT Internet Access.</td> </tr> </tbody> </table>				Service Specification		Name:	VIZSAT Internet Access	Description:	The 'customer facing' service of VIZSAT Internet Access.
Product Specification		Resource Specification																																					
Name:	VIZSAT Internet Access	Name:	SkyView T1234																																				
Description:	VIZSAT Internet Access allows you to allocate bandwidth based on demand and land remote site traffic anywhere – our gateway, yours, or a cloud data centre.	Description:	This resource specification defines the SkyView T1234 as a Customer Terminal.																																				
Type:	Internet Access	Category:	Terminals																																				
Forward CIR:	25 Mbps	Frequency Band:	KU																																				
Return CIR:	10 Mbps																																						
<p>Service Specification</p> <table border="1"> <thead> <tr> <th colspan="2">Service Specification</th> </tr> </thead> <tbody> <tr> <td>Name:</td> <td>VIZSAT Internet Access</td> </tr> <tr> <td>Description:</td> <td>The 'customer facing' service of VIZSAT Internet Access.</td> </tr> </tbody> </table>				Service Specification		Name:	VIZSAT Internet Access	Description:	The 'customer facing' service of VIZSAT Internet Access.																														
Service Specification																																							
Name:	VIZSAT Internet Access																																						
Description:	The 'customer facing' service of VIZSAT Internet Access.																																						

Figure 4.26: Documents & Interactions: Request for Quote - Details

By clicking on the row, the 'details' panel of the service option is shown below the overview row.



Results for My New Mission XYZ				
	Provider	Specified Services	Bookable	Total Costs
<input type="checkbox"/>	Provider 1	Internet Access 1	Immidiate	6.600€
<input type="checkbox"/>	Provider 1	Internet Access 1	On-Demand	6.336€
<input type="checkbox"/>	Provider 2	Internet Access 1	On-Demand	Status: Pending
<input type="checkbox"/>	Provider 2	Internet Access 1	Immidiate	6.620€
<input type="checkbox"/>	Provider 1	Internet Access 1	Immidiate	6.630€
<input type="checkbox"/>	Provider 1	Internet Access 1	Immidiate	6.650€
<input type="checkbox"/>	Provider 1	Internet Access 1	Immidiate	6.700€
<input type="checkbox"/>	Provider 1	Internet Access 1	Immidiate	6.740€

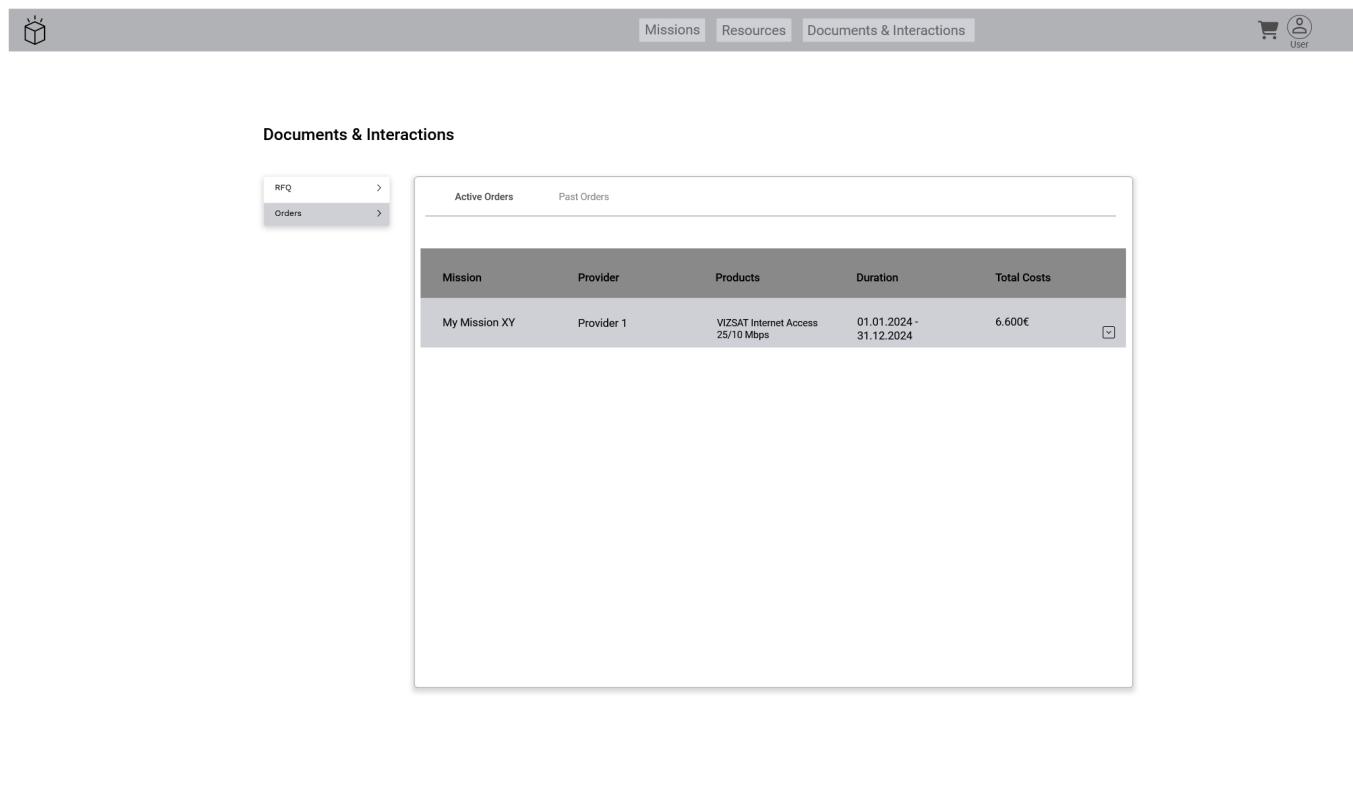
Figure 4.27: Documents & Interactions: Results after Re-calculation

The image above shows the list of service options including the requested service option.

## 4.5.2 Outgoing Product Orders

Actor	Consumed API(s)
User	PSID622 Product Ordering

Table 4.6: Parameters of all Ordered Products Views.



Mission	Provider	Products	Duration	Total Costs
My Mission XY	Provider 1	VIZSAT Internet Access 25/10 Mbps	01.01.2024 - 31.12.2024	6.600€

Figure 4.28: Documents & Interactions: Active Orders

The view for orders shows a component, where the user can easily switch between active and past orders. The image above shows the active orders.

# PSI Graphical Interface Definitions



The screenshot shows the PSI-GID interface with the 'Documents & Interactions' tab selected. On the left, there's a navigation sidebar with 'RFQ' and 'Orders' options. The main area is titled 'Past Orders' and contains a table with the following data:

Mission	Provider	Products	Duration	Total Costs
My Old Mission XY	Provider 1	VIZSAT Internet Access 25/10 Mbps	01.01.2023 - 31.12.2023	6.600€
My Old Mission 123	Provider 2	NovaSat Internet Access 25/10 Mbps	15.03.2023 - 14.09.2023	3.350€

Figure 4.29: Documents & Interactions: Past Orders

The image above shows the past orders.

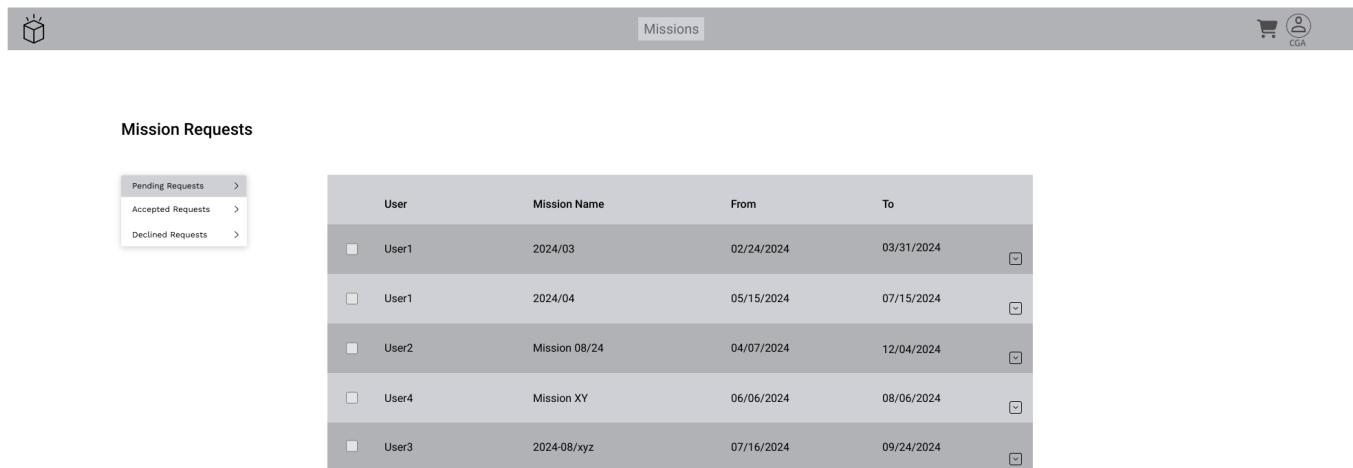
# 5 CGA

## 5.1 Distributed Matchmaking

### 5.1.1 Mission Requests

Actor	Consumed API(s)
CGA	PSID001 Customer Inquiry

Table 5.1: Parameters of all Distributed Matchmaking Views - CGA.



User	Mission Name	From	To
User1	2024/03	02/24/2024	03/31/2024
User1	2024/04	05/15/2024	07/15/2024
User2	Mission 08/24	04/07/2024	12/04/2024
User4	Mission XY	06/06/2024	08/06/2024
User3	2024-08/xyz	07/16/2024	09/24/2024

Figure 5.1: Mission Request

The CGA receives mission requests from the users, which are listed in the view above. These missions must be reviewed and the CGA can accept or decline them.

Mission Requests

User	Mission Name	From	To
User1	2024/03	02/24/2024	03/31/2024

Service Grades

Availability: Standard  
Security Level: Restricted  
Anti-Jamming: Yes

Services

Name: My Internet Access 1  
Type: Internet Access  
Zone: AOO  
Duration: 01/29/2024 - 02/28/2024  
Frequency Band: KA  
Minimum Download/Upload: 2048/1024

Name: My Internet Access 2  
Type: Internet Access  
Zone: HQ  
Duration: 01/29/2024 - 02/28/2024  
Frequency Band: KA  
Minimum Download/Upload: 2048/1024



**Decline Request** **Calculate Options**

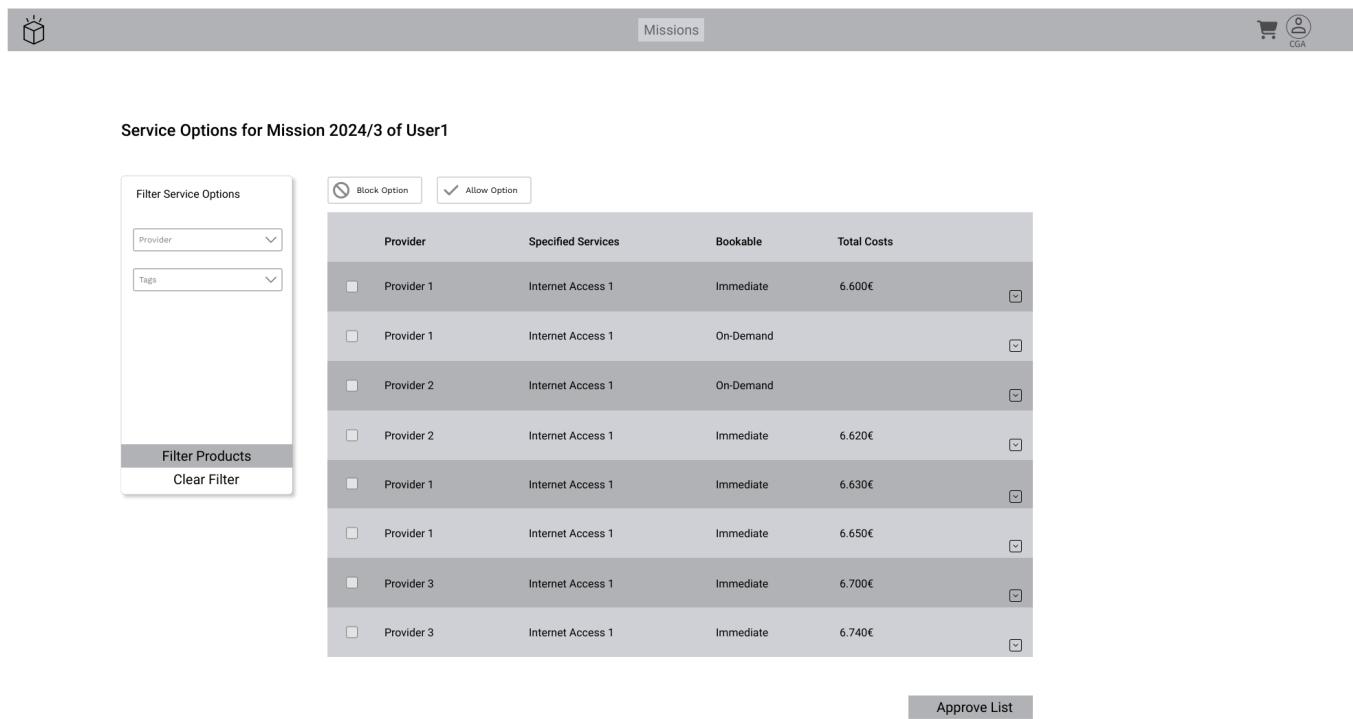
Figure 5.2: Mission Request - Details

By clicking on a row, the details' panel opens underneath. The CGA can review all data to which it has access and then decides either to decline the request or trigger the matchmaking process by clicking on the 'Calculate Options' button. Some information might be restricted and are not shown to the CGA. This is pre-filtered in the backend.

## 5.1.2 Offered Products

Actor	Consumed API(s)
CGA	PSID620 Product Catalog
CGA	PSID001 Customer Inquiry

Table 5.2: Parameters of all Offered Products Views.



Provider	Specified Services	Bookable	Total Costs
Provider 1	Internet Access 1	Immediate	6.600€
Provider 1	Internet Access 1	On-Demand	
Provider 2	Internet Access 1	On-Demand	
Provider 2	Internet Access 1	Immediate	6.620€
Provider 1	Internet Access 1	Immediate	6.630€
Provider 1	Internet Access 1	Immediate	6.650€
Provider 3	Internet Access 1	Immediate	6.700€
Provider 3	Internet Access 1	Immediate	6.740€

Figure 5.3: Offered Products

After triggering the matchmaking, the results are shown in a list. The checkbox on the left side in the row can be checked, which enables the 'Block Option' and 'Allow Option' buttons above.

Service Options for Mission 2024/3 of User1

Filter Service Options
 Block Option     Allow Option

Provider	Specified Services	Bookable	Total Costs
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.600€
Product Name: VIZSAT Internet Access 25/10 Mbps Description: This product offering suggests VIZSAT Internet Access 25/10 Mbps service Provider: Provider 1			
<b>Product Specification</b> Name: VIZSAT Internet Access Description: VIZSAT Internet Access allows you to allocate bandwidth based on demand and land remote site traffic anywhere – our gateway, yours, or a cloud data centre. Type: Internet Access Forward CIR: 25 Mbps Return CIR: 10 Mbps		<b>Resource Specification</b> Name: SkyView T1234 Description: This resource specification defines the SkyView T1234 as a Customer Terminal. Category: Terminals Frequency: KU	
<b>Service Specification</b> Name: VIZSAT Internet Access Description: The 'customer facing' service of VIZSAT Internet Access			

Figure 5.4: Offered Products - Details

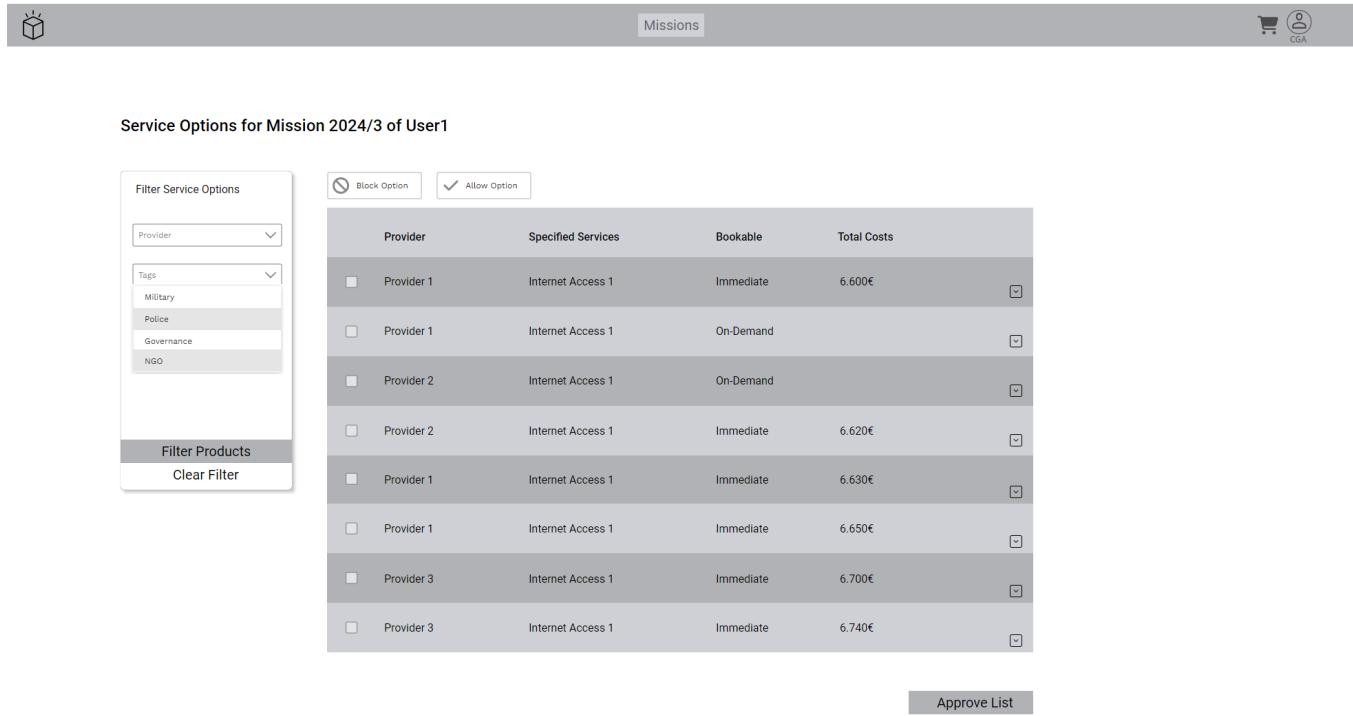
Clicking a row opens the details' panel below.

Service Options for Mission 2024/3 of User1

Filter Service Options
 Block Option     Allow Option

Provider	Specified Services	Bookable	Total Costs
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.600€
<input type="checkbox"/> Provider 1	Internet Access 1	On-Demand	
<input type="checkbox"/> Provider 2	Internet Access 1	On-Demand	
<input type="checkbox"/> Provider 2	Internet Access 1	Immediate	6.620€
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.630€
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.650€
<input type="checkbox"/> Provider 3	Internet Access 1	Immediate	6.700€
<input type="checkbox"/> Provider 3	Internet Access 1	Immediate	6.740€

Figure 5.5: Offered Products - Filter Results 1



Provider	Specified Services	Bookable	Total Costs
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.600€
<input type="checkbox"/> Provider 1	Internet Access 1	On-Demand	
<input type="checkbox"/> Provider 2	Internet Access 1	On-Demand	
<input type="checkbox"/> Provider 2	Internet Access 1	Immediate	6.620€
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.630€
<input type="checkbox"/> Provider 1	Internet Access 1	Immediate	6.650€
<input type="checkbox"/> Provider 3	Internet Access 1	Immediate	6.700€
<input type="checkbox"/> Provider 3	Internet Access 1	Immediate	6.740€

Figure 5.6: Offered Products - Filter Results 2

The list can be filtered using the component on the left. In this example, it can be filtered by provider and by tags, as can be seen in the two images above. Then, the CGA can use the checkmarks in the rows to enable the buttons to block or allow product offers. As soon as the CGA has marked at least one option as allowed, the list can be approved with the button underneath the list: 'Approve List'. Finally, all allowed option are visible to the user after the CGA has completed this process.

# 6 Mission Management ODA Component

The development of a mission management ODA component, which we are aiming to publish on GitHub, is an important target for PSI. One part of it is the frontend design to give a better understanding of how this component is used by different actors. As already described in the user journey mission creation, we draw a crisis scenario, where the different actors have specific roles and use the system in different ways. For now, we describe the top level mission planning, where the actor has a governmental role, and a more specific sub-mission planning, where the actor will plan around a specific area and with certain teams. Until the end of the project, the UI-layout can still be extended and improved.

A proof-of-concept implementation will also follow.

## 6.1 Top Level Mission Planning

Actor	Consumed API(s)
User	PSID002 Mission API
User	PSID632 Party API

Table 6.1: Parameters of Top Level Mission Planning Views.

The top level mission planner defines the frame for all sub-missions. This can be done by:

- Creating templates and
- Creating main missions.

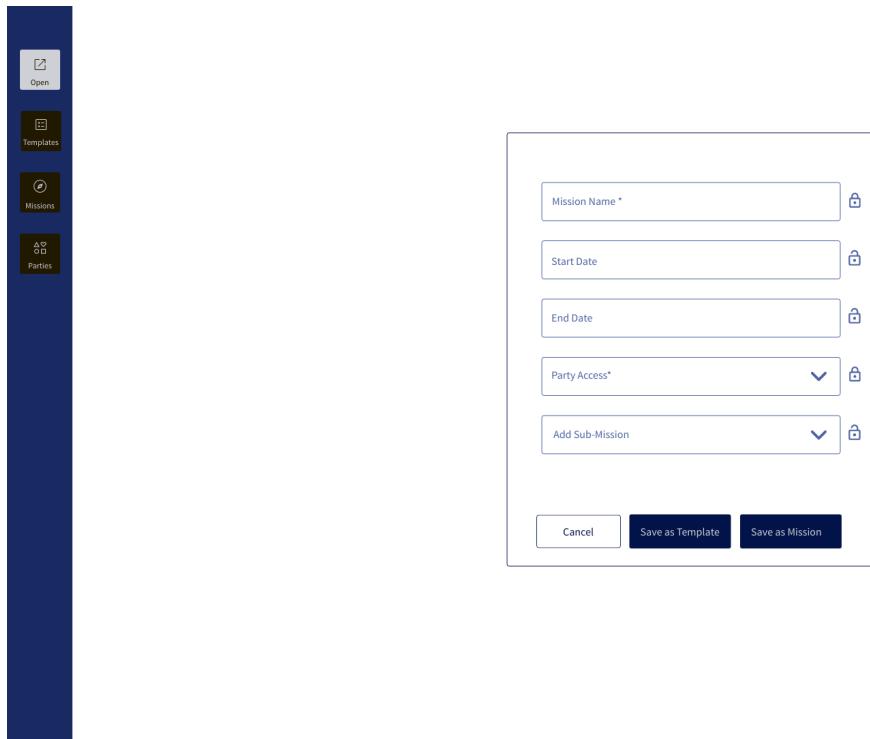


Figure 6.1: Open

The starting point in the GUI is shown in the image above. The main navigation, including

- Open
- Templates,
- Missions and
- Parties

as navigation items, is placed on the left. In this case, the user presses the “Open” button. Then, a sub-navigation opens to the right of the main navigation, showing various possible items to open, sorted by category. The operator wants to open a blank file and presses “Open Blank”.



The screenshot shows the PSI Graphical Interface Definitions application's user interface. On the left, there is a vertical sidebar with four buttons: 'Open' (highlighted in light blue), 'Templates', 'Missions', and 'Parties'. The main area displays a form titled 'Open Blank' with the following fields:

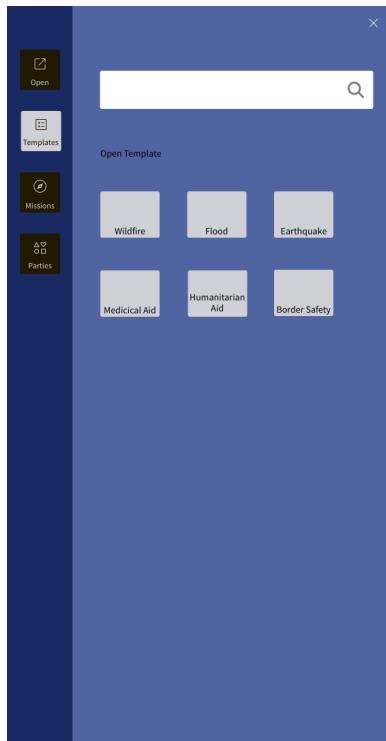
- Mission Name \* (input field with a lock icon)
- Start Date (input field with a lock icon)
- End Date (input field with a lock icon)
- Party Access\* (dropdown menu with a lock icon)
- Add Sub-Mission (dropdown menu with a lock icon)

At the bottom of the form are three buttons: 'Cancel', 'Save as Template' (disabled, greyed out), and 'Save as Mission'.

**Figure 6.2: Open Blank**

After that, a blank form is displayed and the sub-navigation closed. It can be reopened when the user clicks on the “Open” button of the main navigation, again.

After the user filled in the form, at least the required fields, it can be saved either as template or as mission. A mission needs a start date and an end date, in addition to a name and a Party Access selection. This can be communicated to the user by only enabling the “Save as Mission” button, when all required fields are populated. The lock icons indicate whether or not the parameters are editable within a sub-mission. The “Access Parties” defines, which parties have access rights to the mission or template and who can create sub-missions. Existing missions can be added as sub-missions, but the values must follow the main mission frame. The detailed information of a sub-mission, like individual members of the teams attached, are not accessible from the main mission. The need-to-know principle is applied.



**Figure 6.3: Open Template**

The image above shows the sub-navigation for the template management. All existing templates are listed, and a search bar is provided to search for a specific template. Here, only a few templates exist, but this number will grow with time. The operator chooses the template for wildfire.

Template	Wildfire	🔒
Start Date		🔒
End Date		🔒
Party Access	Organisation Alpha	Organisation Beta
Add Sub-Templates	▼	
<input type="button" value="Cancel"/> <input type="button" value="Save as Template"/> <input type="button" value="Save as Mission"/>		

**Figure 6.4: Open template Wildfire**

The template for wildfire was created earlier. The operator can change any value or enter dates before saving the template as a mission.

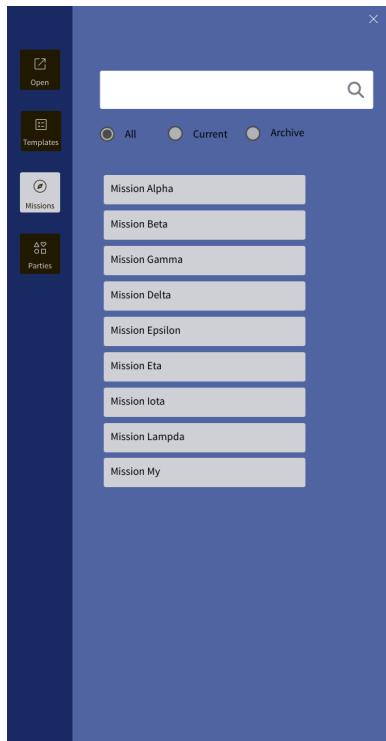


Figure 6.5: Open Mission

The image above shows the sub-navigation for the mission management. All existing missions are listed, and a search bar is provided to search for a specific template. Here, only a few missions exist, but this number will grow with time. The list can show all missions, only the current missions or the missions in the archive. The operator chooses to open “Mission Alpha”.

Figure 6.6: Open Mission Wildfire

The operator can further fill the mission form. The category can be set, party access can be managed and submissions can be added. The operator can enable the area definition. This can be seen in the next image.

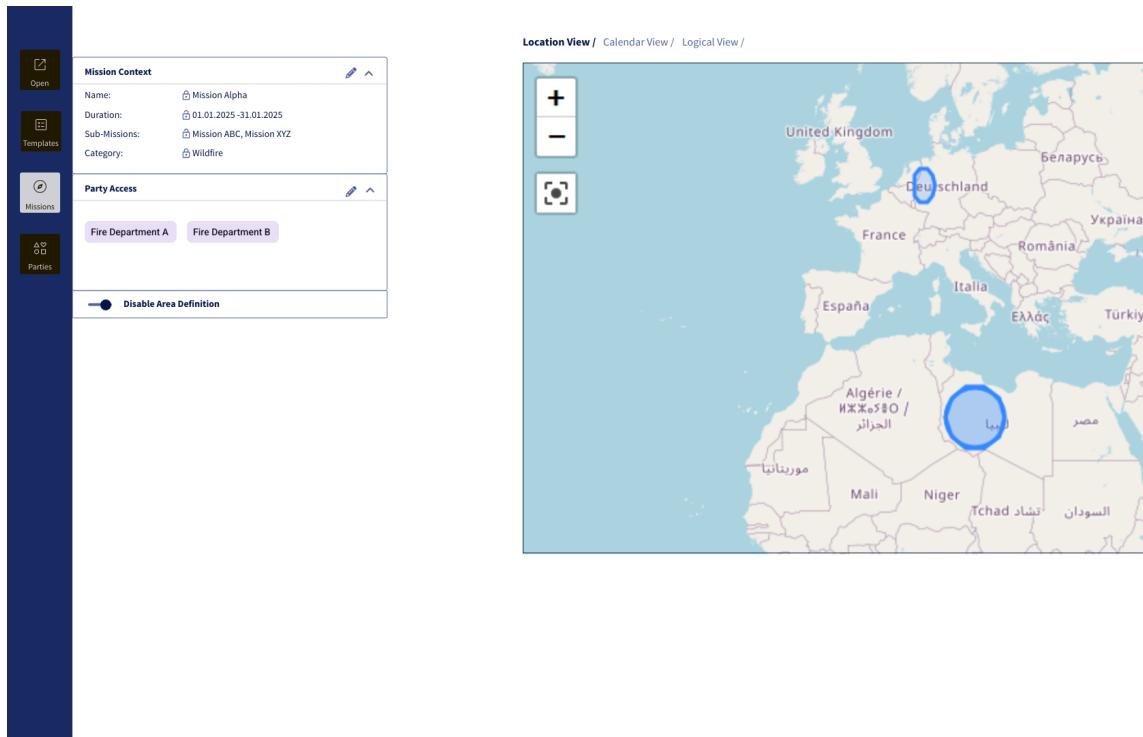


Figure 6.7: Enable Area Definition

The mission data display shifts to the left in order to give the map component the required space. The sub-menu indicates the view on the mission, which will be further described in the chapter Sub-Mission Planning.



Organisation Alpha
Organisation Beta
Organisation Gamma
Organisation Delta
Organisation Epsilon
Organisation Eta
Organisation Iota
Organisation Lampa
Organisation My

Figure 6.8: Open Party

The image above shows the sub-navigation for the party management. All existing parties are listed, and a search bar is provided to search for a specific party. Here, only a few parties exist, but this number will grow with time.

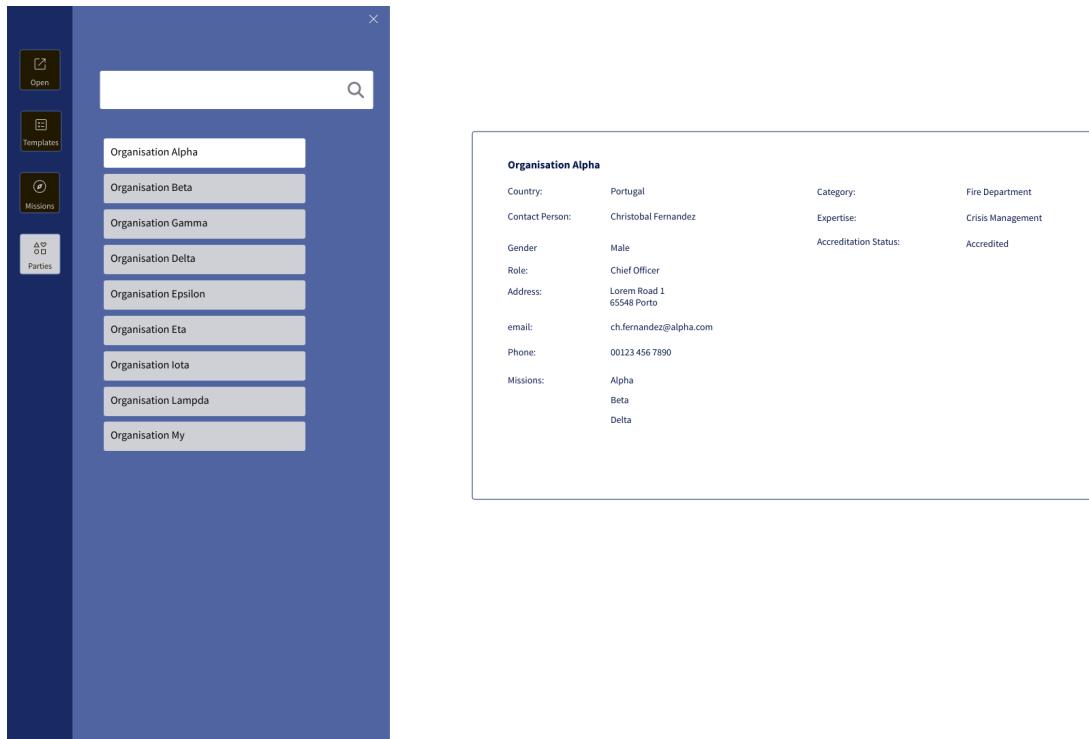


Figure 6.9: Open Party Organisation A

Selecting a party from the list opens a card, which displays all detailed information. This view is read only, since the party management is out of scope of the mission management component.

## 6.2 Sub-Mission Planning

Actor	Consumed API(s)
User	PSID002 Mission API
User	PSID001 Customer Inquiry

Table 6.2: Parameters of Sub-Missions Planning Views.

Sub-missions are part of a main mission, which builds the frame of all sub-missions. Some values may be locked by the main mission and cannot be changed within the sub-mission, such as "category". The start and end of a sub-mission must be between the start and end of the main mission. A sub-mission can include other sub-missions.

The creation of a sub-mission follows the same procedure already described in the previous section [Top Level Mission Planning](#).

Figure 6.10: Open Mission ABC

The image above shows a view on the sub-mission “Mission ABC”. Mission data are displayed on the left and can also be adjusted from here. To specify services, the operator goes to “Service needs” and presses the pencil icon.

Figure 6.11: Add Service

A dialogue pops up, which offers a list of services. The operator can select the required services and save the selection.

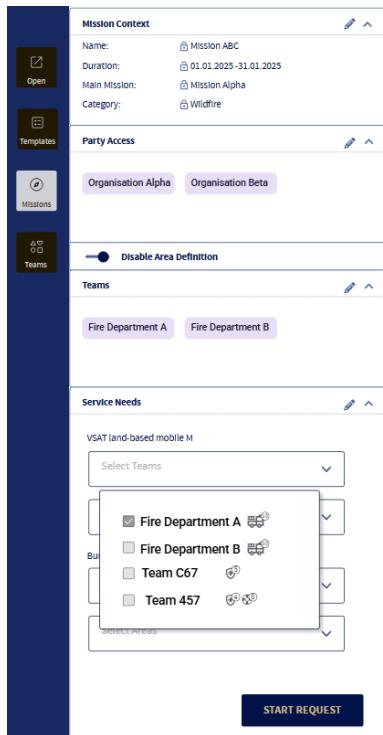
Figure 6.12: Service Filter

The list can be filtered by tags. When clicking on the “Tags” field, a list of filter tags appears in the drop-down. The filtered results will be shown and after selecting services and saving the selection, the dialogue will be closed.

Figure 6.13: Mission Services

After adding the services, they are displayed underneath “Service Needs” on the left. Below each service, input fields enable the operator to assign the service to teams and areas. While the areas are required, teams are

optional. The button “Start Request” will send the request to the inquiry API.



Mission Context

Name: Mission ABC  
Duration: 01.01.2025-31.01.2025  
Main Mission: Mission Alpha  
Category: Wildfire

Party Access

Organisation Alpha Organisation Beta

Disable Area Definition

Teams

Fire Department A Fire Department B

Service Needs

VSAT land-based mobile M

Select Teams

- Fire Department A
- Fire Department B
- Team C67
- Team 457

Select Areas

START REQUEST

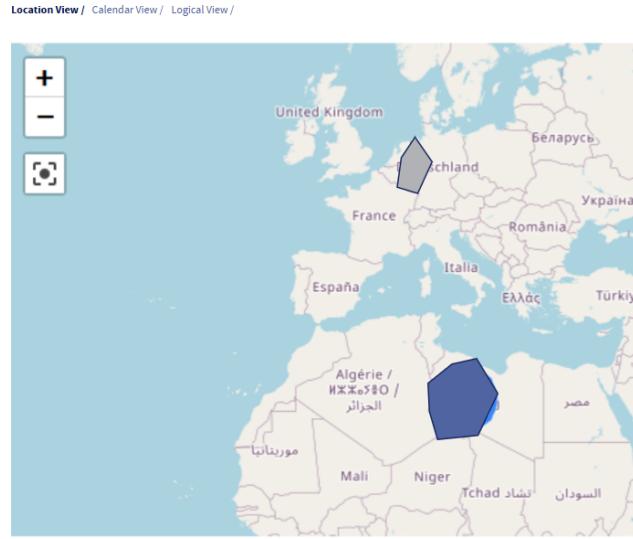
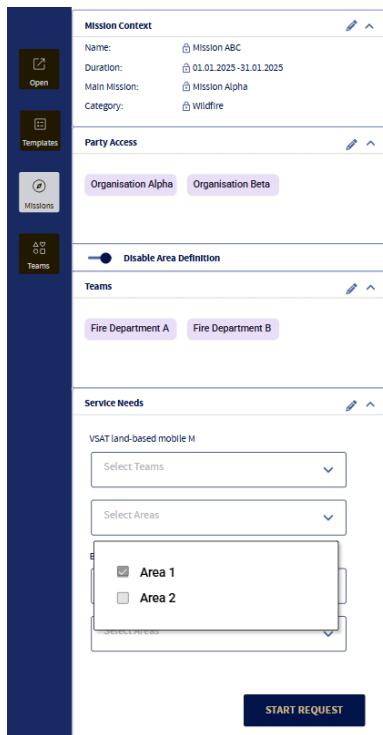


Figure 6.14: Assign Service to Team

When clicking on the drop-down “Select Teams” the operator can select teams from a list.



Mission Context

Name: Mission ABC  
Duration: 01.01.2025-31.01.2025  
Main Mission: Mission Alpha  
Category: Wildfire

Party Access

Organisation Alpha Organisation Beta

Disable Area Definition

Teams

Fire Department A Fire Department B

Service Needs

VSAT land-based mobile M

Select Teams

Select Areas

- Area 1
- Area 2

Select Areas

START REQUEST



Figure 6.15: Assign Service to Area

When clicking on the drop-down “Select Area” the operator can select the area from a list.

**Mission Context**

- Name: Mission ABC
- Duration: 01.01.2025 - 31.01.2025
- Main Mission: Mission Alpha
- Category: Wildfire

**Party Access**

- Organisation Alpha
- Organisation Beta

**Teams**

- Fire Department A
- Fire Department B

**Service Needs**

VSAT land-based mobile M

- Select Teams
- Select Areas

**Burned Area Detection**

- Select Teams
- Select Areas

**Location View** / Calendar View / Logical View /

Figure 6.16: Advanced Service Settings

The operator can enable the configuration of advanced service attributes. After the operator toggled the switch “Show Advanced Settings” underneath the input for area selection, more fields are displayed to the user. That allows the operator to manipulate the template-based value of e.g. data rates. The advanced settings shown here are just an example and can be different for other service types.

**Mission Context**

- Name: Mission ABC
- Duration: 01.01.2025 - 31.01.2025
- Main Mission: Mission Alpha
- Category: Wildfire

**Party Access**

- Organisation Alpha
- Organisation Beta

**Teams**

- Fire Department A
- Fire Department B

**Service Needs**

VSAT land-based mobile M

- Select Teams
- Select Areas

**Burned Area Detection**

- Select Teams
- Select Areas

**Show Advanced Settings**

**START REQUEST**

**Location View** / Calendar View / Logical View /

Figure 6.17: Mission View - Location

A mission can be looked at from different viewpoints:

- location view,
  - calendar view and
  - logical view.

The operator can switch views by using the sub-navigation above the map. See the image above.

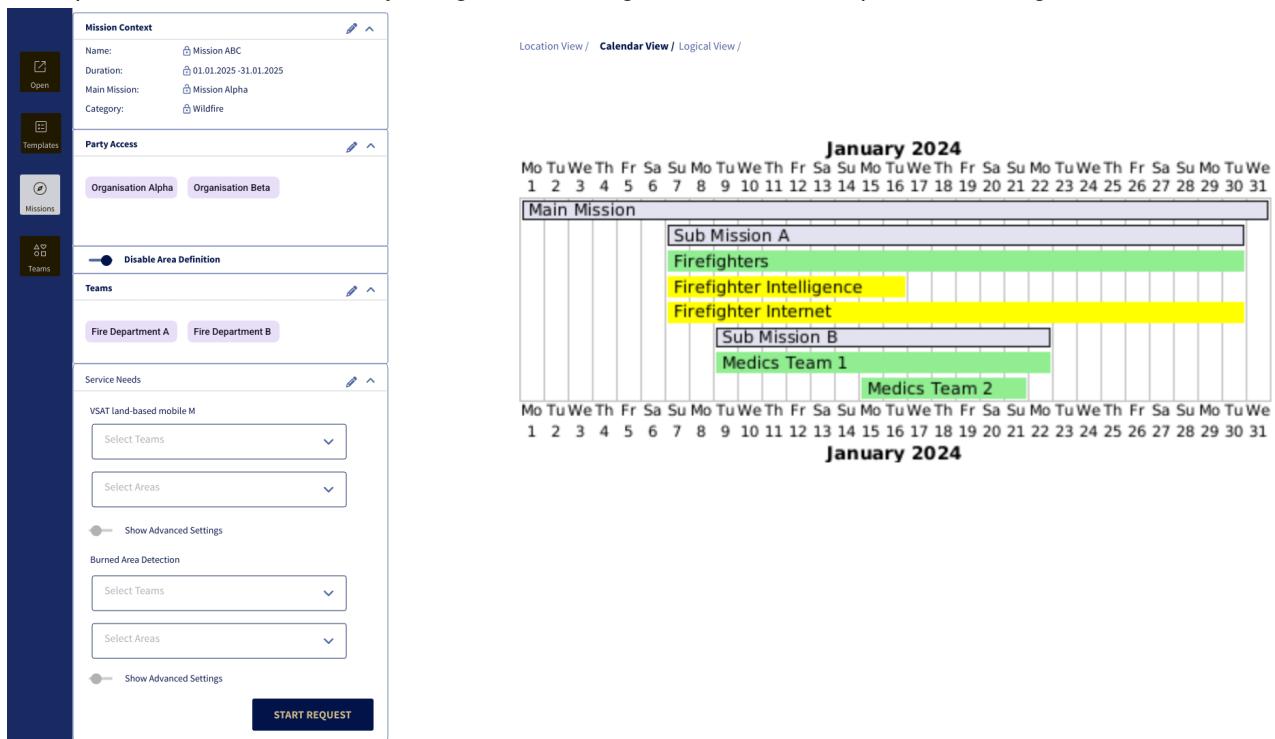
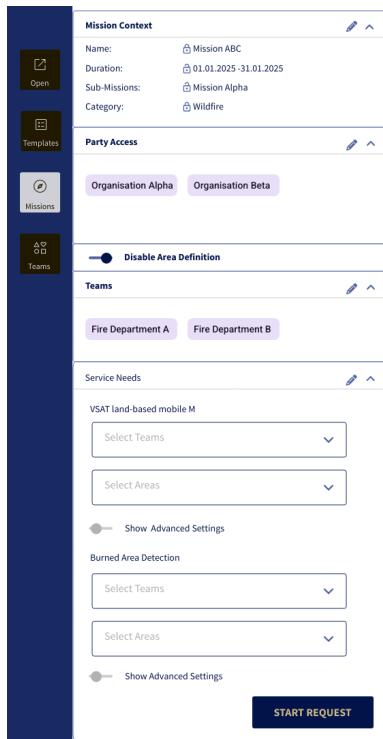


Figure 6.18: Mission View - Calendar

The image above shows the calendar view, which will be realised by a Gantt chart. Here, the operator can get an overview of the start and end dates of sub-missions or team assignments.



The screenshot shows the logical view of a mission. On the left, there's a sidebar with icons for Open, Templates, Missions, and Teams. The main area has tabs for Mission Context, Party Access, Teams, and Service Needs. Under Mission Context, details are provided for Mission ABC (Name: Mission ABC, Duration: 01.01.2025-31.01.2025, Sub-Missions: Mission Alpha, Category: Wildfire). Under Party Access, parties are listed as Organisation Alpha and Organisation Beta. Under Teams, Fire Department A and Fire Department B are listed. Under Service Needs, VSAT land-based mobile M is selected, with dropdowns for Select Teams and Select Areas. There are also sections for Disable Area Definition and Burned Area Detection, each with dropdowns for Select Teams and Select Areas. A 'START REQUEST' button is at the bottom.

Location View / Calendar View / Logical View /

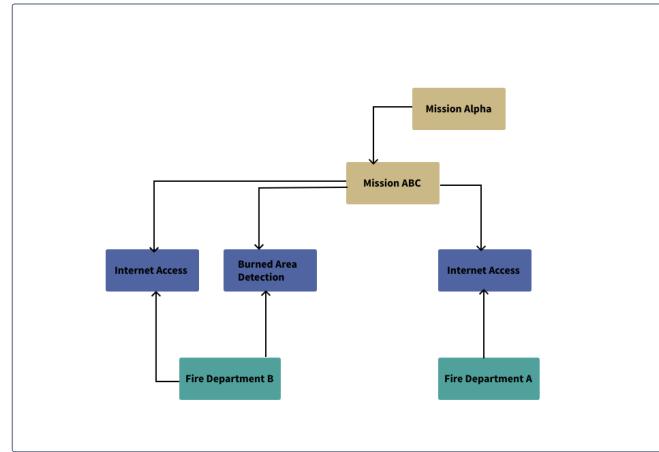
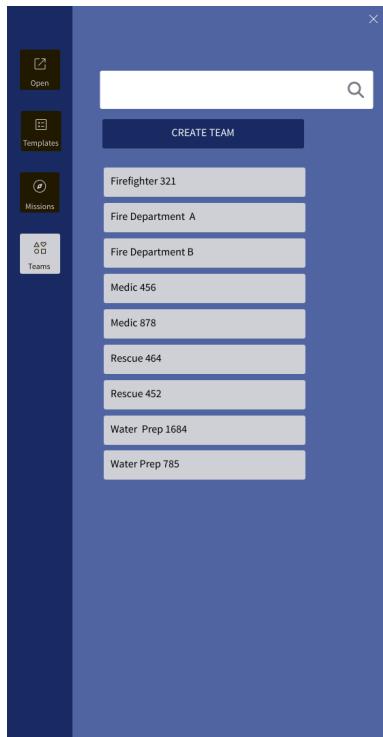


Figure 6.19: Mission View - Logical

The image above shows the logical view. It shows the relations between missions, services, teams etc. in a node diagram.



The screenshot shows the sub-navigation for team management. On the left, there's a sidebar with icons for Open, Templates, Missions, and Teams. The main area displays a list of teams under the heading 'CREATE TEAM'. The teams listed are: Firefighter 321, Fire Department A, Fire Department B, Medic 456, Medic 878, Rescue 464, Rescue 452, Water Prep 1684, and Water Prep 785. A search bar is located at the top of the list.

Figure 6.20: Teams

The image above shows the sub-navigation for the team management. All existing teams are listed, and a search bar is provided to search for a specific team.

Firefighter 321			
Country:	Portugal	Category:	Fire Department
Contact Person:	Chrisitna Luna	Expertise:	Crisis Management
Gender:	Female	Accreditation Status:	Accredited
Role:	Chief Officer		
Address:	Loren Road 1 65548 Porto		
email:	ch.luna@fire.com		
Phone:	00123 456 7890		
Mission:	ABC		
Team Size:	9		
Resources:	Resource A, ResourceB		

Figure 6.21: Open Team

Selecting a team from the list opens a card, which displays detailed information. Teams are seen and treated as resources. This view is read only, since the team management is out of scope of the mission management component.

**Last Page of Document**