



KITE PLATFORM

# User manual for customers

Version 11.1.0

Kite Platform team

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Public use

 Telefónica Tech develops this service



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## 2 Document history

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Version	Date	Changes
3.1.0	23/12/2011	<p>New authentication mechanism based on two factor authentication.</p> <p>New incoming SMS filtering service (only available to Movistar Spain and its leadings OBs as well as Telefónica Mexico)</p> <p>New reports: "Daily API transaction activity" and "Daily network registration failure".</p> <p>Additional columns in consumption and expense detailed reports (Internal ID, Termination reason, Radio technology, Unique ID)</p> <p>New expiration period for daily consumption and expense reports: 4 months</p> <p>New advanced search for users allowing searching for username and/or email.</p> <p>New annex (ii) with the presence values meaning.</p>
3.2.0	12/06/2017	<p>New "Dashboard" for Customers (Homepage).</p> <p>Quick search feature in SIM Inventory.</p> <p>New LTE flag in Commercial plans.</p> <p>New behaviour for SIM Inventory Export option.</p> <p>NB-IoT (Narrow Band IoT) support in detailed consumption and expense reports.</p> <p>Improvements on pre-bill listing and buttons layout.</p>
3.2.0	30/08/2017	<p>Grouping criteria "Provision date" and "Activation date" have been removed for performance reasons.</p>
3.3.0	23/11/2017	<p>Commitment levels management</p> <p>Device management for Customers</p> <p>Data pool overage barring</p> <p>PIN and PUK info included in SIM details</p> <p>RAT Type added in SIM Inventory and SIM details</p> <p>Audit log in SIM details</p> <p>New retired subscription report</p> <p>Network reset (Cancel location) available to Customers (only for UK)</p> <p>New user roles</p>
3.3	12/02/2018	<p>Minor corrections regarding:</p> <p>Device management.</p> <p>SIM inventory file import.</p>
4.0	16/03/2018	<p>Commitment levels: new "Activation grace period" commitment and reimplementation of "Minimum billable period" commitment.</p> <p>New SIM management operations for Vivo.</p> <p>New pre-paid vouchers section in SIM detail.</p> <p>New columns in expense and consumption detailed reports.</p> <p>New brand image for Movistar.</p>
4.0	18/04/2018	"SIM type" literal has changed to "Local/Global"
4.0	03/05/2018	Restrictions in the Subscription group assignment operation for Vivo.

4.0.1	25/05/2018	<p>New report "SIM Detail Billing"</p> <p>New columns are added to the detailed expense and consumption reports to ease the generation of the new report.</p>
4.1	09/07/2018	<p>New security dashboard.</p> <p>Various security improvements: Two factor authentication for Service Providers, notifications of logins from unknown devices and captcha in login.</p> <p>Local point of presence in the configuration of Customer's APNs.</p> <p>SIM replacement operation.</p> <p>SIM Cloud monitoring.</p> <p>Refactoring of the self-management supplementary service.</p>
4.2	19/09/2018	Brand change to Kite Platform.
4.3	04/12/2018	<p>Cloud connector service improvements</p> <p>Advanced filter in Daily expense detail report</p> <p>Authorised and restricted numbers management improvements</p> <p>Security improvements for logging into the Portal for Customers and End Customers.</p>
5.0	12/03/2019	<p>Bulk operations section improvements.</p> <p>Dual stack support in the APNs configuration.</p> <p>Subranges support in static APNs</p> <p>New operation dashboard</p> <p>New user list report</p>
5.1	09/07/2019	<p>Network attach alarms for Customers</p> <p>Support of multiple static APNs at SIM level</p> <p>SIM filtering by file.</p>
5.2	16/01/2020	<p>IPv4v6 support for static APNs</p> <p>Bulk operations result exported to file</p> <p>Push API notifications for Customer alarms</p> <p>Pre-paid vouchers activation via Portal UI</p> <p>IMEI change alarm improvements</p> <p>SIM inventory UI improvements</p> <p>SIM administrative diagnosis improvements</p>
6.0	13/05/2020	<p>Pools dashboard</p> <p>Map dashboard</p> <p>ESIM management</p> <p>PUSH API alarm notification configuration</p> <p>Swap activity report</p> <p>Monthly alarms report</p>
6.1	06/07/2020	<p>Update of minimum accepted browser resolution</p> <p>New Customer manufacturer file report (only for Vivo Customers)</p> <p>Visual improvements on Pools widgets</p>

6.2	21/07/2020	Errata correction
6.3	09/11/2020	Customer impersonation (for multinationals) Pool widget improvements Inventory filters improvements Automatic eSIM download and enable associated to supervision alarms Improvements on management of external services: Connector Cloud and Push API
6.4	12/02/2021	New Pool expense columns in Inventory Block of users in Pending state for 7 days Enter key is allowed in order to apply Inventory filters.
7.0	23/04/2021	Report section redesign API certificate management from the Portal Remote SIM management Bulk operations retry operation Support of wildcards in IMEI filtering Automatic Whitechip activation notifications (Vivo only)
7.1	09/07/2021	Login page and header branding update New columns in monthly and daily Presence reports
7.2	24/09/2021	Errata correction.
7.3	03/12/2021	New Clustering dashboard. Bulk creation of alarm configurations. Option to export only visible columns of SIM Inventory. New functionalities for Essential Clients: access to the dashboard, alarm configuration, management of notifications of prepaid vouchers.
7.4	11/02/2022	Configuration of consumption thresholds (daily and monthly) at Subscription Group level. Advanced functionalities in the Clustering dashboard.
7.5	25/03/2022	Management of cookies Prebill search improvements
8.0	27/05/2022	New "prepaid" dashboard for customers New IoT Data Ready service for Customers. Inclusion of Test traffic in expense and consumption reports. New option to be able to cancel bulk operations in progress of the users of an organization.
8.1	15/07/2022	New mode of operation of prepaid vouchers New VoLTE Activation operation in the SIM Inventory
8.2	17/10/2022	New features in the Analytics dashboard. Security improvements in the modification of a user's email. Automatic retirement by time in Deactivated state.

9.0	03/03/2023	<p>Expansion of the location map of a SIM with tracking information.</p> <p>New filters in the data sessions heat map.</p> <p>New IoT Data Ready service.</p> <p>Improvements in synchronization with external systems: notification of changes of basic services in the SIM.</p> <p>New permissions to issue API certificates from the Portal: read only</p>
9.1	14/07/2023	<p>New section "IoT Analytics"</p> <p>Improvements in the management of radio technologies at the SIM level</p> <p>New functionality to manage open sessions</p> <p>New functionality for the authorization of massive operations</p> <p>New functionality to manage the default APN of a SIM</p> <p>Improvements in the configuration of the filtering of IMEIs</p> <p>Improvements in parameter management to save device battery</p> <p>Availability of the "Amount" field in the list of pre-invoices</p>
9.2	29/09/2023	<p>Improvements in IoT Analytics.</p> <p>Removed the empty Supervision group restriction for enabling Push API.</p> <p>Device port forwarding in upstream communication in Push API and Cloud Connector.</p>
9.3	01/12/2023	<p>Configuration of consumption control at SIM level with traffic cutoff</p> <p>New data pool consumption alarm</p> <p>Mutirole support for users</p> <p>New "Authorizer" role</p> <p>New "IoT Partner" Inventory</p>
10.0	08/03/2024	<p>New IoT PAT service – IoT PAT – Internet reachable devices</p> <p>New Customer Role: Restricted Administrator</p> <p>Evolution of Private LTE: UC5 Private Radio Network Service</p> <p>Client On Boarding</p> <p>Call redirection</p>
10.1	12/07/2024	<p>Improvements on "IoT Partner" service</p> <p>New alarms, due to dropped connections in APN and due to the risk of overage in a pool.</p> <p>Kite API access IP management</p>
10.2	02/12/2024	<p>New alarm section.</p> <p>New alarm: Minimum SIM consumption alarm.</p> <p>New SIM Search Columns and Filters by Date of Last Change of Subscription Group and Commercial Plan</p> <p>New operations subject to the authorization flow</p> <p>Improvements in the operation of SIM Inventory "Change of radio access technologies"</p> <p>New "Audit Log" section</p> <p>Login using corporate credentials</p> <p>New Massive Operation "Reset Network"</p>

		Improvements to the display of the "Audit Log" section in the SIM detail.
11.0.0	31/03/2025	Improvements to two-factor authentication management IMEI Lock New filters and columns for managing radio technologies New filters and columns for recent Voice, SMS, and Data (GPRS up) usage VoLTE information in expense, usage, and SIM detail reports 5G SA information IMEI information in expense reports Storage of ACK and additional ACK messages in IoT Data Ready
11.1.0	15/07/2025	SIM filtering with generative AI. Extension of the customer map dashboard. New maps for open connections and usage. New option to synchronize network registration rejections with external systems (Push API, Cloud). Access control to the portal by IP and country Daily presence report available for the current day Pools and Groups export

### 3 Glossary

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Kite Platform uses a series of concepts described below:

- **5G NSA (Non-Standalone):** 5G architecture that relies on 4G infrastructure for signalling. It does not take full advantage of 5G SA.
- **5G SA (Standalone):** 5G network architecture that is completely independent of 4G infrastructure and enables low latency, higher speeds, and slicing support.
- **Alarm:** this event takes place in Kite Platform when a certain alarm rule is accomplished and is registered by the alarm module. These events can be reported externally by email, SMS or trap SNMP.
- **Alarm rule:** event condition monitored upon the set of elements of the platform.
- **API:** (*Application Programming Interface*) set of methods offered by the Kite Platform that enables the integration of product functionalities in the Customer's systems.
- **Basic Services** each one of the voice, SMS and data services.
- **Billing account:** it records or gathers all the payable concepts of the services provided by the Kite Platform.
- **Billing period:** interval, cyclic and monthly, upon which the Customer's cost of consumption is calculated for its subsequent billing.
- **CAMEL** (*Customized Applications for Mobile networks Enhanced Logic*): outgoing voice calls in roaming connected to operators supporting CAMEL will be charged by Kite Platform on-line. On the other way, if the operator does not support CAMEL, voice calls in roaming will be charged off-line, meaning that the Kite Platform will be able to process voice calls made even months before the current billing cycle.
- **Commercial plan:** commercial service offer that can be associated to a Subscriptions group. Includes managing the life cycle of each one of the M2M subscription, enabled communication services, consumption and expense limits as well as tariffs to be applied for such services.
- **Customer:** organisation that holds a direct commercial relationship with the Service Provider from which he depends hierarchically.
- **Data destination:** it represents a collection of data flows having the same tariff for a same zone.
- **Destination numbering:** it represents a collection of voice calls (outgoing) and SMS destination numbers.
- **Default Subscriptions group:** Subscriptions group a SIM that has not been assigned to any other specific group explicitly belongs to. Such a SIM card does not have an associated commercial condition or a life cycle and cannot carry data.
- **End Customer:** organisation that has a direct commercial relationship with the Customer and which depends on it hierarchically.
- **eSIM (embedded SIM):** it refers to an eUICC.

- **Generic Routing Encapsulation (GRE)** is a tunneling protocol developed by Cisco Systems that can encapsulate a wide variety of network layer protocols inside virtual point-to-point links over an Internet Protocol internetwork.
- **Hosting OB:** Service provider that owns the network infrastructure that supports the service.
- **Kite Platform:** product that provides managed connectivity destined for the management of a SIM cards operator between different organisations. It provides functionality to manage pre-inventory, inventory, commercial management and users' management. Access modalities to the platform are through web interface or through API.
- **Leading OB:** Service provider that has a direct commercial relationship with Customers for commercializing SIM cards.
- **Life cycle of a SIM card:** defines all of the states as well as the transitions between them that govern the behaviour of an M2M SIM card.
- **Line:** represents a SIM card.
- **LPWA (Low Power Wide Area):** groups together the set of technologies oriented to IoT applications in which the devices require small amounts of data, low cost and with a long battery life.
- **Location:** functionality by which the geographical coordinates (longitude and latitude) of a subscription can be obtained.
- **LTE (or 4G LTE, Long-Term evolution):** is a standard for wireless communication of high-speed data for mobile phones and data terminals. It is based on the GSM/EDGE and UMTS/HSPA network technologies, increasing the capacity and speed using a different radio interface together with core network improvements.
- **M2M Subscription:** entity associated to one or several SIM/UICC cards through the time upon which you can work to manage it, hire it, do consumer/expense measures, and supervise it through the Kite Platform throughout its life cycle.
- **MNO:** Mobile Network Operator.
- **Pool:** kind of tariff applied upon the aggregate consumption of all SIM cards that belong to the same group of subscriptions.
- **Pre-bill:** Informative summary document detailing consumptions, prices, discounts and taxes of a billing account.
- **Presence:** indicates the state of the SIM card in the GSM, GPRS and IP services.
- **Service provider:** organisation that assumes the role of Customer's Contract Owner. In practice, it corresponds with a Business Unit.
- **SIM card:** type of card, which identifies a user in the mobile web and gives him access to different operator services.
- **SIM card life cycle:** define all states as well as transitions between them that rule the behaviour of SIM M2M card.

- **Subscription line:** it represents a SIM card.
- **Subscriptions group:** represents a group of subscriptions characterized by the availability of certain basic services upon which restrictions are imposed (service, black/white list and expense) and prices information.
- **Split billing:** Kite Platform feature that allows tariffing data traffic differently based on its destination.
- **Supervision group:** group of SIM cards a user has access to in order to set up alarm rules and create reports.
- **Supplementary services:** services that the Customer can hire in addition to the basic services. See section [Supplementary services](#) for further details.
- **User profile** Defines the group of permissions and privileges a user has in order to perform actions with Kite Platform.
- **Tariff plans:** within the commercial plan, it is the group of tariffs or data prices or services susceptible of being applied to the Customer according to a contractual agreement with him.

## 4 Introduction

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Kite Platform improves productivity globally in the M2M sphere, providing tools to manage your devices connectivity.

Among these tools are:

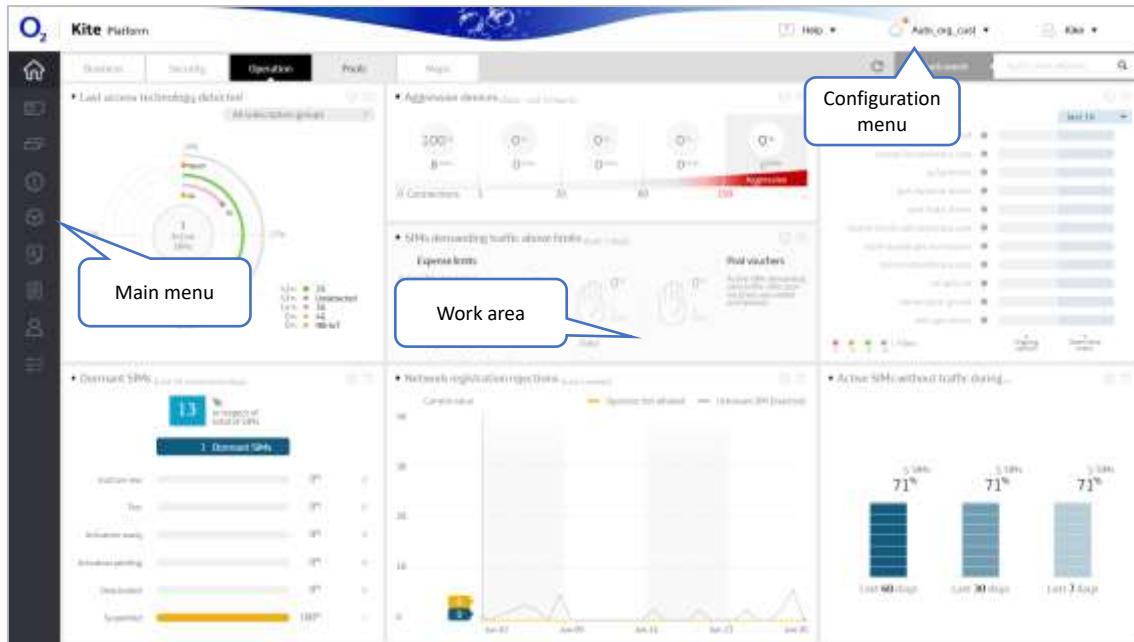
- SIM card management, display and management of its parameters through the inventory, activation and other administrative changes.
- Line assignment or migration to different commercial plans
- Pre-bill invoices inquiries
- Users and organisations management
- Alarms and reports management

Among the tools provided by Kite Platform, are a few APIs used for the integration of the product functionalities in the Customer's systems. Those APIs description is available in the Help menu in the web portal.

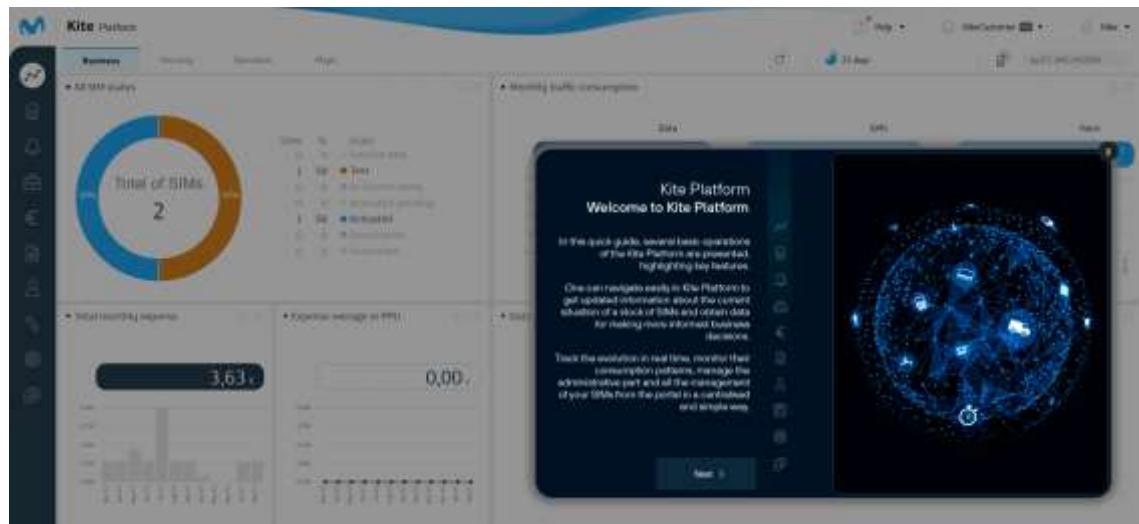
## 5 Quick view to Kite Platform

### 5.1 Description of the graphic interface

The graphic interface of Kite Platform is organized in two blocks of main menus as shown in the following figure:



New users will see a quick guide with descriptions of the main sections of the Kite portal.



#### 5.1.1 Main menu

Allows the access to the Kite Platform main modules, in concrete:

- **Home (📈)**: allows accessing the Kite Platform homepage. This section shows a summarized view of KPIs on expense, consumption and state of the Customer's SIM

base (only available to Customer organisations). See section [Dashboard](#) for further details.

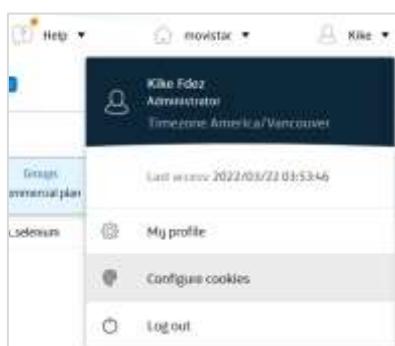
- **SIM Inventory** (): provides facilities for the administration of the whole group of SIM cards provided in the Kite Platform and assigned to a Customer. Operations available will depend on the role and the organisation the user belongs to. Consult section [Working with SIM cards](#) for further details.
- **Device management** () : offers tools to manage devices provisioned from Customer's SIM Inventory. This option is only visible for Customers having this service activated. See section [Working with devices](#) for further details.
- **Alarms** () : the alarms module allows to set up rules for the capture of events taking place in the Kite Platform and access the full list of events. You will be able to set up alarms for carried data, expense and supervision to SIM card level. Consult section [Monitoring and configuration of alarms](#) for further details.
- **Commercial management** () : access point to every commercial management task of Kite Platform. The group of available options is highly dependent on the profile of the user who has access to this module. From here, you can manage Subscriptions groups, that is, the group of SIM cards sharing a same commercial plan. Consult section [Commercial management](#) for further details.
- **Pre-bill** () : in charge of pre-bills display and exportation. Consult section [Pre-bills issuance](#) for further details.
- **Reports** () : The reports module enables the creation of different kinds of reports to be downloaded in the user's local machine in CSV format. Consult section [Generation of Reports](#) for further details
- **Users** () : from this module you can perform actions upon the Kite Platform users, that is, password listing, creation, modification, erasure, deactivation and recovery. Access to this module and actions to be performed shall depend on the role of the logged in user. Consult section [User administration](#) for further details.
- **IoT Data Ready** () : from this module, customers who have activated this service will be able to see the information of the messages from or to their devices that travel through Kite. See the [IoT Data Ready](#) section for more details.
- **IoT Analytics** () : from this section, customers who have activated the IoT Analytics Plus supplementary service will be able to access advanced analytics features. If you have contracted the "Basic" modality, you will have access to the Clustering analysis of your data sessions. If you have contracted the "Advanced" mode, you will also have access to the "Consumption anomalies" section.

- **Audit Log** (🔍): Allows you to view, filter, and export audit events associated with SIM cards. See the [Audit log](#) section for more details.
- **Bulk operations** (📅): allows consulting the state of operations not executing instantly. This module shall only be visible and accessible when there are pending notifications. Consult section [Access to operations in progress \(bulk\)](#) for further details.

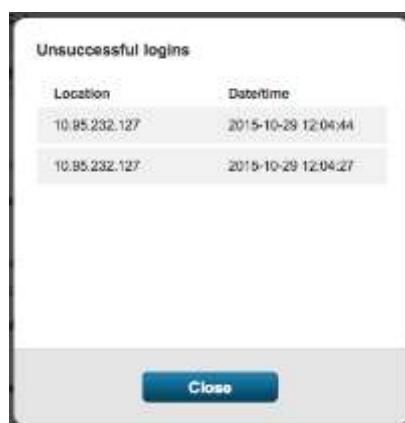
### 5.1.2 Configuration menu

From this menu, you can access the following options:

#### User information



- First and last name of the user who started the session, along with the user role and configured timezone.
- **Last access**, shows the date and time of the last successful login. If there has been unsuccessful logins a warning icon will show.



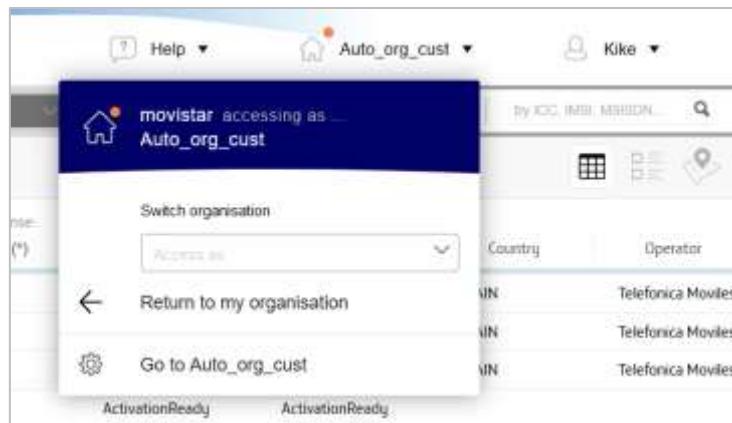
- **User details access**, by clicking on “My profile” option the user information will be displayed allowing to modify user parameters (see section [Configuring a user](#) for further details).
- **Configure cookies<sup>1</sup>**, allows to update user current cookies configuration.

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<sup>1</sup> Currently only available for “kiteplatform-movistar-es.telefonica.com” domain.

- **Logout icon** (➊), allows you to abandon the current session in Kite Platform.

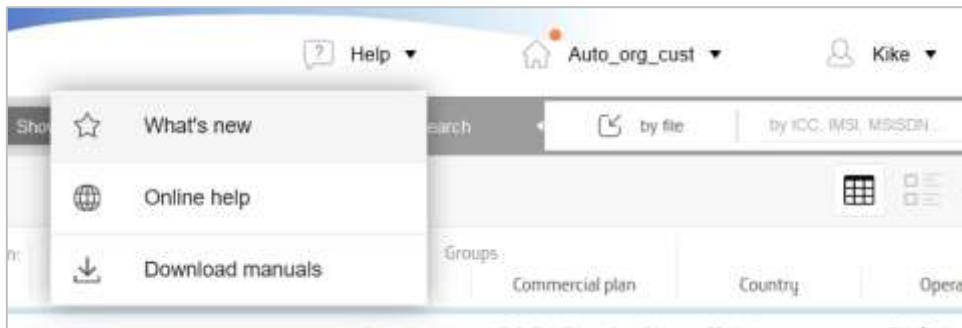
### Organisation that the user belongs to



The screenshot shows the Kite Platform interface. At the top, there is a navigation bar with icons for Help, Home, and Kite. Below the navigation bar, a blue header bar displays the text "movistar accessing as ... Auto\_org\_cust". To the right of this header is a search bar and a magnifying glass icon. The main content area has a title "Switch organisation" and a dropdown menu showing "Access as". Below this are two buttons: "Return to my organisation" and "Go to Auto\_org\_cust". The bottom of the screen shows a table with columns "Country" and "Operator", listing three entries: "IN" under both for Telefonica Moviles. At the very bottom, there are two status indicators: "ActivationReady" and "ActivationReady".

It displays organisation data with the possibility of changing parameters depending on the profile assigned to the user (see section Organisations administration for further details).

- **Help**, it gives access to:



The screenshot shows the Kite Platform interface. At the top, there is a navigation bar with icons for Help, Home, and Kite. Below the navigation bar, a blue header bar displays the text "Auto\_org\_cust". To the right of this header is a search bar and a magnifying glass icon. The main content area has a title "What's new" with a star icon, followed by "Online help" and "Download manuals". The bottom of the screen shows a table with columns "Groups", "Commercial plan", "Country", and "Operator".

- **What's new**, access the news of the installed version of Kite Platform. An orange dot will be displayed when there is news pending to be viewed.
- **Online help**, gives access to the Kite Platform online documentation.
- **Download manuals**, gives access to the Kite platform user guides in PDF.

#### 5.1.3 Work area

The items that make up a work area shall change according to the module chosen from the main menu. In each one of the following sections, you can see every single item that makes it up in detail.

#### 5.1.4 Working with forms

Kite Platform provides mechanisms to facilitate working with forms. During the edition, you are provided with information about the obligatory fields (those in the red box), the minimum fields to be still filled in, and the amount of mistakes found.

NewName

Basic Information

Native language: English	Company type: Company	Sector: Total expiration (days)	Contractual billing cycle: Day
Time Zone: UTC+0	Country: United States	State/Region: California	Charging type: Daily
User 1: User 1	User 2: User 2	City: City	Postal code: Postal code
Country: United States	State/Region: California	Customer ID in the service provider CRM: Customer ID in the service provider CRM	
CUSTOM FIELDS:			

**Cancel** **Save**

Furthermore, you are provided with contextual help on the values allowed in each field. In this way, the user has information on the validity of the entered data and once the form is completed he is certain that the entered data is correct when he has to save the information.

PRIMARY CONTACT

First name: User	Last name: Test	Email: usertest@mail	Phone: 9856325
Mobile phone: 6245629	Fax:	This field should be an email address in the format user@domain.com. Only @ character, letters (a-z, A-Z) and numbers (0-9) are allowed.	

Additionally each template has a search for locating a specific field.

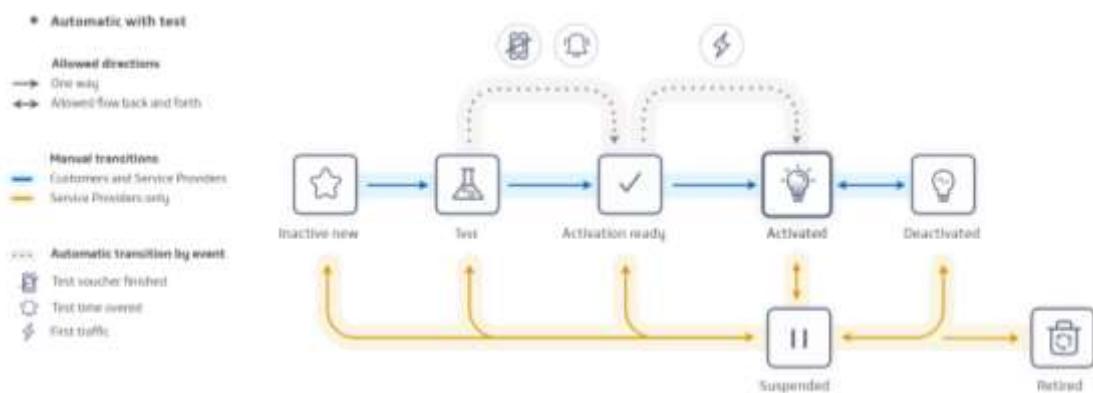
 If click on any element in the error list or in the required fields list, the Kite Platform automatically will show you the affected element.

 Modifications performed by another user over formulary contents won't be updated in the current page until it is refreshed.

## 5.2 SIM Card Life Cycle

Subscriptions go through different states that setup what we call a SIM card life cycle. Each state is characterized for allowing limited traffic, for having a limited stay time, or for not allowing traffic.

The allowed states and the way in those state transitions happen characterize the behaviour of a SIM card throughout its service life and are shown in the following figure:



Kite Platform enables you to visualize the administrative states available for the SIM card within the commercial plan. It also enables the improvement from one state to another during the life cycle. Some of these transitions may have associated fees, in which case the Customer shall be informed about.

-  The election and assignment of a life cycle for a SIM card is done indirectly from the commercial management module when you associate a Basic Services Commercial Plan to a Subscriptions Group (see section [Configuring a Subscriptions group](#) for further details).
-  You can change the state of a SIM card from the Inventory module, this can be done massively.

### 5.2.1 SIM card states

- **Inactive new**, initial state of any SIM card. Every SIM card assigned to a Customer begins its life in this state. The card will remain in this state until the Customer assigns a Subscription Group to it (including a commercial plan) and it changes state. During this initial state, the SIM card cannot perform any kind of traffic and shall belong to Subscriptions group by default (see sections [Administration of Subscriptions groups](#) for further details).
- **Test**, optional and available test for once the SIM card is assigned to a Subscriptions group that takes into account that state in its commercial plan. This state enables a limited traffic in order to prove the SIM card is functioning correctly. The traffic does not involve any fee, that is, it is excluded of the fare plans assigned to the SIM card. You can leave this state manually or automatically when the maximum allowed traffic is consumed and/or when the maximum allowed time in the state is consumed, both limits are previously fixed by the Service Provider. Service Restriction set up in the Subscriptions group through the commercial plan apply to it.
- **Activation ready**, previous state to **Activated** and state the SIM card changes to once the time or the available traffic is consumed in the **Test** state. If **Test** state has not been defined, the change to this state shall be performed manually from **Inactive new** state. Once the first traffic consumption is produced, the SIM card automatically changes to **Activated**.

- **Pending activation**, state similar to the previous one, but in this one the change to the *Activated* state is done manually from Inventory.
- **Activated**, in this state the SIM card is fully operating, in condition of regular traffic, and fees and service restrictions set up in the Subscriptions group through the assigned commercial plan apply to it.
- **Deactivated**, state a SIM card can change to, typically when there is an anomaly with the card. In this state, the SIM card does not have traffic but its permanence can entail an associated fee. From this state, the card can be activated again manually.
- **Suspended**, state a SIM card can be changed to, typically in cases of fraud or unpaid, from any state it is in as long as it is not *Retired*. Leaving this state implies returning to the state the SIM card was in before or to be *Retired*. Only the Service Provider is authorized to perform manual transitions to and from this state.
- **Retired**, this shall always be the last state a SIM card shall be in before it is retired. This state can only be reached if the card is suspended. Once in this state, there is no going back to the previously defined states.

 For No-CAMEL Service Providers: delayed CDRs processing (corresponding to outgoing voice calls in roaming performed months before the current billing cycle) will be allowed even if the SIM card lifecycle status is Deactivated, Suspended or Retired.

### 5.2.2 Allowed state transitions

The following table summarizes the allowed state changes, which can perform them and whether they entail or not an associated fee.

Initial State	Final State	Type of Transition	Who can perform it?	Can it entail an associated fee?
Inactive new	Activation ready	Manual	End Customer, Customer, Service Provider	Yes
Inactive new	Test	Manual	End Customer, Customer, Service Provider	Yes
Inactive new	Pending activation	Manual	End Customer, Customer, Service Provider	Yes
Test	Activation ready	Manual After waiting time After voucher expiration	End Customer, Customer, Service Provider	Yes
Test	Pending activation	Manual After voucher expiration After first session	End Customer, Customer, Service Provider	Yes
Activation ready	Activated	Manual After first session	End Customer, Customer, Service Provider	Yes

Pending activation	Activated	Manual	End Customer, Customer, Service Provider	Yes
Activated	Deactivated	Manual	End Customer, Customer, Service Provider	Yes
Deactivated	Activated	Manual	End Customer, Customer, Service Provider	Yes
Suspended	Retired	Manual	Service provider	Yes
Suspended	Previous state	Manual	Service provider	No
Any State (*)	Suspended	Manual	Service provider	No

(\*) Except Retired state

### 5.3 User Profiles

The Kite Platform handles various user profiles, which in combination with the type of organisation that the user belongs to determine the access rights to the different product features.

 The configuration of user profile and their associated permission will be carried out by a procedure external to the Kite Platform.

#### 5.3.1 Customer

Below the profiles handled for the Customer and the access permissions for each module are detailed:

User profile	SIM Inventory	Device mgmt.	Commercial administration			Pre-bills	Alarms			Reports	Users	Bulk operations and authorisations	IoT Analytics			Audit log
			Organisations	Groups	Commercial Plans		Administrative	Supervision	Rules				Clustering	Consumption anomalies	Notifications configurations	
Administrator	● Restricted access (1)(23)	● Full access	● Restricted access (6)(32)	● Full access	● Restricted access (33)	● Restricted access (7)	● Full access	● Full access	● Full access	● Restricted access (31)	● Full access	● Restricted access (37)	● Full access (34)	● Restricted (35)	● Restricted (35)	● Full access
Administrator restricted	● Restricted access (1)(23)	● Full access	● No access	● No access	● No access	● No access	● Full access	● Full access	● Full access	● No access	● Restricted access (38)	● Restricted access (37)	● No access	● No access	● No access	● Full access
Finances	● Restricted access (9)	● Read only	● Read only	● Read only (22)	● Read only	● Read only	● Read only	● Read only	● No access	● Restricted access (15)(27)	● Restricted access (4)	● Restricted access (24)	● No access	● No access	● No access	● Full access
Technical	● Restricted access (2)(23)	● Restricted access (28)	● Restricted access (20)	● Restricted access (10)	● Read only	● Read only	● Read only	● Full access	● Full access	● Restricted access (16)(30)	● Restricted access (4)	● Restricted access (37)	● No access	● No access	● No access	● Full access
Billing	● Restricted access (3)	● Read only	● Read only	● Restricted access (10)	● Read only	● Restricted access (7)	● Restricted access	● Read only	● No access	● Restricted access (15)(27)	● Restricted access (4)	● Restricted access (24)	● No access	● No access	● No access	● Full access
User management	● Restricted access (14)	● No access	● Restricted access (32)	● Restricted access (10)	● Read only	● Read only	● Read only	● No access	● No access	● Restricted access (26)(31)	● Restricted access (5)	● Restricted access (24)	● No access	● No access	● No access	● Full access

User profile	SIM Inventory	Device mgmt.	Commercial administration			Pre-bills	Alarms			Reports	Users	Bulk operations and authorisations	IoT Analytics			Audit log
			Organisations	Groups	Commercial Plans		Administrative	Supervision	Rules				Clustering	Consumption anomalies	Notifications configurations	
Demo kit	● Restricted access (1)(8)	● Full access	● Restricted access (6)	● Restricted access (10)	● Read only	● Restricted access (7)	● Full access	● Full access	● Full access	● Restricted access (27)	● Restricted access (4)(21)	● Restricted access (24)	● No access	● No access	● No access	● Full access
Supervision Administrator	● Restricted access (17)	● Read only (29)	● Read only	● Restricted access (18)	● Read only	● Read only	● No access	● Full access	● Restricted access (19)	● Restricted access (16)(30)	● Restricted access (4)	● Read only (24)	● No access	● No access	● No access	● Full access
User	● Read only	● Read only	● Read only	● Read only	● Read only	● Read only	● Read only	● Read only	● Read only	● Restricted access (27)	● Restricted access (25)	● Restricted access (24)	● No access	● No access	● No access	● Full access
Authoriser	● No access	● No access	● No access	● No access	● No access	● No access	● No access	● No access	● No access	● Restricted access (38)	● Restricted access (36)	● No access	● No access	● No access	● No access	● Full access
Guess	● No access	● No access	● No access	● No access	● No access	● No access	● No access	● No access	● No access	● Restricted access (38)	● No access	● No access	● No access	● No access	● No access	● No access
Beacons	● Restricted access (39)	● Read only	● Restricted access (40)	● Restricted access (41)	● Read only	● Read only	● Read only	● Read only	● Read only	● Restricted access (27)	● Restricted access (25)	● Restricted access (24)	● No access	● No access	● No access	● Full access

For accesses with restriction each case is detailed below:

- (1) Access without restriction for consulting data except for the Service Provider columns. Can perform any type of operation on the SIM cards except:
  - Changes in the status of the life cycle of SIM cards to Suspended and Retired and change it from the state of Suspended.
  - Activation/deactivation of "Value Added service".
  - Modification of the fields "Local/Global" and "SIM Model" in the details of a SIM.
- (2) Access without restrictions for consulting information, except for supervision alarms and Service Provider columns. Can only perform:
  - Changes in the life cycle of SIM cards except: change to the status of Suspended and Retired and change it from the status of Suspended.
  - Run diagnostic operation (see section [Execution of diagnostic tests](#) for further details)
  - Activation/deactivation of all of the supplementary services except "Value Added services"
  - Associate SIM cards to a Subscriptions group.
  - Editing custom fields and alias.
  - Changing time/data Vouchers.
  - Changing dynamic APNs.
  - Editing static IP.
  - Export to file.
  - Importing data from a file.
  - Edit a SIM card manual location.
  - Change radio access technologies.
  - Activation/deactivation of IMEI Lock.
- (3) Access without restrictions for consulting information, except for supervising alarms. Can only perform:
  - Changes in the life cycle of SIM cards except: change to the status of Suspended and Retired and change it from the status of Suspended.
  - Editing custom fields.
  - Activation/deactivation of all of the supplementary services except "Value Added service".

- Associate lines to a Subscriptions group.
  - Export to file.
- (4) Access to the list and consultation of all of the users from their same Customer organisation and subordinate organisations and with permission to create, edit, list, consult and send activation links to other users from their organisation with their same profile. Access to edit its own user data.
- (5) Access to create, edit, list, consult, delete and send activation links to any type of user except administrator users from their own organisation which can only be listed and consulted. Access to edit its own user data.
- (6) Access to list all End Customer organisations and the own Customer organisation. Create and edit End Customer organisations and be able to activate / deactivate. From its own organisation it can only make changes to the sections "Primary and billing contacts", "Shipping address", changes to the "Basic Information" section (except the organisation name and fields OB CRM Information", "Trial expiration" (not visible), "Sector" (not visible), "Company type" (not visible) and "Monthly fees for SIM status"), "IMEI filtering", "Incoming SMS filtering", Commitments notification configuration and Cloud connector credentials configuration. An organisation cannot deactivate itself.
- (7) Access for listing and consulting pre-bills and exporting them to a file.
- (8) Expense limits cannot be managed.
- (9) Access without restrictions for consulting information, except for viewing supervision alarms. Can only perform:
- Modifications can only be made to time/data Vouchers.
  - Export to file.
- (10) Access without restrictions to the Subscriptions group section. There is no access to supervision groups.
- (11) Access for managing administrative alarms not related to expense.
- (12) Access for managing supervision and administrative alarm rules not related with traffic consumption.
- (13) Access to manage administrative alarm rules not related to traffic consumption.
- (14) Access without restrictions for consulting data and exporting to file except for viewing alarm information and Service Provider columns.
- (15) There is no access to supervision reports.
- (16) There is only access to supervision and "SIM Detail Billing" reports.

- (17) Access without restrictions for consulting information, except for administrative and expense alarms and the Service Provider columns. Can only perform:
  - Assign SIM cards to supervision groups.
  - Edit a SIM card manual location.
  - Run diagnostic operation (see section [Execution of diagnostic tests](#) for further details)
  - Activation/deactivation of all of the supplementary services except "Value Added service".
  - Export to a file.
  - Change radio access technologies.
- (18) Access for consulting information about Subscription groups and permissions for creating, editing and deleting Supervision groups.
- (19) Only access for managing supervision alarm rules.
- (20) Access to create, edit, activate, deactivate and view information regarding End Customer organisations and view information about the own organisation. In the "IMEI Filtering" section it will be allowed to do the following actions: upload IMEI file, search for IMEI and export IMEI whitelist. In the Cloud connector section, it will be allowed to configure cloud provider credentials. It will also be allowed to activate/deactivate double authentication "send verification code" flag (see section [Login with two factor authentication](#) for more details).
- (21) Can send activation links to other users with its same user role.
- (22) Cannot read Supervision groups.
- (23) Can send SMS messages to Inventory SIM cards and make a Network reset<sup>2</sup> (cancel location (see section [Network reset \(Cancel location\)](#) for more details)). Can access and execute [Remote SIM management](#) actions.
- (24) Cannot have access to the SMS-AO delivery confirmation report.
- (25) Access to edit its own user data. Read-only access for the rest of users.
- (26) Access to "Daily API transaction activity", "Daily subscription snapshot", "SIM Detail Billing", "Manufacturer and model list", "Daily IMEI change" and "User list" reports only.
- (27) No access to "retired Subscriptions", "User list" and "Swap activity" report.

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<sup>2</sup> In version 3.3 this operation has been enabled to O2 UK's Customers (Global SIM and Local SIM).

- (28) Full access except for removing a device from Stock Inventory.
- (29) Read only access for everything except for accessing Stock Inventory view. Device diagnosis is allowed but collection of attributes is not.
- (30) No access to user list report.
- (31) No access if Self-management supplementary service is set to Basic.
- (32) Access to [Certificate Management for Customer API](#).
- (33) Access to edit the "Services" section in Commercial plans of Supplementary Services
- (34) The Customer must have enabled the supplementary service of IoT Analytics Plus in Advanced mode to be able to access the full functionality, that is, access the anomalous clustering SIMs.
- (35) The Customer must have contracted the IoT Analytics Plus Supplementary service in Advanced mode.
- (36) Access to manage authorisations.
- (37) Without access to manage authorizations
- (38) Access only to view and edit your own user data. You cannot change your email. Access to change lifecycle status to any state except Deactivated.
- (39) Access to manage your role's API certificates, access IPs, and PUSH API configuration.
- (40) Access to configure PUSH API notifications in the monitoring group.

### **5.3.2 End Customer**

Next are detailed the End Customer user profiles and access right for every module:

User profiles	Inventory	Commercial Management	Users	Bulk operations and authorisations	Reports	Audit log
Administrator	● Restricted access (1)	● Restricted access (4)	● Full access	● Restricted access (12)	● Restricted access (8)	● Full access
Technical	● Restricted access (2)	● Read only	● Restricted access (5)	● Restricted access (7)	● No access	● Full access
Billing	● Restricted access (3)	● Read only	● Restricted access (5)	● Restricted access (7)	● No access	● Full access

User Management	● Read only	● Read only	● Restricted access (6)	● No access	● Restricted access (8)	● Full access
User	● Read only	● Read only	● Restricted access (9)	● No access	● No access	● Full access
Authoriser	● No access	● No access	● Restricted access (10)	● Restricted access (11)	● No access	● Full access
Guess	● No access	● No access	● Restricted access (10)	● No access	● No access	● No access

For the restricted accesses, each case is detailed below:

(1) Access without restrictions for data consultation. Can only perform:

- State changes on the SIM cards life cycle except: changing to Suspended and Retired states as well as changing from Suspended state.
- Changing daily and month consumption controls.
- Editing custom fields and alias.
- Activate / deactivate basic services restrictions.
- Export to file.
- Importing data from a file (only Alias, Custom fields and manual location).
- Run diagnosis operation (see section [Diagnostic tests execution](#) for further details)
- Edit manual location.
- Send SMSs to SIM cards Execute a Network Reset (Cancel location) from the SIM detail if it is enabled by the Customer organisation.
- Access to [Certificate Management for End Customer API](#).
- Execute a Network Reset (Cancel location) from the SIM detail if it is enabled by the Customer organisation.

(2) Access without restrictions for data consultation. Can only perform:

- State changes on the SIM cards life cycle except: changing to Suspended and Retired states as well as changing from Suspended state.
- Editing custom fields and alias.
- Export to file.

- Importing data from a file (only Alias, Custom fields and manual location).
- Run diagnosis operation (see section [Diagnostic tests execution](#) for further details).
- Edit manual location.

(3) Access without restrictions for data consultation. Can only perform:

- State changes on the SIM cards life cycle except: changing to Suspended and Retired states as well as changing from Suspended state.
- Export to file.

(4) Access to the own End Customer organisation. From its own organisation it can only make changes to the sections “Default language”, “Custom fields”, “Addresses” and “Contacts”. An organisation cannot deactivate itself.

(5) Access to the list and consultation of all of the users from their same End Customer organisation and with permission to create, edit, list, consult and send activation links other users from their organisation with their same profile.

(6) Access to create, edit, list, consult, delete and send activation links to any type of user except Administrator users from their own organisation, which can only be listed and consulted.

(7) Cannot have access to the SMS-AO delivery confirmation report.

(8) Access to the user list report.

(9) Access to edit its own user data. Read-only access for the rest of users.

(10) Access only to view and edit your own user data. Cannot change its email.

(11) Only access to manage authorisations.

(12) Without access to manage authorisations

## 5.4 Services manageable through the solution

Kite Platform provides facilities for the hiring and management of different services

### 5.4.1 Basic Services

Includes data, SMS and voice traffic services for SIM M2M cards.



CSD (Circuit Switched Data) services could be included in the voice services (depending on the Service Provider).

### 5.4.2 Supplementary services

Include the Self-management Service, VPN Service, sending SMS messages from the Kite platform, Advanced Supervision Service, Location Services, IoT Device Control, Device Management Service, Value Added Service, Private Radio Network service, IoT Analytics and IoT Data Ready.

In sections [Working with SIM cards](#) and [Commercial management](#) the management of these services is explained in more depth.

### 5.5 Customizable fields of a SIM card

Kite Platform allows up to have four customizable fields for the group of SIM cards an organisation has access. In this way, a Customer shall be able to choose name fields, which are different to their End Customers'.

The value of these fields is established from the inventory, accessing to the information detailed in each SIM card (see section [SIM card detailed information](#) for further details).

The use of customized fields facilitates the SIM cards management by allowing the parameterize using typical values of the business of each organisation. Thus, for instance, a vending machine company could wish to assign a SIM card the serial number of the machine the SIM card is inserted in.

The customizable fields can be used to search SIM cards and to perform actions on them afterwards.



Besides the four mentioned customizable fields, there is an “Alias” field, accesible by all organisations. Its value can only be updated by Customers and End Customers.

### 5.6 Customer's billing accounts

#### 5.6.1 General information

Kite Platform enables to define the way in which the Customer's different invoices are gathered. Every billing account has an associated pre-bill invoice (see section [Pre-bills issuance](#) for further details).

A Customer can have several billing accounts set up, should his business require it.

There will always be a default billing account, which will include, among others, all charges the Customer himself hires, for instance the advance supervision service fees, SIM card transportation to the Customer's offices, if they were to be any.

Optionally, you shall be able to create additional billing accounts to gather charges associated to the SIM cards or to a Subscriptions group (see section [Selecting a Billing Account](#) for further details) This additional accounts shall not include in any case the general charges of the supplementary services, since this charges are at a Customer level.

Examples of charges associated to SIM cards would be: card activation (if there was one), monthly fee, etc.

The charges a Subscriptions group generates shall be those derived from voice, SMS and data fare plans set up in pool mode (see section [Tariff plans of basic services](#) for further details). An example of Subscriptions group charge would be a 1 GB pool shared between the lines of the group.

The Customer shall be able to distribute the SIM cards charges among the additional billing accounts assigning them to different Subscription groups. This can be done from the inventory module (see section [Assignment operations](#) for further details)

When creating a Subscriptions group the Customer may select which billing account it wants to assign the charges generated by this Subscriptions group and by all the SIM cards belonging to this Subscriptions group to.

Whenever a SIM card is assigned to a Customer and published in the Inventory it is always assigned to the default billing account. When a change of Subscriptions group is performed, the new SIM card's billing account will always be the one belonging to its Subscriptions group regardless of its life cycle state.

### 5.6.2 Billing cycle

Each billing account has always a billing cycle associated, independently of rest of billing accounts that will lead to a pre-bill generation. Therefore, a Customer, as such, does not have a billing cycle parameter to be configured.

If the Service Provider, for whatever reason, updated the billing cycle day, then a transitory billing cycle (called mini-cycle) will start once the current billing cycle ends. The mini-cycle will always be shorter than a normal billing cycle and will be subject to apportionments that compute depending on the normal<sup>3</sup> billing cycle and the mini-cycle durations.



It is not allowed to change life cycle from "Inactive New" or "Test" to "Activation ready" if the SIM's billing account has a billing cycle start day change scheduled.

---

<sup>3</sup> A normal or full billing cycle duration, for purposes of apportionments, is computed taking as starting day the day following the last mini-cycle day but in the previous month. For example, if the mini-cycle ends on Feb-15<sup>th</sup>, the full cycle, in order to compute the apportionment, will start on Jan-16<sup>th</sup>. Another more detailed example: given a voucher with 31 SMSs costing 31€, if the mini-cycle spans from Feb 2<sup>nd</sup> to Feb 15<sup>th</sup>, a SIM card will have available only a 13 SMSs voucher for 13€, since the full cycle has, in this case, 31 days (Jan 16<sup>th</sup> to Feb 15<sup>th</sup>):  $(31 \text{ €} / 31 \text{ full_cycle\_days}) * 13 \text{ mini_cycle\_days} = 13\text{€}$ . A similar calculus can be made for deriving the available voucher.

## 6 Accessing Kite Platform

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### 6.1 General information

The Portal is the entrance point to the management of Kite Platform. It was conceived as a secure web application fully compliant with the last version for Windows of Firefox, Chrome and Microsoft Edge. Fully compatibility is not guaranteed with versions older than those mentioned and the last versions of Safari web browser (Windows and OS X), Firefox (OS X), Chrome (OS X) and Internet Explorer<sup>4</sup> 11. The minimum resolution contemplated is 1366x768.

Each Service Provider and its Customers will have an own URL which will provide the users access to the Kite Platform. For instance, the URL access to Movistar is:

`http://kiteplatform-movistar-es.telefonica.com`

And for Vivo the URL is:

`http://kiteplatform-vivo-br.telefonica.com`

If you use a URL that does not correspond to the organization to which you belong, you will be informed and redirected to the appropriate URL, where you must enter your credentials again.



Kite Platform is not designed to work with multiple browser tabs with a same session. Working this way can result in inconsistencies.

### 6.2 User's account activation

The first time a user wants to access the Kite Platform, he will have to have the user's account activated, which must have been previously created for another user under the appropriate permits.

When a user is created in the Kite Platform, he will receive an email with the user's Id under which the account has been created as well as an activation link.

---

<sup>4</sup> The Kite Platform is not compatible with Internet Explorer 10 and older versions. In Windows 7 and 8 TLS1.2 protocol must be manually enabled (is not compatible with TLS1.1 and older versions).

## Welcome to Kite Platform



Kite Platform <no-reply@mail.kiteplatform.telefonica.com>

martes, 11 de septiembre de 2018, 12:29

[Mostrar detalles](#)

## Welcome to Kite Platform

Hello Kike

Welcome to Kite Platform. Please click on the link to activate your account.

Your username is: 'user\_temp'.

[https://kiteplatformtest-movistar-es.telefonica.com/#/activate?  
userName=user\\_temp&token=XYbfVkx7U0V2ZF7g6FPqg713U9EDwv16k06U1jLD7frXvr6L0c&lang=en-GB&rc=0](https://kiteplatformtest-movistar-es.telefonica.com/#/activate?userName=user_temp&token=XYbfVkx7U0V2ZF7g6FPqg713U9EDwv16k06U1jLD7frXvr6L0c&lang=en-GB&rc=0)

If the above link does not work, you can copy and paste the address into your browser.

Thank you,  
The Kite Platform team

The activation of a user's account requires the entering of the user's ID and the specification of a password and its repetition.

After the activation is completed, the user will automatically log in and access to the Kite Platform functionalities according to his user's profile.

 Passwords must have between 10 and 50 characters, any combination of characters is allowed that does not contain "admin" or ":" is possible. They must have at least one numeric and not numeric character.

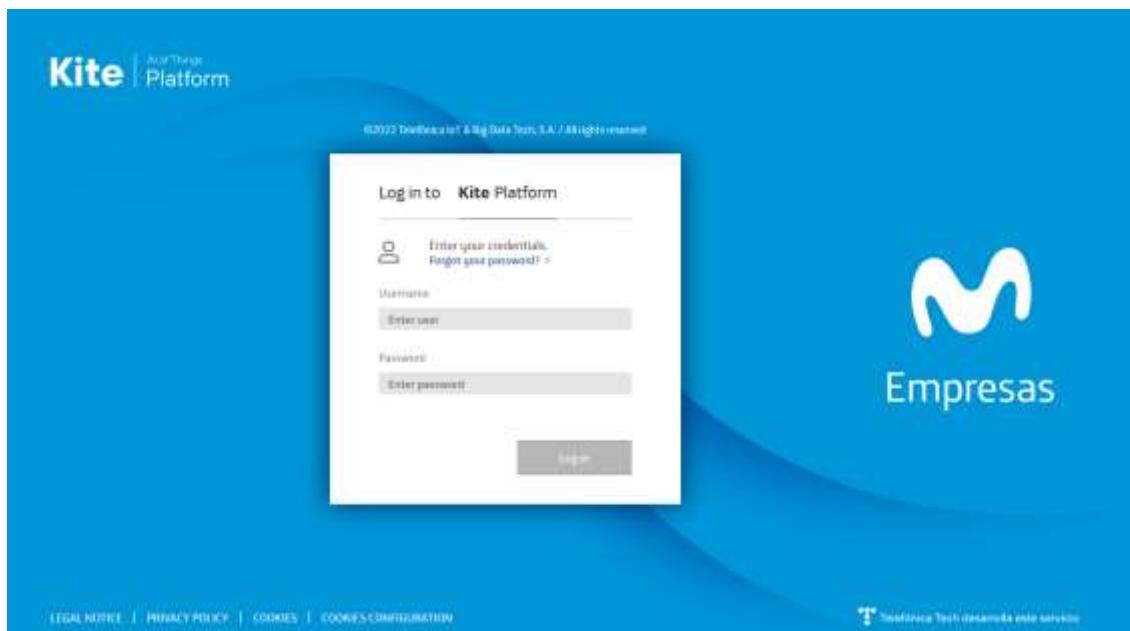
 The activation link expires a week after being sent.

 An error message will be shown in case the activation link is used a second time.

### 6.3 Login

In order to log in into the Kite Platform a user has to introduce the user's Id and password and click on the **Login** button.

 The authentication process transparently executes an algorithm, based on an external Google service, to avoid login attempts by non-human entities (bots). It may be requested to input a verification code (sent by email) in case the recaptcha process is not successful.



The first time you access Kite from a browser, an information panel on the use of cookies by the platform will appear at the bottom<sup>5</sup>. In order to continue with access, you will need to confirm your preferences in this regard, either by accepting them all or by carrying out a more personalized evaluation.

Any decision you make the first time you access, you can change later, either from the link you will see at the bottom of the access interface itself ("Cookies Configuration"), in any other access or from the main menu of Kite, within the user section, once you have validated your access to the platform.

Through the respective links at the bottom left you can consult our privacy policy and the legal information applicable to the service provider.

Once you are in the Kite Platform, you shall have access to a set of functionalities, whose availability shall depend on the role of the assigned user and on the kind of organisation he belongs to.

 If the Customer organisation the user belongs to is deactivated or has not hired the self-management service (see section [Elements of a supplementary services commercial plan](#)), that is, management through Kite Platform, he will not be able to log in. In case the organisation the user belongs to has not have the self management service activated, after trying to access once, the user will be informed his organisation does not have the service activated.

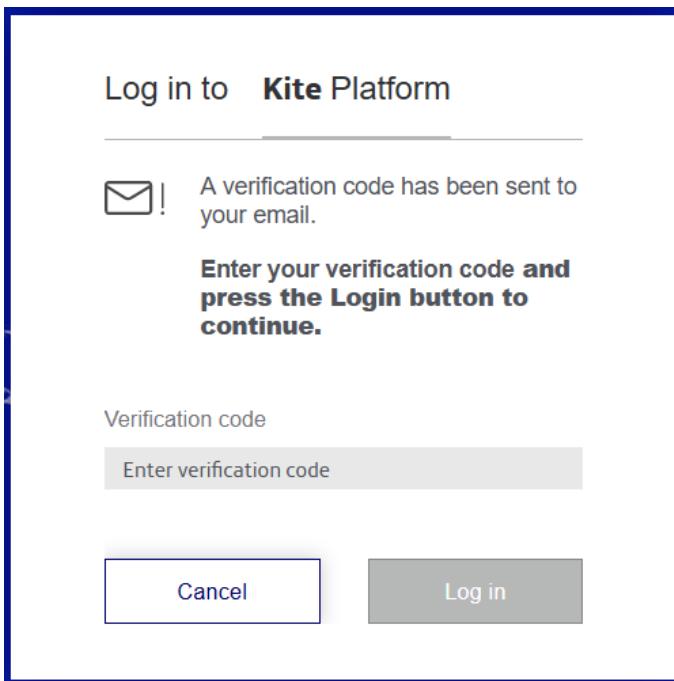
<sup>5</sup> Currently only available for "kiteplatform-movistar-es.telefonica.com" domain.

**⚠** The maximum amount of attempts to enter the password correctly is 5. Once reached this number the user will be locked if more attempts are made and he will receive an e-mail with instructions to reactivate his user account.

**⚠** The inactive session timeout is 3 hours and 24 hours for the active sessions.

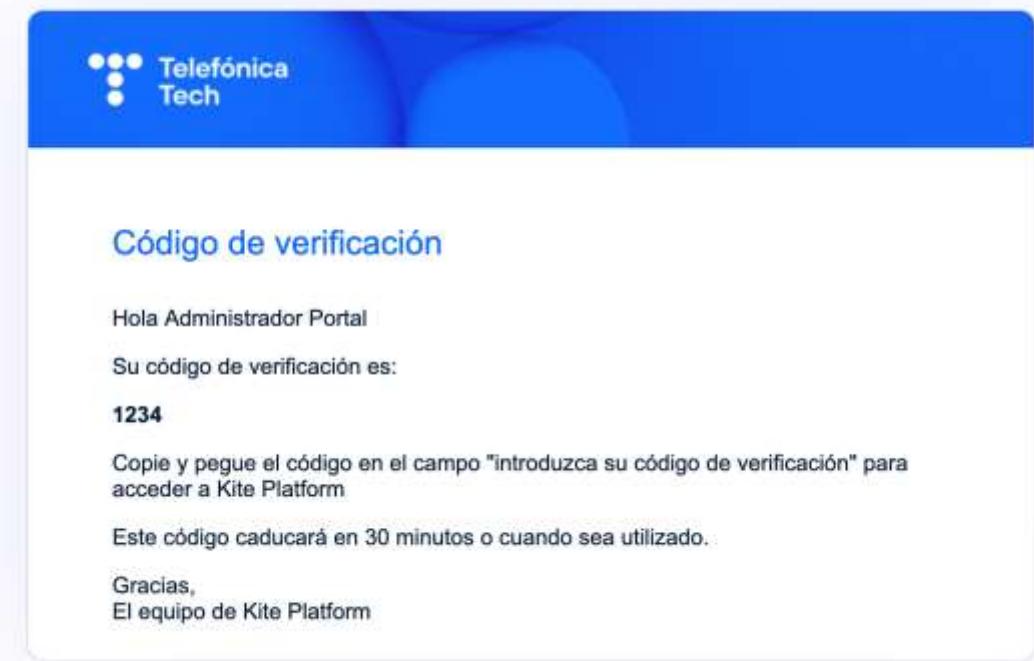
### 6.3.1 Login with two factor authentication

If two-factor authentication has been enabled at the organization level (see section [My organisation data](#) for more details), all users in the organization with this feature enabled may be prompted to enter a verification code immediately after successful login and password validation if KITE determines that more than a month has passed since the last two-factor login, or if the login IP or device characteristics are significantly different from those used during the last login.



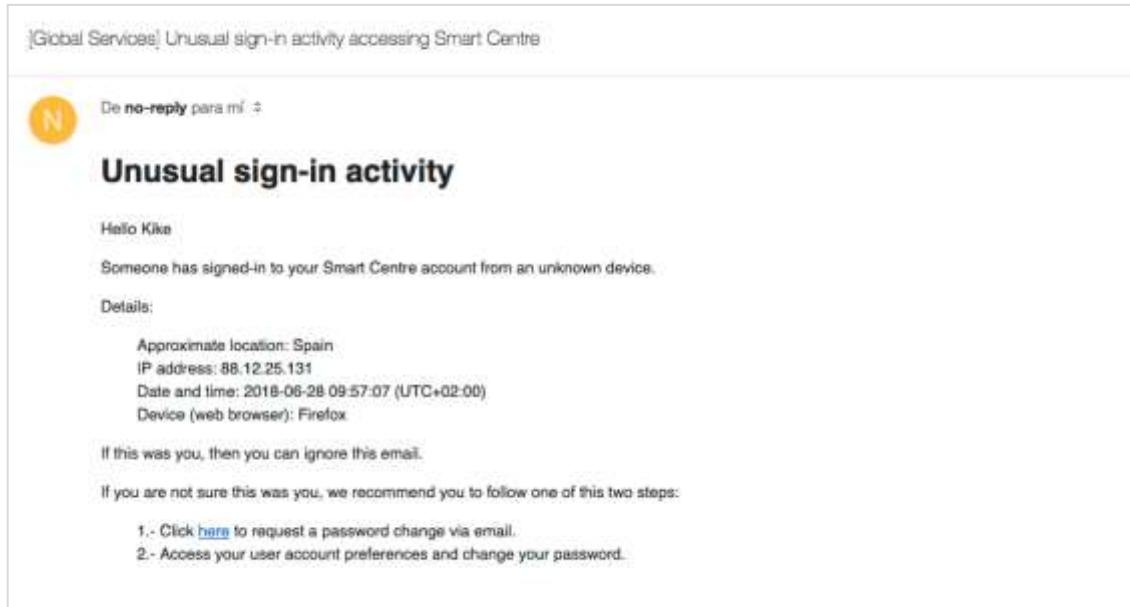
The screenshot shows a login screen with a blue border. At the top, it says "Log in to Kite Platform". Below that, there is a message: "A verification code has been sent to your email." followed by a mail icon. Underneath, it says "Enter your verification code and press the Login button to continue." A "Verification code" label is above a text input field containing "Enter verification code". At the bottom, there are two buttons: "Cancel" on the left and "Log in" on the right.

The verification code will be sent via email and will have a validity period of 30 minutes.



### 6.3.2 Access notifications from unknown user devices

In case the platform detects a login from a computer or user device that is not registered, that is, it is the first time it is used to access the Kite Platform, an email will be sent to the user to warn him / her of this situation.



The image shows an email notification titled "Unusual sign-in activity". The message content is as follows:

[Global Services] Unusual sign-in activity accessing Smart Centre

De no-reply para mí ↗

**Unusual sign-in activity**

Hello Kite

Someone has signed-in to your Smart Centre account from an unknown device.

Details:

Approximate location: Spain  
IP address: 88.12.25.131  
Date and time: 2018-06-28 09:57:07 (UTC+02:00)  
Device (web browser): Firefox

If this was you, then you can ignore this email.

If you are not sure this was you, we recommend you to follow one of this two steps:

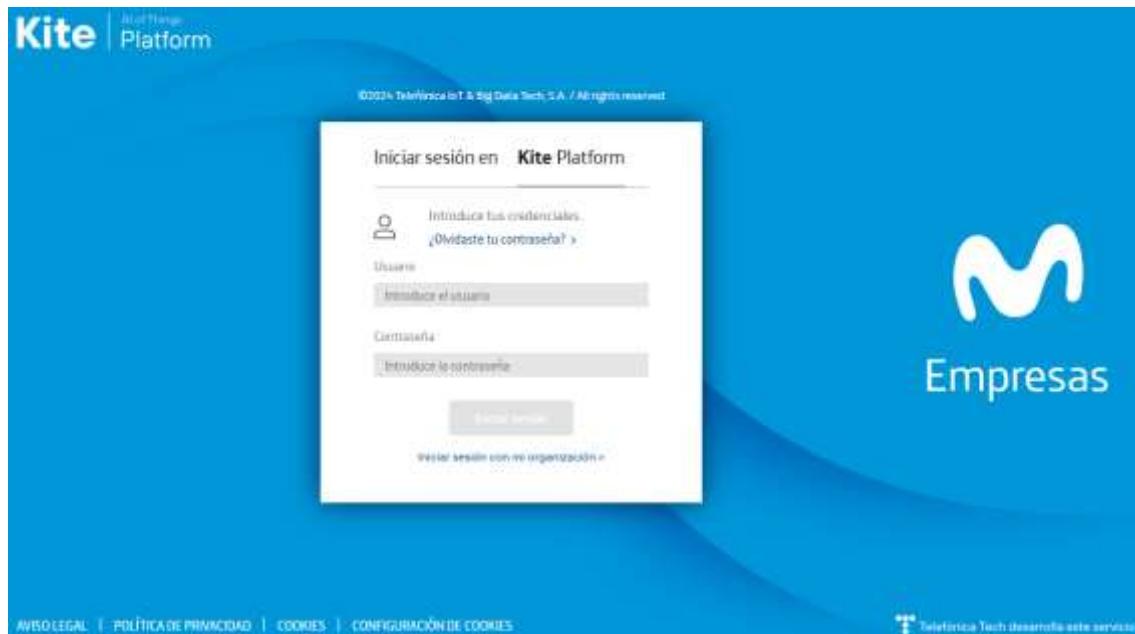
- 1.- Click [here](#) to request a password change via email.
- 2.- Access your user account preferences and change your password.

The user can say whether or not to change the access password through the hyperlink indicated depending on whether he recognizes the access as his own.

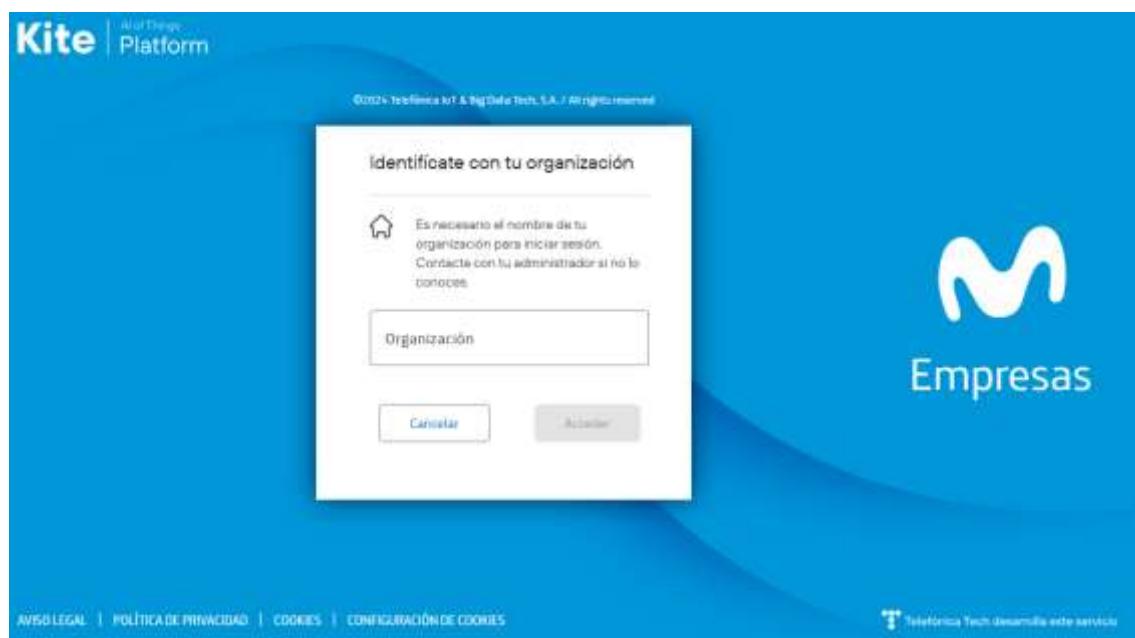
**⚠️** In certain situations (e.g. when using different browsers) access from the same computer might be interpreted as access from different computers.

### 6.3.3 Login using corporate credentials

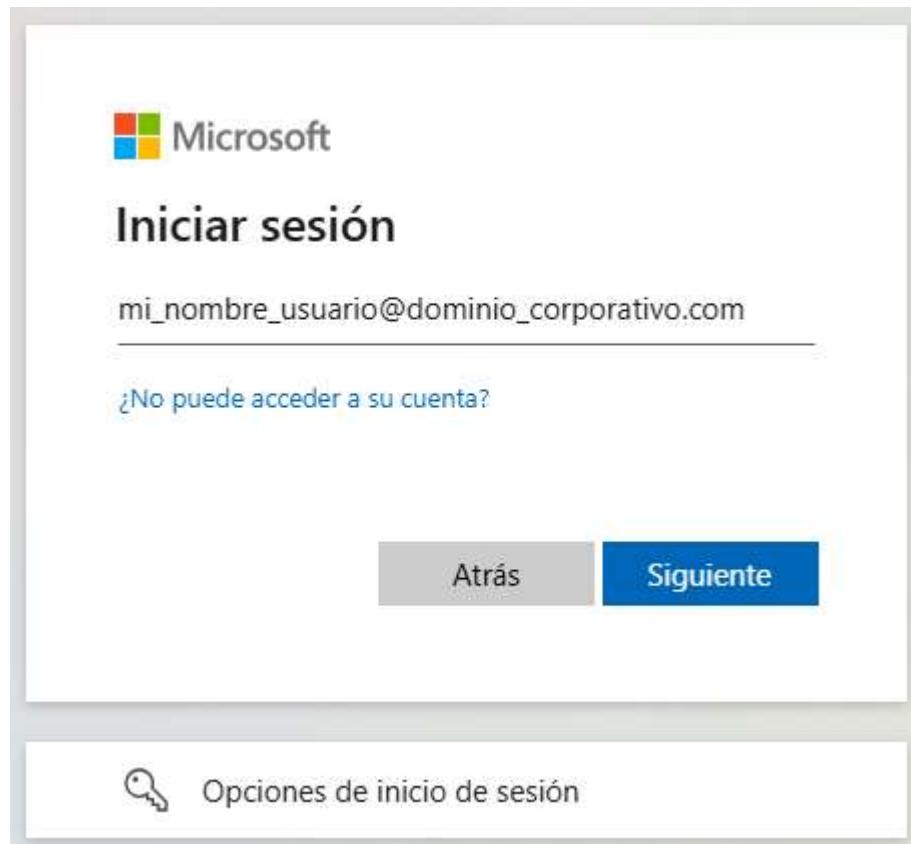
When the organisation has enabled the option to log in with the Open ID Connect protocol, it will be possible to access KITE using the corporate credentials (username/password) in a directory such as Microsoft Entra ID (formerly called Active Directory).



In this case, the user will have to click on the "Sign in with my organization" link.



The user will then type in the name of the organization whose credentials they want to log in with and which will be stored in their Kite tab associated with their Open ID Connect credentials.



From that point on, the user will be redirected to your organisation's directory to sign in with your company's credentials. Once the user has completed logging in to your organization's directory, they will be redirected to Kite and your user will have a guest role. A user in your organization with user management privileges will need to assign you the desired roles within Kite.

#### 6.4 User blocking

If a user does not log in during the 60 days after the last login or if he is in Pending state for 7 days, his user account will be blocked.

Whenever this happens the blocked user will receive a notification email informing about this issue.

He will also receive warning emails informing him about the upcoming account blocking 15, 3, 2 and 1 days before.

In order to re-activate his user account, the user will have to contact with the administrator o user manager of his organisation (or organisation above) to request the activation link.

In case the user click on the [Forgot your password?](#) Link, an error message will be displayed when setting up the new password.



Users blocked more than 60 days will be automatically deleted from Kite. Several days (15, 3, 2, 1) before deleting a blocked user an email will be sent to him. Once deleted, a new email will be sent informing him about this.

## 6.5 Password expiration

Passwords are valid during 120 days after the last change. Once the password is expired, the next time he tries to log in, he will be requested to update his password before logging in.



It is not allowed to enter one of the last 10 passwords already used.

## 6.6 Password reset

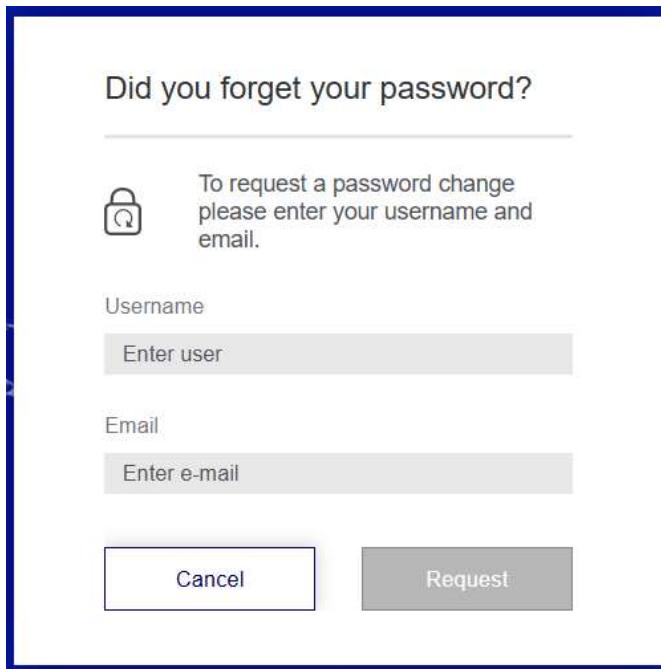
If the access password were forgotten then you should request the password be reset through the link [Forgot you password?](#) located on the lower portion of the start window.



If you forgot your user identifier you should contact your administrator.



If the user exceeds the maximum number of tries he will be blocked.



Did you forget your password?

To request a password change please enter your username and email.

Username

Email

Immediately after you will be required to enter your email address and user name and once confirmed you will receive an email with a link for resetting your password.

The process will be the same for activating a user account (see section [User's account activation](#) for further details).

## 6.7 Impersonating other Customers

If a Customer is configured as a participant of a multinational group and is also flagged as headquarters in that group, he will be able to access the workspace of each one of the Customers that make up the multinational without having to leave the current session (impersonation).



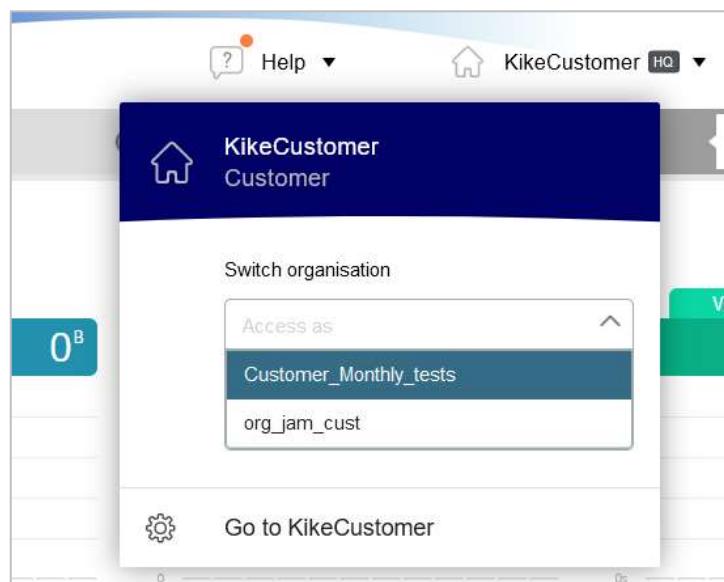
To become part of a multinational, the Customer must contact their Service Provider.

The access privileges in the new chosen Customer organisation will be those corresponding to the user role in the origin organisation. In no case will the user impersonate any specific user in the target Customer. That is, from an audit point of view, all the operations carried out are associated with the user of the origin Customer organisation (Headquarters Customer).

Customers with the ability to impersonate other Customers are displayed with the Headquarters icon  next to their name in the configuration bar, as shown in the image below.

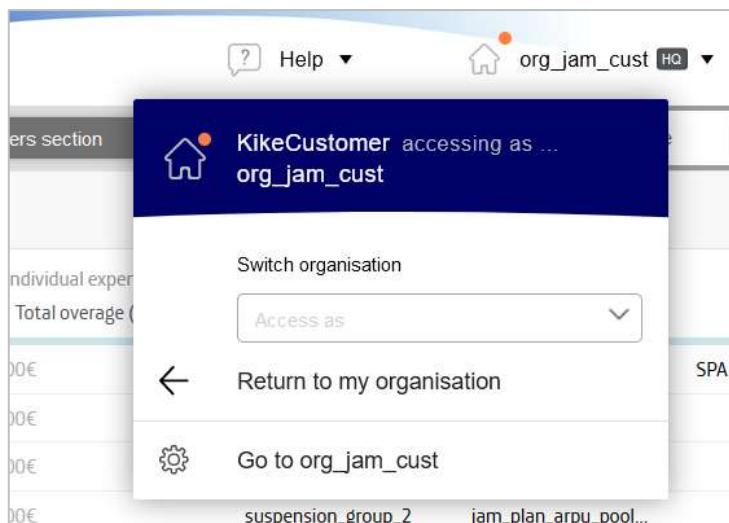


The following figure shows how to impersonate other Customer.



Clicking on the name of the organisation in the upper configuration menu will display a window from which it is possible to select the Customer to access.

When impersonating a specific Customer, the user will have the option to either return to its own organisation workspace or impersonate another Customer.



**⚠️** It will not be allowed to impersonate Customers who do not have the Self-management supplementary service activated.

**⚠️** Impersonation functionality does not allow to have access to any user's workspace, therefore, it is not possible, for a Service Provider, to consult a specific user's bulk operation result.

**💡** It is possible to access the extended view window by using the keys Ctrl+I (Win) and Cmd+I (Mac). With the ESC key the window will close.

## 6.8 Communication campaigns notifications

The ability to register communication campaigns to promote supplementary value-added services is made available to Service Providers. These campaigns will be registered for a specific date range and will appear to the users of Customers who do not have a contract for the service to be promoted.

They will appear associated with a pop-up window and the customer can decide not to see them again.

For more information on how to register campaigns with your service provider, contact the Kite Platform support team.

## 7 Dashboard

### 7.1 General aspects

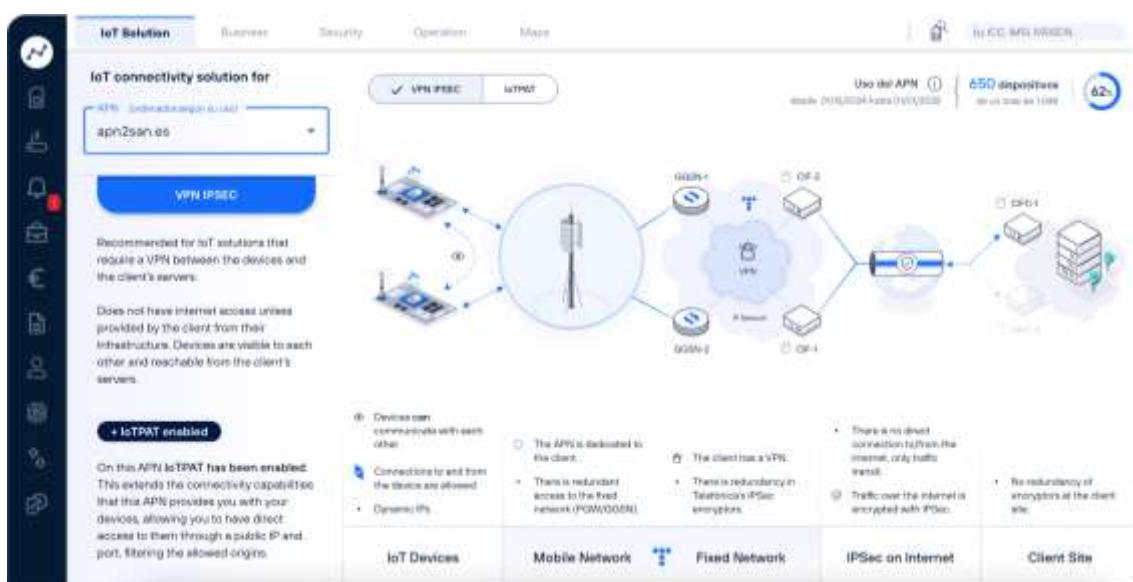
Dashboard section can be accessed through “Home” (  ) icon in the main menu and gives access to the different dashboard: Business and Security.

### 7.2 IoT Connectivity Solution Dashboard

This dashboard will only be available to Customers belonging to Movistar Spain and their Leading OBs.

Each of the APNs that a customer has in use is associated with an IoT connectivity solution. This solution provides a series of capabilities in the communication that occurs between the client's IoT devices and the endpoints with which they communicate.

This dashboard allows a client organization to have a graphical view, supported by descriptions and explanatory texts, of the capabilities associated with the type of IoT connectivity solution associated with each of the APNs it has in use.



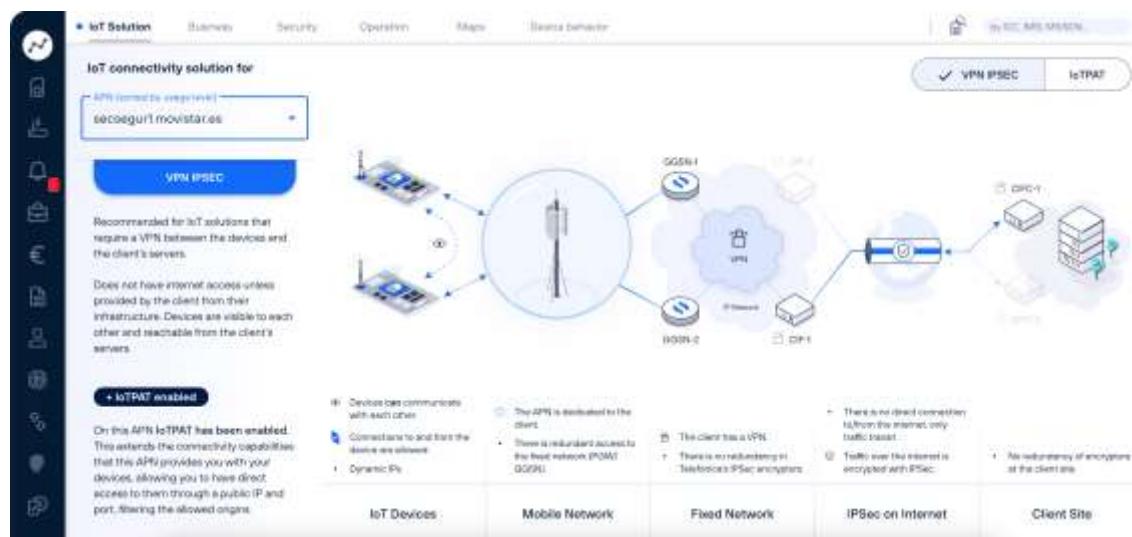
The user can select any of the APNs currently in use from a drop-down list at the top. This list will be sorted by APN usage level, with the most frequently used APNs first. Both the graphical layout and the text associated with it just below it, as well as the name and brief description displayed on the left side below the APN selector, will adapt according to the connectivity type of the selected APN.

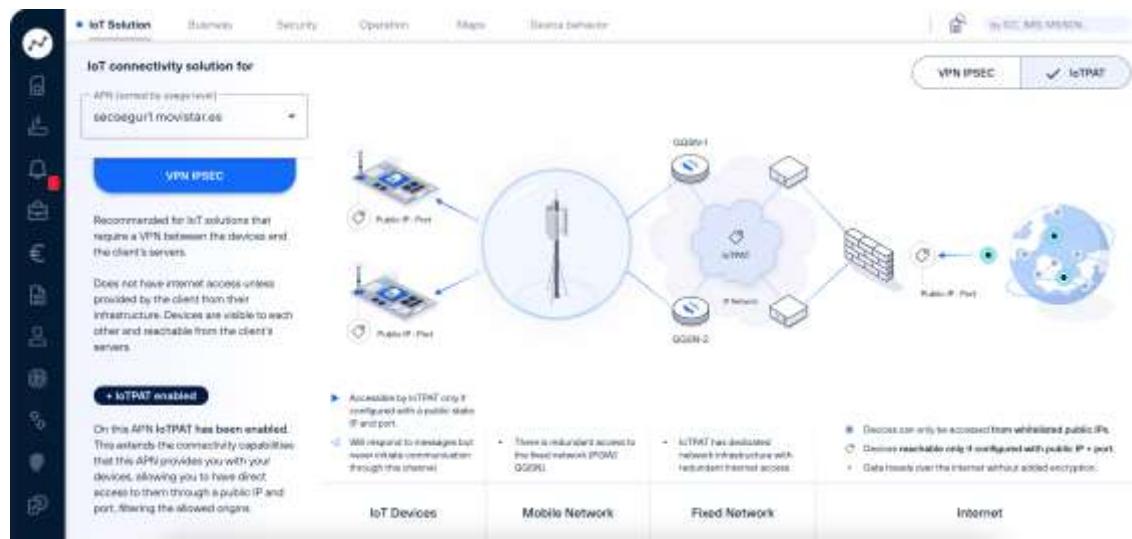
In the upper right part of the layout, an indicator of the usage level of the selected APN will be displayed. It will show the number of different devices that have used that APN at least once during the visually specified time period. This value is also contextualized as a percentage of the total number of devices that have used at least one APN during the same period.

The connectivity schemes correspond exactly to those offered by the service provider and that customers have previously contracted when agreeing on the necessary APNs according to the needs of their business.

Although each APN is associated with a unique connectivity scheme with its own characteristics, for private APNs the service provider gives the option of having additional access to the devices enabled from internet sources, it is the service called IoT PAT.

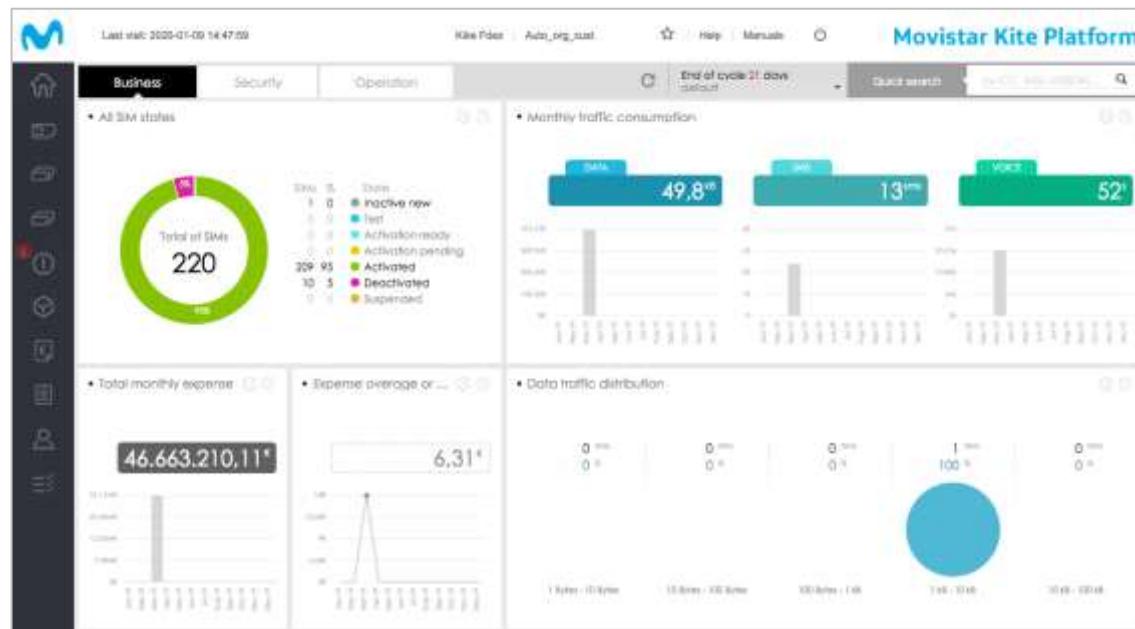
In cases where a private client APN has this extra access enabled, the interface will display a description that will highlight it and, because the connectivity scheme is different for accessing devices via this way (IoT PAT), the user will have the option to select which connectivity scheme they want to visualise. Thus, in the upper right part a selector will appear to allow you to make this choice, being able to view the scheme of the native connectivity type of the APN or what would be the scheme that would be applied if you access your devices through IoT PAT.





### 7.3 Business dashboard

Business dashboard displays a summarized view of widgets with KPIs about expense, consumption and the state of the Customer's SIM base.



The top bar shows information about the remaining days until the end of the current billing cycle. In addition, if the customers work with several billing accounts, they can choose a specific billing account to display all its consumption and expense information.



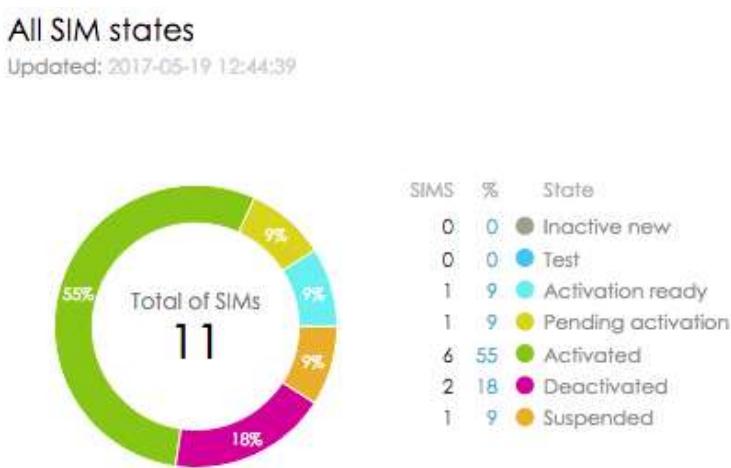
It is also possible to make a Quick Search in the Inventory, as described in section [Quick search](#).

The data of each widget will be automatically updated every hour, displaying the last update timestamp in every widget. Additionally, a manual refresh is also provided.

Next, the widgets available in the current version are described:

### 7.3.1 Widget “All SIM states”

It shows information about the number and percentage of SIM cards in each one of the different life cycle states. All the information is referred to the Customer’s whole SIM base. Hence, this widget is unaffected by the billing account selection.



By clicking on any state, the view will jump to the SIM Inventory, where a filtered list by the state in the life cycle of SIMs is obtained.

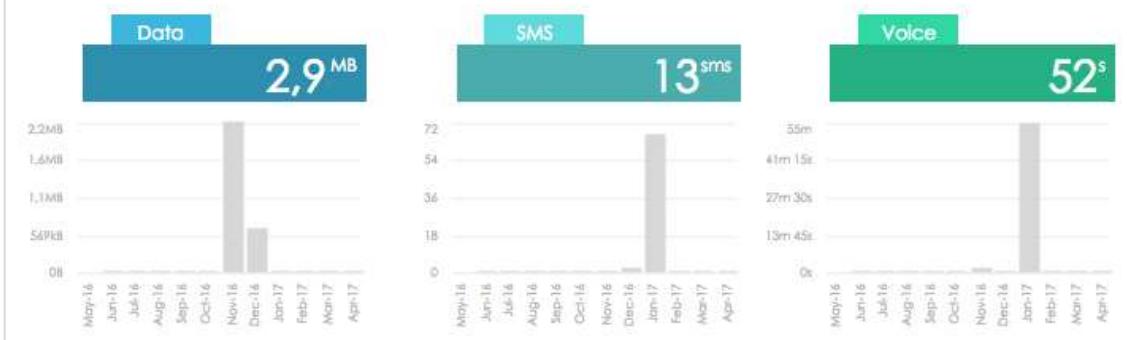
### 7.3.2 Widget “Monthly traffic consumption”

It shows information about the SIM consumption for the selected billing account.

The following indicators shown both, the on-going consumption in the current billing cycle (coloured rectangles), and the historic information in the last 12 billing cycles for Data, SMS and Voice traffic (bar graph).

### Monthly traffic consumption

Updated: 2017-05-19 12:44:58

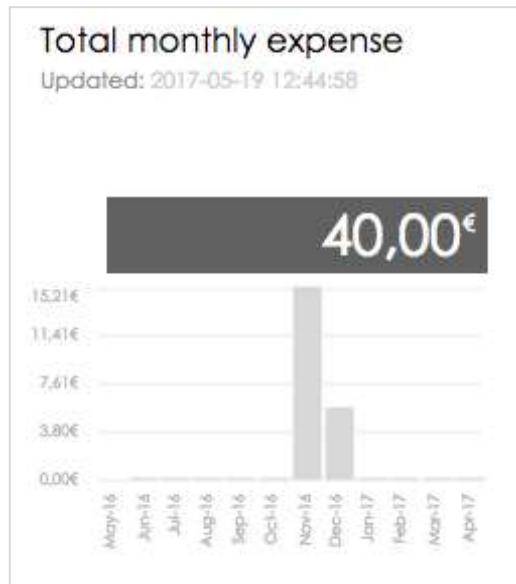


By hovering the mouse over the history bars, the detailed information about each cycle will be displayed. By clicking in a bar, it will jump to the related pre-bill.

 Normally, the durationg of billing cycles in historic graphs is equivalent to a month, except for the mini-cycles (see [Billing cycle](#) section for more information). In these cases, the historic graph may not cover the usual period of 12 months.

### 7.3.3 Widget “Total monthly expense”

It shows information about the total incurred expense for the selected billing account.



The information can belong to both, on-going expense in the current billing cycle (grey rectangle), or to historic information for the last 12 billing cycles (bar graph).

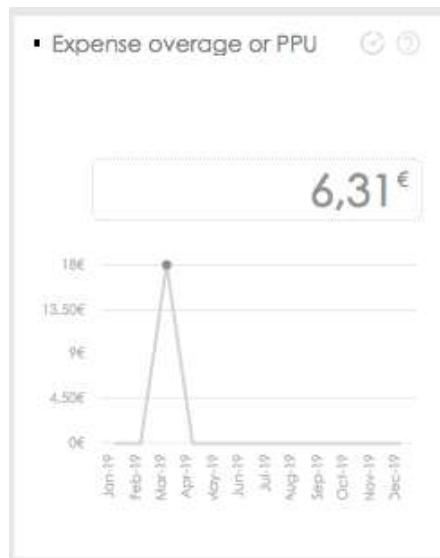
By hovering the mouse over the historic bars, the detailed information about each cycle will be displayed, and by clicking in a particular bar, it will jump to the related pre-bill.



Expense information not only includes expenses related to data, voice and SMS, but any other expense in which the Customer has incurred during the billing cycle.

#### 7.3.4 Widget “Expense overage or PPU”

It displays information about expense made either in pay-per-use (in the case of simple tariffs) or in overage once the voucher is exhausted (in the case of complex tariffs) for the selected billing account and its SIM cards.



The information shown is referred to the on-going expense in the current billing cycle (dashed rectangle) and the historic information for the last 12 billing cycles (bar graph).

By hovering the mouse over the historic bars, the detailed information about each cycle will be displayed.



In this widget, the displayed information will be normally zero, allowing to detect situations where the voucher size is not enough for the volumen of traffic and needs to be revised.



It includes both pool and individual expenses for post-paid tariffs for data, SMS and voice.

#### 7.3.5 Widget “Data traffic distribution”

It shows the distribution of data traffic performed by the SIM cards belonging to the selected billing account.

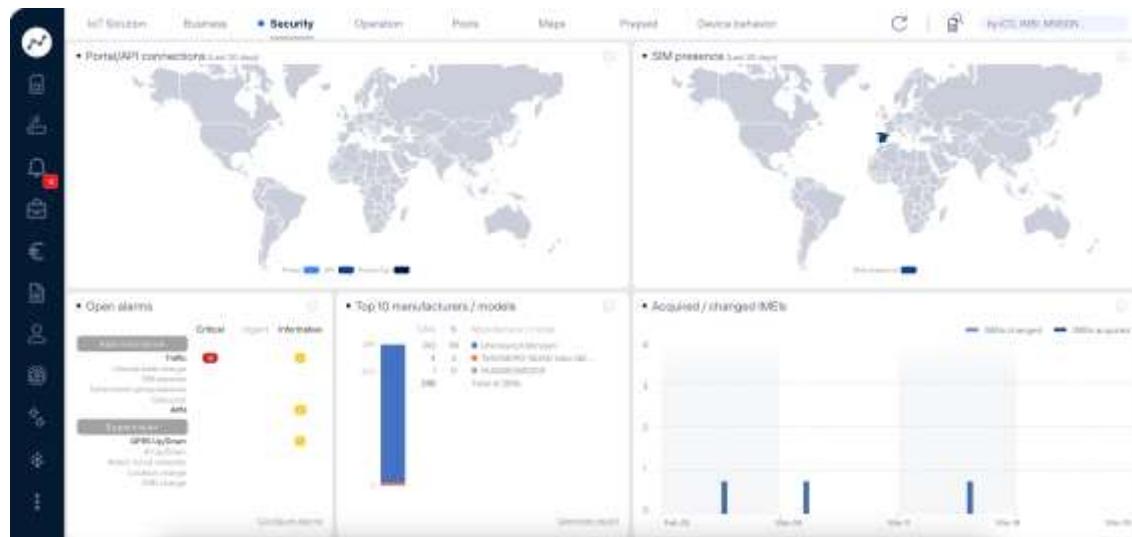


The size of the circles gives an idea about the number of SIM cards performing certain amount of traffic. Enriching this visual information, the percentage and number of SIM cards in each traffic interval are displayed.

 This distribution will change along the current billing cycle so the closer the end of the billing cycle is, the more representative the information will become.

## 7.4 Security dashboard

This dashboard shows a set of security-related indicators related to the Customer's SIM base and devices as well as user Portal access and API use.



The data contained in each widget is automatically refreshed in intervals that depend on each widget.

It is possible to update the information of any individual widget or for all widgets at the same time. By hovering the mouse cursor over the icon  of a widget, the last update information is provided.

Computed 3 min ago 

Next, by clicking on the icon  it will be possible to update the widget with the last computed data available.

Computed a few seconds 

The available widgets are described below.

#### 7.4.1 Widget “Portal/API connections”

It offers information on the number of user logins to the portal and API accesses that have taken place in the last 30 days in each country.



Depending on whether in a country there have been only Portal connections or only API connections or both types, the country will be displayed in a different colour as indicated in the widget legend.

Regarding the API, two indicators are provided: number of accesses from unique IPs each day ("API unique connections") and number of total accesses ("API total connections"), either from the same or different IP.

This widget automatically refreshes every hour.

#### 7.4.2 Widget “SIM Presence”

It offers information about the voice traffic, data traffic and SMS in the last 30 days in each country.



This widget automatically refreshes every hour.

#### 7.4.3 Widget "Open alarms"



It offers information about the number of open alarms of the entire Customer's SIM base broken down by severity (Critical, Urgent, Informative) and by alarm type, as shown in the image above.

Clicking on each number will redirect to the alarm list section to see the detail of each of them.

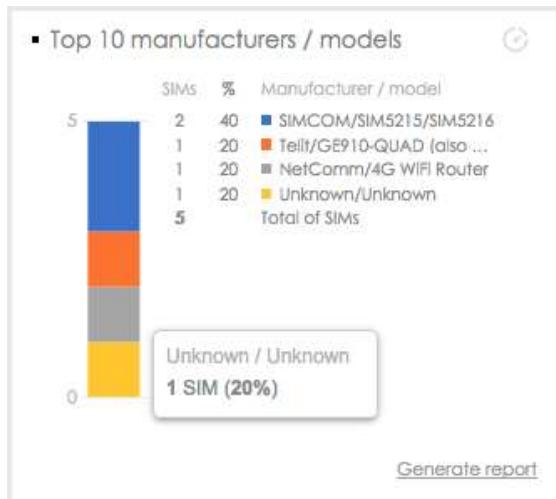
Clicking on the "Alarm configuration" link will redirect to the alarm configuration section.

 This widget will not be visible to the user role "User management"

This widget automatically refreshes every 5 minutes.

#### 7.4.4 Widget “Top 10 manufacturers / models”

It shows information about the different combinations of manufacturers and models of the communications module of the entire Customer’s SIM base.

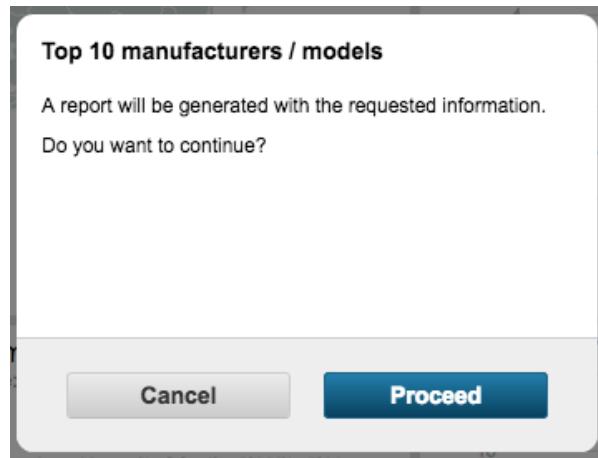


The graphic shows only the 10 most used combinations of manufacturers and models.

 Also included as categories are those combinations in which the model and manufacturer are unknown. A manufacturer and model may be unknown in case the SIM card has not yet established a data session.

By clicking on one of the categories (either on the graphic or on the legend) it will redirect to the Inventory to display the SIM cards associated with the selected manufacturer and model combination.

If you want to obtain the details of all used models and manufacturers and not being restricted to the 10 most used ones, you can generate the corresponding report through the "Generate report" link.



After accepting the warning window, the report will be generated and can be downloaded from the reports section.



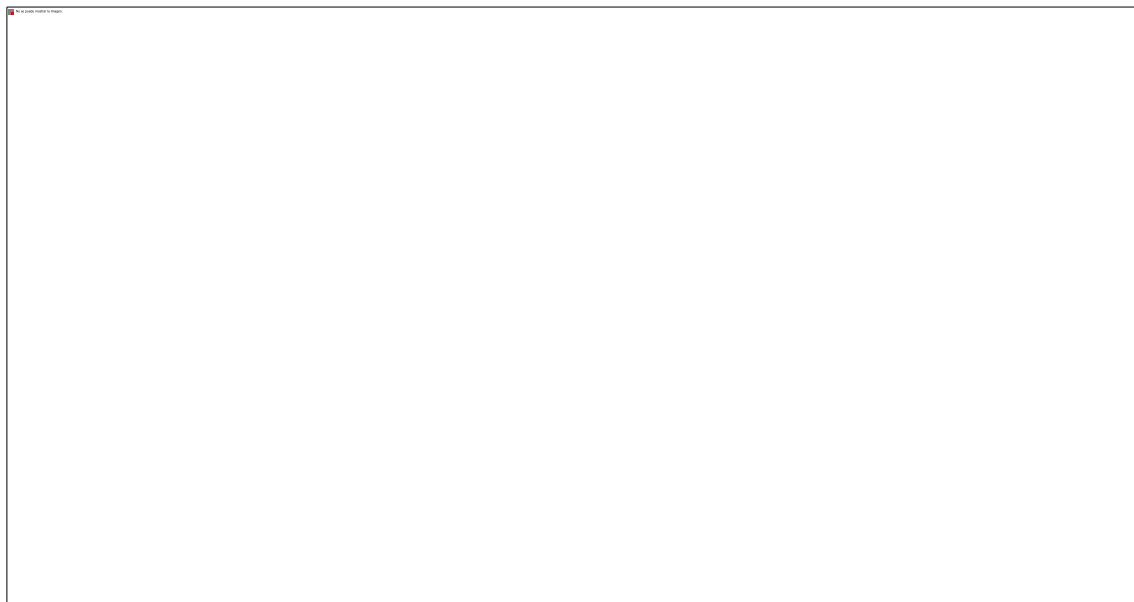
The screenshot shows a report titled "Manufacturer and model list" with a status bar indicating "Ready for download 1 out of 1". Below the title, there is a timestamp "Printed 2021-06-29 09:00:12" and an "Organization" field set to "WireCustomer". On the right side, there are download and refresh buttons. A small note at the top right says "Keep pressed to delete all".

The fields of this report are detailed in the reports section: [Manufacturer and model list](#).

This widget automatically refreshes every hour.

#### 7.4.5 Widget “Acquired / changed IMEIs”

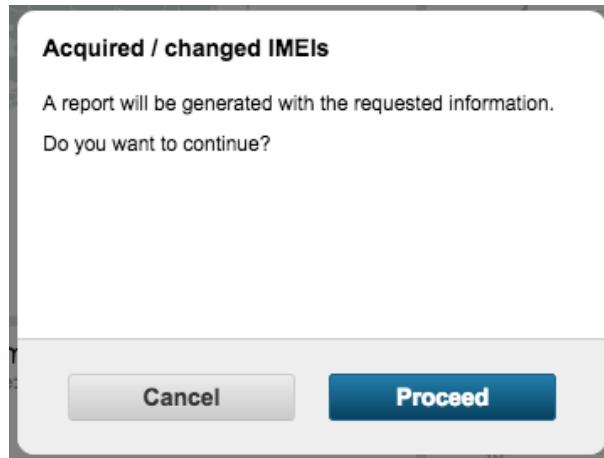
Displays information on the number of daily IMEI changes that have taken place in the last 30 days.



Each day shows both the number of IMEIs acquired for the first time (blue colour) and the number of IMEI modifications (in orange).

 The date relative to the information displayed is always given in the Customer's time zone.

By clicking on one of the bars the corresponding report with the detail of the affected SIMs and the changed IMEIs will be generated.



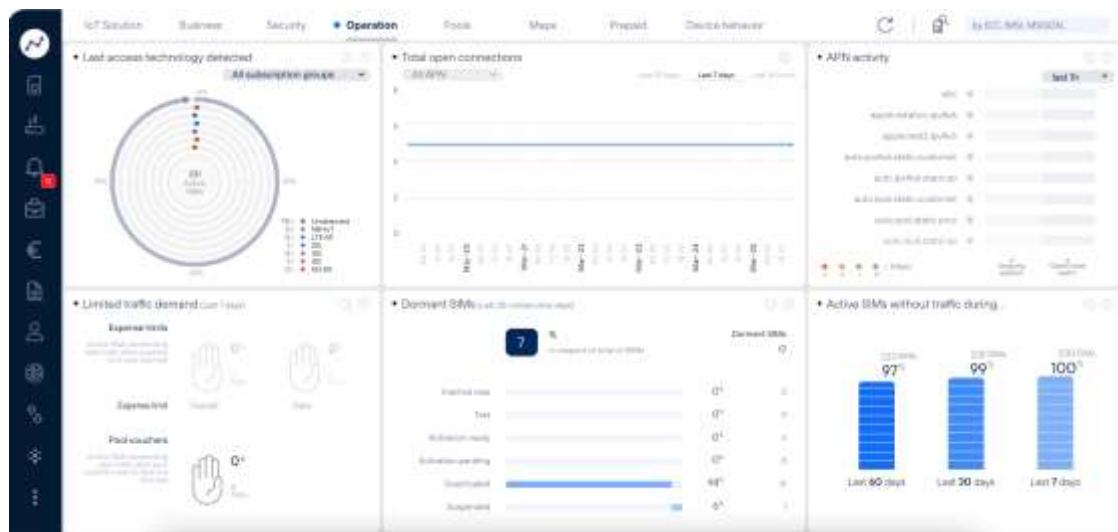
After accepting the warning window, the report will be generated and can be downloaded from the reports section.

Fields of this report are detailed in the reports section: [Daily IMEI changes](#).

This widget automatically refreshes every hour.

## 7.5 Operation dashboard

This dashboard shows a set of indicators related to the use and state of the Customer's SIM base.



Information included in each widget is automatically updated. Updated intervals are different depending on each widget.

Both, the option for updating all widgets with one click or for updating a specific widget, are available.

Associated to each widget a  icon is displayed offering information about the related widget.

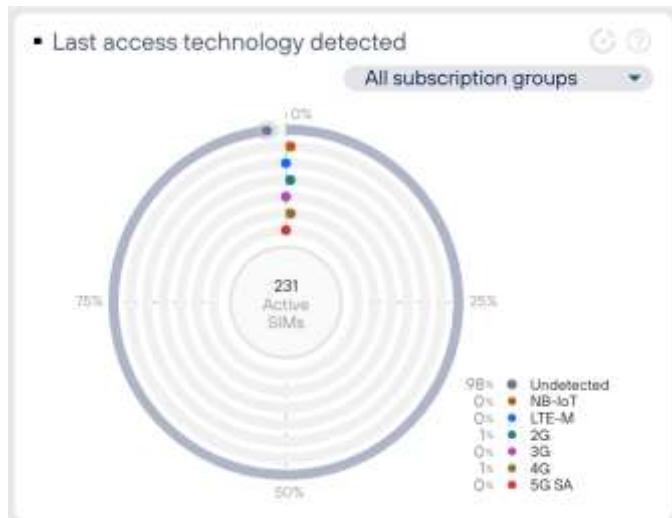
Next are described the available widgets in the operation dashboard.

### 7.5.1 Widget “Last access technology detected”

It shows a snapshot of the distribution of active SIMs according to the last radio technology used.



Note that LTE is accounted as 4G



 By hovering the mouse over the radio technologies, either on the graph or on the key, the number of affected SIMs is displayed.

By default, the information displayed is for all the SIMs in the "Activated" state, but it is possible to filter the view for the SIMs of a specific Subscription group.

By clicking on one of the technologies (either on the graphic or on the legend) the inventory view is accessed with the list of related SIMs.

This widget automatically refreshes every half hour.

### 7.5.2 Widget “Total open connections”

It offers information about the number of open data connections in a certain time interval. According to the chosen view, the time intervals that are handled are:

- Last 30 days: 1-day intervals
- Last 7 days: 1-hour intervals
- Last 24 hours: 15-minute intervals

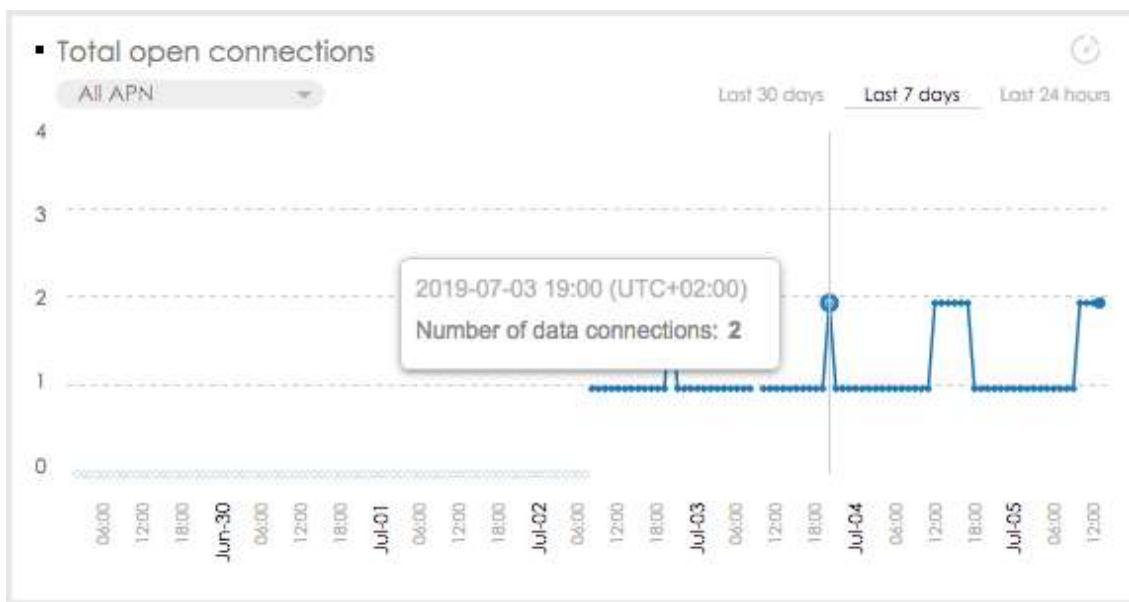
 The number of connections in a day is calculated as the average value of the samples taken every 15 minutes throughout that day.

 The number of connections in one hour is calculated as the average value of the samples taken every 15 minutes throughout that hour.

 The number of connections in 15 minutes is the result of the sample taken at that moment.

**⚠** The number of connections determined in an instant corresponds to the number of SIMs that have established one or more connections at that instant

**⚠** In case that the information of the number of open connections is not available, it will not be taken into account for the calculation of the average value and its representation in the graph.



Each view can be filtered in turn by APN. If it is not filtered by APN, the aggregate number of connections will be shown.

**⚠** The list of APNs through which you can filter will be the one configured at the client level.

**⚠** The date and time relative to the information displayed is always given in the customer's time zone.

This widget automatically refreshes every 15 minutes.

### 7.5.3 Widget “APN activity”

It shows the Customer’s APNs activity according to the selected time interval.



Depending on the type of activity registered each APN may be in one of the following situations:

APN status	Ongoing session now 	Open or close of context in the selected interval 	Open or close of context for less than a week	Description
	✓	✓	✗	There are SIMs with ongoing sessions and open/close connection events on the selected period.
	✓	✗	✓ ✗	There are SIMs with ongoing sessions but without open/close connections events in the selected period.
	✗	✓	✓ ✗	There are SIMs with open/close connection events in the selected period but without ongoing sessions.
	✗	✗	✓	There are no SIMs with ongoing sessions nor open/close connections events in the selected period. Last event was received less than a week ago.
	✗	✗	✗	There are no SIMs with ongoing sessions nor open/close connections events in the selected period. Last event was received more than a week ago.

The monitoring interval will be, by default, the last hour, being possible to select the last 3 hours, last 12 hours or the last 24 hours.



It is possible to filter the list of APNs by state by selecting or deselecting the corresponding colours in the lower left corner.

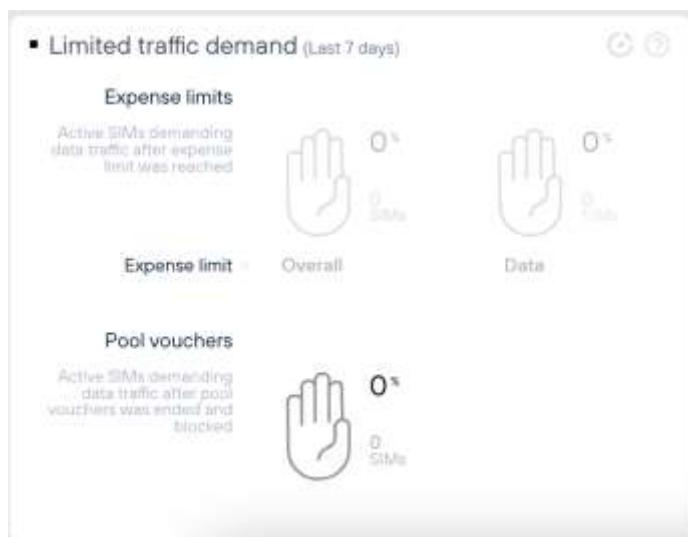


Clicking on one of the APNs will redirect to the Inventory will the list of SIMs having that APN as current APN.

This widget automatically refreshes every 5 minutes.

#### 7.5.4 Widget “SIMs demanding traffic above limits”

It shows the number of active SIM cards with data traffic being blocked trying to make traffic (for the reasons detailed below) in the last 7 days.



- **Expense limit reached** (this section applies to individual tariffs only): It shows the number of active SIMs having reached expense the configured limit that are trying to make traffic (see section [Change operations](#) for more information about how to configure expense limits on SIM cards).

This section becomes dimmed when no individual expense limits have been configured or will turn red if a traffic blocking happens.

- **Pool voucher exhausted** (this section applies to pool tariffs only): It shows the number of active SIMs belonging to a data pool that are trying to make traffic without success

due to having the pay-per-use consumption blocked (see [Data pool overage barring in a Subscription group](#) for more information).

This section becomes dimmed when no data pool tariff exists with blocked data pool overage or will turn red if a traffic blocking happens.

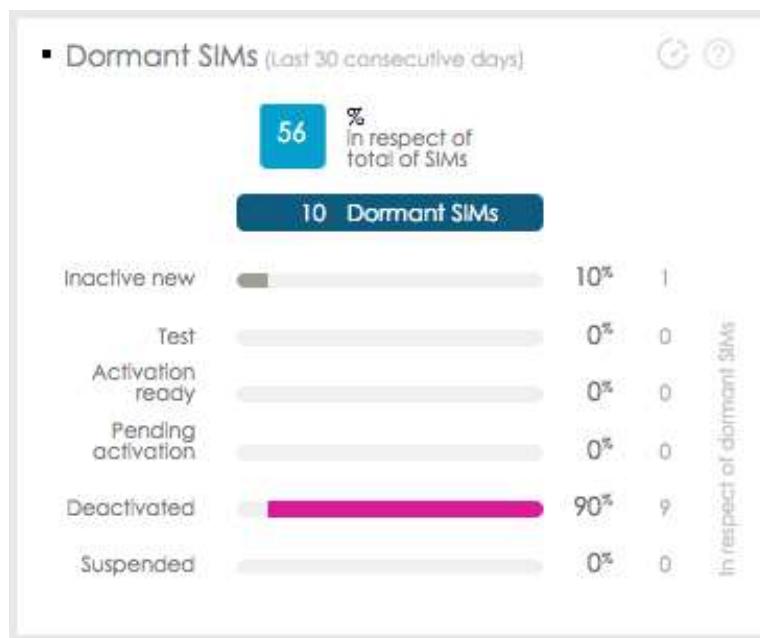
**⚠️** The information displayed will not be affected by changes in the configuration of expense limits or data pool overage barring, or start of a new billing cycle if no attempt of performing traffic after one of these changes has been made.

Clicking on one of the hands will show the Inventory with the list of related SIMs.

This widget automatically refreshes every hour but the data is updated in real time.

#### 7.5.5 Widget “Dormant SIMs”

It shows the number of SIMs being in the same lifecycle state more than 30 consecutive days. “Activated” SIMs are not considered in this widget.

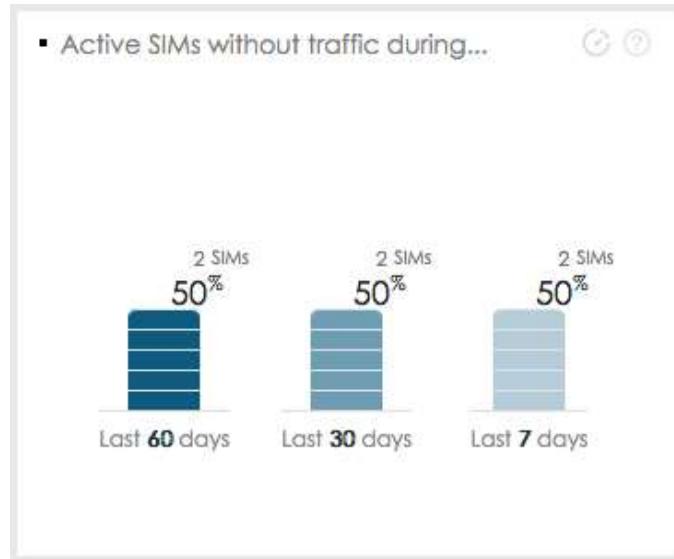


Clicking on one of the states will redirect to the inventory with the list of related SIMs.

This widget is refreshed every hour.

#### 7.5.6 Widget “Active SIMs without traffic”

It shows the number of SIMs in “Activated” state without any kind of traffic (voice, sms, data) in the last 7, 30 and 60 days.



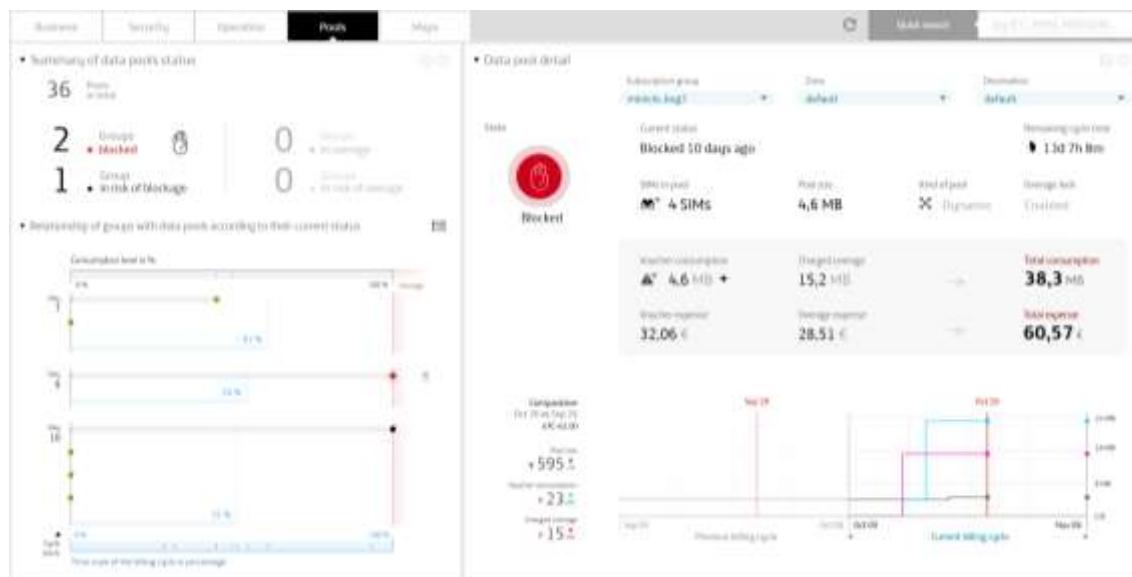
The percentages are calculated on the total number of existing active SIMs

Clicking on one of the columns will redirect to the inventory with the list of related SIMs.

This widget automatically refreshes every hour.

## 7.6 Pools dashboard

This dashboard shows a set of indicators related to the use and status of a customer's data pools.

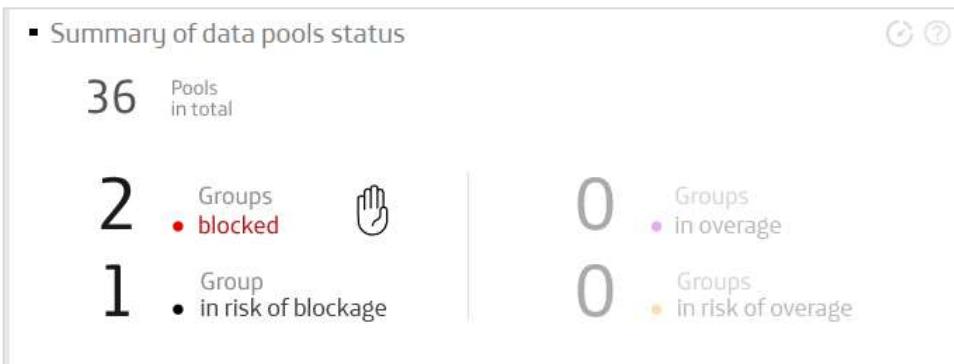


Associated with each widget is a icon that offers help information related to the widget.

The available widgets are described below.

## 7.6.1 "Summary of data pools status" widget

### 7.6.1.1 Summary information



At the top, information is provided on the total number of data pools the Customer has. If the Customer had shared pools, it will be shown how many of them there are and the number of Subscription Groups that participate in shared pools.

**⚠️** A shared pool is one in which SIM cards from various Subscription Groups contribute to the pool. These Subscription Groups must always have the same Commercial Plan and Billing Account to be part of the shared pool (see section [Administration of Subscriptions groups](#) for more information on Subscription Groups in Kite).

**⚠️** Currently only Vivo has the shared pool functionality.

It is also indicated the number of Subscription Groups that are in a special state, specifically:

- **Blocked groups:** it accounts for the Subscription groups whose associated pool has the voucher exhausted and its lines have blocked the use of data by the functionality of "Data pool overage barring" (see section [Setting up the data pool overage barring](#) for more information).
- **Groups with risk of blocking:** the percentage of use of the associated pool is greater than the percentage of the billing cycle that has elapsed and the group has activated the functionality "Data pool overage barring ". When the pool voucher runs out its lines will be blocked.
- **Groups with expense overage:** the associated pool has the voucher exhausted and the use of data from its lines is charged as overage (pay-per-use).
- **Groups with risk of overage:** the percentage of use of the associated pool is greater than the percentage of the billing cycle that has elapsed and the group has disabled the functionality of "Data pool overage barring". When the pool voucher runs out, the overage will be consumed.

#### 7.6.1.2 Relationship of groups with data pools according to their current status

##### List view

This view will only be available when the Customer has several pools

	Consumption	Cycle	Subscription group	Zone	Destination
● 	100%	64%	miniclo_bug7	default	default
● 	100%	38%	mini_1517	default	default
● 	100,00%	61%	gs_mongo_pool_10	spain ole	default
● 	45,21%	70%	gs_tramos_pool_d7	default	default
● 	0,00%	3%	gs_bug_28pro	default	default
● 	0,00%	3%	gs_bug_28pro	spain ole	default

The list with all the Customer data pools can be accessed through the icon . For each pool the following information is provided:

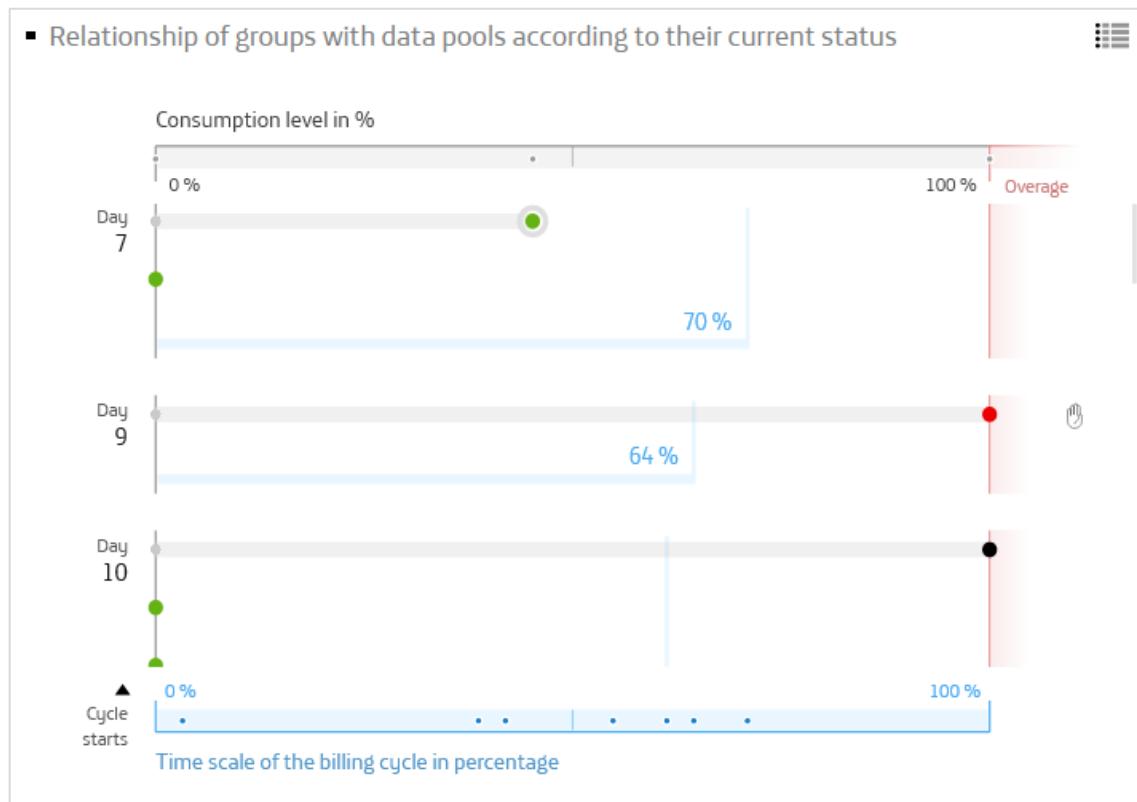
- **Consumption:** Percentage of consumption of each pool. If 100% is exceeded the tag “>100%” will be displayed.
- **Cycle:** Percentage of billing cycle elapsed.
- **Subscription group:** Subscription group associated to the pool.
- **Zone:** Tariff zone associated to the pool.
- **Destination:** Destination zone associated to the pool.

The following iconography appears on this list on the left side of each element:

-  • Indicates that it is a blocked Subscription group.
-  • Indicates that it is a Subscription group in overage.
-  • Indicates that this is a Subscription group at risk of blocking.
-  • Indicates that it is a Subscription group at risk of overage.
-  • Indicates that it is a Subscription group without risks or either blocking or overage.
-  indicates that it is a pool shared among several Subscription groups.

### Graph view with several pools

By clicking on the icon  , you access the graph with information on the current consumption made by each data pool combined with the moment of the billing cycle in which each one is located.



The upper part of this graph shows the scale of the % of voucher that each pool has consumed.

The information is organized by grouping the pools that share the same billing cycle day. The most common situation will be having each pool associated to a single Subscription Group. But, as with Vivo, it may be the case that a pool is shared by several Subscription Groups. This situation is reflected in the graph by showing these Subscription groups more tightly grouped with the icon  on their right.

Each gray bar corresponding to a Subscription Group gives an idea of the daily evolution of the pool's use in percentage since the beginning of the billing cycle. Each gray ball reports the % of accumulated consumption on a daily basis, with the colored ball to the right representing the percentage of current use.

The bottom of the graph shows the scale for the % billing cycle already elapsed. In each daily group the % of cycle elapsed is shown in blue.

 The combined information of the % of consumption (upper scale in gray) together with the % of the billing cycle elapsed (lower scale in blue) allows to compare the current use of the pool in relation to the cycle day. If the colored ball representing the current usage percentage is ahead of the current cycle day, it means that the pool is being consumed at a faster rate than a proportional usage throughout the cycle.

### Graph view for a single pool

If the Customer only has a single pool (shared or not among several Subscription Groups), the graph that will be displayed looks like the following, which, as in the view with several pools, combines the % of consumption with the % of elapsed time of the current billing cycle.



### 7.6.2 "Data Pool Detail" Widget

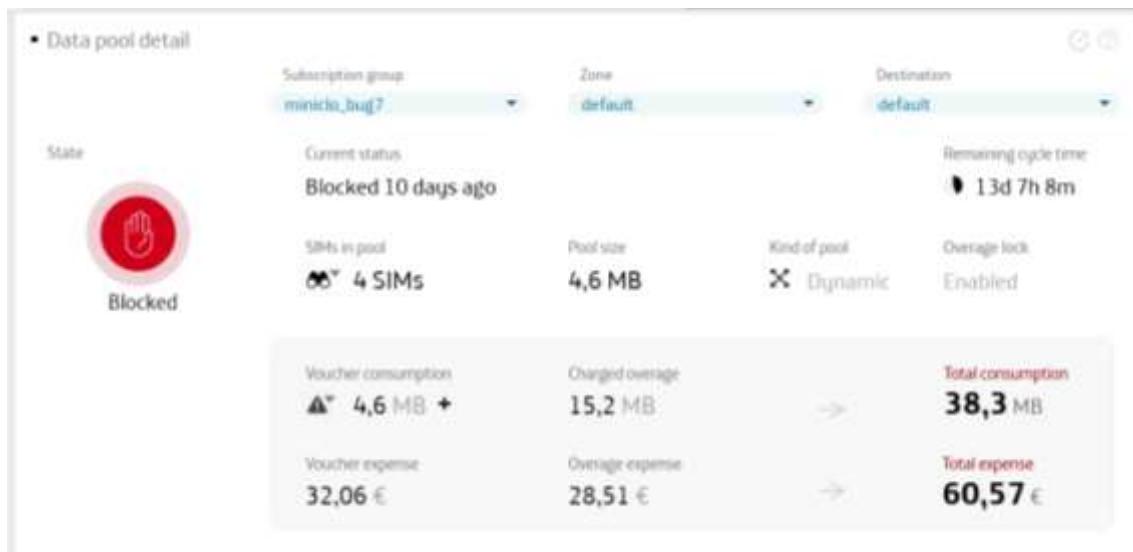
This widget shows the detail of the data pool that has been selected by clicking from the list of pools of the previous widget or from the controls of the widget itself that allow selecting the desired pool, Subscription group, zone and tariff destination.

In this widget, in addition to the pool data, a history of its progress is shown both in the current billing cycle and in the previous cycle for comparison.

#### 7.6.2.1 Data pool information

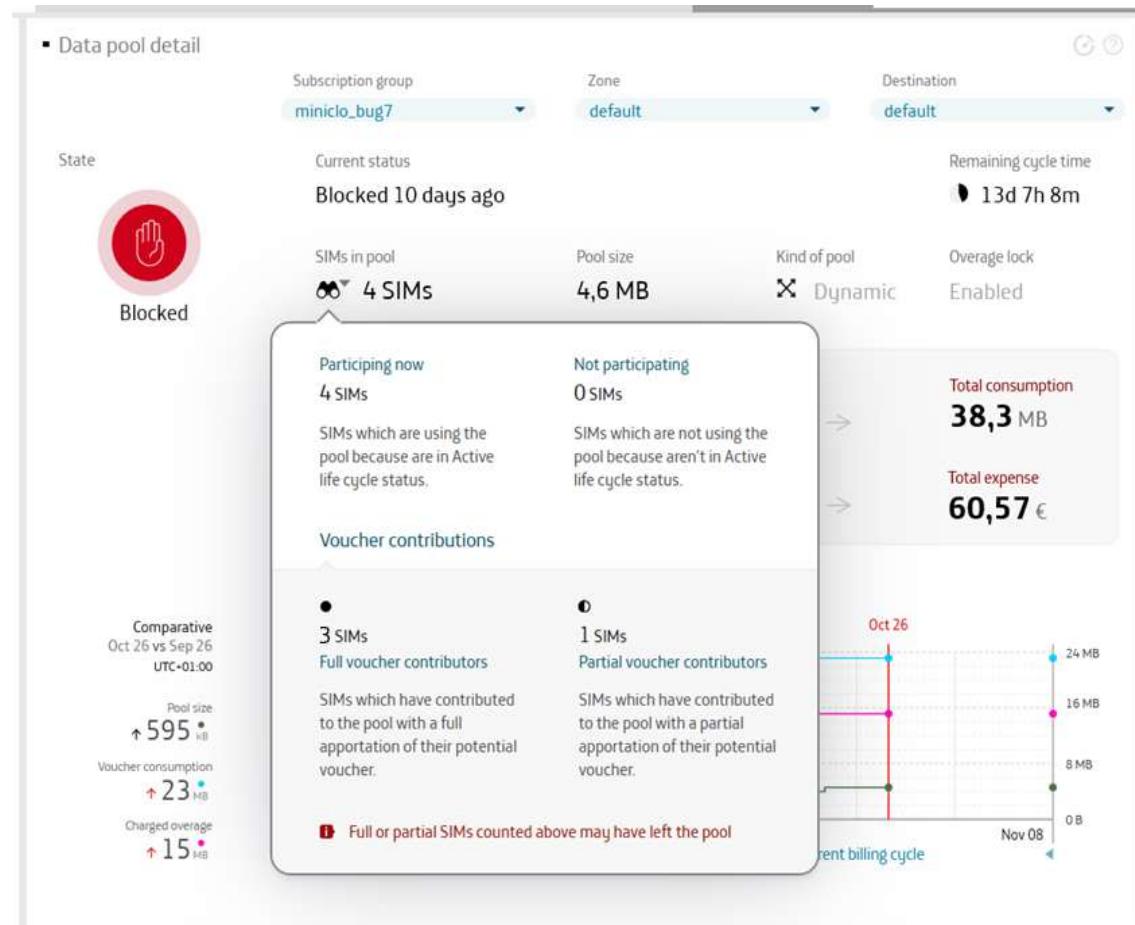
The information that is displayed will be different depending on whether it is an individual pool or a pool shared between several Subscription groups.

##### Individual pool



The screenshot shows the 'Data pool detail' section of a dashboard. At the top, there are three dropdown menus: 'Subscription group' set to 'minichu\_hug7', 'Zone' set to 'default', and 'Destination' set to 'default'. Below these are four main sections: 'State' (Blocked), 'Current status' (Blocked 10 days ago), 'Remaining cycle time' (13d 7h 8m), and 'SIMs in pool' (4 SIMs). To the right of these are 'Pool size' (4,6 MB), 'Kind of pool' (Dynamic), and 'Overage lock' (Enabled). At the bottom, there are two rows of consumption and expense details: 'Voucher consumption' (4,6 MB) and 'Charged overage' (15,2 MB) leading to a total consumption of 38,3 MB; and 'Voucher expense' (32,06 €) and 'Overage expense' (28,51 €) leading to a total expense of 60,57 €.

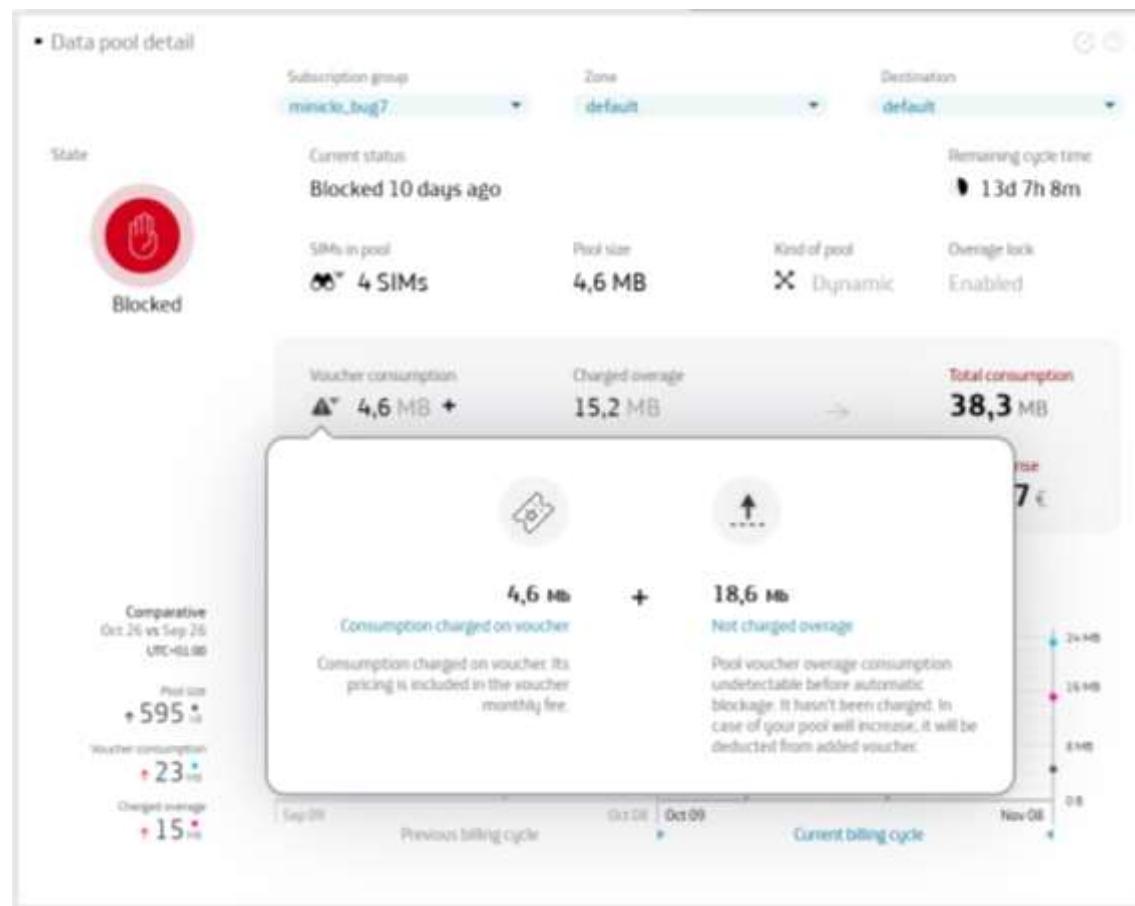
- **State:** Indicates with an icon the % of pool consumption as well as if the pool is in a situation of blocking or with expense overage or at risk of blocking / expense overage.
- **Current status:** Provides additional information on the status of the pool.
- **Remaining cycle time:** Number of days, hours, minutes, and seconds remaining until the end of the current billing cycle.
- **SIMs in pool:** SIMs that are assigned to the Subscription group associated with the pool, regardless of the state in which these SIMs are. The icon provides detailed information about:
  - How many SIMs are making active use of the pool at the current moment, that is, they are in the Activated state; and how many not.
  - How many SIMs have contributed 100% to the pool and how many have only done so partially, because they have entered in the middle of the cycle or have been removed from the pool before it is exhausted.



- **Pool size:** Pool data voucher that is shared by all SIMs. Included in the monthly fee (or monthly accounts in case of dynamic pool).

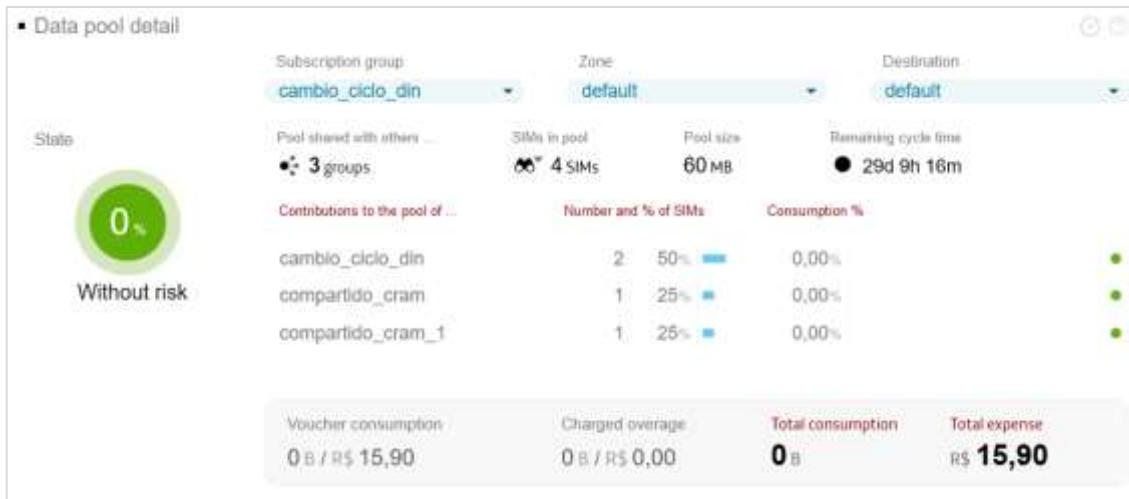
**⚠️** The size of the pool may be 0 bytes in the cases in which the associated rate is configured to be charged only when the SIMs do traffic.

- **Kind of pool:** “Static” if the voucher has a fixed size associated with a single monthly fee or “Dynamic” if the voucher has a dynamic size based on a fixed value multiplied by the number of lines and the same number of monthly fees. Both pools have an overage fee in pay-per-use mode after the voucher is exhausted.
- **Overage lock:** Indicates whether the Subscription group has overage blocking configured (see section [Setting up the data pool overage barring](#) for more information)
- **Voucher consumption:** Traffic units consumed from the pool voucher. It includes any non-charged overage that may exist. If there is a non-charged overage, it will be indicated with a sign (+) and an alert icon (**⚠️**).



- **Charged overage:** Traffic units consumed from the charged overage throughout the billing cycle. It does not include non-charged overage traffic.
- **Total consumption:** Sum of consumption of the voucher + overage.
- **Voucher expense:** expense for monthly pool fees granted by pool voucher traffic units, forming the voucher.
- **Overage expense:** expense for the pay-per-use fee once the pool voucher is exhausted.
- **Total expense:** sum of expense for the voucher + overage.

## Shared pool



- 
- **State:** Indicates with an icon the % of pool consumption as well as whether the pool is in a situation of blocking or with expense overage or at risk of blocking / expense overage. In the event that the Subscription groups that contribute to the pool are in different states, the icon will be a combination of both states.
- **Pool shared with others...:** Number of Subscription groups contributing to the pool.
- **SIMs in pool:** Total number of SIMs that are assigned to the Subscription groups that share the pool regardless of the state in which these SIMs are. The icon  provides detailed information (see the Individual Pool case above, for more information).
- **Pool size:** Pool data voucher that is shared by all lines. Included in the monthly fee (or monthly accounts in case of dynamic pool).
- **Remaining cycle time:** Number of days, hours, minutes, and seconds remaining until the end of the current billing cycle.
- **Contributions to the pool of...:** name of the Subscription groups that make up the pool.
- **Number and % of SIMs:** number of SIMs in each Subscription group and percentage that they represent with respect to the total SIMs that share the pool.
- **Consumption %:** Consumption made by the SIMs of each Subscription group with respect to the total consumed by the pool.
- **Expense overage %:** Expense associated with the excess that each Subscription Group has with respect to the total expense due to the excess in the pool (only visible if there is data to show)
- **Voucher consumption:** Traffic units consumed from the pool voucher. It includes any non-charged overage that may exist. If there is a non-charged overage, it will be indicated with a sign (+) and an alert icon () (see the Individual Pool case above, for more information).

- **Charged overage:** Traffic units consumed from the charged overage throughout the billing cycle. It does not include non-charged overage traffic.
- **Total consumption:** Sum of consumption of the voucher + overage.
- **Total expense:** sum of expense for the voucher + overage.

#### 7.6.2.2 Data pool history



The graph shows the daily consumption history of the pool, for the current and the previous cycle. The information displayed is:

- Start and end of the previous and current cycle.
- Current day of the billing cycle and equivalent in the previous cycle considering the days elapsed since the beginning of the cycle.
- Daily pool size (dark green). Indicates the size of the pool. For dynamic pools it will be based on the number of SIMs that the pool has at the end of the day (for past days) or at the current time (for the current day)..
- Daily pool consumption (in light blue). Indicating the consumption within the franchise without including the overage, if any.



In the case of blocked pools, it may happen that the daily consumption (in blue) exceeds the daily size of the pool (in dark green). The amount exceeded will always correspond to a non-charged overage (see section [Setting up the data pool overage barring](#) for more information). If the size of the pool is extended and the new size is still lower than the daily consumption, the pool will remain blocked.

- Charges overage (in pink): Indicates, for each day, the total accumulated amount of overage during that billing cycle up to that day (inclusive).

Likewise, comparative data is shown, in traffic units, of the size, consumption and accumulated surplus of the pool for the current cycle day with respect to its equivalent of the previous cycle.

## 7.7 Map dashboard

This dashboard provides access to various maps related to open data connections and customer usage, linking this information to the location of subscriptions at the time the connection or usage was made.

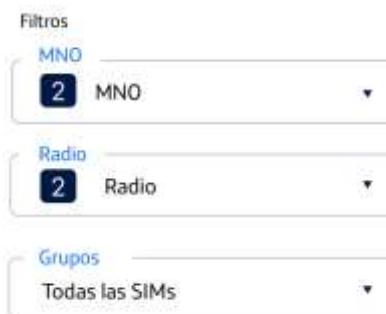
This section has a submenu that provides access to the "Open Connections" and "Usage" maps.

Access to the data on the different maps depends on the customer's availability of the advanced location supplementary service. If the customer has not subscribed to the service in either the Basic or Advanced mode, they will not have access to the data. If they have the "Basic" mode, they will only have access to those that provide information on the most recent status, not those that allow access to historical data.

The different maps in each section can be selected from the drop-down list that appears in the upper left corner of this dashboard.

### Filters common to all maps

There are three filters common to all maps: "Operators," "Radio Technology," and "Group." They will allow you to select the data displayed based on the operator or operators used for the connection (multiple operators can be selected), the radio technology used (multi-selection is also possible), and the subscription group. In this case, only one monitoring group or subscription group can be selected. Filters specific to each map type will be added to these maps.



### 7.7.1 Open Connection Maps

Three maps are available: the first, "Current Situation," will be available for the supplementary location service mode in basic mode. The other two, which allow access to historical data for up to two weeks (with hourly granularity), will be available for the advanced mode. They are "Analysis of Previous Days" and "Comparison between Two Dates."

### 7.7.2 "Current Situation" Map

This map will show the number of SIMs currently connected; it will be updated every 5 minutes. The map reflects the density of the areas with the highest or lowest number of SIMs with established connections at that time. It does not have specific filters.

### 7.7.3 "Analysis of previous days" map

This map will show the number of SIMs that had an open connection on the selected date and time. That is, it is a sample taken on the date and time indicated, not a cumulative total for that time. It allows access to historical data for up to two weeks prior. Two dates and times can be selected, allowing navigation between these moments to see how these connections have evolved. This can be done manually or through an animated sequence that will refresh the data automatically.

The specific filters are the date and time from and to the range to be analysed.

Rango temporal para analizar

<b>Day from:</b> 10-05-2025	<b>Hour:</b> 03h
<b>Day until:</b> 14-05-2025	<b>Hour:</b> 03h

10-05-2025 03h

1x

### 7.7.4 "Comparison between dates" map

This map will allow two specific moments to be compared, allowing you to see the areas where connections have increased or decreased. The map will reflect with greater colour saturation those areas where the decrease or increase is greater.

Specific filters include the date and time from and to the moments to be compared. Additionally, you must indicate whether you want to observe the increase or decrease in the first relative to the second. Historical data for up to two weeks will be available.

Instantes a comparar

Fecha (A)	14-05-2025	Hora (A)	03h
Fecha (B)	14-05-2025	Hora (B)	03h

Mapa de calor a mostrar

Tipo de comparativa	Incremento de las conexiones
---------------------	------------------------------

### 7.7.5 Consumption Maps

Three maps are available: the first, "Last Hour Consumption," will be available for the supplementary location service in basic mode. The other two, which allow access to historical data for up to two weeks (with hourly granularity), will be available for the advanced mode. They are "Segment Aggregate" and "Monthly Aggregate."

### 7.7.6 "Last Hour Aggregate" Map

The aggregate of consumption data for the last hour that has been evaluated will be displayed. This aggregate does not necessarily correspond to the current time due to the time required by the systems to perform this aggregation. The most recent available data will always be displayed.

The map will show the areas with the highest density and consumption, and the data will be labelled according to the most representative consumption units. It has no specific filters.

### 7.7.7 "Aggregate by Segment" Map

This map will show the aggregation of consumption between two given points in time. It allows access to historical data from up to two previous weeks. Two dates and times can be selected to aggregate between them.

Specific filters include the date and time from and to the range to be aggregated.

Agregar los consumos de este tramo

Día desde	14-05-2025	Hora	03h
Día hasta	14-05-2025	Hora	03h

### 7.7.8 "Monthly Aggregate" Map

This map will show the aggregation of consumption for a selected month. It allows access to historical data from up to two previous weeks. Two dates and times can be selected to aggregate between them.

Specific filters include the date and time from and to the range to be aggregated.

Mostrar los consumos agregados del mes

Mes  
marzo 2025 

## 7.8 Prepaid dashboard

This dashboard will help Customers manage the SIMs that have prepaid pricing, so that they can know which SIMs to focus on so as not to run out of service due to lack of vouchers.

It will be available to Customers who have active SIMs associated with commercial plans that include prepaid tariffs with vouchers in any of the available zones and destinations.

The data shown will be calculated every hour.

With the term "prepaid tariff" we refer to that tariff defined in prepaid mode for a specific zone and destination within the commercial plan to which the SIM is associated through its Subscription Group.

On the left side of this dashboard, under the title "SIMs with prepaid tariff", the general status of the SIMs that have this type of tariffs is displayed, treating each basic service separately.

SIMs will be classified into two groups:

- A) Those that do not have vouchers in at least one of the prepaid tariffs that are available to them.
- B) Those that have vouchers in all the prepaid tariffs that are available to them.

On the right side, under the title, "Prepaid SIMs with vouchers", Kite classify the SIMs that have vouchers, from two points of view:

1. According to the amount of vouchers that is available to them, as a percentage of the total assigned vouchers.
2. According to the days left before expiration.

In addition, at the bottom of each widget, the numerical data of each series is included, distinguishing by basic service. By clicking on the values you can go to the SIM inventory applying a filter that will show you the list of SIMs that are in that situation.



If you place the cursor over any of the sectors of the graphs, an information panel will be displayed with the detail of the number of SIMs involved in that sector. Data that, on the other hand, is also collected in the table below.

Additional clarifications:

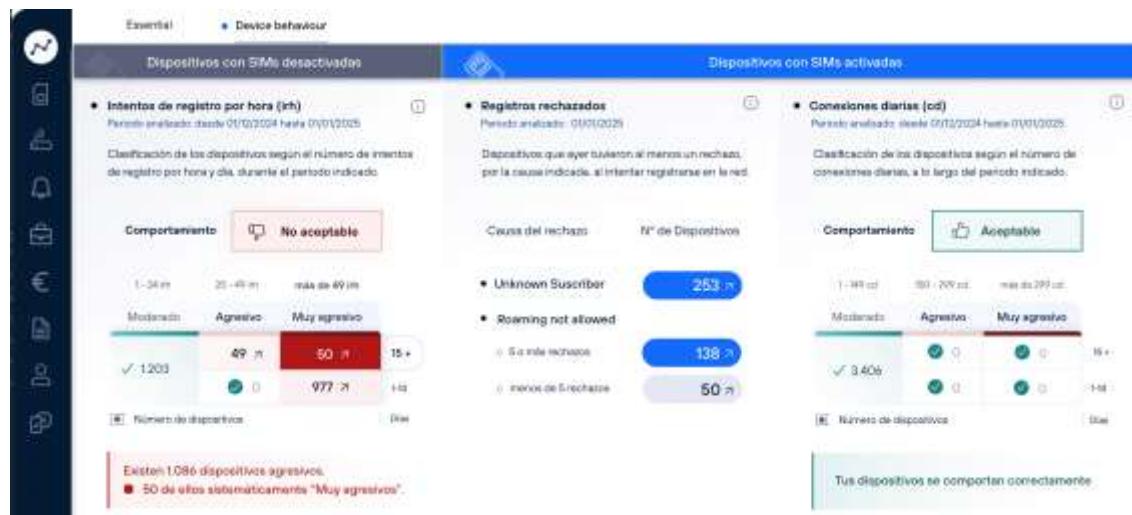
- In the event that a SIM has several vouchers within the same prepaid tariff, to classify that SIM in a specific consumption level, the sum of the remaining consumption of what remains in each voucher that it has in that tariff will be taken and the percentage will be calculated with respect to the total allocated considering all those vouchers.
- In this same case, to classify it by days available, the highest availability of all its vouchers at that tariff will be taken.
- In the event that a SIM has several prepaid tariffs, for consumption Kite will classify the SIM considering the tariff with the lowest consumption available, applying the same criteria for the classification by days for its expiration.

A recurring prepaid voucher that has exhausted its consumption in the current month period, for calculation purposes, will have the same treatment as a non-existent one, although it is automatically renewed for the next cycle.

## 7.9 Device behaviour dashboard

The goal of this dashboard is to evaluate and inform customers about the behavior of their devices, considering their interaction with the network, both in terms of the number of registrations and data connections made, and the number of failed registration attempts.

Ultimately, the goal is to educate customers about the importance of their devices behaving non-aggressively in this context. This will be achieved by distinguishing between scenarios for devices with deactivated SIMs (in a deactivated, suspended, or even retired lifecycle status) or activated SIMs (Active or Test).



The dashboard will feature three widgets. One will analyze the behavior of devices with deactivated SIMs, and two others will provide insight into the behavior of devices with active SIMs.

From left to right, the widgets will be displayed:

- Registration attempts per hour (for deactivated, suspended, and removed SIMs)
- Rejected registrations (for active and test SIMs)
- Daily connections (for active and test SIMs)

### 7.9.1 Registration attempts per hour

This widget analyses the behaviour of devices that have deactivated SIMs and are attempting to register on the network.



To do this, the device's behaviour will be evaluated at each hour of each of the last 30 days, starting from the day before the one being consulted.

Three behaviour levels have been defined based on the number of registration attempts in an hour. Each day, the device will be classified as Aggressive, Very Aggressive, or Moderate depending on its worst behaviour during that day's hours. The number of days on which it has repeated its worst daily behaviour will then be counted.

Once this has been done for each device, the information will be added to the table, indicating how many there are at each "behaviour - Number of days with that behaviour" intersection.

The ranges evaluated for each behaviour level are shown in the image. The acronym "rah" refers to the number of registration attempts per hour.

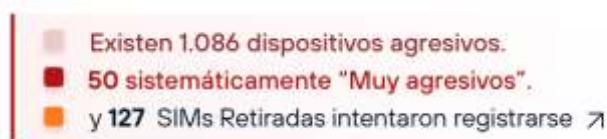


For "Aggressive" and "Very Aggressive" behaviours, if any device is found, clicking on the digits will reveal the details of the devices, the days, and the time periods in which they occurred.

In general, the interface will explicitly inform the user whether the analysed behaviour is considered "Acceptable" or "Not Acceptable" so that they can take appropriate action on their devices if necessary.



The analysis of the data shown in the table will be displayed in textual form at the bottom.



This widget indicates the period of the data analysed, typically the last 30 days, just below the title. It is updated daily.

### 7.9.2 Rejected registrations

This widget analyses the behaviour of devices with activated SIMs that are attempting to register on the network and are being rejected.

It analyses how many of these devices were rejected in the day prior to the query. They are grouped by cause. Clicking on the digits allows you to see the exact details.

This widget indicates, just below the title, the period of the analysed data. Typically, the last thirty days. It is updated daily.



### 7.9.3 Daily connections

This widget analyses the behaviour of devices that have activated SIM cards and established data connections during the analysed period (typically the last thirty days).



To do this, the device's behaviour will be evaluated for each of the last 30 days, starting from the day before the one being consulted.

Three behaviour levels have been defined based on the number of connections established daily. Each day, the device will be classified as Aggressive, Very Aggressive, or Moderate depending on its connection range. Subsequently, the number of days in which it has repeated its worst daily behaviour will be counted for each device.

Once this has been done for each device, the information will be added to the table, indicating how many there are at each intersection "behaviour - Number of days with that behaviour."

The ranges evaluated for each behaviour level are shown in the image. The acronym "dc" refers to the number of daily connections established.

1 - 149 cd	150 - 299 cd	más de 299 cd
Moderado	Agresivo	Muy agresivo
✓ 3.406	✓ 0	✓ 0
	✓ 0	✓ 0
	✓ 0	✓ 0

Número de dispositivos      Días



For "Aggressive" and "Very Aggressive" behaviours, if any device is present, clicking on the digits will reveal the details of the behaviour and the reasons for its behaviour.

In general, the interface will explicitly inform the user whether the analysed behaviour is considered "Acceptable" or "Not Acceptable" so that they can take appropriate action on their devices if necessary.

 **No acceptable**

 **Aceptable**

The analysis of the data shown in the table will be displayed in textual form at the bottom.

Tus dispositivos se comportan correctamente

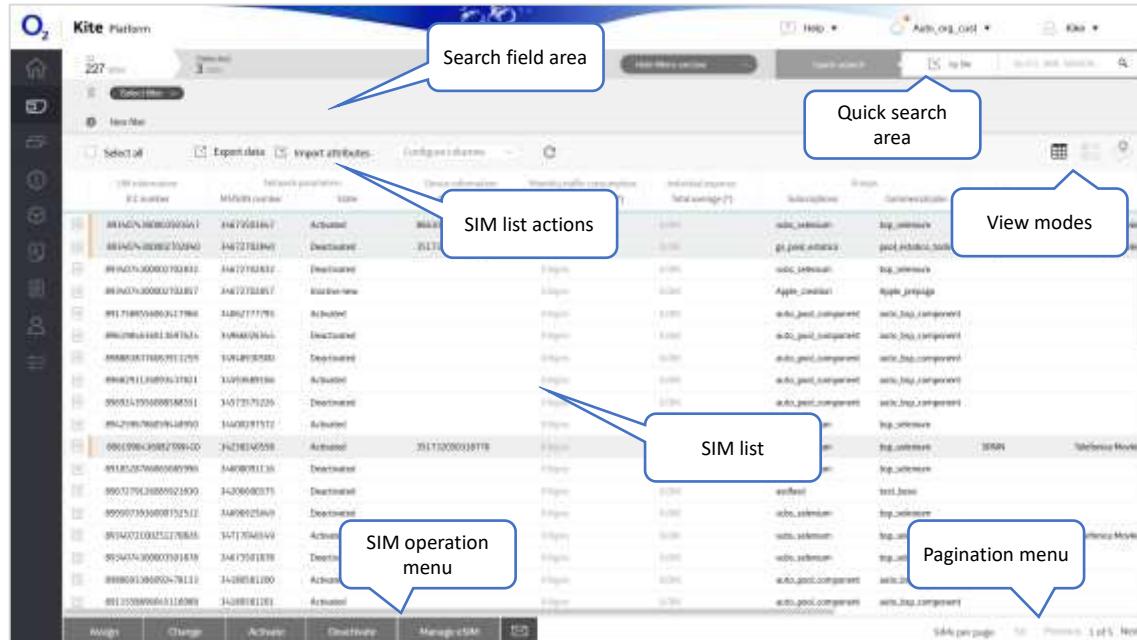
This widget indicates the period of the data analysed, typically the last 30 days, just below the title. It is updated daily.

## 8 Working with SIM cards

### 8.1 General information

The inventory module, you can access via the icon  provides access to the functionalities to operate with the SIM cards that the Kite Platform manages.

Below a figure is shown with the most important elements of the inventory.



This module enables, broadly speaking:

- Access to SIM cards the user can manage.
- Visualize listing of SIM cards with the associated information allowing you to customize the attributes you want to make visible.
- Possibility to apply different modes/views (ways of representation) for the managed SIM cards.
- Perform operations upon one or several SIM cards.
- Order and group SIM cards.
- Create filters according to different criteria and apply them to the actual view.
- Export SIM inventory information (all columns or only the selected columns) to a file.
- Perform operations on SIM cards using information imported from files.
- Reload the SIM view.



When a user logs out of Kite Platform and logs back in, the system shall remember your inventory module preferences in relation to: columns displayed as a list, applied filters, groups and the last type of display (these concepts are explained in the coming sections).

## 8.2 Display modes

Kite Platform provides three different modes of SIM cards inventory display: List, Grid and Map.

You can access these modes of display from three icons located in the upright section of the inventory window.

### 8.2.1 List mode

In this mode, the SIM cards are shown as a paginated list of items (50 per page) in which each entrance represents a SIM card with the visible fields distributed in columns.

Actions	Organizations	SIM information	Monthly traffic consumption	Subscriptions	Groups	Device information
	ID in CRM	Billing account ID in CRM	Profile	MB consumption (*)	Current plan	IMEI number
	test_qc_app1	test_qc_app1	default	P10	Customer	Plan_01
	Customer_AP	customer_usg	clients	P10	CL_Av_Totar	USIM_SIMF
	test_qc_app1	test_qc_app1		P10	Default Subscription	default_group
	test_qc_app1	test_qc_app1		P10	Default Subscription	default_group
	test_qc_app1	test_qc_app1	default	P10	Default Subscription	default_group
	test_qc_app1	test_qc_app1	default	P10	Default Subscription	default_group
	test_qc_app1	test_qc_app1	default	P10	Default Subscription	default_group
	Customer_AP	customer_usg	clients	P10	CL_Av_Totar	RSPN_SIMF
	test_qc_app1	test_qc_app1	clients	P10	clients	USIM_SIMF,SM...
	test_qc_app1	test_qc_app1	clients	P10	test_planEstacion	Plan_PlanEstacion
	test_qc_app1	test_qc_app1		P10	Default Subscription	default_group
	test_qc_app1	test_qc_app1		P10	Default Subscription	default_group
	Customer_AP	customer_usg	clients	P10	CL_Av_Totar	USIM_SIMF

It is possible to choose which fields of the SIM card can be displayed in the list. In order to do so, you must click on the button located on the top of the table. This selection gives place to a menu to show/hide specific fields of the SIM cards on the list. If you click on the head of each column, it is also possible to order the list in ascending or descending order.

	Custom fields	Subscriptions	Com...
5:	Network parameters	a_posteriori_discoun...	Plan...
6:	Presence	<input checked="" type="checkbox"/> ICC number	SP...
7:	SIM information	<input type="checkbox"/> SIM model	
8:	eSIM information	<input type="checkbox"/> Legacy	
9:	Traceability	<input checked="" type="checkbox"/> Profile	
10:	Monthly traffic consumption	grupo_orange	SP_u...
11:	Daily traffic consumption	nuevo2	SP_n...
12:	Individual expense	CG_No_Tocar	BSPA
13:	Pool expense	nuevo	SP_n...
14:	Groups	test_pool_estatico	Nuev...
15:	Device information	Default Subscription ...	
16:	Organisations	Default Subscription ...	
338369			

 It is also possible to alternate between ascending and descending order by clicking on the header of one of the columns.

 First column is fixed and allows the access to SIM details with a single-click over the  icon. The second column is fixed and will show an icon () that will allow direct access to the SIM detail location section, where you can check the manual and automatic location of the SIM as well as the its monitoring (in case that the customer has activated the location supplementary service and it has been also activated at SIM level).

It is possible to reload the list of SIM cards through the 

The **Select all** / **Select none** options located on the upper left part of the list, allows all of the SIM cards on the inventory list to be alternatively selected/unselected. This includes the entire set of SIM cards, not just those displayed; the number of cards is displayed in the upper left (with the label "All"). If there are applies filters, the selection label will change to **Select filtered** and the selection / unselection will be only onto the filtered SIM cards (those labelled as "Filtered" in the upper left).

 You can deselect one or more SIM cards from the current view by clicking on the respective row(s). In this case, the current selection of SIM cards will correspond to the visible SIM cards in the list as indicated at the bottom part of the window.



SIM traffic consumption and expense information displayed in List mode have a difference that can vary from a few minutes to an hour approximately, in the values update. In order to get the actual value of those fields, you must access the detail information of a SIM.

The following table describes all the possible fields you can show or hide in this mode of display.

Mode	Field	Description
Alarms	Expense	Expense alarms
	Administrative	Administrative alarms (consumption and life cycle)
	Supervision	Supervision alarms
SIM information	ICC number	SIM numerical ICC-ID
	SIM model	Text chain representing SIM card model: capacity and version
	Region	Geographic region the SIM card is assigned to. This parameter is only available for certain Service providers and dependent organisations.
	Profile	Logistic profile (e.g. Spain uses E02, M02, E05)
(⚠ Only visible to some Customers. Please contact with your Service Provider for more information)	EID	eUICC/eSIM identifier
	Swap allowed	Indicates whether the subscription corresponds to an eSIM profile ("Yes") or a normal SIM ("No"), in which case it cannot be used to do a swap operation.
	Profile status	Indicates the status of the profile according to its status in the eSIM / eUICC. It can take the values:  "Enabled": the profile is enabled in the eSIM. "Disabled": the profile is disabled in eSIM. "Downloading": The profile is being downloaded into the eSIM. "Enabling": the profile is being enabled in eSIM. "Disabling": The profile is being disabled in eSIM.
Dates	Last state change	Date related to the last life cycle state change
	Additional tariffs suspension	Date of the next scheduled suspension associated with an additional tariff.
	Last commercial plan change	Date on which the last business plan assignment to the line took place.
	Last subscription group change	Date on which the last subscription group assignment to the line took place, whether or not it involves a change in commercial plan.
	Last SMS consumption	Date associated with the last time the SIM made SMS traffic
	Last voice consumption	Date associated with the last time the SIM made voice traffic

	Last traffic	Date related to the last time the SIM made traffic (voice, SMS or data).
	Last GPRS up	Date and time of the last GPRS context open
	Last GPRS down	Date and time of the last GPRS context close
	Whitechip activation	Date on which the automatic activation of the SIM took place or will take place.   Only for Vivo)
Traceability	Manufacturer order number	Manufacturer order number as indicated in the provision manufacturer file
	Extra order number	Internal order number in the Kite Platform.
Device Information	IMEI number	Id numerical IMEI of the device currently associated to the SIM.
	IMEI Lock	IMEI number that identifies the device from which the SIM can connect. If this value is different from the IMEI obtained from the network, the SIM connection will be blocked.  If no value is set, connection will be possible from any device unless the customer has a defined IMEI whitelist and the device containing the SIM is not on that list.
Network parameters	MSISDN number	Numeric field MSISDN
	State	Current state of SIM card life cycle See section <a href="#">SIM card states</a> for further details.
	IMSI number	SIM numerical IMSI ID
	LTE/NB-IoT status	Indicates whether the SIM card has or not the LTE (4G) /NB-IoT service enabled.
	Incoming SMS Filtering <sup>6</sup>   Only visible for Customer organisations)	Indicates if a SIM card has or not has the incoming SMS filtering enabled.
	4G QoS (QCI)   Only visible for Customers with P-LTE supplementary service enabled)	Indicates the QoS Class Identifier (QCI) value assigned to the line.  Only lines with active LTE/NB-IoT will have a value of QCI.  More information at: <a href="https://en.wikipedia.org/wiki/QoS_Class_Identifier">https://en.wikipedia.org/wiki/QoS_Class_Identifier</a>
	VoLTE status	Indicates whether the SIM card has VoLTE feature enabled.
	Default APN	Indicates the default APN if it has one.
	Enabled radio technologies	Displays the radio access technologies that the SIM has enabled.
	Used radio technologies	It shows the radio access technologies the SIM has used at some point in its lifecycle.

<sup>6</sup> Incoming SMS filtering will only be available for Movistar Spain and its Leading OBs' customers and Telefónica Mexico's customers.

		 KITE will only display this information for data usage starting in March 2025.
Custom fields	Custom fields 1-4	Field selected among the customizable ones that the organisation the user belongs to has.
	Alias	“Alias” field text chain
Presence	GPRS Status	Current status of GPRS presence. The possible statuses are: “Not available”, when there is no connectivity with GGSN. “Active”, when GPRS context is opened. “Deactivated”, when GPRS context is closed.
	IP Status	Current IP presence state. The possible states are “Activated”, “Deactivated”, “Not available”..   It is only available if the SIM card counts with the advance supervision service (see section <a href="#">Elements of a supplementary services commercial plan</a> for further details).
	Last IP up	Date and time of the last time the SIM card was reachable at IP level.   It is only available if the SIM card counts with the advance supervision service (see <a href="#">Elements of a supplementary services commercial plan</a> for further details).
	Last IP down	Date and time of the last time the SIM card was not reachable at IP level.   It is only available if the SIM card counts with the advance supervision service (see <a href="#">Elements of a supplementary services commercial plan</a> for further details).
	Current IP	Current IP address the SIM card uses.   For IPv6, the network only informs about the /64 prefix, the rest of the Kite address fills it with zeros. For example, if the device is assigned the IP 2000:0000:0000:0432:0000:0000:1000:0018 Kite will display 2000:0000:0000:0432:0000:0000:0000:0000
	Current APN	APN the SIM card currently uses.
	Last SGSN IP	SGSN node IP address
	Last GGSN IP	GGSN node IP address
	Country	SGSN country
	Operator	SGSN related operator
	Last access technology detected	Possible values are: No value, “2G”, “3.5G”, “3G”, “4G”, “NB-IoT” “LTE-M”, “5G SA”
	Current additional IP	Additional IP being used when the configured addressing type for the used APN is IPv4v6. The value can be an IPv4 or and IPv6 address.

		 For IPv6, the network only informs about the /64 prefix, the rest of the Kite address fills it with zeros. For example, if the device is assigned the IP 2000:0000:0000:0432:0000:0000:1000:0018 Kite will display 2000:0000:0000:0432:0000:0000:0000:0000
Groups	Supervision	Name of the supervision group the SIM card is assigned to.
	Subscriptions	Name of the Subscriptions group the SIM card is assigned to.
	Commercial Plan	Name of the Commercial plan the SIM card is related to
Monthly traffic consumption	Voice %	<p>Percentage of voice consumed during the current billing period in relation to the established superior threshold. The displayed value can be 0%, 50%, 60%, 80%, 90% or 100%, always showing that the highest of them has exceeded the threshold.</p>  Update is performed immediately.
	Data %	<p>Percentage of the traffic of consumed data during the current billing period in relation to the established superior threshold. The displayed value can be 0%, 50%, 60%, 80%, 90% o 100%, always showing that the highest of them has exceeded the threshold.</p>  Update is performed immediately.
	SMS %	<p>Percentage of SMS consumed during the current billing period in relation to the established superior threshold. The displayed value can be 0%, 50%, 60%, 80%, 90% or 100%, always showing that the highest of them has exceeded the threshold.</p>  Update is performed immediately.
	Voice Consumption	<p>Current voice consumption in the current billing period (consumption of voice time).</p>  Update of this value can take up to an hour.
	Data Consumption	<p>Current consumption of data traffic in the current billing period (quantity of transmitted data).</p>  Update of this value can take up to an hour.
	SMS Consumption	<p>Amount of SMS dispatched during the current billing period.</p>  Update of this value can take up to an hour.
	Voice limit	<p>Maximum allowed time of voice consumption in the current billing period. Further consumption of this value fixed for the SIM card does not necessarily involve a service suspension since it is a threshold and not a limit.</p>
	Data limit	<p>Maximum quantity of transmitted data in the current billing period. Further consumption of this value fixed for the SIM card does not necessarily involve a service suspension since it is a threshold and not a limit</p>
	SMS limit	<p>Maximum amount of SMS dispatch allowed in the current billing period. Further consumption of this value fixed for the SIM card</p>

		does not necessarily involve a service suspension since it is a threshold and not a limit.
Daily traffic consumption	Voice %	Percentage of voice consumed during the current day in relation to the established superior threshold. The displayed value can be 0%, 50%, 60%, 80%, 90% or 100%, always showing that the highest of them has exceeded the threshold.  ⚠️ Update is performed immediately.
	Voice Consumption	Current voice consumption throughout day in course (voice time consumed)  ⚠️ Update of this value can take up to an hour.
	Voice limit	Maximum allowed time of voice consumption in the current day. Further consumption of this value fixed for the SIM card does not necessarily involve a service suspension since it is a threshold and not a limit.
	Data %	Percentage of the traffic of consumed data during the current day in relation to the established superior threshold. The displayed value can be 0%, 50%, 60%, 80%, 90% or 100%, always showing that the highest of them has exceeded the threshold.  ⚠️ Update is performed immediately.
	Data Consumption	Current consumption of data traffic in the current day (quantity of transmitted data).  ⚠️ Update of this value can take up to an hour.
	Data limit	Maximum quantity of transmitted data in the current day. Further consumption of this value fixed for the SIM card does not necessarily involve a service suspension since it is a threshold and not a limit.
	SMS %	Percentage of SMS consumed during the current day in relation to the established superior threshold. The displayed value can be 0%, 50%, 60%, 80%, 90% or 100%, always showing that the highest of them has exceeded the threshold.  ⚠️ Update is performed immediately.
	SMS Consumption	Amount of SMS dispatched during the current day.  ⚠️ Update of this value can take up to an hour.
	SMS limit	Maximum amount of SMS sending allowed in the current day. Further consumption of this value fixed for the SIM card does not necessarily involve a service suspension since it is a threshold and not a limit.
Individual expenses  ⚠️ The individual expense concepts only account for the total traffic overage associated to Individual tariffs and therefore do not include	Voice %	Monetary voice expense percentage reached in relation to the established limit. The displayed value can be 0%, 80% or 100%, always showing that the highest value reached.  ⚠️ Update is performed immediately.
	Voice overage	Current voice overage expense during the billing period in course (monetary quantity spent associated to an individual tariff)

<p>monthly fees nor traffic overage associated to Pool tariffs.</p> <p><b>⚠️</b> The expenses shall always be displayed in the currency the Customer who owns the SIM card has set up.</p>		<b>⚠️</b> Update of this value can take up to an hour.
	Voice limit	Maximum voice expense allowed during the billing period in course. To reach this value means a voice service suspension of the affected SIM card
	Data %	Monetary expense percentage of data traffic reached in relation to the established limit. The displayed value can be 0%, 80% or 100%, always showing that the highest value reached.
		<b>⚠️</b> Update is performed immediately.
	Data overage	Current data traffic overage expense during the billing period in course (monetary quantity spent associated to an individual tariff)
		<b>⚠️</b> Update of this value can take up to an hour.
	Data limit	Maximum data traffic expense allowed during the billing period in course. To reach this value means a data service suspension of the affected SIM card
	SMS %	Monetary SMS messaging expense percentage in relation to the established limit. The displayed value can be 0%, 80% or 100%, always showing that the highest value reached.
		<b>⚠️</b> Update is performed immediately.
	SMS overage	Current SMS messaging overage expense during the billing period in course (monetary quantity spent overage)
		<b>⚠️</b> Update of this value can take up to an hour.
	SMS limit	Maximum SMS dispatch expense allowed during the billing period in course. To reach this value means SMS service suspension of the affected SIM card
	Total %	Total monetary expense percentage (sum of voice, SMS dispatch and data expense) in relation to the established limit. The displayed value can be 0%, 80% or 100%, always showing that the highest value reached.
		<b>⚠️</b> Update is performed immediately.
	Total overage	Total current overage expense (sum of voice, SMS messaging and data expense) during the current billing period (monetary quantity spent associated to an individual tariff).
		<b>⚠️</b> Update of this value can take up to an hour.
	Total limit	Total maximum expense allowed during the billing period in course. To reach this value means a suspension of the three basic services (voice, SMS sending and data) of the affected SIM card.
Pool expense  <b>⚠️</b> The pool expense concepts only account for the total traffic overage associated to Pool tariffs	Total overage	Current total overage expense (sum of the voice, SMS messaging and data expenses) incurred during the billing period in progress (monetary amount which has been spent associated to a Pool tariff).
		<b>⚠️</b> Update of this value can take up to an hour.

and therefore do not include monthly fees nor traffic overage associated to Individual tariffs.	Data overage	Current data traffic overage expense incurred during the billing period in progress (monetary amount which has been spent associated to a Pool tariff).  ⚠️ Update of this value can take up to an hour.
	Voice overage	Current voice overage expense incurred during the billing period in progress (monetary amount which has been spent associated to a pool tariff).  ⚠️ Update of this value can take up to an hour.
	SMS overage	Current SMS messaging overage expense incurred during the billing period in progress (monetary amount which has been spent associated to a Pool tariff).  ⚠️ Update of this value can take up to an hour.
Organisations	Customer	Customer organisation the SIM card is assigned to.  ⚠️ Only available for Service Providers and Customer organisations.
	End Customer	End Customer organisation the Customer has assigned the SIM card is to.  ⚠️ Only available for Customer and End Customer organisations.
Block reason  ⚠️ Only available for Vivo Service provider and its Customers.	Reason 1	<p>High priority block</p> <p>Bock reasons can be</p> <ul style="list-style-type: none"> <li>• Due to non-payment</li> <li>• Due to inadequate use</li> <li>• Due to inadequate use – partial</li> <li>• Due to theft/lost</li> <li>• User block</li> <li>• Due to decommissioning request</li> <li>• Due to non-payment – decommission</li> </ul> <p>Due to non-payment – partial</p>
	Reason 2	Medium priority block
	Reason 3	Low priority block

### 8.2.2 Group mode

This view allows differentiating the SIM cards managed in different groups. The **Group by** dropdown menu makes it possible to select specific grouping criteria. After applying a grouping criterion, the SIM cards of the current view are classified by being distributed according to the group they belong to. The information will show paginated with five elements per page.

In addition to showing the number of SIM cards in each of the groups, it also indicates how many there are in each life cycle state.



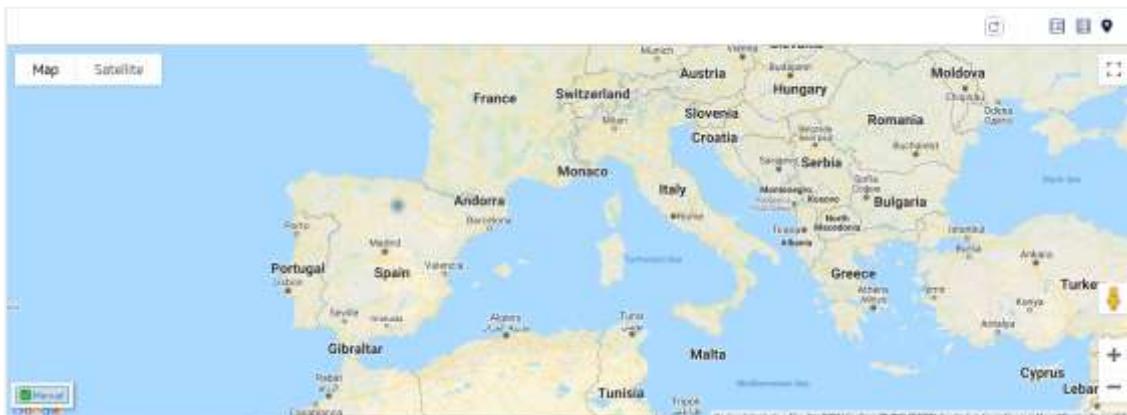
The available groups are the following:

Grouping criterion	Description
None	No grouping is done.
Billing Account  ⚠ Only available for Customer organisations)	Groups together the SIM cards by coincidence of the billing account
Device manufacturer	Grouping by the name of the manufacturer of the GSM module
Device model	Grouping by the name of the GSM module model
End Customer  ⚠ Only available for Customer organisations)	Groups together the SIM cards by coincidence of End Customers
Expense (Voice, Data, SMS, Total)  ⚠ Only available for Customer organisations)	Groups together the SIM cards by quantity of consumption of Voice, Data, SMS or Total (as this is selected). There are six consumption groups: >=0%, >=50%, >=60%, >=80%, >=90%, and >=100%
IP status	Groups together the SIM cards by coincidence of the IP status: "Registered", "Not registered", "Unknown".
Life cycle state	Groups together the SIM cards by coincidence of their lifecycle status, which can be: "Inactive new", "Test", "Ready for activation", "Activation pending", "Activated", "Deactivated", "Suspended".
Extra order number	Groups together the SIM cards that are/were in the order
Postal Code	Groups together the SIM cards by coincidence of the post code
Region  ⚠ Only available for certain Customers and End Customers of certain Service providers)	Groups together all SIM cards that belong to the same region
Shipping date	Groups together the SIM cards by coincidence of the sending date
Local/Global	Groups together the SIM cards by coincidence of the type of SIM: "Local", "Local_RR", "TE_O2DE"

(⚠ Only available for Customer organisations)	"Local_RR" references the Movistar Spain "Red de Respaldo", a local solution of Movistar Spain to provide their Customers SIM cards that attach to any radio operator in Spain (Orange, Movistar, Vodafone...), obtaining an advantage in coverage. "TE_O2DE" references the Movistar Spain "Red de Respaldo" for SIMs with IMSI/MSISDN of Germany HOB.
Subscriptions group  (⚠ Only available for Customer and End Customer organisations)	Groups together the SIM cards that are in the same Subscriptions group
Supervision group  (⚠ Only available for Customer organisations)	Groups together the SIM cards that are in the same supervision group
Traffic consumption (Voice, Data, SMS traffic)	Groups together the SIM cards by quantity of consumption of Voice, Data or SMS (as this is selected). There are six consumption groups: >=0%, >=50%, >=60%, >=80%, >=90%, and >=100%

### 8.2.3 Map mode

This view displays the SIM cards on the image of a map according to the geographical location they have in their configuration if one or several SIM cards have been selected before accessing this display mode. Otherwise, the map will be displayed, but without any SIM card icons.



When sliding the cursor over any SIM cards, a *tooltip* shows up indicating its ICC number. In order to view other fields relevant to the SIM card, the icon can be clicked, which also offers the possibility of displaying the complete details of the SIM card.

 For performance reasons this view will show only a maximum of 100 SIMs. Hence it is recommended to filter SIMs before accessing this view.

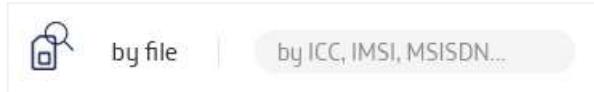
 Automatic location will only be available if the location service has been contracted (see section [Elements of a supplementary services commercial plan](#) for further details).

 Accuracy of automatic location will vary depending on different factors (e.g. 2G or 3G coverage, usage of agent on the device, etc.).

## 8.3 SIM cards search

### 8.3.1 Quick search

The quick search section allows filtering by SIM identifier without having to access the filters menu.



#### Quick search by file

It allows filtering SIM cards from a list of identifiers (ICC or IMSI or MSISDN) contained in a file.

This file must contain a single column of identifiers determined by the header title, which may be "icc", "msisdn" or "imsi".

The file cannot contain more than 100,000 rows.

#### Quick search by ID

It allows locating a set of SIM cards from one of their identifiers (ICC, IMSI, MSISDN, EID or Alias).

It accepts up to 20 identifiers comma (,) separated. After including the required identifiers, it will be necessary to press ENTER to perform the search. The search result will list all SIM cards matching one or several of the specified identifiers. Any filter previously applied will be discarded.



Each time a Quick Search is done, the search criteria will be removed.



If you want to combine the Quick Search filters with other previously applied filters, you can do it by applying those filters from the filter menu.

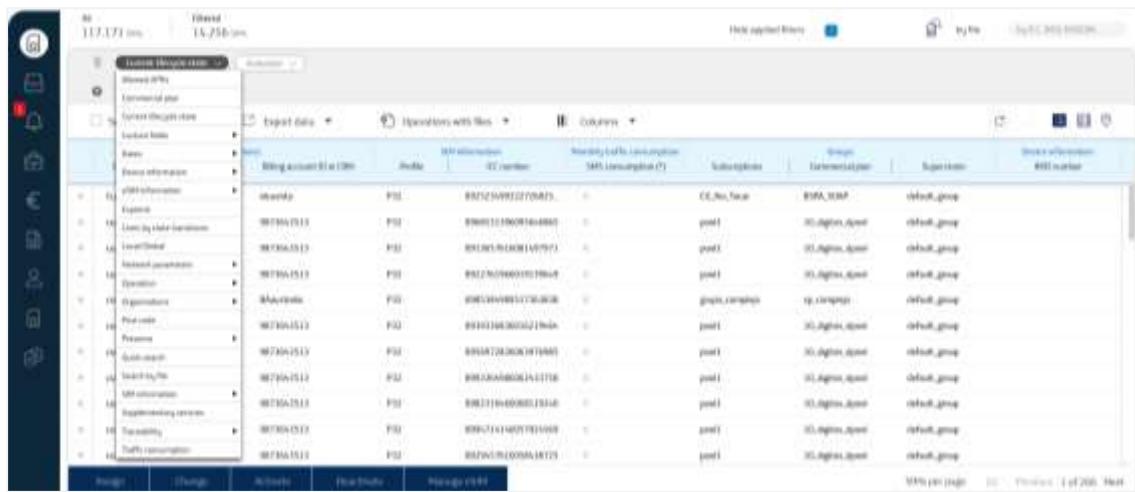


Wildcards are not supported.

### 8.3.2 Search filters

From any inventory view, it is possible to create filters to display only those SIM cards meeting a set of criteria. Such criteria are based on the characteristics and values of the SIM cards' attributes that are managed by the Kite Platform.

To create a filter, the option **Show filters section** (or **Show applied filters** if any is already applied) must be clicked and then, the filter must be selected from the dropdown menu that appears by clicking on the **Select filter** button. To hide the filter bar, it will suffice to click the option **Hide filters section**.



When a filter is created, the user must provide additional information that can be of a different kind and number, depending on the field that is to be used to filter the information (e.g. IMEI, alias, IP, expense...)

The available filters and parameters required for each one of them are shown below:

Category	Name	Parameters	Selection criteria
-	Alarms  ⚠ Only for Customer organisations)	Alarm type, Severity, Attention	The possible values are:  Alarm type: "Life cycle status change", "Traffic consumption", "Expense", "Hardware", "Location", "Presence", "Any"  Severity: "Informative", "Urgent", "Critical", "Any"  Attention: "Attended", "Not attended", "Any"
-	Allowed APNs	APN name allowed on the SIM card.	String with the option for wildcard characters "*" and "?"
-	Behaviour profile  ⚠ Only for Customer organisations having the IoT Analytics Plus supplementary service)  💡 The recommended use of this filter is through the "Clustering" dashboard, using the link included in the detail of a	Behaviour profile identifier	Drop-down list with the behaviour profile identifiers collected in the last analysis

	profile to access the list of SIMs that compose it)		
-	Billing Account  ⚠ Only for Customer organisations)	Billing Account	Drop-down list with the billing accounts assigned to the Customer
-	Commercial plan  ⚠ Only for Customer and Service provider organisations. Filtering of delegated SIM are not performed)	Name of commercial plan	Dropdown list with the commercial plan that the Customer has assigned to it.
-	Current lifecycle state	Life cycle status of a SIM card	Possible values are: "Inactive new", "Test", "Ready for activation", "Activation pending", "Activated", "Deactivated", "Suspended"
Custom fields	Alias	Alias	String with the option for wildcard characters "*" and "?"
	Customizable fields [1 to 4]	Customizable fields [1 to 4]. The name configured at the organisational level which the user belongs to who started the Kite Platform session will appear	String with the option for wildcard characters "*" and "?"
Dates	First activation date	Range of time between the two dates	Selection of two dates through a calendar. Dates will be taken in the user's time zone.
	IMEI change date	Range of time between the two dates	Selection of two dates through a calendar. Dates will be taken in the user's time zone.
	Provision date	Range of time between the two dates	Selection of two dates through a calendar. Dates will be taken in the user's time zone.
	Shipping Date	Range of time between the two dates	Selection of two dates through a calendar
	Additional tariffs suspension date	Range of time between the two dates	Selection of two dates through a calendar. Dates will be taken in the user's time zone.
	Subscription group last change date	Time range between two dates.	Selecting at least one date using a calendar. Dates will be taken in the user's time zone.
	Date of last change of commercial plan	Time range between two dates.	Selecting at least one date using a calendar. Dates will be taken in the user's time zone.
	Whitechip activation date  ⚠ Only for Vivo)	Range of time between the two dates or without date	Selection of two dates through a calendar. Dates will be taken in the user's time zone.

	Last SMS consumption date	Time range between two dates.	Selecting at least one date using a calendar. Dates will be taken in the user's time zone.
	Last voice consumption date	Time range between two dates.	Selecting at least one date using a calendar. Dates will be taken in the user's time zone.
	Last GPRS up date	Time range between two dates.	Selecting at least one date using a calendar. Dates will be taken in the user's time zone.
Device information	Device manufacturer	Text that identifies the manufacturer of the SIM card communication module	String with the option for wildcard characters "*" and "?"
	Device model	Text that identifies the SIM card communication model	String with the option for wildcard characters "*" and "?"
	IMEI number	IMEI	String with the option for wildcard characters "*" and "?"
	IMEI Lock	With the "Activated with IMEI" option: an IMEI number  "Deactivated" option	String with the option for wildcard characters "*" and "?"
-	Expense   Only for Customer and Service provider organisations)	Type of Service, Status and Threshold	The possible values are:  "Voice", "Data", "SMS" or "Total"  "Reached" or "Not reached"  "Limit" or "90%"
Groups	Subscriptions group   Only for Customer organisations)	Subscriptions group	Drop-down list with the Subscriptions groups assigned to the Customer.
	Supervision group   Only for Customer and End Customer organisations)	Supervision group	Drop-down list with the supervision groups assigned to the organisation.
-	Lines by state transition	Date and value of the initial status  Date and value of the final status  At least one date is mandatory	The possible values for the statuses are:  "Any", "Activated", "Deactivated", "Inactive new", "Ready for activation", "Activation pending", "Suspended", and "Test"
Network parameters	IMSI number	IMSI	String with the option for wildcard characters "*" and "?"

	Default APN	Selector with/without default APN and default APN	String with the option for wildcard characters "*" and "?"
	MSISDN number	MSISDN	String with the option for wildcard characters "*" and "?"
	LTE/NB-IoT status   Only visible for Service provider and Customer organisations with enabled LTE/NB-IoT capabilities)	Indicates whether the SIM card has or not the LTE (4G) /NB-IoT service enabled.	The possible values for the statuses are: "Active", "Inactive"
	VoLTE status	VoLTE status	The possible values for the statuses are: "Active", "Inactive"
	Incoming SMS Filtering   Only for Customer organisations)	Indicates whether the SIM card has or not the Incoming SMS filtering service enabled.	The possible values for the statuses are: "Active", "Inactive"
	4G QoS (QCI)   Only visible for Service provider and Customer organisations with enabled LTE/NB-IoT capabilities)	QCI value (QoS Class Identifier) associated to SIMs with active LTE/NB-IoT data service.	String with the option for wildcard characters "*" and "?"
	Static IP subnet	Subrange IP address.  Mask related to the subrange.	IP and mask: [1-255].[0-255].[0-255].[0-255]  Note: Only IPv4 addresses are allowed.
	Used radio technologies	Technologies 2G, 3G, 3.5G, 4G, NB-IoT, LTE-M, 5G SA	A drop-down list appears for each technology to indicate whether you want to filter by technology: "Yes," "No," or blank to indicate that any state is valid.  At least one technology must have a value selected.
	Configured radio technologies	Technologies 2G, 3G, LTE/LTE-M, NB-IoT, 5G	A drop-down list appears for each technology to indicate whether you want to filter by "Activated," "Deactivated," or blank to indicate any status.  At least one technology must have a value selected.
Operation	Aggressive behaviour	Type of behaviour.	The possible values are:  "Yes": shows those SIM cards opening more than 150 contexts in the last 24 hours.  "No": shows those SIM cards opening 150 or less in the last 24 hours.
	SIMs demanding traffic above limits	Type of block.  Number of days since the current day.	Show those SIM cards trying to make traffic without success (due to the block reason selected) during at least the indicated number of days.

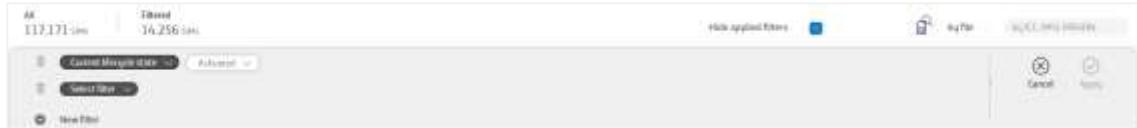
	(⚠ Only for Customer organisations)		<p>The type of blockage that can be selected are:</p> <p>“Data expense limit reached”: whenever the data expense limit has been reached (see section <a href="#">Change operations</a> for more information).</p> <p>“Total expense limit reached”: whenever the total expense limit has been reached (see section <a href="#">Change operations</a> for more information).</p> <p>“Pool overage barred”: when the data pool voucher is exhausted and the use of overage is barred (see section <a href="#">Setting up the data pool overage barring</a> for more information).</p>
	SIMs without traffic	Number of days since the current day.	<p>Show those SIM cards not performing any kind of traffic (voice, sms or data) during at least the indicated number of days.</p> <p>Value of 1 will refer to the current day.</p>
	Stalled SIMs	Lifecycle state Number of days since the current day.	<p>Shows those SIM cards being in the same lifecycle state during indicated number of days.</p> <p>Value of 1 will refer to the current day.</p>
Organisations	End Customer (⚠ Only for Customer organisations)	Name of the End Customer	Drop-down list with the list of End Customers
-	Postal Code	Postal Code	String with the option for wildcard characters “*” and “?”
Presence	APN	APN name being used, which depends on the Customer VPN which the SIM card belongs to	String with the option for wildcard characters “*” and “?”
	Country	SGSN related country	Text string
	GGSN IP	GGSN node IP address	Text string
	IP  (⚠ IPv6 address format will be allowed only for Service providers with IPv6 enabled)	IP Address	<p>Drop-down list with the following values:</p> <ul style="list-style-type: none"> <li>- “Static” or “Dynamic”: text string.</li> <li>- “Set by range” or “Dynamic by range”: lower range text string, higher range text string.</li> </ul> <p>“Dynamic”: refers to the session IP being used, whether it is a dynamic or static IP (IPv4 or IPv6)</p> <p>“Static”: refers to the provisioned IP. This IP will always be a static IP (IPv4 or IPv6)</p>
	Level	Type of service and Status	<p>The possible values are:</p> <p>“GPRS” or “IP”</p> <p>“Up” or “Down”</p>
	Operator	SGSN related operator	String text

	SGSN IP	SGSN node IP address	String text
	Last access technology detected	Last access radio technology detected	Possible values are: "2G", "3.5G", "3G", "4G", "LTE-M", "NB-IoT", "5G SA", "Undetected"
-	Quick search	SIM identifier list separated by comma (,). Those SIM cards matching one or several ids will be listed.	Only the following identifiers will be allowed: ICC, IMSI, MSISDN, Alias  Wildcard characters are not supported.
-	Search by file	CSV file	A single column of identifiers with a header "icc", "msisdn" or "imsi"  (max 100.000 rows)
SIM Information	ICC number	ICC number	String with the option for wildcard characters "*" and "?"
	Region   Only available to certain Service providers and dependent organisations)	Geographic region	Dropdown list with the list of regions
	Profile	Logistic profile (e.g. Spain uses E02, M02, E05)	String with the option for wildcard characters "*" and "?"
eSIM Information   Only applies to Customers with swap feature enabled)	EID	eUICC/eSIM identifier	String with the option for wildcard characters "*" and "?"
	Profile Status	Status of the profile in the eUICC/eSIM	Possible values are: "Enabled": the profile is enabled in the eSIM. "Disabled": the profile is disabled in eSIM. "Downloading": The profile is being downloaded into the eSIM. "Enabling": the profile is being enabled in eSIM. "Disabling": The profile is being disabled in eSIM.
	Swap allowed	Indicates whether the subscription corresponds to an eSIM	Possible values are: "Yes": This is an eSIM profile "No": It is not an eSIM profile and cannot be used to do a swap operation.
-	Local/Global	One of the possible types of SIM card	Dropdown list with the "Local", "Local_RR" or "TE_O2DE" values.  "Local_RR" references the Movistar Spain "Red de Respaldo", a local solution of Movistar Spain to provide their Customers SIM cards that attach to any radio operator in Spain (Orange,

			Movistar, Vodafone...), obtaining an advantage in coverage.  "TE_O2DE" references the Movistar Spain "Red de Respaldo" for SIMs with IMSI/MSISDN of Germany HOB.
-	Supplementary Services	Supplementary Service	The possible values are: "Device management", "Value Added Service", "Location", "Advanced Supervision", "VPN"
Traceability	Manufacturer order number	Manufacturer order number as indicated in the manufacturer provision file.	String with the option for wildcard characters "*" and "?"
	Extra order number	Internal order number in the Kite Platform.	String with the option for wildcard characters "*" and "?"
-	Traffic consumption	Type of Service, Status, Time zone and Threshold	There are four values:  "Voice", "Data" or "SMS" "Reached" or "Not reached" "Current day" or "Current billing cycle" "50%", "60%", "70%", "90%" or "Limit"
-	Block reason   Only available for Vivo Service provider and its Customers.	Block reason	<p>Block reasons can be</p> <ul style="list-style-type: none"> <li>• Due to non-payment</li> <li>• Due to inadequate use</li> <li>• Due to inadequate use – partial</li> <li>• Due to theft/lost</li> <li>• User block</li> <li>• Due to decommissioning request</li> <li>• Due to non-payment – decommission</li> <li>• Due to non-payment – partial</li> </ul>

-	Prepaid voucher	Basic service Category Subcategory	Basic service: Voice / SMS / Data Category / Subcategory: <ul style="list-style-type: none"> <li>• SIMs with prepaid tariff           <ul style="list-style-type: none"> <li>○ With vouchers</li> <li>○ Without vouchers</li> </ul> </li> <li>• SIMs with vouchers: Available days           <ul style="list-style-type: none"> <li>○ More than 30 days</li> <li>○ Between 15 and 30 days</li> <li>○ Between 5 and 14 days</li> <li>○ Less than 5 days</li> </ul> </li> <li>• SIMs with vouchers: Available consumption           <ul style="list-style-type: none"> <li>○ More than 30%</li> <li>○ Between 10-30%</li> <li>○ Between 5-9%</li> <li>○ Less than 5%</li> </ul> </li> </ul>
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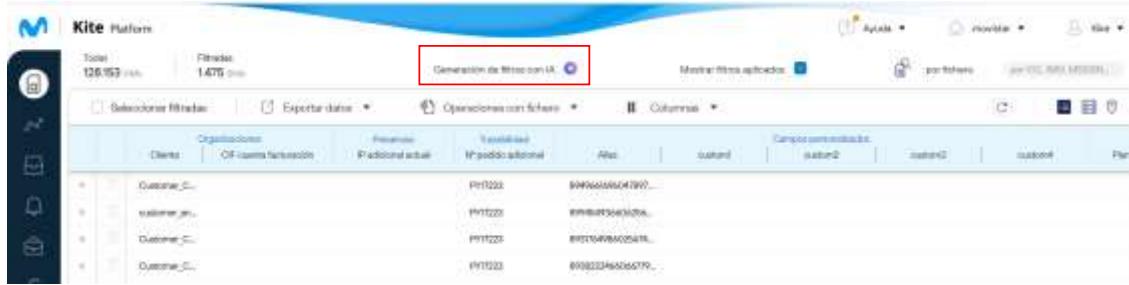
 It is possible to define compound filters by linking simple filters as the ones previously shown on the table. With this method, several individual filters can be applied simultaneously on the SIM cards the user whishes to manage.



To create a compound filter, simply use the options  to add or  to remove individual filters, located to the left of each filter. Once the filters to be applied have been selected, it will be necessary to execute the operation by clicking on the "Apply" icon ().

 The configured filters can also be executed by pressing the "Enter" key when positioned on a text box.

### 8.3.3 Search filtering with generative AI



The screenshot shows a data table with columns: Cliente, Organización, Proveedor, Estado actual, Altas, custom1, Campos comunes, custom2, custom3, and Plan. There are four rows of data, each with a small icon next to it.

Cliente	Organización	Proveedor	Estado actual	Altas	custom1	Campos comunes	custom2	custom3	Plan
Customer_1...	Officina Nacional...	PNT222	999999999999999...						
Customer_2...	Officina Nacional...	PNT222	999999999999999...						
Customer_3...	Officina Nacional...	PNT222	999999999999999...						
Customer_4...	Officina Nacional...	PNT222	999999999999999...						

Using the "AI Filter Generation" button, you can search and filter SIMs by using natural language queries.

Clicking on this icon will display a window for querying.



By clicking the button or pressing ENTER, KITE will evaluate the query and display the set of filters that best fit the user's request.



If the user agrees by clicking the "Apply Filter" button, KITE will configure the filters and apply them, displaying the resulting list of SIMs.

If the user is not satisfied with the selection made by the AI, they can clear the text window using the "I'll try another request" option.

If no filter combination is found that matches the user's query, a corresponding message will indicate this.



AI search doesn't implement a new filtering engine; rather, it maps the user's query to existing filters with the currently applicable restrictions. For example, a query like "Give me the active or test lines" isn't supported by current filters and, therefore, isn't supported by AI.

AI SIM filtering does not have chatbot capabilities, so it does not implement memory for past queries.

If a filter combination is not found, the most likely causes are:

- The information provided is incomplete or ambiguous and cannot be mapped to any known filter with all its parameters.

E.g.: Give me the lines that have consumed more than 50% in the current month.

In this case, it is missing the indication that it is Voice, SMS, or Data.

- The information provided is incompatible with the current capabilities of the filtering engine.

E.g.: I need the lines that are not activated.

This requires a filter type that is not currently available in KITE.

- A query is being performed for which you do not have permissions, or the required filter is not currently supported by the generative AI model.

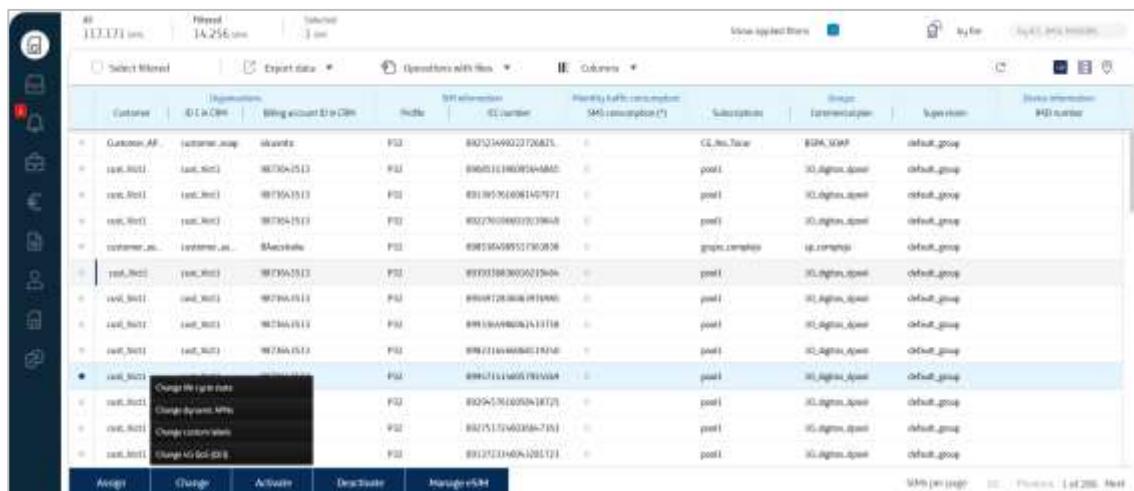
E.g.: I need the lines from the 'GS 10MB test' Subscription Group.

If this query is performed as a Service Provider, no results will be returned because this filter is only available for Customers and End Customers.

#### 8.4 Performing actions on the SIM cards

The Kite Platform allows the performance mass operations upon a group of SIM cards. In order to be able to perform them, the following steps must be followed:

- Select a set of SIM cards from the display modes List or Grid.
- Select the action to be applied upon the SIM cards by displaying one of the menus located on the lower area of the view and choosing one of its options.
- Select the parameter/s required (if applicable) from the modal pop up window.
- Accept the confirmation for the entered data.
- As the execution of mass operations in the Kite Platform may take a long while to finish, they are managed in the background. To see their progress, the option "Mass operations" must be accessed from the main menu (see appendix [Access to operations in progress \(bulk\)](#) for more details.)



The screenshot shows a table of SIM card data with a context menu open over a specific row. The columns include Customer, ID SIM Card, Billing account ID or CRM, Profile, SIM information, Identity of the consumer (e.g., SMS consumption (%)), Subscriptions, Usage, and Status information (ID number). The context menu for the selected row contains options: Assign, Change, Activate, Deactivate, and Manage SIM. The table has a header row and several data rows, with some rows expanded to show more details.

Depending on the user profile, either more or fewer options of mass operations will be available.

 The results of the bulk operation cannot be seen directly in the pop-up window. They can be accessed and monitored in the [Bulk operations](#) section.

 Currently, a bulk operation can be performed over a maximum limit of 100.000 SIM cards.

### 8.4.1 Customer bulk operations

Available operations for Customers are listed next:

#### 8.4.1.1 Assign operations

- **Assign lines to device**, only available for the Administrator, Demo Kit and Technical profiles. Makes it possible to provision a device from the selected SIM card.



 Only available to Customers with "Device management" service activated (see section [Working with devices](#) for more details).

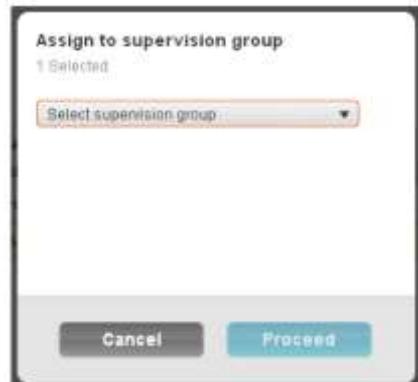
 Selected OEM (manufacturer) and model, will be used only in case the communication module's IMEI is unknown when creating the device. If it is known, it will be used to derive the OEM and model related to that IMEI.

 The model and OEM (manufacturer) of the device does not have to coincide with the model and manufacturer of the communications module (the latter will be those shown at the SIM level).

 SIM cards that have been linked to devices through this operation can be filtered using the Supplementary Services filter with the option "Device management". This is because when the "Assign line to devices" operation is performed, the supplementary service "Device management" is automatically activated in SIMs in which the operation is executed successfully.

 Legacy SIM cards can not be assigned to the device.

- **Assign lines to a supervision group**, only available for the Administrator, Supervision and Demo Kit user profiles. It allows assigning a group of SIM cards to a supervision group.



- **Assign lines to a Subscriptions group**, only available for the Administrator, Billing, Technical and Demo kit user profiles. It allows to assign a group of SIM cards to one of the Subscriptions groups created by the Customer.



 This will be one of the first operations to be performed in the Kite Platform by a Customer so that he can start working with his SIM cards. Once the SIM cards are assigned to a Subscriptions group, it will be possible to activate them.

 Changing the Subscription group is always allowed if both Subscription groups have been created by the Customer (that is, restricted Subscription groups are not involved) and they have the same commercial plan. In the case of having different commercial plans, a SIM card can be assigned to other Subscription group if 1) its lifecycle state is "Innactive new", "Active", "Suspended", "Deactivated" or if 2) being in "Activation Ready" or "Activation Pending", the lifecycle configuration in the new Subscription group's Commercial Plan take this state into account. If the SIM card's lifecycle state is "Test" or "Suspended" if its previous state was "Test", it won't be allowed to assign it to another Subscription group.

 Only for Vivo: A customer is not allowed assigning a SIM to a Subscription Group when a billing account change is involved or when the SIM is assigned to the group for the first time. It won't be allowed if the SIM is blocked (see section [SIM blocking operations](#) for more details), either.

**⚠️** When changing Subscriptions groups the state of the counters associated to the expense and usage limits for each SIM card remain the same.

**⚠️** When subscriptions are assigned to a different Subscriptions group the supplementary services of the SIM cards are maintained.

**⚠️** It is allowed to change to another Subscriptions group as long as the number of SIM cards in this Subscriptions group does not exceed the limit configured at Commercial plan level.

**⚠️** It is not allowed to move a SIM card to a Subscription group if:

- The destination group has a billing cycle start day change scheduled.
- The change takes place the day before, the day after, during the billing cycle day configured in the Billing Account of the source Subscription group
- The change takes place during a mini-cycle in the Billing Account of the source Subscription group (see section [Billing cycle](#) for further information).

These restrictions applies only if the billing account of the source and destination Subscription groups are different.

**⚠️** When subscriptions are assigned to a different subscriptions group the supplementary services of the SIM cards are maintained. This is due to the fact that supplementary services are not associated to a specific subscription group. So when the VPN, location or any other supplementary service is activated in a SIM card this configuration will be kept when the SIM is moved to a different subscription group.

**⚠️** Whenever a change of Subscription group does imply a change of Commercial plan change, new Commercial Plan's restrictions will apply. If restrictions have been configured at the individual SIM level, these will prevail over those of the new commercial plan.

**⚠️** It is not allowed to move a SIM card to a Subscription group as long as it implies both a Commercial plan change and the SIM card has prepaid vouchers being purchased (see section [Tariff plans of basic services](#) for further information).

- ⚠️** It must be considered that the group to which the subscription is assigned may have the consumption thresholds configuration for SIMs entering the group activated (see section Consumption thresholds for SIMs entering the group for more information). In this case, the SIM cards will be initialized with these thresholds, which will not prevent them from being configured later at an SIM level with new threshold values.
- ⚠️** It is not allowed to assign SIM cards to a Subscription Group if the SIMs have any 4G technology activated (LTE/LTE-M or NB-IoT) and the Commercial Plan of the new Subscription Group does not support it (has LTE/NB-IoT disabled).
- ⚠️** For 2G-activated customers, when you switch a SIM to a Subscription Group with a 2G-activated Business Plan, the SIM will become 2G-activated.

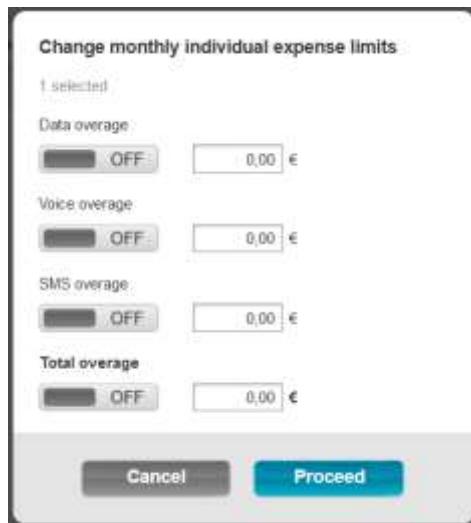
#### 8.4.1.2 Change operations

- **Changing Life cycle state**, only available for the Administrator, Technical, Billing and Demo kit user profiles. It allows changing the state of the life cycle of the SIM cards.

- ⚠️** In order to change the state of the SIM card, it must be part of a Subscriptions group (see appendix [Assignment operations](#) for more details).
- ⚠️** It is not allowed to change life cycle from “Inactive New” or “Test” to “Activation Ready” if the Subscription group has a “billing cycle start day” change scheduled.
- ⚠️** It is advisable to ensure that all selected SIM cards allow the change to the selected state. Otherwise, the execution of the operation will throw errors (see appendix [Access to operations in progress \(bulk\)](#) for more details). It will not execute for the SIM cards that do not allow the change of state.
- ⚠️** When changing to Deactivated, entering the user password will be required, as this operation can leave the affected lines out of service (only if required by the Service Provider). An additional field is also available on the same screen to add a checkmark such as “Additional Information”.
- ⚠️** It should be considered that, when changing the life cycle state to "Deactivated", the automatic SIM retirement policy that is configured for the Customer to which they belong will be applied. Typically after 18 months in a deactivated state the SIM will be removed from SIM Inventory. More details can be found in the [Terms of Use](#) section.

- **Changing monthly individual expense limits**, only available for the Administrator user profile. It allows both, to activate or to deactivate the expense counters as well as to

change the values of the expense limits of each of the basic voice, SMS and data services, as well as the total expense.



 A common reason for this operation would be when it is anticipated that a SIM card may perform in a deficient manner which may result in a higher than expected expense.

 The information on the current expense and the set limits for a SIM cards can be viewed using the list mode or accessing the detailed information of the SIM card (See appendix [List mode](#) and [SIM card detailed information](#) respectively for more details.)

 The scope of application of the expense limits refer to the billing period in progress. Once the billing period has ended, the expense counters will be reset to zero.

 Set expense limits only refer to the overage, that is to say, the expenses associated to recurrent monthly fees are not taken into account. For example, if the voice tariff of a SIM card has a monthly fee of €10 and the users wants to ensure that the total voice expense does not exceed €12, the amount €2 should be specified as a limit.

 Once the SIM card reaches a defined expense limit, it will stop processing traffic until either the limit is extended or the expense counter is reset to zero in the following billing cycle.

 Expense limits only applies to SIM cards not being in pool. For SIM cards being in pool the expense control at Subscription group level will apply.

 The type of currency of the expense limits is always the one defined by the Customer organisation that sets the limits.



Voice expense limit won't have any effect for outgoing voice calls in roaming in No-CAMEL operators if the consumption information (CDRs) are processed out of the current billing cycle. This may happen because these type of calls are always processed off-line.

- **Changing Monthly traffic consumption controls**, only available for the Administrator and Demo Kit user profiles. Allows you to activate or deactivate the consumption counters for basic voice, SMS and data services. When activating one of these counters, it is necessary to configure its limit value and whether you want to cut off traffic when it is reached. These counters will reset at the beginning of each billing cycle.

- **Changing Daily traffic consumption controls**, only available for the Administrator and Demo Kit user profiles. It allows you to activate or deactivate the consumption counters for basic voice, SMS and data services. When activating one of these counters, it is necessary to configure its limit value and whether you want to cut off traffic when it is reached. These counters will reset every day.



The information on the current usage and the set threshold for a SIM card can be viewed using the list mode or accessing the detailed information of the SIM card (See sections [List mode](#) and [Traffic consumption control](#) respectively for more details).



Consumption limits applies both to SIM cards not being and being in pool.



Voice consumption limits won't have any effect for outgoing voice calls in roaming in No-CAMEL operators if the consumption information (CDRs) are processed out of the current billing cycle. This may happen because these type of calls are always processed off-line.

- **Change Time/data vouchers**, only available for the Administrator, Finance, Technical and Demo kit user profiles. It allows to activate / deactivate the configuration of the time/date vouchers and to add to the current values the time during which the selected lines will be able to process data as well as the amount of traffic.



The total amount of time and data allocated to a SIM card can be viewed from the detailed information of the SIM card.



This operation will only be available if the Customer's configuration allows it.

- **Changing Dynamic APNs**, only available for the Administrator, Finance, Technical and Demo kit user profiles. Makes it possible to add (or remove) a dynamic APN to the list of 10 APNs that a SIM can have, for the set of SIM cards selected as long as they belong to the same Customer.



The APN being used for data traffic will be the one set up in the device with the SIM. Device APN must always be one of the APN at SIM level.

- **Change default APN**, only available for Administrator, Demo Kit and Technician profiles. It allows changing the default APN that a SIM has for the set of selected SIM cards, as long as they belong to the same Client.

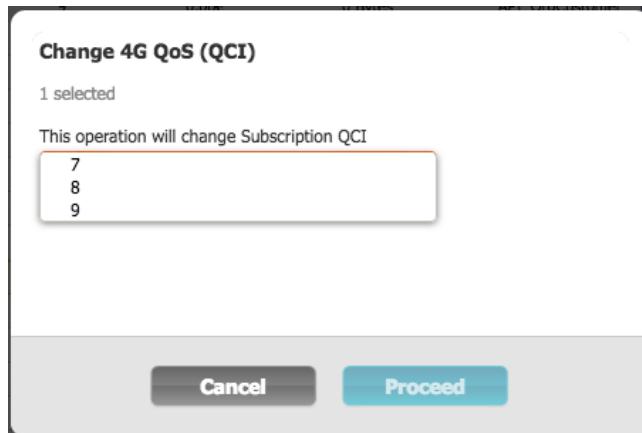


 The default APN is the APN that will be used to establish the implicit data connection (in which APN is not indicated) when registering in LTE, LTE-M, NB-IoT, 5G SA radio technologies. When the line does not have a default APN configured, APN 1 is used in this type of data connection.

- **Changing Custom labels**, only available for the Administrator, Billing, Technical and Demo kit user profiles. It allows to modify the value of the customizable fields for the set of selected SIM Cards.



- **Change 4G QoS (QCI)**, only available for the Administrator, Technical and Demo Kit user profiles. It allows modifying the QoS Class Identifier value (see [https://en.wikipedia.org/wiki/QoS\\_Class\\_Identifier](https://en.wikipedia.org/wiki/QoS_Class_Identifier) for more information) for the set of SIM cards selected.



Available QCI values can be different according to the following table:

Service Provider P-LTE Flag	Customer		Available QCI values
	4G technologies	Private Radio Network Supplementary service	
Activated   Applies only to Movistar Spain)	Activated	Activated and configured as:  - "UC5 mode: Access and core network" with no public network backup.  - "UC2 and UC5 modes" with no public network backup.	GBR (1, 2, 3, 4, 65, 66, 75) and non-GBR (7, 8, 9)
	Activated	Activated and configured as:  - Another configuration.	Non-GBR (7, 8, 9).
	Activated	Deactivated	Operation not available.
	Deactivated	-	Operation not available.
Deactivated   Applies to Service Providers other than Movistar Spain)	Activated	-	No GBR (7, 8, 9).
	Deactivated	-	Operation not available.

The assignment of a specific QCI value to a SIM will also be subject to the following criteria:

- The SIM must have the LTE/NB-IoT flag activated in order to assign it a QCI.
- If the Service Provider has the P-LTE flag activated:
  - The IMSI of the SIM must be within the range assigned to P-LTE<sup>7</sup> in order to assign it a QCI.

<sup>7</sup> For Movistar Spain, the P-LTE IMSI range is 21405\*.

**⚠️** The allowed QCI values can be different from those indicated in the table above, since they can be customized by Service Provider and range of IMSIs at the BD level.

**⚠️** This operation can cause a context closure.

- **Change radio access technologies**, only available for Administrator, Technician, Supervision and Demo Kit user profiles. Allows the activation or deactivation of radio access technologies on the selected SIMs. Only the radio technologies being enabled at customer level will be shown.



**⚠️** A 4G technology (LTE/LTE-M or NB-IoT) cannot be activated on a SIM assigned to a Subscription Group with a Commercial plan that is not of the LTE/NB-IoT type.

**⚠️** The activation of a 4G technology (LTE/LTE-M or NB-IoT) in a SIM will automatically assign the default 4G QoS (QCI) value<sup>8</sup> configured in BD.

**⚠️** 5G technology controls both 5G NSA (using the LTE core network) and 5G SA only with operators that support it.

**⚠️** This operation is not allowed on TdE legacy lines.

**⚠️** 2G and 3G radio technologies can only be managed by operators who have enabled it. The rest of the Service Providers are not compatible with managing these radio access technologies, so all their lines have it active by default and the option will not appear in the portal.

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<sup>8</sup> SIMs from Spain (local SIM and global SIM) will have QCI = 7 as default value. SIMs from other countries (AR, BR, CL, GE, MX and UK) will have QCI = 9 as default value.

#### 8.4.1.3 Supplementary services activation operations

- **Activate VPN service**, only available for the Administrator, Technical, Billing, Supervision and Demo kit user profiles. It allows the activation and deactivation on the line level of the additional VPN service as long as this service has been contracted and is not activated.



Only the lines that have the VPN service activated can process data, that is to say, use the basic data service.

- **Activate advanced supervision**, only available for the Administrator, Technical, Billing, Supervision and Demo kit user profiles. It allows the activation of the additional advanced supervision service as long as this service has been contracted and is not activated.
- **Activate Location**, only available for the Administrator, Technical, Billing, Supervision and Demo kit user profiles. It allows the activation of the additional location service as long as this service has been contracted and is not activated.



The user will be able to consult the supplementary services contracted by his Customer organisation by accessing the Admin → Commercial plans → Supplementary services → Services module. The available services will be those with state "activated."

#### 8.4.1.4 Basic services activation operations



The basic services activation operations that can be carried out will be conditioned upon the restrictions of basic services set by the Service provider in the associated commercial plan. In this way the configured restrictions will only be able to restrict even further those set by the Service provider (see section [Selecting a Commercial plan](#) for further details).

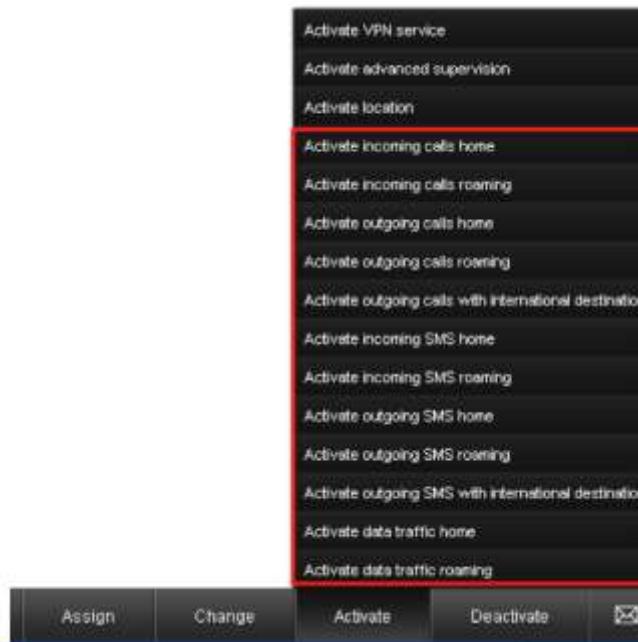


Home, Roaming and International kind of services are not going to be differentiated for Customers and End Customers depending on a Leading OB.

- **Activate incoming calls home**, only available for the Administrator and Demo Kit user profiles. It allows to receive voice calls within the operator network the service has been contracted with.
- **Activate incoming calls roaming**, only available for the Administrator and Demo Kit user profiles. It allows to receive voice calls within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.

- **Activate outgoing calls home**, only available for the Administrator and Demo Kit user profiles. It allows to make voice calls within the operator network the service has been contracted with.
- **Activate outgoing calls roaming**, only available for the Administrator and Demo Kit user profiles. It allows to make voice calls within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.
- **Activate outgoing calls with international destination**, only available for the Administrator and Demo Kit user profiles. It allows to make voice calls to international destinations regardless of the operator network the SIM card is connected to.
- **Activate incoming SMS home**, only available for the Administrator and Demo Kit user profiles. It allows to receive SMS messages within the operator network the service has been contracted with.
- **Activate incoming SMS roaming**, only available for the Administrator and demo Kit user profiles. It allows to receive incoming SMS within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.
- **Activate outgoing SMS home**, only available for the Administrator and Demo Kit user profiles. It allows to send SMS messages within the operator network the service has been contracted with.
- **Activate outgoing SMS roaming**, only available for the Administrator and Demo Kit user profiles. It allows to send SMS messages within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.
- **Activate outgoing SMS with international SMSC destination**, only available for the Administrator and Demo Kit user profiles. It allows to send SMS messages through an international SMS Centre from the point of view of the country in which the SIM card is located.
- **Activate data traffic home**, only available for the Administrator and Demo Kit user profiles. It allows to process data within the operator network the service has been contracted with.
- **Activate data traffic roaming**, only available for the Administrator and Demo Kit user profiles. It allows to process data within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.

 Data service activation is also done in 4G if the SIM card has a 4G radio access technology service enabled (see [Other services activation of operations](#)).



When configuring these parameters the following must be taken into account:

- If a service is not active in home, then it cannot be activated in roaming and in international.
- In case both outgoing calls in home and outgoing SMS in home are active, the following restriction will take place
  - If outgoing calls in roaming are activated then outgoing SMS in roaming will be also activated.

#### **8.4.1.5 Other services activation of operations**

- **Activate LTE/NB-IoT data service**, this operation has been replaced by “Change radio access technologies”.
- **Activate Incoming SMS filtering<sup>9</sup>**, only available for the Administrator, Technical, Supervision and Demo Kit user profiles. Makes it possible to activate incoming SMS filtering setting up whether the MSISDNs and GTs whitelist are taken from Customer’s configuration (default setup) or are defined specifically for the selected SIM cards. There is no defined limit for the number of items in both white lists.

---

<sup>9</sup> Incoming SMS filtering is only available to Movistar Spain’s Customers and all its Leading OBs as well as to Telefónica México (HOB)’s Customers.

**Activate Incoming SMS Filtering**

1 selected

Incoming SMS Filtering will be activated.

Use default filtering configuration set in [my organization](#):

Remitter allowed <input type="radio"/> Allow all <input checked="" type="radio"/> Just from this MSISDNs <div style="border: 1px solid #ccc; padding: 2px; width: 150px;">34687980*</div>	SMS Center / Global MSC SMS allowed <input checked="" type="radio"/> Allow all <input type="radio"/> Just from this SMS centers
--	---

- **Activate pre-paid vouchers**, only available for the Administrator, Technical and Billing user profiles and only for data prepaid vouchers. It allows the activation of pre-paid voucher in the selected SIM card. The chosen pre-paid voucher must exist in the commercial plan the SIM card has assigned. This operation is only displayed if the Customer has at least one pre-paid voucher defined in any of its Commercial plans.



The Active prepaid voucher section in SIM details allows you to see the active vouchers the SIM card has.

The parameters to be configured will depend on the type voucher to activate:

#### One-time vouchers

**Activate pre-paid vouchers**

1 selected

Activate pre-paid voucher on Subscription

Basic services commercial plan

Pre-paid voucher

Expiration date

Extend one-time vouchers

Optionally the following fields can be configured:

- **Expiration date:** by default it will be the date defined at Commercial plan level. This field will only be visible if the selected voucher belongs to an “Immediate activation” tariff type (see section [Tariff plans of basic services](#) for more information)
- **Extend one-time vouchers:** disabled by default, this option allows to extend all the active one-time vouchers expiration date in the SIM card to the expiration date of the new pre-paid voucher. This only applies to vouchers with expiration date earlier than the new expiration date. This field will only be visible if the selected voucher belongs to an “Immediate activation” tariff type.

### Monthly vouchers

**Activate pre-paid vouchers**

1 selected

Activate pre-paid voucher on Subscription

Basic services commercial plan  
bsp\_selenium\_prepay\_voucher

Pre-paid voucher  
1143 - data1 - Monthly

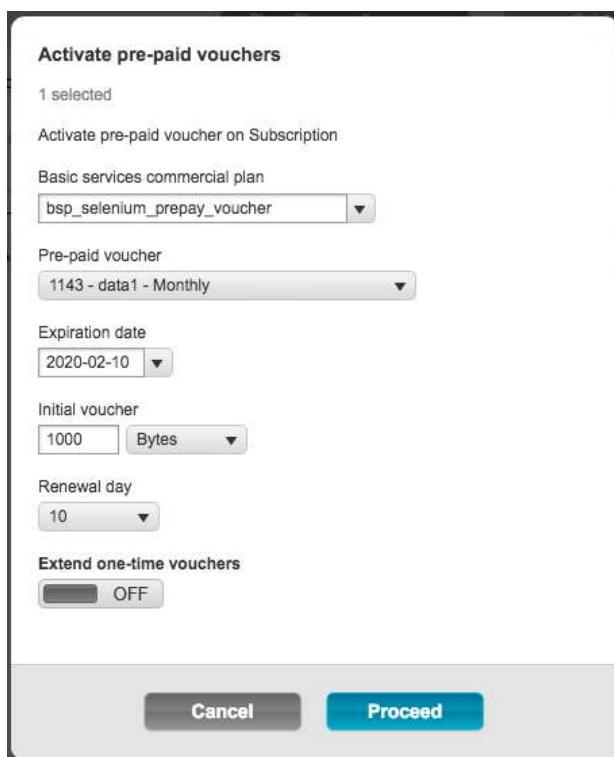
Expiration date  
2020-02-10

Initial voucher  
1000 Bytes

Renewal day  
10

Extend one-time vouchers  
 OFF

**Cancel** **Proceed**



Optionally the following fields can be configured:

- **Expiration date:** by default, it will be the date defined at Commercial plan level. This field will only be visible if the selected voucher belongs to an “Immediate activation” tariff type (see section [Tariff plans of basic services](#) for more information).
- **Renewal day:** by default, it is the activation day but any other day can be set up. This field will only be visible if the selected voucher belongs to an “Immediate activation” tariff type.
- **Initial voucher:** data or SMS limit from the activation date until the first renewal day. By default, it is the voucher size defined in the Commercial plan. If a lesser amount is set up, the charge will be prorated.
- **Extend one-time vouchers:** disabled by default, this option allows to extend all the active one-time vouchers expiration date in the SIM card to the expiration date of the new pre-paid voucher. This only applies to vouchers with expiration date earlier

than the new expiration date. This field will only be visible if the selected voucher belongs to an “Immediate activation” tariff type.



The “Extend one-time vouchers” option may not be available if the Service Provider requires it.

- **Activate IMEI Lock**, only available for Administrator, Restricted Administrator, Technical, and Demo Kit user profiles. This operation saves the IMEI of the device in which the SIM is installed, so its connection will be blocked if it is connected from a device other than the current one.



For SIMs without the device's IMEI, IMEI lock will not be activated.



IMEI lock can be activated with a specific IMEI for each subscription through the attribute import file or by accessing the subscription details. For new SIMs, automatic IMEI lock can be activated from the "My Organization" section.

#### 8.4.1.6 Supplementary services of deactivation operations

- **Deactivate VPN service**, only available for the Administrator, Technical, Billing, Supervision and Demo kit user profiles. It allows the deactivation of the additional VPN service, as long as the service is activated.



When deactivating the VPN service, entering the user password will be required, as this operation can leave the affected lines out of service (only if required by the Service Provider). An additional field is also available on the same screen to add a checkmark such as “Additional Information”.

- **Deactivate advanced supervision**, only available for the Administrator, Technical, Billing, Supervision and Demo kit user profiles. It allows the deactivation of the additional advanced supervision service, as long as the service is activated.
- **Deactivate tracking**, only available for the Administrator, Technical, Billing, Supervision and Demo kit user profiles. It allows the deactivation of the additional location service, as long as the service is activated.

#### 8.4.1.7 Basic services deactivation operations



The basic services activation operations that can be carried out can only restrict more the ones defined by the Service Provider in the related commercial plan (see appendix [Basic services](#) for more details).



Deactivation of calls do not imply immediate cancellation of them.

**⚠️** In case the LTE service is deactivated for the selected SIM card data service deactivation will also be performed in 4G.

**⚠️** Home, Roaming and International services are not going to be differentiated for Customers and End Customers depending on a Leading OB.

- **Deactivate incoming calls home**, only available for the Administrator and Demo Kit user profiles. It restricts the reception of voice calls within the operator network the service has been contracted with.
- **Deactivate incoming calls roaming**, only available for the Administrator and Demo Kit user profiles. It restricts the reception of voice calls within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.
- **Deactivate outgoing calls home**, only available for the Administrator and Demo Kit user profiles. It restricts the voice calls that can be made within the operator network the service has been contracted with.
- **Deactivate outgoing calls roaming**, only available for the Administrator and Demo Kit user profiles. It restricts the voice calls that can be made within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.
- **Deactivate outgoing calls with international destination**, only available for the Administrator and Demo Kit user profiles. It restricts the voice calls that can be made to international destinations regardless of the operator network the SIM card is connected to.
- **Deactivate incoming SMS home**, only available for the Administrator and Demo Kit user profiles. It restricts the reception of SMS messages within the operator network the service has been contracted with.
- **Deactivate incoming SMS roaming**, only available for the Administrator and Demo Kit user profiles. It restricts the reception of SMS within the network of an operator which is different to the one the service has been contracted with, either within the same country or abroad.
- **Deactivate outgoing SMS home**, only available for the Administrator and Demo Kit user profiles. It restricts the SMS messages that can be sent within the operator network the service has been contracted with.
- **Deactivate outgoing SMS roaming**, only available for the Administrator and Demo Kit user profiles. It restricts the SMS messages that can be sent within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.
- **Deactivate outgoing SMS with international SMSC destination**, only available for the Administrator and Demo Kit user profiles. It restricts the SMS messages using in the

destination an international SMS center from the point of view of the country in which the SIM card is located.



Kite Platform does not establish the SMS Centre. The device using the SIM card does it.

- **Deactivate data traffic home**, only available for the Administrator and Demo Kit user profiles. It restricts data processing within the operator network the service has been contracted with.
- **Deactivate data traffic roaming**, only available for the Administrator and Demo Kit user profile. It restricts data processing within the network of an operator which is different from the one the service has been contracted with, either within the same country or abroad.



When deactivating date traffic, entering the user password will be required, as this operation can leave the affected lines out of service (only if required by the Service Provider). An additional field is also available on the same screen to add a checkmark such as "Additional Information".

When configuring these parameters the following must be taken into account:

- If a service is deactivated in home, the same service will also be automatically deactivated in roaming and in international.
- In case both outgoing calls in home and outgoing SMS in home are active, then if outgoing calls in roaming are deactivated, then outgoing SMS in roaming will be deactivated automatically.

#### 8.4.1.8 Other services deactivation operations

- **Deactivate LTE/NB-IoT data service**, this operation has been replaced by "Change radio access technologies".
- **Deactivate incoming SMS filtering**, only available for the Administrator, Technical, Billing, Supervision and Demo Kit user profiles. Makes it possible to deactivate incoming SMS filtering service.
- **Deactivate pre-paid vouchers**, only for the Administrator, Technical and Billing user profiles and for prepaid data vouchers. It allows to cancel an active pre-paid voucher in the selected SIM cards. If no consumption has been made, the activation charged amount will be reimbursed.
- **Deactivate IMEI Lock**, only available for Administrator, Restricted Administrator, Technical, and Demo Kit user profiles. This operation deactivates the IMEI lock for selected subscriptions by deleting the associated IMEI, allowing them to connect from any device.

#### 8.4.1.9 SIM blocking operations

- **Activate 120-day block:** This operation is only available for Customers belonging to Vivo Service Provider and only for the Administrator, Technical, Billing and Demo Kite profiles. It allows to configure the SIM card in a state such that:
  - The SIM is suspended.
  - The lifecycle state cannot be changed through the lifecycle state change operation.
  - Basic services cannot be activated or deactivated.
  - The SIM cannot be removed.
  - There are no monthly charges but the corresponding adjustments are made.



To activate the 120-day lock, you will be asked to enter your user password, as this operation will remove service from the affected line. An additional field is also available on the same screen to add a checkmark, such as "Additional Information".

- **Deactivate blocking of 120 days:** This operation is only available for Customers belonging to Vivo Service Provider and only for the Administrator, Technical, Billing and Demo Kite profiles. Running it has the same effect as the "Return from Suspended" lifecycle state change.

#### 8.4.1.10 SIM decommissioning operations

- **Request decommissioning**, an operation only available for Customers belonging to Vivo Service Provider and only for the Administrator, Technical and Billing profiles. It allows you to schedule a SIM retire after 180 days, after that time, the MSISDN is removed. Until that moment, the SIM is configured in such a state that:
  - The SIM is suspended.
  - The lifecycle state cannot be changed through the lifecycle state change operation.
  - Basic services cannot be activated or deactivated.
  - The SIM can only be retired with provisioning cancellation.
  - There are no monthly charges, but the corresponding adjustments are made.
  - You cannot perform a 120-day block.



When executing this operation, entering the user password will be required, as this operation can leave the affected lines out of service. An additional field is also available on the same screen to add a checkmark, such as "Additional Information".

- **Cancel decommissioning**, an operation only available for Customers belonging to Vivo Service Provider and only for the Administrator, Technical and Billing profiles. Executing it has the same effect as the "Return from Suspended" lifecycle state change. In case of

applying this operation on a SIM without MSISDN due to having been decommissioned for more than 180 days, a new MSISDN will be assigned.

#### 8.4.1.11 Reset operations

- **Reset network**, only available for Admin and Technical profiles. It allows you to perform a network reset operation (Cancel Location) on SIM cards.

Before executing the operation, the radio technologies for which this operation is to be executed must be indicated. By default, it will always run on both 2G/3G and 4G.



The "4G" option will not be available on SIM cards that do not have the "LTE/LTE-M" or "NB-IoT" radio accesses activated.



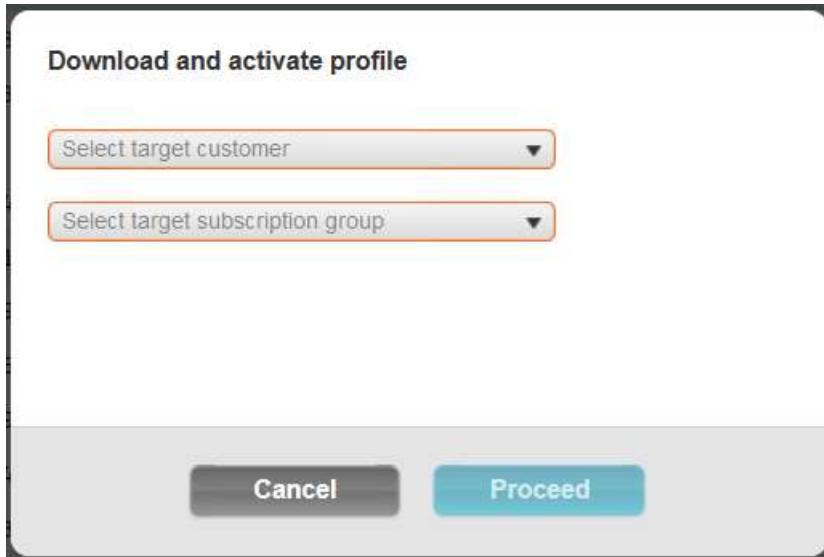
Keep in mind that this action could leave the device frozen depending on the firmware implementation that has been made. It is highly recommended to do some tests in a controlled environment before running it in the field.

#### 8.4.1.12 eSIM management operations



These operations will only be available to some Customers. Please contact with your Service Provider for more information.

- **Download and activate profile**, operation only available for the Administrator profile. It allows to perform a swap operation between eSIM profiles, specifically this operation allows, once a subscription has been selected in Inventory, corresponding to the enabled profile in the eUICC card, to carry out the following actions:
  - **Download and activation of a new profile** (virtual eSIM profile) on the eSIM. This action will suppose the publication of a new SIM in the Inventory of the selected Customer selected in the pop-up window of the operation. The SIM will be published in the chosen Subscription Group and will be enabled in eSIM and activated in Kite.



- **Activation of profile in the eSIM**, only in case there is already an eSIM profile on the eUICC card for the selected customer. In this case, the found profile is activated and a new one is not downloaded. If this is the case, the selected Subscription Group has no effect.

#### 8.4.2 End Customer bulk operations

Available operations for End Customers are listed next:

##### 8.4.2.1 Change operations

- **Changing life cycle state**, only available for the Administrator, Technical and Billing user profiles. It allows changing the state of the life cycle of the SIM cards.

 It is not allowed to change life cycle from "Inactive New" or "Test" to "Activation Ready" if the Subscription group has a "billing cycle start day" change scheduled (operation performed by the Service provider).

 It is advisable to ensure that all selected SIM cards allow the change to the selected state. Otherwise, the execution of the operation will throw errors (see appendix [Access to operations in progress \(bulk\)](#) for more details.) It will not execute for the SIM cards that do not allow the change of state.

 It should be considered that, when changing the life cycle state to "Deactivated", the automatic SIM retirement policy that is configured for the Customer to which they belong will be applied. Typically after 18 months in a deactivated state the SIM will be removed from SIM Inventory.

- **Changing monthly traffic consumption controls**, only available for the Administrator user profile. It allows both, to activate and to deactivate the usage counters as well as

to change the values in the usage thresholds of the basic voice, SMS and data services at billing cycle level.

- **Changing daily traffic consumption controls**, only available for the Administrator user profile. It allows to activate and to deactivate the usage thresholds of the basic voice, SMS and data services that apply to the day in progress.



The information on the current usage and the set threshold for a SIM card can be viewed using the list mode or accessing the detailed information of the SIM card (see sections [List mode](#) and [Traffic consumption control](#) respectively for more details).

#### 8.4.2.2 Operations for the de activation / deactivation of basic services

See sections [Basic services activation operations](#) and [Basic services deactivation operations](#) for a further information.

#### 8.4.2.3 SIM blocking operations

See section [SIM blocking operations](#) in [Customer bulk operations](#) for more information.

#### 8.4.2.4 Reset operations

- **Reset network**, only available for Admin profile. It allows you to perform a network reset operation (Cancel Location) on SIM cards.

Before executing the operation, the radio technologies for which this operation is to be executed must be indicated. By default, it will always run on both 2G/3G and 4G.



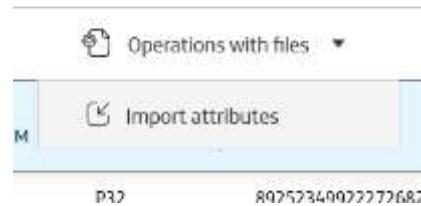
The "4G" option will not be available on SIM cards that do not have the "LTE/LTE-M" or "NB-IoT" radio accesses activated.



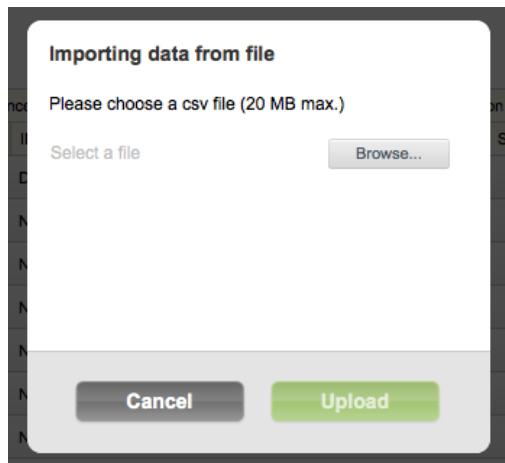
Keep in mind that this action could leave the device frozen depending on the firmware implementation that has been made. It is highly recommended to do some tests in a controlled environment before running it in the field.

#### 8.4.3 Importing data from file

The Kite Platform enables the users to update SIM cards information from external data with a file from the menu [Operations with files](#).



After selecting the option **Import attributes**, a modal window is displayed, which enables the user to select a local file with the SIM card data to be loaded.



As the loading of SIM card information is a mass operation (it can affect many SIM cards), the user will be able to see the result of the operation in the mass operations window (see appendix [Access to operations in progress \(bulk\)](#) for more information.)

- ⚠** The maximum file size allowed for the SIM card information that can be imported is 20 MB.
- ⚠** The files with SIM cards information that are exported using the Kite Platform (See appendix [Exporting data to a file](#) for more details) may be imported back to the Kite Platform. It must be borne in mind that not all the fields of an exported file can be imported back; such fields will be omitted by the Kite Platform during the importation.
- ⚠** In case a character that is not allowed is entered, no fields of the affected SIM card will be updated.
- ⚠** Only UTF-8 and UTF-8 BOM character encodings are supported.

The following table shows the SIM card fields that are taken into account during the importation. The rest of the fields will be ignored even though they may be present in the data file:

Field name	Comments
icc imsi msisdn	They are only taken into account to identify the SIM card where the data must be loaded
alias	If a hyphen (-) is specified, the current value will be eliminated.
customField_X, con X de 1 a 4	If a hyphen (-) is specified, the current value will be eliminated.
apn_apnX, with X from 1 to 10	<p>An APN consists of one or more labels separated by dots. Each label must start with a letter or digit, end with an *, a letter or a digit and have letters, digits and hyphens (-) as allowed characters.</p> <p>In order to delete a static APN, a hyphen (-) must be included in each one of these fields:</p> <ul style="list-style-type: none"> <li>- "apn_apnX" (with X, the number referenced by "staticIpApnIndex")</li> <li>- "staticIpAddressX"</li> </ul> <p>Note:</p> <ul style="list-style-type: none"> <li>- In order to delete a static APN defined with the fields "staticIpApnIndex" and "staticIpAddress", the hyphen (-) must also be included in these fields.</li> </ul> <p>Restrictions:</p> <ul style="list-style-type: none"> <li>- The length of an APN may not be more than 62 characters.</li> <li>- It must not start with "RAC", "LAC", "SGSN" or "RNC".</li> <li>- It must not end in ".GRPS".</li> </ul>
staticIpAddressX, with X from 1 a 10	<p>IP address associated with APN apn_apnX in case this APN is static. If this field is left empty, the corresponding APN will be taken as dynamic. Up to 10 static APNs can be defined.</p> <p>These fields can either contain an IPv4 or an IPv6 address. For IPv6:</p> <ul style="list-style-type: none"> <li>- Must be a full IP (128-bit)</li> <li>- The first 64 bits must not match that of another line for the same APN.</li> </ul> <p>If a hyphen (-) is specified, the APN referenced by the staticIpAddressX will change from static to dynamic.</p> <p> It is recommended to use these fields instead of the old method based on the fields "staticIpApnIndex" and "staticIpAddress" to define a static APN.</p>
additionalStaticIpAddressX with X from 1 to 10	<p>Additional IP address associated to the APN "apn_apnX" in case this APN is static. The corresponding "staticIpAddressX" must be defined.</p> <p>These fields can either contain an IPv4 or an IPv6 address. For IPv6:</p> <ul style="list-style-type: none"> <li>- Must be a full IP (128-bit)</li> <li>- The first 64 bits must not match that of another line for the same APN.</li> </ul> <p>If a hyphen (-) is specified, the existing value of this field will be removed.</p>
staticIpApnIndex	<p> It is recommended to use the staticIpAddressX fields to define static APNs.</p> <p>Indicates a positional reference to an APN within the range [1..10]. It must be borne in mind that the referenced APN must be filled in with data in the importation file.</p>

	If a hyphen (-) is specified, the referenced APN will change from static to dynamic.
staticIpAddress	<span style="color: yellow;">⚠</span> It is recommended to use the staticIpAddressX fields to define static APNs. It is mandatory to fill this field in if the staticIpApnIndex field is present.
locationManual_latitude locationManual_longitude	Either fields will or will not be present simultaneously. The contents of those fields can be modified but not eliminated, and hence a hyphen (-) will generate an importing error.
LTE_status	Non-mandatory field indicating if a SIM card will have or not the LTE/NB-IoT service activated. Accepted values are "Active", "Inactive" and hyphen (-) (the hyphen has the same meaning as "Inactive").
INCOMING_SMS_FILTERING_status	Non-mandatory field indicating if a SIM card will have or not the incoming SMS filtering service activated (with the Customer's default configuration). Accepted values are "Active", "Inactive" and hyphen (-) (the hyphen has the same meaning as "Inactive").
imeiLock	IMEI number that identifies the device from which the SIM can connect. If this value is different from the IMEI obtained from the network, the SIM connection will be blocked.  If a hyphen (-) is specified, the existing value in this field will be deleted.

#### 8.4.3.1 File format

The file must be a CSV file, using either ";" or "," as a field separators. The first line of files must be header lines and it will be followed by multiple lines of data with information about the SIM cards.

- **Header rows**, indicate what fields of the SIM cards will be loaded and their location in the data rows. The data location in the data rows is indicated by the header row. The fields may be a combination of those obtained during the file exportation (See section [Exporting data to a file](#) for more details), nevertheless, only those indicated in the previously mentioned table will be taken into account. The following must be borne in mind:
  - Regarding ICC, IMSI and MSISDN, these are SIM card identifiers and at least one of them must be present. They must always be the first headers of the row although their relative order is not important.
  - The order of the headers is irrelevant (with the exception of the previous rule)
  - No distinction between upper/lower case letters is made in the header rows.
- **Data rows**, the following must be taken into account:
  - It is possible that several data rows refer to the same SIM card.
  - If more than one SIM card identifier is indicated (ICC, IMSI, MSISDN), only the first one will be taken into account, and the rest will be omitted.
  - It is possible to use different identifiers to reference the same SIM card if it is done in different rows.
  - At least one of the SIM card identifiers must appear on each row.

- Each data row must contain as many fields as indicated on the header row.
- The data fields from the SIM card that the user wishes to keep unchanged must not contain any information in the data file (not even blank spaces).
- The field separator characters must always be present.
- The value indicated in the corresponding field will be the one updated in the SIM card field in the Kite Platform.
- To eliminate the contents of a SIM card field, the character “-“ must be used.

#### **8.4.4 SIM replacement**

The Kite Platform offers the possibility to replace the ICC and the IMSI of a set of subscriptions maintaining the MSISDN and all the billing information registered to date.

97 SIMs		
port	Export	Operations with files ▾
Parameter	Replace SIM	
GPRS status		IP status
Active		Not available
Active		Not available
Active		Not available

In order to carry out this operation it is necessary that both, the card to be replaced and the card that is chosen to substitute, are in the SIM Inventory. In addition, the card chosen to replace must not have an MSISDN provisioned<sup>10</sup>.

Once the operation on a SIM is completed, the replacement card will be removed.

In order to run this operation over a set of SIMs it will be necessary to provide a CSV file containing as many records as replacements have to be made. Each record (row of the CSV) must have the following structure:

REPLACED\_ICCID; REPLACEMENT\_ICCID

---

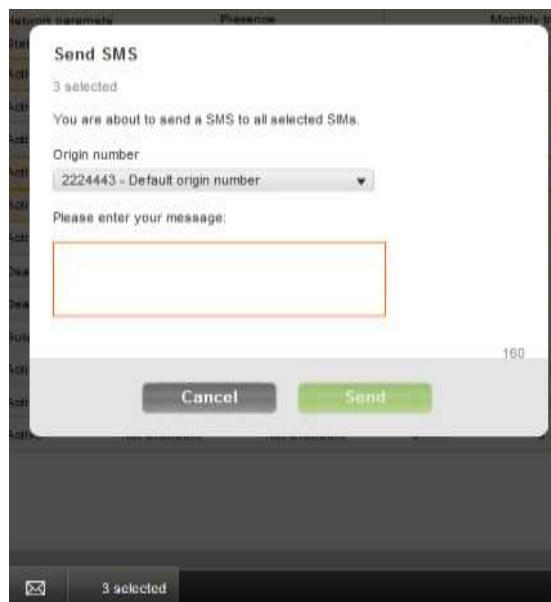
<sup>10</sup> In the current version, this operation will only be available to the followings Service Providers: Movistar Spain and all its Leading OBs, Vivo, Telefónica México HOB, Telefónica Argentina HOB and Telefónica Chile HOB, which are allowed to publish SIM cards without MSISDN.



The progress status of the operation can be consulted in the bulk operations section.

#### 8.4.5 Sending SMS to SIM cards

The Kite Platform allows sending SMS messages to one or several SIM cards from the inventory module.



To do it, the first step is to select the chosen SIM cards and next, click the button to send SMS.

- If the Customer has several origin numbers configured he will be able to choose the number from which to send the SMS (see section [Elements of a supplementary services commercial plan](#) for additional details).



The SMS dispatch is only available for those Customer organisations that have contracted the supplementary service (see appendix [Elements of a supplementary services commercial plan](#) for more details).

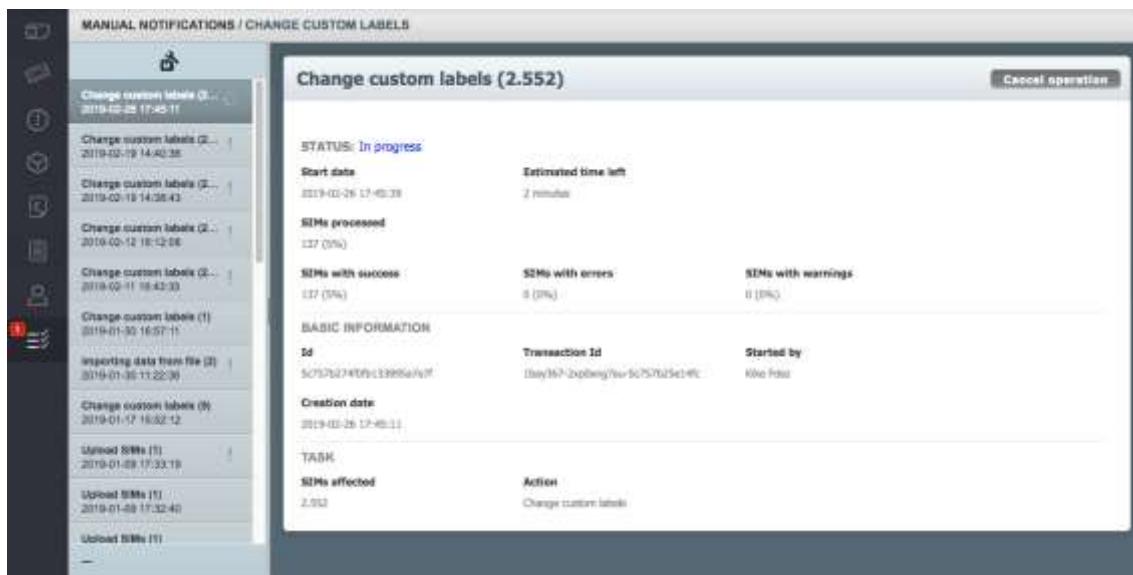
**⚠** It will not be possible to send SMSs to SIM cards that do not have an assigned MSISDN. This can happen, in the case of the Vivo Service provider, for example if a card has been decommissioned after 180 days of requesting said operation (see [SIM decommissioning operations](#) section for more information).

**⚠** End Customers will always send SMS using the default origin number.

**⚠** If more than 50 SIM cards are selected, the SMS will be sent only to the 50 SIM card of the first page.

#### 8.4.6 Access to Bulk operations

The operations requested from the action menus in the Inventory are not run immediately if they are not launched in the background. In order to find out about the evolution of these operations as well as their completion status, there is an operation notification window available, accessible from the main menu icon . This icon displays the number of ongoing operations if any exists (). The operation notification window is persistent at user level, that is to say, even though the user logs out and logs in again, his operations are kept.



##### Left panel

It shows the list of the notifications of the asynchronous operations, finished or in progress, either manually initiated by the user ( tab) or automatically as result of an alarm ( tab) (see [Alarm rules and notifications configuration](#) for more details). Every entry of the operations list shows the following:

- **Name and number of SIM cards**, operation date followed by the number of SIM cards upon which it was carried out.
- **Timestamp**, date and time when the operation was initiated.
- **State icon**, it indicates whether the operation is still in progress (dynamic spiral symbol) or whether the operation of any of the SIM cards has ended with an error. If that is the case, an exclamation mark “!” is displayed and the error details can be checked on the right panel. If the operation has ended without errors, no symbol is shown.

If desired, and the user has permissions for this, it is possible to delete any of the notifications of the panel via the lower button .

-  Deleting the notification of a operation in progress does not imply that such operation will stop.
-  Entries older than 6 months old won't be available.
-  If several bulk operations are requested in a short period of time, they may not execute in the requested order.

## Right panel

When selecting an operation notification from the list, its associated information will be displayed on the right panel, organized in the following fields:

Category	Field name	Description
Status	-	Waiting In progress Cancelling Finished with some errors Finished successfully
	SIMs successfully updated	Number of SIM cards related to the operation successfully finished. Only visible when the operation has finished.
	Start date	Date and time when the operation processing started.
	Estimated time left	Estimated time to finish the ongoing operation. In case of manual cancellation, this time will inform about the estimated time to finish the cancellation process. This field won't display once the operation has finished.
	Cancelled by	Informs about whether the operation is being called by the own user who launched the operation (it shows "User") or by the operator (it shows "Service Provider"). This field will only be visible during the cancellation process.

	SIMs processed	Informs about the number of SIM (and percentage) that have already been processed.  This field won't display once the operation has finished.
	SIMs with success	Informs about the number of SIM (and percentage) that have already been processed successfully.  This field won't display once the operation has finished.
	SIMs with errors	Informs about the number of SIM (and percentage) that have already been processed with error.  This field won't display once the operation has finished.
	SIMs with warnings	Informs about the number of SIM (and percentage) that have already been processed with warning.  This field won't display once the operation has finished.
Basic information	Id	Notification identifier.
	Transaction Id	Operation internal identifier.
	Started by	User name or alarm rule name that requested the operation.
	Creation date	Date and time when the user launched the operation.
Task	Affected SIMs	Number of SIM cards involved in the operation.
	Action	Name of the operation being initiated.
Errors	Total	Number of SIM cards related to the operation unsuccessfully finished.
	Source	It shows the source of error. It can be due to an incompatible operation over a SIM card (ICC will be displayed) or to a file parsing error (error line will be displayed).
	Reason	Error message for the affected SIM card.  In case an ongoing operation is cancelled, it will be displayed for the affected SIM whether the operation has been cancelled by the user who executed the operation ("Cancelled by: user" will be displayed) or by the operations team (it will be shown "Cancelled by: service provider").
Warnings	Total	Number of SIM cards related to the operation finished with a warning.
	Source	It shows the source of warning. It can be due to a operation over a SIM card (ICC will be displayed) or when parsing a file (warning line will be displayed).
	Reason	Warning message for the affected SIM card.

 The progress and status of the operation will be updated automatically every minute or at the end of it.



The information detail about operation progress will not be available for file import operations.

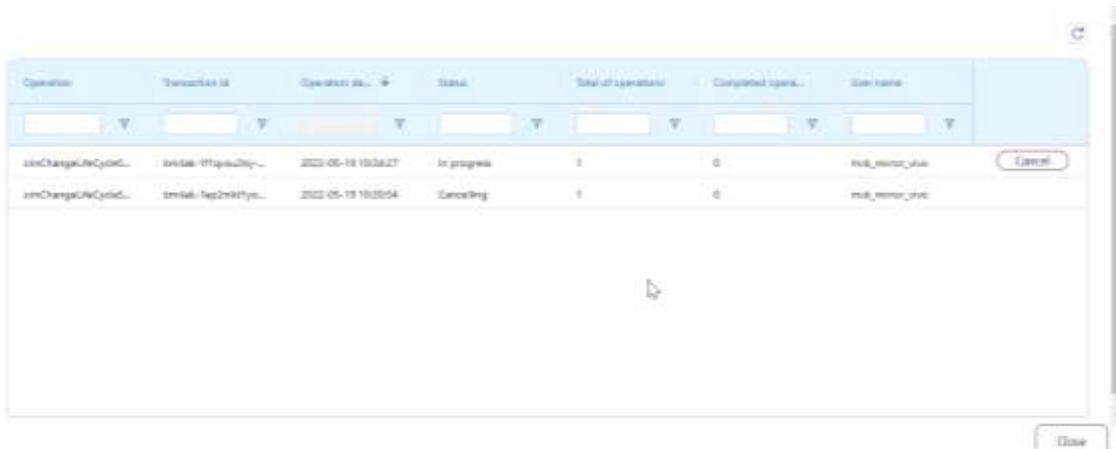
### Cancelling ongoing operations

It will be possible to cancel an operation in progress (in the state "Waiting" or "In progress") through the **Cancel operation** button located in the upper right corner of the right panel. Remember that these operations are the ones that you launched manually with your user.



The "Cancel operation" button will not be available for file import operations.

Additionally, users with an administrator role will be able to access a section that will allow them to cancel the ongoing manual operations within their organization, regardless of the user who launched them. To access this section, a new "hand" icon will be available at the bottom left. By click on it, the list of operations will be displayed, with the option to cancel any of them.



Operation	Transaction ID	Operation date	Status	Total of operations	Completed operat...	User name	
simChangeUsiCycle...	sim123-1ff10a2bf...	2022-05-18 10:30:27	In progress	1	0	user_menor_usi...	<b>Cancel</b>
simChangeUsiCycle...	sim123-1ff20a2bf...	2022-05-18 10:30:54	Canceled	1	0	user_menor_usi...	

### Retrying failed operations

In the event that a bulk operation has errors on SIM cards, it will be possible to retry it from the same section by simply clicking on the **Retry operation** button. At that moment a new bulk operation will be created that will be executed on the failed SIMs.

**Change life cycle state (13)**

**STATUS:** Finished with some errors  
SMS successfully updated

**BASIC INFORMATION**

H	Transaction Id	Started by	Creation date
HTTP/1.1/2023/05/18/10:12:17	Http://ttech-tgsmwslbqy-007911010101	Mike Cane	2023-05-18 10:12:17

**TASK**

SMS affected	Action
13	Change life cycle state

**ERRORS**

Total: 13	<b>Retry the operation</b>
-----------	----------------------------

**Click on the button if you want to retry the operation only on the SMS for which the error occurred. A new bulk operation will be created with them.**

SOURCE	REASON
ICC: 8876543210200101798	The transaction is not allowed because it is not defined in the available lifecycle
SPN: 00000000000000000000000000000000	The transaction is not allowed because it is not defined in the available lifecycle

**⚠️** The retry button will not be available for bulk operations via file upload and automatic bulk operations (via alarm actions).

#### 8.4.6.1 Notifications of authorisations

Authorisation notifications are available in a tab in the massive operations section:

NOTIFICACIONES DE AUTORIZACIONES / DESACTIVAR SMS SALIENTES EN OPERADOR LOCAL

**Desactivar SMS salientes en operador local (3)**

**ESTADO:** Peticiones de autorización

**INFORMACIÓN DE LA AUTORIZACIÓN**

Código del permiso	Teléfono del permisario
00000000000000000000000000000000	9876543210200101798
Opciones del permiso	Tipo de autorización del permiso
master_00000000000000000000000000000000	Se ha ejecutado manualmente

**INFORMACIÓN BÁSICA**

ID	Id de la transacción	Impulsada por	Página de visualización
00000000000000000000000000000000	Http://ttech-tgsmwslbqy-007911010101	No disponible	05-07-2023 09:12:17

**TAREA**

SMS afectados	Acción:
3	Desactivar SMS Salientes en operador local

In this section, the user with the appropriate role has access from the left panel to:

- Filters:** Allow you to filter authorisations by customer or by release date.
- Authorisations pending from me:** Display the list of operations that my organisation is responsible for authorisation.
- Pending authorisations from others:** Display the list of operations that my child organizations are responsible for authorizing.
- Authorisations reviewed:** Authorisations that have already gone through the review process.



The maximum number of transactions that can be seen in this section is 50, counting the three types of authorisations.

Depending on the role of the user and the context (for example, a user cannot authorize himself) it will be possible to authorize or reject the pending authorisation s and enter a comment to it.

When selecting an authorisation from the list, its associated information is displayed in the panel on the right, through the following fields:

Category	Name	Description
Status	-	Pending of authorisation authorised rejected expired
Authorisation information	Petitioner's email	Petitioner's email
	Petitioner's phone	Petitioner's phone
	Organisation Id of the petitioner	Organisation identifier of the petitioner
	Organisation type of the petitioner	Type of organisation to which the petitioner belongs

The rest of the information will be displayed the same as in the case of the right panel for operations.

#### 8.4.6.2 Bulk operations result reports

Once the operation has been completed, a report with the operation details for each of the affected SIM cards can be downloaded through the Download button of mass operation result



The generated report is a CSV file, with headers and the semicolon as fields separator. This report has the following fields:

Field	Description
ID	Internal identifier of the subscription in Kite.
ICC	ICCID of the SIM card.
IMSI	International Mobile Subscriber Identity
MSISDN	Mobile Subscriber ISDN Number
EID	eUICC identifier.
RESULT	ERROR or WARNING
REASON_CODE	Error message code
ERROR_CODE	Additional internal error code
REASON_MESSAGE	Error message related to the reason code. If the reason code is empty the error message will be related to the error code.

 This report will not be available for file upload and SIM publication operations from pre-inventory, IMEIs white list configuration in IMEI filtering and SIM filtering in Inventory via file uploading .

#### 8.4.6.3 Delivery confirmation reports

For Send SMS-AO related operations (SMS originated from the Kite Platform), either manually initiated from SIM Inventory or automatically started as a result of an alarm automatic action, it will be possible to generate and download a report with the SMS delivery status of each participating SIM.

The report generation action can be performed from the details window related to the Send SMS operation that is needed to be checked.



Once the report has been generated it can be downloaded either from this very same window:

**Send SMS (2)**

Download delivery status   Download bulk operation result

Report file generated on 2020-01-10 12:56:18

STATUS: Finished with some errors  
SIMs successfully updated

or from the Reports section:

SMS-AO delivery confirmation Period: 2015-11-03 15:17:22 Notification Id: 0938c1bfe027ac34130ffaf

Export CSV

- ⚠ This feature is only available for Movistar Spain and its Leading OBs.**
- ⚠ Generated reports will only be available for downloading during a week. Once this period is exceeded, reports will need to be generated again in order to be downloaded.**

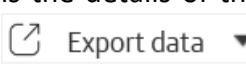
Format of generated report is CSV with ; as separator and with headers. It provides the following information:

Field	Description
SUBMIT_TIMESTAMP	Timestamp when the SMS was submitted.
DELIVER_TIMESTAMP	Timestamp when the SMS was delivered.
ORG_NUMBER	Origin number.
DST_NUMBER	Destination number.
DELIVERY_STATUS	Delivery status. It can be one of the following: DELIVERED (SMS was delivered); PENDING (SMS is not delivered yet); FAILED (SMS was not delivered).
DESCRIPTION	Optional information.

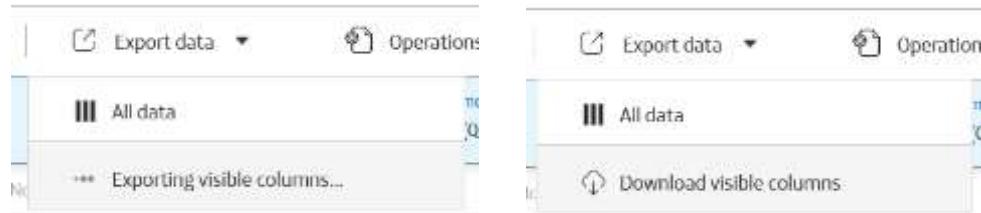
## 8.5 Exporting data to a file

The Kite Platform makes it possible to download to a local file in CSV format information about all the SIM complying with the current filter. This is available from both the list view mode and grid view mode.

- ⚠ Downloaded file will always be a ZIP file having one or several CSV file inside. Each CSV file will have one million rows as maximum.**

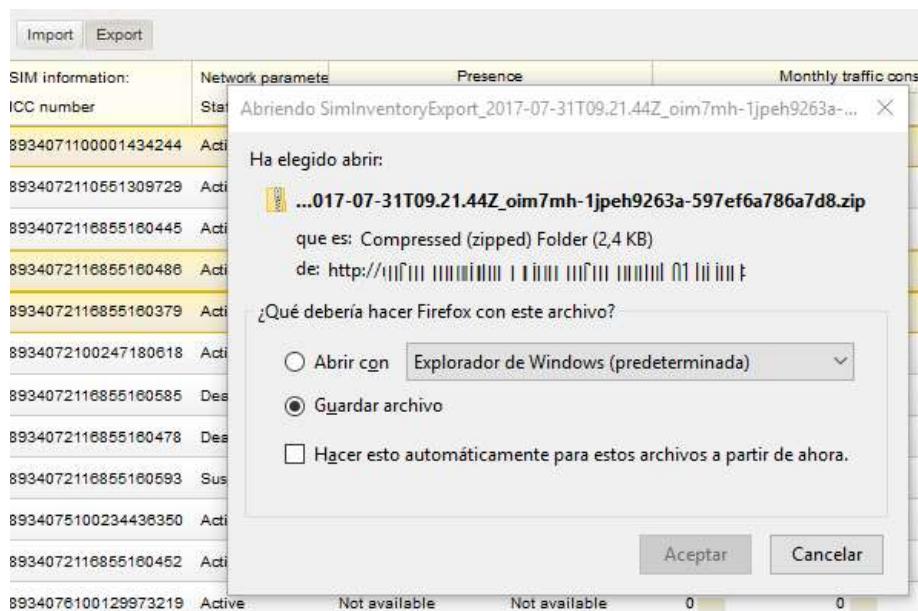
CSV file contains the details of the fields associated with the selected SIM cards. When clicking on the  button, and after selecting whether to export all the data or only those corresponding to the columns selected to be displayed at that moment

in the table, a file will be generated and when it is available, the button will change to "Download ...".

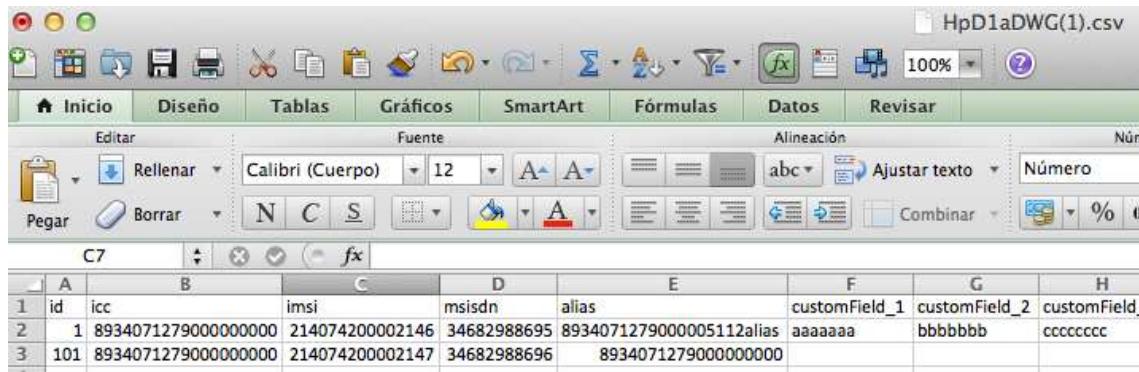


 Generated report can also be downloaded from the Reports section. Once it is downloaded the report will be automatically deleted. Reports older than one week will be automatically deleted as well.

When clicking over this button a window will show for selecting the name and location of the CSV file.



The file downloaded will contain all SIM cards existing in the Inventory list. The first row will contain the headers with the name of each one of the fields/columns. The name of the fields obtained in an exported file will be the same as those used in the importing file. A file example is shown below.



	A	B	C	D	E	F	G	H
1	id	icc	imsi	msisdn	alias	customField_1	customField_2	customField_3
2	1	893407127900000000	21407420002146	34682988695	893407127900005112alias	aaaaaaaa	bbbbbbb	ccccccc
3	101	893407127900000000	21407420002147	34682988696	8934071279000000000			

## 8.6 SIM card detailed information

To access the specific details of a SIM card and to see its fields, the display modes “List” or “Map” must be accessed, as the grid mode does not offer an individual representation of each SIM but of groups of them.

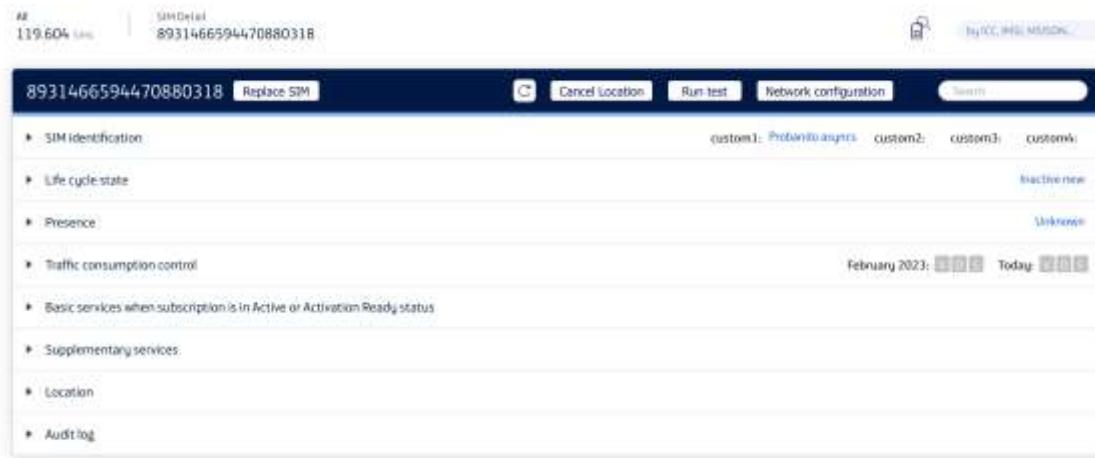
The details of a SIM can be accessed in two different ways:

- From the “List” mode, it suffices to double click one of the SIM cards from the inventory to access its detailed information.
- From the “Map” view, the SIM card icon must be clicked and then, the **See details** button must be selected.



Clicking on the icon of the first column in Inventory also allows access to the SIM details (facilitating, thus, the operation from touch screens).

Regardless of the chosen method, the current view will only show sections corresponding to the different data groups of the SIM card and information related to generated alarm events (opened and closed.)



## 8.6.1 Actions on a SIM card

### 8.6.1.1 Diagnostic tests execution

Through the Kite Platform, it is possible to perform diagnosis operations on SIM cards in order to identify problems with the card. This action, which cannot be performed on a group of SIM cards, is available from the SIM card detailed information view. This can be done only by clicking the **Launch test** button, located in the upper right side of the view.



**⚠️** The execution of the IP reachability test can entail an associated fee, which can be consulted in the supplementary services fees linked to the Customer.

The diagnosis operation carries out several consecutive tests on the SIM card. For each test performed, the system indicates whether it has been completed correctly (OK) or with any problem. A problem in one of the diagnosis tests can be blocking (error) or not (warning) and detailed information about it will always be provided. If the test has ended with an error, the remaining tests will not be carried out.

**💡** It is possible that the detailed information about the problem is not displayed completely in the reserved area. It is possible to view all the information by only placing the mouse on the information text.

- **Administrative status**, it provides information on the activation and provision state of the SIM card. In the event of detecting any global problem (such as, the card is not

provisioned in the HRL, has reached the total limit of expense, etc.) affecting the proper performance of the card, the diagnosis test will end with an error (displayed in red) and subsequent verification will not be performed. If the problem affects only some of the basic services (voice, sending of SMS messages or data) the test result will be "warning" (displayed in orange) and the subsequent diagnosis tests will be performed.

Administrative status		Error / Warning	We found 1 error and 6 warnings that may affect the correct functioning of the subscription	Cancel test	Hide detail	Search
Affected service	Scenes					
Voice   Data   SMS No service is available	Subscription in Suspended life cycle status.					
Data Data traffic unavailable	The subscription doesn't have defined APNs, therefore it cannot perform data traffic.					
Data Any Data traffic is restricted	The following data traffics are restricted: ✖ Roaming					
Voice Voice service partially affected	MO (outgoing) and MT (incoming) voice calls are applying rules of authorized and restricted numbers, which have been setting in "Authorized and restricted numbers" subscription group section, to authorize or reject calls. If you have permissions you can edit these rules, otherwise contact your service provider.					
Voice Any Voice traffic is restricted	The following voice traffics are restricted: MO: ✖ International ✖ Roaming					

- **GSM Status** displays information on the current record state of the SIM in the network (OK or error).
- **GPRS Status** displays information on the SIM card current state as regards the establishment of the data session (ok or warning).
- **IP reachability**, displays information on the SIM card current state as regards the establishment of the data session in the IP level (ok or error).

 The IP reachability test will only be performed if the advanced supervision service is contracted.

 The results of the GPRS and IP reachability diagnosis tests from the last 30 days are available in the Presence tests history.

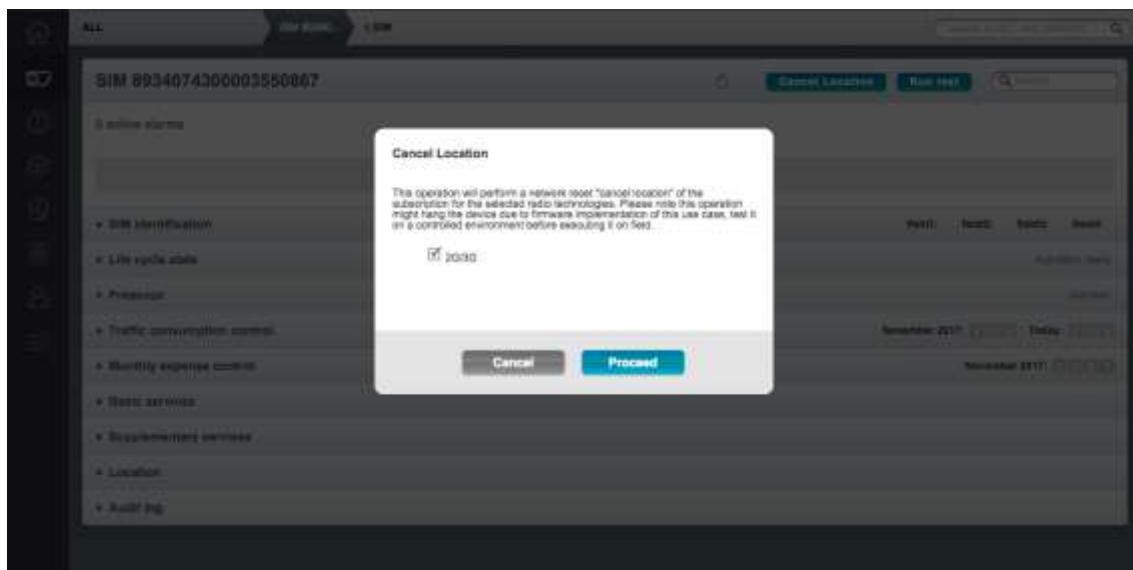
 If the battery of the device is removed or exhausted (i.e. the device is not turned off in a orderly manner) the GSM and GPRS status can be shown as ok even when the device is disconnected. The information will be eventually updated after several hours.

 Due to there can be special devices in which GSM status is NOK and at the same time are able to send and receive traffic, GSM diagnosis won't impede performing GPRS diagnosis.

**⚠** Correct execution of IP reachability in IPv4, demands using a GRE tunnel for the used APN. If for whatever reason, this tunnel is not correctly established the following error text will be displayed: "Tunnel for APN xx.xx.xx.xx not found".

#### 8.6.1.2 Network reset (Cancel location)

Kite Platform allows to run a network reset operation on a SIM card in order solve problematic situations with the card. This action is available from the SIM card details information view. To do this just click on the **Cancel location** button located in the upper right area of the view.



Before running this operation it shall be necessary to select the radio technologies over which the network reset will be executed. By default, both 2G/3G and 4G will be selected.

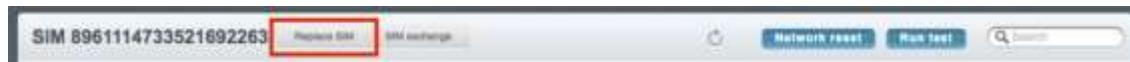
**⚠** "4G" option won't be available for SIM cards with "LTE/LTE-M" or "NB-IoT" radio acceses disabled.

**⚠** Keep in mind that this action may hang the device depending on the firmware implementation that has been made. It is highly recommended to do some tests in a controlled environment before executing it in the field.

#### 8.6.1.3 Replace SIM

This option<sup>11</sup> offers the possibility to replace the ICC and the IMSI of a subscription by maintaining the MSISDN and all the billing information registered to date.

<sup>11</sup> In the current version, this operation will only be available to the followings Service Providers: Movistar Spain and all its Leading OBs, Vivo, Telefónica México HOB, Argentina HOB and Chile HOB, which are allowed to publish SIM cards without MSISDN.



In order to carry out this operation, it is necessary that the card that is chosen to be replaced the SIM Inventory and does not have any MSISDN provisioned.

Once the operation is completed, the card with the indicated ICC will be retired.

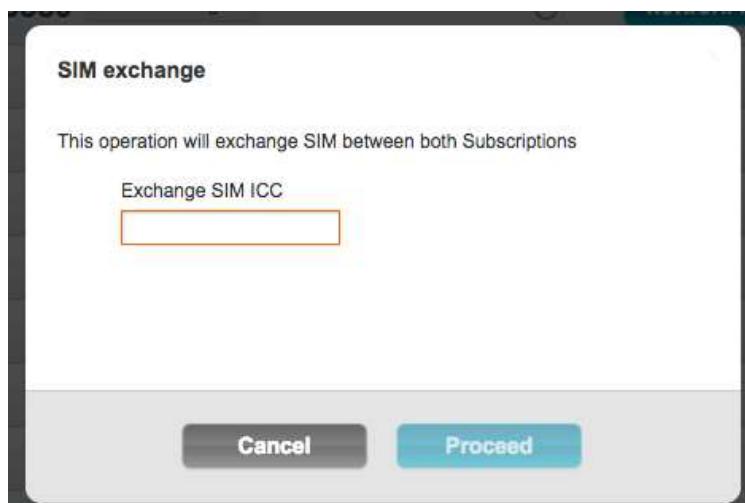
**⚠️** This operation will not be possible if the SIM card to be replaced has no MSISDN assigned. This can happen, in the case of the Vivo service provider, for example if a card has been withdrawn after 180 days of requesting said operation (see section [SIM decommissioning operations](#) for more information).

#### 8.6.1.4 SIM Exchange

This option<sup>12</sup> allows to exchange the ICC and IMSI of one subscription for those of another SIM supplied maintaining the MSISDN and all the billing information registered to date.



Both SIMs must be in the SIM Inventory, therefore it is not possible to exchange the ICC-IMSI with those of a SIM in Pre-Inventory.



#### 8.6.2 Alarm events of a SIM card

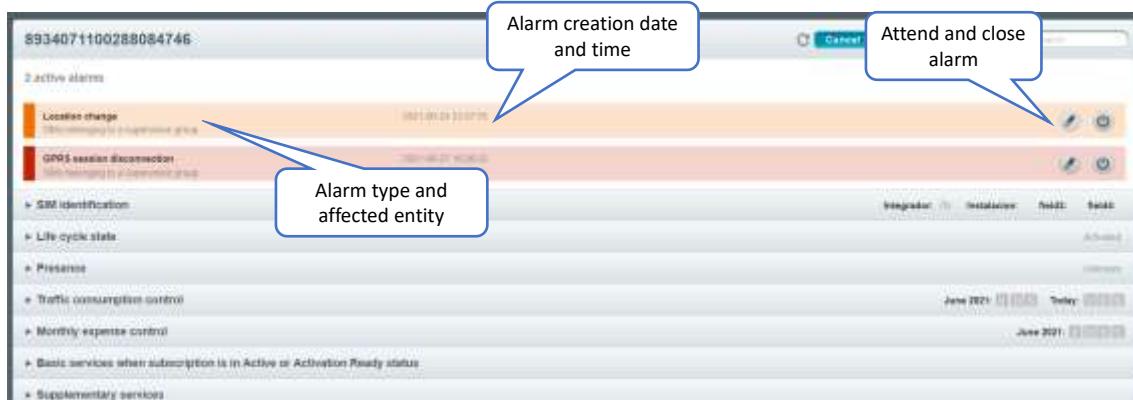
This section shows the alarms generated by the selected SIM card<sup>13</sup>.

<sup>12</sup> This option is currently available just at Service Provider level, and only for Telefónica Mexico (HOB).

<sup>13</sup> There can be a mismatch between supervision alarms listed in this section and the ones listed in Inventory table. This mismatch is corrected during the nightly update.

**⚠️** The alarm events generated by SIM cards are only available for Customer and End Customer organisations. For End Customers only non-expense administrative alarms are available. **⚠️** Only alarm events not older than 3 months will be listed.

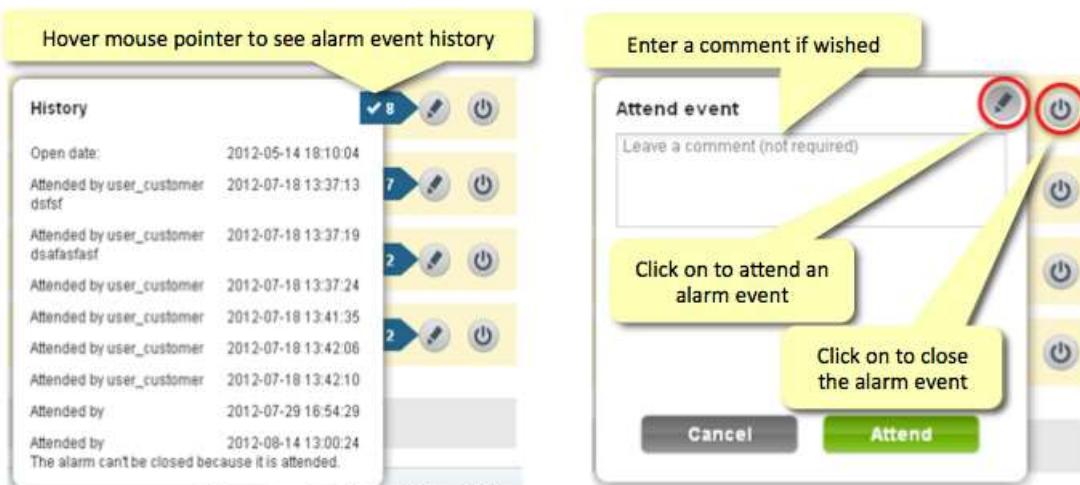
The complete list of opened alarms is always visible and it is sorted starting from the oldest alarms. This list is sorted from the oldest to the most recent alarms according to the closure date. Moreover, it can be filtered by opening date.



Each alarm shows the type of alarm generated, its creation date, the number of attentions it has received and its severity according to the following colour scheme (see section [Alarm parameters](#) for further information):

Colour	Severity
Red	Critical alarm
Orange	Severe alarm
Yellow	Informative alarm

It is also possible to close and/or attend a concrete alarm by providing additional information about the closure reason or attention state. The history of attentions and closures of an alarm can be viewed by hovering the mouse over the corresponding button.



### 8.6.3 IoT Device Control

From this section it is possible to obtain information from the device by communicating directly with the SIM card in a secure way.

**⚠ Only SIM cards configured with the proper OTA keys will have this section visible.**

**⚠ Only customers with IoT Device Control supplementary service activated will have this section visible.**

**⚠ This service requires, for its correct operation, that the SIM card can both receive and send SMS. For this, the Customer must have activated the SMS-AO Supplementary Service and the SIM card must have activated the basic services for sending and receiving SMSs (local and roaming)**

The cost of the SMSs used by this service will only be charged in the event that the operation has been carried out by the customer and provided that the response from the device includes a correct collection of information or confirmation of the reset operation (see C) below). The device's response after sending a command through this service may contain the following:

- An error at the service level / OTA. In this case, the cost of the SMS used will not be charged to the customer (except in a particular case with the RESET).
- A response indicating that the device does not support the command or any other business logic error. In this case, the customer will not be charged.
- A response with the collected value or confirmation of the reset operation on the device. Only in the latter case the cost of the SMS used for this information collection will be charged to the customer.

### 8.6.3.1 Device capabilities

This tab provides information about the capabilities that the device has available and the IMEI registered in Kite.

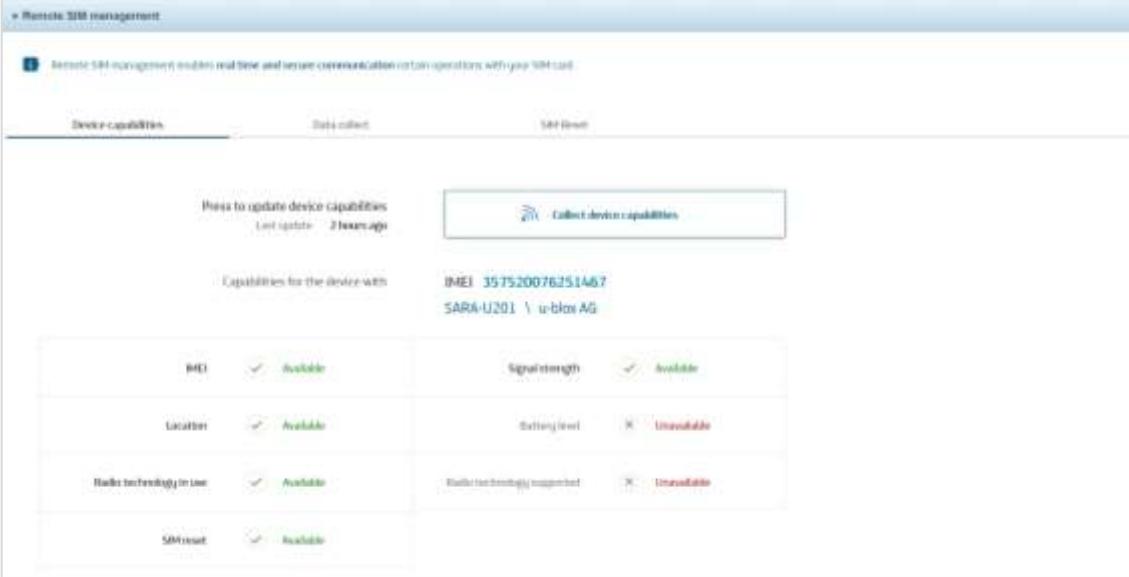
 The “Collect device capabilities” operation requires 2 SMS to be sent to the device from Kite and 2 additional SMSs back and can take up to 7 min.

 Each of these capabilities, with the exception of the "SIM Reset", can be detected alternatively and individually by collecting the corresponding information from the "Data collect" tab.

 The "SIM Reset" capability can be alternatively and individually updated by performing a SIM reset operation from the "SIM Reset" tab.

The collection of capacities will be carried out through the button **Collect device capabilities**.

Associated with the IMEI that Kite has registered, it will be shown, if possible, the manufacturer and model of the communications module associated with that IMEI.



Radio	Available	Signal strength	Available
Location	Available	Battling level	Unavailable
Radio technology in use	Available	Radio technology supported	Unavailable
SIMReset	Available		

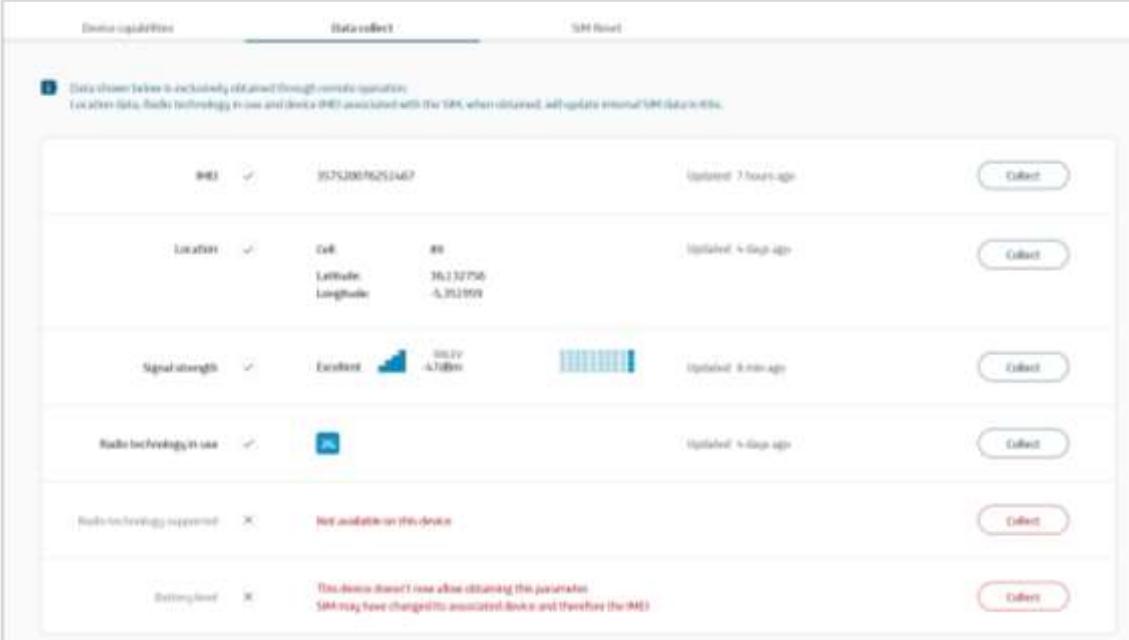
The states in which each of the possible capabilities in this section can be found are:

- **Available**, if the device has confirmed that it supports the requested capacity.
- **Unavailable**, if the device has not confirmed that it supports the requested capacity after being asked.
- To be determined, if it has not been asked if the device supports a certain capacity.

**⚠️** In the event that the SIM card changes device and, therefore, there is an IMEI change with respect to the last value collected, a warning message will be displayed alerting of this situation and the status of the capacities will change to "To be determined".

### 8.6.3.2 Data collect

From this tab you can collect information for each of the capacities that the device has available.



The screenshot shows the 'Data collect' tab of a device configuration interface. It lists several parameters with their current values, last update times, and 'Collect' buttons:

- IMEI:** 357520016251467 (Updated: 7 hours ago) - **Collect**
- Location:** Cell: #8 Latitude: 36.232756 Longitude: -5.352199 (Updated: 4 days ago) - **Collect**
- Signal strength:** Excellent (Updated: 8 min ago) - **Collect**
- Radio technology in use:** LTE (Updated: 8 days ago) - **Collect**
- Radio technology supported:** Not available on this device - **Collect**
- Setting level:** **?** This device doesn't have allow obtaining this parameter. SIM may have changed its associated device and therefore the IMEI. - **Collect**

If Kite already has knowledge of whether or not a capability can be collected, it will be indicated with the **✓** and **✗** icons, respectively. If Kite does not have this information, it will be indicated with the **?** icon.

The **Collect** button allows collecting the required information from the device. It will be shown in red if it is a non-collectable parameter or if it is not known if it is collectable. Even so, it is allowed to execute the operation in case the SIM had changed to another device.

**⚠️** A “Collect” operation involves sending 2 SMS to the device from Kite and 2 additional SMSs back and can last up to 7 min.

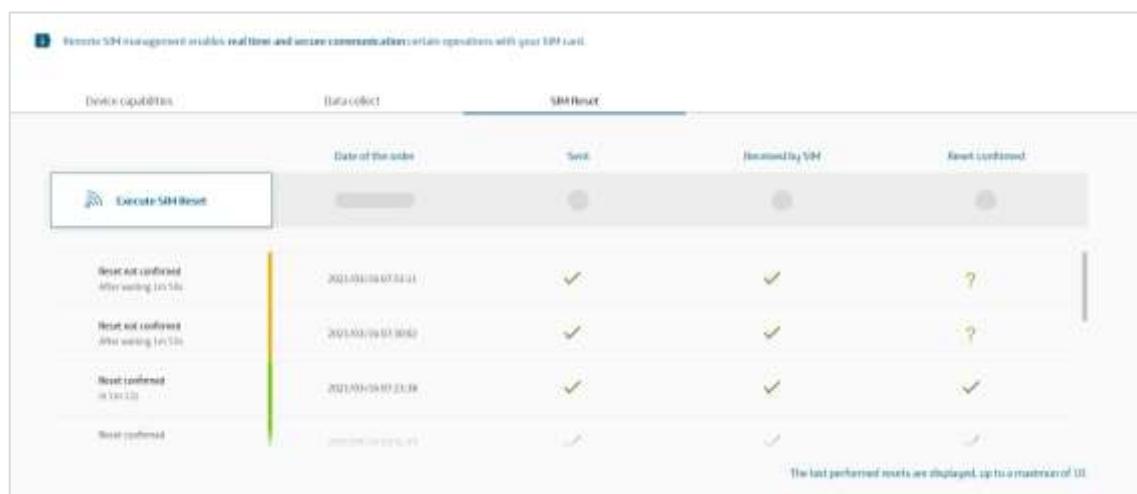
If the value of any of the capability is not available, the reason will be indicated.

Capability	Description
IMEI	The IMEI stored in Kite or the new collected value is displayed. The new value will become the one that Kite assigns to the SIM, replacing any previous value.
Location	The collection of location information shows the value of the Cell Id in which the SIM is located. The geographic coordinates associated with that cell are also displayed. This

	new value will become the one that Kite assigns to the SIM, replacing any previous value.
Signal strength	Reports the last signal level collected. Both a qualitative and a quantitative value in dBm is displayed along with the metric considered for its evaluation (RXLEV in 2G; RSCP in 3G; RSRP in 4G).  It also shows a history of the last 10 measurements.
Radio technology in use	Reports the current value of radio technology in use. If a new value is collected, it will become the one assigned by Kite to the SIM, replacing any previous value.
Radio technology supported	Shows the radio technologies (2G, 3G, 4G) that the device supports.
Battery level	Shows the percentage of available battery or if it is currently charging (充满). If the device does not have a battery and is connected to an electrical outlet, it will be indicated by the icon (连接).  It also includes a graph with the last 10 measurements made.

#### 8.6.3.3 SIM reset

From this tab you can perform a SIM reset and check the status of the last 10 resets.



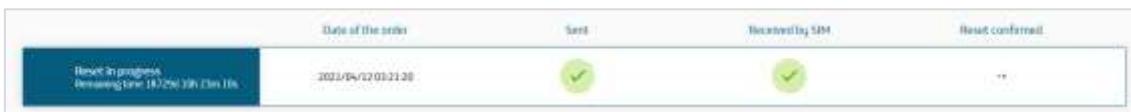
The screenshot shows a user interface for managing SIM operations. At the top, there is a message: "Herramienta SIM te permite realizar, realizar y monitorear comunicaciones y operaciones con tu tarjeta SIM." Below this are three tabs: "Device capabilities", "Data collect", and "SIM Reset". The "SIM Reset" tab is selected. A large button labeled "Execute SIM Reset" is visible. Below the button is a table with four columns: "Date of the reset", "Sent", "Received by SIM", and "Reset confirmed". The table contains four rows of data:

Date of the reset	Sent	Received by SIM	Reset confirmed
2021/09/08 07:34:11	✓	✓	?
2021/09/09 03:30:02	✓	✓	?
2021/09/09 03:31:38	✓	✓	✓
2021/09/09 03:31:41	✓	✓	✓

A vertical color bar on the left side of the table indicates the progress of the reset process. At the bottom right of the table, there is a note: "The last performed resets are displayed, up to a maximum of 10."

The reset operation consists of several phases:

- **Sent:** Kite sends an SMS with the reset order.
- **Received by SIM:** The SMS Center confirms that the SMS has been delivered to the device. This confirmation can take up to 5 min.
- **Reset confirmed:** Kite receives confirmation from the device that the reset has been carried out. This confirmation can take up to 2 min.



This screenshot shows a single SIM reset operation in progress. The table has four columns: "Date of the reset", "Sent", "Received by SIM", and "Reset confirmed". The first row shows the following data:

Date of the reset	Sent	Received by SIM	Reset confirmed
2021/09/12 03:21:20	✓	✓	??

A blue banner at the bottom left of the table area says "Reset in progress. Remaining time: 14:07h 00m 00s".

A SIM reset operation entails the sending of 2 SMS to the device from Kite and 2 additional SMSs back.

The status of a reset operation in the history can take the following values and colours:

- : The reset operation was confirmed by the device.
- : The reset operation was not confirmed by the device.
- : The reset operation completed with errors.

#### 8.6.4 SIM identification

When this section is closed, the information displayed is that of the customized fields that have a configured value.



The screenshot shows a configuration interface for a SIM card. It includes sections for SIM INFORMATION (ICC number: 001407A1234567890123456789, SIM card ID: 1234\_56789), DEVICE INFORMATION (IMEI number: 359112345678901, Concentrator remote serial: Concentrator remote serial, Concentrator remote vendor: Concentrator remote vendor), GROUPS (Management group: default\_group, Subcription group: default\_group, Billing account: default), CUSTOM FIELDS (Name de instalación: Movistar España, Nombre de la tarjeta: Tarjeta 1, Activation date: 08/08/2023, Status: Activado), TRACEABILITY (Production date: 2023-08-20, Order number: 123456789, Shipping date: 2023-08-20, Activation date: 08/08/2023), OWNER DETAILS (Last previous service provider: Movistar, Last meter service provider: Movistar, Client: TE\_O2DE\_Freedom), and NETWORK PARAMETERS (Current Recycle state: Active, IMEI number: 359112345678901, MMEI number: 123456789012345, APN: mmsc.movistar.es).

When the section opens, the detailed information on the SIM card is accessed. This does not usually change over time. Some of these fields are editable by activating the editing mode with the **Edit** button located on the top right corner of this group of fields. The following table shows a summary of the fields of this grouping.

Category	Name	Description	Editable
SIM information	ICC number	<i>International Circuit Card (ICC)</i> . International identifier associated with the SIM card. The Kite Platform supports both 19 and 20 digits.	---
	Region	Geographic area assigned to the SIM card. This parameter is only available for certain Service Providers and dependent organisations.	---
	Local/Global	“Local”, “Global” or “TE_O2DE” “Local_RR” references the Movistar Spain “Red de Respaldo”, a local solution of Movistar Spain to provide their Customers SIM cards that attach to any	---

	(⚠ Only visible by Service Providers and Customers)	radio operator in Spain (Orange, Movistar, Vodafone...), obtaining an advantage in coverage. "TE_O2DE" references the Movistar Spain "Red de Respaldo" for SIMs with IMSI/MSISDN of Germany HOB.	
	SIM model	Identifies the manufacturer of the SIM card and its version.	---
	Profile	Logistic profile (e.g. Spain uses E02, M02, E05)	
	PIN1 and PIN2	SIM card's PIN1 and PIN2 values	✓
	PUK1 and PUK2	SIM card's PUK1 and PUK2 values	---
(⚠ Only visible to some Customers. Please contact with your Service Provider for more information)	EID	eUICC/eSIM identifier	---
	Swap allowed	Indicates whether the subscription corresponds to an eSIM profile ("Yes") or a normal SIM ("No"), in which case it cannot be used to do a swap operation.	---
	Profile status	Indicates the status of the profile according to its status in the eSIM / eUICC. It can take the values:  "Enabled": the profile is enabled in the eSIM "Disabled": the profile is disabled in eSIM. "Downloading": The profile is being downloaded into the eSIM. "Enabling": the profile is being enabled in eSIM. "Disabling": The profile is being disabled in eSIM.	---
Device information	IMEI number	<i>International Mobile Equipment Identity (IMEI).</i> Unique identifier associated with the mobile terminal that identifies the communications module hardware.	---
	IMEI Lock	IMEI number that identifies the device from which the SIM can connect. If this value is different from the IMEI obtained from the network, the SIM connection will be blocked.  If no value is set, connection will be possible from any device unless the customer has a defined IMEI whitelist and the device containing the SIM is not on that list.	✓
	Communications module model	Text that identifies the SIM communications module.	---
	Communications module vendor	Text that identifies the GSM communications module of the SIM card.	---
Groups	Supervision group (⚠ Only visible by Service Providers and Customers)	Name of the Subscriptions group that the SIM card is assigned to	---
	Subscriptions group	Group of SIM cards of the Customer that the SIM belongs to.	---

	Billing Account   Only visible by Service Providers and Customers)	Billing account that the SIM is associated with	---
	Commercial Plan   Only visible by Service Providers and Customers)	Commercial plan that the SIM is associated to	---
Custom fields	Specific custom fields of the organisation (1-4)	This is a list of customizable fields defined for the organisation to which the SIM is associated	✓
	Alias	It contains information provided by the Customer to identify the SIM card at the inventory and supervision level	✓ (only by Customers and End Customers)
Traceability	Provision date	Date on which the Service provider registers the SIM card in the Kite Platform	---
	Manufacturer order number	Manufacturer order number as indicated in the manufacturer provisioning file (1 <sup>st</sup> provisioning file)	---
	Extra order number	Internal order number in the Kite Platform. This order number is provided in the 3rd provisioning file.	---
	Shipping date	Date on which the Service provider sends the SIM to the Customer.	---
	First activation date	Date on which the Customer changes the SIM card to Activated state for the first time.	---
	Additional tariffs suspension date	Date when the next programmed suspension will take place associated to an additional tariff.	---
Owner details	Customer   Only visible by Service Providers and Customers)	Customer organisation that the SIM card belongs to.	---
	End Customer   Only visible by Customers and End Customers)	End Customer organisation that the SIM card belongs to.	---
Network parameters	Current lifecycle state	Status of the lifecycle that the SIM is at.	---
	IMSI number	<i>International Mobile Subscriber Identity (IMSI).</i> Unique identifier associated with a SIM card that permits its identification in the GSM and GPRS networks.	---
	MSISDN number	<i>Mobile Subscriber ISDN Number (MSISDN).</i> International telephone number associated with a SIM card.	---

LTE/NB-IoT data service status	Indicates whether the SIM card has or not the LTE/NB-IoT data service enabled.	---
VoLTE status	Indicates the activation status of the VoLTE service. It may be active or inactive. If the customer does not have VoLTE activated, you will not see anything related to VoLTE in SIM detail.	---
Static IP  ⚠️ Visible only if a static APN is configured)	IP address associated with the static APN	✓ (only by Service providers and Customers)
Incoming SMS filtering  ⚠️ Only visible by Customers)	Indicates if the SIM card has or not incoming SMS filtering service enabled.  Specifies about the current configuration setup can be accessed in the "Incoming SMS Filtering" panel (see section <a href="#">Incoming SMS filtering</a> for more details).	---
APN 1...APN10  ⚠️ for static APNs the label "Static" will be displayed. If an APN is default, the "default" label will be displayed.)	APNs configured in the SIM card.  For static APNs the associated IP address will be displayed.  If addressing type is IPv4v6, both IPv4 and IPv6 will be shown.	✓ (Adding new APNs is allowed as well as editing the IP address of static APNs)

### 8.6.5 SIM card life cycle

It groups information related to the status changes in the life cycle of the SIM card. When this section is closed, it displays only the value of the current state.



The screenshot shows a user interface for managing a SIM card's life cycle state. At the top, a blue header bar contains the text "Life cycle state". Below this, there are two main sections: "Current life cycle state" and "Life cycle state history".

**Current life cycle state:**

- Last change date: 2012-06-25
- Change rule: Manual
- Current life cycle state: Active
- User: enresonidg

**Life cycle state history:**

This section is currently collapsed, indicated by a small arrow icon on the left.

When the section is opened, it provides access to the detailed information on the current state as well as to a historical graph of the state changes the SIM card has undergone throughout time.

The fields that refer to the current state are summarized in the following table

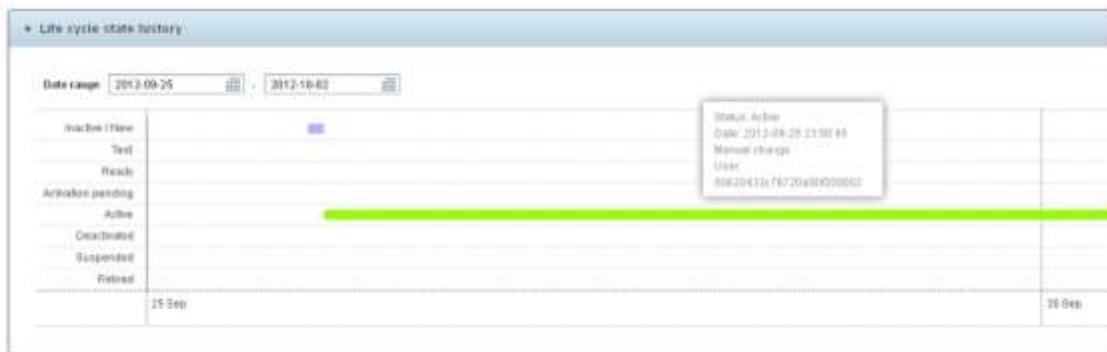
Name	Description	Editable
Last change date	Date when the transition to current status occurred.	---

Change rule	It indicates whether the change of state has been manual or automatic.	---
Change cause	Reason for change of state to "Suspended" if it has been done manually.	---
User	User that generated the transition in case it was manual	---
Current life cycle state	Current state to which the change has been made	---
Block reason	<p>It can have the following values:</p> <ul style="list-style-type: none"> <li>• Blocked due to non-payment</li> <li>• Blocked due to inadequate use</li> <li>• Blocked due to theft/lost</li> <li>• User block</li> </ul> <p><b>⚠️</b> Only the Service Provider via API can set these states. In the current version only Vivo will be able to do it.</p>	---

**⚠️** The modification of the change of state of a SIM card is done from the inventory module (see [Change operations](#) for more details.)

#### 8.6.5.1 History of the life cycle state

To view the evolution throughout time of the SIM card's state, the section [History of the life cycle state](#) must be opened. The different state changes that have taken place since the SIM card was published on the inventory will be graphically displayed. Each state is represented by an identifying colour matching the one used on the inventory grid mode display. When placing the mouse cursor on one of those colours (states in time) a *tooltip* displaying a summary of the information linked to each state will appear. The following image shows the graph of the history of a SIM's states:



#### 8.6.6 Presence

It displays SIM information related to the connectivity availability at the GSM, GPRS and IP levels. If it exists at the IP level, then it exists at the GPRS and GSM levels. The existence of GPRS context implies connectivity at the GSM level.

Presence		
Current APN em2m-apple.mobiles.es	Current IP 172.16.213.248	SGSN last IP 172.16.154.1
Current status GPRS context	Last event date 2016-09-22 08:44:07	GGSN last IP 172.16.154.3
Last event Idle SIM in GSM	Cell Global Identification (CGI) 214.09.1.63	Country SPAIN
		Operator Telefónica Móviles España

\* Presence history

**⚠** The information on the GSM presence takes into account only the situation existing during the diagnosis request on the SIM card (see section [Diagnostic tests execution](#) for more details).

**⚠** The date and time information will make reference to the time zone of the user that is viewing the information (see section [Configuring a user](#) for more details).

When this section is closed, it displays only the value of the current presence state.

When the section is opened, the detailed information on the SIM card presence is accessed. The displayed fields are the ones described in the following table:

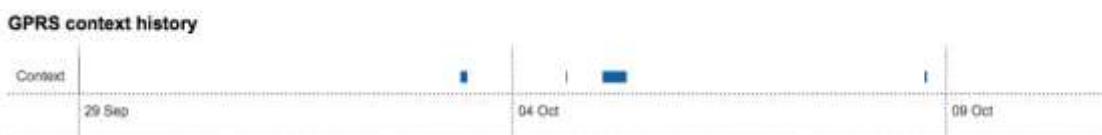
Name	Description
Current APN	Current access point linked to the SIM card.
Current Status	Current state of presence at the IP, GPRS and GSM levels. Possible states from better to worst service quality: “IP Reachability” “GPRS Context” “GPRS Unknown” “Registered GSM” “Unregistered GSM” Unknown
Last event	Last event processed by the subscription.
Current IP	IP address (IPv4 or IPv6) linked to the SIM card when it has an active data session with the APN shown on this table.  <b>⚠</b> For IPv6, the network only informs about the /64 prefix, the rest of the Kite address fills it with zeros. For example, if the device is assigned the IP 2000:0000:0000:0432:0000:1000:0018 Kite will display 2000:0000:0000:0432:0000:0000:0000
Additional IP	Additional IP (IPv4 or IPv6) address in case it is available when the used APN is defined as IPv4v6 type.

	 For IPv6, the network only informs about the /64 prefix, the rest of the Kite address fills it with zeros. For example, if the device is assigned the IP 2000:0000:0000:0432:0000:0000:1000:0018 Kite will display 2000:0000:0000:0432:0000:0000:0000:0000
Last event date	Date and time of the last status to which a change was made.
Cell Global Identification (CGI)	Cell Global Identification.   Visible for Service Providers. Visible for Customers and End Customers if the SIM has location service enabled)
SGSN last IP	SGSN node IP address
GGSN last IP	GGSN node IP address
Country	SGSN related country
Operator	SGSN related operator
Last access technology detected	Possible values are:  No value, "2G", "3.5G", "3G", "4G", "LTE-M", "NB-IoT", "5G SA"

To view historical information on presence, section **Presence history** must be opened. It offers the four graphs described below.

#### 8.6.6.1 GPRS context history

It shows the evolution over time of GPRS contexts linked to the SIM card during the last 30 days as maximum. When placing the cursor on the coloured boxes (established context) a tooltip appears. The tooltip contains a summary of the information about the context (date of opening/end of context, access technology in opening/end of context, packets/data transmitted/received, IP address, IP GGSN, IP SGSN, SGSN Country –ISO Code–, SGSN Operator, and CGI –visible for Service Providers and for Customers and End Customers, if the SIM has the location service enabled–).



 Contexts with start or stop beyond two days of the specified interval limits will not be displayed.

 The transmitted and received information at presence level is approximate and may not coincide with that displayed at data expense detail level.

 Kite Platform is not compatible with devices that open and close more than one session simultaneously. In that case, the displayed presence information could be erroneous.

#### 8.6.6.2 Presence tests history

It shows the presence states at GSM and IP level as regards the diagnosis requests carried out on the SIM card during the last 30 days as maximum (see section [Diagnostic tests execution](#) for further details).

The rectangles of colours indicate the absence (**red** colour) or presence (**green** colour) of GSM and IP connectivity. Placing the cursor over the rectangles of colours, a *tooltip* appears with the test undertaking date. For the GSM test history, information related to the VLR Global Title, MSC and SGSN will be also shown.

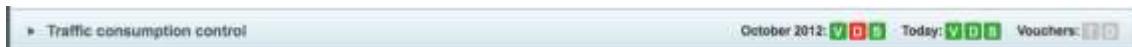


#### 8.6.7 Traffic consumption control

Shows detailed or summary information on the SMS messages, data and traffic or voice consumption of the SIM card during the current billing period.

Information is offered as regards the current consumption (from the ongoing billing period and day) and consumption evolution during the last six months.

As this section is folded, three group of icons will be shown, [V]: voice, [D]: data and [S]: SMS for the current day and current billing period and [T]: time and [D]: data in case the Customer has the time/data vouchers activated.



Each of the traffic icons will be shown in a special colour, relative to the consumption percentage reached and to the fact that whether such control on each of the services is activated or not.

Colour	Consumption % reached
Grey	No consumption or control not enabled
Green	0% < Consumption <= 50%
Yellow	50% < Consumption <= 90%
Red	Consumption > 90% (Does not involve traffic interruption)

Icons from the time/data vouchers may display a colour according to the following scheme:

Colour	Time/data vouchers
Grey	Voucher deactivated
Green	Voucher not expired

Red	Voucher expired
-----	-----------------

#### 8.6.7.1 Current traffic consumption

When the section is unfolded, it is possible to access detailed information on each of the basic services shown:

- **Percentage of traffic consumption** accumulated in the ongoing billing period with respect to the limit set. The update is performed in real time and it is shown when the page is reloaded manually.
- **Current traffic consumption** in the ongoing billing period. The update is done immediately for sent SMS messages, and finished voice and data sessions. In the case of data sessions not finished yet, the update is done every 15 minutes (counting from the session start) or every one megabyte, what happens sooner. The value it is shown when the page is manually reloaded.
- **Traffic consumption limit** that the Customer has set and whether it implies or not traffic cutoff.



By clicking **Today** / **Month** the values for the billing day or period will be shown, respectively.

**⚠** The traffic consumption limits information is available only if consumption limits have been established for each of the SIM card basic services on screen (see section [Change operations](#) for further details).

#### 8.6.7.2 Vouchers time and data traffic consumption

This section shows the time and data left that the SIM card has until using up the voucher.



If the SIM card does not have the voucher activated, that will be shown and two icons will be displayed when the section is unfolded [T]: time and [D]: data that could be displayed in grey (if the voucher is not activated), green (if the voucher is not used up) and red (if the voucher has been used up).

- ▶ Time and data traffic consumption vouchers
- ▶ Traffic consumption history

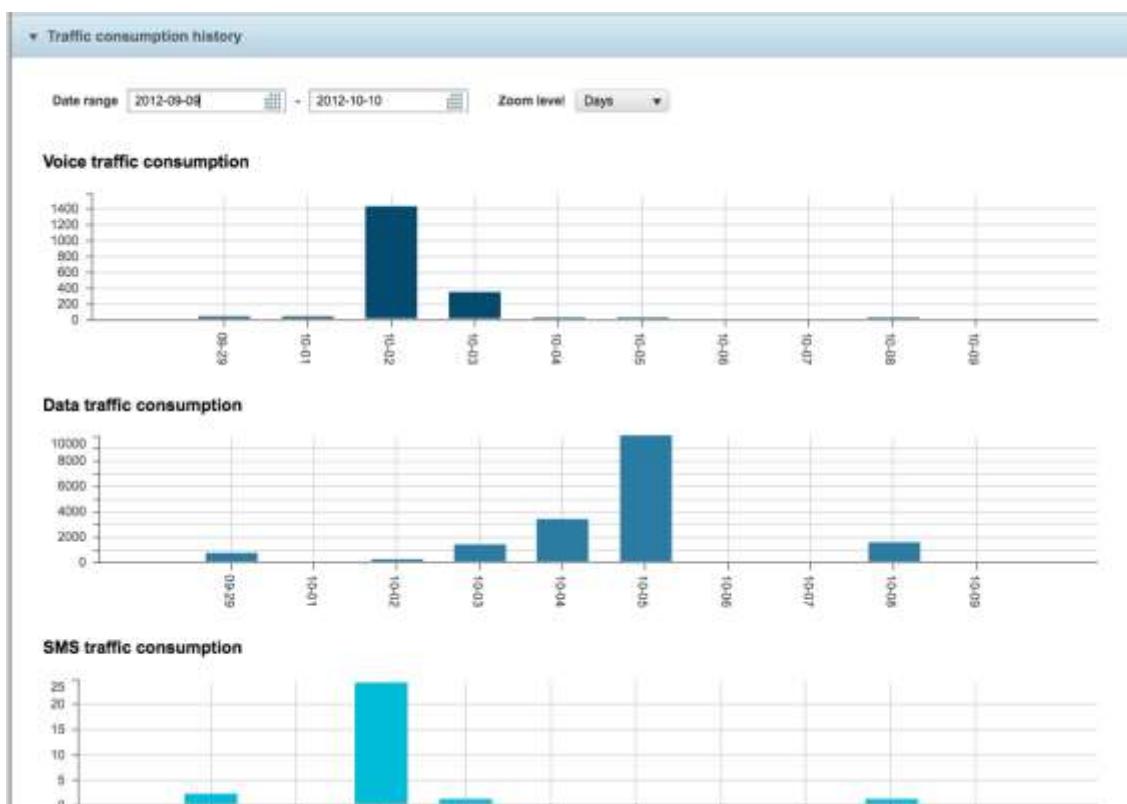
 Vouchers:  T  D

If the Customer does not have thesees vouchers activated, this section will not been shown.

#### 8.6.7.3 Traffic consumption history

In order to view consumption evolution graphics, **Traffic consumption history** must be clicked. This history displays a different graphic for each of the basic services, including ongoing billing period.

It is possible to select a range of dates, and to select the granularity degree during billing days or periods with the **Zoom level** option, updating the graphic according to the choice made. Choosing "Months," the maximum period that can be selected is twelve months from the current date and the minimum period the one comprising, at least, one billing cycle start. The information displayed will correspond to the total consumption made in the billing cycles or made until the current date. Choosing "Days," the maximum period is a month from the current date. Placing the cursor on the graphic, a *tooltip* is displayed indicating the date and consumption of the corresponding units.



Update frequency is done immediately for sent SMS messages and finished voice and data sessions. In the case of data sessions not finished yet, the update is done one hour and 15 minutes (counting from the session start).



Voice traffic consumption refers only to outgoing calls.

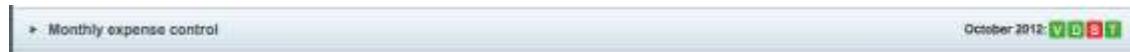
### 8.6.8 Monthly expense control

It shows detailed or summary information on data, SMS messages and voice expense incurred by the SIM card. There is information available on the current expense (for the ongoing billing period) as well as an evolution history during the last months.



The expenses shall always be displayed in the currency the Customer who owns the SIM card has set up.

When this section is folded, four icons are displayed, [V]: voice, [D]: data, [S]: SMS and [T]: Total.



Each of these icons will be displayed in a special colour, relative to the expense percentage reached and to whether the expense counter is activated or not. The expense counters are activated or deactivated from the Inventory actions menu (see section [Change operations](#) in End Customers bulk operations for further details).

Colour	Expense % reached
Grey	No consumption or expense control disabled
Green	0% < Expense < 80%
Yellow	80% <= Expense < 100%
Red	Expense = 100% (it implies cutting off of traffic)

#### 8.6.8.1 Current expense



The expense information of each basic service refers only to exceeded expense in accordance to the monthly charge linked to such basic service.



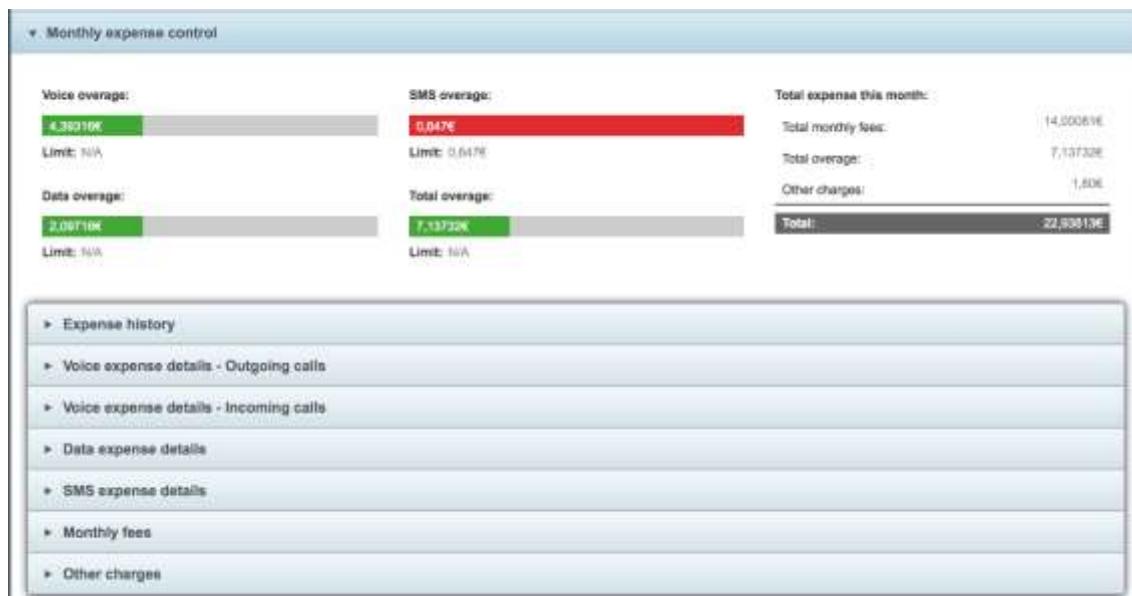
Current expense information only applies for SIM cards not being in pool



Once the billing period has ended, the expense counters are reset.



Expense limit and percentage information is only available if expense counters have been activated (when setting expense limits) for each of the basic services of the SIM card being displayed (see section [Change operations](#) for further details).



When this section is unfolded, detailed information on the expense accumulated during the current billing period of each of the basic services is displayed, showing:

- Graphic information about the percentage of consumption reached at the current time. Depending on the percentage attained, the graph will be shown in one colour or another. This value is shown in real time each time the page is manually updated.
- Current expense in the on-going billing period. The update is done immediately for sent SMS messages, and finished voice and data sessions. In the case of data sessions not finished yet, the update is done every 15 minutes (counting from the session start) or every one megabyte, what happens sooner. The value it is shown when the page is manually reloaded.
- Expense limit set (see section [Change operations](#) for further details).
- Total expense of the current month, including total expense linked to the SIM card corresponding to monthly charges, exceeded expense and other associated expense, such as state changes of the SIM card.



Expense limit settings for a SIM card are set from the Inventory module. See section [Change operations](#) for further details.

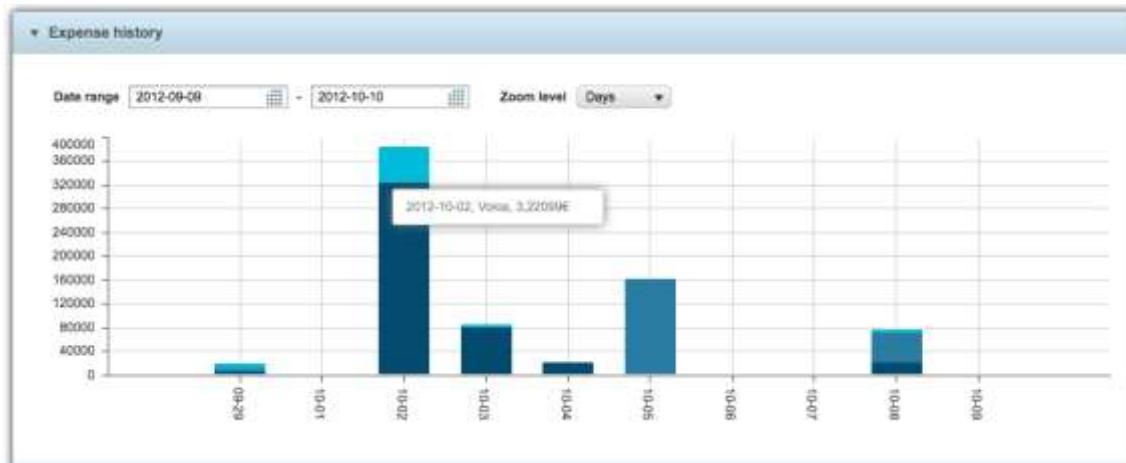
For detailed information on expense, there are six dropdown field subgroups, which are described in the following lines.

#### 8.6.8.2 Expense history

It displays a graphic with information about exceeded expense added to monthly charges for each of the basic services and the total amount.

It is possible to select a range of dates, and to select the granularity degree during billing days or periods with the **Zoom degree** option, updating the graphic according to the choice

made. In the case of selecting "Months", the maximum period that can be selected are twelve months from the current date and the minimum period the one comprising, at least, one billing cycle start. The information displayed will correspond to the total expense made in the billing cycles or made until the current date. Choosing "Days," the maximum period is a month from the current date. Placing the cursor on the graphic, a *tooltip* is displayed indicating the date and expense of the corresponding units.



**⚠️** Update frequency is done immediately for sent SMS messages and finished voice and data sessions. In the case of data sessions not finished yet, the update is done one hour and 15 minutes (counting from the session start).

**⚠️** Voice expense includes both outgoing and incoming calls.

#### 8.6.8.3 Voice expense detail – outgoing calls

It displays a table containing detailed information on the outgoing voice calls and expense linked to those calls for the ongoing billing period.

The fields displayed are:

Field	Description
Date/ Time	Time and date of the call according to the time zone of the Customer.
Duration	Call duration, including seconds.
Destination number	MSISDN of the called SIM.
Origin zone	Roaming zone from where the call is made (E.g. "Home", "EU27"...) These roaming zones are defined by the Service Provider.
Destination numbering	It indicates the type of destination number of the call recipient. These types of destination numbers are defined by the Service Provider.
Commercial plan	Commercial plan applied to the call.

Amount	Total amount for the call
VoLTE	Indicates whether the voice call is a VoLTE type.

Calls included in the monthly charge will be displayed with zero amount. For the remaining calls, the excess amount will be added to such monthly charge.

 Outgoing calls “amount”, while being in pool, will show an hyperlink (“pool”) to the related Subscription group. In this way, the pool expense can be easily consulted in the “Expense and consumption by pool” section.
 Each entry corresponds to a CDRs, which is generated when the call finishes and hourly for voice calls lasting more than one hour. Voice consumption is shown in rounded units and are the billed traffic units.
 If a expense limit lower than the current expense is established during a voice call not finished yet, this section may not show the last hour registry. At pre-bill and CDR level this issue doesn't exist.
 The maximum number of displayed registers will be limited to 100.

#### 8.6.8.4 Voice expense detail – incoming calls

It displays a table containing detailed information on the incoming voice calls and expense linked to those calls for the ongoing billing period.

The fields displayed are:

Field	Description
Date/ Time	Time and date of the call according to the time zone of the Customer.
Duration	Call duration, including seconds.
Origin number	MSISDN of the calling SIM.
Destination zone	Roaming zone where the call is received (E.g. “Home”, “EU27”...). The Service Provider defines these roaming zones.
Commercial plan	Commercial plan applied to the call.
Amount	Total amount for the call
VoLTE	Indicates whether the voice call is a VoLTE type.

Calls included in the monthly charge will be displayed with zero amount. For the remaining calls, the excess amount will be added to such monthly charge.

- ⚠️** Incoming calls “amount”, while being in pool, will show an hyperlink (“pool”) to the related Subscription group. In this way, the pool expense can be easily consulted in the “Expense and consumption by pool” section.
- ⚠️** Each entry corresponds to a CDRs, which is generated when the call finishes and hourly for voice calls lasting more than one hour. Voice consumption is shown in rounded units and are the billed traffic units.
- ⚠️** If a expense limit lower than the current expense is established during a voice call not finished yet, this section may not show the last hour registry. At pre-bill and CDR level this issue doesn't exist.
- ⚠️** The maximum number of displayed registers will be limited to 100.

#### 8.6.8.5 Data detailed expense

It displays a table containing detailed information about data traffic and associated expense for the ongoing billing period.

The fields displayed are:

Field	Description
Start date and Time	Time and date of the data session according to the time zone of the Customer.
End date and Time.	Date and time when the data session ended.
APN access	APN used for network access.
IP assigned	IP address assigned. For IPv4v6 sessions both IPs will be displayed in the format <IPv4 IPv6>.
Origin zone	Roaming zone from where the data session is started (E.g. “Home”, “EU27”...). The Service Provider defines these roaming zones.
Data destination	Data destination name related to expense made.
Data volume	Transmitted data volume.
Commercial plan	Commercial plan related to the applied tariff.
Amount	Total amount for transmission.

Data traffic included in the monthly charge will be displayed with zero amount. For the remaining data connections, the excess amount will be added to such monthly charge.

- ⚠️** Traffic data “amount”, while being in pool, will show an hyperlink (“pool”) to the related Subscription group. In this way, the pool expense can be easily consulted in the “Expense and consumption by pool” section.

- ⚠️** Each entry corresponds to a CDRs, which is generated when the session ends and hourly for data sessions lasting more than one hour. Data consumption is shown in rounded units and are the billed traffic units.
- ⚠️** If a expense limit lower than the current expense is established during a data session not finished yet, this section may not show the last hour registry. At pre-bill and CDR level this issue doesn't exist.
- ⚠️** The maximum number of displayed registers will be limited to 100.

#### 8.6.8.6 SMS detailed expense

It shows a table including detailed information about SMS messages sent and associated expense for the ongoing billing period.

The fields displayed are:

Field	Description
Date and Time	Time and date of the SMS message according to the time zone of the Customer.
Destination number	MSISDN of the SIM receiving the SMS.
Origin zone	Roaming zone from where the SMS is sent (E.g. "Home", "EU27"...) The Service Provider defines these roaming zones.
Destination numbering	It indicates the type of destination number of the SMS recipient. The Service Provider defines these types of destination numbers.
Commercial plan	Commercial plan to which the sending of the SMS message is applied.
Amount	Transmitted data volume

SMS messages sent included in the monthly charge will be displayed with zero amount. For the remaining SMS messages, the excess amount will be added to such monthly charge.

- ⚠️** SMS messages “amount”, while being in pool, will show an hyperlink (“pool”) to the related Subscription group. In this way, the pool expense can be easily consulted in the “Expense and consumption by pool” section.
- ⚠️** Update is done immediately when the page is manually updated.
- ⚠️** The maximum number of displayed registers will be limited to 100.

#### 8.6.8.7 Monthly charges

It displays information about fees charged in the ongoing billing period. For each of the charges, date, and category (e.g. Lifecycle change, Location service, Data, etc.), concept

(e.g. Activated state monthly tariff, Location monthly tariff, Data monthly tariff, etc.) and the total amount of the same.

**⚠️** In the current version of the Kite Platform, monthly fees do not exclude charges performed by the SIM cards while being in pool.

**⚠️** The maximum number of displayed registers will be limited to 100.

#### 8.6.8.8 Other charges

It contains information on other charges, which are not included in the aforementioned sections to be applied to the ongoing billing period. Each of the charges offers information on the date and time (according to the time zone of the user), category (e.g. life cycle), concept (e.g. SIM activation) and its total amount.

**⚠️** The maximum number of displayed registers will be limited to 100.

#### 8.6.9 Basic services restrictions

It includes restrictions of the voice, SMS messages and data services, indicating whether those restrictions are activated or not. Details of each of these fields are included in the following table:

**⚠️** The information shown only applies when the SIM is in the “Activated” and “Activation pending” states.

**⚠️** CSD (Circuit switched data) services could be included in the voice services (check with your Service provider).

Service	Description
Incoming voice Home	Enables (ON) or not (OFF) to receive voice calls being in the operator's network with which it has contracted the service.
Incoming voice in roaming	Enables (ON) or not (OFF) to receive voice calls being in other network than the operator with which it has contracted the service, either within the country or abroad.
Outgoing voice Home	Enables (ON) or not (OFF) to make voice calls being in the network operator with which it has contracted the service.
Outgoing voice in roaming	Enables (ON) or not (OFF) to make voice calls being in other network other than the operator with which it has contracted the service, either within the country or abroad.
Outgoing voice International	Enables (ON) or not (OFF) voice calls to international destinations regardless of the network to which it is connected.
Incoming SMS Home	Enables (ON) or not (OFF) to receive SMS messages being in the network of the operator with which it has contracted the service.

Incoming SMS in roaming	Enables (ON) or not (OFF) to receive SMS messages being in other network than the operator's with which it has contracted the service, either within the country or abroad.
Outgoing SMS Home	Enables (ON) or not (OFF) to send SMS messages being in the network operator with which it has contracted the service.
Outgoing SMS in roaming	Enables (ON) or not (OFF) to send SMS messages being in other network than the operator's with which it has contracted the service, either within the country or abroad.
Outgoing SMS International SMSC	Enables (ON) or not (OFF) to send SMS messages through an international SMS centre from the point of view of the country in which the SIM card is located.
Data Home	Enables (ON) or not (OFF) to send data being in the network of the operator with which it has contracted the service.
Data in roaming	Enables (ON) or not (OFF) to send data being in other network than the operator with which it has contracted the service, either within the country or abroad.

 The basic services available for a SIM card are managed from the Inventory module. See section [Basic services activation operations](#) for further details.

▼ Basic services when subscription is network enabled

VOICE	SMS	DATA
<b>Incoming calls</b>	<b>Incoming SMS</b>	<b>Data traffic</b>
<input type="checkbox"/> ON <input checked="" type="checkbox"/> Home	<input type="checkbox"/> ON <input checked="" type="checkbox"/> Home	<input type="checkbox"/> ON <input checked="" type="checkbox"/> Home
<input type="checkbox"/> ON <input checked="" type="checkbox"/> On roaming	<input type="checkbox"/> ON <input checked="" type="checkbox"/> On roaming	<input type="checkbox"/> ON <input checked="" type="checkbox"/> On roaming
<b>Outgoing calls</b>	<b>Outgoing SMS</b>	
<input type="checkbox"/> ON <input checked="" type="checkbox"/> Home	<input type="checkbox"/> ON <input checked="" type="checkbox"/> Home	
<input type="checkbox"/> ON <input checked="" type="checkbox"/> On roaming	<input type="checkbox"/> ON <input checked="" type="checkbox"/> On roaming	
<input type="checkbox"/> ON <input checked="" type="checkbox"/> International	<input type="checkbox"/> ON <input checked="" type="checkbox"/> International SMSC	

In case of depending on a “Leading OB”, the set of actions is reduced to:

- **Incoming calls**, it allows to (ON) or not (OFF) to receive voice calls whatever the operator the SIM card is connected to.
- **Incoming SMS**, it allows to (ON) or not (OFF) to receive SMS whatever the operator the SIM card is connected to.
- **Data**, it allows to (ON) or not (OFF) to send/receive data whatever the operator the SIM card is connected to.
- **Outgoing calls**, it allows (ON) or not (OFF) to make calls to whatever destination number, national or international, from whatever operator the SIM card is connected to.
- **Outgoing SMS**, it allows (ON) or not (OFF) to send SMS using any operator and any SMS Centre.

**⚠️** This information only applies when the SIM card can perform traffic. For instance, it does not apply when the SIM card is suspended.

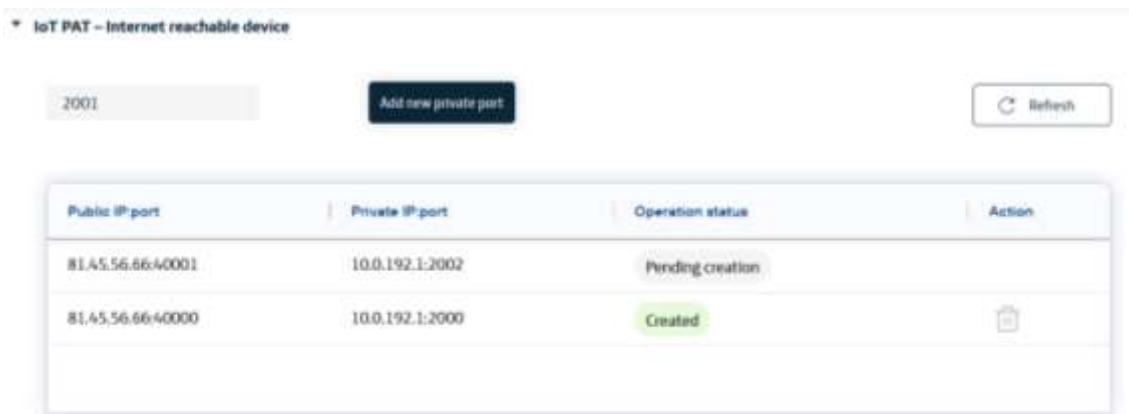
### 8.6.10 Radio access technologies

This section shows the radio access technologies that a SIM card currently has activated and deactivated and which ones it has used at some point.



### 8.6.11 IoT PAT – Internet reachable device

This section<sup>14</sup> allows to configure one or more private ports on the device for its access from the Internet.



Once a port has been added, the following information will be displayed:

Column	Description
Public IP:port	Internet IP and port to access the device
Private IP:port	Private IP and port of the device reachable from the public IP:port
Operation status	<p>The states can be:</p> <ul style="list-style-type: none"> <li>• Pending creation: the data has been successfully received by the platform and is awaiting provision.</li> <li>• Creation in process: the data is being provisioned.</li> </ul>

<sup>14</sup> This section is only available for customer belonging to service providers with IoT PAT functionality activated in DB.

	<ul style="list-style-type: none"> <li>Created: The data has been successfully provisioned.</li> <li>Pending deletion: the deletion request has been successfully received by the platform and is waiting.</li> <li>Deletion in process: the request is being executed.</li> <li>With error: the request could not be executed satisfactorily and is pending for the platform to correct the problem.</li> </ul>
Action	Shows the trash icon to delete an item when the status allows it.

**⚠️** When the first rule is added, Kite will automatically activate the supplementary value added service for that SIM. Likewise, it will disable it when the last rule is deleted. This value-added service will be used to charge the IoT PAT service.

**⚠️** If the service is not properly activated by the Service Provider, an error may happen when the first rule is added.

### 8.6.12 Supplementary services

This section indicates the supplementary services the SIM card has activated ("ON"). Those in "OFF" are services that are either deactivated or temporarily suspended.

**⚠️** Services available for a SIM card are managed from the Inventory module (see section [Supplementary services of deactivation of operations](#) for further details).



### 8.6.13 LPWA – Battery Saver

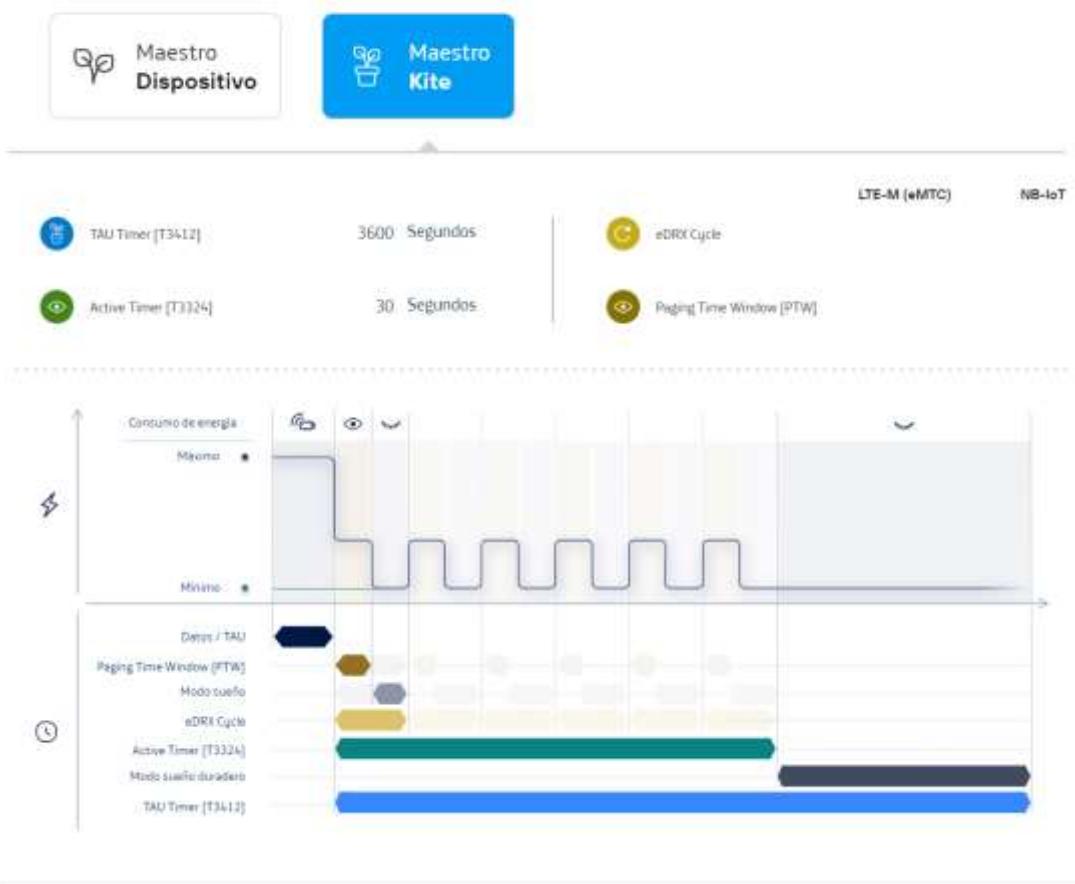
This section allows you to view which battery saving parameters the SIM card has configured to apply to the visited network.

**⚠️** The configuration of the battery saving parameters is done in the subscription group. See section [Configuring a group of LPWA subscriptions - battery saving](#) for more details.

**⚠️** The visited network must support the parameterization of the battery saving parameters and can set certain minimum values in the timers.

**\* LPWA - Ahorro de batería**

- ① Estos son los parámetros de ahorro de batería que aplican en la red para esta línea. Puede haber un retraso respecto a la parametrización del grupo de suscripciones cuando se hace un cambio. En el modo "Maestro Kite" aplican parámetros específicos para los temporizadores de ahorro de batería. En el modo "Maestro Dispositivo" los parámetros son a criterio del dispositivo.



### 8.6.14 Location and tracking

Through this section, it is possible to obtain information on the geographical location data of the SIM card directly on a map.

All 105 items | SIM Detail B9520111000008000017 | [Edit, view history](#)

### Location and tracking

Map is currently showing you the visited radio cells since yesterday (you can modify filters as well as clearing events for each one). Represented data is based on location events triggered when SIM changes its location from current radio cell to another one. Due to optimization reasons, some events (crossing time boundaries) may have been discarded.

[Export filtered events \(3,060\)](#) Available data from 2021-11-01

Date	Lat / Long / CGI	Radio	Event
2021-02-06 00:00:00	62.801 -3.335 214-09-1-66	2G	<a href="#">Start session</a>
2021-02-06 00:00:00	62.835 -3.321 214-09-1-66	2G	<a href="#">Close session</a>
2021-02-06 00:00:00	62.835 -3.333 214-09-1-66	2G	<a href="#">Start session</a>
2021-02-06 00:00:00	62.801 -3.318 214-09-1-66	NB-IoT	<a href="#">Close session</a>



Map controls: Refresh location | Map data ©2021 Nokia. All rights reserved. Terms of use | Report a map error

The option is given to view both manual and automatic location (and its history), allowing the display of each of them to be selectively activated and deactivated. This can be done using the icons located at the top right of the map:



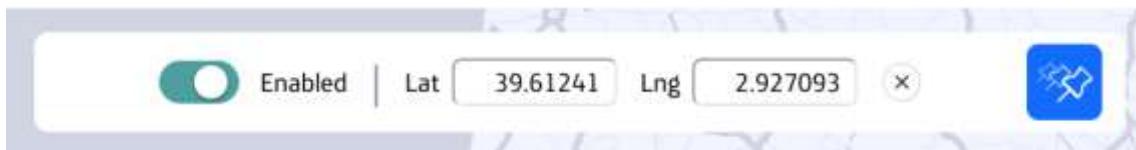
The image above illustrates the scenario in which the automatic location would be displayed but not the manual one.

Manual location, as opposed to automatic location, which is detected through the network, can be modified from this same panel entering in edition mode, by clicking the  icon.

**⚠️** Automatic location will only be available if the location service has been contracted, either Basic or Advanced mode (see section [Elements of a supplementary services commercial plan](#) for further details).

**⚠️** Accuracy of automatic location will vary depending on different factors (e.g. 2G, 3G, 4G or NB-IoT coverage, usage of agent on the device, etc.).

**⚠️** Only latitudes in the range between -85° and +85° are allowed.



The automatic location of a SIM card is updated when a change of the cell in which it is located is detected. It may be the case that the device changes telecommunications cell and Kite is not informed by the Network. For optimization reasons, certain location data occurring in the transition periods between two cells may be discarded. All automatic location will be associated with the information of the presence status that the SIM had at that moment.

These events may be: data session activated, deactivated or updated. Additionally, locations may be obtained after performing a diagnostic operation on the SIM or said location has been obtained through the IoT Device Control Service (only if the SIM supports said service and the organization has contracted it for said service). Supplementary Service).

- ⚠ SIM card's location information in the Kite Platform is not refreshed automatically in the user interface. In order to update this information the user must manually do it clicking on the upright button ().
- ⚠ The location information is updated internally every time it detects a change in the cell in which the SIM is located and it arrives associated with certain information about the state of the data session at that moment. Additionally, when a GSM diagnosis is made (if the HLR obtains the CGI) or if it is updated by retrieving this information from the [IoT Device Control](#) section (see [Data collect](#) section for more information).
- ⚠ Device location gets updated in the map when the distance between the current location and the previous one is longer than 1.000 meters.

In edition mode, it is possible to activate or deactivate manual location data, set a new location, either through *drag & drop* directly on the map or introducing the geographical coordinates manually.

#### **8.6.14.1 Historical information of automatic location (Tracking)**

The SIM can only have location activated in the event that the organization to which it belongs has activated the Location Supplementary Service in any of the two permitted modalities: Basic or Advanced.

In these cases, there will be information on the last automatic location and a history of each of the previous ones. The number of locations available in the history will depend on the type of service activation and the moment in which it was activated. Basic activation makes data available from the day before the consultation (full) up to the present moment.

The advanced one, allows to consult from ninety previous days (complete and counted from the previous day), until the present moment.

The map is associated with a table, on the left side, which details the information available on each registered location. These will be shown aggregated in two levels, first by date (without the time) and within each of them for each hour (0h – 24h). The objective is to make it easier for the user to analyse the information, by classifying it into manageable time periods.

The information offered for each location will be:

- Your date (and time) of registration.
- Latitude and longitude.
- Identifier of the cell to which the location belongs (CGI).
- Radio Technology in use at that time.

Associated event (possible values described in previous paragraphs).



The cell identifier (CGI) is only available to Service Provider users.

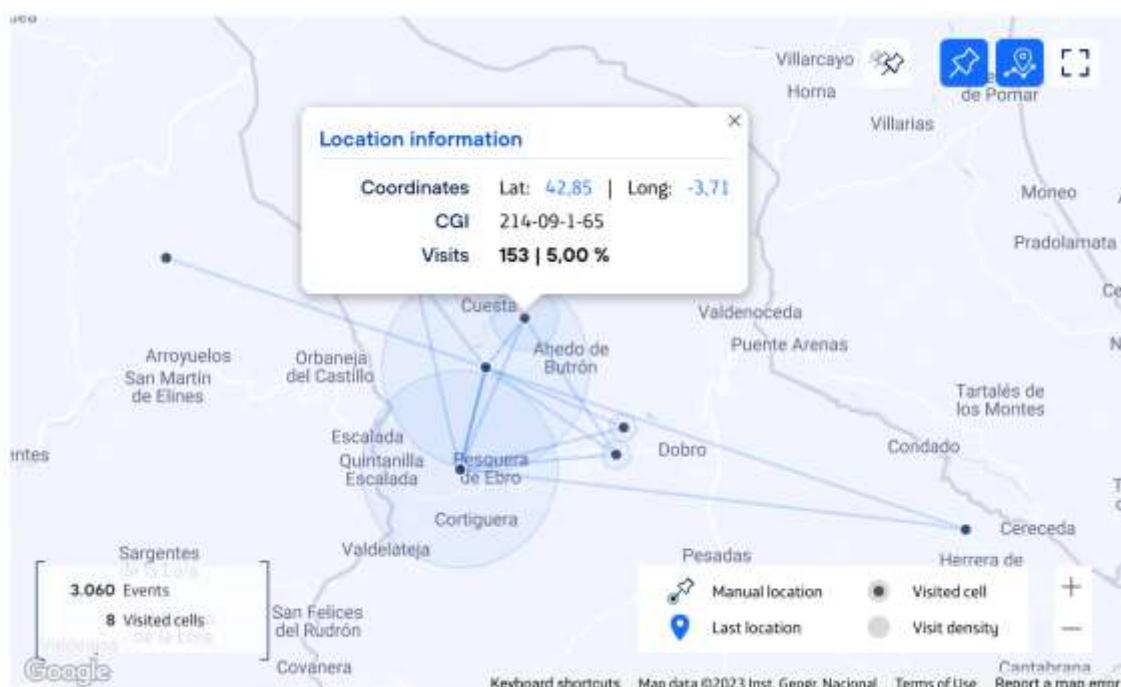
Below is a screenshot of the table:

Date	Lat : Lng / CGI	Radio	Event
▼ 2023-02-08			
▼ 09 h			
09:26:25	42.801 : -3.735 214-09-1-66	2G	Start session
▼ 08 h			
08:52:31	42.835 : -3.723 214-09-1-64		Close session
08:17:37	42.835 : -3.723 214-09-1-64	2G	Start session
08:10:51	42.801 : -3.735 214-09-1-66	NB-IoT	Close session
➤ 07 h			

A circular marker will be shown on the map for each of the different locations in the table (different cells where the SIM was). A line will also be represented joining those locations that have been visited consecutively. These lines will have a greater intensity of colour the greater the use of said route.

Associated with each marker (cell location where the SIM was) and centred on it, a translucent circle will be displayed whose size is related to the number of visits it has received. The greater the number of visits, the larger the circle will be. This "visit density indicator" allows a quick visual comparison to be made on the map to identify the places with the highest or lowest number of visits.

You can check the details of each location by placing the mouse pointer over the marker. An informative panel will be displayed with the data related to it, which includes the number of visits and the percentage they represent of the total data represented at that moment on the map (see the subsection on map data filters below).



You will be able to see other summary information in the legend at the bottom left, which will indicate the number of registered locations and the number of different visited cells involved.

There is a way to identify on the map which cells and tracks have been recorded on a particular day or time of day. You can also pinpoint exactly where the location of an individual location record is. To do this, click on any of the data lines in the table, regardless of whether it is an aggregation per day, per hour within a day, or a specific location event.

In this case, it will be indicated in the table by an orange marker and the markers of the cells and of the paths involved will be reflected in the same colour on the map itself.



At the top of the map you will find different filters that will allow you to carry out an analysis of the data more focused on your specific needs. Filters are available for each of the attributes associated with locations and that have been previously described.

By default, the filters will be initialized to show all locations, regardless of the type of associated event, cell or radio technology used. You must bear in mind that even if the client organization to which the SIM belongs has contracted the advanced service, the initial dates of the filter will be set from yesterday to the present. You can change these dates at any time.

We also offer you the possibility of exporting to a file the locations that you are currently viewing (depending on the status of the filter).

You can directly access this location section from the SIM inventory, using the icon located in the second column to the left of the table (  )

All  
105 SIMs

<input type="checkbox"/> Select all	Organisations	Groups	SIM information	MS
	Customer	Commercial plan	ICC number	
<input checked="" type="checkbox"/>	Data Destina...	13Junio2016	8952031422900140834	526
<input checked="" type="checkbox"/>	Data Destina...	vouchers	89520111000008000017	528
<input checked="" type="checkbox"/>	Data Destina...	sp_split_complejo	8952031422900140818	526

### 8.6.15 Purchased prepaid vouchers not finished

This section allows viewing the prepaid vouchers that the SIM has purchased and are not used up or expired.



Next, each field is described:

Attribute	Description
Voucher ID	Identifier of the voucher purchased as shown in the commercial plan.
Voucher	Name of the voucher.
Voucher instance ID	Identifier of the voucher being purchased at a specific time. The same Voucher ID can be purchased several times over time. Each purchase will have a different instance ID. Automatic renewals of a voucher keep the same instance ID.
Type	Indicate the type of voucher: RECURRENT / ONE_TIME.
Size	Maximum voice/sms/data volume associated to the voucher.
Remaining	Remaining voice/sms/data to use up the voucher.
Expiration date	Date when the voucher expires.
Renewal day	Renewal date of the recurrent voucher.
Last renewal date	Date on which the last renewal of the voucher took place.
Next renewal date	Next renewal date of the voucher.
Purchase date and time	Date and time in UTC when the voucher was purchased.
Activation date and time	Date and time in UTC when the voucher was activated.
First usage date and time	Date and time in UTC when the voucher was used for the first time.
Amount (Only for one-time vouchers)	Cost of the voucher. (Only for one-time vouchers)
Upfront fee (Only for monthly vouchers)	Amount of the first charge (purchase) of the monthly voucher.
Renewal fee (Only for monthly vouchers)	Amount of the renewal charges of the monthly voucher.
Extend previous one-time vouchers	According to what was specified in the API call for purchasing the voucher it can be: "false" or "true"
Priority	Number indicating the priority of use of the voucher over others purchased. The value 1 means the highest priority.

### 8.6.16 Incoming SMS filtering

This section allows visualizing SIM card's incoming SMS filtering service configuration. This section will be visible only for those SIM cards with the service activated.

Either, default configuration (defined at Customer level and accessed by clicking on "my organisation" hyperlink) or specific at SIM level, will be displayed in this section.



This information is read only, so it cannot be modified from this section. In case of any update, it will be necessary to access "Activate" and "Deactivate" menus from the Inventory menu bar at the bottom (see sections [Other services activation of operations](#) and [Other services deactivation operations](#) for more information).

### 8.6.17 Audit log

This section allows to visualize different modification events dealing with SIM parameter modifications that have taken place, either from the UI itself or via the API; either manual actions initiated by a user or automatic initiated by the platform as a result of fulfilling some condition (for example, automatic changes of SIM life cycle states, changes due to the execution of automatic alarm rules, etc.)

The user interface allows to export the table content to a file by clicking on the  button.

Hora / Hora	Fuente	Elemento	Último acceso	Último registro	Última actividad	Vínculo	Opciones
23-11-2024 14:30:04	API	open_april	miércoles 21 nov 2024	miércoles 21 nov 2024	API,ETI,Inventor(332d#1).as...	<a href="#">ver</a>	
23-11-2024 14:36:23	API	commercialPlan	Prueba_DCS_Infracon - id 13...	Prueba_DCS_Infracon - id 13...	API,ETI,Inventor(332d#1).as...	<a href="#">ver</a>	
23-11-2024 14:36:21	API	commercialPlan	Default_SaturnoGroup	Default_SaturnoGroup	API,ETI,Inventor(332d#1).as...	<a href="#">ver</a>	



The maximum number of records that will show will be limited to 100.



Customers will not be able to see the name of users belonging to Service Providers.



Events initiated by automatic actions will be distinguished from those initiated by users, because the user name won't be displayed.

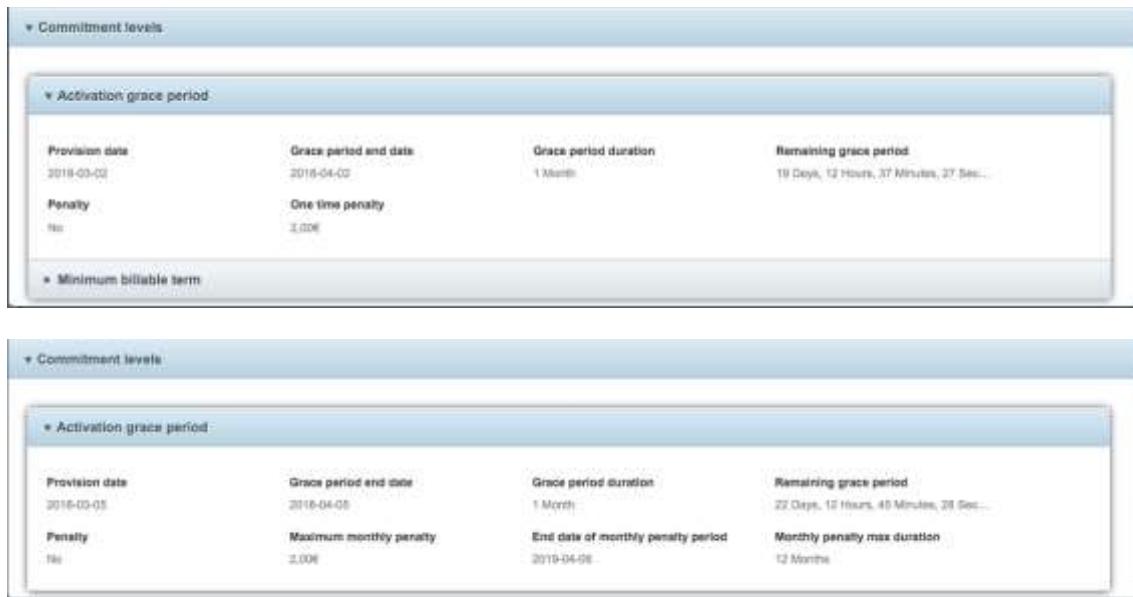
### 8.6.18 Commitment levels

This section allows viewing the configuration and status of the commitment levels applicable at the individual SIM level, that is, the **Activation grace period commitment** and the **Minimum billable term commitment**.

Once a SIM acquires one of these commitments, the relevant section and information is displayed, remaining visible during the life of the SIM, even if the commitment has ended.

In case the line has not acquired any of these two commitments, this section will not be shown.

#### 8.6.18.1 Activation grace period commitment



Activation grace period			
Provision date 2018-03-01	Grace period end date 2018-04-01	Grace period duration 1 Month	Remaining grace period 19 Days, 12 Hours, 37 Minutes, 27 Sec...
Penalty No	One time penalty 3,00€		

Minimum billable term			
Provision date 2018-03-01	Grace period end date 2018-04-01	Grace period duration 1 Month	Remaining grace period 27 Days, 10 Hours, 46 Minutes, 28 Sec...
Penalty No	Maximum monthly penalty 3,00€	End date of monthly penalty period 2019-04-01	Monthly penalty max duration 12 Months

Each of the fields is described below:

Attribute	Description
Provision date	SIM publishing date in the Customer's Inventory.
Grace period end date	Date on which the grace period ends. The end time will be at 23:59:59 in the customer's time zone.  If the line is suspended, this date will not be displayed.
Grace period duration	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).
Remaining grace period	Time left until the grace period ends.  If the line is suspended, this value will not be displayed.
Penalty	Indicates whether the SIM has incurred a penalty and is pending charging.
One time penalty	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).

(⚠ Only visible only in the one-time penalty mode)	
Maximum monthly penalty (⚠ Only visible only in the monthly penalty mode)	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).
End date of monthly penalty period (⚠ Only visible only in the monthly penalty mode)	Date on which the monthly penalty period ends. The end time will be at 23:59:59 in the client's time zone.
Monthly penalty max duration (⚠ Only visible only in the monthly penalty mode)	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).

### 8.6.18.2 Minimum billable term commitment



First activation date:	Commitment end date:	Commitment duration:	Penalty:
2018-03-02	2018-06-12	1 Month	Yes
Maximum monthly penalty:	Monthly deferral period:	Remaining deferral period:	
10,00€	1 Days	0 Seconds	

Each of the fields is described below:

Attribute	Description
First activation date	SIM first activation date.
Commitment end date	Date on which the commitment ends. The end time will be at 23:59:59 in the customer's time zone.
Commitment duration	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).
Penalty	Indicates whether the SIM has incurred a penalty and is pending collection.
Maximum monthly penalty	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).
Monthly deferral period	Value configured in the definition of the commitment (see section <a href="#">My organisation data</a> for more details).
Remaining deferral period	Time remaining to consume the monthly grace period. This field will not be displayed if the commitment has already ended.

### **8.6.19 Alarm rules**

This section provides a shortcut to the alarms section to list the configured alarm rules that affect the SIM.

## 9 Working with devices

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### 9.1 General aspects

Device management module, accessible from the icon , allows Customers to manage devices with Kite Platform SIM cards.



Device provisioning will be performed through the "Assign line to device" Customer operation, which is detailed in the [Assign operations](#) section (for Customers).

The access icon will only be accessible to Customers having the Device management service enabled<sup>15</sup>.



Activation of the Device management service will be performed by the Service Provider through the activation of the corresponding supplementary service.

This module allows, roughly:

- Access the list of devices that the user can manage.
- Perform device searches by using filters.
- Perform operations on one or more devices.
- Editing device attributes
- Access detailed device information.

### 9.2 Supported device models

The following table shows models and manufacturers currently supported by the Kite Platform.

Manufacturer	Model
HUAWEI	MS2131I
ROBUSTEL	R2000 – 3P
ROBUSTEL	R3000 – 3P
NETCOMM	NTC 6200



⚠ Correct operation and management with other device models are not guaranteed and therefore their use is unencouraged.

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<sup>15</sup> In version 3.3.0, Device management service can only be offered to Customers belonging to the following Service Providers: Spain, Mexico (HOB and LOB), Colombia, O2 UK (LOB) and TGS+USA.

**⚠️** To guarantee the correct functioning of the devices, it is advisable to carry out a battery of unit tests prior to the massive execution of the "Update Firmware" operation.

**⚠️** Kite Platform currently supports linking a single SIM to a device. In the case of devices that physically have two slots for SIMs (Robustel models), only operations on the SIM inserted in slot 1 will be performed.

### 9.3 Device inventory

The device inventory shows the list of devices that the customer has provisioned and that are linked to a SIM card from their SIMs inventory.

It is the default view when accessing Device Management. You can also access it by clicking with the mouse on the button  when you are in the "Stock of devices" view (see section [Device Stock](#) for more details).

The appearance and functionalities of this section are similar to the "List" display mode of the SIMs inventory (see section [List mode](#) for more details).

Todos									Número IMEI	32 dispositivos	Mostrar más
<b>Campos personalizados:</b>											
		OEM del dispositivo	Modelo del dispositivo	Número IMEI	Número de serie	Versión de firmware	APN del dispositivo	Número ICID			
<input checked="" type="checkbox"/>	Li_U_2	HUAWEI	MS213H1	588893050212001	322344345494	Fw02	msn0000000000000000	99133947448996291418			
<input checked="" type="checkbox"/>	Alia_Lily	ROBUSTEL	R0200	0708001788	3330023	FwLily1	apn_recocido-2	9916218878117585432			
<input checked="" type="checkbox"/>	enab8	HUAWEI	MS213H1	6035627	BN01			9910345442525043460			
<input checked="" type="checkbox"/>	enab8	ROBUSTEL	R0200	8238118	BN01			9923784788811881718			
<input checked="" type="checkbox"/>	enab8	NETCOMM	NTC 6200	6035023	SNS			9924245503137233244			
<input checked="" type="checkbox"/>	enab8	ROBUSTEL	R0200	6535620	BN01			99247316888978459			
<input checked="" type="checkbox"/>	Alia_Lily	ROBUSTEL	R0200	1234	7777771	FwLily	Recarga_Lily_Prov0	993692398871936670			
<input checked="" type="checkbox"/>	para_desvincular	ROBUSTEL	R0200	356653050000093				9938782238397299290			
<input checked="" type="checkbox"/>	alib8	ROBUSTEL	R0200	2808001783	981908	3.3.0	msn0000000000000000	994298571524231427			
<input checked="" type="checkbox"/>	Lily_Protector	HUAWEI	AR502-C06	07090000001				994437357910321424			
<input checked="" type="checkbox"/>	Lily_4	ROBUSTEL	R0200	23234348454		Fw04	APN	994551371432598232			
<input checked="" type="checkbox"/>	enab8	NETCOMM	NTC 6200	9236118	BN01			99521731886417234			
<input checked="" type="checkbox"/>		HUAWEI	MS213H1	69910903004913				9955497110254547			
<input checked="" type="checkbox"/>	Lily_N	HUAWEI	MS213H1	5223257875	444	Fw02	APN	99615801305279453			
<input checked="" type="checkbox"/>		HUAWEI	MS213H1	686109032368806				996375422447931276			
<input checked="" type="checkbox"/>		HUAWEI	MS213H1	123456789				996568702324238106			
<input checked="" type="checkbox"/>	Lily_5	NETCOMM	140	3890401111346	11111	Fw02	APN	99793737184332620			
<input checked="" type="checkbox"/>	Fran	ROBUSTEL	R0200	357184000000001	3000001	R024-WW1	apn_recocido-7	997952357425591650			
<input checked="" type="checkbox"/>	enab8	NETCOMM	140	8035617	BN12			99824349884899870			

#### 9.3.1 Device attributes

The following table describes the columns that can be shown/hidden in the view mode.

Type	Field	Description
Device information	Device OEM	Manufacturer of the device. Do not confuse with the manufacturer of the communications module that shows at SIM level.
	Device Model	Model of the device. Do not confuse with the model of the communications module that shows at the SIM level.
	IMEI number	<i>International Mobile Station Equipment Identity (referred to the communication model)</i> . The last known value will be displayed: it can be a manually provided value or the value collected directly from the

		device's communication module or the one provided by the network if the device has ever been connected to the data network.
	Serial number	Serial number of the device. The last known value will be displayed: it can be a manually provided value or the value collected directly from the device.
	Firmware version	Firmware version of the device. The last known value will be displayed: it can be a manually provided value or the value collected directly from the device.
	Device APN	APN configured on the device. The last known value will be displayed: it can be a manually provided value or the value collected directly from the device.
Custom fields	Alias	Open field for custom values
	Custom field 1 a 4	Open field for custom values
	Administrative status	Open field for custom values
Connectivity	RSSI (dBm)	Received signal strength indicator in dBms.
	Connection status	Can take one of the following values: “Unknown”, “GPRS down”, “GPRS up”, “IP up”, “IP down”
	Last connection	Last connection date and time
SIM information	ICC number	ICC number of the SIM embedded in the device.
	IMSI number	IMSI number of the SIM embedded in the device.
	MSISDN number	Public number of the SIM embedded in the device.

### 9.3.2 Device search

By using search filters, it is possible to locate specific devices. The way to work with these filters is equivalent to the one already described to search for SIMs (see section [Search filters](#) for more details).

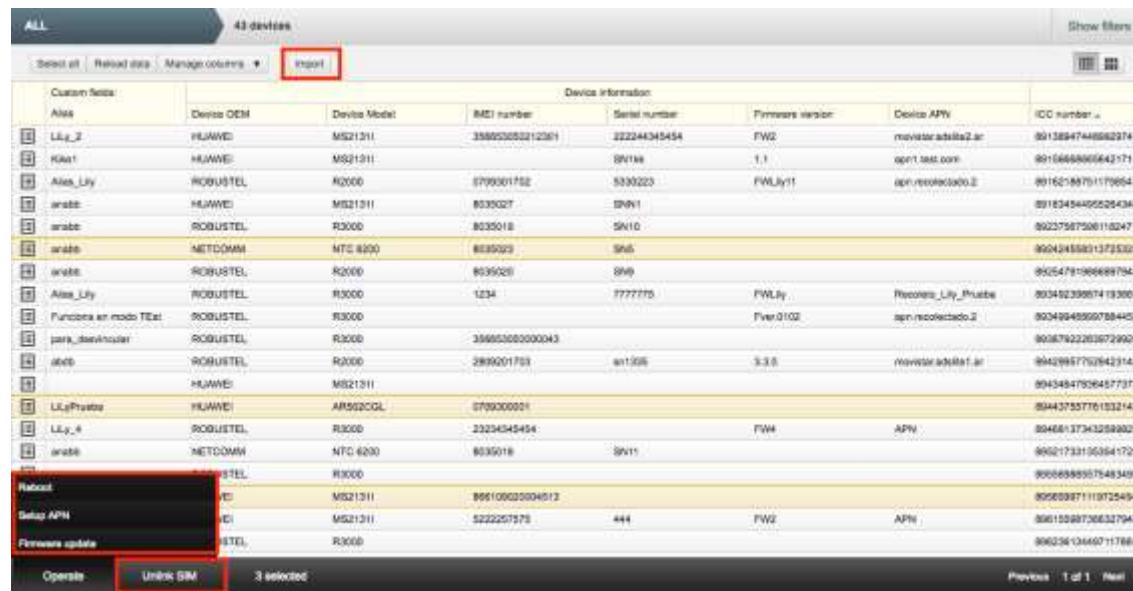
The available filters and necessary parameters for each of them are shown below:

Name	Parameters	Selection criteria
Alias	Fee text	String with the option for wildcard characters “*” and “?”
Device APN	Device APN name	String with the option for wildcard characters “*” and “?”
Custom fields 1-4	Free text	String with the option for wildcard characters “*” and “?”
Administrative status	Free text	String with the option for wildcard characters “*” and “?”
Connection status	Connection status value	Dropdown list with the following values: “Unknown”, “GPRS down”, “GPRS up”, “IP up”, “IP down”
Device model	Device model name	String with the option for wildcard characters “*” and “?”

Serial number	Serial number	String with the option for wildcard characters "*" and "?"
ICC number	ICC number	String with the option for wildcard characters "*" and "?"
IMEI number	IMEI number	String with the option for wildcard characters "*" and "?"
IMSI number	IMSI number	String with the option for wildcard characters "*" and "?"
MSISDN number	MSISDN number	String with the option for wildcard characters "*" and "?"
Device OEM	Device manufacturer name	String with the option for wildcard characters "*" and "?"
RSSI (dBm)	Two numeric strings indicating respectively lower and upper RSSI limit.	Two negative numbers in dBm
Firmware version	Free text	String with the option for wildcard characters "*" and "?"
Last connection	Range of time between the two dates	Selection of two dates through a calendar (in the user's time zone).

### 9.3.3 Performing bulk actions

From the "Device Inventory" view, different operations can be performed on the selected devices. The way of working is similar to the one already mentioned for SIMs (see section [Performing actions on the SIM cards](#) for more details).



Device Information							
Custom Setup	Device OEM	Device Model	IMEI number	Serial number	Firmware version	Device APN	ICC number
Lily_2	HUAWEI	MS213H	358803053312361	222244345454	FW2	movistaradsl2ar	89138497446686271416
Kami	HUAWEI	MS213H	891188	SN118	1.1	apn1.s88.com	891668800644317131
Alia_Uly	ROBUSTEL	R2000	EP99001752	8330223	PWULy11	apn/recolectado.2	891621879117995432
arabi	HUAWEI	MS213H	8330207	SN1			891834840552543460
arabi	ROBUSTEL	R3000	8035018	SN10			8923798750811624715
arabi	NETCOMM	MTS6200	8035023	SN5			99042458013733044
arabi	ROBUSTEL	R2000	8035026	SN9			8925479166889179456
Alia_Uly	ROBUSTEL	R3000	1234	7777770	PWULy1	Recolecta_Uly_Puente	8934923980741330070
Funciona en modo TEst	ROBUSTEL	R3000			Pwv.0102	apn/recolectado.2	8934984599978944538
para_desmuntar	ROBUSTEL	R3000	399803080000043				89367922261867290090
arabi	ROBUSTEL	R2000	2899001783	sn198	3.3.0	movistaradsl2ar	99429987704231427
	HUAWEI	MS213H					8943484703645773733
LilyPrueba	HUAWEI	AR5620GL	8799000001				8944375577613321434
Lily_4	ROBUSTEL	R3000	23234545454		FW4	APN	894661173432820232
arabi	NETCOMM	NTC6200	8035018	SN11			996217331936417294
	ROBUSTEL	R3000					9998698935754834071
Robot	YD	MS213H	89610902004613				8956539711101254947
Setup APN	ROBUSTEL	MS213H	522220575	444	FW2	APN	896159873663379453
Firmware update	ROBUSTEL	R3000					89623613646071178668

Operate      Undo SIM      3 selected

The result of these operations (if they have successfully finished or with error) can be seen in the section of massive operations as described in the section [Access to Bulk operations](#).

### 9.3.3.1 Operation on devices

The following operations act directly on the device. The mechanism of interaction with the device is carried out by sending SMSs.

The request message is made by sending SMS Application Originated (SMS-AO). The sender number is the one configured at Customer's supplementary service "Device management" level (see section [Elements of a supplementary services commercial plan](#) for more details) and will be charged according to the tariffs set at "SMS originated in application" supplementary service level.

Charging of the SMS response (SMS-MO) will be made according to the SMS tariffs set in the Commercial plan of the SIM associated with the device.



For security reasons, it is strongly recommended to restrict the sender numbers that can send SMSs to the devices. This is done through the configuration of the incoming SMS Filtering service (see [Other services activation operations](#) section for more details).



The Service Provider must assign a specific origin number to use the Device Management functionality, from which SMS can be sent to the devices, belonging to the numbering range established for it.



It is important to have correctly configured the model and manufacturer (OEM) parameters of the device because they ensure that the dialogue between the Kite Platform and the device is done correctly.



It won't be possible to perform an operation on one device if there is another ongoing operation in the same device.



There are devices (Netcomm models) that require a manual activation for the reception of SMS, and / or a pre-configuration of white lists to be able to receive SMS.

- **Reboot**, only available for the Administrator, Demo Kit and Technical profiles. Makes it possible to reboot the selected devices.



- **APN Setup**, only available for the Administrator, Demo Kit and Technical profiles. Makes it possible to set up the selected APN into the selected devices.



**⚠** The APN list shown corresponds to the APNs configured at Customer level. If the selected APN is not configured on the SIM card of the selected device, the operation will end in error.

**⚠** The configuration of the APN in those devices that physically have two slots for SIMs (Robustel models), will be carried out on the SIM inserted in slot 1.

- **Firmware update**, only available for the Administrator, Demo Kit and Technical profiles. Makes it possible to update the firmware referenced by the provided URL, in the selected devices.

**Firmware update**

2 selected

Enter the URL for obtaining the firmware:

**Cancel** **Proceed**

- ⚠️** Not all models require entering a URL. In those cases where it is not needed, it will not be requested.
- ⚠️** All selected devices must be of the same model and manufacturer (OEM) to be able to execute the operation.
- ⚠️** It is advisable to have advice and guarantee that the URL entered is safe and comes from a reliable source, provided by the manufacturer of each device.

#### 9.3.3.2 Unlink SIM from device

This operation removes a device from Device Inventory by moving it to the Device Stock, if it has IMEI and / or Serial Number. Otherwise, it is permanently deleted from the Database.

**Unlink SIM**

2 selected

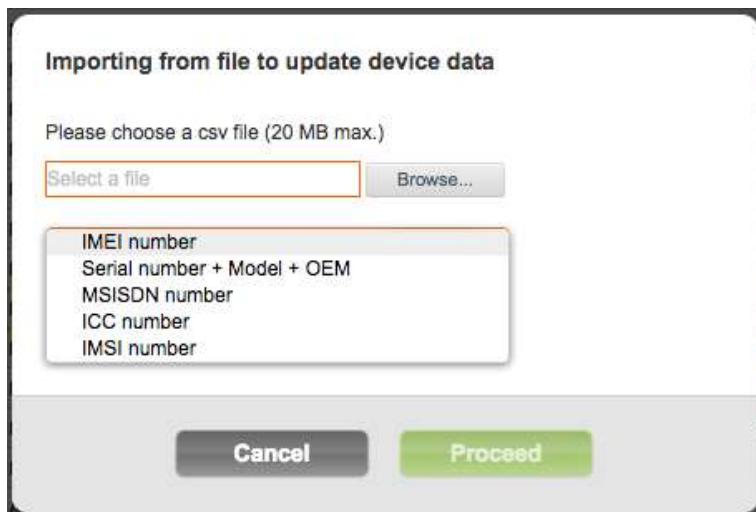
SIM cards will be unlinked from selected devices and will be moved to Stock Inventory. Devices not having IMEI and Serial Number will be removed from the Smart Center.

**Cancel** **Unlink SIM**

- ⚠️** When a device is moved to Device Stock, it loses the information associated with the SIM (ICC, IMSI, MSISDN).

### 9.3.3.3 Updating device data from file

It is possible to modify the values in database of the attributes of a set of devices via import file. This can be done from Device inventory by selecting the **Import** button and, in the file selection window, select the key field that will identify the device to be updated.



The required file format will be a CSV with a semicolon (;) as a separator character and with headers as shown in the following table:

Header	Can be deleted	Validation
Alias	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
CustomField1	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
CustomField2	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
CustomField3	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
CustomField4	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
DeviceOEM		max length: 128 chars; Only certain values are permitted (UTF-8)
;		Separator. Ascii (3B HEX)
DeviceModel		max length: 128 chars; Only certain values are permitted (UTF-8)
;		Separator. Ascii (3B HEX)

AdministrativeStatus	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
FWversion	✓	max length: 128 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
DeviceAPN	✓	max length: 256 chars; free text (UTF-8)
;		Separator. Ascii (3B HEX)
IMEI	✓	max length: 17 chars; [0-9] Key field. Cannot be duplicates.
;		Separator. Ascii (3B HEX)
SerialNumber	✓	max length: 128 chars; free text (UTF-8) Triplet SN, OEM y Model must be unique in BD.
;		Separator. Ascii (3B HEX)
MSISDN		max length: 128 chars; [0-9] Key field. Cannot be duplicates.
;		Separator. Ascii (3B HEX)
ICC		max length: 128 chars; [0-9] Key field. Cannot be duplicates.
;		Separator. Ascii (3B HEX)
IMSI		max length: 128 chars; [0-9] Key field. Cannot be duplicates.

- All headers should always be included, not necessarily in the order indicated in the table above.
- Rows with values must contain all separators (the same as the header).
- When a value, associated with an attribute, is not indicated (in blank), this value will not be modified.
- If a minus sign "-" is indicated, as the value of an attribute, that value will be deleted from the database.
- An update error in a device will not imply the total cancellation of the update operation on the rest of the devices.



It will be necessary to perform a manual refresh of the inventory to be able to see the changes being made.

## 9.4 Device details information

By double-clicking on one device or by single-clicking on the column with icons  , it is possible to access the specific details of a device.



 The ICC identifier is a hyperlink to the detail of the SIM associated with the device.

### 9.4.1 Execution of diagnostic tests

By clicking on the **Run test** button it will be possible to execute a diagnosis on the device. This button will change to **Hide test** as soon as it is pressed.



If the Run test button is disabled, it may be because the device's SIM has a configuration that prevents it from sending and / or receiving SMS. Typically it will be due to one of the following causes: 1) The SIM is in a state of life cycle incompatible with the sending of SMS 2) The traffic of SMSs is restricted for this SIM 3) The SIM has reached the expense limit and cannot send SMSs 4) The destination number for sending response SMSs from the SIM is blocked (configured in the black list of "Authorized and Restricted Numbers" of the Commercial plan / Subscription group).

This diagnosis consists of two parts:

3. **Checking the signal strength (RSSI):** allows to obtain both the value in dBm of the radio signal and an indication of its quality.

Signal quality		RSSI
Excellent		> -70 dBm
Good		-70 to -86 dBm
Fair		-86 to -100 dBm
Poor		-100 to -110 dBm

No signal		< -110 dBm
-----------	---	------------

- 4. APN status:** it allows to know if there is a discrepancy between the APN configured in the device and those configured in the SIM. If either the device or the SIM do not have an APN configured, an error will be displayed.



Diagnosis of APN is not supported by Huawei MS2131i model.



The reading of the APN in those devices that physically have two slots for SIMs (Robustel models) will be performed on the SIM inserted in slot 1.

#### 9.4.2 Device information attributes

The attributes associated with this section are listed in the following table indicating which of them are editable and which of them are collected from the device.

Attribute	Editable	Can be deleted	Can be collected
Alias	✓	✓	
Custom field 1 a 4	✓	✓	
Administrative status	✓	✓	
Device OEM	✓		
Device Model	✓		
Firmware version	✓	✓	✓
Device APN	✓	✓	✓ (Not supported by Huawei MS2131i)
IMEI number	✓	✓	✓
Serial number	✓	✓	✓ (Not supported by Huawei MS2131i)
MSISDN number	✓		
ICC number	✓		
IMSI number	✓		

The meaning of each field is described in the [Device attributes](#) section.



By clicking on the "ICC number" attribute, you can access the detail of the corresponding SIM.

#### 9.4.3 Device connectivity attributes

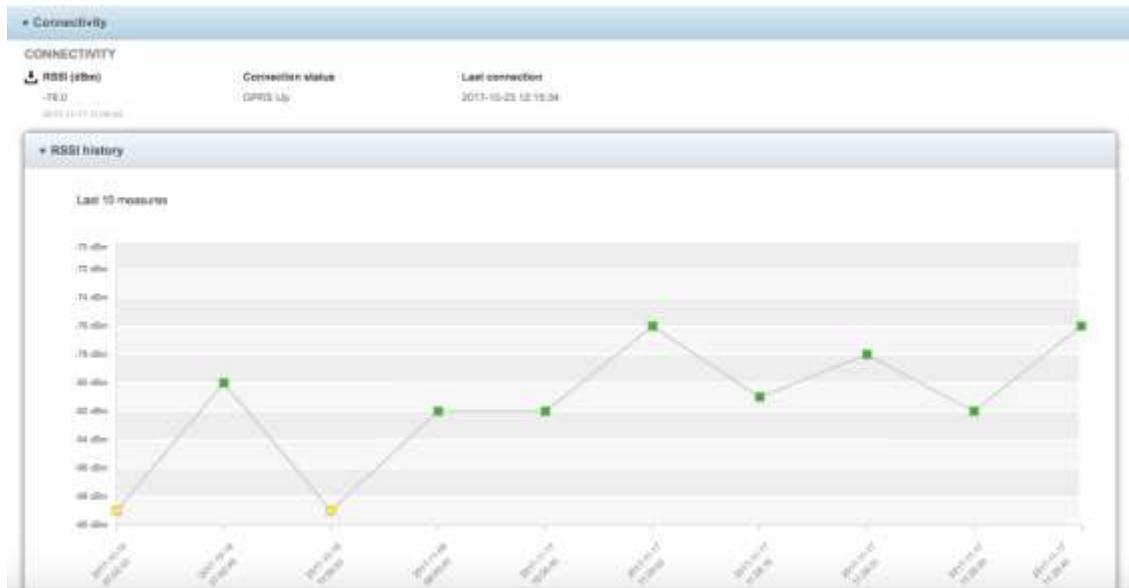
This section shows information about the following device attributes:

Attribute	Editable	Can be deleted	Can be collected
RSSI (dBm)			✓
Connection status			✓
Last connection			✓

The meaning of each field is described in the [Device attributes](#) section.

#### 9.4.3.1 RSSI history

The RSSI history shows the last 10 values successfully collected. Either through a collection of this parameter or via a diagnostic operation.



 The collection of RSSI in those devices that physically have two slots for SIMs (Robustel models) will be carried out on the SIM inserted in slot 1.

#### 9.4.4 Attributes edition

Attributes edition is done through the **Edit** button located in the header of the section. Only the "Device identification" section contains editable attributes.

**Device Identification**

**DEVICE INFORMATION**

 IMEI number 2808201703	 Device OEM ROBUSTEL	 Device Model R2000
 Serial number	 Device APN test.test	 Firmware version 3.3.0

**Cancel** **Save**

**Device Identification**

**DEVICE INFORMATION**

IMEI number 2808201703	Device OEM ROBUSTEL	Device Model R2000	Serial number sn1336
Device APN test.test	Firmware version 3.3.0		

**SIM INFORMATION**

ICC number 8942905775294231427	IMSI number 722075741241611	MSISDN number 5440134673
-----------------------------------	--------------------------------	-----------------------------

**CUSTOM FIELDS**

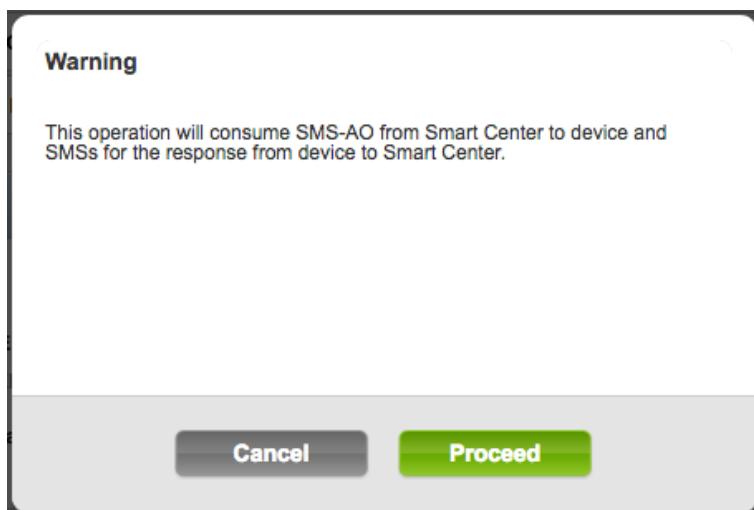
Alias abdi	Administrative status	Custom field 1 ANT	Custom field 2
Custom field 3	Custom field 4		

 It will be necessary to perform a manual refresh of the inventory to be able to see the changes made.

#### 9.4.5 Collection of attributes

The collection of an attribute can be done by clicking on the icon  . Any value collected will show a collection date un underneath its value. If the parameter is manually edited, that date will disappear, so that it can easily be checked if the values shown are the result of an edition or of a collection.

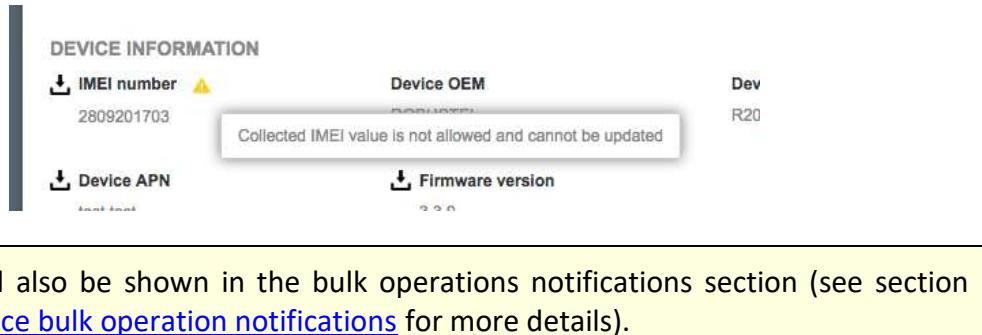
Every collection operation involves SMS traffic and therefore an expense. This is notified by a pop-up window just before executing the operation.



The section [Operation on devices](#) provides more details on the consumption of SMS in operations on devices.

After executing the operation, the collection icon will change indicating that the operation is ongoing and waiting for a response.

In case of error, the corresponding error message will be notified by means of an icon and a tooltip.



The screenshot shows a 'DEVICE INFORMATION' section with four items: 'IMEI number' (warning icon, value 2809201703), 'Device OEM' (Dev R20), 'Device APN' (warning icon), and 'Firmware version' (warning icon). A tooltip for the IMEI number field says: 'Collected IMEI value is not allowed and cannot be updated'. Below this, a yellow box contains a warning icon and the text: 'Errors will also be shown in the bulk operations notifications section (see section [Access to device bulk operation notifications](#) for more details)'.

### Automatic collection of the IMEI

Device communication module's IMEI can be collected not only manually, as described in the previous section, but also automatically.

When a device establishes a data session, the Kite Platform will receive the device communication module's IMEI from the network. If the device doesn't have an IMEI assigned or it is different, the IMEI will be updated, automatically, in the database.

## 9.5 Device stock

The Device Stock view shows the set of devices that do not have a SIM linked. Typically, a device will be added to the Stock either because it is removed from the Device Inventory (through the "Unlink SIM" operation or because the associated SIM has been retired) or because it is imported via file, as described in the section [File import in Stock](#).

The operative as for configuration of columns, selection of elements, filtering and refreshing of the information is concerned, is equivalent to that of the Device Inventory and SIM Inventory.

Device Information								Custom Fields	
Device OEM	Device Model	IMEI number	Serial number	Firmware version	Device APN	Alt	Administrative status		
HUAWEI	MS21311	35770464	33334444			U3g			
ROBUSTEL	R2000	1500201780				fradminmax			
HUAWEI	AR922CGL	2800201782				abdb			
ROBUSTEL	R2000	2800201784				abdb			
HUAWEI	AR922CGL	133211162617	1892	3.3.0	test	abdb			
HUAWEI	MS21311	8881100233998886	555599	FW8	APN	U3g_Dos	adminpub		
ROBUSTEL	R2000	6001000233996641	200090	FW8	APN	U3g_ress	adminpub		
HUAWEI	MS21311	8881000233996658		FW2	APN	U3g_Dos	adminpub		
ROBUSTEL	R2000	8881000233996480		FW5	APN	U3g_ress	adminpub		
ROBUSTEL	R2000	8881000233983778	288890	FW5	APN	U3g_ress	adminpub		
ROBUSTEL	R2000	8881100233667980	288333	FW5	APN	U3g_ACCOUNTING	adminpub		
ROBUSTEL	R2000	8881000233667763	12223	FW5	APN	U3g_ACCOUNTING_1	adminpub		
ROBUSTEL	R2000	8881000235677771		FW5	APN	U3g_ACCOUNTING_2	adminpub		
NETCOMM	NTC_R200	432222	22222222	FW6	APN	U3g_ress	adminpub		
HUAWEI	MS21311	8227777	44434	FW2	APN	U3RN_ProfileFinal	adminpub		
HUAWEI	MS21311	164526548531							
ROBUSTEL	R2000	359054063338148	8N6	FW5	APN		Recolectar		
ROBUSTEL	R2000	359054063338168	8n611	FW2	APN		Recolectar		
NETCOMM	NTC_R200	232345451110	11111	FW2	APN		Recolectar		
HUAWEI	MS21311	3590040541110301	11111	FW2	APN		Recolectar		
ROBUSTEL	R2000	357704044111308		FW2	APN		Recolectar		
ROBUSTEL	R2000	888100024111314	54341119	FW2	APN		Recolectar		

The attributes shown in this view are the same as in the Device Inventory (see section [Device attributes](#)) with the exception of the identifiers of the SIM (ICC, IMSI, MSISDN) and connectivity information that do not apply in this view.

### 9.5.1 Device search

The Stock view also allows the search of devices in the same way as described for the Inventory device view. Each view saves the last selection of filters made by the user.

The filters in this section correspond to those in the Device Inventory (see section [Device search](#)) with the exception of the ICC, IMSI, MSISDN and connectivity filters (RSSI, Connection Status and Last Connection) that do not apply in this view.

### 9.5.2 Bulk actions

#### 9.5.2.1 Remove device from data base

This action permanently removes the selected devices from the database.

ROBUSTEL	R2000	866109023567383	28
ROBUSTEL	R2000	866109023567763	22
ROBUSTEL	R2000	866109023567771	
NETCOMM	NTC 6200	432222	22
HUAWEI	MS2131I	5227777	44
HUAWEI	MS2131I	164626546531	
ROBUSTEL	R2000	359054053338145	SN
ROBUSTEL	R2000	359054053338186	Se
NETCOMM	NTC 6200	2323434541110	11
HUAWEI	MS2131I	359054054111301	11
ROBUSTEL	R2000	357784044111308	
ROBUSTEL	R2000	866109024111314	34
<b>Remove device</b>		<b>3 selected</b>	

### 9.5.2.2 File import in Stock

Through the file import option, it is possible to provision new devices to the Stock as well as to make later updates of attributes in a massive way.

The supported file format is a CSV with a semicolon (;) as a separator character and with headers as shown in the following table:

Header	Can be provisioned	Editable	Can be deleted	Validation
Alias	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
CustomField1	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
CustomField2	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
CustomField3	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
CustomField4	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
DeviceOEM	✓	✓		max length: 128 chars; Only certain values are permitted (UTF-8)
;				Separator. Ascii (3B HEX)
DeviceModel	✓	✓		max length: 128 chars; Only certain values are permitted (UTF-8)
;				Separator. Ascii (3B HEX)
AdministrativeStatus	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)

;				Separator. Ascii (3B HEX)
FWversion	✓ (optional)	✓	✓	max length: 128 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
DeviceAPN	✓ (optional)	✓	✓	max length: 256 chars; free text (UTF-8)
;				Separator. Ascii (3B HEX)
IMEI	✓  One of the two, IMEI or Serial number, must be included.			max length: 17 chars; [0-9]  Key field. Cannot be duplicates.
;				Separator. Ascii (3B HEX)
SerialNumber	✓  One of the two, IMEI or Serial number, must be included.			max length: 128 chars; free text (UTF-8)  Triplet SN, OEM and Model must be unique in BD.
;				Separator. Ascii (3B HEX)
MSISDN	✓ (optional)			max length: 128 chars; [0-9]  Key field. Cannot be duplicates.
;				Separator. Ascii (3B HEX)
ICC	✓ (optional)			max length: 128 chars; [0-9]  Key field. Cannot be duplicates.
;				Separator. Ascii (3B HEX)
IMSI	✓ (optional)			max length: 128 chars; [0-9]  Key field. Cannot be duplicates.

- An attribute can be provisioned if it can be specified as part of the creation of the device.
- An attribute is editable if it can be specified as part of the modification of a device.
- If a valid SIM identifier (ICC, IMSI, and MSISDN) is included, the device will be provisioned directly in the Device Inventory.
- Devices not present in the Stock cannot be updated, even if they are in the device inventory.
- All headers should always be included, not necessarily in the order indicated in the table above.
- Rows with values must contain all separators (the same as the header).
- When a value, associated with an attribute, is not indicated (in blank), this value will not be modified.

- If a minus sign "-" is indicated, as the value of an attribute, that value will be deleted from the database.
- An update error in a device will not imply the total cancellation of the update operation on the rest of the devices.



It will be necessary to perform a manual refresh of the inventory to be able to see the changes being made.

## 9.6 Merging mechanism between device inventory and stock

When a device in the Inventory has device identifiers (IMEI and / or the triplet: serial number-OEM (manufacturer)-Model) coinciding with those of a Stock element, an automatic merge of the two elements will be performed, so that:

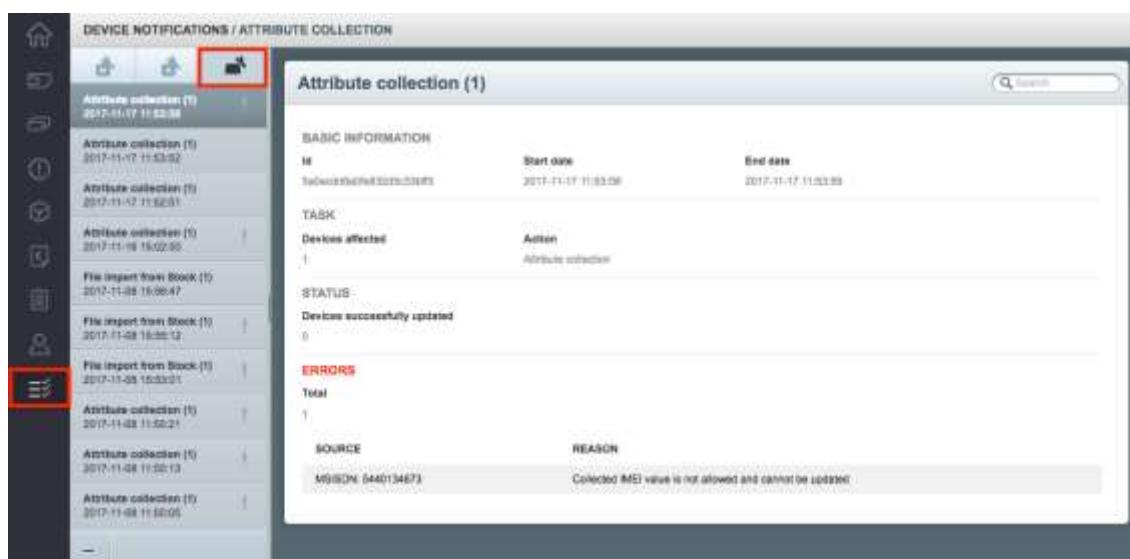
- The device will be removed from Stock.
- The device in the inventory will take the new attributes that it had in the Stock.

The merging mechanism comes into play both during the provision of a device and during the editing or collection of attributes.

## 9.7 Access to device bulk operation notifications

In a similar way as it is described for SIMs, in the section [Access to Bulk operations](#), it is possible to query the status of asynchronous operations for devices, that is, massive or collection operations.

This information is available in a new tab next to the tabs related to SIM cards.



The screenshot shows the 'DEVICE NOTIFICATIONS / ATTRIBUTE COLLECTION' interface. On the left, there's a sidebar with various icons and a list of recent operations. A red box highlights the 'Attribute collection (1)' entry in the list. On the right, a detailed view of this operation is shown in a modal window titled 'Attribute collection (1)'. The modal contains sections for 'BASIC INFORMATION', 'TASK', 'STATUS', and 'ERRORS'. Under 'BASIC INFORMATION', it shows 'ID: 2017-11-17 11:53:52', 'Start date: 2017-11-17 11:53:52', and 'End date: 2017-11-17 11:53:52'. Under 'TASK', it lists 'Devices affected: 1' and 'Author: Attribute collection'. Under 'STATUS', it shows 'Devices successfully updated: 0'. Under 'ERRORS', it lists 'Total: 1' and 'SOURCE: IMEI/IMSI: 0440134673' with the reason 'Collected IMEI value is not allowed and cannot be updated'.

In the following table, each of the available fields is described:

Category	Name	Description
----------	------	-------------

Basic information	<b>Id</b>	Notification identifier
	<b>Start date</b>	Date and time when the operation started
	<b>End date</b>	Date and time when the operation finished
Task	<b>Devices affected</b>	Number of elements involved in the operation. It can be devices or file rows (header not included) when processing a file import.
	<b>Action</b>	Name of the operation
Status	<b>Devices successfully updated</b>	Number of devices in which the operation ended successfully.
Errors	<b>Total</b>	Number of devices in which the operation ended with error. It can be devices or file rows (header included) when processing a file import.
	<b>Source</b>	Indicates the element that caused the error, it can be either, due to an incompatible operation on a device or due to an unaccepted format when processing a file (the line of the file will be indicated).
	<b>Reason</b>	Error description
Warnings	<b>Total</b>	Indicates the element that caused the warning. It can be devices or file rows (header included) when processing a file import.
	<b>Source</b>	Indicates the element that caused the warning
	<b>Reason</b>	Warning description.

## 10 Monitoring and configuration of alarms

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### 10.1 General

The alarm module, accessible from the  main menu icon, allows you to configure rules to capture events that occur in Kite Platform and thus be able to perform actions on the affected elements.

In addition to the configuration of rules, you have access to alarm monitoring, that is, the complete list of events generated, which we will call "Alarms" from now on, being able to perform actions on them.

Information about the alarms generated on a SIM card is also accessible from the Inventory and as part of the detailed information for each SIM card (see sections [List Mode](#) and [Alarms of a SIM card](#) for more details).

The following sections will detail the different options offered by the Kite Platform for alarm management.

#### 10.1.1 Types of alarms

Kite allows you to work on different types of alarms as shown in the following table:

Alarm Type	Accessible by the organization:	Description
Traffic consumption exceeded of a SIM card	Customer	Notifies when 50%, 60%, 80%, 90% or 100% of the consumption limit established for voice, SMS or data of a SIM card is reached (see section <a href="#">Change operations</a> for more details). This type of alarm closes automatically at the end of the billing cycle or when the consumption threshold changes if they have not been met.
Minimum traffic consumption of a SIM card	Customer	Notifies when the consumption level of a SIM, at the end of the selected period (day, month) has not reached the configured level.
Expense achieved on a SIM card	Customer	Notifies when an 80% excess occurs or the established daily and monthly spending limit is reached for voice, SMS, data or the total of a SIM card. (See section <a href="#">Change operations</a> for more details). These types of alarms are automatically closed at the end of the billing cycle or when the spending limit changes if they have not been addressed.
Change of lifecycle status of a SIM card	Customer	Notifies when a SIM card changes state.
Expense achieved in a Subscription Group	Customer	Notifies when the spending limit set for the subscription group for voice, SMS, data, or total is reached (see <a href="#">Configuring the expense controls of the Subscriptions group</a> for more details). These types of alarms are automatically closed at the end of the billing cycle or when the spending limit changes if they have not been addressed.
Consumption achieved in a data pool	Customer	Notifies when 50%, 70%, 80%, 90%, or 100% size of the selected data pool is reached. These types of alarms are automatically closed at the end of the billing cycle or in the event of an increase in the size of the pool (in the case of dynamic pools) if they have not been addressed.

Alarm Type	Accessible by the organization:	Description
Pool at risk of overage	Customer	Notifies when the selected data pool is at risk of running out because the rate of consumption is high, i.e., the pool's % of consumption is greater than the % of elapsed billing cycle.  It only applies to pools that have already consumed at least 50%.
Dropped connections	Customer	Notifies when the number of concurrent connections for the selected APN has fallen below the configured amount.
Presence status reached	Customer	Notifies when a connection or disconnection occurs at the GPRS or IP level.
Change of location	Customer	Notifies when a SIM card location change occurs.
IMEI change	Customer	Notifies when an IMEI change occurs on a SIM card.
Network registration	Customer	Notifies when a SIM attach occurs in or out of the list of networks defined in the alarm rule.

### 10.1.2 Alarm concepts

The alarm management that Kite Platform does is based on the following concepts:

- **Alarm rule:** Refers to the complete definition of the monitoring scope, event to be alarmed, automatic actions to be executed as well as the alarm notification channels.
- **Entity to monitor:** Represents the element generating the alarm event (SIM, APN, Customer, etc.). Depending on the entity to be monitored, it may be necessary to define the scope of monitoring, i.e. the set of entities to be monitored (e.g., specific Subscription group for the SIM entity)
- **Alarm criteria:** Defines the condition that causes alarm events to be generated.
- **Automatic action:** An operation that Kite executes when an alarm is generated. This operation affects the entity that has triggered the alarm.
- **Notification:** Mechanism for communicating alarm events. It includes its display in the Kite portal or its notification to external elements, e.g. via Push API, email, SMS or SNMP trap.
- **Alarm:** An event generated as a result of the condition defined in the alarm rule being met.



A practical case would be that of a SIM card with ICC 893407127900006656, belonging to the "SG01MadGas" supervision group, which generates an alarm in Portal because it has moved 1Km.

In this example, the Entity would be the SIM card, the Alarmed Criterion would be "Change of location" with a threshold of 1Km and the Notification channel "Portal". In this example, it would be necessary to select a certain Monitoring Group as the monitoring scope.

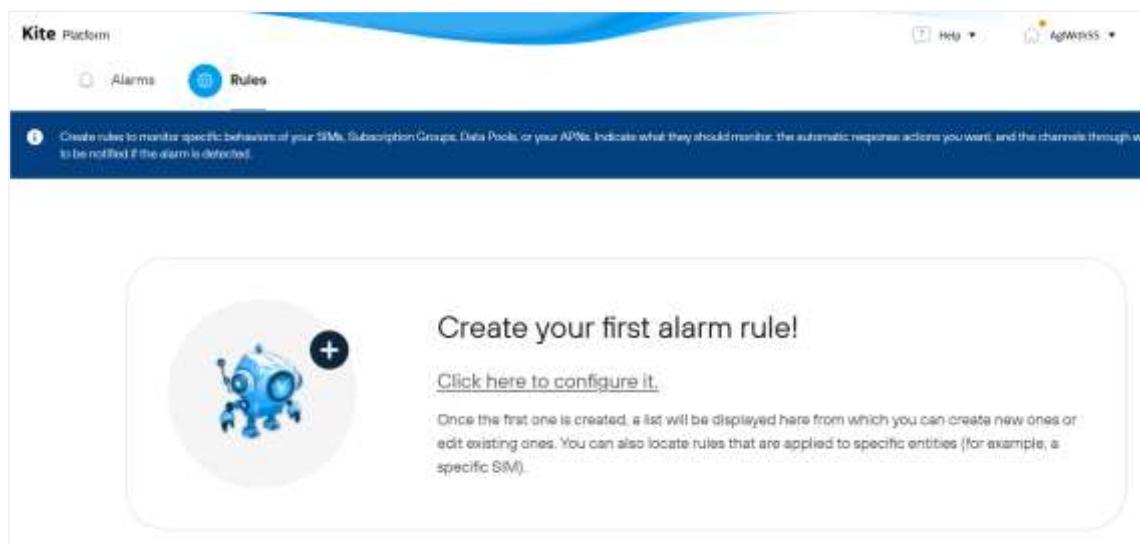
## 10.2 Managing alarm rules

Access to the configuration and list of alarm rules is done through the "Rules" menu.

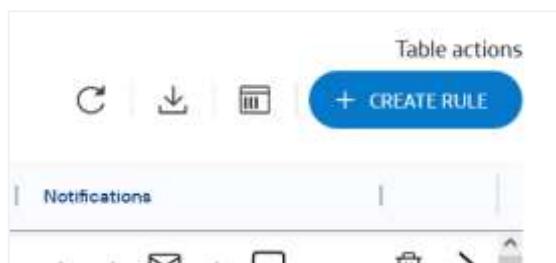


### 10.2.1 Creating alarm rules

The creation of alarm rules is done by accessing the "Rules" menu. In case there are no rules, the user is invited to create their first alarm rule:



In the event that a rule has already been created, clicking on the **+ CREATE RULE** button will give access to the alarm rule creation wizard.



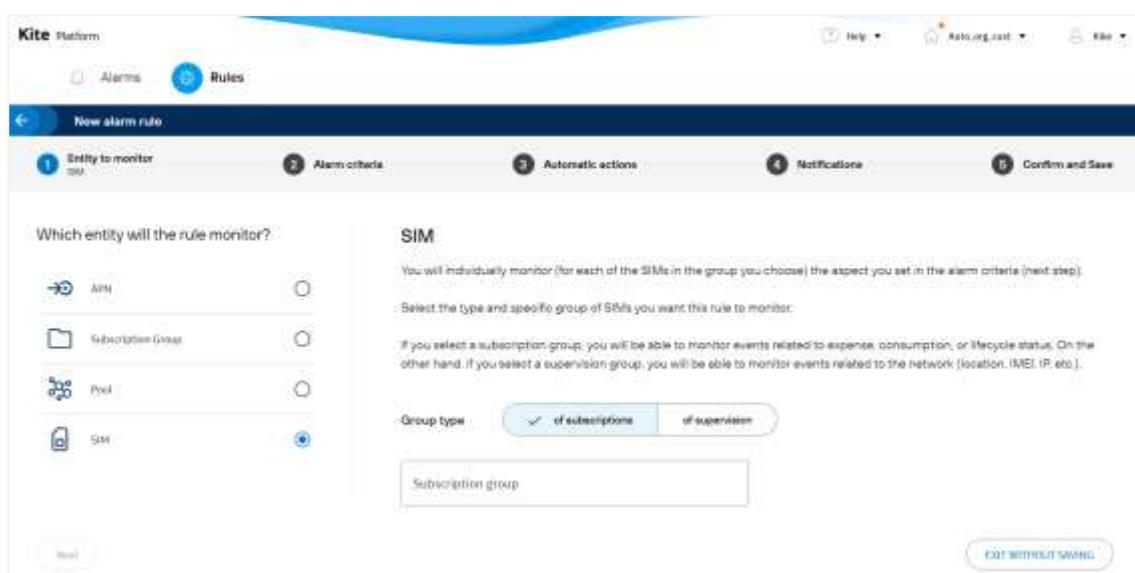
Creating an alarm rule is done in 5 steps:

- Step 1: Selecting of the entity to monitor.
- Step 2: Setting the Alarm criteria.
- Step 3: Define automatic actions.
- Step 4: Select notification channels.
- Step 5: Confirm and create the new alarm rule.

Each of these steps is described in detail below.

#### **10.2.1.1 Step 1: Selecting the entity to monitor**

It allows you to select the type of element that you want to monitor and that, ultimately, triggers the alarm associated with the rule.



The screenshot shows the 'New alarm rule' configuration page in the Kite Platform. The top navigation bar includes 'Alarms' and 'Rules'. The main title is 'New alarm rule'. Below it, a progress bar indicates '1 Entity to monitor' (selected), '2 Alarm criteria', '3 Automatic actions', '4 Notifications', and '5 Confirm and Save'. The 'Entity to monitor' step shows four options: 'APN', 'Subscription Group', 'Pool', and 'SIM'. 'SIM' is highlighted with a blue border. To the right, a detailed description explains that selecting 'SIM' allows monitoring individual SIMs based on the criteria set in the next step. It also notes that selecting a 'Subscription group' monitors events related to expense, consumption, or lifecycle status, while selecting a 'Supervision group' monitors network-related events like location and IMEI. A 'Group type' section with dropdowns for 'of subscriptions' and 'of supervisors' is shown. A 'Subscription group' input field is present. At the bottom are 'Next' and 'Exit without saving' buttons.

The available options depend on the type of organization:

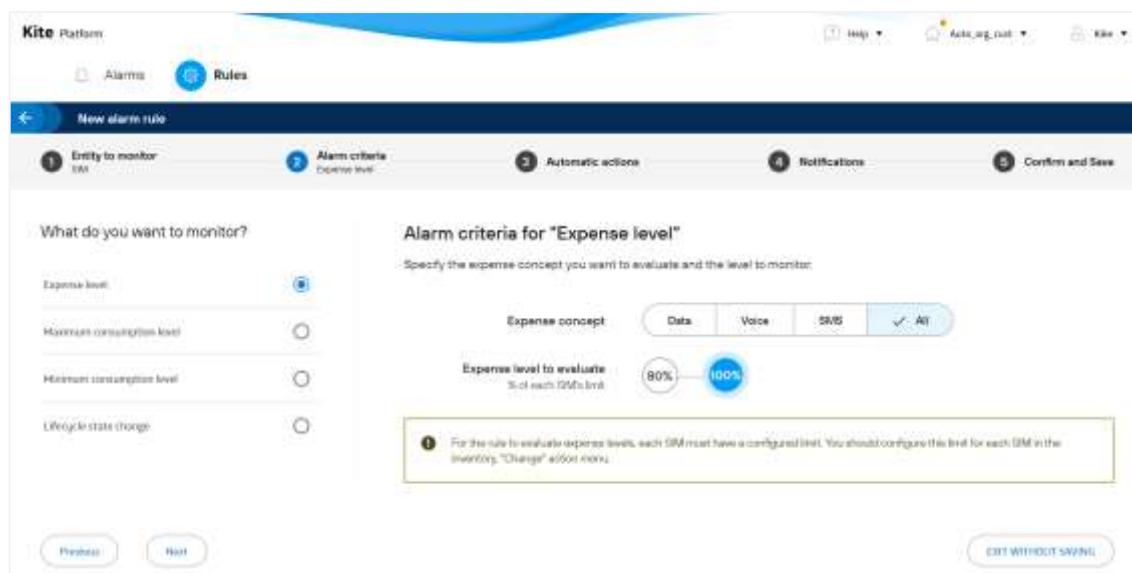
Organization	STEP 1: Entity to monitor		STEP 1: Parameters
Customer	APN	Name of the APN or "All APNs".	
	Subscription group	Name of the Subscription Group.	
	Pool	Names of the pools to be monitored.	
	SIM	Name of a Subscription Group or Supervision Group that includes the SIMs to be monitored.	



The parameters configured in this step 1 will not be modifiable once the rule has been saved.

### 10.2.1.2 Step 2: Setting the Alarm criteria

Indicates the condition that must be satisfied in order to generate an alarm.



The screenshot shows the 'New alarm rule' configuration interface. The 'Entity to monitor' step has been completed with 'SIM'. The current step is 'Alarm criteria' (Expense level). The 'Automatic actions', 'Notifications', and 'Confirm and Save' steps are visible but not yet configured.

**What do you want to monitor?**

- Expense level
- Maximum consumption level
- Minimum consumption level
- Lifecycle state (usage)

**Alarm criteria for "Expense level"**

Specify the expense concept you want to evaluate and the level to monitor:

**Expense concept**: Data, Voice, SMS, All

**Expense level to evaluate**: % of each SIM's limit: 80% → 100%

**Tip:** For this rule to evaluate expense levels, each SIM must have a configured limit. You should configure this limit for each SIM in the inventory "Change" editor menu.

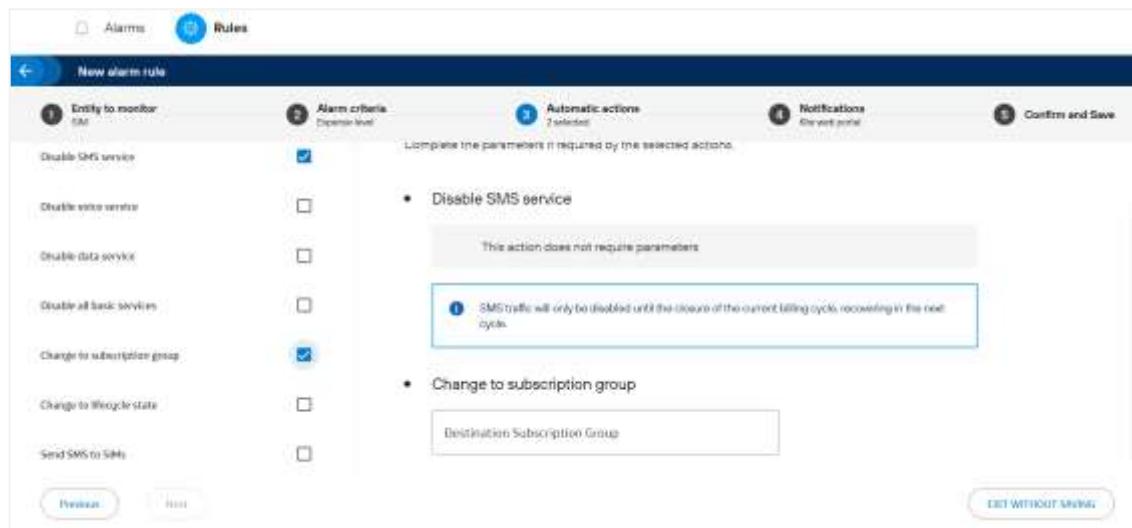
The options available will depend on the selection made in step 1.

STEP 1: Entity to monitor	STEP 2: Alarming Criteria	STEP 2: Parameters
SIM of a Subscription Group	Expense level	<p><i>Expense Concept:</i> Voice, SMS, Data, Total  <i>Consumption Level:</i> 80%, 100%</p> <p><b>⚠️</b> The correct operation of this rule requires that a spending limit has been configured on the SIMs to be monitored. This can be done from the SIM Inventory (see section <a href="#">Change operations</a> for more information)</p>
	Maximum consumption level	<p><i>Consumption period:</i> Daily, Monthly  <i>Traffic Type:</i> Voice, SMS, Data  <i>Consumption Level:</i> 50%, 60%, 80%, 90%, 100%</p> <p><b>⚠️</b> The correct operation of this rule requires that a spending limit has been configured on the SIMs to be monitored. This can be done from the SIM Inventory (see section <a href="#">Change operations</a> for more information)</p>
	Minimum consumption level	<p><i>Consumption period:</i> Daily, Monthly  <i>Traffic Type:</i> Voice, SMS, Data  <i>Minimum consumption level for the selected traffic type.</i></p> <p><b>⚠️</b> SIM cards that are not active at the end of the consumption period and those that have been published during the consumption period are excluded.</p>
	Lifecycle state	<i>Alarm life</i> (seconds, minutes, hours): the open alarm will automatically close once the indicated time has expired.

STEP 1: Entity to monitor	STEP 2: Alarming Criteria	STEP 2: Parameters
SIM of a Supervision Group	GPRS connectivity	<p><i>GPRS Event Type:</i> Allows you to choose between "Session open" or "Session closed" events</p> <p><i>Create alarm if this state remains</i> (in seconds, minutes, hours): the alarm will only be notified if the conditions that generated the alarm do not disappear within that timeout.</p>
	IP connectivity	<p><i>IP Event Type:</i> Allows you to choose between "Reachable by IP" or "Not reachable by IP" events</p> <p><i>Create alarm if this state remains</i> (in seconds, minutes, hours): the alarm will only be notified if the conditions that generated the alarm do not disappear within that timeout</p>
	Location change  ⚠️ The location change alarm is not based on the concept of <i>Geofence</i> .	<p><i>Maximum allowed displacement</i> (meters, km): the alarm is only generated if the geographical distance that the SIM card has moved from the last value recorded (position recorded in the last alarm or current position if it is the first alarm) is higher than this threshold.</p>
	IMEI change	<p>It allows you to select between: "Consider the first acquisition of the IMEI and all its updates" and "Do not consider the first acquisition, only the updates"</p>
	Network registration list  ⚠️ It will be allowed to configure up to 5 rules of the same.	<p>Allows you to select between: "Enter the operator group" and "Leave the operator group".</p> <p><i>Create alarm if the situation remains</i> (hours, days): allows you to configure a time threshold so that the alarm is triggered only after that defined time has expired if the alarm conditions still persist.</p> <p><i>Operator list name:</i> This name will be used to differentiate different rules of this type and will be displayed in the rules list along with the name of the alarmed event.</p> <p><i>Operator list:</i> identifies the set of carriers that will trigger the alarm in case a SIM is registered with a carrier on the list ("Enters the carrier group" criterion) or registers with a non-listed operator ("Leaves the carrier group" criterion).</p> <p><i>If the SIM changes operator without leaving the list ("Enters the operator group" criteria) or without entering the list ("Leaves the operator group" criteria), no alarm will be generated.</i></p>
Subscription group	Expense level	<p><i>Expense Concept:</i> Voice, SMS, Data, Total</p> <p>⚠️ The correct operation of this rule requires that a spending limit has been configured in the Subscription Group to be monitored. This can be done from the Commerce Administration section &gt; Subscription Group (see <a href="#">Defining the expense thresholds configuration in a Subscription group</a> for more information)</p>
Pool	Consumption level	Consumption Level: 50%, 70%, 80%, 90%, 100%
	Overage risk	No parameters
APN	Dropped connections	<i>Minimum connection threshold:</i> indicates the number of simultaneous connections for the selected APN, below which the alarm will be triggered

### 10.2.1.3 Step 3: Define automatic actions

Optionally, it is allowed to define a set of actions that will be executed when the alarming criterion defined in step 2 is met.



The screenshot shows the 'New alarm rule' configuration interface. The 'Automatic actions' tab is selected, displaying two actions: 'Disable SMS service' and 'Change to subscription group'. The 'Disable SMS service' action is described as requiring no parameters. The 'Change to subscription group' action has a note stating that SMS traffic will only be disabled until the end of the current billing cycle, recovering in the next cycle. Both actions have checkboxes next to them, with 'Change to subscription group' checked. The interface includes tabs for 'Alarms' and 'Rules', and buttons for 'Confirm and Save' and 'Exit without saving'.

The listing of shares offered depends on what is established in steps 1 and 2:

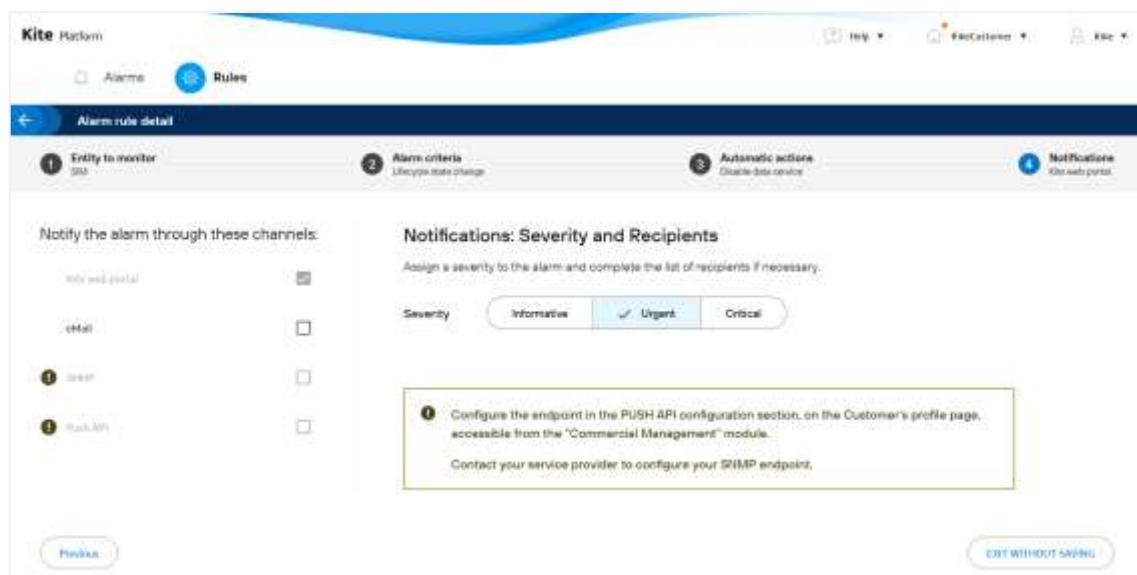
STEP 1: Entity to monitor	STEP 2: Alarming Criteria	STEP 3: Automatic Actions	STEP 3: Parameters
SIMs of a Subscription Group	Expense level Maximum consumption level	Disable the Voice service (local inbound, local outbound, inbound roaming, outgoing roaming, international outbound) on the affected SIM.  ⚠️ The service will be restored at the start of the next billing cycle as long as no manual deactivation has been executed on the affected SIM (see <a href="#">Performing actions on the SIM cards</a> more details) and no subscription group has been manually changed.	None
SIMs of a Supervision Group	Minimum consumption level Lifecycle state GPRS connectivity IP connectivity Location change IMEI change	Disable SMS service (local inbound, local outbound, inbound roaming, outbound roaming, international outbound) on the affected SIM.  ⚠️ The service will be restored at the start of the next billing cycle as long as no manual deactivation has been executed on the affected SIM (see <a href="#">Performing actions on the SIM cards</a> for more details) and no subscription group has been manually changed.	None
		Disable data services (local, roaming) on the affected SIM.  ⚠️ The service will be restored at the start of the next billing cycle as long as no manual deactivation has been executed on the affected SIM (see <a href="#">Performing actions on the SIM cards</a> for more	None

		<p>details) and no subscription group has been manually changed.</p>	
		<p>Disable all basic services (data, voice, SMS) on the affected SIM.</p> <p><b>⚠️</b> Services will be restored at the start of the next billing cycle as long as they have not been manually disabled on the affected SIM (see <a href="#">Performing actions on the SIM cards</a> for more details) and the Subscription Group has not been manually changed.</p>	None
		<p>Switch the affected SIM card to another Customer Subscription Group</p> <p><b>⚠️</b> Switching to a restricted Subscription Group cannot be selected.</p> <p><b>⚠️</b> You will not be able to make a change to the Subscription Group if the selected entity is a Restricted Subscription Group (see the <a href="#">Administration of Subscriptions groups</a> for more details on what a Restricted Subscription Group is).</p>	Subscription group
		<p>Change the affected SIM card to another lifecycle state.</p>	<p>Lifecycle state</p> <p><b>⚠️</b> It is the user's responsibility to select a state that is compatible with the SIM lifecycle configuration. Otherwise, errors will occur.</p> <p><b>⚠️</b> If the selected Subscription Group has a scheduled billing cycle day change, it will not be possible to change its lifecycle status from "Inactive, New" or "Test" to "Ready for Activation" or "Pending Activation" in any combination.</p>
		<p>Send an SMS to the affected SIM card</p> <p><b>⚠️</b> The sending of SMS messages will only be available to Customers who have contracted the supplementary service "Application outgoing SMS".</p>	SMS Text
SIMs of a Supervision Group	Network registration list	<p>eSIM Download and enable profile</p> <p><b>⚠️</b> This action will only be available to Customers who have the eSIM Access flag enabled (see <a href="#">Basic information</a> section for more details) and are configured as source of a swap rule.</p>	<ul style="list-style-type: none"> <li>• Target Customer of the swap operation</li> <li>• Subscription group destination of the swap operation (only required for eSIM Swaps that require download of a virtual profile. It will be ignored if it is only necessary to enable an already downloaded profile)</li> </ul>

Subscription Group	Expense level	Disable Voice (local inbound, local outbound, inbound roaming, outbound roaming, international outbound) on all SIM cards in the affected Subscription Group.	None
		Disable SMS (local inbound, local outbound, inbound roaming, outbound roaming, international outbound) on all SIM cards in the affected Subscription Group.	None
		Disable Data (local, roaming) on all SIM cards in the affected Subscription Group.	None
		Disable all Services (data, voice, SMS) on all SIM cards in the affected Subscription Group.	None
	Change all SIM cards in the affected Subscription Group to another Customer Subscription Group		Subscription group

#### 10.2.1.4 Step 4: Select notification channels

It allows you to indicate the ways in which Kite will notify alarm events as well as to establish their level of severity.



The screenshot shows the 'Alarm rule detail' page in the Kite Platform. The top navigation bar includes 'Kite Platform', 'Alarms', 'Rules', and user icons for 'My', 'FireCallCenter', and 'Kite'. The main header is 'Alarm rule detail'. Below it, there are four tabs: 'Entity to monitor' (SIM), 'Alarm criteria' (Lifecycle state change), 'Automatic actions' (Disable data service), and 'Notifications' (Kite web portal). The 'Automatic actions' tab is active. Under 'Entity to monitor', there are four checkboxes: 'Web mail portal' (checked), 'eMail' (unchecked), 'Push API' (unchecked), and 'SNMP' (unchecked). To the right, under 'Notifications: Severity and Recipients', there is a 'Severity' dropdown with three options: 'Informative' (grayed out), 'Urgent' (selected and highlighted in blue), and 'Critical' (grayed out). A note below says 'Assign a severity to the alarm and complete the list of recipients if necessary.' A callout box contains the following text: 'Configure the endpoint in the PUSH API configuration section, on the Customer's profile page, accessible from the "Commercial Management" module. Contact your service provider to configure your SNMP endpoint.'

- **Severity**, can take the following values from lowest to highest criticality: "Informative", "Urgent" and "Critical". It is the responsibility of the user setting the rule to decide the value of this field.
- **Notification channels** can be: Portal, Push API, Email, SMS, SNMP.

**⚠** Phone numbers for SMS notifications must be in international format (34xxxxxxxxx). The + symbol is not allowed and 0034 is also invalid.

**⚠** Selecting an automatic action makes notification mandatory in the Portal.



SMS notifications will not be available in the following cases:

1. When the entities "SIMs of a Subscription Group" and "SIMs of a Supervision Group" are selected.
2. When the Customer has not contracted the supplementary service "Application outgoing SMS " (see section [Configuration of supplementary service availability](#) for more information).



In order to make use of notifications via PUSH API, the customer must configure the endPoint at the customer configuration level. If a Customer does not have such an endpoint configured, they will not be able to activate that notification method.

If you select to notify by SMS and/or Email, you must indicate the list of email recipients and/or telephone number to whom you want to notify the alarm events generated.

Notify the alarm through these channels:

- Kite web portal
- eMail
- SNMP
- Push API

**Notifications: Severity and Recipients**

Assign a severity to the alarm and complete the list of recipients if necessary.

Severity	<input type="radio"/> Informative	<input checked="" type="radio"/> Urgent	<input type="radio"/> Critical
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eMail recipients

+

foo@foo.com

X

foo2@foo.com

X



Each alarm rule can have its own list of Email and SMS recipients.

#### 10.2.1.4.1 *Detail of the email notification message*

The following is the format of the email notification messages that Kite Platform can send according to the type of entity selected in Step 1 of creating the alarm rule:

Entity to monitor	Message syntax	Values
SIMs of a Subscription Group	Kite PLATFORM ALARM. SEVERITY=\$SEVERITY. ALARM_RULE_NAME=\$ALARM_RULE_NAME. CAUSE=\$CONDITION_TYPE.	\$SEVERITY= {
SIMs of a Supervision Group	MSISDN=\$MSISDN. IMSI=\$IMSI. ALIAS=\$ALIAS. CUSTOM_FIELD_1=\$CUSTOM_FIELD_1. CUSTOM_FIELD_2=\$CUSTOM_FIELD_2. CUSTOM_FIELD_3=\$CUSTOM_FIELD_3. CUSTOM_FIELD_4=\$CUSTOM_FIELD_4.	INFORMATIVE CRITIC URGENT} \$ALARM_RULE_NAME={<Alarm rule name>}

Entity to monitor	Message syntax	Values
	<pre>CUSTOM_FIELD_4.CUSTOMER_NAME= \$CUSTOMER_NAME. CUSTOMER_ID= \$CUSTOMER_ID. SUBSCRIPTION_GROUP_NAME= \$SUBSCRIPTION_GROUP_NAME. SUBSCRIPTION_GROUP_ID= \$SUBSCRIPTION_GROUP_ID. SUPERVISION_GROUP_NAME=\$ SUPERVISION_GROUP_NAME.</pre>	<p>This name is assigned automatically by Kite.</p> <p><b>\$CONDITION_TYPE=</b></p> <ul style="list-style-type: none"> <li>EXPENSE MONTHLY VOICE 80%</li> <li>EXPENSE VOICE 100%</li> <li>EXPENSE SMS 80%</li> <li>EXPENSE SMS 100%</li> <li>EXPENSE DATA 80%</li> <li>EXPENSE DATA 100%</li> <li>EXPENSE TOTAL 80%</li> <li>EXPENSE TOTAL 100%</li> <li>CONSUMPTION DAILY VOICE 50%</li> <li>CONSUMPTION DAILY VOICE 60%</li> <li>CONSUMPTION DAILY VOICE 80%</li> <li>CONSUMPTION DAILY VOICE 90%</li> <li>CONSUMPTION DAILY VOICE 100%</li> <li>CONSUMPTION DAILY SMS 50%</li> <li>CONSUMPTION DAILY SMS 60%</li> <li>CONSUMPTION DAILY SMS 80%</li> <li>CONSUMPTION DAILY SMS 90%</li> <li>CONSUMPTION DAILY SMS 100%</li> <li>CONSUMPTION DAILY DATA 50%</li> <li>CONSUMPTION DAILY DATA 60%</li> <li>CONSUMPTION DAILY DATA 80%</li> <li>CONSUMPTION DAILY DATA 90%</li> <li>CONSUMPTION DAILY DATA 100%</li> <li>CONSUMPTION MONTHLY VOICE 50%</li> <li>CONSUMPTION MONTHLY VOICE 60%</li> <li>CONSUMPTION MONTHLY VOICE 80%</li> <li>CONSUMPTION MONTHLY VOICE 90%</li> <li>CONSUMPTION MONTHLY VOICE 100%</li> <li>CONSUMPTION MONTHLY SMS 50%</li> <li>CONSUMPTION MONTHLY SMS 60%</li> <li>CONSUMPTION MONTHLY SMS 80%</li> <li>CONSUMPTION MONTHLY SMS 90%</li> <li>CONSUMPTION MONTHLY SMS 100%</li> <li>CONSUMPTION MONTHLY DATA 50%</li> <li>CONSUMPTION MONTHLY DATA 60%</li> <li>CONSUMPTION MONTHLY DATA 80%</li> <li>CONSUMPTION MONTHLY DATA 90%</li> <li>CONSUMPTION MONTHLY DATA 100%</li> </ul>

Entity to monitor	Message syntax	Values
		LIFECYCLE STATE CHANGE SUPERVISION GPRS CONNECTION SUPERVISION GPRS DISCONNECTION SUPERVISION IP CONNECTION SUPERVISION IP DISCONNECTION SUPERVISION LOCATION CHANGE SUPERVISION IMEI CHANGE SUPERVISION ICC CHANGE SUPERVISION_NET_ATTACH_IN SUPERVISION_NET_ATTACH_OUT }
		\$MSISDN={<MSISDN number>}
		\$IMSI={<IMSI number>}
		\$ALIAS={<Alias field value of the SIM>}
		\$ CUSTOM_FIELD_X={<Custom field X value of the SIM>}
		\$CUSTOMER_NAME={<Customer name>}
		\$CUSTOMER_ID={<Customer Id>}
		\$SUBSCRIPTION_GROUP_NAME={<Subscription group name>}
		\$SUBSCRIPTION_GROUP_ID={< Subscription group Id>}
		\$ SUPERVISION_GROUP_NAME={< Supervision group name>}
Subscription group	Kite PLATFORM ALARM. SEVERITY=\$SEVERITY. ALARM_RULE_NAME=\$ALARM_RULE_NAME. CAUSE=\$CONDITION_TYPE. CUSTOMER_NAME= \$CUSTOMER_NAME. CUSTOMER_ID= \$CUSTOMER_ID. SUBSCRIPTION_GROUP_NAME= \$SUBSCRIPTION_GROUP_NAME. SUBSCRIPTION_GROUP_ID= \$SUBSCRIPTION_GROUP_ID.	\$SEVERITY= { INFORMATIVE CRITIC URGENT}  \$ALARM_RULE_NAME={<Alarm rule name>} This name is assigned automatically by Kite
		\$CONDITION_TYPE={ EXPENSE VOICE 80% EXPENSE VOICE 100% EXPENSE SMS 80% EXPENSE SMS 100% EXPENSE DATA 80% EXPENSE DATA 100%

Entity to monitor	Message syntax	Values
		EXPENSE TOTAL 80% EXPENSE TOTAL 100% }  \$CUSTOMER_NAME=<Customer name>  \$CUSTOMER_ID=<Customer Id>  \$SUBSCRIPTION_GROUP_NAME=<Subscription group name>  \$SUBSCRIPTION_GROUP_ID=<Subscription group Id>
Data pool	Kite PLATFORM ALARM. SEVERITY=\$SEVERITY. ALARM_RULE_NAME=\$ALARM_RULE_NAME. CAUSE=\$CONDITION_TYPE. SUBSCRIPTION_GROUP_NAME=\$SUBSCRIPTION_GROUP_NAME. SUBSCRIPTION_GROUP_ID=\$SUBSCRIPTION_GROUP_ID. TARIFF_ZONE_NAME=\$TARIFF_ZONE_NAME. TARIFF_DESTINATION_NAME=\$TARIFF_DESTINATION_NAME. CUSTOMER_NAME=\$CUSTOMER_NAME. CUSTOMER_ID=\$CUSTOMER_ID.	\$SEVERITY= { INFORMATIVE CRITIC URGENT}  \$ALARM_RULE_NAME=<Alarm rule name> This name is assigned automatically by Kite  \$CONDITION_TYPE=DATA POOL CONSUMPTION 100%  \$SUBSCRIPTION_GROUP_NAME=<Subscription group name>  \$SUBSCRIPTION_GROUP_ID=<Subscription group Id>  \$TARIFF_ZONE_NAME=<Tariff zone name>  \$ TARIFF_DESTINATION_NAME=<Tariff destination name>  \$CUSTOMER_NAME=<Customer name>  \$CUSTOMER_ID=<Customer Id>
APN	Kite PLATFORM ALARM. SEVERITY=\$SEVERITY. ALARM_RULE_NAME=\$ALARM_RULE_NAME. CAUSE=\$CONDITION_TYPE. CUSTOMER_NAME=\$CUSTOMER_NAME. CUSTOMER_ID=\$CUSTOMER_ID. THRESHOLD=\$THRESHOLD. APN=\$APN	\$SEVERITY= { INFORMATIVE CRITIC URGENT}  \$ALARM_RULE_NAME=<Alarm rule name> This name is assigned automatically by Kite  \$CONDITION_TYPE=APN_DROPPED_CONNECTIONS  \$CUSTOMER_NAME=<Customer name>  \$CUSTOMER_ID=<Customer Id>

Entity to monitor	Message syntax	Values
		\$THRESHOLD=<Configured threshold value>
		\$APN=<Selected APN value>

#### 10.2.1.4.2 PUSH API notifications in alarms

For PUSH API notifications for alarms, a JSON object will be sent with information about the alarm that has been opened and whose content is described next.

Title	Description	Format	Optional/Mandatory delivery
icc	ICCID of subscription raising the alarm	String	Optional
imsi	IMSI of subscription raising the alarm	String	Optional
msisdn	MSISDN of subscription raising the alarm	String	Optional
eid	EID of subscription raising the alarm, only in case of eUICC	String	Optional
customerId	Customer ID - owner of the subscription raising the alarm	String	Mandatory
date	Timestamp when the alarm was raised in UTC. Example: 2014-03-14T14:08:46Z	String	Mandatory
name	Opened alarm rule name.  (See the table below for a description of the values this field can take)	String	Mandatory
severity	Opened alarm severity. Can be:  "INFORMATIVE", "URGENT" o "CRITICAL".	String	Mandatory
customerName	Name of the client associated with the element that raises the alarm.	String	Mandatory
supervisionGroupName	Name of the supervision group in case the alarm is associated with the type of universe "SIMs pertenecientes al Grupo de Supervisión"	String	Optional
alias	Alias de la suscripción en caso de que la alarma este asociada al tipo de universo "SIMs pertenecientes al Grupo de Supervisión" o "SIMs belonging to a supervision group"	String	Optional
customField1, customField2, customField3, customField4	Optional fields in case the alarm is associated with the type of universe "SIMs belonging to a subscription group" o "SIMs belonging to a supervision group"	String	Optional

The *name* field describes the alarm rule that has been triggered. This is the mapping of the additional fields for each rule:

<i>name</i> field value	Description	Additional fields
-------------------------	-------------	-------------------

(see the table below for a description of these fields)

"GPRS_CONNECTION"	GPRS data connection, universe type "SIMs belonging to a supervision group".	presence, address, additionalAddress, apn, cgi.
"GPRS_DISCONNECTON"	GPRS data disconnection, universe type "SIMs belonging to a supervision group".	presence, address, additionalAddress, apn, cgi.
"IP_CONNECTION"	SIM IP connection, universe type "SIMs belonging to a supervision group".	presence, address, additionalAddress, apn, cgi.
"IP_DISCONNECTON"	SIM IP disconnection, universe type "SIMs belonging to a supervision group".	presence, address, additionalAddress, apn, cgi.
"LOCATION_CHANGE"	SIM location change, universe type "SIMs belonging to a supervision group".	previousLatitude, previousLongitude, previousPostalCode, newLatitude, newLongitude, newPostalCode.
"IMEI_CHANGE"	IMEI change of the communications module, universe type "SIMs belonging to a supervision group".	previousIMEI, previousManufacturer, previousModel, newIMEI, newManufacturer, newModel.
"OPERATOR_ATTACH-\$nombre_de_la_lista"	Attach an operator to a list defined in the alarm, universe type "SIMs belonging to a supervision group".	previousOperator, newOperator.
"OPERATOR_DETACH-\$ nombre_de_la_lista "	Deattach an operator from a list defined in the alarm, universe type "SIMs belonging to a supervision group".	previousOperator, newOperator.
"LIFECYCLE_CHANGE"	Life cycle change, universe type "SIMs belonging to a subscription group".	previousLifecycleStatus, newLifecycleStatus.
"EXPENSE_LIMIT"	Expense limit / threshold, universe type "SIMs belonging to a subscription group".	expenseType, thresholdReached.
"CONSUMPTION_THRESHOLD"	Consumption threshold, universe type "SIMs belonging to a subscription group".	consumptionType, frequency, thresholdReached.
"COMMERCIAL_GROUP_THRESHOLD"	Subscription group expense threshold, universe type "Subscription group".	commercialGroupName, commercialGroupId, expenseType, thresholdReached.
"POOL CONSUMPTION"	Pool consumption threshold, universe type "Data pool"	commercialGroupName, commercialGroupId, consumptionType, thresholdReached, tariffZoneName, tariffDestinationName

Next, each one of the "Additional fields" above mentioned is described:

Title	Description	Format
presence	Line presence status. Same values as in API to manage the inventory.	String
address	Current IP of the SIM.	ipv4/ipv6
additionalAddress	Additional IP in case of an ipv4v6 session.	ipv6
apn	Current APN of the SIM.	String

cgi	CGI during session (Cell Id).	String
previousLatitude	Last saved latitude of the SIM.	Float
newLatitude	SIM latitude raising the alarm.	Float
previousLongitude	Last saved longitude of the SIM.	Float
newLongitude	SIM longitude raising the alarm.	Float
previousPostalCode	Last saved ZIP Code.	String
newPostalCode	ZIP code returned by the Spain location service raising the alarm.	String
previousIMEI	Last IMEI of the communication module saved.	String
newIMEI	IMEI of the communication module raising the alarm.	String
previousManufacturer	Last Manufacturer Name (taken from IMEI) saved before raising alarm.	String
newManufacturer	Manufacturer's name stored raising the alarm.	String
previousModel	Last IMEI Model saved before raising the alarm.	String
newModel	IMEI model stored raising the alarm.	String
previousOperator	Last Operator saved before raising the alarm.	String
newOperator	Operator saved raising the alarm.	String
previousLifecycleStatus	Last saved lifecycle state before raising the alarm: "INACTIVE_NEW", "TEST", "ACTIVATION_PENDANT", "ACTIVATION_READY", "DEACTIVATED", "ACTIVE", "SUSPENDED", "RETIRED".	String
newLifecycleStatus	Life cycle status raising the alarm: "INACTIVE_NEW", "TEST", "ACTIVATION_PENDANT", "ACTIVATION_READY", "DEACTIVATED", "ACTIVE", "SUSPENDED", "RETIRED".	String
expenseType	Expense type. Possible values: "VOICE", "SMS", "DATA", "TOTAL"	String
thresholdReached	Expense, consumption or APN connections threshold: <ul style="list-style-type: none"><li>- Threshold possible values: "50%", "60%", "80%", "90%", "100%".</li><li>- Expense possible values: "80%", "100%".</li><li>- APN connections threshold: configured value.</li></ul>	String
consumptionType	Possible values: "VOICE", "SMS", "DATA"	String
frequency	Counter type of threshold reached. Consumption possible values: "DAILY", "MONTHLY". In the case of expense threshold, it is always: "MONTHLY"	String
commercialGroupName	Subscription Group name	String
commercialGroupId	Subscription Group Id	String
tariffZoneName	Name of the tariff zone associated with a pool alarm event. This name is part of the pool name: commercialGroupName – tariffZoneName – tariffDestinationName.	String

tariffDestinationName	Name of the tariff destination associated with a pool alarm event. This name is part of the pool name: commercialGroupName – tariffZoneName– tariffDestinationName.	String
-----------------------	---	--------

Example of PUSH API notification for a GPRS connection alarm:

```
{
    "icc" : "8934076400003813993",
    "imsi" : "214074302591999",
    "msisdn" : "345901012148597",
    "cgi" : "214-07-2818-3342",
    "customerId" : "EU_PRUEBA_VT174c015ffcbcOfSGcaKFF6",
    "eid" : "",
    "date" : "1615007188000",
    "name" : "GPRS_CONNECTION",
    "severity" : "CRITICAL",
    "presence" : "GPRS",
    "address" : "10.161.179.130",
    "additionalAddress" : "",
    "apn" : "m2mtrial.telefonica.com",
    "customerName" : "EU_PRUEBA_VT",
    "supervisionGroupName" : "GS_Monitorizacion",
    "alias" : "OTRO",
    "customField1" : "CIF",
    "customField2" : "Producto",
    "customField3" : "Subcategoria",
    "customField4" : "JAVI"
}
```

Example of PUSH API notification for a reaching the consumption threshold alarm. In the following example, a SIM belongs to a subscription group that reach to an individual consumption threshold. In this case, the SIM alarm is the half of the monthly threshold (50% of the 100Mb established threshold):

```
{
    "icc" : "8934076400003813993",
    "imsi" : "214074302591929",
    "msisdn" : "345901012148557",
    "customerId" : "EU_PRUEBA_VT174c015ffcbcOfSGcaKFF6",
    "eid" : "",
    "date" : "1615030915995",
    "name" : "CONSUMPTION_THRESHOLD",
    "severity" : "INFORMATIVE",
    "thresholdReached" : "50%"}
```

```
"consumptionType" : "DATA",
"frequency" : "MONTHLY",
"commercialGroupName" : "SG_PRUEBA_VT",
"commercialGroupId" : "49158",
"customerName" : "EU_PRUEBA_VT",
"alias" : "Alias de Javi",
"customField1" : "CIF",
"customField2" : "Producto",
"customField3" : "Subcategoria",
"customField4" : "JAVI"
}
```

**Example of PUSH API notification for IMEI change alarm:**

```
{
  "icc" : "8934076400003813993",
  "imsi" : "214074302591999",
  "msisdn" : "345901012148597",
  "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",
  "eid" : "",
  "date" : "1615011807000",
  "name" : "IMEI_CHANGE",
  "severity" : "CRITICAL",
  "previousImei" : "860922044840506",
  "newImei" : "353490068418132",
  "newManufacturer" : "LG Electronics Inc.",
  "newModel" : "Nexus 5",
  "previousManufacturer" : "SIMCOM Wireless Solutions Co Ltd",
  "previousModel" : "SIM800C",
  "customerName" : "EU_PRUEBA_VT",
  "supervisionGroupName" : "GS_Monitorizacion",
  "alias" : " Alias PEPE",
  "customField1" : "CIF",
  "customField2" : "Pro",
  "customField3" : "Sub",
  "customField4" : "JAVI"
}
```

**Example of PUSH API notification for location change alarm:**

```
{
  "icc" : "8934076400003813993",
  "imsi" : "214074302591999",
  "msisdn" : "345901012148597",
```

```
"customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",
"eid" : "",
"date" : "1615007188000",
"name" : "LOCATION_CHANGE",
"severity" : "URGENT",
"previousLatitude" : "40.512299",
"previousLongitude" : "-3.608638",
"previousPostalCode" : "28109",
"newLatitude" : "40.50325",
"newLongitude" : "-3.597825",
"newPostalCode" : "28108",
"customerName" : "EU_PRUEBA_VT",
"supervisionGroupName" : "GS_Monitorizacion",
"alias" : "OTRO ",
"customField1" : "CIF",
"customField2" : "ProductoTal",
"customField3" : "SubcategoriaTal",
"customField4" : "Javi"
}
```

Example of PUSH API notification for a SIM attachment alarm (attachment to a network operator defined in a specific list of operators):

```
{
"icc" : "8949226193904208499",
"imsi" : "262075690040849",
"msisdn" : "4917699945539",
"customerId" : "Pepe_Juan_y gotilio_fdsfd4335348",
"eid" : "",
"date" : "1615213789971",
"name" : "OPERATOR_ATTACH-Vodafone",
"severity" : "INFORMATIVE",
"previousOperator" : "21403",
"newOperator" : "21401",
"customerName" : " Pepe_Juan_y gotilio",
"supervisionGroupName" : "default_group",
"alias" : "MyAlias",
"customField1" : "pepe",
"customField2" : "",
"customField3" : "",
"customField4" : ""
}
```

Example of PUSH API notification for data pool alarm:

```
{  
    "customerId" : "Customer_pushAPI16a58ced1b32nMsvtcmk8O",  
    "date" : "1700204537978",  
    "name" : "POOL CONSUMPTION",  
    "severity" : "INFORMATIVE",  
    "thresholdReached" : "100%",  
    "consumptionType" : "DATA",  
    "commercialGroupName" : "GS_dia20",  
    "commercialGroupId" : "300407",  
    "customerName" : "Customer_pushAPI",  
    "tariffZoneName" : "Default",  
    "tariffDestinationName" : "OTHERS"  
}
```

Example of PUSH API notification for APN dropped connections alarm:

```
{  
    "customerId" : "Customer_pushAPI16a58ced1b32nMsvtcmk8O",  
    "date" : "1700204537978",  
    "name" : "APN_DROPPED_CONNECTIONS",  
    "severity" : "INFORMATIVE",  
    "thresholdReached" : "200000",  
    "customerName" : "Customer_pushAPI",  
    "apn": "m2mtrial.telefonica.com"  
}
```

## Communications security

To use this functionality, a public server must be available on the internet to be able to send these notifications. The characteristics that this server must meet are:

- Must implement SSL
- The certificate presented by the server must be signed by a trusted certificate authority (Verisign, DigiCert ...). If not, the connection is rejected.
- The server should establish the connection in less than a second.
- Kite will not apply any retry policy (In case of a timeout connection or the server response arrives in less than 3 seconds).

In order that the server can validate the source of communications, Kite sends the HTTP Authorization header. This header contains a signature based on the content of the message and the Authentication Token field that the Customer configures in Kite in the PUSH API & Cloud connector.

Kite uses an HMAC function to calculate the Authorization header. Process is described here:

```
DateKey = HMAC-SHA256("KITE" + <secretAccessKey>, "yyyyMMddHHmmss")
signature = Hex(HMAC-SHA256(DateKey, JSONPayload))
```

- **secretAccessKey:** the authentication token that the client configures in Kite.
- **yyyyMMddHHmmss:** HTTP Date header in format yearmonthday24hourminutesecond (e.g.: 20230512183403).
- **JSONPayload:** Json received in the notification..
- **signature:** it is the value sent in the Authorization header.
- **Below is an example of calculating the push-api key in PHP:**

```
// Variable initialization example
    $date = "20230302131415";
    $secretAccessKey = "authToken";
    $body = "{\"icc\": \"icc\"}";

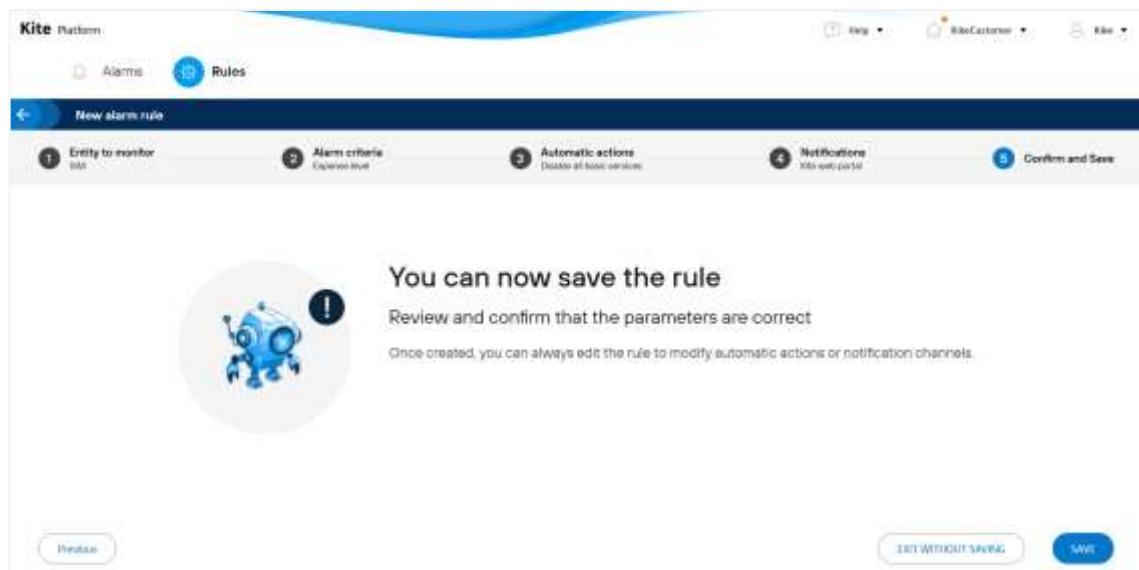
// Key calculation
    $dateKey = hash_hmac('sha256', $date, "KITE".$secretAccessKey, true);
// The value of the dateKey variable in the case of passing it to hex
// (bin2hex($dateKey)), at this point, would be:
//"d5980da7b13bb03d7dd2f47526b187205ffd8a10263b743bcecbc5f2c61dfa8e"
    $authorization = hash_hmac('sha256', $body, $dateKey);
// Salida
    return $authorization;
```

The result (the value of \$authorization) should be:  
"96f349fb76dcaadb7270fba5f831e503ddc1d559cf22e6a68a2da3eebb374d85"

#### **10.2.1.5 Step 5: Confirm and create the new alarm rule**

The last step allows you to save the configuration and effectively create the alarm rule.

The top bar shows a summary of the parameters performed in each step.



 It is possible to directly access a specific step for editing by clicking with the mouse on the top step bar of the alarm rule.

### 10.2.2 List of alarm rules

The list of alarm rules is organized into two sections: a panel with a summary of the number of existing rules type and a list with the details of each of the rules created.

Kite Platform

Alarms Rules

Total: 25 Rules of alarm Entity Type: Subscription Group: 3 APN: 2 Pool: 6 SIM: 14

Search for rules affecting a SIM

Show: 10 Max per page: 10-25 > 25 Table actions + CREATE RULE

Alarmed event	Which entity?	Scope	Severity	Actions	Notifications
Attach to network list	SIM	of the supervision group otro_gi	Informative	Yes (1 Action)	Email API
SIM Change	SIM	of the supervision group cloud_connector	Urgent	None	SNMP Email API
Location Change	SIM	of the supervision group cloud_connector	Critical	None	Email API
GPRS Connection	SIM	of the supervision group cloud_connector	Informative	None	Email API
Attach to account list	CMS	of the account manager	Information		

### Summary and filtering pane by rule type

Total: 25 Rules of alarm Entity Type: Subscription Group: 3 APN: 2 Pool: 6 SIM: 14

Search for rules affecting a SIM

This panel shows the total number of rules created as well as how many of each type there are. By clicking on the icon filtering is performed in the table with the list of rules.

### Find rules that affect a SIM

Through the icon it is possible to locate the alarm rules in which the SIM participates with the ICC, MSISDN or IMSI entered.

Alarms Rules

Total: 25 Rules of alarm Entity Type: Subscription Group: 3 APN: 2 Pool: 6 SIM: 14

ICCID, MSISDN, IMSI: 89340743000015011

Show: 10 Max per page: 10-25 > 25 Table actions + CREATE RULE

Alarmed event	Which entity?	Scope	Severity	Actions	Notifications
Lifecycle state change	SIM	of the subscription group gp_pool_state	Critical	None	

## Table with the list of rules

Showing All rules		Number of rules to display Max per page: 10		Table actions			
Alarmed event	Which entity?	Scope	Severity	Actions	Notifications		
Attach to network list	SIM	of the supervision group kite_2g	Information	No (1 Act...)			
IMEI Change	SIM	of the supervision group cloud_connector	Urgent	None			
Location Change	SIM	of the supervision group cloud_connector	Critical	None			
GRIS Connection	SIM	of the supervision group cloud_connector	Information	None			
Mobile connection lost	SIM	of the supervision group cloud_connector	Information	No			

The alarm rule list displays the following information according to the parameters defined when you created the alarm rule.

Column Name	Description	Does it support filtering?
Alarmed event	Indicates the condition configured in Step 2 of the alarm rule creation (see <a href="#">Creating alarm rules</a> for more details) and that if satisfied it will generate an alarm.	Yes
Which entity?	Indicates the type of element that triggers the alarm associated with the rule. The section <a href="#">Step 1: Selecting the entity to monitor</a> includes a table with the different entities that exist for each type of organization and the related events that can be configured.	Yes
Scope	Indicates the set of entities that Kite monitors. It is especially relevant in alarm rules on SIM entities. In this case, this column indicates the subscription or monitoring group that Kite monitors.	Yes
Severity	It can be Informative, Urgent or Critical.	Yes
Actions	Shows whether or not the rule has automatic actions configured, and if it does, how many have been configured. By placing the mouse over the information icon, a list is displayed with the name of the different configured actions.	Yes
Notifications	The corresponding icon indicates which alarm notification channels have been enabled for the rule. Each icon has an associated tooltip explaining the type of notification.	Yes



The information will be filtered by positioning itself over the icon in each column.

## Actions on the Alarm Rule Listing

Each column of the list allows you to filter the contents of the table. In addition, it is possible to export it to Excel or CSV file, as well as to organize the location of columns and their visibility.



Both the visibility and location of a column will be maintained between user sessions.

### 10.2.3 Editing and deleting alarm rules

From the list of alarm rules itself, the icons  and  allow you to delete a rule and access its detail for editing, respectively.



All parameters of a rule are modifiable except for those in step 1.

## 10.3 Monitoring alarms

Access to the alarm monitoring is done through the "Alarms" menu.



### 10.3.1 List of alarms

The list of alarms is organized into two sections: a summary panel with the type of existing alarms and a list with the details of each of them.

Showing		Alarms to Show				Table actions	
Open Alarms		Max per page: 10					
Severity	Date/Time	Entity Type	Alarmed Entity	Alarmed event	Actions	Attended	
Informative	2024-11-05 00:47:00	SIM	34717040151	Data traffic threshold ...			
Informative	2024-11-05 06:47:05	SIM	34717040151	Bdry data traffic thres...			
Informative	2024-11-05 09:40:50	SIM	34717040151	GPRS session connecti...			
Informative	2024-11-05 04:00:01	APN	apple.4g.co.jp/wifi	Drop of simultaneous ...			
Informative	2024-10-19 05:20:00	APN	abc	Drop of simultaneous ...			

### Summary and filtering panel by alarm type

Total		Attendance Level				Severity				Entity Type			
5 Alarms open		● Attended		○ Not Attended		● Critical		○ Urgent		● Informative		● SIM	
		0		5		0		0		5		3	

This panel shows the total number of alarms created as well as how many there are of each type according to different criteria, such as Attendance level, Severity and Entity type. By clicking on the icon , it is possible to filter the list of alarms by the desired criteria.



The number of critical alarms is also displayed on the access icon  to the alarms section.

## Table with the list of alarms

Showing		Alarms to Show					Table actions	
Open Alarms		Max per page		1-5 of 5				
Severity	Detection	Entity Type	Alarmed Entity	Alarmed event	Actions	Attended		
Information	2024-11-05 06:47:05	SIM	34711040151	Data traffic threshold...				
Information	2024-11-05 06:47:05	SIM	34711040151	Daily data traffic thre...				
Information	2024-11-05 06:46:59	SIM	34711040151	GPRS session connecti...				
Information	2024-11-05 04:20:11	APN	apn-test-1.apn-1	Drop of simultaneous...				
Information	2024-10-19 05:20:00	APN	abc	Drop of simultaneous...				

The alarm list shows the following information.

Column Name	Description	Does it support filtering?
Severity	Indicates the level of alarm severity as configured in the associated rule.	Yes
Detection	Date and time when the alarm was issued.	Yes
Entity Type	Indicates the type of entity that triggered the alarm. In the section <a href="#">Step 1: Selecting the entity to be monitored</a> , a table is included with the different entities that exist for each type of organization.	Yes
Alarmed entity	Indicates the specific entity that generated the alarm. In the case of a SIM, the MSISDN is indicated and the icon  is a hyperlink to the SIM detail.	Yes  ⚠ If the list contains several types of entity, it will be necessary to filter by one of them before being able to use this filter.
Alarmed event	Indicates the condition that generated the alarm and that was configured in Step 2 of the alarm rule creation (see <a href="#">Creating alarm rules</a> for more details).	No
Actions	Shows whether or not the alarm has automatic actions configured, and if it does, how many have been configured. By clicking with the mouse on the icon  , a list is displayed with the name of the different actions executed.	Yes
Attended	It shows whether or not the alarm has been answered and if it has been, the number of services provided. By clicking with the mouse on the icon  , a list of the different services carried out is displayed.	Yes



The information will be filtered by positioning itself over the icon  in each column.



⚠ Kite will automatically delete alarms older than 31 days and, therefore, only open alarms from the last month can be consulted.

**⚠️** The list of alarms does not include, in any case, those corresponding to spending limits or consumption thresholds for outgoing roaming calls made by Non-CAMEL operators, since there is no record of the consumption and expenditure in real time of this type of calls.

Depending on the type of entity selected in the alarm rule, the monitoring and generation of alarms will be carried out at different points in time:

Entity Type	Monitoring and alarm generation
SIMs of a Subscription Group	Every 10 minutes
SIMs of a Monitoring Group	Every 10 minutes
Subscription group	Every hour (*)
Data Pool	Hourly
APN	Hourly

(\*) The spend may exceed the spend threshold configured at the time of alarm generation.

### 10.3.2 Alarm closing

Alarms can be closed on Kite in three ways:

- Manually by a user. The user who closes the alarm and the time of closing will be saved as alarm data.
- Automatically when the alarm rule condition is no longer satisfied. The automatic closing of an alarm only applies to open unattended alarms.
- By expiration, as specified in the following table in the "Alarm expiration" column. Closing an alarm due to expiration only applies to open alarms that are not attended.

Entity Type	Alarmed event	Alarm expiration
SIMs of a Subscription Group	The expense of [voice   SMS   Data   total] of the SIM has exceeded its limit.	End of billing cycle / change of limit to a higher value.
	The expense of [voice   SMS   Data   total] of the SIM has exceeded its approximation threshold	End of billing cycle.
	Monthly traffic from [voice   SMS   data] of the SIM has exceeded its threshold of [50%   60%   80%   90%   100%]	End of billing cycle / change of threshold from 100% to a higher value.
	Daily traffic from [voice   SMS   data] of the SIM has exceeded its threshold of [50%   60%   80%   90%   100%]	3 days
	Monthly traffic from [voice   SMS   data] on the SIM has not reached the minimum consumption set.	None

Entity Type	Alarmed event	Alarm expiration
	Daily traffic from [voice   SMS   data] on the SIM has not reached the minimum consumption set.	None
	SIM status has changed	5 days (default, can be modified via the "Timeout" field).
SIMs of a monitoring group	[Connection   Disconnection] GPRS	None
	[Connection   IP Disconnection] IP	None
	Change of location  ⚠ The location change alarm is not based on the <i>Geo-fence concept</i>	None
	Change of IMEI	None
	Register [inside outside] the list of networks	None
Subscription group	The spending of [vox   SMS   Data   Subscription Group] has exceeded its threshold	End of billing cycle / change of threshold to a higher value.
Data Pool	The pool's data consumption has reached [50%   70%   80%   90%   100%]	End of billing cycle / increase in pool size.
	Pool at risk of surplus	End of billing cycle
APN	The number of simultaneous connections has dropped below a threshold	None

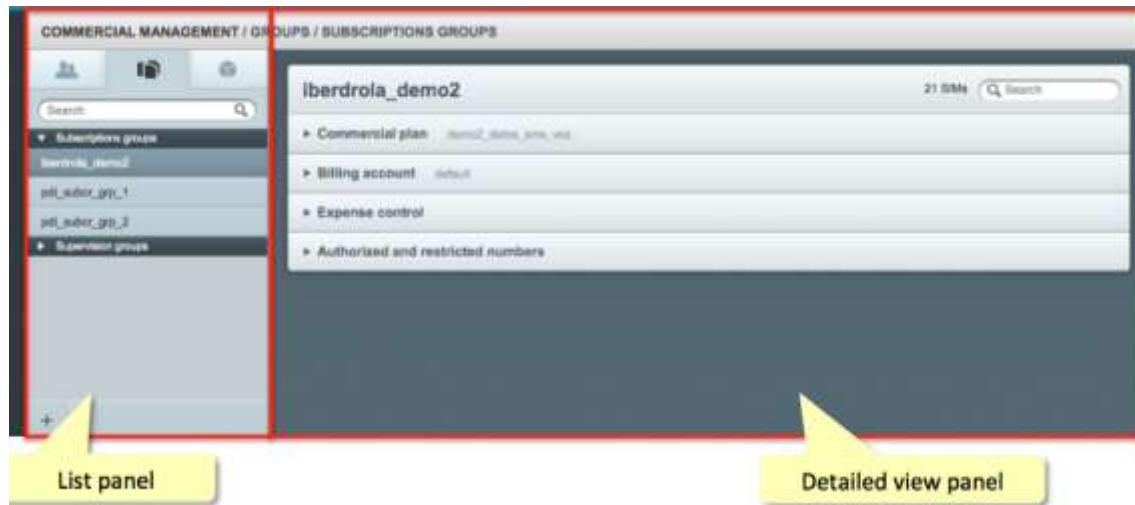
## 11 Commercial management

### 11.1 General aspects

The commercial management module, which can be accessed through the icon, , allows access to the following functionalities:

- Management of End Customers and my own organisation
- Configuration of Subscriptions groups
- Consulting commercial plans available

Each one of these functionalities is available through the corresponding tab on the organisations list left panel.



The left panel always shows a list of elements with the options create, erase or search, depending on each particular case.

The right panel always shows details on the selected element, allowing changes on the information displayed.

 The view and modification options are not always available for all users and depend upon the assigned user profile.

### 11.2 Organisations administration

#### 11.2.1 End Customer data

End Customer organisations are made up of a set of attributes grouped in the following blocks.

- Basic information.

- Addresses.
- Contacts.
- Certificate management for API Kite
- Bulk operations authorization flow

Such set of attributes is described below:

#### **11.2.1.1 Basic information**

Attribute	Mandatory	Editable by End Customer	Description
Account name	✓	✓	Organisation name as appears in Kite Platform's interface.
Default language	✓	✓	This field is not currently used in the Kite Platform
Company type (not visible for End Customers)	✓	✓	Determines the company type among available values.
Sector (not visible for End Customers)	✓	✓	Determines the company sector among available values.
Custom fields		✓	Name values for each custom field. For further details of custom fields, see section <a href="#">Customizable fields of a SIM card</a> .
Verification code		✓	When enabled, all Customer's users will be required double authentication (see section <a href="#">Login with two factor authentication</a> for more information). By default, it will be activated when creating the organisation.
Network reset access			When enabled, it allows End customers to perform a network reset (Cancel location) over a SIM (see section <a href="#">Executing a network reset (Cancel location)</a> for more information). By default, it will be disabled.

#### **11.2.1.2 Addresses**

Attribute	Mandatory	Editable by End Customer	Description
Company address	✓	✓	Determined by several fields (address, city, country, postal code and region).
Shipping address	✓	✓	Order delivery address. Can be the same as the company address.
Billing address	✓	✓	Can be the same as the company address.

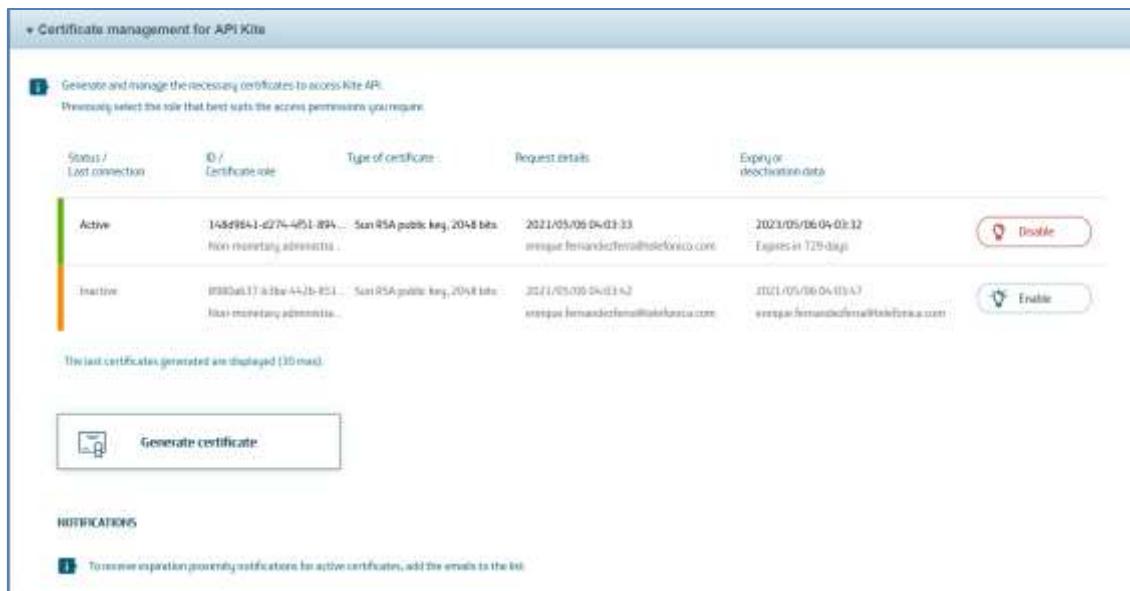
### 11.2.1.3 Contacts

Attribute	Mandatory	Editable by End Customer	Description
Default contact	✓	✓	Data of the person taken as main contact of the company.
Other contacts		✓	Up to three contacts can be added as maximum.

### 11.2.1.4 Certificate Management for API Kite

From this section it will be possible to generate certificates for End Customer API and carry out their subsequent management (disable and delete certificates).

All users, with the appropriate role, belonging to the same organisation as the user who generated the certificate, can manage it.



The screenshot shows a list of certificates:

Status / Last connection	ID / Certificate role	Type of certificate	Request details	Expiry or description date	
Active	1452984-1-0274-4051-894... Non-monetary administrator	512 RSA public key, 2048 bits	2021/05/05 04:03:33 enrique.fernandezfernandez@telefonica.com	2021/05/06 04:03:32 Expires in 729 days	<button>Disable</button>
Inactive	1452984-1-0274-4051-894... Non-monetary administrator	512 RSA public key, 2048 bits	2021/05/05 04:03:33 enrique.fernandezfernandez@telefonica.com	2021/05/06 04:03:32 Expires in 729 days	<button>Enable</button>

Below the table, there is a button labeled "Generate certificate" and a section titled "NOTIFICATIONS" with a note about receiving expiration priority notifications.

Attribute	Mandatory	Editable by End Customer	Description
Status / Last connection			A certificate can be in the following states: "Active", "Inactive" or "Expired".  It also indicated the approximate time elapsed since the last time a connection was made with that certificate.
ID / Certificate role			Identifier: Unique ID of the certificate.  Certificate role: can be "Administrator", "Non-monetary administrator", "Read only" or "Non-monetary read only". This parameter is chosen when generating the certificate.
Type of certificate			Encryption algorithm.

Request details			Date and time when the certificate was generated and the email of the user who generated it.
Expiry or deactivation date			Indicates the date on which the certificate will expire or was deactivated
Action button		✓	The following actions are allowed on a certificate: "Enable": only on deactivated certificates. "Disable": only on active certificates. "Delete": only on certificates that have expired or have been deactivated for more than 30 days.
Generate certificate		✓	Clicking on this button will start the generation and download of the certificate (.pfx file) on the user's machine.  The user will receive an email with the password of the generated certificate.
Notifications		✓	Allows defining the email addresses to which notifications of certificates about to expire will be sent, 90, 30, 15, 7, 3, 2, and 1 day before.  The user who generated the certificate will always receive these emails even if they have not been included in the email list.

The list of certificates will be ordered according to the following criteria:

1st: The first active certificates to expire.

2nd: Last certificates deactivated.

3rd: Last expired certificates.



Only up to 30 certificates can be generated per organisation.



Kite does not store the generated certificates, so if the user misplaces a certificate, he/she will have to generate another one.

#### 11.2.1.5 Kite API access IP management

From this section you can configure the access IPs to the Kite API. By default, the Kite API will be accessible from any IP on the Internet.

▼ IP access management

This section allows granting API access only to a set of IPs. When empty grants access to any external IP.

Network:	Mask:	+
0.0.0.0	0.0.0.0	

 The source network 0.0.0.0 with mask 0.0.0.0 identifies any public IP on the Internet.

The user can add filtering by source IP network (made up of network and mask). When adding the first entry Kite will reject any request whose origin does not belong to the specified network.

Network 0.0.0.0/0.0.0.0 disappears the moment the user enters the first entry to apply filtering by source IP. When the user deletes all entries then the network 0.0.0.0/0.0.0.0 is implicitly reconfigured.

#### 11.2.1.6 Bulk operations authorization flow

In the authorization flow section for bulk operations, it will be possible to configure the rules to apply to the flow when a user launches operations in the Customer's inventory.

The set of operations that are subject to this flow are:

- Deactivate lines
- Disable SMS/Voice/Data
- Change consumption limits

Attribute	Mandatory	Editable by End Customer	Description
Activation of the authorization flow	✓	✓	Indicates the status of the authorization flow for this organization.
Limit threshold		✓	Threshold of lines from which the authorization flow is applied for an operation subject to the authorization flow. It can be indicated in a nominal amount or in a percentage.

Responsible for the authorization		✓	Organization responsible for carrying out the authorization.
-----------------------------------	--	---	--

 The Customer or End Customer cannot delegate authorisation to a higher-level organisation or assume authorisation if it is delegated to a higher-level organisation.

 The End Customer will not be able to deactivate the authorization flow if their inventory exceeds the default threshold configured at the Service Provider level.

 The End Customer may not set a threshold higher than the default threshold configured at the Service Provider level.

### 11.2.2 My organisation data

A Customer organisation is made up of a set of attributes grouped in the following blocks.

- Basic commercial plans.
- Supplementary commercial plans.
- Basic information.
- Discounts and Taxes.
- Primary, billing and authorization contact person.
- Shipping address.
- Default and additional billing account.
- Expense thresholds.
- Time/data voucher.
- IMEI filtering.
- LTE.
- Incoming SMS filtering.
- LPWA – Battery saver
- IoT PAT – Internet reachable devices
- APN setup.
- Default APN
- Commitment levels.
- Terms of use
- API-E2E applications.

- Bulk operations authorization flow
- eSIM information.
- Whitechip activation notifications.

Next, each one of the previous blocks is described.

#### **11.2.2.1 Basic Commercial plans**

Contains the list of Basic services Commercial plans distributed to the customer represented by the image of a cube.



Clicking on a cube gives access to the details of the Commercial plan.

#### **11.2.2.2 Supplementary commercial plan**

It shows the commercial plan of supplementary services distributed to the customer represented by the image of a cube.



Clicking on a cube gives access to the details of the Commercial plan.

#### **11.2.2.3 Basic information**

Attribute	Editable	Description
Account name		Organisation name, as it will be shown in the Kite Platform interface.
Default language	✓	It identifies the language that will be used in the Customer organisation level in the Kite Platform. For example, the language of the pre-bill invoices of the Customer.

Scheduled billing cycle day		Day of month in which a new billing cycle will be scheduled. This field value will only apply at Billing account level (see Billing Account parameters below in this section).
Time zone		Time offset according to GTM +0 for proper interpretation of the dates and times at the Customer level. It is used for the proper interpretation of the billing cycle start.
Currency		Sets the currency with which the Customer will work in the Kite Platform. For example, he will only have available commercial plans defined in its same currency. The pre-bill invoices will be presented in the set currency.  This parameter cannot be modified if the Customer has already been assigned any commercial plans.
Charging type		Charging model a Customer is going to work with. Currently it takes the "online" value only.
Company address	✓	Determined by several fields (address, city, country, zip code and region).
OB CRM information	✓	Customer identifiers in the operator CRMs ("Customer ID in provider 1 CRM" and "Customer ID in provider 2 CRM." This field will appear in the pre-bill invoices Customer data.
Customizable fields	✓	Name values of each customizable field. See section <a href="#">Customizable fields of a SIM card</a> for further details on customized fields.
Monthly fees for SIM status		Monthly cost per SIM card being in "Inactive / New" status. A change of value doesn't imply any adjustment / apportionment. These charges are always included at default billing account level.
Verification code	✓	When enabled, all Customer's users will be required double authentication (see section <a href="#">Login with two factor authentication</a> for more information).
Network reset access		When enabled, it allows to perform a network reset (Cancel location) over a SIM.

#### 11.2.2.4 Discounts and taxes

Attribute	Editable	Description
Global discounts		Optional data making up the discount list, which will be applied to the Customer in all pre-bills. The sum of all the concepts defined will always be applied.
Basic services commercial plan discounts		Data options that include the list of discounts to apply on monthly vouchers for post-paid voice, sms and data tariffs. Different discounts can be created by commercial plan and in each discount define different sections (up to 5), each one with its discount percentage and the number of active SIMs that apply to it. Depending on the volume of SIM cards activated in the associated commercial plan at the time of the generation of the pre-bill, the percentage of the section that applies to said volume of SIMs will be applied. If several discounts are defined

		(each of them with its sections) the total discount to apply will be the sum of said discounts.
Taxes		Optional data making up the tax list applied to the Customer in all its pre-bills. The sum of all the concepts defined will always be applied.

#### 11.2.2.5 Primary, billing and authorisation contact

Attribute	Editable	Description
Primary contact person	✓	Data of the main contact person designated for the company.
Primary contact person address	✓	It can be the same as the company address.
Billing contact person	✓	Data of the person in charge of the company billing. It can be the same as the main contact person.
Billing contact person address	✓	It can be the same as the company address.
Authorization contact	✓	Details of the person in charge of company authorizations for the authorization flow of massive operations.
Authorization contact address	✓	Can be the same as the company address

#### 11.2.2.6 Shipping address

Attribute	Editable	Description
Shipping address	✓	Address for orders delivery. It can be the same as the company address.

#### 11.2.2.7 Default and additional billing accounts

Attribute	Editable	Description
Billing account name		Only editable for additional billing account
Fiscal number		Tax identification number of the Company (or company ID for companies outside Spain). This number will appear in the pre-bill linked to the account.
Billing region		Only available for certain Service Providers (currently only for Vivo). It allows consulting the geographic area assigned to a billing account. All SIM cards assigned to this billing account will share the same region value.
Billing cycle		It allows to consult both, the new starting billing cycle day ("Scheduled day") and the current one ("Next billing cycle day") (see section <a href="#">Billing cycle</a> for further information)
Billing contact person		Billing account contact person. It can be the same as the main contact person.
Billing Address		It can be the same as the company address. It will appear in the pre-bill linked to the account.

Billing account ID in provider CRM		Billing account ID in the Service Provider CRM.
Billable		It indicates that a pre-bill linked to this billing account will be generated.
Automatic pre-billing		It indicates if the pre-bill will be generated automatically or manually by the Service Provider (see section <a href="#">Pre-bills issuance</a> for further details)
Discounts		Optional data making up the discounts list which will be applied to the associated pre-bill. Different discounts and different values may be shown according to the volume of published SIM cards linked to the affected billing account at the closing time of the billing account. The total applied discount will be the sum of the individual specified discounts.
Taxes		Optional data that is taken by the tax list, which will be applied to the pre-bill, linked. The sum of all the concepts defined will always be applied.
Subscriptions groups assigned to the billing account		Informative, non-modifiable field that indicates the number of Subscriptions group linked to such billing account.
SIM cards assigned to the billing account		Informative, non-modifiable field that indicates the number of SIM cards linked to such billing account.
Method of Payment		It determines the payment method of the Customer (through a credit card or bank account number).
Payment Data		Credit card or bank account number.

#### 11.2.2.8 Time/data voucher

Attribute	Editable	Description
Time/data subscriptions vouchers.		It indicates if a Customer can configure time/date vouchers. This operation can be performed from the Inventory.

 Once the Service Provider enables the time/data voucher the only way SIM cards can perform any traffic is by assigning them a voucher from Inventory (not other possibilities of generating traffic in the Kite Platform are allowed).

#### 11.2.2.9 IMEI filtering

##### IMEI filtering via whitelist

Attribute	Editable	Description
IMEI filtering enabled	✓	<p>Indicates if traffic blocking will be performed (ON) or not (OFF) depending on the device's IMEI.</p> <p>IMEI filtering will be ultimately effective when it is also enabled at Subscription group level. Therefore, IMEI filtering only applies to SIM cards belonging to the affected Subscription group.</p> <p>When IMEI filtering is enabled data traffic will be blocked if device's IMEI is not present in the IMEI white list or if the IMEI</p>

		white list has not been created. Traffic blocking / unblocking will take place as soon the first accounting radius is received.
Automatic provision of first IMEI	✓	<p>By activating this flag it is possible to configure whether the first IMEI acquisition will be automatically added to the IMEI whitelist or not.</p> <p>The configuration of this flag is independent of the IMEI filtering flag.</p>
Number of IMEIs in white list		<p>It shows the number of items in the white list.</p> <p><span style="color: yellow;">⚠️</span> An item in the list could refer to several IMEIs if it has been defined with wildcards (eg 35752 *).</p>
Last update of white list		Date when the last update of the white list (for either adding or removing IMEIs) took place.

Attribute	Editable	Description
Export	✓	<p>It allows exporting the white list content to a CSV file. This file can be downloaded from the Reports section (or from Customer section if the user doesn't leave while the report is being generated)</p> <p>This file will only be available during one week while not being downloaded.</p>
Add	✓	<p>It allows adding an IMEI list to the current white list.</p> <p>List format shall be a CSV file without headers and with a single column made up of IMEIs (only 14 to 16 digits accepted). The inclusion of wildcards (*) at the end is allowed (Ex. 35752 *). Maximum file size supported is 20MB.</p> <p>Operation status can be viewed in Bulk operation section.</p> <p><span style="color: yellow;">⚠️</span> Only UTF-8 and UTF-8 BOM character encodings are supported for the CSV file.</p>
Remove	✓	<p>It allows removing items existing in the IMEI list.</p> <p>List format shall be a CSV file without headers and with a single column made up of IMEIs (only 14 to 16 digits accepted). The inclusion of wildcards (*) at the end is allowed (Ex. 35752 *). Maximum file size supported is 20MB.</p> <p>Operation status can be viewed in Bulk operation section.</p> <p><span style="color: yellow;">⚠️</span> Only UTF-8 and UTF-8 BOM character encodings are supported for the CSV file.</p>
IMEI search	✓	It allows searching for a specific IMEI in the IMEI white list.

⚠️ If IMEI filtering is enabled and no IMEI has been provided, that is, the IMEI list is empty, all data connections will be rejected.

## Automatic IMEI Lock at SIM level

Attribute	Editable	Description
IMEI filtering enabled	✓	When ON, the first detected IMEI of a SIM will be saved and the IMEI lock will be activated for that SIM, ignoring, in this situation, the IMEI filtering by white list.

### 11.2.2.10 Incoming SMS filtering<sup>16</sup>

Attribute	Editable	Description
Service enabled in new Subscriptions	✓	<p>“Incoming SMS filtering” service allows to restrict incoming SMS received by the Customer’s SIM cards so that they can only be sent from certain authorized source numbers (MSISDNs). Additionally, specific SMS centres, from which SMSs will be delivered, can also be filtered out, as a way to increase security.</p> <p>When this flag is enabled, all SIM cards being published from Pre-inventory to Customer’s Inventory will have this service automatically activated with the configuration defined at Customer’s level (“Sender allowed” and “SMS Centre / Global MSC SMS allowed” parameters below commented).</p> <p>By default this flag will be disabled, and thus published SIM cards will not have this service activated.</p> <p>Specific activation/deactivation of this service shall always be performed at SIM level (see sections <a href="#">Other services activation of operations</a> and <a href="#">Other services deactivation operations</a> for more details).</p>
Sender allowed	✓	<p>It allows defining a range of source MSISDNs from which SMSs can be sent to Customer’s SIM cards. Wildcards are allowed (*, ?) and there’s no limit.</p> <p>If a different configuration is wished for a given SIM card it will be necessary to define it at SIM level (see sections <a href="#">Other services activation of operations</a> and <a href="#">Other services deactivation operations</a> for more details).</p>
SMS Centre / Global MSC SMS allowed	✓	<p>It allows defining a range of SMS centres/GMSCs (Global Title list) from which SMS can be delivered to the Customer’s SIM cards. Wildcards are allowed (*, ?) and there’s no limit.</p> <p>If a different configuration is wished for a given SIM card it will be necessary to define it at SIM level (see sections <a href="#">Other services activation of operations</a> and <a href="#">Other services deactivation operations</a> for more details).</p>

### 11.2.2.11 Network services

Attribute	Editable	Description
2G activated		Only visible if it is activated. Subscriptions that transition from the “New Inactive” life cycle state will have this radio technology enabled.

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<sup>16</sup> Incoming SMS filtering will only be available for Customers belonging to Movistar Spain and its Leadings OBs as well as to Telefónica Mexico.

3G activated		Only visible if it is activated. Subscriptions that transition from the "New Inactive" life cycle state will have this radio technology enabled.
LTE/LTE-M activated		Only visible if it is activated. Subscriptions that transition from the "New Inactive" life cycle state will have this radio technology enabled.
NB-IoT activated		Only visible if it is activated. Subscriptions that transition from the "New Inactive" life cycle state will have this radio technology enabled.
5G activated		Only visible if it is activated. Subscriptions that transition from the "New Inactive" life cycle state will have this radio technology enabled.  This flag controls both 5G NSA (using LTE core network) and 5G SA only with operators that support it.

### 11.2.2.12 Access control

From this section, you can configure the IP addresses and countries from which the Kite portal can be accessed. By default, access can be obtained from any IP address and country.

\* Control de acceso

Puedes restringir el acceso al portal Kite configurando países permitidos y/o direcciones IP autorizadas:

- Si configuras uno o más **países**, se permitirá el acceso desde cualquiera de ellos.
- Si configuras una o más **direcciones IP**, se permitirá el acceso desde cualquiera de esos IPs.
- Si configuras **ambos (países e IPs)**, el acceso será permitido si se cumple al menos una de las condiciones: que el usuario esté en uno de los países permitidos o acceda desde una IP autorizada.

Revisa las configuraciones para evitar bloqueos no deseados.

**CONTROL DE ACCESO BASADO EN IP**

Esta sección permite conceder acceso al portal sólo a un conjunto de IPs. 0.0.0.0 otorga acceso a cualquier IP externa.

Red:	Máscara	+
0.0.0.0	0.0.0.0	-

**CONTROL DE ACCESO BASADO EN PAÍS**

Esta sección permite conceder acceso al portal sólo a un conjunto de países.

País	+
Cualquier	-

**⚠** The source network 0.0.0.0 with a mask of 0.0.0.0 identifies any public IP address on the Internet.

The user can add source IP access control (consisting of a list of network and mask elements). By adding the first entry, Kite will reject any request whose source IP address does not belong to the specified network.

The 0.0.0.0/0.0.0.0 network disappears when the user enters the first entry to apply source IP access control. When the user deletes all entries, the 0.0.0.0/0.0.0.0 network is implicitly reconfigured.

The user can also add a country-based access control (consisting of a list of countries). Upon adding the first entry, Kite will reject any login request originating outside the specified country.

The "Any" country disappears when the user enters the first entry to apply the country-based access control. When the user deletes all entries, the "Any" country is automatically set again.

If the user configures both access controls, Kite allows login if the origin satisfies either of the two controls, that is, if it belongs to a country on the list or the IP address belongs to a network on the list.

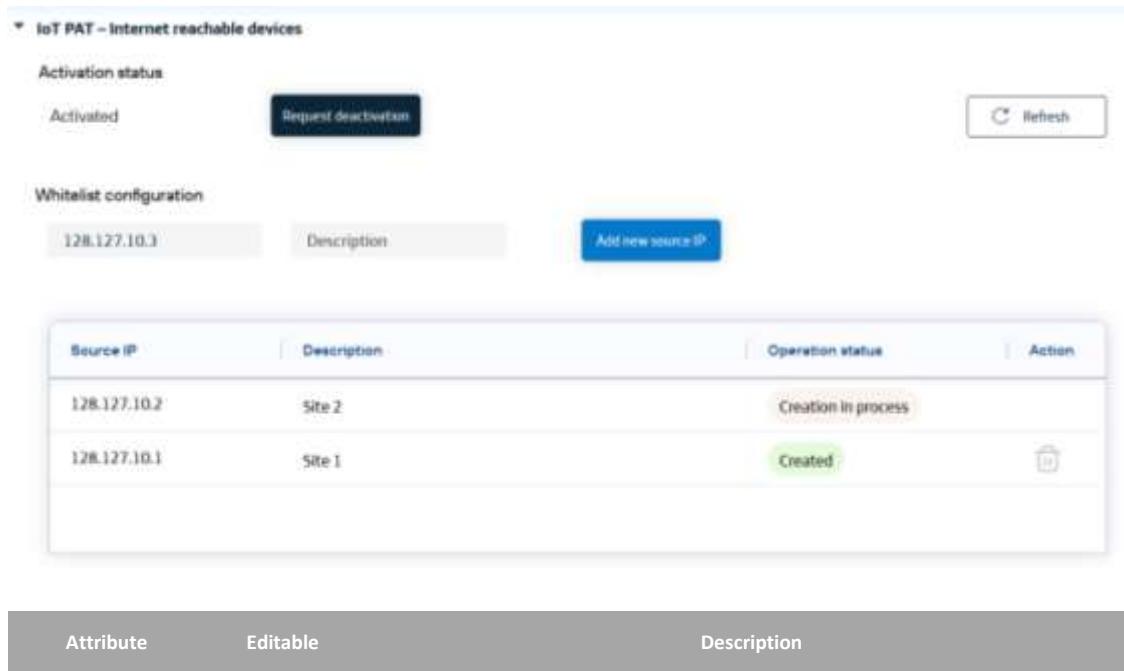
#### **11.2.2.13 LPWA – Battery Saver**

This section allows you to give the customers permissions to modify the battery saving parameters in their subscription groups.

#### **11.2.2.14 IoT PAT – Internet reachable devices**

The IoT PAT service allows customers to directly access their devices from public Internet addresses without the need for their devices to have public addresses configured.

This section<sup>17</sup> allows configuring the source addresses from which the customer will connect to their devices, thus forming an access white list.



Source IP	Description	Operation status	Action
128.127.10.2	Site 2	Creation in process	
128.127.10.1	Site 1	Created	

<sup>17</sup> This section is only available to customers belonging to Service providers with IoT PAT functionality activated in DB.

Activation status	No	Indicates whether the IoT PAT service is activated or deactivated.
Add source IP to whitelist	Yes	Whitelist a source IP address from which the customer can access their devices. An empty whitelist prevents the customer from accessing their devices.
Source IP	Yes	Customer IP from which the device can be accessed.
Description	Yes	Optional description of the provisioned source IP.
Operation status	Yes	The states can be: <ul style="list-style-type: none"><li>• Pending creation: the data has been satisfactorily received by the platform and is awaiting provision</li><li>• Creation in process: the data is being provisioned.</li><li>• Created: The data has been successfully provisioned.</li><li>• Pending deletion: the deletion request has been successfully received by the platform and is waiting.</li><li>• Deletion in process: the request is being executed.</li><li>• With error: the request could not be executed satisfactorily and is pending for the platform to correct the problem.</li></ul>
Action	Yes	Shows the trash icon to unsubscribe an item when the status allows it.

### 11.2.2.15 APN setup

Attribute	Editable	Description
Description		Name of the VPN that groups an APN configuration.
Addressing type		It indicates if the APN is static or dynamic.
Protocol <sup>18</sup>		Indicates whether addressing will be IPv4, IPv6 o IPv4v6:   Only if Service Provider is configured to support IPv6, IPv6 value will be selectable, otherwise IPv4 value will always be displayed.   IPv4v6 will be selectable only if the Service Provider is configured to support it.
APN		APN name. Several aliases can also be defined sharing the same configuration.

<sup>18</sup> Only Customers belonging to Movistar Service Provider or to any of its Leading OBs and Germany HOB will be able to configure IPv6 and IPv4v6 protocols.

Point of presence		Indicates if the APN is configured in a local presence point (PoP) (GGSN located outside the home network of the SIM).  The value indicates the service provider and the location of the PoP where the APN is configured.
Network		Field only available for static APN configurations.  IP value linked to the range of IPs allowed in case of an APN with static addressing.  Several subranges may coexist.
Mask		Field only available for static APN configurations.  Subnet mask linked to the range of IPs allowed in case of an APN configuration with static addressing.  Several subranges may coexist.
Used/Total IPs		Field only available for static APN configurations.  Used IPs: number of IPs in use by Customer subscriptions in the given APN / static IP address subrange.  Total IPs: total IPs available in range, excluding net / broadcast address. e.g. 192.168.0.0 / 24 has $256 - 2 = 254$ available addresses.
First available IP		Field only available for static APN configurations.  It shows the first available IP in the subrange in ascending order.

#### 11.2.2.16 Default APN

This section allows, optionally, to configure a default APN for the Customer so that when registering the APN indicated in this section in a subscription that does not have a default APN, that APN is automatically configured as the default APN.



The default APN is used for the data connection that is opened implicitly in LTE, LTE-M, NB-IoT and 5G SA radio technologies.

#### 11.2.2.17 Commitment levels

##### Activation Grace Period (AGP)

It defines the maximum period of time during which a SIM card must be activated after its publication in the Customer's inventory. If this period doesn't met, a penalty will be charged, which, depending on the configuration, could be:

- **Monthly:** a penalty is charged at the end of each billing cycle, from the end of the grace period until the customer activates the SIM or the billing period ends.
- **One-time:** a penalty is charged at the end of the grace period. After that, the SIM will be activated automatically and left in the deactivated state.

\* Commitment levels

\* Activation grace period

**NOTIFICATIONS**

Send notification emails  ON

Email list

**DEFINITION**

Changes won't affect already provisioned lines.

Grace period duration	Behaviour after grace period	One time penalty / SIM	Default destination Subscription group
1 Month	Automatic transition to deactivated + One time penalty	2,00 €	sub_selenium

**Cancel** **Save**

Attribute	Editable	Description
Send notification emails	✓	If active, an email will be sent once a day with information on the number of SIMs in grace period and incurring a penalty.
Email list	✓	List of recipients of previous emails. Only up to 20 recipients are allowed.
Grace period duration		Duration begins at the moment the SIM is published from Pre-inventory to the Customer and ends after the configured calendar months at 23:59:59 in the customer's time zone.  E.g.: If a SIM is published to the Customer on June 23rd at 3:30 pm and the configured duration is 3 months, the grace period ends on September 23rd at 23:59:59. If it had been published on November 30th, it would end on February 28 (if the year is not a leap year).
Behaviour after grace period		You can choose: <ul style="list-style-type: none"> <li>• Automatic transition to deactivated + One time penalty.</li> <li>• No SIM activation + Monthly penalty.</li> </ul>
One time penalty / SIM		One time penalty to be applied after the end of the grace period if the SIM has never been activated
Default destination Subscription group		Subscription group to which the SIM will be assigned at the end of the grace period in order to be able to make the automatic transition to deactivated. If the SIM had a Subscription group already assigned, it will not change the group.  If a problem occurs when at the time of changing the Subscription group or changing to the deactivated state, a descriptive error will be displayed in the Portal's bulk operations section.

Attribute	Editable	Description
		In any case, the corresponding charge will always be made.
Maximum monthly penalty / SIM		<p>Penalty per SIM that would apply if the SIM were not activated during a full billing cycle</p> <p>The cost of the penalty that will be applied in each case will always be proportional to the time the SIM has been without activating during the cycle.</p> <p>This penalty will be charged at the end of each billing cycle during the monthly charging period or until the SIM is activated.</p>
Monthly penalty maximum duration (optional)		Determines the monthly charging period, starting at the expiration of the grace period and ending after the configured calendar months at 23:59:59 in the Customer's time zone.



At pre-bill level, the penalty to be applied will be shown as a new concept (see section [Elements of pre-bills](#) for more information).

### Minimum Billable Term (MBT)

It allows defining the period of time during which a SIM card must not be deactivated, as well as the associated penalty for non-compliance with the commitment. The penalty will apply at the end of each billing cycle.

Applies to	Commercial plan name	Duration	Monthly deferral period	Maximum monthly penalty / SIM
Default		1 Month	1 Days	10,00 €

Attribute	Editable	Description

Send notification emails	✓	If active, an email will be sent once a day with information on the number of SIMs subject to commitment and incurring a penalty.  ⚠️ This option is only configurable by the Customer.
Email list	✓	List of recipients of previous emails. Only up to 20 recipients are allowed.  ⚠️ This option is only configurable by the Customer.
Applies to		Indicate the scope of application of the commitment, it can be: <ul style="list-style-type: none"><li>• "Default": applies to the Customer's entire SIM base.</li><li>• "Commercial plan": applies to the indicated commercial plan.</li></ul> If two commitments are created, one with each option, the "Commercial Plan" option will have priority for those SIMs that apply to it.
Commercial plan name		See "Applies to" description above.
Duration		The duration begins when a SIM is activated for the first time, and ends after configured the calendar months at 23:59:59 in the Customer's time zone.  Ex: If a SIM is activated on June 23rd at 15:30 and the duration set is 3 months, the commitment will end on September 23 at 23:59:59. If the SIM had been activated on November 30th, it would end on February 28 (if the year is not a leap year).
Monthly deferral period		Defines the time (in hours or days) in a billing cycle during which a SIM can be deactivated without incurring a penalty (maximum 32 days). Upon expiration of this period, the entire time the SIM has been deactivated will be penalized.
Maximum monthly penalty / SIM		SIM penalty that would apply if the SIM was deactivated the entire billing cycle without having a grace period.  The cost of the penalty that will be applied in each case will always be proportional to the time the SIM has been deactivated.

⚠️ At pre-bill level, the penalty to be applied will be shown as a new concept (see section [Elements of pre-bills](#) for more information).

### Minimum Holding Value (MHV)

It allows to define, on the basis of all the SIMs that the client has, the minimum number of active SIMs that must be at the end of each billing cycle (default billing cycle) during the time the commitment is enabled, as well as the SIM penalty to be applied on the volume of SIMs that are missing to reach the minimum.

**Commitment levels**

**Minimum holding value**

**NOTIFICATIONS**

Send notification emails  OFF

Email list  
mhw@cusqaapple2.com

**DEFINITION**

Start date	End date	Penalty / SIM	Minimum holding value
		4,004 €	100

**Cancel** **Save**

Attribute	Editable	Description
Send notification emails	✓	If active, an email will be sent once a day informing of whether there is a breach of the commitment and if there is, the current number of active SIMs and the minimum number to reach will be indicated.
Email list	✓	List of recipients of previous emails. Only up to 20 recipients are allowed.
Start date		Date on which the commitment begins to apply. It will start at 00h00m00s.  In blank, it means that applies from the date of the current day.
End date		Date on which the commitment stops applying. It will cease to apply at 23h59m59s.  In blank, it means that the commitment will always be valid.
Penalty/SIM		Penalty per SIM per billing cycle.
Minimum Holding Value		Minimum number of SIMs that must be active at the end of the billing cycle.

### Minimum Holding Expense

It allows to define the minimum monthly expense that a billing account must have during the configured period.

Attribute	Editable	Description
Billing account		Name of the billing account on which the commitment level applies.
Start date		Date on which the commitment begins to apply. It will start at 00h00m00s.

		In blank, it means that applies from the date of the current day.
End date		Date on which the commitment stops applying. It will cease to apply at 23h59m59s.  In blank, it means that the commitment will always be valid.
Minimum Holding Value		The minimum value of the expense that the billing account must have in order not to incur a penalty.  The penalty will always be the difference between the minimum expense value and the current value reached.  Note: the discounts and taxes that may be applied are not considered for calculation purposes.

#### 11.2.2.18 Terms of use



This section will only be available for Movistar Spain and Leading OBs customers.

This section shows the maximum time that Customer's SIMs can consecutively remain in the **Deactivated** state before being automatically removed from SIM Inventory. Specifically, this configuration will affect SIMs that have a 13-digit number and that are not eUICC.

The customer will be able to consult this value and decide if he wants to receive warning notifications related to this automatic SIM retirement event due to this scenario.

NOTIFICATIONS

Send notification emails

Email list  
info@customer.com

DEFINITION

Maximum time in the Deactivated state before a Customer's SIM is automatically retired:  
11 Months

Attribute	Editable	Description
Send notification emails	v	If active, an email will be sent 27, 7 and 1 day before the retirement is performed with the list of impacted ICCs. Once the retirement has been performed another email will be sent.
Email list	v	List of recipients of previous emails. Only up to 20 recipients are allowed.

Maximum time in the disabled state before automatic retirement.	Maximum time in months (by default 18 months) that a SIM with a 13-digit number can remain consecutively in deactivated status and after which it will be automatically withdrawn.  This attribute may take values greater than or equal to 18 months and less than or equal to 999.
---	--

### 11.2.2.19 Prepaid voucher event notifications



This section is only visible in Kite Essential Customers

Customers configured as "Essential" will have the possibility to send notifications of events related to prepaid vouchers.

Attribute	Editable	Description
Notification channels: Email	✓  This option is only configurable by Essential Customers.	If enabled, prepaid voucher events will be notified to the configured email addresses.  It cannot be activated if there are no email addresses configured
Notification channels: Push API	✓  This option is only configurable by Essential Customers.	If enabled, prepaid voucher events will be sent to the endpoint configured in the <a href="#">API – E2E applications</a> section.  It cannot be activated if no endpoint has been configured.
Email notifications recipients	✓  This option is only configurable by Essential Customers.	List of email addresses for sending prepaid vouchers event notifications.

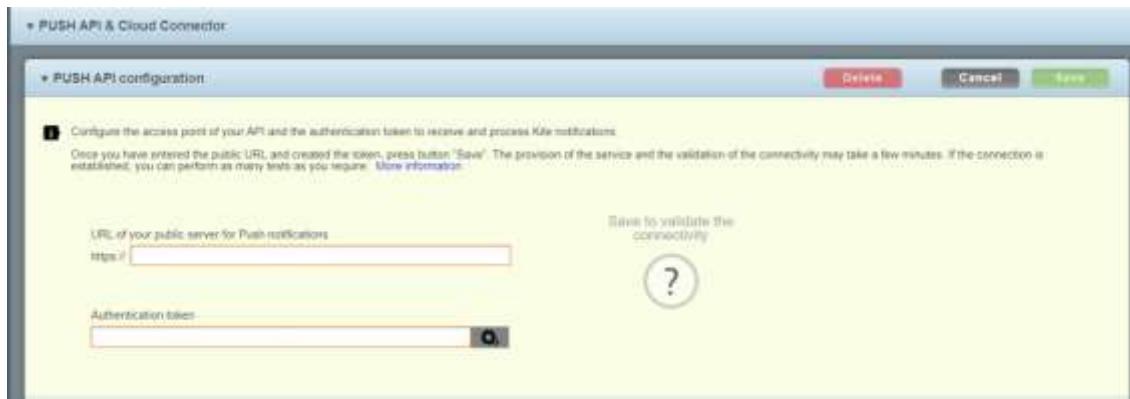
The events related to prepaid vouchers that will be notified are:

- Voucher threshold reached
- Voucher exhausted
- Voucher expired
- First use of the voucher
- Voucher renewed
- Premium voucher exhausted (only for "Monthly premium" and "One-time premium" type vouchers): the voucher does not allow to navigate at maximum speed.

#### **11.2.2.20 API – E2E applications - Authentication**

##### **PUSH API configuration**

To configure the PUSH notifications, go to the “PUSH API Configuration” sub-section within the PUSH API & Cloud Connector section. The service provision process will carry out two actions: provision and validate the connection. The provision opens the firewall rules and saves the service data. And during the validation, it is verified that the connection is active and the notifications arrive.



The screenshot shows the 'PUSH API configuration' page. At the top, there's a note: 'Configure the access point of your API and the authentication token to receive and process KITE notifications. Once you have entered the public URL and created the token, press button 'Save'. The provision of the service and the validation of the connectivity may take a few minutes. If the connection is established, you can perform as many tests as you require. [More information](#)'.

Fields include:

- 'URL of your public server for Push notifications': https:// [input field]
- 'Authentication token': [input field] with a small circular icon next to it.
- A button labeled 'Have to validate the connectivity?' with a question mark icon.
- Standard buttons: Delete, Cancel, Save.

Attribute	Editable	Description
Customer's URL attending push API notifications	✓	URL where the client will receive the information sent by KITE and where they must implement their server to process it properly. This URL must include a public IP.
Token		Token that KITE will send in each push API notification and that will allow you to recognize the sender. The token will be generated automatically by pressing the button
Service status		May be: "Provision and validation in progress": awaiting response from the provision. "Connection validated": The provision and validation are correct. The button to test connectivity will be activated.

		<p>"Connection provisioned but there was an error in the validation": The provision is correct, but there was a connection problem. The button to test connectivity will be activated.</p> <p>"Provisioning Error": A problem has occurred with the provisioning and you will need to rewrite the data.</p> <p>"Error in provision https:// .... The status of the previous provision has not been changed": A problem has arisen while modifying the URL of the provision and you will have to write the data again. The data from the previous provision is saved.</p> <p>"Connectivity validation error: Invalid server certificate": The provision is correct, but the connectivity fails.</p>
Connectivity test button	✓	It allows to carry out a connection test with the established credentials.
Link to "More information"		Access the online configuration instructions.
Save button	✓	Sends the provision data and if the provision is established, they are saved and a connection test is performed.
Delete button	✓	Saved provisioned data is removed.

Once the connection is provisioned and validated, the PUSH API option will be enabled in the alarm notifications section. For more information see the section [Alarm rules and notifications configuration](#).

## Cloud connector configuration

Attribute	Editable	Description
Cloud monitoring	✓	It enables Cloud connector service to the Customer. Only editable by the Service Provider.
Cloud provider	✓	It can be "Amazon" or "Azure" (Microsoft). This field can only be configured by the Customer.
Credentials	✓	Only visible and configurable by the Customer. Credentials allow to establish a secured connection with the Cloud provider.
Test Credentials	✓	It allows to test the configured credentials.
Credentials status		It informs about whether the entered credentials are or not valid after testing them.
Service status		<p>It informs about whether the credentials have or not been provisioned and any error occurred.</p> <p><b>OK:</b> credentials are correctly configured and working.</p> <p><b>Not provisioned:</b> when no credentials have been configured.</p> <p><b>Paused by error in customer credentials:</b> when two consecutive credential provisions have failed in 5 minutes (provisioning is disabled during the following 15 minutes. Automatic retries are performed after that period).</p>

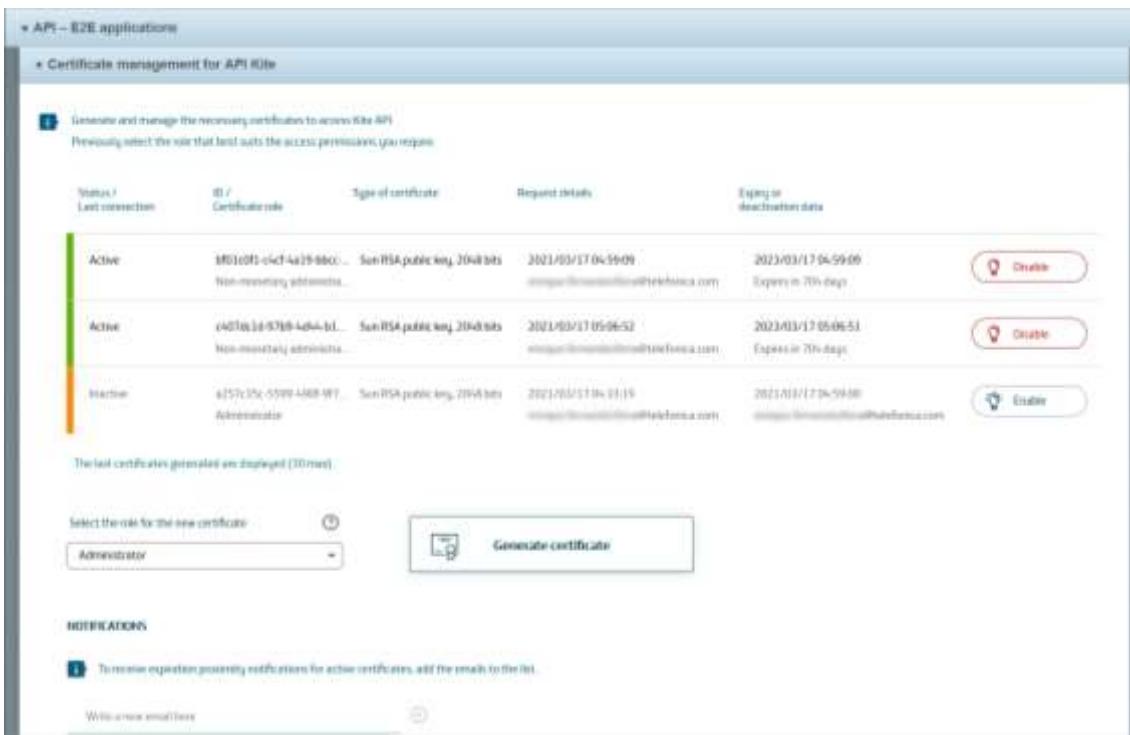
		<b>Paused by error in connection with cloud provider:</b> when there are two consecutive connectivity errors with the cloud provider in 20min or 100 consecutive errors, whatever it becomes first (Provisioning is disabled during the following 15 minutes. Automatic retries are performed after that period).
Monitoring subscriptions		It shows the number of SIM cards being monitored by the Cloud service. These SIM cards will correspond to the ones being assigned to the Supervision groups with the Cloud monitoring flag enabled.

**⚠️** The Customer must communicate the endpoint (hostname) / Regionzone to their commercial / presale. With this information, the KITE operations team will open the rule (for KITE to send the data from the sims Cloud Connector to the public cloud in question: Azure or AWS) in the KITE Firewall for the Customer in question.

## Certificate Management of API Kite

From this section it will be possible to generate certificates for Customer API and carry out their subsequent management (disable and delete certificates).

All users, with the appropriate role, belonging to the same organisation as the user who generated the certificate, can manage it.



The screenshot shows the 'Certificate management for API Kite' page. At the top, there's a note: 'Generate and manage the necessary certificates to access Kite API. Previously select the role that best suits the access permissions you require.' Below this, a table lists three certificates:

Status / Last connection	ID / Certificate role	Type of certificate	Request details	Expires or deactivation date	Action
Active	MF010F1-c4cf-4a29-98c0-... Non-monetary administrator	Sun RSA public key, 2048 bits	2021/03/17 04:59:09 <a href="https://api.kite.telefonica.com">https://api.kite.telefonica.com</a>	2023/03/17 04:59:00 Expires in 730 days	<b>Disable</b>
Active	6d07031d-9709-4d64-bd... Non-monetary administrator	Sun RSA public key, 2048 bits	2021/03/17 05:06:52 <a href="https://api.kite.telefonica.com">https://api.kite.telefonica.com</a>	2023/03/17 05:06:51 Expires in 730 days	<b>Disable</b>
Inactive	4f57c35e-5599-4408-8f7... Administrator	Sun RSA public key, 2048 bits	2021/03/17 04:23:15 <a href="https://api.kite.telefonica.com">https://api.kite.telefonica.com</a>	2023/10/17 04:59:00 Expires in 730 days	<b>Enable</b>

Below the table, a note says: 'The last certificates generated are displayed (100 max)'. A 'Select the role for the new certificate' dropdown is set to 'Administrator'. A 'Generate certificate' button is available. Under 'NOTIFICATIONS', there's a note: 'Turn on expiration proximity notifications for active certificates, add the email to the list.' A 'Write an email here' input field is present.

Attribute	Editable	Description
Status / Last connection		A certificate can be in the following states: "Active", "Inactive" or "Expired".

		It also indicated the approximate time elapsed since the last time a connection was made with that certificate.
ID / Certificate role		Identifier: Unique ID of the certificate.  Certificate role: can be "Administrator" or "Non-monetary administrator". This parameter is chosen when generating the certificate.
Type of certificate		Encryption algorithm.
Request details		Date and time when the certificate was generated and the email of the user who generated it.
Expiry or deactivation date		Indicates the date on which the certificate will expire or was deactivated
Action button	✓	The following actions are allowed on a certificate:  "Enable": only on deactivated certificates.  "Disable": only on active certificates.  "Delete": only on certificates that have expired or have been deactivated for more than 30 days.
Select the role for the new certificate	✓	Depending on the chosen role ("Administrator" or "Non-monetary administrator"), the certificate will have access to expense information or not.
Generate certificate	✓	Clicking on this button will start the generation and download of the certificate (.pfx file) on the user's machine.  The user will receive an email with the password of the generated certificate.
Notifications	✓	Allows defining the email addresses to which notifications of certificates about to expire will be sent, 90, 30, 15, 7, 3, 2, and 1 day before.  The user who generated the certificate will always receive these emails even if they have not been included in the email list.

The list of certificates will be ordered according to the following criteria:

1st: The first active certificates to expire.

2nd: Last certificates deactivated.

3rd: Last expired certificates.



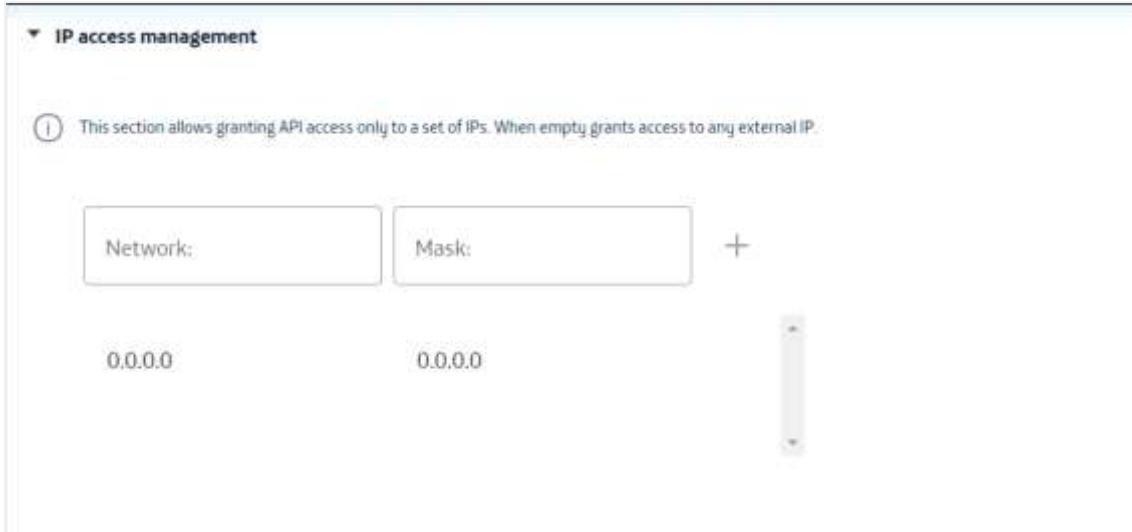
Only up to 30 certificates can be generated per organisation.



Kite does not store the generated certificates, so if the user misplaces a certificate, he/she will have to generate another one.

## Kite API access IP management

From this section you can configure the access IPs to the Kite API. By default, the Kite API will be accessible from any IP on the Internet.



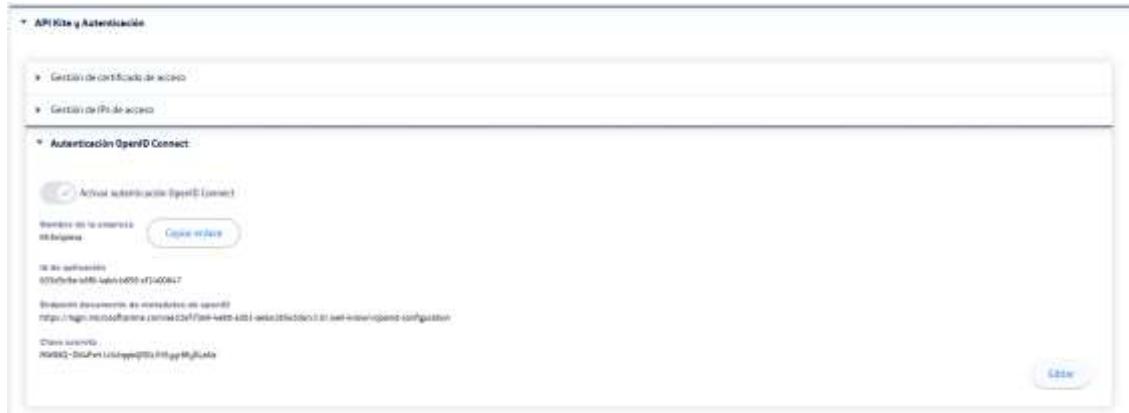
The source network 0.0.0.0 with mask 0.0.0.0 identifies any public IP on the Internet.

The user can add filtering by source IP network (made up of network and mask). When adding the first entry Kite will reject any request whose origin does not belong to the specified network.

Network 0.0.0.0/0.0.0.0 disappears the moment the user enters the first entry to apply filtering by source IP. When the user deletes all entries then the network 0.0.0.0/0.0.0.0 is implicitly reconfigured.

## OpenID Connect Authentication

This section configures the Open ID Connect settings to be able to access Kite using the user's corporate credentials in your organisation and is associated with a company name that is used to log in to your directory.



The screenshot shows the 'API Kite y Autenticación' section of the configuration interface. Under 'Autenticación OpenID Connect', there is a link to 'Activar autenticación OpenID Connect'. Below it, there is a 'Resumen de la configuración' table with columns for 'Nombre de la configuración', 'ID de aplicación', and 'URL de autenticación'. A 'Copiar enlace' button is present. The URL listed is <https://login.microsoftonline.com/tenantid/oauth2/v2.0/authorize>. At the bottom, there is a 'Descargar' button.

Attribute	Description
Enable OpenID Connect authentication	Indicates whether logging in to the directory configured using the company name is allowed.
Company Name	The copy link button allows you to use a direct link, so you don't need to remember the name of the company.
Application ID	Application ID that represents access to Kite in the corporate directory.
Endpoint for OpenID connect metadata document	Link to the corporate directory metadata document that allows Kite to access the endpoints of the authentication service, obtaining user data...
Secret Key	It allows Kite to identify with the corporate directory by providing an additional level of assurance in communications.

A configuration guide for the Microsoft Entra ID directory (Active Directory) is included in Annex D.

#### 11.2.2.21 Bulk operations authorization flow

In the authorization flow section for bulk operations, it will be possible to configure the rules to apply to the flow when a user launches operations in the Customer's inventory.

The set of operations that are subject to this flow are:

- Deactivate lines
- Remove APNs
- Change default APN
- Disable VPN supplementary service
- Disable SMS/Voice/Data
- Change expense limits
- Change consumption limits
- Disable LTE

- Deactivate radio technologies
- Subscription group change
- Activation of IMEI filtering and removal of whitelisted IMEIs.

Attribute	Editable	Description
Activation of the authorization flow	✓	Indicates the status of the authorization flow for this organization.
Limit threshold	✓	Threshold of lines from which the authorization flow is applied for an operation subject to the authorization flow. It can be indicated in a nominal amount or in a percentage.
Responsible for the authorization	✓	Organization responsible for carrying out the authorization.

 Customer cannot delegate authorisation to a higher-level organisation or assume authorisation if it is delegated to a higher-level organisation.

 The Customer will not be able to deactivate the authorization flow if their inventory exceeds the default threshold configured at the Service Provider level.

 The Customer will not be able to set a threshold higher than the default threshold configured at the Service Provider level.

 The Customer may assume the role of authoriser of transactions of its end customers by accessing the "Flow of authorisations of bulk operations" section in the End Customer section.

#### 11.2.2.22 eSIM information

 In the current version this information is only available to some Vivo's customers. Please contact with your Service Provider for more information.

This section allows to view the maximum number of a Customer's virtual profiles downloads that can be carried out in an eSIM when performing a swap operation (see section [eSIM management operations](#) for more details) as well as the number of virtual profile downloads available before reaching the limit.

The customer can configure to be notified by email when he is close to reaching the configured limit or the limit has already been reached.

Attribute	Editable	Description

Logistics profile		Name of the logistics profile for which an eSIM virtual profile download control is made.
Virtual profile downloads limit		Maximum number of downloads allowed for eSIM virtual profiles when performing a swap operation for the defined logistics profile.
Available virtual profile download		Number of downloads allowed before reaching the limit configured for the defined logistics profile.
Send email	✓	If it is active, an email will be sent both, when the number of downloaded profiles exceeds 80% of the allowed profiles and when the limit is reached.  Emails will be sent every 15 days if the conditions that led to the sending of the first email are maintained.
Email list	✓	List of recipients of the previous emails. Only a maximum of 20 recipients are allowed.

#### 11.2.2.23 Whitechip activation notifications



This section is only available for Vivo customers.

In this section the email addresses, to which notifications related to the automatic activations of whitechips will be sent, can be configured.

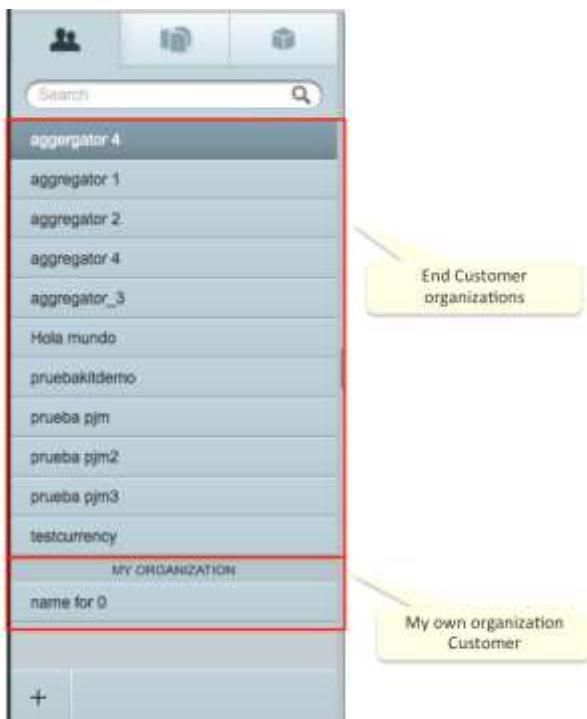
Emails will be sent 30, 7 and 1 day before the whitechip activation date. The email will include a CSV file attached with the ICC list that will be activated in the period indicated in the email.



Automatic whitechip activations are subject to the same costs as manual activations.

#### 11.2.3 Basic operations with organisations

The organisations panel shows the list of End Customers depending on the Customer the logged in user belongs to. The Customer is shown below.



This panel will also allow performing the following actions:

- **Search**, filtering by organisation name while entering characters.
- **Create End Customers**, clicking on the  button located at the bottom. Then the End Customer form has to be filled and saved. Partial edition is not supported.

 An existing End Customer can be deactivated but not deleted. Users belonging to a deactivated End Customer are not allowed to log into the Kite Platform.

 If a trial Customer reaches the end of its trial period, he and his End Customers will be automatically deactivated as well as their SIM cards.

#### 11.2.4 Configuring an organisation

From the organisation list panel it will be possible to access each End Customer and the own Customer data.

**aggregator 1**

[Deactivate](#) [Search](#) [Edit](#)

▼ Basic information

**BASIC INFORMATION**

Default language Czech	Company type Large Accounts	Sector Health
---------------------------	--------------------------------	------------------

**CUSTOM FIELDS**

Custom field 1 Country	Custom field 2 W	Custom field 3 E	Custom field 4 T
---------------------------	---------------------	---------------------	---------------------

► Addresses

► Contacts

The following actions can be performed:

- **Edit and access to End Customer data**, for this, you must select firstly the End Customer from the organisation list panel and then click on the **Edit** button. When creating a new End Customer from scratch, the form will display directly in edit mode.

**New organization**

**Basic information**

**BASIC INFORMATION**

Default language	Company type	Sector
------------------	--------------	--------

**CUSTOM FIELDS**

Custom field 1	Custom field 2	Custom field 3	Custom field 4
----------------	----------------	----------------	----------------

**Addresses**

**COMPANY ADDRESS**

Line 1	Line 2	City	Postal code
--------	--------	------	-------------

Country	State/Region
---------	--------------

**SHIPPING ADDRESS**

Same as company address  OFF

**Cancel** **Save**

- **Edit data of my own organisation**, for this purpose, it will be necessary to first select the Customer from the organisations list panel, unfold the section to be modified and click on the **Edit** button. The view of the form will automatically change to edition mode. Modification is only allowed for elements marked as “editable” in the tables in section [My organisation data](#). An organisation cannot deactivate itself.

TDIG\_NF\_Produccion

Search

Basic commercial plans



Supplementary commercial plans



Supplementary...

▼ Basic information

**BASIC INFORMATION**

Default language Spanish; Castilian	Billing cycle 24	Time Zone Europe/Madrid
--	---------------------	----------------------------

Cancel Save

- **Save**, to save changes made. This option will be available only if the form has been correctly filled.
- **Cancel**, not to save the changes made.
- **Activate or deactivate End Customers**, when clicking on the **Deactivate** or **Activate** button once an End Customer is selected.



A manually deactivated End Customer will not be able to log into the Kite Platform but all his SIM cards will remain active.



An automatic deactivated End Customer (due to his Customer trial period expiration) will not be able to log into the Kite Platform and all his SIM cards will be deactivated.

## 11.3 Access to available commercial plans

### 11.3.1 General aspects

#### 11.3.1.1 Types of commercial plans

The Kite Platform uses the concept “commercial plan” in order to describe the set of available services as well as the tariffs defined for such services. Such tariffs are to be applied to a Customer, Subscriptions group or individual SIM cards.

Kite Platform offers two types of commercial plans, which are available for a Customer:

- **Basic services commercial plans**, are those which only apply to voice, data, SMS services and state changes in the life cycle of a SIM card (see section [SIM card states](#) for further details). The Customer will be responsible for deciding which Subscriptions groups use

which commercial plan among those available for him (see section [Administration of Subscriptions groups](#) for further details).

**⚠️** In order for the Customer to manage its own SIM cards, he will need at least one basic services commercial plan available as part of a Subscriptions group, which has to have SIM cards linked.

- **Supplementary services commercial plans:** generally, they are those applying to services other than voice, SMS and data. VPN or location services are examples of such type of services (see section [Supplementary services](#) for further details). The Customer is responsible for deciding which services, among those enabled by the Service Provider, will be available for its SIM cards (see section [Supplementary services activation operations](#) for further details).

**⚠️** A Customer will always have a basic services and supplementary services commercial plan. Customers are not allowed to modify commercial plans.

#### **11.3.1.2 Elements of a basic services commercial plan**

A basic services commercial plan is made up by the following elements:

- **Currency**, in which the associated tariffs are defined.
- **Basic services configuration**, this element includes both voice, SMS and data services enabled and allowed operators from each country (See [Basic services](#) for further details).
- **Life cycle**, made up of the set of states and transitions allowed for a SIM card (see section [SIM Card Life Cycle](#) for further details).
- **Basic services tariff plan**, made up of a certain currency and different tariffs for each of the basic services (voice, SMS and data) in the specified currency (See section [Tariff plans of basic services](#) for further details)
- **Tariff plan for life cycles**, made up of a certain currency, the charges for state permanence and for transition between states.
- **Authorized and restricted numbers**, made up of three lists of telephone numbers, a list of restricted numbers, a list of exceptions to the former list and a list of numbers authorized for roaming.

#### **11.3.1.3 Elements of a supplementary services commercial plan**

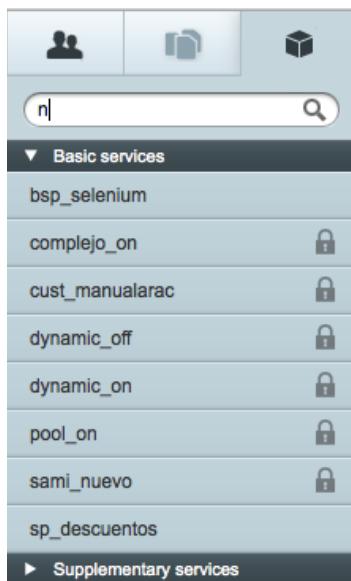
A supplementary services commercial plan is made up by the following elements:

- **Currency**, in which the associated tariffs are defined.
- **Services**, includes a list of supplementary services available in the Kite Platform and its state. A service may be activated, deactivated or suspended. Only activated services are available for Customers.

- **Tariffs**, includes the different application tariffs for each of the supplementary services managed by Kite Platform.

### 11.3.2 Consulting basic services commercial plans

A Customer can consult all of his basic services commercial plans and carry out searches on them, but he cannot modify any of them. Searches are carried out filtering by commercial plan name, as the user introduces characters on the text box.



The commercial plans list panel shows the list of commercial plans grouped by basic and supplementary services.

Those commercial plans marked with the lock icon (🔒) mean they are restricted commercial plans. Customers cannot use this kind of commercial plans in their Subscription groups. Only Service Providers can use them.

In this section, there is a description of the concepts of a basic services commercial plan applied to a Customer.

A basic services commercial plan includes the set of parameters shown in the following figure:



The screenshot shows a navigation sidebar titled "SB\_PDI\_02" with the following items:

- Currency
- Basic services configuration
- Life cycles
- Tariff plan for basic services
- Tariff plan for life cycles
- Authorized and restricted numbers

At the top right of the sidebar, there are buttons for "Grupo\_comercial", "Search", and a magnifying glass icon.

In the upper right part, there are the Subscriptions groups using the commercial plan.

#### 11.3.2.1 Basic services

Basic services configuration includes three sections:

##### Maximum number of subscriptions configuration

It shows the maximum number of SIM cards that every Subscriptions group using this commercial plan will have (see section [Administration of Subscriptions groups](#) for further information).

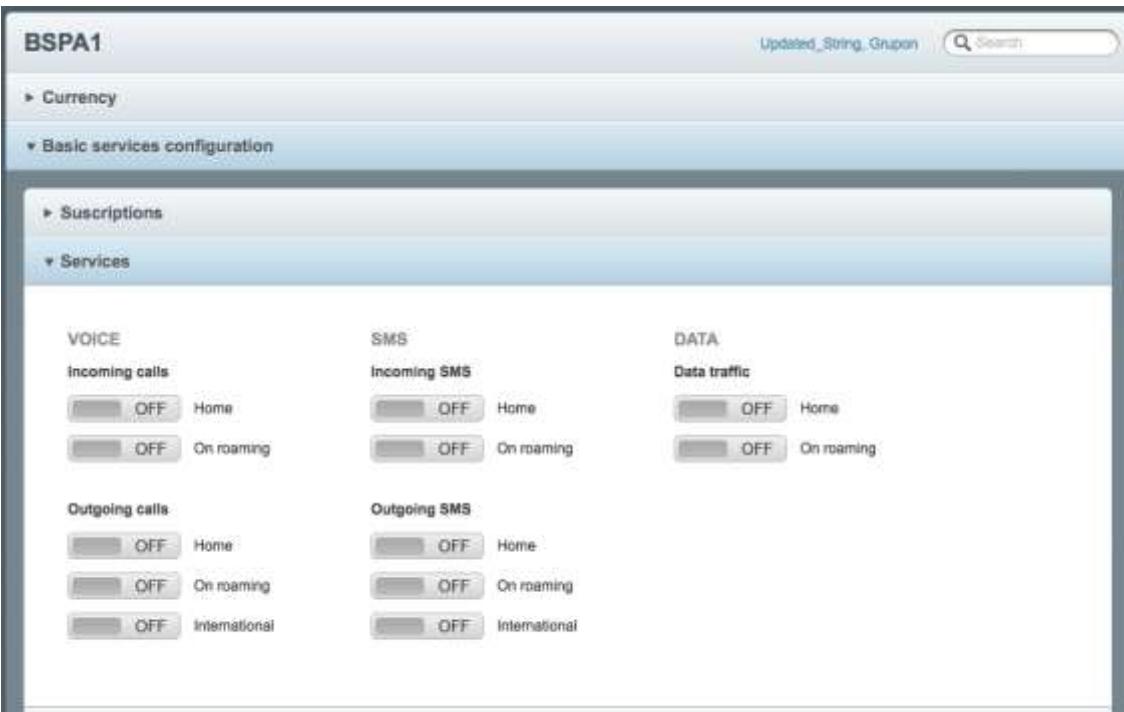


The screenshot shows the "BSPA3" configuration interface with the "Subscriptions" section selected. The "Limit suscriptions" option is set to "ON". The "Subscriptions" value is set to "200".

##### Basic services restrictions

Configuration options are different depending on type of Service Provider, Hosting OB or Leading OB:

## If the Customer belongs to a Hosting OB



The screenshot shows the 'BSPA1' interface with the title 'Basic services configuration'. Under 'Subscriptions', there are sections for 'VOICE', 'SMS', and 'DATA'. Each section has three rows: 'Incoming calls' (Home, On roaming), 'Outgoing calls' (Home, On roaming, International), and a specific row for 'SMS' or 'Data traffic' (Home, On roaming). Each row contains two buttons: 'OFF' (disabled) and 'ON' (enabled).

VOICE		SMS		DATA		
Incoming calls	OFF	Home	OFF	Home	OFF	Home
	OFF	On roaming	OFF	On roaming	OFF	On roaming
Outgoing calls	OFF	Home	OFF	Home	OFF	International
	OFF	On roaming	OFF	On roaming	OFF	International
	OFF	International	OFF	International	OFF	International

For voice calls, the following can be configured:

- **Incoming calls → Home**, whether incoming voice calls are permitted (ON) or not (OFF), while using the operator network engaged for the service.
- **Incoming calls → On roaming**, whether incoming voice calls are permitted (ON) or not (OFF), while using a network of an operator other than the one the service has been engaged with, be they inside the same country or abroad.
- **Outgoing calls → Home**, whether outgoing voice calls are permitted (ON) or not (OFF), while using the operator network engaged for the service.
- **Outgoing calls → On roaming**, whether outgoing voice calls are permitted (ON) or not (OFF) to national destinations while using a network of an operator other than the one the service has been engaged with, be they inside the same country or abroad.
- **Outgoing calls → International**, whether outgoing voice calls are permitted (ON) or not (OFF) to international destinations, regardless of the network to which the user is connected.

For SMS, the same configurations apply as for voice, that is:

- **Incoming SMS → Home**, whether the reception of SMS messages is permitted (ON) or not (OFF), while using the network of the operator with which the service has been engaged.
- **Incoming SMS → On roaming**, whether the reception of SMS messages is permitted (ON) or not (OFF), while using a network other than that of the operator with which the service has been engaged, be they inside the same country or abroad.

- **Outgoing SMS → Home**, whether sending of SMS messages is permitted (ON) or not (OFF) to national destinations, while using the network of the operator with which the service has been engaged.
- **Outgoing SMS → On roaming**, whether sending of SMS messages is permitted (ON) or not (OFF) while using a network other than that of the operator with which the service has been engaged, be they in the same country or abroad.
- **Outgoing SMS → International SMSC**, whether sending of SMS messages is permitted (ON) or not (OFF) using in the destination an international SMS centre from the point of view of the country in which the SIM card is located.

For data, the following can be configured:

- **Data traffic → Home**, whether data transmission is permitted (ON) or not (OFF), while using the network of the operator with which the service has been engaged.
- **Data traffic → On roaming**, whether data transmission is permitted (ON) or not (OFF), while using a network other than that of the operator engaged for the service, be it inside the same country or abroad.

#### If the Customer belongs to a Leading OB

Leading OB's SIM cards will be in permanent roaming except when they are connected to the Hosting OB's network. Consequently, the only available options to configure will be:

- **Incoming calls**, it allows to (ON) or not (OFF) to receive voice calls whatever the operator the SIM card is connected to.
- **Incoming SMS**, it allows to (ON) or not (OFF) to receive SMS whatever the operator the SIM card is connected to.
- **Data**, it allows to (ON) or not (OFF) to send/receive data whatever the operator the SIM card is connected to.
- **Outgoing calls**, it allows (ON) or not (OFF) to make calls to whatever destination number, national or international, from whatever operator the SIM card is connected to.
- **Outgoing SMS**, it allows (ON) or not (OFF) to send SMS using any operator and any SMS centre.



### Allowed operators

It displays which operator networks will be allowed in the Commercial plan, and thus will be enabled at SIM card level.

#### 11.3.2.2 Tariff plans of basic services

Each Customer business plan has a series of applicable tariff plans for each basic service. The tariff plans for each basic service are defined in each Customer commercial plan: incoming and outgoing calls, SMS and data.



Following are the concepts, which are handled within the tariff plans for the basic services:

- Zones and destination numbers:
  - A **zone** is made up of one or several operators. Depending on the type of tariff plan a zone may represent the traffic source (for outgoing voice calls, SMS and data) or a traffic destination (for incoming voice calls). In every tariff plan, there is always a default zone that represents the set of operators that are not taken into account explicitly in the rest of zones included in the tariff plan defined by the Service provider. In the case of outgoing voice calls and SMS, each zone can have one or several destinations.

▼ Tariff plan for basic services

- Zones
- ▼ Outgoing calls
  - Origin zone: Zona 1
  - Origin zone: Default
- Incoming calls
- SMS
- Data

- **Destination numbers** have country granularity and represent the destination of the outgoing voice calls and SMS. There will always exist a default destination, which represents the set of uncovered destinations (created) explicitly in the definition of the tariff plan by the Service Provider.
- A **Data destination** represents a collection of data flows having the same tariff for a same zone. This is the ways Kite Platform supports slit billing.

▼ Tariff plan for basic services

- ▼ Outgoing calls
  - Origin zone: HPLMN
  - Origin zone: Default
- ▼ Incoming calls
  - Destination zone: Default
- ▼ SMS
  - Origin zone: HPLMN
  - Origin zone: Default
- ▼ Data
  - Zone: Default

- “Prepaid” and “Postpaid” tariffs
  - In “**prepaid**” data tariffs charging will be made before traffic consumption. A SIM card will be able to make traffic as long as a voucher defined in the tariff plan is activated.

Prepaid vouchers may be of the "One-time" or "Monthly" type. The first ones will be for single use, once consumed they cannot be renewed. Monthly vouchers will be renewed on the same day of each month coinciding with the day the voucher was activated. One-time vouchers will have a single charge at the time of their activation, the monthly ones will have a specific charge for the first charge and another (which may be different) for each renewal.

Prepaid tariffs can be configured to work in two different ways: with and without immediate activation.

- In a tariff with immediate activation, the voucher is always activated at the time of purchase. This is the default behavior.
- In a tariff without immediate activation, the voucher is activated only when the SIM does not have another voucher available to perform traffic.

The activation of a voucher implies setting up its expiration date.

- For “**postpaid**” tariff plans, charging will always be made at the end of the billing cycle.
- “Individual” and “pool” postpaid tariffs
  - An “**Individual**” tariff, is the tariff that applies to each SIM card associated to such tariff.
  - A “**Pool**” tariff, is the tariff that applies to the aggregated consumption of all the SIM cards belonging to the same Subscriptions group (see section [Administration of Subscriptions groups](#) for further details).
- “Static pool” and “Dynamic pool” postpaid tariffs
  - A “**static pool**” tariff represents a kind of tariff in which the pool size is independent of the number of SIM cards comprising the pool.
  - A “**dynamic pool**” tariff is a kind of pool in which the pool size is directly proportional to the number of SIM cards within the pool. In this configuration the Kite Platform will show the pool information always relative to one SIM card.



The voucher size in “dynamic pools” is always computed taking into account the number of **active SIMs existing in the related Subscription group**, the voucher value per SIM and the time left till the end of the billing cycle when a SIM is added to the pool (proration).



Only for Service Providers with No-CAMEL feature enabled: for outgoing voice calls in roaming in No-CAMEL operators, the tariff being applied will be the existing one when the voice call events are being processed, not the one defined when the call took place.

### 11.3.2.3 SIM Card Life Cycle

It shows which are the states and transitions that a SIM card will have throughout its life cycle. Section [SIM Card Life Cycle](#) provides a description of the different states and transitions through which a SIM card may undergo in Kite Platform. A SIM card life cycle consists of:

- **The life cycle type**, which indicates the possible states of a SIM card and what transitions are allowed between them. This graphic shows a visual representation of the states and transitions allowed for the life cycle configured.



**⚠️** In case of a configuration involving Test state, it must be taken into account that although a voucher might expire, and then no traffic will be sent for that voucher, the SIM card couldn't transition to another state. This is so if the configured voucher to carry out the transition is not the one being expired.

For instance, if I configure a lifecycle with "Automatic with Test" state and for the Test state I configure a 10 Kb data home voucher, 1 min voice home voucher and a 3 messages SMS home voucher changing to another state when the data home vouche expires. If the voice home voucher expires without consuming all the data voucher, the SIM card won't change to the "Ready for activation" state nor will able to make a call.

### 11.3.3 Configuration of Supplementary services

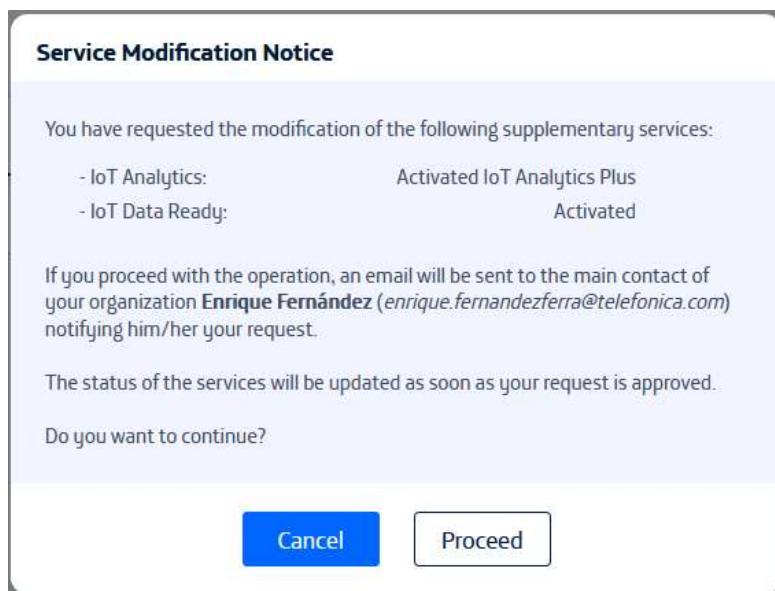
Client users with an administrator profile will be able to edit the "Services" section in commercial Plans of Supplementary Services.

**Servicios**

Estado	Nivel de auto-gestión	Estado	Estado
Activado	Avanzado	Activado	Activado
Número origen por defecto	Servicio de supervisión avanzado	Servicio de localización	SMS originados en aplicación
579	Activado	Activado Localización avanzada	Activado
Servicio de gestión de dispositivos	Número origen de gestión de dispositivos	Servicio de Value Aggregado	IoT Device Control
Desactivado	Desactivado	Activado	Activado
Modo de LTE privada:	Respaldo red pública LTE privada	Código de zona LTE privada	Servicio de LTE privada
Solo red de empresa	Desabilitada	34	Activado
IoT Data Ready			IoT Analytics
Desactivado			Activado IoT Analytics Plus

The customer may only request changes to specific services, these are: Location service, IoT Device Control, IoT Analytics, IoT Data Ready.

After making the required status changes on one or more of these services and clicking on the "Request" button, a confirmation pop-up window will be displayed with information on what this action entails once the request is processed.



An email will be sent, for each modified service that you wish to modify, to the email address defined for the main contact of the customer organization, notifying him that the Service Provider's commercial team can contact him to process this request or with a service activation link in cases where activation of a service is requested.



Currently, this feature is only available to Telefónica TTECH customers.



The email with the activation link for the IoT Analytics and location services will only be sent when requesting the activation of the advanced or plus mode.

## 11.4 Administration of Subscriptions groups

### 11.4.1 General aspects

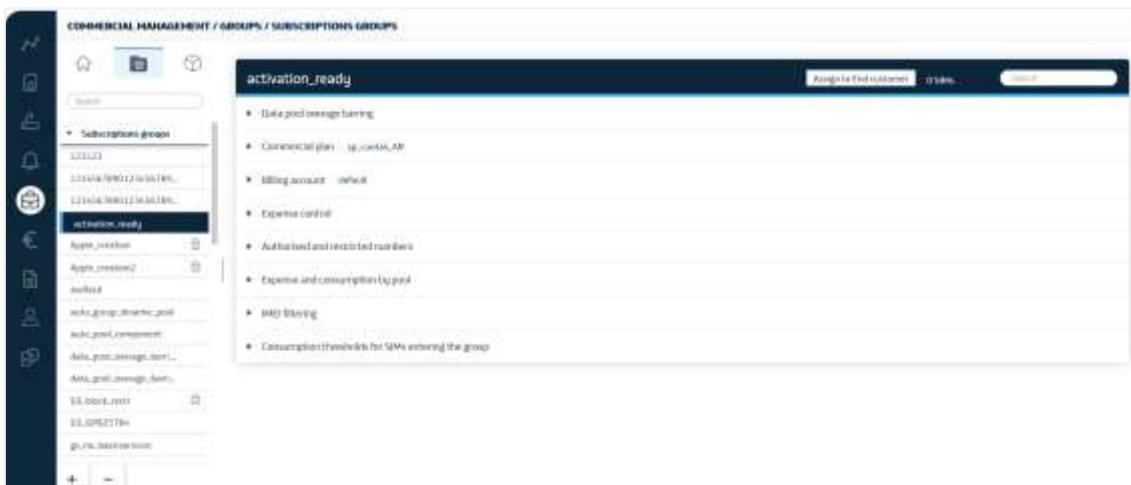
Kite Platform handles the concept of Subscriptions group to describe a group of SIM cards over which it is applied the same series of tariffs and contracted services. Therefore, all the SIM cards of a Subscriptions group share the following:

- The same **commercial plan**, which is used to determine the expense of the SIM cards.
- A **billing account** to bill all the charges made.
- **Expense controls** which are applied over the group of SIM cards.
- Authorized and restricted numbers to make calls using the SIM cards of the group.

 Kite Platform handles the concept of “Default Subscription Group” to make reference to the Subscriptions group to which a SIM card belongs and has not been explicitly assigned to any specific group. Such a SIM card does not have an associated commercial condition, or a life cycle and cannot carry data.

### 11.4.2 Basic operations with Subscriptions groups

Access to the Subscriptions group is provided by selecting the central tab, Groups in the dropdown section "Subscription Groups". This shows a list of all the Customer's Subscriptions groups about the Customer, whether they have associated SIM cards or not.



Restricted Subscription groups are those marked with a lock icon () , meaning that they have been created by a Service Provider and are only partly manageable by the Customer.

In certain situations the icon () may be displayed indicating that the Subscription Group has data pools with traffic exceeded blocked (see section [Setting up the data pool overage barring](#) for more details).

With this panel, you can perform the following actions:

- **Searches**, by filtering by the name of the Subscriptions group as the user types in characters in the search box. The list panel of Subscriptions groups will show only those Subscriptions groups whose first characters of the name match with the characters typed in by the user.
- **Create new Subscriptions groups**, once the Subscriptions groups section has been deployed, use the pointer to select the button in the bottom  of the list panel. After pressing this button, it will be necessary to populate the information requested in the attribute panel of a Subscriptions group (see section [Configuring a Subscriptions group](#) for further details) and then save the changes for the group to be created.
- **Delete all Subscriptions groups**, by selecting one unrestricted Subscription group of the list and clicking on the button  located on the bottom of the panel. After accepting the confirmation message, the Subscriptions group will be cleared. It will only be possible to clear one Subscriptions group if this has no assigned SIM cards. If it had them, it will be necessary to assign such SIM cards to another Subscriptions group.



To assign SIM cards to a Subscriptions group, access the inventory, select a set of SIM cards and perform the action "Assign lines to a Subscriptions group" (see section [Assignment operations](#) for further details).



⚠ Alarm events as well as alarm configurations referencing a Subscriptions group to be deleted will be also deleted (see section [Commercial management](#) for further details).

- Export groups and pools. The button identified with this icon , which will only be available to Customers whose roles have access to the list of both groups (subscriptions and supervision), will allow the data for subscription groups, pools, and supervision groups to be exported to a file (it will be an Excel spreadsheet with three tabs).

Clicking this button will display a modal window and give the user the option to download the information.

#### **11.4.3 Configuring a Subscriptions group**

On selecting a Subscriptions group in the Subscriptions group list panel, the attribute panel on the right-hand side will be updated with the values of the selected group. The upper right hand corner of the panel shows the number of SIM cards assigned to the group in question as well as the End Customer organisation the Subscriptions group has been assigned to. By means of this panel, the user can configure the Subscriptions group attributes and assign/remove the Subscriptions group to/from the End Customer, as described further on in this section.



The screenshot shows a list of configuration options for a Subscriptions group named 'activation\_ready'. The options listed are:

- Data pool overage barring
- Commercial plan sp\_customer\_AR
- Billing account default
- Expense control
- Authorised and restricted numbers
- Expense and consumption by pool
- IMEI filtering
- Consumption thresholds for SIMs entering the group

#### 11.4.3.1 Defining the name of the Subscriptions group

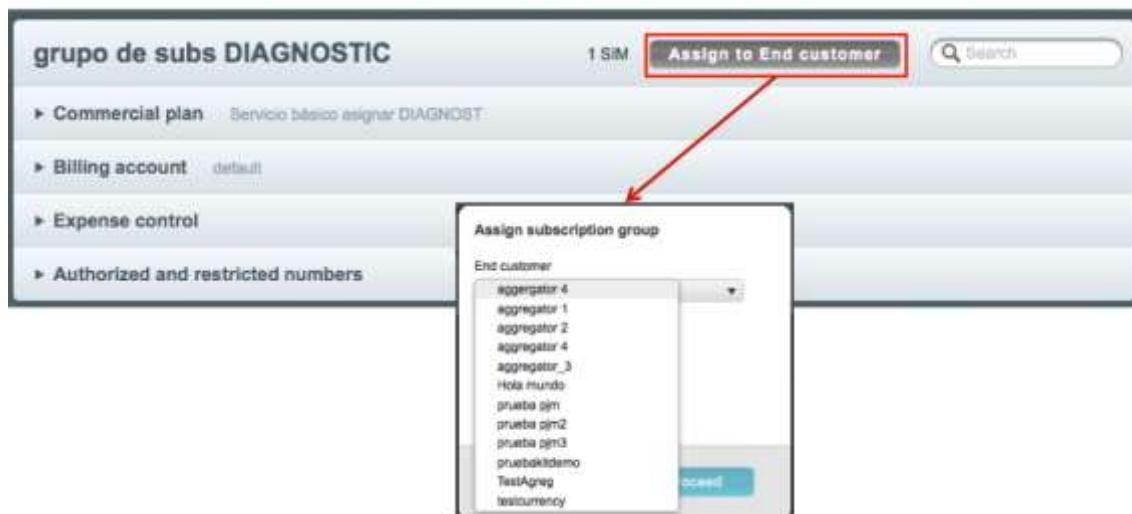
It is possible to change the name of the Subscriptions group by clicking on the name of the group. Once selected, enter the new name in a text field; accept or save the operation with the options **Cancel** and **Save Name** respectively.



The screenshot shows the 'Save name' dialog box open. The text input field contains the new group name: 'subs.selenium\_without\_sims'. The dialog box includes a 'Cancel' button, a 'Save name' button, and a search bar.

#### 11.4.3.2 Assigning and removing a Subscriptions group from an End Customer

The way a Customer can assign SIM cards to his End Customers is carried out by assigning the Subscriptions group to a specific End Customer. This is achieved clicking on the **Assign to End customer** button located in the upper right corner of the Subscriptions group panel.



A Subscriptions group can only be assigned to one End Customer only, but an End Customer can have several Subscriptions groups assigned.

Whenever a Subscriptions group is assigned to an End Customer, the **Assign to End Customer** button will change to **Unassign**, allowing, in this way, to undo de assignation.



SIM cards being unassigned from an End Customer will keep on working normally.

#### **11.4.3.3 Setting up the data pool overage barring**

From this section you can configure whether or not SIM cards are allowed to consume data traffic when the pool runs out. By default this option is disabled (except for Vivo Service Provider, which will have it enabled) when creating a Subscription Group, so if it is not modified, there will be no traffic blocking when charging in pay-per-use mode.



The screenshot shows a configuration interface for a data pool. At the top, there's a header bar with the text "activation\_ready" and a search bar. Below the header, there's a list of configuration items under a heading "Data pool overage barring". The items listed are: Commercial plan: sp\_ecosan\_AR, Billing account: default, Expense control, Authorized and restricted numbers, Expense and consumption by pool, IMEI filtering, and Consumption thresholds for SIMs entering the group. There are also "Edit" and "Save" buttons at the bottom right.

Traffic unblocking can be done manually at any time.

**⚠️** A Service Provider can either activate or deactivate a traffic blocking at any time. A Customer is authorized to deactivate a blocking but not to reactivate it.

**⚠️** It is necessary to take into account that the traffic cut at the moment the pool runs out is not accurate. The traffic cut is made by not granting a new slice of traffic to the GGSN, but it may happen that one has already been granted when the pool runs out. The extra traffic that is consumed, due to the last slice that was granted, will not be charged to the customer.

In the previous case, that uncharged traffic is marked as overage. In case of extending the pool, the uncollected overage will be counted as used pool traffic; so that the pool is only unlocked if the amount of extended pool exceeds the uncollected overage it had accumulated.

The last change in the configuration of the flag will be displayed in the user interface by showing both the update date and the name of the user who made the change.

**⚠️** If the change was made by a user of the Service Provider, the user name will not be visible to the Customers, who will see the name of the organisation instead.

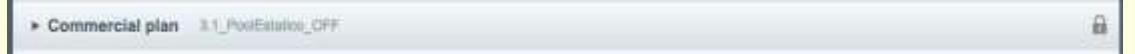
If there are blocked data pools, these poles will be displayed in the user interface, indicating the zone and destination that identify them.



#### 11.4.3.4 Selecting a Commercial plan

 A commercial plan may only be changed in the case of Subscriptions groups that still have no SIM cards associated to them. The rest of attributes can be modified at any time.

It is not allowed to modify the commercial plan if the Subscription group type is restricted, that is, it has been created by a Service Provider. This is indicated with a lock icon in the right part of the section.



It is always possible to select/change the associated commercial plan of the basic services as long as the Subscriptions group does not have any SIM card assigned. In order to do this, deploy the attribute group "Commercial Plan" and select the option **Edit** located on the right side. This section deploys the group of fields associated to the commercial plan and offers the possibility to select a commercial group of a dropdown menu. The commercial plan selected will be the one to be applied to the Subscriptions group under edition. After selecting the commercial group, it is necessary to select one of the button options **Cancel** or **Save** located on the right side. You can find the details of a commercial plan in section [Access to available commercial plans](#).

 Commercial plan dropdown menu only list those that can be assigned to the Customer, therefore does not include restricted commercial plans (commercial plans included in Subscription groups created by the Service Provider).



 One or more Basic services commercial plans and one single Supplementary services commercial plan are always assigned to a Customer by the Service Provider.

#### 11.4.3.5 Selecting a Billing Account

The associated consumption to the SIM cards, which make up the Subscriptions group, is charged on a billing account; it is possible to change this account by another Customer's account. To carry out this change, select the option **Edit** located on the right side of the attribute group "Billing Account". This selection deploys a group of associated fields to the commercial plan and offers the possibility to select one billing account through a dropdown menu. The billing account selected will be the one in which all the associated charges to the Subscriptions group under edition will be made. After selecting the billing account, select one of the button options **Cancel** or **Save** located on the right side. See section [Customer's billing accounts](#) for further details.

Billing account   **default**   SeleniumAdditionalBillingAccount

Fiscal number

**BILLING CYCLE**

Same as basic information  Meet billing cycle day

Scheduled day

**BILLING CONTACT**

Same as primary contact

First name	Last name	Email	Phone
Mobile phone	Fax		

**BILLING ADDRESS**

Same as company address

Line 1	Line 2	City	Post code

**Cancel**   3 required, 0 entries   **Save**

**⚠** Changing of Billing account will only be allowed if both Billing accounts (old and new) have the same billing cycle.

If the Subscription group type is restricted then it won't be allowed to modify the Billing account.

► Billing account   **default**   lock icon

#### 11.4.3.6 Configuring the expense controls of the Subscriptions group

It is possible to set expense controls over a Subscriptions group. These controls can be defined by the use of each of the basic services of voice, SMS and data, as well as by the joint sum of all of them. Once this period is finished, the expense counters will be restarted again.

**⚠** The expense controls which are configured do not imply an interruption in the data carry when reaching the specified monetary value.

**⚠** Subscriptions group expense controls work both over individual SIM cards and SIM cards being in pool and they take both the voucher and pay per use stretches into account.

**💡** The utility of the Expense control at a Subscriptions group level is obtain when combining them with the alarms, a functionality which will be available in the following editions.

**⚠️** Modification of expense controls may imply an alarm generation (if the new threshold is lower than the current one) or cancelling an existing one (if the new threshold is higher than the current expense or the expense control is deactivated).

The Customer has the possibility to modify the expense controls of a Subscriptions group by using the **Edit** option located on the right side of the attribute group "Expense Controls".

Following are the expense controls, which can be set by the Customer:

- **Threshold for total expense alarms:** sets an expense control applied to the joint expense sum of voice, data and SMS.
- **Threshold for voice expense alarms:** sets an expense control on voice.
- **Threshold for data expense alarms:** sets an expense control on data.
- **Threshold for SMS expense alarms:** sets an expense control on SMS messages.



The options “ON/OFF” act as a selector mode and are enabled/disabled with one single click over each one of them. If enabled, a text field is enabled to enter the numeric value of the expense control.

**⚠️** The expense controls entered by the user are always in the local currency of the Customer.

#### 11.4.3.7 LPWA – Battery Saver

The battery saving settings can only be edited by the Customer if it is indicated to do so at the client file level.

**⚠️** The visited network must support the configuration of the battery saving parameters and can set certain minimum values in the timers.

The behaviour when defining the battery saving parameters is fixed by the mode, which has two possible values:

- **Device mode**, in which the device is the one that negotiates the battery saving parameters with the visited network.
- **KITE mode**, in which the visited network uses the battery saving parameters that are configured in KITE at the subscription group level, in this section.

The parameters that can be configured in KITE mode are:

- **TAU Timer**, mandatory, is the waiting time between Tracking Area Update (TAU) shipments. During the update the radio circuitry of the communications module is active and between updates it goes into a period of disconnection of the circuitry but the network registration continues active. It can be set in seconds, minutes or hours and the minimum value is 60 minutes.
- **Active Timer**, optional, defines a period after the TAU during which the module performs a discontinuous listening process (DRX) and the radio circuitry of the communication module is in a half-activity state.
- **eDRX Cycle**, is an advanced mode of discontinuous listening (eDRX) in which cycles of discontinuous listening – disconnection of the radio circuitry are established. This parameter establishes the length of those cycles and is configured by LTE-M or NB-IoT radio technology.
- **Paging Time Window**, establishes within the previous cycle the duration of the discontinuous listening section (DRX); Once that section is exhausted, the radio circuitry turns off.

**▼ LPWA - Ahorro de batería**

- ① Consulta o selecciona la modalidad de gestión de los parámetros de ahorro de batería para las suscripciones del grupo. Si desea establecer unos parámetros específicos para los temporizadores de ahorro de batería, selecciona el modo "Maestro Kite". O bien puedes dejar estos parámetros a criterio del dispositivo (modo "Maestro Dispositivo").


**Maestro Dispositivo**

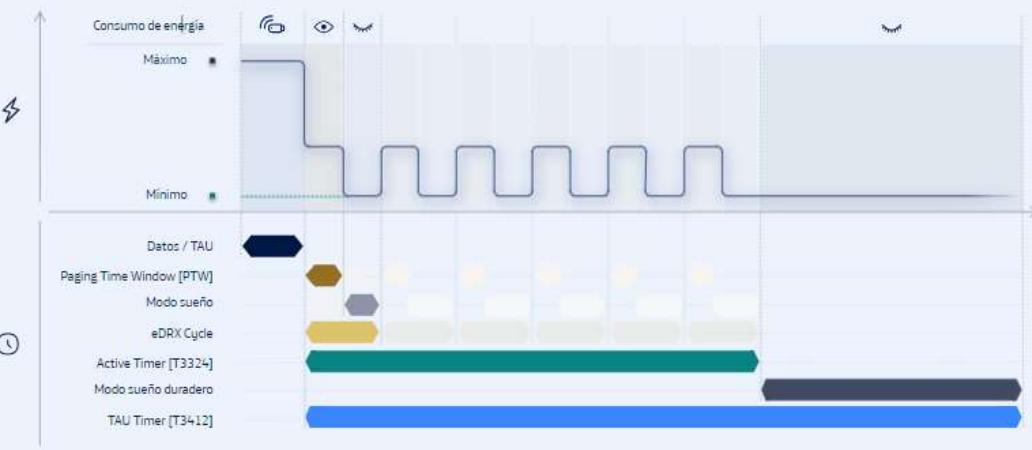
**Maestro Kite**

- Establece la parametrización de los temporizadores según el comportamiento deseado

	LTE-M (eMTC)	NB-IoT
TAU Timer [T3412]	24	Horas
eDRX Cycle	327,6...	327,6...

	LTE-M (eMTC)	NB-IoT
Active Timer [T3324]	5	Horas
Paging Time Window [PTW]	10,24 s	10,24 s



#### 11.4.3.8 Configuring the lists of authorized and restricted numbers

It is possible to modify the restrictions on calls based on numbers for calls made from the same local operator as well as *roaming*, so long as the Service Provider has enabled this. To modify these restrictions, select the **Edit** option located on the right side of the attribute group "Authorized and Restricted Numbers".

**subs.selenium**

Auto\_org\_endcust 11 SIMs [Unassign](#)

- ▶ Data pool overage barring
- ▶ Commercial plan bsp.selenium
- ▶ Billing account default
- ▶ Expense control

▼ Authorised and restricted numbers [Cancel](#) [Save](#)

**Black lists**

Rules and lines to block calls and SMS:  
i.e. 376\*

Exceptions to black list rules:  
i.e. 34660123456

Rule	Type	Rule	Type
1234*	4 - International	123?4	4 - International
-		-	
+		+	

**Incoming calls**

Allow all incoming calls  
 Just from this numbers/rules

This section deploys this group of fields and offers the possibility to configure the following lists:

- **Black list**, with the numbers that may not be called and send SMS to.
- **White list**, exceptions to the black list.
- **Screening list**, offering the possibility of permitting all incoming calls or else to define a list of allowed numbers.
- **Type**: indicates the numeration type. The number of available options can be different depending on the Service provider.



It is not allowed to enter two equal rules having the same type.

Wildcards ('\*' –replaces several numbers– and '?' –replaces a single number–) can be used in the three lists.

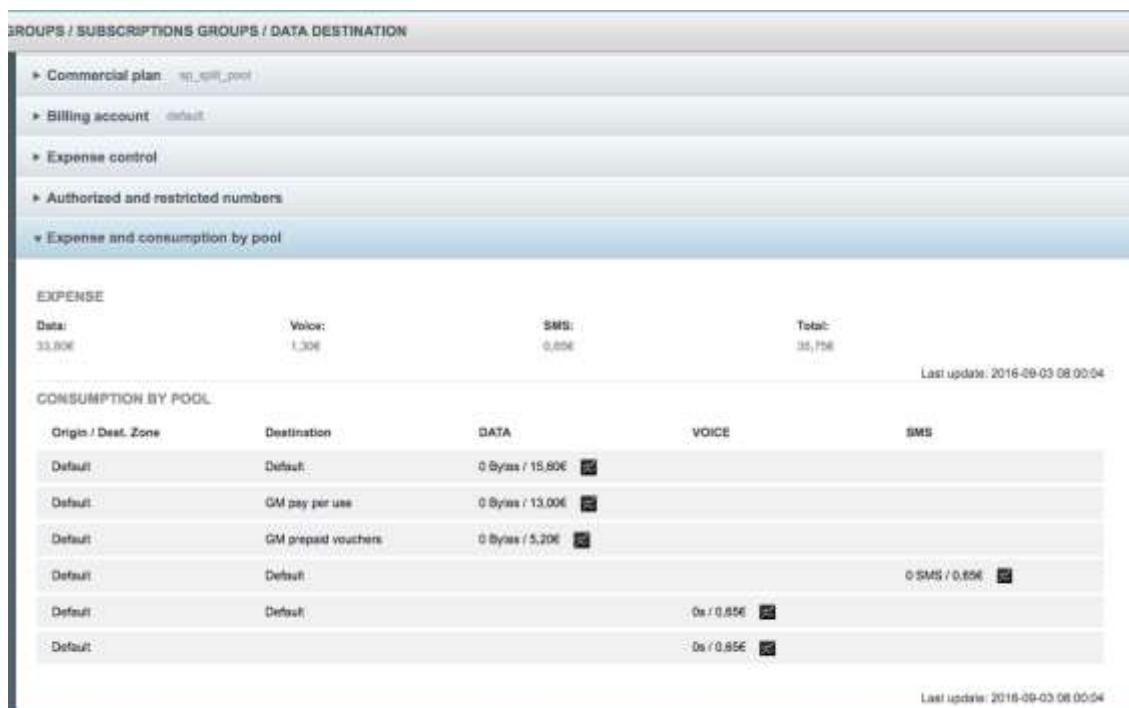
Up to a maximum of 250 entries can be defined in any of the three lists.

After configuring the number lists, select one of the button options **Cancel** or **Save** located on the right side.

**⚠️** For Service Providers with No-CAMEL feature enabled: black list configuration does not apply for outgoing voice calls in roaming when connected to network operator not supporting CAMEL. Affected No-CAMEL operators will be displayed when configuring this list.

#### 11.4.3.9 Expense and consumption by pool

This section allows accessing Subscription group total expenses divided up by basic service (Voice, SMS, and Data) as well as expense and consumption by every pool defined in the Commercial plan associated to the Subscription group.



EXPENSE				
Data:	Voice:	SMS:	Total:	
33,80€	1,30€	0,00€	35,10€	Last update: 2016-09-03 08:00:04

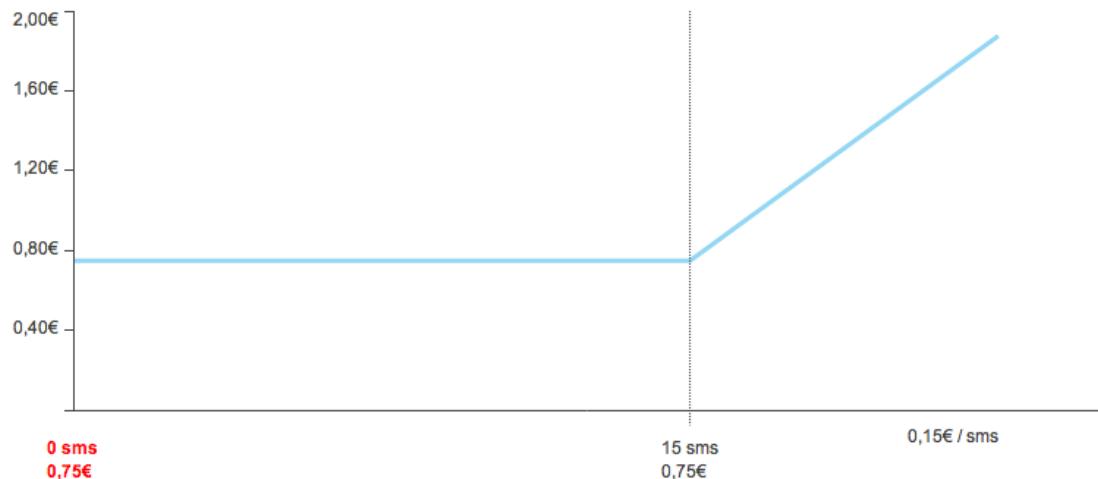
  

CONSUMPTION BY POOL				
Origin / Dest. Zone	Destination	DATA	VOICE	SMS
Default	Default	0 Bytes / 15,80€		
Default	GM pay per use	0 Bytes / 15,00€		
Default	GM prepaid vouchers	0 Bytes / 5,20€		
Default	Default			0 SMS / 0,85€
Default	Default		0s / 0,85€	
Default			0s / 0,85€	

**⚠️** Basic service expenses (Data, Voice, SMS and Total) do include both individual and pool expenses. Such expenses have into account both the voucher and the overage and they include the Commercial plan discounts.

This section also shows expense and consumption performed by each one of the pool tariff plans defined in the related Commercial plan together with the zone and destination (destination number in the case of voice MO and SMS or data destination in the case of data). Clicking on the graph icon ( ) a popup window will show with the tariff details from the current moment on.

If the icon (!) Is shown, it will indicate that the pool is blocked for consumption outside the pool, that is, it will not be able to perform traffic exceeded (see section [Setting up the data pool overage barring](#) for more details).



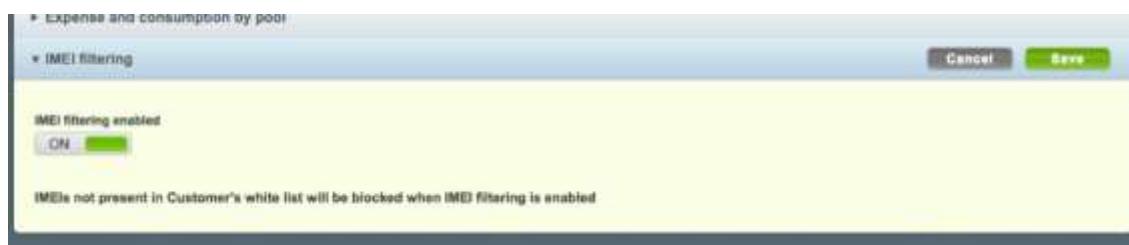
**Marked in red current consumption / expense**

Last update: 2014-01-08 09:31:20

- ⚠️** In the case of dynamic pools, no graph will be shown if the pool is empty at the time of consulting the information.
- ⚠️** No graph will be displayed, either, in case the pool tariff has been marked to be deleted (in the related Commercial plan).
- ⚠️** “Last update” information is updated every 30 sec and is referred to the last received traffic timestamp. This information may be delayed up to 5 min aprox.

#### 11.4.3.10 Configuration of IMEI Filtering

If IMEI filtering is enabled at Customer section level, then a new section will appear at Subscription group level intended for enabling the IMEI filtering feature only for the SIM cards belonging to the affected Subscription group.



#### 11.4.3.11 Consumption limits for SIMs entering the group

Service Providers can configure the values of this section during the creation of the Subscription group, although it is not mandatory. After saving them they cannot be modified (as happens in the other sections). In any case, Customers can always modify them later.

In this section, the consumption limits, both monthly and daily, that the Customer wishes to apply to the SIMs that enter the group can be defined.

**Consumption limits for SIMs entering the group**

**Having these limits activated means that they will be automatically applied to the SIMs that enter the group**

Setting this limit will allow you to monitor it from the inventory and in the SIM details. You will be able to choose whether to cut off the service if it is reached. In case of traffic cut, it will be automatically restored in the next billing cycle / day.

These consumption limits are being applied to the SIMs that enter this group.

	Consumption limit to monitor			Cut off traffic if reached?
<b>Monthly</b>	<input checked="" type="checkbox"/> Data	500 Megabytes	/ month	<input checked="" type="checkbox"/> No
	<input checked="" type="checkbox"/> Voice			
	<input checked="" type="checkbox"/> SMS	200 SMS	/ month	<input checked="" type="checkbox"/> No
<b>Daily</b>	<input checked="" type="checkbox"/> Data	1 Megabytes	/ day	<input checked="" type="checkbox"/> No
	<input checked="" type="checkbox"/> Voice			
	<input checked="" type="checkbox"/> SMS	2 SMS	/ day	<input checked="" type="checkbox"/> No

If you also want to be notified (via email, Push API and/or in the portal) or perform any other action related to the reached level of these limits, remember to configure consumption monitoring rules in the alarm associated with the SIMs of this subscription group.

These limits will only apply to the SIM cards that enter the group, as long as the configuration is enabled in the control available at the top. If the SIM cards assigned to the new group already had consumption controls configured, these will be replaced by the values defined in said subscription group.

SIM cards that are already in the Subscription group at the time these thresholds are configured and saved will not be affected by them.

If you want to propagate this configuration to all of them, you can do it manually and massively from the SIM inventory by filtering and selecting all the SIMs that belong to this Subscription group and applying the operations "Change" > "Traffic consumption control" on them in any of the "daily" and/or "monthly" options.

The customer will still be able to manually configure consumption controls at SIM level from Inventory, overwriting any initialization that was done when the SIM cards were added to the Subscription group.

## 11.5 Supervision Groups Management

### 11.5.1 General aspects

Kite Platform handles the concept of supervision groups to describe a group of cards on which can be carried out supervision operations, specifically:

- Get supervision reports (see section [Supervision Reports](#) for further details)
- Configure supervision alarms (see section [Alarm rules and notifications configuration](#) for further information).
- Cloud Connectors service access (see section [Cloud Connectors service](#) for further details).

 Kite Platform handles the concept of “Supervision Group by default” to make reference to the supervision group to which a SIM card belongs and has not been explicitly assigned to any specific group.

### 11.5.2 Managing Supervision Groups

Access to the supervision groups is provided by selecting the tab Groups and deploying the section "Supervision Groups". Inside is a list with all the Customer's supervision groups, whether they have associated SIM cards or not.



With this panel, you can perform the following actions:

- **Searches**, by filtering by the name of the supervision group as the user types in characters in the search box. The list panel of supervision groups will show only those supervision groups whose first characters of the name match with the characters typed in by the user.
- **Create new supervision groups**, once the supervision groups section has been deployed, use the pointer to select the button  in the bottom of the list panel. Once this button

has been pressed, it will be necessary to name the new group and then save the changes for the group to remain as created:

- **Clear supervision groups**, by selecting one group of the supervision list and clicking on the button  located on the bottom of the panel. After accepting the confirmation message, the Subscriptions group will be cleared. It will only be possible to clear one supervision group if this has no assigned SIM cards. If it has, it will be necessary to assign such SIM cards to another supervision group to access to clear them.



To assign SIM cards to a supervision group, you have to access to the inventory, select a set of SIM cards and apply on them the action "Assign group lines to supervision group" (see section [Assignment operations](#) for further detailed information).



Next versions will allow the name edition. If you want to rename a supervision group, you will have to create a new one with the name you want and move all the SIM cards to that group.



⚠ Alarm events as well as alarm configurations referencing supervision groups to be deleted will be also deleted.

The right-hand panel will show information about the number of SIM cards, which the Supervision group currently has along with information about the configuration of synchronization with external systems to Kite.

### 11.5.3 Synchronization with external systems



\* Sincronización con sistemas externos

Editar

Información a sincronizar

- Alias y campos personalizados Actualizaciones en el alias y los campos personalizados de la suscripción
- Estado Cambios en el estado de ciclo de vida de la suscripción y en la fecha de activación
- Servicios básicos Cambios de configuración de servicios básicos
- Consumos Cambio de consumo registrado para cualquiera de los servicios (m2m, M2M o Datos)
- Presencia Término de eventos de apertura o cierre del contexto en sesiones de datos. Primeras adquisiciones o modificaciones del RIE y actualizaciones del posicionamiento físico. Solo disponible con servicio de localización activado
- IoT Data Ready Dado evento enviado por el dispositivo.
- Rechazos de registro en red Eventos de rechazo de registro en red.

Servicios externos de monitorización

No está configurado el servidor "PUSH API"

Se requiere incluir credenciales válidas

Configuración de PUSH API

Configuración del Conector Cloud

In this panel it will be possible to configure which SIM information you want Kite to send to an external system. Kite Platform is prepared to send events to public cloud platforms,

such as Microsoft's Azure or Amazon Web Services, and to the Customer's servers via Push API.

Thanks to this functionality, for those Kite Platform customers who either already have applications and business logic implemented in the public cloud, or want to build them, the integration of SIM data and connectivity requires less effort, since can be done with a simple configuration change in the Kite Platform.

The first time a SIM is assigned to a Supervision Group, all attributes are published in the activated external system, from then on, only in the event of any change will the common attributes and those of the selected categories be synchronized. There are no periodic updated of any parameter.

The Customer may decide which service to activate, Cloud Connector or Push API, providing a hyperlink to the configuration of each service.

Therefore, the Customer will have the option of activating any of these two services for all those SIMs that he wishes, just by including them in a Supervision Group and configuring it appropriately.



**⚠️** A customer with the available service can only activate the SIM cloud monitoring if the Supervision group does not have SIM cards (in that moment the supervision group must have "0" SIMs).

**⚠️** It must be kept in mind that the activation of this service may involve charges by the cloud service provider that are not managed, therefore, by the Kite Platform.

If the customer does not have the service enabled, a message will be shown informing about it.



### 11.5.3.1 Cloud notifications in Supervision groups

In the panel of Synchronization with external systems section, it can be configured which SIM information you want Kite to send to an external system. Kite Platform is ready to send events to public cloud platforms, such as Microsoft's Azure or Amazon Web Services (AWS). Kite uses the standard libraries to send events to these platforms.

After the service is configured and validated for data sync with Azure or AWS, a JSON element will be sent like the examples below.

Below is an example of the information dumped in the AWS public cloud from the Kite Platform:

```
"reported": {  
    "country": "ES",  
    "commsModModel": "HUAWEI E3276s-150",  
    "commsModManufacturer": "HUAWEI Technologies Co Ltd",  
    "imei": "863781010957232",  
    "iccid": "8952031422900140636",  
    "alias": "8952031422900140636",  
    "event": "ACCOUNTING_RADIUS_START",  
    "dailyVoice": 0,  
    "dailySms": 0,  
    "dailyData": 0,  
    "apn": "mconnect.pre.telefonica.com",  
    "lifeCycleStatus": "ACTIVATION_READY",  
    "operator": "Telefonica Moviles España",  
    "timestamp": 1560850561000,  
    "activationDate": 1525947198000,  
    "Latitude": 42.6217,  
    "Longitude": -7.767138,  
    "presenceLevel": "GPRS",  
    "ip": "172.18.213.250",  
    "data": {  
        "payload": "12500100050001010300000000890068691540402936697a1e0240 -61 -  
77 27 2140700000N41.643592W000.762633202206200759180290200502.08",  
        "timestamp": 1672128262000  
    }  
}
```

An example of what is sent to the Azure cloud will be:

```
"deviceId": "276074",  
"etag": "AAAAAAAAAAE=",  
"deviceEtag": "MTM4OTM2Nzcz",
```

```
"status": "enabled",
"statusUpdateTime": "0001-01-01T00:00:00",
"connectionState": "Disconnected",
"lastActivityTime": "0001-01-01T00:00:00",
"cloudToDeviceMessageCount": 0,
"authenticationType": "sas",
"x509Thumbprint": {
    "primaryThumbprint": null,
    "secondaryThumbprint": null
},
"version": 1258,
"properties": {
    "desired": {
        "$metadata": {
            "$lastUpdated": "2018-06-27T11:58:45.3094884Z"
        },
        "$version": 1
    },
    "reported": {
        "country": "ES",
        "presenceLevel": "GPRS",
        "commsModManufacturer": "Telit Communications SpA",
        "ip": "172.18.213.253",
        "dailySms": 0,
        "Latitude": 42.6217,
        "Longitude": -7.767138,
        "operator": "Telefonica Moviles España",
        "iccid": "8934072100251270842",
        "dailyData": 0,
        "commsModModel": "Telit GE910-QUAD (also known as Telit GE910)",
        "alias": "8934072100251270842_mod",
        "imei": "351732050318578",
        "activationDate": 1519209861000,
        "event": "ASSUMED_IDLE",
        "dailyVoice": 0,
        "apn": "sm2m-apple.movistar.es",
        "lifeCycleStatus": "ACTIVATED",
        "timestamp": 1534962611947,
        "data": {
            "payload": "1250010005000101030000000890068691540402936697a1e0240 -61 -
77 27 2140700000N41.643592W000.762633202206200759180290200502.08",
            "timestamp": 1672128262000
        }
    }
}
```

```
},
"$metadata": {
    "$lastUpdated": "2018-08-22T18:30:12.923377Z",
    "country": {
        "$lastUpdated": "2018-08-22T18:30:12.923377Z"
    },
    "presenceLevel": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "commsModManufacturer": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "ip": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "dailySms": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "Latitude": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "Longitude": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "operator": {
        "$lastUpdated": "2018-08-22T18:30:12.923377Z"
    },
    "iccid": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "dailyData": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "commsModModel": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    },
    "alias": {
        "$lastUpdated": "2018-08-22T18:05:59.7914932Z"
    },
    "imei": {
        "$lastUpdated": "2018-08-22T16:46:14.296284Z"
    }
},
```

```

},
"activationDate": {
    "$lastUpdated": "2018-08-22T16:46:14.296284Z"
},
"event": {
    "$lastUpdated": "2018-08-22T18:30:12.923377Z"
},
"dailyVoice": {
    "$lastUpdated": "2018-08-22T16:46:14.296284Z"
},
"apn": {
    "$lastUpdated": "2018-08-22T16:46:14.296284Z"
},
"lifeCycleStatus": {
    "$lastUpdated": "2018-08-22T16:46:14.296284Z"
},
"timestamp": {
    "$lastUpdated": "2018-08-22T18:30:12.923377Z"
}
},
"$version": 1257
}
}
}

```

### 11.5.3.2 PUSH API notifications in Supervision groups

In the panel of [Synchronization with external systems](#) section, it can be configured which SIM information you want Kite to send to an external system. Kite Platform is prepared to send events to Client's servers via Push API.

After the service is configured and validated for data sync with PUSH API, a JSON element will be sent with the following structure:

```
{
"eventType": "XXX",
"subscription": { <objeto_información_suscripción> }
"data": { <objeto_información_cambios_suscripcion> }
}
```

Depending on the event that triggers the synchronization of the subscription data, eventType will have one of the following values:

eventType field	Description	Suscription object's fields	Data object's fields
-----------------	-------------	-----------------------------	----------------------

bootstrap	The first time a SIM is registered in the Supervision Group, all attributes are published in the external system (bootstrap).	ICCID, IMSI, MSISDN, EID, ID, customerId, CommercialGroupID, supervisionGroupName	All of the following table. Corresponding to categories: "Alias and custom fields", "Status", "Basic services", "Consumption" and "Presence".
presence	When there is a GPRS presence change (data connection / disconnection).	ICCID, IMSI, MSISDN, EID, ID, customerId, CommercialGroupID, supervisionGroupName	presenceLevel, country, ip, event, apn, operator, operatorMcc, operatorMccMnc, timestamp, imei, commsModModel, commsModManufacturer, Latitude and Longitude.
consumption	When it comes to a consumption update, the update is performed every hour, or when the data session closes, or when the data slice granted by the GGSN is exhausted.	ICCID, IMSI, MSISDN, EID, ID, customerId, CommercialGroupID, supervisionGroupName	dailyVoice, dailySms, dailyData, monthlyVoice, monthlySms y monthlyData. Only the updated fields are sent. For example, if only the voice data has changed, dailyVoice and monthlyVoice will be sent, the rest will not.
diagnostic	When performing a diagnostic operation (GSM and IP reachability).	ICCID, IMSI, MSISDN, EID, ID, customerId, CommercialGroupID, supervisionGroupName	presenceLevel, country, event, operator, operatorMccMnc y timestamp o presenceLevel, apn, event and ip. (presenceLevel is sent, only if changes its value)
lifeCycle	When there is a SIM lifecycle update.	ICCID, IMSI, MSISDN, EID, ID, customerId, CommercialGroupID, supervisionGroupName	activationDate, and lifeCycleStatus.
alias	When there is an update of alias or custom fields associated with the SIM.	ICCID, IMSI, MSISDN, EID, ID, customerId, CommercialGroupID, supervisionGroupName	alias, customField1, customField2, customField3 and customField4.
iotDataReady	When data is collected from a device associated with the IoT Data Ready service (see <a href="#">IoT Data Ready</a> section)	ICCID, IMSI, MSISDN, IMEI, EID, ID, customerId, CommercialGroupID, supervisionGroupName	Timestamp, payload, sourcePort
basicServices	When a basic services update is performed on a SIM card.	ICCID, IMSI, MSISDN, IMEI, EID, ID, customerId, CommercialGroupID, supervisionGroupName	incomingVoiceHome, incomingVoiceRoaming outgoingVoiceHome, outgoingVoiceRoaming, outgoingVoiceInternational incomingSmsHome, incomingSmsRoaming outgoingSmsHome, outgoingSmsRoaming, outgoingSmsInternational dataHome, dataRoaming
networkRejection	At the moment a network registration rejection is detected.	ICCID, IMSI, MSISDN, IMEI, EID, ID, customerId, commercialGroupID, supervisionGroupName	timestamp, rejectionCause, mcc, mnc

The set of Kite Platform parameters that are synchronized with the platforms via PUSH API are:

Category	Attributes
Common attributes (always sent)	<ul style="list-style-type: none"> <li>• iccid</li> <li>• imsi</li> <li>• msisdn</li> <li>• eid</li> <li>• id</li> <li>• customerid</li> <li>• commercialGroupID</li> <li>• supervisionGroupName</li> </ul>
Alias and custom fields	<ul style="list-style-type: none"> <li>• alias</li> <li>• customField1</li> <li>• customField2</li> <li>• customField3</li> <li>• customField4</li> </ul>
Status	<ul style="list-style-type: none"> <li>• activationDate</li> <li>• lifeCycleStatus</li> </ul>
Consumption	<ul style="list-style-type: none"> <li>• dailyVoice</li> <li>• dailySms</li> <li>• dailyData</li> <li>• monthlyVoice</li> <li>• monthlySms</li> <li>• monthlyData</li> </ul>
Presence	<p>When there is a GPRS presence change (data connection / disconnection).</p> <ul style="list-style-type: none"> <li>• presenceLevel (current presence status):           <ul style="list-style-type: none"> <li>• UNKNOWN (unknown)</li> <li>• NOT_REGISTERED (not registered in GSM)</li> <li>• GSM (GSM registered)</li> <li>• GPRS (GPRS registered)</li> <li>• IP (achievable by IP reachability test)</li> </ul> </li> <li>• country: country code (two chars).</li> <li>• ip</li> <li>• event (last presence event received by the SIM):           <ul style="list-style-type: none"> <li>• GPRS_UP (GPRS network connection)</li> <li>• GPRS_DOWN_TER_OK (disconnection from the GPRS network requested by the terminal)</li> </ul> </li> </ul>

Category	Attributes
	<ul style="list-style-type: none"> <li>● GPRS_DOWN_TER_ERR (GPRS network disconnection due to user application error)</li> <li>● GPRS_DOWN_NET_OK (GPRS network disconnection due to loss of service / coverage)</li> <li>● GPRS_DOWN_NET_ERR (GPRS network disconnection due to another error)</li> <li>● GPRS_DOWN_NET_TOUT (GPRS network disconnection due to session timeout)</li> <li>● ASSUMED_IDLE (Connected to the GSM network)</li> <li>● CAMEL_BUSY (On voice call)</li> <li>● MS_PURGED (SIM purged from VLR due to inactivity)</li> <li>● IMSI_DETACHED (SIM disconnected from the GSM network)</li> <li>● RESTRICTED_AREA (SIM in restricted roaming zone)</li> <li>● NOT_REGISTERED (SIM not registered in GSM network)</li> <li>● REGISTRATION (The SIM was registered in the system)</li> <li>● IP_UP_ICMP (Successful ICMP PING result)</li> <li>● IP_DOWN_ICMP (ICMP PING failed)</li> <li>● IP_DOWN_NO_IP (The PING cannot be performed because there is no associated IP)</li> <li>● apn: Apn used in data session.</li> <li>● operator</li> <li>● operatorMccMnc</li> <li>● *timestamp: Milliseconds since epoch.</li> <li>● *imei: Last collected imei by the device.</li> <li>● *commsModModel: Model of the communication module of the device.</li> <li>● *commsModManufacturer: Manufacturer of the communication module of the device.</li> <li>● **Latitude: Last collected value.</li> <li>● **Longitude: Last collected value.</li> </ul> <p>* If the attribute is empty, it won't appear.  ** Only available if Customer has the Location supplementary service enable and KITE is able to determine that location. It</p>

Category	Attributes
	only changes if the cell has changed position since the last connection.
Diagnostic	<p>Diagnosis operation is performed (GSM and IP reachability):</p> <ul style="list-style-type: none"> <li>• presenceLevel (same values as in presence) (Only sent if modified)</li> <li>• country (only for GSM status).</li> <li>• event (same values as in presence)</li> <li>• operator (only for GSM status).</li> <li>• operatorMccMnc (only for GSM status).</li> <li>• timestamp (only for GSM status): Milliseconds since epoch.</li> <li>• apn: Apn used in data session.</li> <li>• ip (only for IP reachability).</li> </ul>
IoT Data Ready	<p>When data is collected from a device associated with the IoT Data Ready service (see <a href="#">IoT Data Ready</a> section)</p> <ul style="list-style-type: none"> <li>• timestamp</li> <li>• payload</li> <li>• sourcePort</li> </ul>
Basic services	<p>When:</p> <ul style="list-style-type: none"> <li>• Sending the bootstrap message (this is sent when a subscription enters the supervision group).</li> <li>• Changing the commercial plan, if the basic services of the subscription change.</li> <li>• Changing basic services from the Portal.</li> <li>• Executing an alarm business rule that changes the configuration of basic services.</li> <li>• Publishing the subscription directly to Active from pre-inventory</li> </ul> <p>The following will be synchronised:</p> <ul style="list-style-type: none"> <li>• incomingVoiceHome, incomingVoiceRoaming</li> <li>• outgoingVoiceHome, outgoingVoiceRoaming, outgoingVoiceInternational</li> <li>• incomingSmsHome, incomingSmsRoaming</li> <li>• outgoingSmsHome, outgoingSmsRoaming, outgoingSmsInternational</li> <li>• dataHome, dataRoaming</li> </ul>
networkRejection	<p>At the moment a network registration rejection is detected, the following information will be sent:</p> <ul style="list-style-type: none"> <li>• timestamp</li> <li>• rejectionCause</li> <li>• mcc</li> <li>• mnc</li> </ul>

Category	Attributes
	<p>El "rejectionCause" puede ser:</p> <p><b>SIGTRAN:</b></p> <ul style="list-style-type: none"> <li>• 8 – Roaming not allowed</li> <li>• 1 – Unknown subscriber</li> </ul> <p><b>DIAMETER:</b></p> <ul style="list-style-type: none"> <li>• 5001 – Unknown subscriber</li> <li>• 5004 – Roaming not allowed</li> <li>• 5003 – Identity not registered</li> </ul> <p>5420 – EPS services not allowed</p>

Below is an example of the information dumped into a PUSH API server from Kite Platform when a SIM is included in the supervision group that an external system is bound to:

```
{
  "eventType" : "bootstrap",
  "subscription" : {
    "iccid" : "8924528873860991393",
    "imsi" : "214077719199691",
    "msisdn" : "34491626779",
    "eid" : "",
    "id" : 472055,
    "customerId" : "customer_Anal671735e050PVIRKit2n",
    "commercialGroupId" : 186796,
    "supervisionGroupName" : "Nuevo_GSupervision"
  },
  "data" : {
    "presenceLevel" : "UNKNOWN",
    "country" : "",
    "ip" : "",
    "additionalIp" : "",
    "event" : "GPRS_DOWN_NET_ERR",
    "apn" : "",
    "operator" : "",
    "operatorMccMnc" : "",
    "timestamp" : 1605866973000,
    "imei" : "866109023566443",
    "commsModModel" : "HUAWEI MS2131",
    "commsModManufacturer" : "HUAWEI Technologies Co Ltd",
    "dailyVoice" : 0,
    "dailySms" : 0,
  }
}
```

```
"dailyData" : 0,  
"monthlyVoice" : 0,  
"monthlySms" : 0,  
"monthlyData" : 0,  
"activationDate" : 1566403033000,  
"lifeCycleStatus" : "ACTIVATED",  
"alias" : "8924528873860991393",  
"customField1" : "13",  
"customField2" : "23",  
"customField3" : "33",  
"customField4" : "43",  
"incomingVoiceHome" : false,  
"incomingVoiceRoaming" : true,  
"outgoingVoiceHome" : false,  
"outgoingVoiceRoaming" : false,  
"outgoingVoiceInternational" : true,  
"incomingSmsHome" : false,  
"incomingSmsRoaming" : false,  
"outgoingSmsHome" : true,  
"outgoingSmsRoaming" : true,  
"outgoingSmsInternational" : true,  
"dataHome" : false,  
"dataRoaming" : false  
}
```

Below is an example of the information dumped in a PUSH API server from Kite Platform with event type of Presence (GPRS example).

```
{  
  "eventType" : "presence",  
  "subscription" : {  
    "iccid" : "89782335963396972869",  
    "imsi" : "214073245682",  
    "msisdn" : "34454298180",  
    "eid" : "",  
    "id" : 489641,  
    "customerId" : "customer_1671735e050PVIRKiT2n",  
    "commercialGroupId" : 122297,  
    "supervisionGroupName" : "gs_push"  
  },  
  "data" : {  
    "presenceLevel" : "GPRS",  
    "lat" : 37.7749, "lon" : -122.4194  
  }  
}
```

```

    "country" : "ES",
    "ip" : "172.18.213.250",
    "additionalIp" : "2001:db8:85a3::8a2e:370:7336",
    "event" : "GPRS_UP",
    "apn" : "ap.movistar.es",
    "operator" : "Telefonica Moviles España",
    "operatorMccMnc" : "21407",
    "timestamp" : 1616679269000,
    "imei" : "866109023566450",
    "commsModModel" : "MS2131",
    "commsModManufacturer" : "Technologies Co Ltd"
}
}

```

**⚠️** The attributes Latitude and Longitude are only available if Customer has the Location supplementary service enable and the provider gives us its location. It only changes if the cell has changed position since the last connection.

Below is an example of the information dumped in a PUSH API server from Kite Platform with event type of Consumption (only modified elements are sent). In this example there are only consumptions updates, there are not voice or SMS updates.

```

{
  "eventType" : "consumption",
  "subscription" : {
    "iccid" : "8934076400003813949",
    "msisdn" : "345901012148558",
    "eid" : "",
    "id" : 30278233,
    "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFf6",
    "commercialGroupId" : 50408,
    "supervisionGroupName" : "GS_Monitorizacion"
  },
  "data" : {
    "dailyData" : 171499,
    "monthlyData" : 5432361
  }
}

```

An example of the information dumped in a PUSH API server from the Kite Platform when the Alias of that SIM has been modified.

```

{
  "eventType" : "alias",

```

```
"subscription" : {
    "iccid" : "8934076400003813993",
    "imsi" : "214074302591999",
    "msisdn" : "345901012148597",
    "eid" : "",
    "id" : 30278235,
    "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",
    "commercialGroupId" : 51468,
    "supervisionGroupName" : "GS_Monitorizacion"
},
"data" : {
    "alias" : "Cambio Alias a OTRO",
    "customField1" : "CIF_Igual",
    "customField2" : "Producto_Igual",
    "customField3" : "Subcategoria Igual",
    "customField4" : "JAVI Igual"
}
}
```

An example of the information dumped into a PUSH API server from the Kite Platform when a SIM goes from Enabled to Disabled, lifeCycle change.

```
{
    "eventType" : "lifeCycle",
    "subscription" : {
        "iccid" : "8934076400003813993",
        "imsi" : "214074302591999",
        "msisdn" : "345901012148597",
        "eid" : "",
        "id" : 30278235,
        "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",
        "commercialGroupId" : 51468,
        "supervisionGroupName" : "GS_Monitorizacion"
},
    "data" : {
        "activationDate" : 1601023839000,
        "lifeCycleStatus" : "DEACTIVATED"
}
}
```

An example of the information dumped into a PUSH API server from the Kite Platform when a SIM goes from Disabled to Enable, lifeCycle change.

```
{
```

```
"eventType" : "lifeCycle",
"subscription" :
  "iccid" : "8934076400003813993",
  "imsi" : "214074302591999",
  "msisdn" : "345901012148597",
  "eid" : "",
  "id" : 30278235,
  "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",
  "commercialGroupId" : 51468,
  "supervisionGroupName" : "GS_Monitorizacion"
},
"data" : {
  "activationDate" : 1601023839000,
  "lifeCycleStatus" : "ACTIVATED"
}
}
```

An example of the information dumped in a PUSH API server from the Kite Platform when a diagnostic operation of that SIM is performed.

```
{
"eventType" : "diagnostic",
"subscription" :
  "iccid" : "8934076400003813993",
  "imsi" : "214074302591929",
  "msisdn" : "345901012148557",
  "eid" : "",
  "id" : 30278235,
  "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",
  "commercialGroupId" : 51468,
  "supervisionGroupName" : "GS_Monitorizacion"
},
"data" : {
  "presenceLevel" : "GSM",
  "country" : "ES",
  "event" : "ASSUMED_IDLE",
  "operator" : "Telefonica Moviles España",
  "operatorMccMnc" : "",
  "timestamp" : 1615007139746
}
}
```

An example of the information dumped in a PUSH API server from the Kite Platform when information from a IoT Data Ready service device is collected by KITE:

```
{  
    "eventType" : "iotDataReady",  
    "subscription" : {  
        "iccid" : "8934076400003813993",  
        "imsi" : "214074302591929",  
        "msisdn" : "345901012148557",  
        "eid" : "",  
        "imei": "",  
        "id" : 30278235,  
        "customerId" : "EU_PRUEBA_VT174c015ffcbc0fSGcaKFF6",  
        "commercialGroupId" : 51468,  
        "supervisionGroupName" : "GS_Monitorizacion"  
    },  
    "data" : {  
        "timestamp" : 1672128111000,  
        "payload" : "12500100050001010300000000890068691540402936697a1e0240 -61 -77  
27 214070000N41.643592W000.762633202206200759180290200502.08",  
        "sourcePort" : 9999  
    }  
}
```

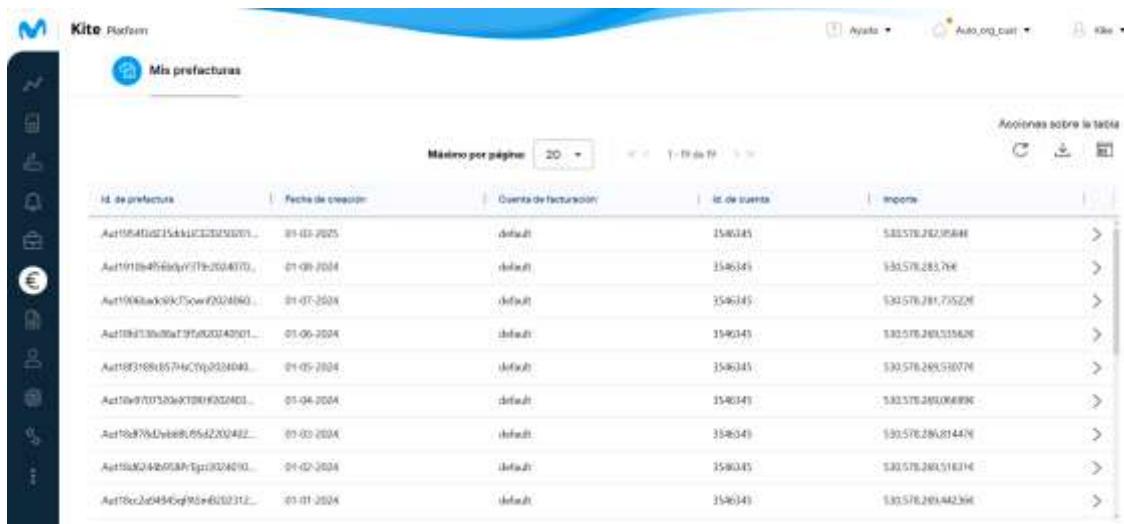
## 12 Pre-bills issuance

### 12.1 General aspects

The pre-bill module is accessible from the  main menu access icon to the set of pre-bills available for the Customer.

Pre-bills include summarized information about the billable elements of a Customer. Each pre-bill is associated to a billing account and gathers the billed items at the end of a bill cycle. In this way, a Customer may have as many bills as billing accounts they have defined for a monthly-based billing cycle.

Following is this module's aspect:



Id. de prefactura	Fecha de creación	Cuenta de facturación	Id. de cuenta	Importe	Acción
Aut1054fb0215dd1c33029361...	01-01-2025	default	1546345	\$30,578,282,956.48	>
Aut101184956097712034070...	01-09-2024	default	1546345	\$30,578,285,766	>
Aut100black9a0750e02074060...	01-07-2024	default	1546345	\$30,578,281,735229	>
Aut100d13b6091395a820343501...	01-06-2024	default	1546345	\$30,578,280,515628	>
Aut100f3168b85774ac79324040...	01-05-2024	default	1546345	\$30,578,280,510776	>
Aut100e9700320e4c100ff324003...	01-04-2024	default	1546345	\$30,578,280,004096	>
Aut100f79a0798185d22034022...	01-03-2024	default	1546345	\$30,578,285,814428	>
Aut100f424b05187f79324010...	01-02-2024	default	1546345	\$30,578,280,516316	>
Aut100cc2d4340e950e80132312...	01-01-2024	default	1546345	\$30,578,280,442396	>

### 12.2 Basic operations with pre-bills

The list of available pre-bills are sorted by creation date, from newest to oldest.



Only pre-bills older than 24 months will be available.

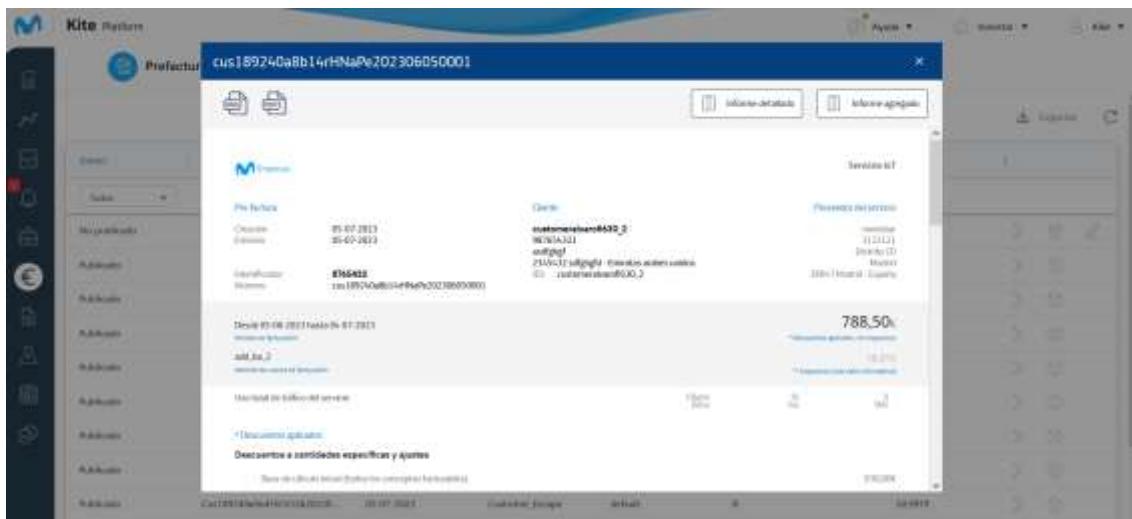
Each element of the pre-bill list has the following information:

- Prebill status: published or unpublished.
- Pre-bill number.
- Pre-bill creation date.
- Customer's name.
- Billing account name associated to the pre-bill.
- Billing account id.
- Amount: total amount without taxes.

- Access to pre-bill details (  ).

### 12.3 Working with pre-bills

From the detail view of the pre-bill, the following actions can be carried out:



- **Export**, the concepts that constitute part of the pre-bill can be accessed from the detailed information panel. After selecting a pre-bill, it is possible to download it with the option **Export** located in the option list available at the top of the list. This option allows getting an XML version of the pre-bill (you can find an example of this in section [Annex A: Sample of pre-bill file in XML format](#)). The filename syntax follows this structure:

```
<MM>-prebill-<CRM_BILLING_ACCOUNT_ID>-<CUSTOMER_CRM_ID1>-
<PREBILL_ID>[MINICYCLE_ID].xml
```

With:

- <MM>: month when the pre-bill is generated.
- <CRM\_BILLING\_ACCOUNT\_ID>: CRM ID configured for associated Billing Account at the time of pre-bill generation.
- <CUSTOMER\_CRM\_ID1>: CRM ID 1 configured for this Customer at the time of pre-bill generation.
- <PREBILL\_ID>: internal pre-bill ID.
- [MINICYCLE\_ID]: optional. ID indicating if the pre-bill corresponds to a mini-cycle. The value by default is ".mc".
- **Print** ()**,** it allows printing a pre-bill. When clicking on the **Print** button the web browser window will show. In case of printing to PDF, it might be necessary to install a third-party print-to-PDF plug-in.
- **Report download**, it allows to download reports with detailed information about basic services (voice, SMS, data) related charges:

- **Detailed report** (), it gathers information related to pools at the end of the billing cycle. This report is the same as Monthly expense detail report (see section [Monthly expense detail](#) for more information).
- **Aggregated report** () , it gathers information (consumption and expense) aggregated per SIM. It covers voucher fees as well as overage charges (see section [Pre-bill aggregated report](#) for more information).

Both reports can be downloaded from either Pre-bill section or from Reports section.

## 12.4 Elements of Pre-bills

A pre-bill contains several fields, which are organized in different groups. Depending on the type and amount of services hired by the Customer, the pre-bill contains more or less fields. Following are the groups you can find in a pre-bill:

- **General aspects about the pre-bill:** shows data related to the service provider, customer information and specific data of the pre-bill (creation, issuance and update dates and identifiers).

O <sub>2</sub>		Customer	Service provider
Pre-bill			IoT services
Creation	2021-02-03		
Issued	2021-06-30		
Last modification	2021-06-30		
Identifier Number	<b>46345</b> Aut177661ce412cq2uFA202101030000	<b>Auto_org_cust</b> number24352345 line1 line2 08111 city - United Kingdom ID1 autoorgcustid1 ID2 autoorgcustid2	movistar 3123121 Distrito CD Madrid 28047 Madrid - Spain
From 2021-01-03 to 2021-02-02		<b>2.808,70023 €</b>	
Billing period		* Discounts and adjustments applied, without taxes	
default		2.584,0042 €	
Billing account name		** Taxes (only informative)	
Total traffic service usage	14,628 MB Data	54m 33s Voice	92 SMS

- **Total of pre-bill:** This block shows the date range over which the pre-bill (billing period) has been calculated, the name of the associated billing account and the total without taxes.
- **Total traffic usage:** summary of the consumption of each one of the basic services (voice, SMS and data)
- Discounts and adjustments:
  - **Adjustments**, that can be positive or negative, applies to the total charge.
  - **Discounts for basic services** are calculated by applying the corresponding percentage on the voice, SMS and data monthly fee. The percentage of discount to

be applied will depend on the configuration made at customer level (see section [Discounts and taxes](#) for more information).

- **General discounts** (customer and billing account) are calculated by applying the corresponding percentage over total charges + adjustments - discounts for basic services.
- **Taxes:** The corresponding percentage is calculated based on the total of pre-bill. Total taxes result from the sum of all taxes defined at the customer level and billing account.
- **Global charges**, provides all those fees which do not apply to the SIM card level, i.e. it includes all the Customer level charges and Subscriptions group level charges, whose individual SIM card consumptions are jointly accounted in the group. These charges are divided also into two groups:
  - **Pool charges by subscription group**, reflects the voice, SMS or data fees subject to pool-type fees grouped by Subscriptions groups. Each Subscriptions group shows:
    - Total expense.
    - Commercial plan associated to the Subscriptions group.
    - End Customer associated to the Subscriptions group.
    - Number of activated SIM cards which make up the Subscriptions group.
    - Voice, SMS and data monthly fees.
    - Voice, SMS and data traffic overage.

 For Service Providers with No-CAMEL feature enabled: voice charges in pool may include calls made months before the billing cycle the pre-bill is referred to. This is so only for outgoing voice calls in roaming when connected to network operators not supporting CAMEL.

<b>Global charges</b>		216,16815 €	
• <b>Pool charges by subscription group</b>		201,00685 €	
ATEQA_CG_OnSimuStaticVCOFF	164,50852€	ATEQA_CG_OnSimuStaticVCOFFAux	36,49833€
<b>Basic commercial plan:</b> ATEQA_CP_OnSimuStaticVCOFF		<b>Basic commercial plan:</b> ATEQA_CP_OnSimuStaticVCOFF	
<b>Nº of active SIMs:</b> Monthly fee:	0 36,49833€	<b>Nº of active SIMs:</b> Monthly fee:	0 36,49833€
Data: Voice: SMS:	32,58064€ 2,41769€ 1,50000€	Data: Voice: SMS:	32,58064€ 2,41769€ 1,50000€
<b>Overage fee:</b> Data: Voice: SMS:	128,01019€ 71,29025€ 36,71996€	<b>Overage fee:</b>	0,00€

- **Customer charges associated with supplementary services**, they reflect the general fees of each of the supplementary services hired to the Customer. These charges will appear only in the Customer's pre-bills associated to the billing account

by default. The pre-bill shows as many sections as services affected. The charges of the supplementary services are grouped in:

- **One time fees**, these are expense which apply specifically and not in a periodic way in every billing period. Examples of this expense can be the registration/cancellation fees or the service reactivation after cancelling it.
- **Monthly fees**, these are monthly and periodic fees by the simple fact of hiring the service.

Customer charges associated with supplementary services		15,1613 €	
One time fees	15,00€	Monthly fees	0,1613€
<b>VPN</b>	1,00€	<b>VPN</b>	0,03226€
Set up:	1,00€	VPN tariff:	0,03226€
<b>Application outgoing SMS</b>	1,00€	<b>Self management</b>	0,03226€
Set up:	1,00€	Self management tariff:	0,03226€
<b>Self management</b>	1,00€	<b>Supervision</b>	0,03226€
Set up:	1,00€	Supervision tariff:	0,03226€
<b>Supervision</b>	1,00€	<b>Location and tracking</b>	0,03226€
Set up:	1,00€	Location and tracking tariff:	0,03226€
<b>Location and tracking</b>	1,00€	<b>Value Added Service</b>	0,03226€
Set up:	1,00€	Value Added Service tariff:	0,03226€
<b>Value Added Service</b>	1,00€		
Set up:	1,00€		
<b>Not associated with traffic</b>	9,00€		
SIM setup:	3,00€		
SIM transportation:	3,00€		
SIM activation:	3,00€		

- **Individual charges**, this offers the charges, which apply to the SIM card level. These charges are divided also into two groups:
  - **SIM charges by subscription group**, reflects the voice, SMS or data traffic charges subject to individual-type fees grouped by Subscriptions groups. Each Subscriptions group shows:
    - Total expense.
    - Commercial plan associated to the Subscriptions group.
    - End Customer associated to the Subscriptions group.
    - Number of activated SIM cards which make up the Subscriptions group.
    - One-time fees.
    - Voice, SMS and data monthly fees as well as a monthly fee due to permanence in a SIM card life cycle state.

- Voice, SMS y data overage.

 Charges of a SIM card will always be associated to the last Subscriptions group assigned when the billing cycle ends.
 For Service Providers with No-CAMEL feature enabled: voice charges at individual SIM level may include calls made months before the billing cycle the pre-bill refers to. This is so only for outgoing voice calls in roaming when connected to network operators not supporting CAMEL.

Individual charges		43,39988 €
• SIMs charges by subscription group		43,39988 €
ATEQA(CG)_OnSimuSimple	43,39988€	
Basic commercial plan: ATEQA(CP)_OnSimuSimple		
Nº of active SIMs:	0	
One time fees:	0,00€	
Monthly fees:	0,00€	
Overage fee:	43,39988€	
Data:	22,50000€	
Voice:	19,99988€	
SMS:	0,90000€	

- **SIM charges associated with supplementary services**, these reflect the charges to the SIM card level associated to each of the supplementary services hired by the Customer. These charges are grouped in:
  - **One-time fees**, they are charges from the supervision/diagnosis operations carried out on the SIM cards (included the End Customers') (see appendix [Diagnostic tests execution](#) for further details).
  - **Monthly fees**, they are the monthly charges, which the company does to all subscribers of a SIM card.

• SIMs charges associated with supplementary services	80,67742 €
Monthly fees	80,67742€
VPN Tariff:	1,32258€
Private LTE service tariff:	79,35484€

- **SIM charges associated with inactive / new fees**: it shows the charges related to SIM card being in inactive / new state.
- **SIM charges associated to commitment levels**: it shows charges related to Commitment levels (see section [My organisation data](#) for more information).

## 13 User administration

### 13.1 General aspects

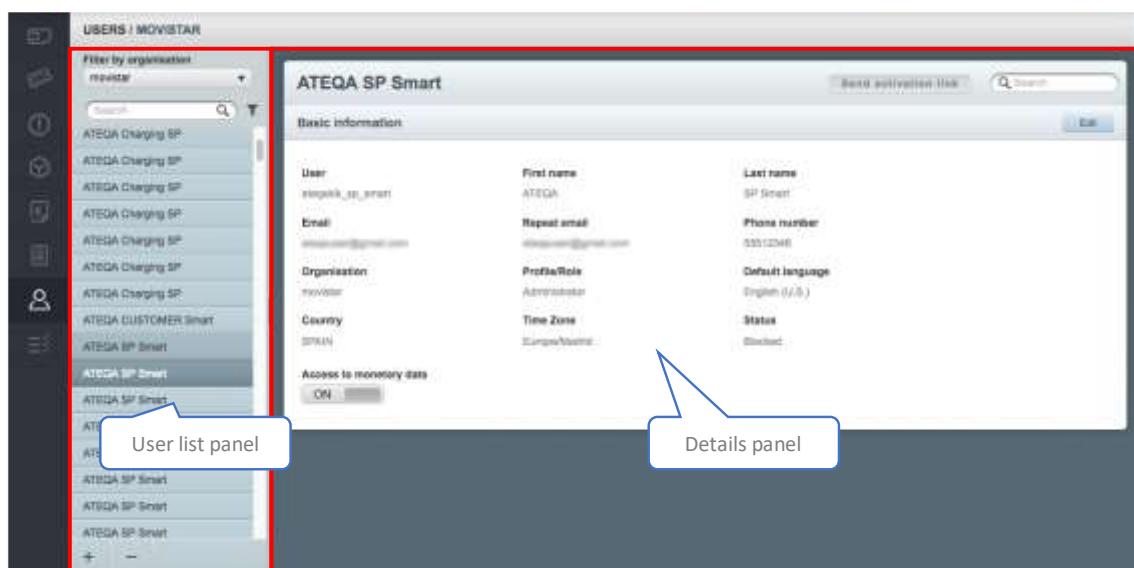
The user administration module, which can be accessed through the  main menu icon, allows creating, modifying and cleaning users in the Kite Platform.

Every organisation has access to both its own users and the users belonging to its subordinated organisations, so a user of a Customer with the appropriate user profile could manage its End Customer users if desired.



The first user of a Customer organisation shall be obligatorily created by the organisation that has created such subordinated organisation.

The work area of the user administration module is divided into two panels as it shows the following figure:



The screenshot shows the 'USERS | MOVISTAR' interface. On the left, a sidebar lists various organisations under 'Filter by organisation'. A red box highlights the 'User list panel' containing a list of users. On the right, a larger window displays the 'ATEQA SP Smart' user details. This window is divided into sections: 'Basic information' (User: ateqa\_sp\_smart, Email: ateqa\_sp\_smart@gmail.com, Organisation: movistar, Country: SPAIN, Access to monetary data: ON), 'Profile/Role' (First name: ATEQA, Last name: SP Smart, Repeat email: ateqa\_sp\_smart@gmail.com, Profile/Role: Administrator, Time Zone: Europe/Berlin), and 'Default language' (Default language: English (U.S.)). A red box highlights the 'Details panel' containing these details. A blue callout points from the 'Details panel' label to the right side of the main window.

Following is described the place from which you can perform different operations on users:

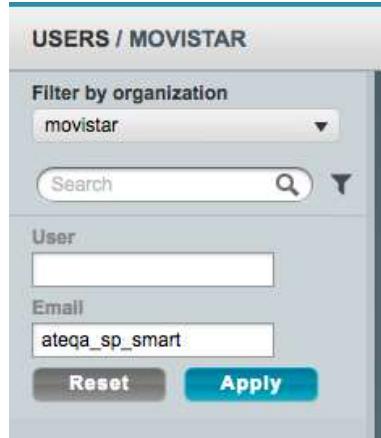
### 13.2 Basic operations with users

The user list panel shows the set of newly registered users grouped by the organisation to which they belong.

Through this panel, the following actions can be performed:

- **Simple search**, filtering by name and last name as the user introduces characters on the search box. For this, it is needed, firstly, to select the organisation we want make the search on.

- **Advanced search**, apart from the basic search depicted above, an advanced search is available through the  button, allowing to search for users via “email” and/or “user” (username).



The screenshot shows a search interface titled "USERS / MOVISTAR". At the top, there is a dropdown menu labeled "Filter by organization" with "movistar" selected. Below it is a search bar with a magnifying glass icon and a dropdown arrow. Underneath the search bar are two input fields: "User" and "Email", both containing the value "ateqa\_sp\_smart". At the bottom of the interface are two buttons: "Reset" and "Apply".

- **Create new user**, by clicking the  button, on the lower part of the panel. After pressing this button, it will be necessary to fill in with the user information requested in the user attributes panel on the right and save the changes for the user to be created.

 A newly-created user remains in a Pending state until they activate their account (see section [User's account activation](#) for further details). Once the account has been activated, the user will pass to the Active status and they will be able to log in Kite Platform.

 Multiple user roles can be selected in the “Profile/Role” drop-down menu. The permissions of a multi-role user will be the union of the permissions of each individual role.

- **Delete users**, select a user from the list and click on the  button located in the bottom of the panel. After accepting the confirmation message, the user will be cleaned and they will be sent a notification email about such action.

 Cleaning a user is always made in a logic way, but not physically. Cleaning a user in a logic way means that the user does not disappear from Kite Platform but they will not be visible in Kite Platform.

### 13.3 Configuring a user

From the user attributes panel, it will be possible to access each user data and the following actions will be allowed:

- **Edit user data**, it will be necessary to select first a user from user from the user list panel, then deploy the form, and select the  button. The view of the form will automatically

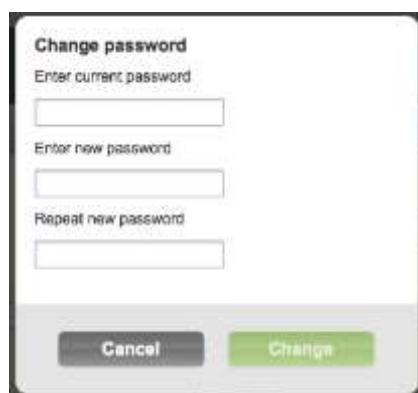
change to edition mode. If you are creating a user from scratch, the form will be directly displayed in the edition mode. It should be noted that under no circumstances no changes could be made to the user identifier.



- **Edit my user's data**, it will be necessary to follow the same process to edit the data of any other user but the information to be modified will vary: neither the organisation to which they belong nor the assigned user profile.



- **Save**, to save changes made in the user tab. This option will be available only if the form has been correctly filled.
- **Cancel**, not to save the changes made.
- **Change password**, allows the user to modify their password.



- **Send activation link**, this button is visible only when other user is selected. It is available only for Administrator, User management and Demo kit user profiles. It allows sending an email with the activation link to the selected user. From that moment on, the user

status will be “Pending” and will not be able to log in in the Kite Platform until his user account is activated again (see section [User's account activation](#) for further details).

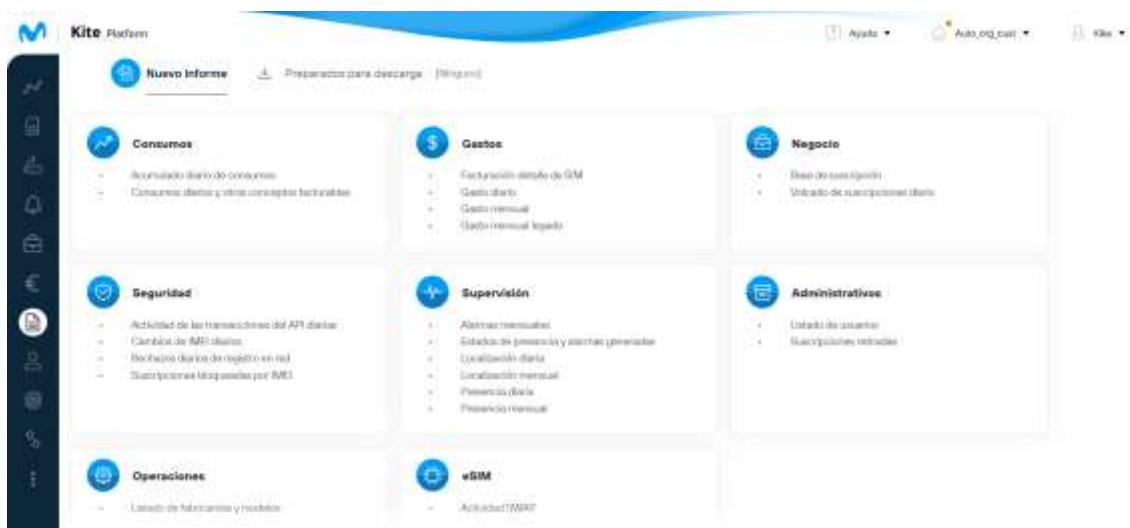


A typical scenario where this option might be used is when the activation email to set up the password has expired and the user cannot complete the activation process.

## 14 Generation of Reports

### 14.1 General aspects and reports types

The reports module can be accessed from the icon  and allows the creation of different kinds of reports to be downloaded in the user's local hardware in CSV format.



The following table shows the different types of reports that can be generated as well as their variants:

Type	Variant	Description
Consumption	Daily aggregated consumptions	Daily summary of the consumption of basic services in a range of calendar days.
	Daily consumptions and other billable concepts	Detailed information of all consumptions related to a Customer during an interval of days.
Expense	Monthly expense	Detailed information of all expenses related to a Customer's billing account during a full billing cycle.
	Daily expense	Detailed information of all expenses related to a Customer during an interval of days.
	Pre-bill aggregated	Aggregated information per subscription about monthly fees and one-time charges and overage referred to one billing cycle.
	SIM Detail Billing	Detailed information of post-paid tariffs billable events and non-billable events (billing account and subscription group change). Entries are grouped by subscription, tariff (triplet zone-destination-service) and tariff nature (voucher monthly fee, pay-per-use, amount of traffic performed...).
Business	Subscription base	It provides a snapshot of the status of the lines of Customers at the end of each month.

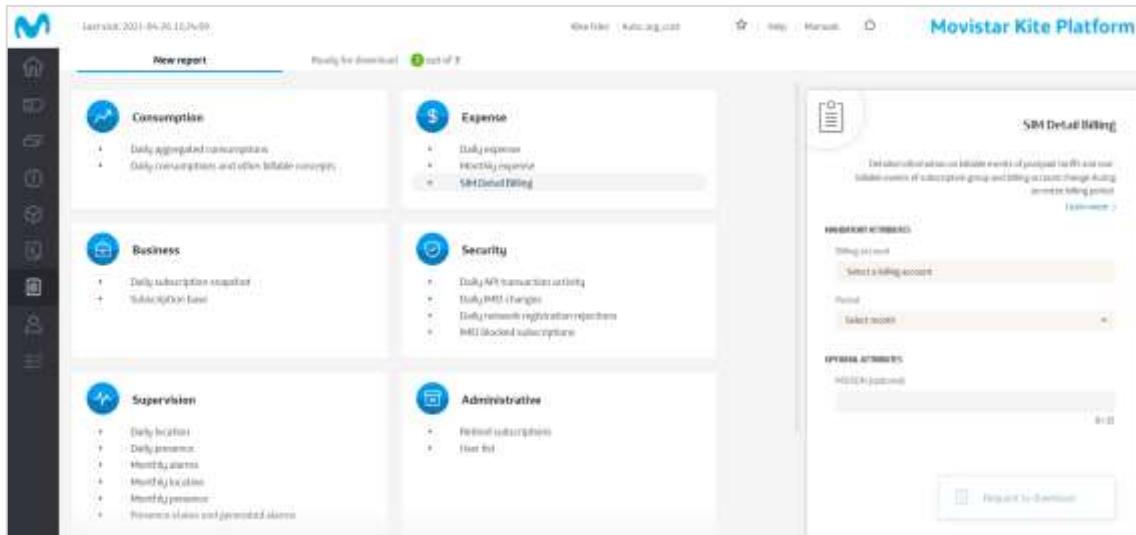
	Daily subscription snapshot	Snapshot of the lines belonging to the selected organisation
Security	IMEI blocked subscriptions	Snapshot of the Customer's lines currently blocked because their IMEI is not within the IMEI white list.
	Daily IMEI changes	It provides information on the IMEI changes that have taken place in each SIM throughout the selected day.
	Daily network registration rejections	Contains information about network registration rejections taken place along the selected day.
	Daily API transaction activity	Contains information about API transactions carried out along the selected day, either successful or with errors.
Supervision	Presence	It provides presence information for all the lines of a particular Supervision group for a Customer.
	Location	It provides location information for all the lines of a particular Supervision group for a Customer.
	Monthly alarms	It includes all events related to Customer alarms being opened or closed.
	Presence states and generated alarms	It contains aggregated information of presence and alarms events of the lines of a specific supervision group of a customer. This information is presented for each day of the selected month and is calculated at the end of each day.
Administrative	Retired subscriptions	Contains information about SIM cards that have been retired in the indicated period.
	Direct SIM manufacturer order	It includes information on direct orders to manufacturers and information on the associated manufacturer file loaded from the Pre-inventory.
	User list	It provides a "snapshot" of the existing users, belonging to the own organisation and child organisations, at the moment of generating the report.
Operations	Manufacturer and model list	It provides a "snapshot" of the manufacturers and models of the communications module used and the number of SIMs that use each combination of them.
eSIM	SWAP activity	It includes all events related to swap operations over an eUICC

## 14.2 General procedure for generating reports

Once having accessed the reports module, the steps for creating any report are similar, differing only in the data to be provided.

### Step 1: Select the desired report

When selecting a report type the panel with the report parameters that need to be filled in to generate the report will display.



The screenshot shows the Movistar Kite Platform interface. At the top, there's a header with the Movistar logo, the date (January 2021 - 04/10/2021), and a search bar. Below the header, there are two tabs: "New report" (which is currently selected) and "Ready for download". On the left, there's a sidebar with icons for different sections. The main area is divided into several sections: Consumption, Expense, Business, Security, Supervision, and Administrative, each with a list of specific reports. To the right, there's a detailed view of the "SIM Detail Billing" report, which includes fields for "Billing account" (selected), "Period" (set to "Today"), and "Report attributes" (with a dropdown menu for "Period"). A "Request to download" button is located at the bottom right of this panel.

### Step 2: Enter the attributes of the selected report

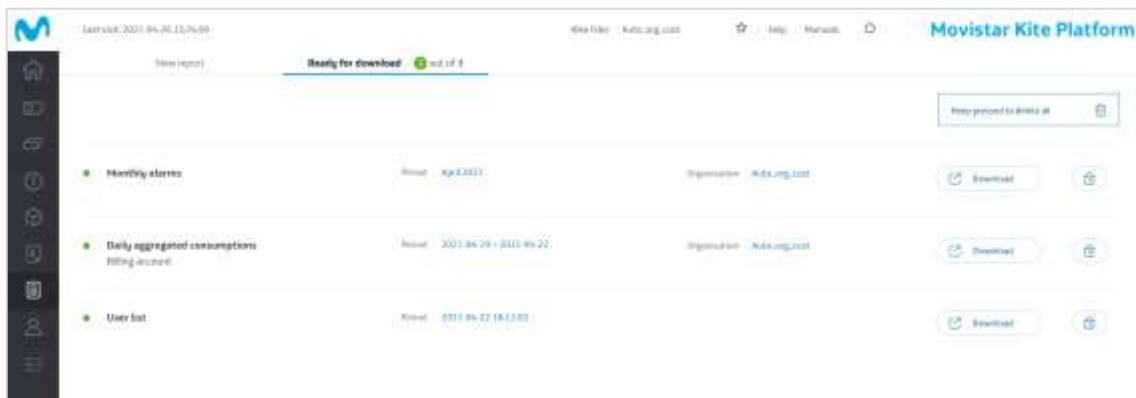
Before generating a report, it will be necessary to specify the mandatory attributes. The type of attributes to define depend on the type of report selected. These attributes are detailed in the sections in which each report is described.

### Step 3: Request the report generation

Once the mandatory data has been filled in, the **Request to download** report button will be available. The requested report will be available for downloading from the "Ready to download" tab described in the next section.

#### 14.3 Requested report list

From the "Ready to download" tab, the list of requested reports can be accessed. This tab indicates, in addition to the total number of reports in the list, the number of reports ready for download.



The screenshot shows the "Ready for download" tab. It displays a list of three requested reports: "Monthly alarms", "Daily aggregated consumptions", and "User list". Each report entry includes a summary of the request parameters (like "Period" and "Organization") and two buttons: "Download" and "Delete". Above the list, there's a "Print preview" button and a "Print" icon. The "Download" button is highlighted with a red box.

The report list shows the name of the requested report along with a summary of the request parameters.

Downloading a report to the user's local machine is done through the **Download** button.

In some cases, you will be able to view the report in the interface itself, for example, for the "SIM detail billing" report (and only if the size of the report allows it). In this case, an icon will be shown that will allow the display.

The different reports generated are displayed in order from the last created (top) to the oldest until the user deletes them manually. A maximum of 20 reports per user is only allowed, and manual deletion is necessary if this limit is reached in order to continue generating new reports.

The downloaded reports are in CSV format and contain a first header line with the column names followed by the data lines. The separator character for the fields is ";".



The downloaded file is a ZIP file with one or more CSVs and with a maximum size of 1 million records per CSV.



If a user is deleted, all the reports generated by that user will be deleted.

## 14.4 Consumption reports

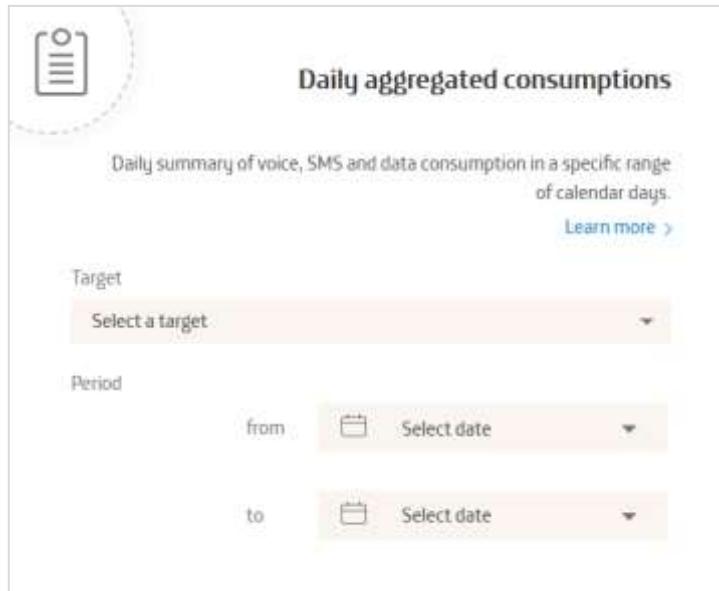
### 14.4.1 Daily aggregated consumptions



In previous versions of Kite this report was called "Daily traffic consumption".

This report provides information about the consumption made in each of the basic services (voice, SMS, data) during the period of days selected. The information provided about each one of the services is calculated on a daily base, and added with the selected granularity level, when generating the report. The information is calculated taking into account the excess with regard to the bonus for each one of the hired services. The daily consumption report only contains information, but never expense data, and will not show any information about the monetary amount, which implied the use of the service.

In order to generate the report the following fields have to be selected in the form:



**Daily aggregated consumptions**

Daily summary of voice, SMS and data consumption in a specific range of calendar days.

[Learn more >](#)

**Target**  
Select a target

**Period**  
from  to

- **Target:** The following table shows the possible targets depending on the organisation, which belongs the user that generates the report:

Target	Description
Billing account	Each billing account shows, which has been the consumption of the basic services (voice, SMS and data). This information is provided by each one of the days of the selected time range.
Billing accounts + Lines	Each of the billing account shows which has been the consumption of each of the basic services (voice, SMS and data) as well as the participation of the lines computing in such consumption. This information is provided by each one of the days of the selected time range.
Subscriptions group	Each Subscriptions group shows that has been the consumption of the basic services (voice, SMS and data). This information is provided by each one of the days of the selected time range.  Made consumption will be displayed in the Subscription group assigned to the line at the time of generating the report.
Subscriptions group + Lines	Each of the Subscriptions group shows which has been the consumption of each of the basic services (voice, SMS and data) as well as the participation of the lines which. This information is provided by each one of the days of the selected time range.  Made consumption will be displayed in the Subscription group assigned to the line at the time of generating the report.
End Customer	Each End Customer shows which has been the consumption of the basic services (voice, SMS and data). This information is provided by each one of the days of the selected time range.
End Customer + Billing account	Each End Customer shows which has been the consumption of the basic services (voice, SMS and data). As well as each one of the billing account affected. This information is provided by each one of the days of the selected time range.

- **Period:** Range of up to 31 days calendar days with the current day included. The report lines will be displayed and grouped by each of the regular days of the selected period.

## Report fields

The following table shows each of the possible fields of the report. Certain fields will be present or not in the report depending on the selected target:

Field	Description	Available for targets...
Date	Day over which the consumption is calculated	All
Service Provider	Service provider name in which the service has been consumed	All
Customer	Customer name in which the service has been consumed.	All
End Customer	End Customer name in which the service has been consumed	End Customer End Customer + Billing account
CRM ID	Customer identifier in operator's CRMs	All
Fiscal number	Company Tax ID (or company ID for companies outside Spain) as appears in the selected billing account.  ⚠ When the fiscal number is changed, in the corresponding report there might be values with the current and previous fiscal number. This is due to the showed information with the old fiscal number refers to the previous billing cycle, whereas the information generated with the new fiscal number refers to the current billing cycle. In this way this information agrees with the billing information contained in the pre-bill.	All
Commercial group ID	Identifier of the Subscriptions group associated to the line at the <u>time</u> of generating the report	Subscriptions group
Commercial Group Name	Name of the Subscriptions group associated to the line at the time of generating the report	Subscriptions group
Billing Account ID	Billing account identification in which consumption generated	Billing account
Billing Account Name	Billing account name in which consumption generated	Billing account
Subscription ID	Line/subscription line in which consumption generated	Billing accounts + Lines
Voice	Voice service consumption expressed in seconds	All
SMS	Number of SMS sent	All
Data	Data consumption expressed in bytes	All

### 14.4.2 Daily consumptions and other billable concepts

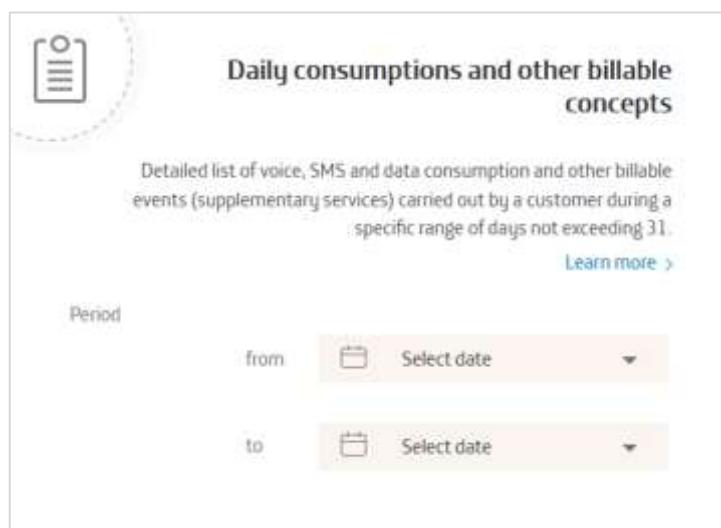
 In previous versions of Kite this report was called “Daily consumption detailed”.

This report provides information on the services consumption (basic services and supplementary services) made by a Customer during a specific date range, no longer than

31 days, either in the Activated or Test life cycle states. It is important to highlight that this report does not contain monetary information nor consumed services cost, it only contains service traffic consumption information, that includes overage and voucher stretches.

For each achieved consumption, a new row is added that includes information about the entity of change (Subscription line or Subscriptions group), the entity name, time-stamp... As well as other details depending on the consumed service (voice, SMS, data or other services like diagnostic operations over a SIM card).

In order to generate the report, the following fields have to be selected in the form:



- Period:** Range of up to 31 calendar days within the last 4 months including the current day. The generated report will contain information about all consumptions made by the selected Customer during the selected range.

### Report fields

The following table shows each one of the report fields.

Field	Description
Type of entity	Indicates what type of entity that generates expense it is, which may be: Subscription, Subscriptions group, Customer.
ID of entity of change	Name of the entity that generates expense. It can be Subscription MSISDN, Subscriptions Group name or a Customer. The report can contain multiple rows for a same name of the entity.
MSISDN	SIM card's MSISDN that generated the expense.
ICC	SIM card's ICC that generated the expense.
IMSI	SIM card's IMSI that generated the expense.
State of the subscription	SIM card's current life cycle state taking into account the following criteria: When the expense is generated due to a state transition, the initial state is shown. When the expense corresponds to a basic service (voice, SMS data), the ACTIVE value is shown.

Time Stamp	Date and time that the event generated by the charge in the Billing Account occurred. Only a date is indicated in the case of monthly fees.
Fiscal number	Company Tax ID (or company ID for companies outside Spain) as appears in the selected billing account.  ⚠ When the fiscal number is changed, in the corresponding report there might be values with the current and previous fiscal number. This is due to the showed information with the old fiscal number refers to the previous billing cycle, whereas the information generated with the new fiscal number refers to the current billing cycle. In this way, this information agrees with the billing information contained in the pre-bill.
Operator Network	Operator name on which the service/charge depends. This field has a value when the expense is related to basic services (voice, SMS, data).
Subscription Group Name	Subscriptions group to which the SIM card belongs. This field is filled only for charges with the "Type of entity" field set to "Subscription".
End Customer name	Name of the End Customer (if exists) associated to the Subscriptions group to which the SIM card generating expense belongs. This field will be present if the report is generated at Customer level.
Call Detail: Type of call	Type of voice call. Possible values are "MO" (Mobile Originated) or "MT" (Mobile Terminated").
Call Detail: Duration	Duration of the call that was made in HH:MM:SS format.
Call Detail: Duration rounded	Rounded duration of the call that was made in HH:MM:SS format.
Call Detail: Called/Calling number	It contains the destination number if "Call Detail: Type of call" = "MO" or the origin number if "Call Detail: Type of call" = "MT".  In case of call redirection, the original number will be shown in parentheses
Call detail: Zone	It contains the name of the origin roaming zone if "Call Detail: Type of call" = "MO" or the destination roaming zone if "Call Detail: Type of call" = "MT".  ⚠ "Default" will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone does not have to match, necessarily, the tariff zone in the Commercial plan.
Call detail: Type of destination numbering	It contains the destination numbering. This field is filled only when "Call Detail: Type of call" = "MO".
SMS detail: Destination	Destination number of the SMS. SMS-AO destination included.
SMS detail: Origin Zone	Origin roaming zone from which the SMS has been sent.  ⚠ "Default" will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone does not have to match, necessarily, the tariff zone in the Commercial plan.
SMS detail: Type of destination numbering	It contains the type of destination numbering.
Data detail: Finalization	Day, hours and seconds in which the transmission was ended.
Data detail: APN	APN using the data context.
Data detail: IP	IP used in the context achievement.
Data detail: Zone	Name of the roaming zone from which the data context was established.  ⚠ "Default" will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone does not have to match, necessarily, the tariff zone in the Commercial plan.

Data detail: Uploaded data in Bytes	Quantity of data uploaded to the net.
Data detail: Downloaded data in Bytes	Quantity of data downloaded from the net.
Data detail: Transferred data in Bytes	Sum of the downloaded and uploaded data in the network.
Data detail: Transferred data rounded in Bytes	Rounded sum of the downloaded and uploaded data in the network.
Monthly charges: Category	It indicates that each category of monthly fees make reference to the expense (Example: Lifecycle, VPN, Data, Localization...).
Monthly charges: Concept	It indicates the concrete monthly concept for which the expense is charged (Example: recurrent monthly fees of voice/SMS/Data, recurrent monthly fees about being in specific lifecycle states ...)
Other charges detail: Category	It indicates the category of one-time fees referring to the expense (Example: Location, Supervision, prepaid voucher...)
Other charges detail: Concept	It indicates the one time fees (non-monthly) through which the expense is charged (Example: Supervision Operation over a SIM card, Prepaid voucher renewal, Prepaid voucher cancellation...).
Data detail: Data Destination name	Data destination name
Data detail: Data Destination id	Data destination identifier
Data detail: Prepaid voucher id	Prepaid voucher identifier making the expense
Data detail: Prepaid voucher name	Prepaid voucher name making the expense
Internal ID	SIM card Kite Platform internal identifier.
Termination reason	<p>Indicates the reason by which a call or a data session was ended.</p> <p>Data:</p> <ul style="list-style-type: none"> <li>"1": DIAMETER_LOGOUT</li> <li>"2": DIAMETER_SERVICE_NOT_PROVIDED</li> <li>"3": DIAMETER_BAD_ANSWER</li> <li>"4": DIAMETER_ADMINISTRATIVE</li> <li>"5": DIAMETER_LINK_BROKEN</li> <li>"6": DIAMETER_AUTH_EXPIRED</li> <li>"7": DIAMETER_USER_MOVED</li> <li>"8": DIAMETER_SESSION_TIMEOUT</li> <li>"0": ANY_OTHER_REASON</li> </ul> <p>Voice:</p> <ul style="list-style-type: none"> <li>"101": SERVICE_RELEASED</li> </ul>

	"102": CALLING_DISCONNECT "103": CALLED_DISCONNECT "104": TOLL_FREE "105": NETWORK_ERROR "106": CALLED_BUSY "107": CALLED_UNREACHABLE "108": CALLED_NO_ANSWER "109": CALLING_ABANDON "110": UNKNOWN "111": NETWORK_FORCED "100": ANY_OTHER_REASON
Radio technology	Indicates the radio technologies used by the subscriber when connecting to the radio interface of the mobile network. This field is only available for data sessions. Ex: "3G 4G"
Unique ID	Unique identifier
Data detail: Rating group	Rating group identifier associated to the data flow.
Data detail: Service id	Service Id associated to the data flow.
Parent Unique ID	Unique ID on which the flow depends
Flow detail: Transferred data in Bytes	Total transferred bytes (upstream + downstream)
Data detail: Prepaid voucher instance	Pre-paid voucher identifier involved in the data flow
Name of the Commercial Plan - Destination	It will be filled when the SIM is assigned to a Subscription group. Name of the Basic Services Commercial plan in the new Subscription group.
Basic Services Commercial Plan ID - Destination	It will be filled when the SIM is assigned to a Subscription group. ID of the Basic Services Commercial plan in the new Subscription group.
Subscription Group name - Destination	It will be filled when the SIM is assigned to a Subscription group. Name of the new Subscription group.
Billing account name - Destination	It will be filled when the SIM is assigned to a Subscription group. Name of the Billing account in the new Subscription group.
Pool units used	Amount of pool traffic
Voucher/Pool nominal units	Voucher size, as defined in the Commercial plan (in seconds/bytes/number of SMS)
Voucher/Pool units granted/removed	Traffic granted in voucher or decremented as a consequence of a proration or adjustment in the monthly fee. If there is no proration or adjustment this value will match the "Voucher/Pool nominal units" field. If it corresponds with an adjustment this value will be negative.

Discounts	A priori discounts applied in percentage, according to what has been defined in the Commercial plan.
Tariff	Applied tariff according to what has been defined in the Commercial plan
Tariff: Zone name	Tariff zone name according to what has been defined in the Commercial plan.
Tariff: Destination name	Tariff destination name according to what has been defined in the Commercial plan.
Call detail: Prepaid voucher id	Identifier of the purchased voice prepaid voucher.
SMS detail: Prepaid voucher id	Identifier of the purchased SMS prepaid voucher.
SMS detail: Prepaid voucher name	SMS prepaid voucher name as it was defined when it was purchased.
Call detail: Prepaid voucher instance	Voice pre-paid voucher instance identifier in use.
SMS detail: Prepaid voucher instance	SMS pre-paid voucher instance identifier in use.
MCC/MNC	Mobile Country Code / Mobile Network Code
VoLTE	Indicates whether the voice call is a VoLTE call. Possible values are "Y" (the call is a VoLTE call) or "N" (the call is not a VoLTE call). This column will be empty if the call is not voice traffic.



This report cannot be requested when either this report or “Daily expense” report is already being generated by a user belonging to the same organisation.

## 14.5 Expense reports

### 14.5.1 Monthly expense

This report provides monetary information on all items billed to a Customer in a specific Billing Account and during a specific billing cycle. Consumption and expense information contained in the report includes both overage and the voucher stretches. In the case where consumption has not reached the overage, the services expense information (Voice, SMS, and Data) shall indicate a charge with a value of 0. Consumptions made in the Test state will also appear with a charge value equal to 0. The report also includes information about expenses not related to basic services consumptions, as one-time fees or monthly fees as well as other charges as diagnostic operations and charges related to the Application originated SMS service among others.

The monetary information presented in this report is expressed in the currency of the Customer. Each row of the report corresponds to a charge (including null charges resulting from the use of the service) performed in the Billing Account and expressed in the currency of the Customer. The entities on which the charge is performed can be:

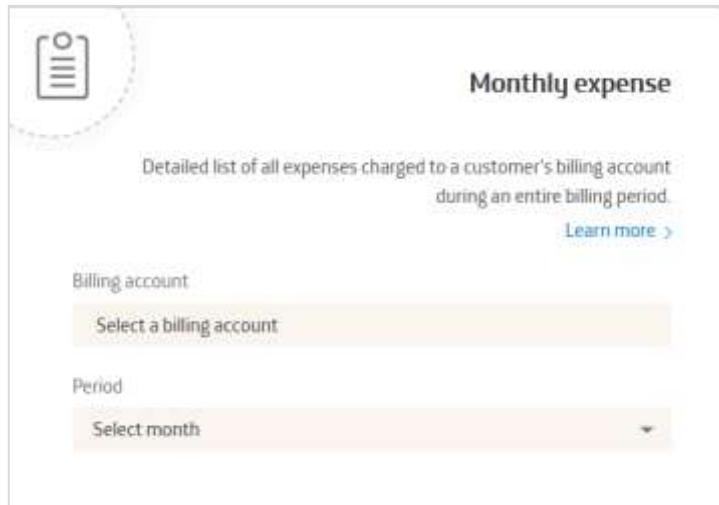
- Subscription line

- Subscriptions group
- Customer

For each expense, the report includes information about the type of the entity of charge, identifier of the entity, time-stamp, monetary amount charged by the service/concept, currency, and other details of the charge. The concepts of charge and their details may be different depending on whether they are associated with a SIM card, a Subscriptions Group or a Customer. For example, a SIM may have details about the voice call, SMS and data download, but if the entity of charge is a Customer, he may not have call details, but another type of quotas at Customer level. The following table shows the items susceptible of billing that each type of entity can generate:

Fields Groups	Fields Names	Subscription line	Subscription Group	Customer
Call detail	Type of Call Duration Duration rounded Called/Calling Number Zone Type of destination numbering	X		
SMS detail	Destination Origin zone Type of destination numbering	X		
Data detail	Finalization APN IP Zone Uploaded data in Bytes Downloaded data in Bytes Transferred data in Bytes Transferred data rounded in Bytes	X		
Monthly charges	Category Concept	X	X	X
Other charges details	Category Concept	X		

The form fields to select are:



- **Billing account:** Select a billing account. The generated report will include information about all the spent charges to such billing account.
- **Period:** Billing period, associated with the indicated billing account, from among those available in the last 24 months. The generated report will include information about all the spent charges to such billing account during the billing period selected.

### Report fields

The following table shows each of the possible reports.

Field	Description	Available for no-monetary users
Type of entity	Indicates what type of entity that generates expense it is, which may be: Subscription, Subscriptions group, Customer.	Yes
ID of entity of change	Name of the entity that generates expense. It can be Subscription MSISDN, Subscriptions Group name or a Customer. The report can contain multiple rows for a same name of the entity.	Yes
MSISDN	SIM card's MSISDN that generated the expense.  This field is also used to include the origin number for sent application originated SMSs.	Yes
ICC	SIM card's ICC that generated the expense.	Yes
IMSI	SIM card's IMSI that generated the expense.	Yes
State of the subscription	SIM card's current life cycle state taking into account the following criteria:  When the expense is generated due to a state transition, the initial state is shown.  When the expense corresponds to a basic service (voice, SMS data), the ACTIVE value is shown.	Yes
Time Stamp	Date and time that the event generated by the charge in the Billing Account occurred. Only a date (yyyy-mm) is indicated in the case of monthly fees (with the exception of adjustments and prorations of pool tariffs)..	Yes

Fiscal number	Company Tax ID (or company ID for companies outside Spain) as appears in the selected billing account.  ⚠️ When the fiscal number is changed, in the corresponding report there might be values with the current and previous fiscal number. This is due to the showed information with the old fiscal number refers to the previous billing cycle, whereas the information generated with the new fiscal number refers to the current billing cycle. In this way this information agrees with the billing information contained in the pre-bill.	Yes
CRM ID	Customer identifier in operator's CRMs	Yes
Quantity	Monetary amount that the expense entails.	No
Currency	Currency in which the expense is expressed. It corresponds to the Customer's currency.	No
Pool	Indicates if the SIM card's expense is based on a pool tariff. The possible values are: "Yes" or "No".	Yes
Billing cycle	Indicates the billing cycle day. Values range between 1 and 28.	
Billing Account Name	Name of the billing account as defined in the Customer form.	Yes
Name of Commercial Plan	Name of the basic services or supplementary services commercial plan. For expenses not related to a commercial plan, this field is empty.	Yes
Operator Network	Operator name on which the service/charge depends. This field has a value when the expense is related to basic services (voice, SMS, data).	Yes
Subscription Group Name	Subscriptions group to which the SIM card belongs. This field is filled only for charges with the "Type of entity" field set to "Subscription".	Yes
End Customer name	Name of the End Customer (if exists) associated to the Subscriptions group to which the SIM card generating expense belongs. This field will be present if the report is generated at Customer level.	Yes
Call Detail: Type of call	Type of voice call. Possible values are: "MO" (Mobile Originated) or "MT" (Mobile Terminated).	Yes
Call Detail: Duration	Duration term of the call that was made.	Yes
Call Detail: Duration rounded	Rounded duration of the call that was made in HH:MM:SS format.	Yes
Call Detail: Called/Calling number	It contains the destination number if "Call Detail: Type of call" = "MO" or the origin number if "Call Detail: Type of call" = "MT".  In case of call redirection, the original number will be shown in parentheses	Yes
Call detail: Zone	It contains the name of the origin roaming zone if "Call Detail: Type of call" = "MO" or the destination roaming zone if "Call Detail: Type of call" = "MT".  ⚠️ "Default" will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone doesn't have to match, necessarily, the tariff zone in the Commercial plan.	Yes
Call detail: Type of destination numbering	It contains the destination numbering. This field is filled only when "Call Detail: Type of call" = "MO".	Yes

SMS detail: Destination	Destination number of the SMS. SMS-AO destination included.	Yes
SMS detail: Origin Zone	Origin roaming zone from which the SMS has been sent.  ⚠ “Default” will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone doesn't have to match, necessarily, the tariff zone in the Commercial plan.	Yes
SMS detail: Type of destination numbering	It contains the type of destination numbering.	Yes
Data detail: Finalization	Day, hours and seconds in which the transmission was ended.	Yes
Data detail: APN	APN using the data context.	Yes
Data detail: IP	IP used in the context achievement. For IPv4v6 sessions both IPs will be included in the format: <IPv4   IPv6>	Yes
Data detail: Zone	Name of the roaming zone from which the data context was established.  ⚠ “Default” will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone doesn't have to match, necessarily, the tariff zone in the Commercial plan.	Yes
Data detail: Uploaded data in Bytes	Quantity of data uploaded to the net.	Yes
Data detail: Downloaded data in Bytes	Quantity of data downloaded from the net.	Yes
Data detail: Transferred data in Bytes	Sum of the downloaded and uploaded data in the network.	Yes
Data detail: Transferred data rounded in Bytes	Rounded sum of the downloaded and uploaded data in the network.	Yes
Monthly charges: Category	It indicates that each category of monthly fees make reference to the expense (Example. Voice, SMS, Data...).	No
Monthly charges: Concept	It indicates the concrete monthly concept for which the expense is charged (Example. recurrent monthly fees of voice/SMS/Data, recurrent monthly fees on SIM cards ...)	No
Other charges detail: Category	It indicates the category of one-time fees referring to the expense (Example. Location, Supervision, prepaid vouchers...)	No
Other charges detail: Concept	It indicates the one time fees (non-monthly) through which the expense is charged (Example. Supervision Operation over a SIM card, Prepaid voucher renewal, Prepaid voucher cancellation...)	No
MCC/MNC	Mobile Country Code / Mobile Network Code.	Yes
Basic Services Commercial Plan Id	Commercial Plan identifier	Yes
Customer Id	Customer internal identifier	Yes
Zone Id	Zone internal identifier where the expense were made	Yes
Data detail: Data Destination name	Data destination name	Yes

Data detail: Data Destination id	Data destination identifier	Yes
Data detail: Prepaid voucher id	Prepaid voucher identifier making the expense	Yes
Data detail: Prepaid voucher name	Prepaid voucher name making the expense	Yes
Internal ID	SIM card Kite Platform internal identifier.	Yes
Termination reason	<p>Indicates the reason by which a call or a data session was ended.</p> <p>Data:</p> <ul style="list-style-type: none"> <li>"1": DIAMETER_LOGOUT</li> <li>"2": DIAMETER_SERVICE_NOT_PROVIDED</li> <li>"3": DIAMETER_BAD_ANSWER</li> <li>"4": DIAMETER_ADMINISTRATIVE</li> <li>"5": DIAMETER_LINK_BROKEN</li> <li>"6": DIAMETER_AUTH_EXPIRED</li> <li>"7": DIAMETER_USER_MOVED</li> <li>"8": DIAMETER_SESSION_TIMEOUT</li> <li>"0": ANY_OTHER_REASON</li> </ul> <p>Voice:</p> <ul style="list-style-type: none"> <li>"101": SERVICE_RELEASED</li> <li>"102": CALLING_DISCONNECT</li> <li>"103": CALLED_DISCONNECT</li> <li>"104": TOLL_FREE</li> <li>"105": NETWORK_ERROR</li> <li>"106": CALLED_BUSY</li> <li>"107": CALLED_UNREACHABLE</li> <li>"108": CALLED_NO_ANSWER</li> <li>"109": CALLING_ABANDON</li> <li>"110": UNKNOWN</li> <li>"111": NETWORK_FORCED</li> <li>"100": ANY_OTHER_REASON</li> </ul>	Yes
Radio technology	Indicates the radio technologies used by the subscriber when connecting to the radio interface of the mobile network. This field is only available for data sessions. Ex: "3G 4G"	Yes
Unique ID	Unique identifier	Yes
Data detail: Rating group	Rating group identifier associated to the data flow.	Yes
Data detail: Service id	Service Id associated to the data flow.	Yes
Parent Unique ID	Unique ID on which the flow depends	Yes

Flow quantity	Monetary value associated to the flow.  It is calculated from the columns: "Quantity", "Flow: detail: Transferred data in Bytes" and "Data detail: Transferred data in Bytes"	No
Flow detail: Transferred data in Bytes	Total transferred bytes (upstream + downstream)	Yes
Data detail: Prepaid voucher instance	Pre-paid voucher identifier involved in the data flow	Yes
Name of the Commercial Plan - Destination	It will be filled when the SIM is assigned to a Subscription group.  Name of the Basic Services Commercial plan in the new Subscription group.	Yes
Basic Services Commercial Plan ID - Destination	It will be filled when the SIM is assigned to a Subscription group.  ID of the Basic Services Commercial plan in the new Subscription group.	Yes
Subscription Group name - Destination	It will be filled when the SIM is assigned to a Subscription group.  Name of the new Subscription group.	Yes
Billing account name - Destination	It will be filled when the SIM is assigned to a Subscription group.  Name of the Billing account in the new Subscription group.	Yes
Pool units used	Amount of pool traffic	Yes
Voucher/Pool nominal units	Voucher size, as defined in the Commercial plan (in seconds/bytes/number of SMS)	Yes
Voucher/Pool units granted/removed	Traffic granted in voucher or decremented as a consequence of a proration or adjustment in the monthly fee. If there is no proration or adjustment this value will match the "Voucher/Pool nominal units" field. If it corresponds with an adjustment this value will be negative.	Yes
Discounts	A priori discounts applied in percentage, according to what has been defined in the Commercial plan.	Yes
Tariff	Applied tariff according to what has been defined in the Commercial plan	Yes
Tariff: Zone name	Tariff zone name according to what has been defined in the Commercial plan.	Yes
Tariff: Destination name	Tariff destination name according to what has been defined in the Commercial plan.	Yes
Used on Sim Detail Report	Indicate whether this entry is used ("Y") or not ("N") in the "SIM Detail Billing" report generation	Yes
Additional tariffs: Name	Name of the additional tariff producing the charge.	Yes
Additional tariffs: Duration (months)	Duración del periodo de cargo de la tarifa adicional asociada.	Yes
Correlation ID	CDR identifier	Yes

Call detail: Prepaid voucher id	Identifier of the purchased voice prepaid voucher.	Yes
Call detail: Prepaid voucher name	Voice prepaid voucher name as it was defined when it was purchased.	Yes
SMS detail: Prepaid voucher id	Identifier of the purchased SMS prepaid voucher.	Yes
SMS detail: Prepaid voucher name	SMS prepaid voucher name as it was defined when it was purchased.	Yes
Call detail: Prepaid voucher instance	Voice pre-paid voucher instance identifier in use.	Yes
SMS detail: Prepaid voucher instance	SMS pre-paid voucher instance identifier in use.	Yes
Charge Code	Charge code as it is defined in the expense CDR	Yes
Pool ID	Pool identifier as it is defined in the expense CDR	Yes
IMEI	Indicates the IMEI used during the data session. This column will be empty if the traffic is not data.	Yes
VoLTE	Indicates whether the voice call is a VoLTE call. Possible values are "Y" (the call is a VoLTE call) or "N" (the call is not a VoLTE call). This column will be empty if the call is not voice traffic.	Yes

 For Service Providers with No-CAMEL feature enabled: this report may include voice calls made months before the billing cycle the report refers to. This is so only for outgoing voice calls in roaming when connected to network operators not supporting CAMEL.

 “Time Stamp” column will ease the task to discriminate voice calls made in previous billing cycles in No-CAMEL networks.

#### 14.5.2 Daily expense

This report provides monetary information on all items billed to a Customer during a specific range of days, no longer than 31 days. Expense information contained in the report includes both overage and the voucher stretches. In the case where consumption has not reached the overage, the services expense information (Voice, SMS, and Data) shall indicate a charge with a value of 0. Consumptions made in the Test state will also appear with a charge value equal to 0. The report also includes information about expenses not related to basic services consumptions, as one-time fees or monthly fees as well as other charges as diagnostic operations and charges related to the Application originated SMS service among others.

The monetary information presented in this report is expressed in the currency of the Customer. Each row of the report corresponds to a charge (including null charges resulting from the use of the service) performed in the Billing Account (indicated in the same row) and expressed in the currency of the Customer. The entities on which the charge is performed can be:

- Subscription line
- Subscription Group
- Customer

For each expense, the report includes information about the type of the entity of charge, identifier of the entity, time-stamp, monetary amount charged by the service/concept, currency, and other details of the charge. The concepts of charge and their details may be different depending on whether they are associated with a SIM card, a Subscriptions Group or a Customer. For example, a SIM may have details about the voice call, SMS and data download, but if the entity of charge is a Customer, the report may not show call details, but another type of quotas at Customer level. The following table shows the items susceptible of billing that each type of entity can generate:

Fields Groups	Fields Names	Subscription line	Subscription Group	Customer
Call detail	Type of Call Duration Duration rounded Called/Calling Number Zone Type of destination numbering	X		
SMS detail	Destination Origin zone Type of destination numbering	X		
Data detail	Finalization APN IP Zone Uploaded data in Bytes Downloaded data in Bytes Transferred data in Bytes Transferred data rounded in Bytes	X		
Monthly charges	Category Concept	X	X	X
Other charges detail	Category Concept	X		

The form fields to select are:



### Daily expense

Detailed list of all the expenses of a customer during a specific period of days.

[Learn more >](#)

**MANDATORY ATTRIBUTES**

Period

from  to

**OPTIONAL ATTRIBUTES**

SIM Identifier (optional)

Filter by ICC, IMSI or MSISDN separated by commas (max 20)

- **Period:** Range of 31 calendar days within the last 4 months including the current day. The generated report will contain information about all expenses charged to the selected Customer during the selected range.
- **SIM Identifier (optional):** It allows to define a list of up to 20 SIM ids (ICC, IMSI or MSISDN) in whatever combination in order to narrow the report entries down.
- **Type of use (optional):** It allows to select one or more usage types and obtain a report filtered by your selection. The values in this field correspond to the "Other charges detail: Concept" column in the report.

#### Report fields

The following table shows each of the possible reports.

Field	Description
Type of entity	Indicates what type of entity that generates expense it is, which may be: Subscription, Subscriptions group, Customer.
ID of entity of change	Name of the entity that generates expense. It can be subscription MSISDN, Subscriptions Group name or a Customer. The report can contain multiple rows for a same name of the entity.
MSISDN	SIM card's MSISDN that generated the expense. This field is also used to include the origin number for sent application originated SMSs.
ICC	SIM card's ICC that generated the expense.
IMSI	SIM card's IMSI that generated the expense.
State of the subscription	SIM card's current life cycle state taking into account the following criteria:

	When the expense is generated due to a state transition, the initial state is shown. When the expense corresponds to a basic service (voice, SMS data), the ACTIVE value is shown.
Time Stamp	Date and time that the event generated by the charge in the Billing Account occurred. Only a date is indicated in the case of monthly fees.
Fiscal number	Company Tax ID (or company ID for companies outside Spain) as appears in the selected billing account.  ⚠ When the fiscal number is changed, in the corresponding report there might be values with the current and previous fiscal number. This is due to the showed information with the old fiscal number refers to the previous billing cycle, whereas the information generated with the new fiscal number refers to the current billing cycle. In this way, this information agrees with the billing information contained in the pre-bill.
CRM ID	Customer identifier in operator's CRMs
Quantity	Monetary amount that the expense entails.
Currency	Currency in which the expense is expressed. It corresponds to the Customer's currency.
Pool	Indicates if the SIM card's expense is based on a pool tariff. The possible values are "Yes" or "No".
Billing cycle	Indicates the billing cycle day. Values range between 1 and 28.
Billing Account Name	Name of the billing account as defined in the Customer form.
Name of Commercial Plan	Name of the basic services or supplementary services commercial plan. For expenses not related to a commercial plan, this field is empty.
Operator Network	Operator name on which the service/charge depends. This field has a value when the expense is related to basic services (voice, SMS, data).
Subscription Group Name	Subscriptions group to which the SIM card belongs. This field is filled only for charges with the "Type of entity" field set to "Subscription".
End Customer name	Name of the End Customer (if exists) associated to the Subscriptions group to which the SIM card generating expense belongs. This field will be present if the report is generated at Customer level.
Call Detail: Type of call	Type of voice call. Possible values are "MO" (Mobile Originated) or "MT" (Mobile Terminated).
Call Detail: Duration	Duration of the call that was made in HH:MM:SS format.
Call Detail: Duration rounded	Rounded duration of the call that was made in HH:MM:SS format.
Call Detail: Called/Calling number	It contains the destination number if "Call Detail: Type of call" = "MO" or the origin number if "Call Detail: Type of call" = "MT".  In case of call redirection, the original number will be shown in parentheses
Call detail: Zone	It contains the name of the origin roaming zone if "Call Detail: Type of call" = "MO" or the destination roaming zone if "Call Detail: Type of call" = "MT".  ⚠ "Default" will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone does not have to match, necessarily, the tariff zone in the Commercial plan.
Call detail: Type of destination numbering	It contains the destination numbering. This field is filled only when "Call Detail: Type of call" = "MO".

SMS detail: Destination	Destination number of the SMS. SMS-AO destination included.
SMS detail: Origin Zone	<p>Origin roaming zone from which the SMS has been sent.</p> <p><b>⚠️</b> “Default” will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone does not have to match, necessarily, the tariff zone in the Commercial plan.</p>
SMS detail: Type of destination numbering	It contains the type of destination numbering.
Data detail: Finalization	Day, hours and seconds in which the transmission was ended.
Data detail: APN	APN using the data context.
Data detail: IP	IP used in the context achievement. For IPv4v6 sessions both IPs will be included in the format: <IPv4 IPv6>
Data detail: Zone	<p>Name of the roaming zone from which the data context was established.</p> <p><b>⚠️</b> “Default” will be shown if the operator is not assigned to any specific roaming zone. The displayed roaming zone does not have to match, necessarily, the tariff zone in the Commercial plan.</p>
Data detail: Uploaded data in Bytes	Quantity of data uploaded to the net.
Data detail: Downloaded data in Bytes	Quantity of data downloaded from the net.
Data detail: Transferred data in Bytes	Sum of the downloaded and uploaded data in the network.
Data detail: Transferred data rounded in Bytes	Rounded sum of the downloaded and uploaded data in the network.
Monthly charges: Category	It indicates that each category of monthly fees make reference to the expense (Example. Voice, SMS, Data...).
Monthly charges: Concept	It indicates the concrete monthly concept for which the expense is charged (Example. recurrent monthly fees of voice/SMS/Data, recurrent monthly fees on SIM cards ...)
Other charges detail: Category	It indicates the category of one-time fees referring to the expense (Example. Location, Supervision, prepaid vouchers...)
Other charges detail: Concept	It indicates the one time fees (non-monthly) through which the expense is charged (Example. Supervision Operation over a SIM card, Prepaid voucher renewal, Prepaid voucher cancellation...)
Data detail: Data Destination name	Data destination name.
Data detail: Data Destination id	Data destination identifier.
Data detail: Prepaid voucher id	Identifier of the purchased data prepaid voucher.
Data detail: Prepaid voucher name	Data prepaid voucher name as it was defined when it was purchased.
Internal ID	SIM card Kite Platform internal identifier.
Termination reason	Indicates the reason by which a call or a data session was ended.

	<p>Data:</p> <p>"1": DIAMETER_LOGOUT          "2": DIAMETER_SERVICE_NOT_PROVIDED          "3": DIAMETER_BAD_ANSWER          "4": DIAMETER_ADMINISTRATIVE          "5": DIAMETER_LINK_BROKEN          "6": DIAMETER_AUTH_EXPIRED          "7": DIAMETER_USER_MOVED          "8": DIAMETER_SESSION_TIMEOUT          "0": ANY_OTHER_REASON</p> <p>Voice:</p> <p>"101": SERVICE_RELEASED          "102": CALLING_DISCONNECTED          "103": CALLED_DISCONNECTED          "104": TOLL_FREE          "105": NETWORK_ERROR          "106": CALLED_BUSY          "107": CALLED_UNREACHABLE          "108": CALLED_NO_ANSWER          "109": CALLING_ABANDONED          "110": UNKNOWN          "111": NETWORK_FORCED          "100": ANY_OTHER_REASON</p>
Radio technology	Indicates the radio technologies used by the subscriber when connecting to the radio interface of the mobile network. This field is only available for data sessions. For example: "3G 4G"
Unique ID	Unique identifier
Data detail: Rating group	Rating group identifier associated to the data flow.
Data detail: Service id	Service Id associated to the data flow.
Parent Unique ID	Unique ID on which the flow depends
Flow quantity	<p>Monetary value associated to the flow.</p> <p>It is calculated from the columns: "Quantity", "Flow: detail: Transferred data in Bytes" and "Data detail: Transferred data in Bytes"</p>
Flow detail: Transferred data in Bytes	Total transferred bytes (upstream + downstream)
Data detail: Prepaid voucher instance	Data pre-paid voucher instance identifier in use.
Name of the Commercial Plan - Destination	<p>It will be filled when the SIM is assigned to a Subscription group.</p> <p>Name of the Basic Services Commercial plan in the new Subscription group.</p>

Basic Services Commercial Plan ID - Destination	It will be filled when the SIM is assigned to a Subscription group. ID of the Basic Services Commercial plan in the new Subscription group.
Subscription Group name - Destination	It will be filled when the SIM is assigned to a Subscription group. Name of the new Subscription group.
Billing account name - Destination	It will be filled when the SIM is assigned to a Subscription group. Name of the Billing account in the new Subscription group.
Pool units used	Amount of pool traffic
Voucher/Pool nominal units	Voucher size, as defined in the Commercial plan (in seconds/bytes/number of SMS)
Voucher/Pool units granted/removed	Traffic granted in voucher or decremented as a consequence of a proration or adjustment in the monthly fee. If there is no proration or adjustment this value will match the "Voucher/Pool nominal units" field. If it corresponds with an adjustment this value will be negative.
Discounts	A priori discounts applied in percentage, according to what has been defined in the Commercial plan.
Tariff	Applied tariff according to what has been defined in the Commercial plan
Tariff: Zone name	Tariff zone name according to what has been defined in the Commercial plan.
Tariff: Destination name	Tariff destination name according to what has been defined in the Commercial plan.
Additional tariffs: Name	Name of the additional tariffs producing the charge.
Additional tariffs: Duration (months)	Duration of the charging period of the associated additional tariff.
Call detail: Prepaid voucher id	Identifier of the purchased voice prepaid voucher.
Call detail: Prepaid voucher name	Voice prepaid voucher name as it was defined when it was purchased.
SMS detail: Prepaid voucher id	Identifier of the purchased SMS prepaid voucher.
SMS detail: Prepaid voucher name	SMS prepaid voucher name as it was defined when it was purchased.
Call detail: Prepaid voucher instance	Voice pre-paid voucher instance identifier in use.
SMS detail: Prepaid voucher instance	SMS pre-paid voucher instance identifier in use.
MCC/MNC	Mobile Country Code / Mobile Network Code
Charge Code	Charge code as it is defined in the expense CDR
Pool ID	Pool identifier as it is defined in the expense CDR
IMEI	Indicates the IMEI used during the data session. This column will be empty if the traffic is not data.

VoLTE	Indicates whether the voice call is a VoLTE call. Possible values are "Y" (the call is a VoLTE call) or "N" (the call is not a VoLTE call). This column will be empty if the call is not voice traffic.
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 This report cannot be requested when either this report or “Daily consumptions and other billable concepts” report is already being generated by a user belonging to the same organisation.

#### 14.5.3 Pre-bill aggregated

This report provides aggregated information per subscription about monthly fees and one-time charges and overage referred to one billing cycle.

This report can be requested from the pre-bill section, although once generated can be also downloaded from Reports section. This report is available to both Customers and Service Providers.

##### Report fields

The following table shows each one of the possible fields of the report and their relation with the different pre-bill sections (see section [Pre-bill Items](#) for further details).

Field	Description	Related pre-bill sections
TYPE	Type of entity generating the expense. It can be : subscription, pool, customer, suppservices	-
ID	Kite Platform internal ID of the subscription.	-
ICC	SIM card's ICC that generated the expense.	-
IMSI	SIM card's IMSI that generated the expense.	-
MSISDN	SIM card's MSISDN that generated the expense.	-
DATA_IND	Non-pooled data traffic in bytes.	-
SMS_IND	Non-pooled SMSs (MO).	-
VOICE_IND	Non-pooled voice calls (MO y MT) in seconds.	-
DATA_IND_OV	Non-pooled overage data expense.	“Individual charges” → “SIM charges by subscription group” → “Subscription group” → “Overage fee” → “Data”
SMS_IND_OV	Non-pooled overage SMS (MO) expense.	“Individual charges” → “SIM charges by subscription group” → “Subscription group” → “Overage fee” → “SMS”
VOICE_IND_OV	Non-pooled overage voice calls (MO y MT) expense.	“Individual charges” → “SIM charges by subscription group” → “Subscription group” → “Overage fee” → “Voice”
DATA_POOL	Pooled data traffic in bytes.	-

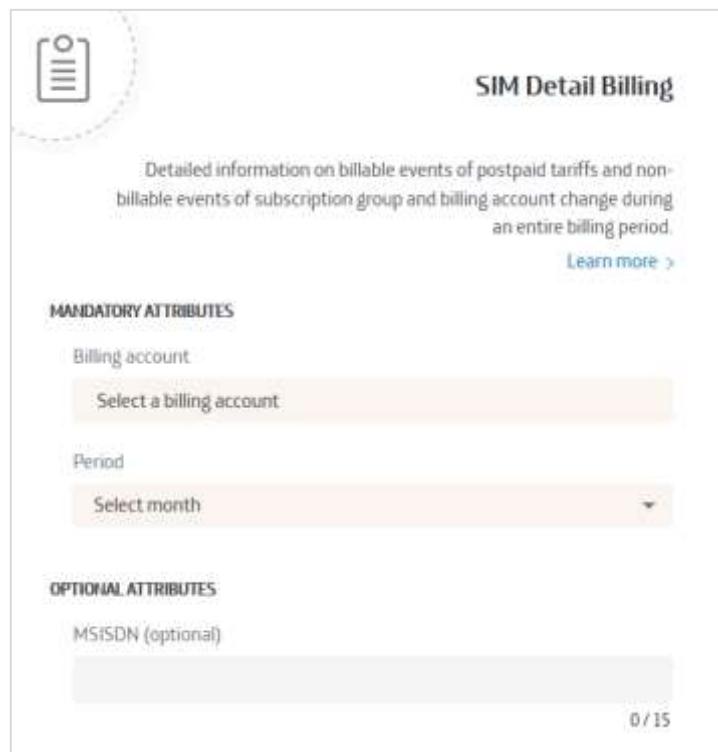
SMS_POOL	Pooled SMSs (MO).	-
VOICE_POOL	Pooled voice calls (MO y MT) in seconds.	-
DATA_POOL_OV	Overage for pool data expense.	"Global charges" → "Pool charges by subscription group" → "Subscription group" → "Overage fee" → "Data"
SMS_POOL_OV	Overage for pooled SMS (MO) expense.	"Global charges" → "Pool charges by subscription group" → "Subscription group" → "Overage fee" → "SMS"
VOICE_POOL_OV	Overage for pooled voice calls (MO y MT) expense.	"Global charges" → "Pool charges by subscription group" → "Subscription group" → "Overage fee" → "Voice"
MONTHLY_FEES	Includes all monthly charges for the current billing cycle (supplementary services, basic services (voice, SMS, data), lifecycle, Inactive new fee ...).	If TYPE = pool: "Global charges" → "Pool charges by subscription group" → "Overage fee" → "Monthly fee". If TYPE = suppsservices: "Global charges" → "Customer charges associated with supplementary services" → "Monthly fees". If TYPE = subscription: "Individual charges" → "SIMs charges by subscription group" → "Subscription group" → "Monthly fees" If TYPE = subscription: "Individual charges" → "SIM charges associated with supplementary services" → "Monthly fees". If TYPE = customer: "Individual charges" → "SIM charges associated with Inactive / new fees". If TYPE = subscription: "Individual charges" → "SIM charges associated to commitment levels" → "Monthly fees"
OTHER_CHARGES	Includes all one-time charges for the current billing cycle (advanced supervision, lifecycle state transitions, SMS AO overage,...)	If TYPE = suppsservices: "Global charges" → "Customer charges associated with supplementary services" → "One time fees" If TYPE = subscription: "Individual charges" → "SIMs charges by subscription group" → "Subscription group" → "One time fees" If TYPE = subscription: "Individual charges" → "SIM charges associated with supplementary services" → "One time fees" If TYPE = customer: "Individual charges" → "SIM charges associated to commitment levels" → "One time fees"
TOTAL_DATA	Total data traffic in bytes.	Total traffic service usage → Data
TOTAL_SMS	Total number of SMSs.	Total traffic service usage → SMS
TOTAL_VOICE	Total seconds of voice calls	Total traffic service usage → Voice
CURRENCY	Currency in which the expense is expressed. It corresponds to the Customer's currency.	-

#### 14.5.4 SIM Detail Billing

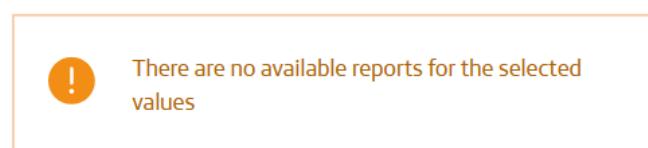
This report contains detailed information of post-paid tariffs billable events and non-billable events (billing account and subscription group change).

Each row of this report is related with certain charges of the “Monthly expense detail” report, specifically with those entries having the column “Used in SIM Detail report” with the value “Y”. Entries are grouped by subscription, tariff (triplet zone-destination-service) and tariff nature (voucher monthly fee, pay-per-use, amount of traffic performed...).

The form fields to select are:



- **Billing account:** A billing account has to be chosen and if there is no information for the selected billing account a warning message will be displayed.



- **Period:** Billing period, associated with the indicated billing account, from among those available in the last 24 months. The generated report will contain information about all expenses charged to such Billing Account for the selected billing period.
- **MSISDN (optional):** In case you want to obtain information relating only to a specific SIM.

## Report fields

The following table shows each one of the report fields.

Field	Description
ID	SIM card Kite Platform internal identifier.
ICC	SIM card's ICC that generated the expense.
IMSI	SIM card's IMSI that generated the expense.
MSISDN	SIM card's MSISDN that generated the expense.
PERIOD_START	Day and time when the period started for the entry. For individual and static pool monthly fee entries, only year and month will be shown.
PERIOD_END	Day and time when the period ended for the entry. It doesn't apply to individual and static pool monthly fee entries.
COMMERCIAL_PLAN	Commercial plan name.
SUBSCRIPTION GROUP	Subscription group name. In entries related to Subscription group changes the origin and destination Subscription groups will be indicated: [Origin subscription group] / [Destination subscription group]
ZONE	Used tariff zone  It won't be present for the following concepts (see "DESCRIPTION" field): <ul style="list-style-type: none"><li>• "Subscription group changed"</li><li>• "Entered in a billable status" / "Entered in a non-billable status"</li></ul>
DESTINATION	Used tariff destination (only for Voice MO, SMS MO and Data)  It won't be present for the following concepts (see "DESCRIPTION" field): <ul style="list-style-type: none"><li>• "Subscription group changed"</li><li>• "Entered in a billable status" / "Entered in a non-billable status"</li></ul>
SERVICE	Used Basic Service (Data, Voice MO, Voice MT, SMS)  Note: in case of individual monthly fees it won't differentiate between Voice MO and Voice MT and the text "Voice" will be shown.  It won't be present for the following concepts (see "DESCRIPTION" field): <ul style="list-style-type: none"><li>• "Subscription group changed"</li><li>• "Entered in a billable status" / "Entered in a non-billable status"</li></ul>
DESCRIPTION	Charge description. It can be one of the following: <ul style="list-style-type: none"><li>• "Usage included in pool": information related to pool consumption of a subscription for the related service.</li><li>• "Pool overage": informs about the pay-per-use tariff (as it has been defined in the Commercial plan) as well as the amount of traffic and expense performed in pay-per-use (overage) of a subscription for the related service.</li><li>• "Pay-per-use including individual voucher": informs about the amount of traffic and total expense, voucher exceeded, of a Subscription for the related service.</li><li>• "Dynamic pool voucher monthly fee": provides information of the voucher size and monthly fee of a dynamic pool (as it has been defined in the Commercial plan) of a</li></ul>

	<p>subscription for the related service. Voucher increasing and decreasing is also provided as a consequence of adding or removing the subscription to the voucher in the middle of the billing cycle.</p> <ul style="list-style-type: none"> <li>• “Individual voucher monthly fee”: provides information of the individual voucher size and monthly fee (as it has been defined in the Commercial plan) of a subscription for the related service.</li> <li>• “Static pool voucher monthly fee": provides information of the voucher size and monthly fee (as it has been defined in the Commercial plan) of a static pool of a subscription for the related service.</li> <li>• “Entered in a billable status (from XXX to XXX)": informs about the time stamp when the subscription starts to be billable, indicating the affected life cycle states.</li> <li>• “Entered in a non-billable status (from XXX to XXX)": informs about the time stamp when the subscription ceases to be billable, indicating the affected life cycle states.</li> <li>• “Subscription group changed": informs about the time stamp when the subscription moves to another subscription group.</li> <li>• “Usage included in pool – deferred": related to delayed CDRs corresponding to expired billing cycles.</li> <li>• “Usage not included in pool – deferred": related to delayed CDRs corresponding to expired billing cycles.</li> <li>• “Pay-per-use including individual voucher – deferred": related to delayed CDRs corresponding to expired billing cycles.</li> </ul>
DISCOUNT (%)	<p>Applied discount according to what has been defined in the Commercial plan.</p> <p>It won't be present for the following concepts (see “DESCRIPTION” field):</p> <ul style="list-style-type: none"> <li>• “Usage included in pool”</li> <li>• “Subscription group changed”</li> <li>• “Entered in a billable status” / “Entered in a non-billable status”</li> </ul>
TARIFF	<p>Applied tariff according to what has been defined in the Commercial plan.</p> <p>For the following concepts is either 0 or unavailable (see “DESCRIPTION” field):</p> <ul style="list-style-type: none"> <li>• Usage included in pool</li> <li>• “Pay-per-use including individual voucher”</li> <li>• “Subscription group changed”</li> <li>• “Entered in a billable status” / “Entered in a non-billable status”</li> </ul>
AMOUNT(bytes/SMS/seconds)	<p>Amount of traffic.</p> <p>It won't be present for the following concepts (see “DESCRIPTION” field):</p> <ul style="list-style-type: none"> <li>• “Subscription group changed”</li> <li>• “Entered in a billable status” / “Entered in a non-billable status”</li> </ul>
QUANTITY (CURRENCY_ISO_4217)	<p>Cost associated to the amount of traffic. Discount is already applied.</p> <p>It won't be present for the following concepts (see “DESCRIPTION” field):</p> <ul style="list-style-type: none"> <li>• “Usage included in pool”</li> <li>• “Subscription group changed”</li> <li>• “Entered in a billable status” / “Entered in a non-billable status”</li> </ul>

 This report cannot be requested if it is already being generated by a user belonging to the same organisation.



This report will not be available for non-monetary users.

This report, in addition to being downloadable to a file, allows for on-screen viewing:

#### 14.5.5 IoT Partner

This report offers a detail of the monthly fees, eventual charges and usage rates made by lines associated with third-party local profiles (e.g. Singtel).



This report can only be generated from the view of a preinvoice that contains line charges associated with third-party profiles.

The type of charges it contains are:

- Third-party profile setup charges (downloading third-party profiles in Telefónica's eUICC).
- Monthly service charges.
- Payments for use of voice, SMS and data services

This report is made up of a ZIP that in turn contains two types of files:

- Detailed report (IoT Partner MCP): contains details of the voice, SMS and data sessions and the pricing applied to each session.
- Report of monthly and eventual charges (IoTPartner fees): contains details of the monthly service fees and charges for profile provision.

#### IoT Partnet MCP report Fields

The following table shows the content of this report:

Field	Description
CALLTYPE	Indicates the type of service: phone (voice), SMS, or GPRS (data)
SUBSCRIPTION TYPE	Service provider to which the report row refers.
CALL TIME	Date and time of the event in DD/MM/YYYY HH:MM
UTC OFFSET	Offset in hours and minutes relative to the UTC time zone (800 = 8 hours 00 minutes)
A-NUMBER	Origin number
B-NUMBER	Destination number
DIRECTION	MOC for originated calls and MTC for terminated calls
APN	APN used
ORIGINATING COUNTRY	Origin country
ORIGINATING NETWORK	Origin mobile network
DESTINATION COUNTRY	Destination country
DESTINATION NETWORK	Destination mobile network
IMSI	IMSI of the profile being charged
UNIT	Units, not used
UNIT PRICE	Unit price (per megabyte, per SMS, or per minute)
BILLABLE QUANTITY	Charged traffic amount in voice seconds, or SMS (1) or data (bytes). After rounding.
ACTUAL QUANTITY	Traffic performed in voice seconds, or SMS (1) or data (bytes)
AMOUNT	Charge associated with usage, result of applying the tariff
VOLUME SENT	Amount of bytes sent
VOLUME RECEIVED	Amount of bytes received
COMMERCIAL PLAN	Commercial plan used to charge this usage.

### IoT Partner fees report fields

Field	Description
EID	eUICC identifier associated with the position
ICC	ICC associated with the charge
IMSI	IMSI associated with the charge

MSISDN	MSISDN associated with the charge
Provision Date	Provision date of the line associated with the charge (YYYY-MM-DDTHH:MM:SS.MMM+HHMM format)
Monthly Charge: Concept	Can be MONTHLY_FEE or SETUP_FEE
Tariff	Unit tariff
Quantity	Charge applied

#### 14.5.6 Legacy monthly expense

 Only applies to Movistar lines that have not been migrated from legacy and are in a billing account associated with a legacy billing account

This report shows spend per legacy line in two reports: a summary report per line and a detailed report per line

This report also shows discounts, but without associating them with any line.

##### Summary by line report fields

Field	Description
Extension	Line extension identifier
MSISDN	Phone number
Service	Name of the service associated with the charged usage
Sessions	Number of voice/SMS/data sessions
Volume	Data volume (bytes) or voice (seconds)
Quantity	Applied pricing
Billing Account	Billing account identifier in legacy systems
CIF	Tax identification number / DNI / CIF of the customer

##### Line details report fields

Field	Description
Extension	Line extension identifier
MSISDN	Phone number
Time Stamp	Date in YYYY-MM-DD format

Service	Name of the service associated with the charged usage
Data detail: Access	Data Session: Access
Data detail: Type	Data Session: Type
Data detail: Country	Data Session: Country
Voice/SMS detail: Phone	Voice call/SMS: Telephone
Voice/SMS detail: Type	Voice call/SMS: Type
Voice/SMS detail: Destination	Voice call/SMS: Destination
Voice/SMS detail: Country	Voice call/SMS: Country
Volume (bytes/seconds)	Volume (bytes in case of data, seconds in case of voice call)
Quantity (EUR)	Applied pricing
Billing Account	Billing account identifier in legacy systems
CIF	Tax identification number / DNI / CIF of the customer

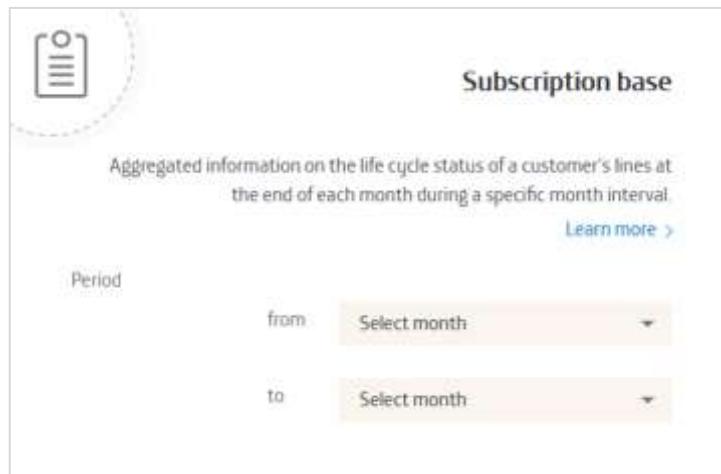
## 14.6 Business Reports

### 14.6.1 Subscription Base

This report provides a summary of the status in which the lines of Customers are during the months covered by the selected range indicating, for each one of the possible statuses, how many subscriptions are in it. This information is provided by each one of the regular months of the selected time range. The statuses (counters columns) are the following:

- Inactive new.
- Test.
- Activation ready.
- Activation pending.
- Active.
- Deactivated.
- Suspended.

The form fields to select are:



- **Period:** Range of calendar months from those available in the last 24 months, the current month being valid.

⚠ The list of months shown are according to the Customer's time zone, therefore, if the user has a different time zone than the Customer's, there could be some discrepancy in the months of the list as expected by the user.

## Report fields

The following table shows each of the possible fields of the report. Some fields can be present or not depending in the organisation to which the user belongs.

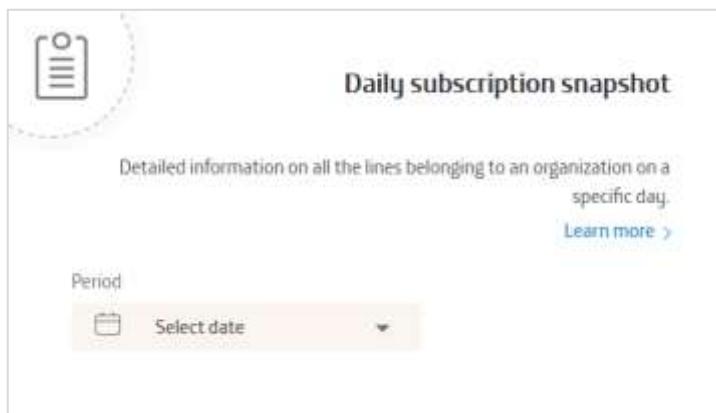
Field	Description
Period	Indicates which month of the selected range the line of the report refers.
Service Provider	Organisation to which the line of the report refers.
Fiscal number	Company Tax ID (or company ID for companies outside Spain) as appears in the default billing account.  ⚠ When the fiscal number is changed, in the corresponding report there might be values with the current and previous fiscal number. This is due to the showed information with the old fiscal number refers to the previous billing cycle, whereas the information generated with the new fiscal number refers to the current billing cycle. In this way, this information agrees with the billing information contained in the pre-bill.
Subs. Total Base	Total number of lines over which the calculation is made.
Inactive new	Number of lines in the status "Inactive new" at the end of the indicated month in the field "Period".
Test	Number of lines in the status "Test" at the end of the indicated month in the field "Period".
Activation ready	Number of lines in the status "Activation ready" of the indicated month in the field "Period".
Activation pending	Number of lines in the status "Activation pending" at the end of the indicated month in the field "Period".
Active	Number of lines in the status "Active" at the end of the indicated month in the field "Period".

Deactivated	Number of lines in the status at the end of the status “Deactivated” indicated month in the field “Period”.
Suspended	Number of lines in the status “Suspended” at the end of the indicated month in the field “Period”.

#### 14.6.2 Daily subscription snapshot

This report provides a snapshot of the lines belonging to the selected organisation. The report always refers to the day before the request day. For example, if the report is requested on July 17<sup>th</sup>, the obtained information refers to July 16<sup>th</sup>.

The form fields to select are:



- **Period:** Specific day within a range of 90 days from two days prior to the current date.

#### Report fields

The following table displays each of the possible report fields.

Field	Description
Internal ID	Internal identifier of the subscription.
ICC	SIM card numeric identifier.
IMSI	SIM card “International Mobile Subscriber Identity”.
MSISDN	SIM card “Mobile Station Integrated Services Digital Network”.
IMEI	“International Mobile Equipment Identity”. Unique identifier associated with the mobile terminal that identifies the communications module hardware.
Comm module manufacturer	Text that identifies the GSM communications module of the SIM card.
Comm module model	Text that identifies the SIM communications module.
Master ID	Master organisation identifier.

Service Provider ID	Service Provider organisation identifier.
Customer ID	Customer organisation identifier.
Status	Current lifecycle state of the SIM card.
BS Comm Plan	Basic service commercial plan identifier.
BS Comm Plan Name	Basic service Commercial Plan Name.
Subsc. Group	Subscription group Identifier.
Subsc. Group Name	Subscription Group Name.
LTE_STATUS	SIM card LTE status. It can be "A" (active) or "I" (Inactive)
CRM_ID	"Customer ID in provider 1 CRM" value indicated in the Customer section.

## 14.7 Security reports

### 14.7.1 IMEI blocked subscriptions

 This report will be available only for Customers with IMEI filtering enabled (see section [My organisation data](#) for more information).

This report provides a snapshot of a Customer's SIM cards whose data traffic is blocked because the associated device's IMEI is not in the IMEI white list (see section [My organisation data](#) for more information).

#### Report fields

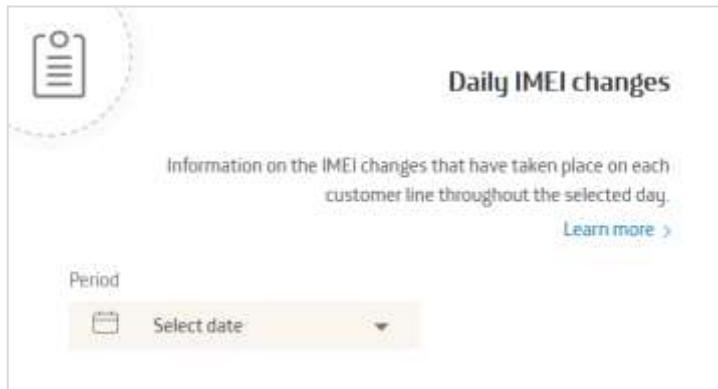
The following table shows each one of the possible fields of the report.

Campo	Description
Timestamp	Date and time when the traffic blockage took place in the Customer's time zone.
Internal ID	Kite Platform internal ID of the subscription.
ICC	SIM card's ICC whose data traffic is blocked.
IMSI	SIM card's IMSI whose data traffic is blocked.
MSISDN	SIM card's MSISDN whose data traffic is blocked.
IMEI	Device's IMEI being blocked.
Subscription Group	Subscription group name the SIM card belongs to.

### 14.7.2 Daily IMEI changes

This report provides information on the IMEI changes that have taken place in each SIM throughout the selected day.

The form fields to select are:



- **Period:** Day for which you want to generate the report within the last 30 days including the current day.

#### Report fields

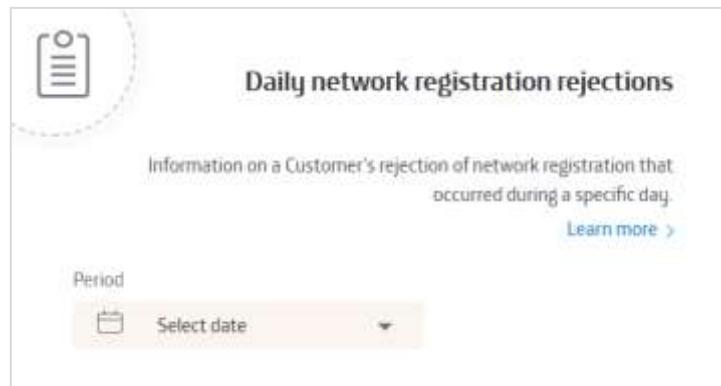
The following table shows each one of the possible fields of the report.

Field	Description
Internal ID	Internal identifier of the SIM card.
ICC	ICC of the SIM card with IMEI changed
IMSI	IMSI of the SIM card with IMEI changed
MSISDN	MSISDN of the SIM card with IMEI changed
Old IMEI	Replaced IMEI. It will be empty if the SIM acquires an IMEI for the first time.
New IMEI	New IMEI acquired by the SIM .
Timestamp	Date and time when the IMEI change event has taken place.

### 14.7.3 Daily network registration rejections

This report contains information about network registration rejections taken place along the selected day.

The form fields to select are:



- **Period:** Day comprised in the last 31 days counting the current day. The generated report will contain information for the selected day only referred to the organisation requesting the report.

### Report fields

The following table shows each one of the possible fields of the report.

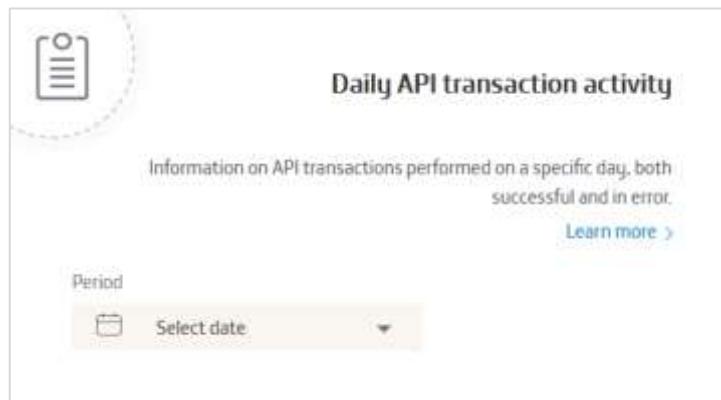
Field	Description
ID	Unique identifier
Time stamp	Day and time when the failure has been registered
IMSI	SIM card "International Mobile Subscriber Identity".
Origin node <sup>19</sup>	Origin node (may be a GT in 2G/3G or hostname in 4G).
Error id	Type of rejection and code. Values can be:  SIGTRAN: - Roaming not allowed – 8 - Unknown subscriber – 1  DIAMETER: - Unknown subscriber – 5001 - Roaming not allowed – 5004 - Identity not registered – 5003 - EPS services not allowed – 5420
Error time stamp	Error time stamp
MCC	Mobile Country Code
MNC	Mobile Network Code

<sup>19</sup> This column will not be shown for Customers different from OnStar (Telefónica México).

#### 14.7.4 Daily API transaction activity

This report provides information about API transactions carried out along the selected day, whether successful or with error.

The form fields to select are:



- **Period:** A day within the last 32 days counting the current day. The generated report will contain information for the selected day only referred to the organisation requesting the report.

#### Report fields

The following table shows each one of the possible fields of the report.

Field	Description
Timestamp	Day and time when the transaction took place
API name	Used API name. For example: DiagnosticSoap
SOAP action	SOAPAction header value indicating the SOAP call being made. This field will be empty for REST type requests. For example: urn:gsmDiagnostic
Request method	POST o GET
Request path	For example: /services/SOAP/GlobalM2M/DiagnosticInventory/v1/r12
Organisation id	Internal organisation identifier invoking the API. For example: Auto_org_cust14ba91b1418jGIMtn2v  ⚠ In some error cases this field may appear empty, for example in XSD schema validation errors, authentication errors or errors when exceeding maximum TPS.
Response status	HTTP response code.
Time elapsed	API call processing time (in milliseconds)
Request payload	HTTP message.
Exception ID	Exception ID as defined by UNICA.
Exception Text	Exception Text

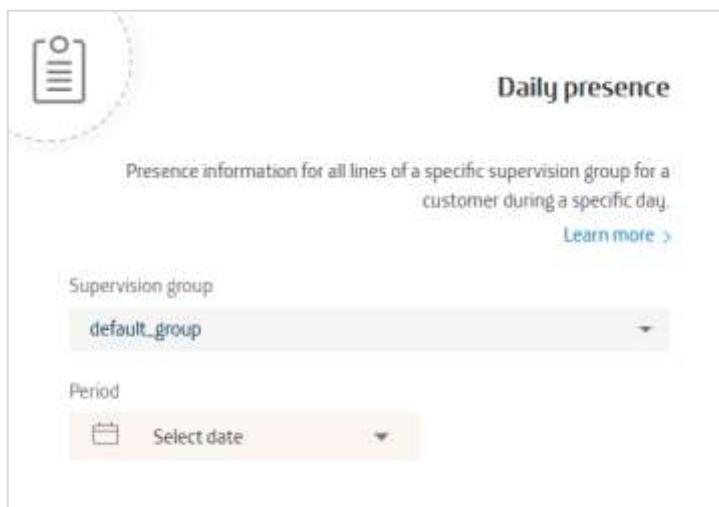
Exception Extra	Exception extra information
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## 14.8 Supervision Reports

### 14.8.1 Daily and monthly presence

This report contains information about the unified state of presence of the Supervision Group lines throughout the selected day or month. Includes additional information such as the date and time when the change of presence, IP (if available) was detected as well as the cause of the change of presence among other things.

The form fields to select are:



Daily presence

Presence information for all lines of a specific supervision group for a customer during a specific day.

[Learn more >](#)

Supervision group

default\_group

Period

Select date

- **Supervision group:** The report will include information on all lines included in the selected Supervision group.
- Period:
  - For the daily presence report, a day included in the last 2 months in addition to the days of the current month (current day included).
  - For the monthly presence report, a month within the last 2 months (current month excluded).

#### Report fields

The following table shows the fields of the daily or monthly presence reports; both reports share the same fields and differ only in the time range over which information is displayed (day or month).

Field	Description
IMSI	“International Mobile Subscriber Identity” of the subscription.
MSISDN	“Mobile Station Integrated Services Digital Network” of the subscription.

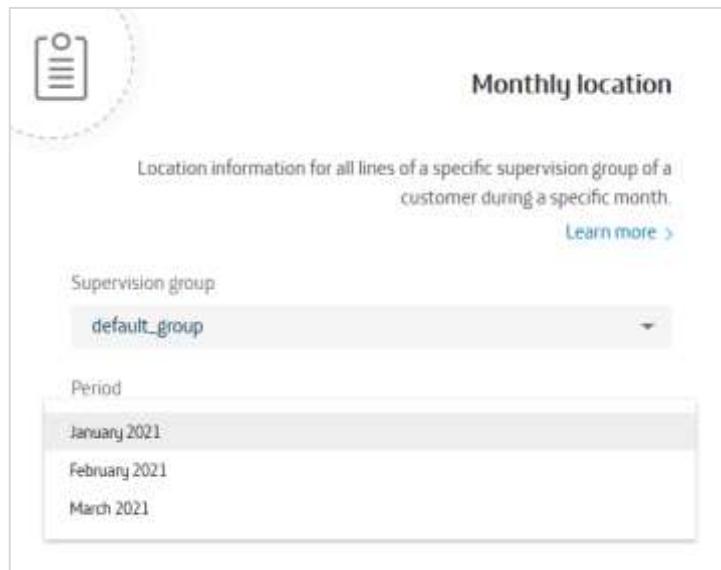
ICC	"Integrated Circuit Card ID" of the subscription.
ALIAS	Descriptive value of the SIM given by a user from the Service Provider or Customer organisation.
IP_ADDRESS	IP address associated to the GPRS context. This information is not displayed when the level of presence is neither GPRS nor IP. For IPv4v6 sessions both IPs will be included in the format: <IPv4 IPv6>
IP_ADDR_DATE	Moment when the opening of the GPRS context took place. It is a date expressed in the Customer's GMT. This information will only appear if the IP field is available.
PRESENCE	Unified presence state. The possible values are UNKNOWN, NOT_REGISTERED, GSM, and IP.
PRESENCE_DATE	Date when the unified presence state was established. It is expressed in the Customer's GMT.
EVENT_CAUSE	Cause that originated the unified presence state. The possible values of unified presence depending on the presence state on the network are shown below (see <a href="#">Annex B: Description of the presence values</a> for more information): <p>For IP: IP_UP_ICMP</p> <p>For GPRS: GPRS_UP e IP_DOWN_ICMP</p> <p>For UNKNOWN_GPRS: GPRS_UNKNOWN e IP_DOWN_ICMP</p> <p>Para GSM: ASSUMED_IDLE, CAMEL_BUSY, GPRS_DOWN_TER_OK, GPRS_DOWN_TER_ERR, GPRS_DOWN_NET_OK, GPRS_DOWN_NET_ERR, GPRS_DOWN_NET_TOUT, GPRS_OFF y GPRS_ON</p> <p>For NOT_REGISTERED: GPRS_DOWN_TER_OK, GPRS_DOWN_TER_ERR, GPRS_DOWN_NET_OK, GPRS_DOWN_NET_ERR, GPRS_DOWN_NET_TOUT, GPRS_OFF, GPRS_ON, MS_PURGED, IMSI_DETACHED, RESTRICTED_AREA, NOT_REGISTERED</p> <p>For UNKNOWN: REGISTRATION, NOT_PROVIDED_FROM_VLR, UNKNOWN_SUBSCRIBER, GPRS_DOWN_TER_OK, GPRS_DOWN_TER_ERR, GPRS_DOWN_NET_OK, GPRS_DOWN_NET_ERR, GPRS_DOWN_NET_TOUT, GPRS_OFF y GPRS_ON</p>
APN	Access point associated with the SIM card
GGSN_NODE_IP	SGSN node IP address when the presence level is GPRS.
SGSN_NODE_IP	SGSN node IP address.
SGSN_OPERATOR	Operator name where the SGSN is located.
SGSN_COUNTRY	Country name where the SGSN is located.
SGSN_COUNTRY_CODE	Country code where the SGSN is located.
ACCOUNTING_SESSION_ID	Session Id identifier associated to the presence event.
CGI	Cell-id Information
RECEIVED_DATA	Number of octets received
PACKETS RECEIVED	Number of packets received
RAT_TYPE	Last Access Technology detected
TRANSMITTED_DATA	Number of octets transmitted
PACKETS TRANSMITTED	Number of packets transmitted

SUBSCRIPTION_ID	ID of the subscription in Kite
STATUS_TYPE	1.Start, 2.Stop, 3.Interim-Update, 7.Accounting-On, 8.Accounting-Off
STATUS	GSM_UP or GSM_DOWN
VLR_GLOBAL_TITLE	Global Title del VLC obtenido en el diagnóstico de la SIM
VLR_GT_HEADER	Cabecera del Global Title del VLC
MSC_GLOBAL_TITLE	Global Title de la MSC obtenido en el diagnóstico de la SIM
MSC_GT_HEADER	Cabecera del Global Title de la MSC.
SGSN_GLOBAL_TITLE	Global Title del SGSN obtenido en el diagnóstico de la SIM
SGSN_GT_HEADER	Cabecera del Global Title del SGSN.
TRANSACTION_ID	ID de la Transacción usado para notificaciones en el Portal.
TRY_NUMBER	Número de reintento actual en el mecanismo de notificaciones
LAST_TRY_TIMESTAMP	Timestamp epoch en milisegundos de cuando se envió el último echo
DESCRIPTION	IP_UP o IP_DOWN
SEQUENCE_NUMBER	Número de secuencia en el ping ICMP
VPN_SUBID	VPN de Cliente usado en el diagnóstico
USER_ID	Id de Usuario en el Portal.
SESSION_TIME	Session duration in seconds

#### 14.8.2 Daily and monthly location

This report contains geographical location information on the lines of the Supervision Group throughout the selected day or month. Includes additional information such as the date and time when the latitude, longitude and CGI (Global Identification Cell) were detected, among other things.

The form fields to select are:



- **Supervision group:** The report will include information on all lines included in the selected Supervision group.
- Period:
  - For the daily location report, the current day or a day within the last 100 days.
  - For the monthly location report, a month within the last 3 months (current month excluded).

**⚠️** If the customer has not subscribed to the Advanced Localization Supplementary Service, only the daily report can be downloaded, and only for the current and previous days.

## Report fields

The following table shows the fields of the daily and monthly location reports. Both reports share the same fields, and they only offer in the time range over which information is displayed (day or month):

Field	Description
IMSI	“International Mobile Subscriber Identity” of the subscription.
MSISDN	“Mobile Station Integrated Services Digital Network” of the subscription.
ICC	“Integrated Circuit Card ID” of the subscription.
ALIAS	Descriptive value of the SIM given by a user belonging to a Customer organisation.
LATITUDE	Universal latitude associated to the position of the subscription.
LONGITUDE	Universal longitude associated to the position of the subscription.

POSTAL_CODE	Postal code associated to the position of the subscription.
LOCATION_DATE	Date and time when the location of the subscription was obtained. The date is expressed in the Customer's GMT.
CGI	<p>It is the Cell Global Identification (CGI). This field is expressed as a text chain with four decimals separated by a "-" character (E.g.: 214-07-2864-20332). The four sub-fields are the following:</p> <ul style="list-style-type: none"> <li>- MCC: Mobile Country Code</li> <li>- MNC: Mobile Network Code</li> <li>- LAC: "Location Area Code". Represents a group of BTS cells.</li> <li>- Cell-ID: Cell identifier. It is the ID of one of the cells inside the cell group identified by the LAC.</li> </ul>
OPERATOR	CGI related country
COUNTRY	Country name related CGI
COUNTRY_CODE	Country code related CGI

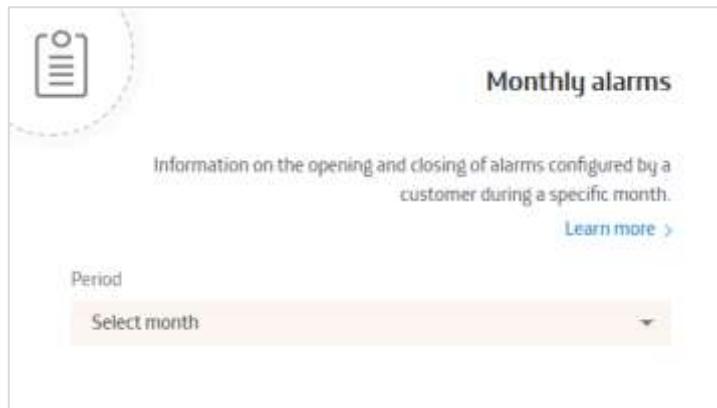
#### 14.8.3 Monthly alarms

 This report is only available to Customer organisations. To view it, the Service Provider will first have to access a Customer's workspace.

The monthly alarm report includes all events related to the opening or closing of alarms configured by a customer. For the current month, it includes the alarms for the month up to the moment of generating the report.

It includes all the alarm targets that a customer can configure: SIMs from a Subscription group, SIMs from a Supervision group, and a Subscription group.

The form fields to select are:



- **Period:** Month in which the alarm events took place, selectable between the last 12 months plus the current month.

## Report fields

The following table shows the fields in the report.

Fields	Description
EID	SIM EID. Only available for eUICC cards.
ICC	SIM ICC.
IMSI	SIM IMSI
MSISDN	SIM MSISDN.
ALIAS	SIM alias.
CUSTOM_FIELD_1	SIM Customer's custom field 1.
CUSTOM_FIELD_2	SIM Customer's custom field 2.
CUSTOM_FIELD_3	SIM Customer's custom field 3.
CUSTOM_FIELD_4	SIM Customer's custom field 3.
EVENT	Event type: OPEN for opening alarms, CLOSED_MANUAL for manually closed alarms and CLOSED_AUTOMATIC for automatic closed alarms.
NAME	Rule name related to the alarm event
DATE	Alarm event date
OPEN_DATE	Opening event alarm date.
SEVERITY	Alarm event severity. Possible values are: " <i>Informative</i> ", " <i>Urgent</i> " y " <i>Critical</i> ".
NOTES	Comments entered by users when the alarm is attended.
SUBSCRIPTION_GROUP_NAME	Name of the Subscription group associated with the alarm event, present in events related to the alarm targets "SIMs of a subscription group" and "Subscription group".
SUBSCRIPTION_GROUP_ID	Name of the Subscription group associated with the alarm event, present in events related to the alarm targets "SIMs of a subscription group" and "Subscription group".
SUPERVISION_GROUP_NAME	Name of the Subscription group associated with the alarm event, present in events related to the alarm objective "SIMs of a monitoring group".
TARIFF_ZONE_NAME	Name of the tariff zone associated with a pool alarm event. This name is part of the pool name: SUBSCRIPTION_GROUP_NAME- TARIFF_ZONE_NAME-TARIFF_DESTINATION_NAME.
TARIFF_DESTINATION_NAME	Name of the destinations zone associated with a pool alarm event. This name is part of the pool name: SUBSCRIPTION_GROUP_NAME- TARIFF_ZONE_NAME- TARIFF_DESTINATION_NAME.

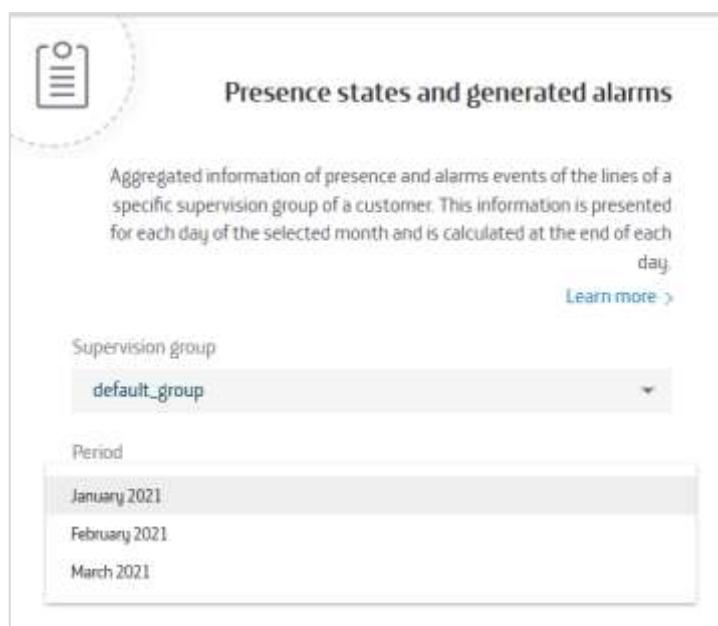
SIM related fields are only present in events related to alarm targets "SIMs in a Subscription group" and "SIMs in a Supervision group".

#### 14.8.4 Presence states and generated alarms

 In previous versions of Kite this report was called “Accumulative Summary”.

Contains a snapshot with the aggregated information (counters) of presence and alarms at the end of each day for each of the days of the selected month. For the presence state, it shows the counters of how many lines there are in each of the presence states. For the alarms, it offers information on how many are opened/closed/attended and their severity (Info, Urgent, and Critical).

The form fields to select are:



**Presence states and generated alarms**

Aggregated information of presence and alarms events of the lines of a specific supervision group of a customer. This information is presented for each day of the selected month and is calculated at the end of each day.

[Learn more >](#)

Supervision group

default\_group

Period

January 2021

February 2021

March 2021

- **Supervision group:** The report will include information on all lines included in the selected Supervision Group.
- **Period:** A selectable month in the last 3 months (current month excluded)

#### Report fields

The following table shows each one of the possible fields of the report.

Field	Description
DATE	Day to which the line of summary of presence and alarms in the report refers.
DEVICES	Total number of Customer subscriptions in the supervision group.
IP	Total number of subscriptions in the unified state IP
GPRS	Total number of subscriptions in the unified state GPRS
GSM	Total number of subscriptions in the unified state GSM

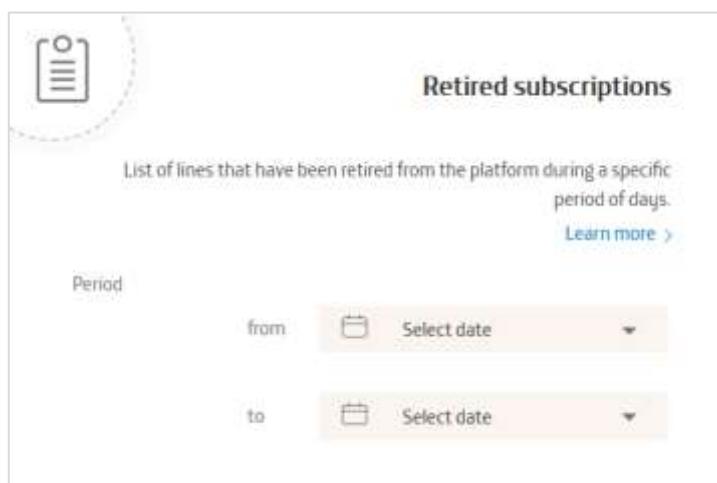
UNREG	Total number of subscriptions in the unified state NOT_REGISTERED
UNKNOWN	Total number of subscriptions in the unified state UNKNOWN
OPENINFO	Total number of alarms opened with severity state Info.
OPENURG	Total number of alarms opened with severity state Urgent.
OPENCRT	Total number of alarms opened with severity state Critical.
ATTENINFO	Total number of alarms attended with severity state Info.
ATTENURG	Total number of alarms attended with severity state Urgent.
ATTENCRIT	Total number of alarms attended with severity state Critical.
CLOSEINFO	Total number of alarms closed with severity state Info.
CLOSEURG	Total number of alarms closed with severity state Urgent.
CLOSECRIT	Total number of alarms closed with severity state Critical.

## 14.9 Administrative reports

### 14.9.1 Retired subscriptions

This report provides information about SIM cards that have been retired in the indicated period.

The form fields to select are:



- **Period:** A range of days in the last 24 months. The current day can also be selected.

#### Report fields

The following table shows each one of the possible fields of the report.

Field	Description

Timestamp	Time and date when the SIM card was retired (in the Customer's time zone). UTC for Service Providers.
ID	Internal identifier of the SIM card.
ICC	ICC of the retired card.
IMSI	IMSI of the retired card.
MSISDN	MSISDN of the retired card.
Customer	Name of the Customer owner of the SIM card being retired. Only present in reports generated by the Service Provider.
Source	PORTAL or API.
Username	Name of the user that has retired the SIM card. Only present in reports generated by the Service Provider.
Provision_Correction	"Yes" o "No". "Yes" in case the SIM has been retired with Provision correction. Only present in reports generated by the Service Provider.
EID	eUICC identifier. Only available subscription is an eUICC profile.
Timestamp_Provision	Indicates the date the line was provisioned in ISO 8601 format using the time zone of the organization requesting the report.
Timestamp_FirstActivation	Indicates the date the line was first activated in ISO 8601 format using the time zone of the organization requesting the report.
Timestamp_LastActivation	Indicates the date the line was last activated in ISO 8601 format using the time zone of the organization requesting the report.

#### 14.9.2 Direct SIM manufacturer order

 This report is only available to Vivo Service Provider's Customer organisations.

This report includes information on direct orders to manufacturers and information on the associated manufacturer file loaded from the Pre-inventory.

The form fields to select are:



- **Order:** Order number for which you want to obtain the report.

### Report fields

Field	Description
DATE	Date and time when the order took place (in UTC)
ORDER	Value of "orderId" field in the order interface
BILLING_ACCOUNT	Value of "billingAccCrmId" field in the order interface
DDD	Value of "DDD" field in the order interface
COMMERCIAL_PLANS	List of commercial plans associated to the order separated by the character " ".
TEST_DEGUST_COMMERCIAL_PLAN	TEST/DEGUSTACION commercial plan, empty in case there is no information.
ORDER_SIZE	Value of "orderIdSize" field in the order interface: max number of SIMs that the Customer can request directly to manufacturer within this order.
SUBORDER_TRACKING	Value of "Batch" field in the manufacturer file: SIM Manufacturer tracking order
SUBORDER_SIZE	Quantity of sim cards (output file) purchased in the manufacturer by the Customer.
ORDER_SIZE_AVAILABLE	Number of ICCs ready to be purchased to the Vendor.
COMMERCIAL_PLAN_DEFAULT	Name of the default Commercial plan linked to the order sent by Vivo.

### 14.9.3 User list

It provides a “snapshot” of the existing users, belonging to the own organisation and child organisations, at the moment of generating the report.

To generate the report there is no need to provide any additional information since the data in the report are relative to the moment of its generation.

## Report fields

The following table shows each one of the possible fields of the report.

Field	Description
userName	Login name
organisationName	User's organisation name
firstName	User's name
lastName	User's last name
email	User's email address
phone	User's telephone number
fiscalNumber	Fiscal number belonging to the user's organisation. Only for users belonging to Customers and Service providers.
crmId	Customer's Id 1 in the Service provider's CRM. Only for users belonging to Customers.
creationDate	Date and time when the user was created. For users belonging to Customers and End Customers date and time will be in the time zone of the Customer. For users belonging to Service Providers date and time will be in UTC.
lastLoginDate	Date and time of the user's last login. For users belonging to Customers and End Customers date and time will be in the time zone of the Customer. For users belonging to Service Providers date and time will be in UTC.
role	User's role name. If the user has more than one role, they will be separated by the character " ".
status	User's account status.

## 14.10 Operation reports

### 14.10.1 Manufacturer and model list

This report provides a "snapshot" of the manufacturers and models of the communications module used and the number of SIMs that use each combination of them.

To generate the report there is no need to provide any additional information since the data in the report are relative to the moment of its generation.

## Report fields

The following table shows each one of the possible fields of the report.

Field	Description

Communication module manufacturer	Name of the manufacturer of the communications module.
Communication module model	Name of the model of the communication module
Quantity	Number of SIM cards having this model and manufacturer
Percentage	Percentage of SIM cards with that model and manufacturer relative to the Customer's total number of SIM cards.

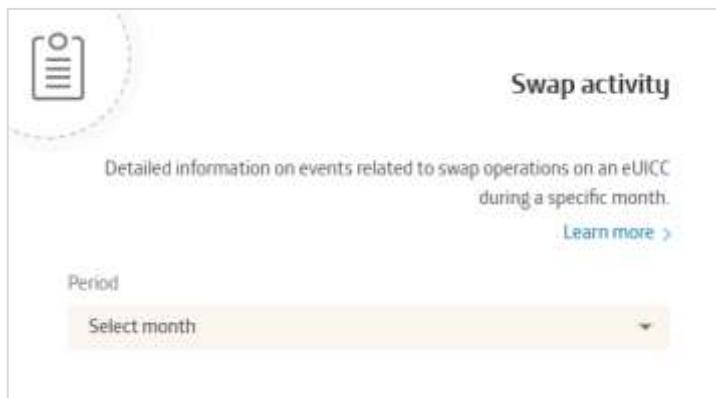
## 14.11 eSIM reports

### 14.11.1 SWAP activity

 This report is available only to some Customers. Please contact with your Service Provider for more information.

This report includes all the events related to swap operations on an eUICC, both those originated by a user or via API in Kite, as well as the operations carried out between Kite and the Subscription Manager, in which the organisation that has been involved request the report.

The form fields to select are:



- **Time period:** Month in which swap events have taken place.

#### Report fields

The following table shows each of the possible fields in the report.

Field	Description
Id	Transaction identifier. Relate each user / API event to the child events between Kite and the Subscription Manager (Swap Platform).
Timestamp	Day and time the event took place (in the Customer's Time Zone or in UTC if requested by a Service Provider)

Event	Event name
Result	Result of the event. It can be: OK, OK (Warning), ERROR.
Origin service provider id	Identifier of the Service Provider that started the event.
Origin service provider name	Name of the Service Provider that started the event.
Origin customer Id	Identifier of the Customer that started the event.
Origin customer name	Name of the Customer that started the event.
Destination service provider id	Identifier of the service provider destination of the event (owner of the profile used in the operation).
Destination service provider name	Name of the service provider destination of the event (owner of the profile used in the operation).
Destination customer id	Identifier of the Customer destination of the event (owner of the profile used in the operation).
Destination customer name	Name of the Client destination of the event (owner of the profile used in the operation).
Destination subscription group id	Subscription Group identifier used to perform a swap operation that requires profile download.
Destination subscription group name	Subscription Group name used to perform a swap operation that requires profile download.
SM-SR Id	Identifier of the SM-SR involved in the operation against the Subscription manager.
EID	eUICC identifier.
Origin ICC	ICC of the origin subscription (selected) in a swap / Audit operation.
Origin IMSI	IMSI of the origin subscription (selected) in a swap / Audit operation.
Origin MSISDN	MSISDN of the origin subscription (selected) in a swap / Audit operation.
Destination ICC	ICC of the target profile, on which the operation is performed.
Destination IMSI	IMSI of the target profile, on which the operation is performed.
Destination MSISDN	MSISDN of the target profile, on which the operation is performed.
Requester	User name that started the operation or "API" if the operation was started via API. "Service_provider_user" will be displayed if the operation has been started by the Service Provider.
Additional info	Displays detail information about the error, warning, or detailed information of the profiles returned in calls to the Subscription manager.

## 15 IoT Data Ready

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### 15.1 General aspects

#### Data Service

The “IoT Data Ready” service is made available to Customer organizations, which will allow them to use Kite as a secure data transit gateway to their final destinations.

This service will enable the direct and secure passage of the data sent from the devices (through the secure radio infrastructure, first and later through Kite) to the destination desired by the customer. This prevents the early exposure of data on the Internet, guaranteeing its security (confidentiality, integrity and availability) without the need for applications or specific software on the devices.

It is especially indicated for customers based on “narrow band” type connectivity, that is, the use of simple devices, with low-volume data transmission with a simple structure. For this reason, the usual type of radio connectivity targeted by this service is "NB-IoT", although it can be supported over any other provided that the volume of information involved in the specific use case is previously evaluated.

This service will always be offered through a specific APN, which can be generic (iotdataready.movistar.es) or one assigned exclusively to the Customer. The current version of IoT Data Ready only accepts messages received via the UDP protocol (more protocols geared towards IoT use cases will be included in future versions of Kite). The parameters of the server that exposes the IoT Data Ready service to which the messages must be sent are the following:

**Note:** This last channel is aimed at facilitating the integration phase of the devices and the validation of the integrity of their data, which the customer may optionally require prior to integration with the final destinations using either of the first two channels.

 Currently, the customer must request this functionality through Kite's commercial services, which will initiate the necessary actions in the operation support systems for its activation. For more information consult your Service provider.

 Customers will be able to view the data of their IoT Data Ready devices, once they have this service enabled, in a new section that will have that name and that will be accessed in the side menu from the icon .

#### SMS Service

Kite provides a complete messaging application that makes it easy for the customer to integrate communications with their devices using SMS. It does not require the customer to implement complex protocols such as SMPP, Kite provides customer service using portal tools, REST API query and PUSH notifications to the customer server or to the cloud.

The service is bidirectional, Kite can act as a gateway for the SMS sent to the devices as well as be a receiver of the messages that the devices send as replies or communications that they proactively initiate.

This service requires the customer to have Application outgoing SMS service with at least one short number assigned to it that Kite will use to act as a gateway for the SMS.

**⚠️** If Kite is to act as a gateway for messages sent by devices, no other application must be connected to a Bind that listens to the application number used to receive SMS from devices.

**⚠️** To act as a gateway for the SMS sent to the devices, communications must be made from the Kite API or from the inventory operation.

**⚠️** If you wish to use this service, the customer must request it through Kite's commercial channels as it requires a provision in the database to be active. Activating the IoT Data Ready service is not enough.

## 15.2 Data collection from devices ("upstream" channel)

**⚠️** For this feature to be available, it is necessary that:

- 1) The Customer has IoT Data Ready supplementary service activated (see section [Configuration of Supplementary services](#))
- 2) IoT Data Ready data collection is activated at the supervision group level and, for data collections through "Push API" or "Cloud connector" channels, these options must be enabled and correctly configured (see section [Synchronization with external systems](#) for more information).

In the case of data sent by the devices ("upstream" channel), once the data reaches Kite, the Customer will be able to "consume" it through different channels:

- By forwarding them via "Push API" to the collection point you have configured.
- Using Kite's Cloud Connector functionality, which enables easy and efficient integration with Amazon AWS and Microsoft Azure Core IoT.
- Calling the specific API that Kite publishes for this purpose.

The parameters to be configured in the device to send messages to Kite IoT Data Ready depend on the Service Provider.

By default they are the following:

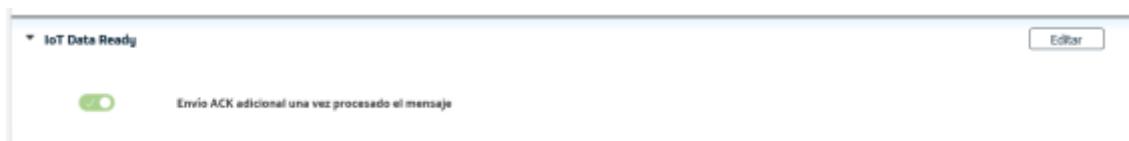
- **APN:** iotdataready.movistar.es (with NB-IoT it is not necessary to configure it, but it is in other cellular technologies)
- **IP address:** 81.45.14.171
- **Port:** 5005 (by default, but not checked)
- **Protocol:** UDP.
- **UDP payload:** free, up to 1440 bytes.

For Vivo they are:

- **APN:** iotdataready.vivo.com.br (with NB-IoT it is not necessary to configure it, but it is in other cellular technologies)
- **IP address:** 81.45.14.185
- **Port:** 5005 (by default, but not checked)
- **Protocol:** UDP.
- **UDP payload:** free, up to 1440 bytes.

Whenever the device sends a UDP packet and KITE receives it, it will respond with an ACK, the content of which will be: "Message processed".

At the Supervision Group level, the customer will be able to configure, from the "IoT Data ready" panel, if they want Kite to send an additional ACK to the device, confirming that KITE has saved the message received from the device in DB and is in queue to be sent to the customer via Push API or Cloud connector. By default, this option will be disabled.



If sending the additional ACK is enabled, Kite will send the following information depending on the situation:

Message processed OK:

- ACK to the device with payload string: "MESSAGE\_PROCESSED\_ADDITIONAL\_ACK"

Message processed with error:

- ACK to the device with payload string: "ERROR"

Both the initial ACK message and the additional ACK will be recorded in IoT Data Ready as downstream messages.

### 15.3 Data sending to devices through Kite ("downstream" channel)

 For this feature to be available, it is necessary that the Customer has the IoT Data Ready supplementary service activated.

Through the endpoint services/REST/GlobalM2M/Data/v1/r12/devicedata it will be possible to send messages to client devices:

```
POST services/REST/GlobalM2M/Data/v1/r12/devicedata  
  
    "deviceId": {"icc": "8932339776077328360"},  
    "payload" : "cHJ1ZWJhLWFuYQ==",  
    "payloadType": "base64",  
    "fastDelivery": false,  
    "destinationPort" : "80"  
}
```

More detailed information about this endpoint is provided in the "UNICA API: REST Binding for Customer" document.

### 15.4 Device SMS collection

 For this functionality to be available, it is necessary that:

- 1) The customer has the IoT Data Ready service activated and the Kite provisioning team must have made a manual provision in the Kite database to indicate that Kite should capture the SMS sent by the devices or all SMS.
- 2) The customer must have the Application outgoing SMS service activated and for the application number that is used as a gateway to Kite for the messages there must be no other SMPP Bind application listening to the messages.

The SMS sent by the devices ("upstream"), once they reach the application number of the client that Kite uses to act as a gateway, can be accessed through:

- Portal, in the IoT Data Ready section.
- Through Kite's Cloud Connectors functionality, which enables easy and efficient integration with Amazon AWS and Microsoft Azure IoT Cores.
- Using Kite's PUSH API functionality, which allows integration with a client server.
- By invoking the specific query API that Kite publishes for this purpose.

Kite supports fragmented messages, including in the inputs associated with the messages the reference number, total fragments and sequence number. Those fields will be empty for SMS that are not fragmented.

Kite also supports binary messages, storing and making available the content of SMS in base64 format.

## 15.5 Sending SMS to the Device via Kite

 For this functionality to be available, it is necessary that:

- 1) The customer has the IoT Data Ready service activated and the Kite provisioning team must have manually provisioned to the Kite database to indicate that Kite should capture SMS sent from inventory/API or all SMS.
  - 2) The customer must have the Application outgoing SMS service enabled and for the app number that is used as a gateway to Kite for the messages there must be no other SMPP Bind app listening to the messages.

For Kite to be the gateway for SMS sent to devices, the user has to use either the Kite API or the Kite portal to send the SMS to the devices.

## 15.6 Access to IoT Data Ready section and message display

 For this feature to be available, it is necessary that the Customer has the IoT Data Ready supplementary service activated.

## Data tab

Fecha	Momento de creación de la solicitud en el proveedor (Zona Horaria)	Número de Solicitud	Número de Ruta	Número de Identificación	Número de Ruta	Estado	Proyecto destino	Origen	Tipo de solicitud
25-11-2024 09:20:56	202411250920560002	891402119957178507	21474000000015	545211700	88110000000005	UPTSTREAM			
25-11-2024 09:21:03	202411250921030003	891402119957121414	21474000000015	4431710001	88110000000003	UPTSTREAM			
25-11-2024 09:24:16	202411250924160004	891402119944001279	34207000000015	34207000000015	88110000000005	UPTSTREAM			
25-11-2024 09:26:07	202411250926070005	891402119968110711	34207000000015	5437779994	88110000000005	UPTSTREAM			
25-11-2024 09:27:29	202411250927290006	891402119944200040	34207000000012	34207000000012	88110000000005	UPTSTREAM			
25-11-2024 09:27:30	202411250927300006	8914021199771704196	34207000000007	34207000000007	88110000000005	UPTSTREAM			
25-11-2024 09:28:25	202411250928250008	891402119981102224	34207000000015	4437750001	88110000000005	UPTSTREAM			
25-11-2024 09:29:46	202411250929460009	891402119951123176	34207000000015	5437779994	88110000000005	UPTSTREAM			
25-11-2024 09:32:18	202411250932180008	891402119944001161	34207000000015	4436112211	88110000000005	UPTSTREAM			
25-11-2024 09:32:08	202411250932080007	891402119957171448	34207000000015	34207000000015	88110000000005	UPTSTREAM			
25-11-2024 09:32:08	202411250932080007	891402119968111150	34207000000015	5437779994	88110000000003	UPTSTREAM			
25-11-2024 09:32:08	202411250932080007	891402119977171776	34207000000015	34207000000015	88110000000005	UPTSTREAM			
25-11-2024 09:32:08	202411250932080007	891402119981102203	34207000000015	4437750001	88110000000005	UPTSTREAM			

This section displays the list of UDP messages sent by each Customer device connected to KITE, which is very useful for debugging and certification purposes.

The grey area indicates the number of UDP messages sent in the current billing cycle (along with the breakdown of upstream and downstream messages).

Through the use of filters available in each column, the search for specific messages is facilitated.

The columns involved are described below:

- **Date and time:** Date and time of sending/receiving the message.
  - **Id:** Message identifier.
  - **ICC number:** ICC of the SIM card involved.
  - **IMSI number:** IMSI of the subscription involved.
  - **MSISDN number:** MSISDN of the SIM card involved.
  - **IMEI number:** IMEI of the SIM device involved.
  - **Status:** this message processing in KITE, can take the values "WAITING" / "SENT".
  - **Direction:** indicates if the processed message is "Downstream" (KITE → Device) or "Upstream" (Device → KITE).
  - **Destination port.**
  - **Immediate:** Can take the values "True" (immediate delivery of the message to the device) or "False" (delivery to the device when it wakes up).
  - **Type of message:** It can take the values "Base64" or "Text".
  - **Content of the message.**

## SMS tab

 For this tab to appear, the database provision must indicate that for the customer's IoT Data Ready service, SMS sent to the devices or SMS sent from the devices or both are to be stored.

This section displays the list of SMS messages sent/received by each customer device.

The grey area shows the number of SMS messages sent in the current billing cycle (along with the breakdown of upstream and downstream messages). In the context of SMS messaging, downstream messages are messages sent to the device (from API/Portal Kite) and upstream messages originate from the device.

The use of filters available in each column makes it easier to search for specific messages.

The columns involved are described below:

- **Date and time:** Date and time of sending/receiving the SMS.
- **Id:** Identifier of the message.
- **ICC number:** ICC of the SIM card involved.
- **IMSI number:** IMSI of the subscription involved.
- **MSISDN number:** MSISDN of the SIM card involved.
- **IMEI Number:** IMEI of the SIM device involved.
- **Status:** Applies to Downstream messages only and represents the delivery status to the device reported by the Short Message Centre. Take the values: SENT, DELIVERED, ACCEPTED, UNKNOWN, REJECTED, EXPIRED, DELETED, or UNDELIVERABLE.
- **Direction:** indicates whether the SMS processed is "Downstream" (Kite → Device) or "Upstream" (Kite → Device).
- **Sender:** Sender application number in case of Downstream SMS. Void for Upstream SMS.
- **Recipient:** Target application number in case of Upstream SMS. Void for Downstream SMS.
- **Reference number:** Only applies to fragmented Upstream SMS. Reference number shared by all fragments.
- **Number of fragments:** Only applies to fragmented Upstream SMS. Total fragments.
- **Sequence number:** Only applies to fragmented Upstream SMS. Sequence number of this fragment.
- **Message type:** You can take the values "Base64" (for binary SMS) or "Text".
- **Message content:** content of the plaintext SMS in case of text type or Base64 encoding in case of binary SMS.

## 15.7 Troubleshooting

The following are possible problems in using IoT Data Ready and their possible causes:

## I don't see how to access the IoT Data Ready section from the Kite portal

To access this section through the menu icon  on the left of Kite, it is necessary to have activated the IoT Data Ready supplementary service, accessible from the Commercial Administration (see [Supplementary commercial plan section](#)).

Servicios suplementarios



Servicio de auto gestión	Nivel de auto gestión	Servicio VPN	SMS originados en aplicación
Activado	Avanzado	Activado	Activado
Número origen por defecto	Servicio de supervisión avanzado	Servicio de localización	IoT Device Control
742222	Activado	Activada Localización básica	Desactivado
Servicio de gestión de dispositivos	Número origen de gestión de dispositivos	Servicio de Valeo Agregado	Servicio de LTE privada
Desactivado		Activado	Desactivado
Modo de LTE privada	Red pública LTE privada	Código de zona LTE privada	IoT Analytics
Solo red de acceso	Deshabilitado		Activado IoT Analytics básico
<b>IoT Data Ready</b>			
Activado			

If the service is not activated, you should contact your service provider.

## I can't collect information from the devices

In order to obtain information from the devices it is necessary:

- 1) To have the IoT Data Ready supplementary service activated, accessible from the Commercial Administration (see [Supplementary Commercial Plan section](#)).
- 2) To have IoT Data Ready data collection enabled at the Supervision group level:



**ADMINISTRACIÓN COMERCIAL / GRUPOS / GRUPOS DE SUPERVISIÓN**

**Información**

**Sincronización con sistemas externos**

**Información de sincronización**

- Redes y servicios personalizados
- Estado
- Servicios básicos
- Geolocalización
- Presencia
- IoT Data Ready

**Services externe de synchronization**

**Push API** Se enviarán datos al servidor "PUSH API" (<https://api.serveis.telefonica.cat/api/v1/>) [Configuración de PUSH API](#)

**Cloud connector** No se enviarán datos al servidor en la nube (<https://cloud.connector.cat/>) [Configuración de Cloud connector](#)

If the "Push API" or "Cloud connector" channel is to be used, it must be enabled and correctly configured.

**I am not able to send data to the devices through the client REST API**

In order to be able to send data to the devices through Kite, it is necessary to have activated the IoT Data Ready supplementary service, accessible from the Commercial Administration (see [Supplementary Commercial Plan section](#)).

## 16 IoT Analytics

Customers who have contracted the "IoT Analytics Plus" service will have this section available from which they will have access to the advanced analytics capabilities provided by the platform.

Depending on the type of service contracted ("Basic" or "Advanced"), you will have access to different sections that will appear within it.

Two main sections are provided, "Clustering" and "Consumption Anomalies". In addition, associated with the latter, there will be a section called "Notifications".

### 16.1 Clustering

The objective of this dashboard is to help the Customer to know the behaviour of their SIM cards is in the context of data traffic.



This dashboard shows a classification of the SIMs based on the behaviour profile obtained after analysing the data traffic sessions they carry out. This behaviour is determined by evaluating three characteristics, in a period approximately 20 days back from the start date of the analysis:

- Number of sessions completed by each SIM in the period considered.
- Average consumption of each SIM in these sessions.
- Average duration of each SIM in these sessions.



To have this dashboard available, the customer must have activated the supplementary service "IoT Analytics". This service can be activated in two modes: "Basic" and "Plus". **The Plus mode will enable certain options not available in the basic mode.**



Completed sessions are understood to be those that have started and ended a session within the period analyzed. Partial sessions (only with a known start or end of the session in the analyzed period) are discarded as well as their associated traffic.

The behaviour profiles created group the SIMs considering the similarity of the interrelation patterns of these variables.

Prior to the identification and classification of the SIMs according to these behavioral profiles, an identification of the SIMs that behave very differently from the rest is carried out. These SIMs are identified and labelled as "Anomalous" for later consultation by the user, but will be excluded from the analysis of general behaviour profiles

The calculation frequency between one scan and the next cannot be determined exactly at the time of writing this manual, as it is dependent on multiple factors, including the number of customer SIMs. But it is estimated that they could be of the order of two every thirty days.

Several different areas are displayed in the user interface

**Top left.** It shows the data characterizing the context of the analysis. That is, the period of days corresponding to the data analysed and the number of SIMs considered.

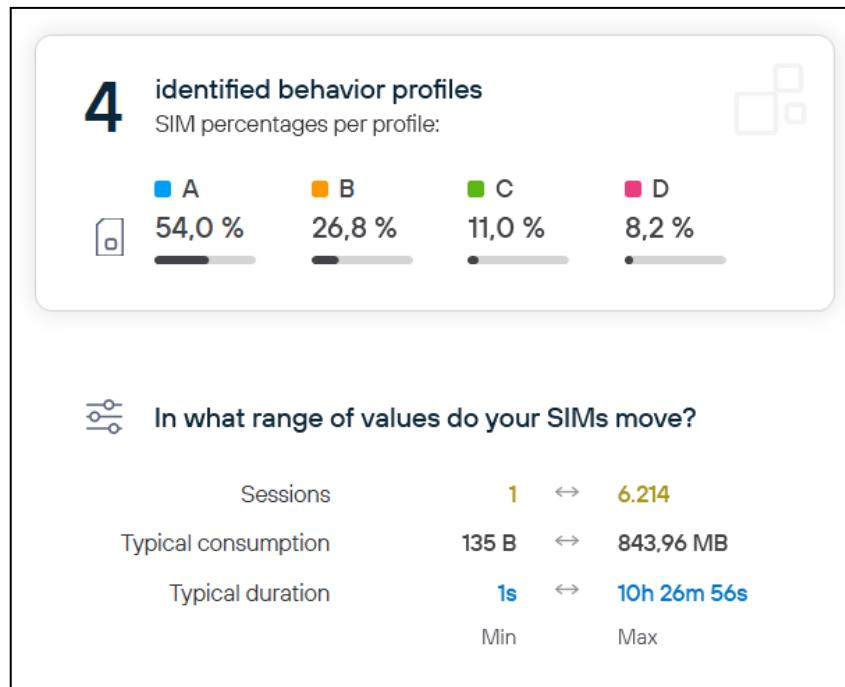
from 2022-07-24 to 2022-09-24 Period analyzed: 61 days	29.026 Analyzed SIMs	14  Anomalous SIMs >
---	-------------------------	--



If the customer organization has the IoT Analytics Plus supplementary service enabled, the tag associated with the number of anomalous SIMs will appear as a link to the inventory where these SIMs will be listed.

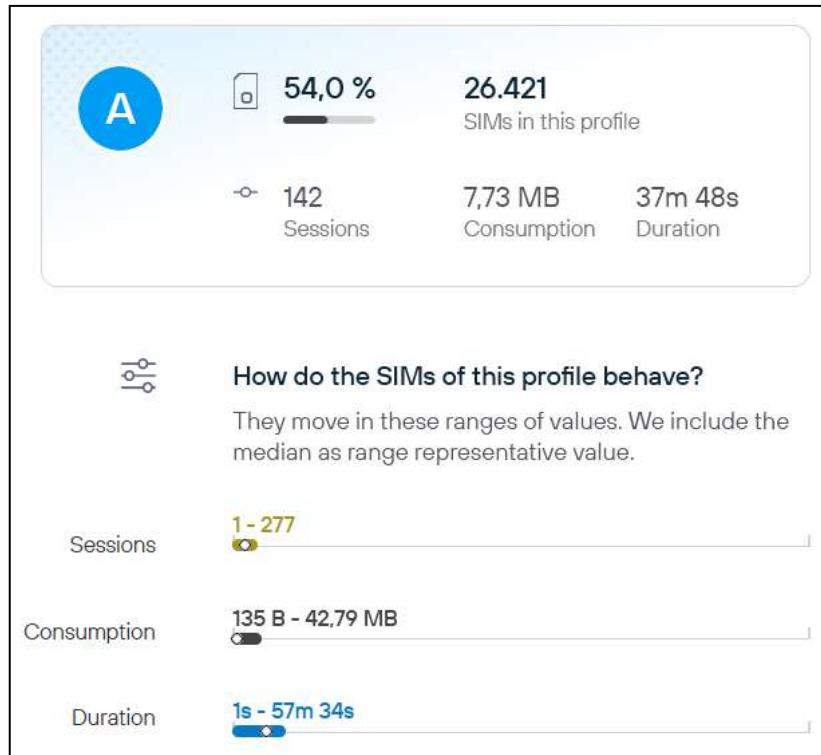
**Bottom left.** It displays the information resulting from the analysis. This area can show either the summary data of the analysis or the specific detail of one of the profiles that have resulted from the study. Displaying one or the other will depend on the selection you have made in the list of profiles in the central area of the interface.

- Analysis summary data:



The analysis summary shows the following information:

- Number of behavioral profiles identified in the study ordered according to the number of SIMs that each group contains (from highest to lowest number of SIMs).
- Percentage of SIMs (with respect to the total of those considered in the study) associated with each group
- Additionally, the range of values (maximum and minimum) in which the analyzed variables move is shown.
- Data for a specific behavior profile:



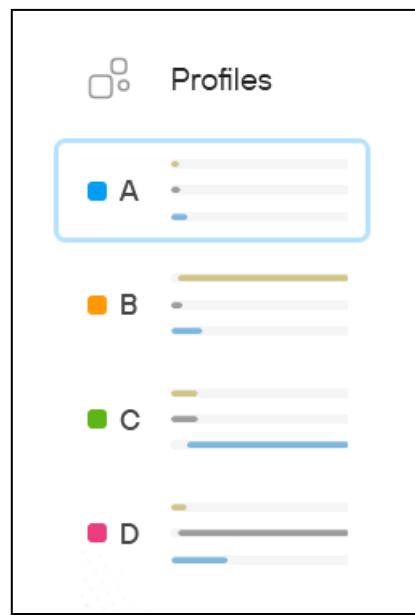
The following information is offered on a specific profile:

- Number of SIMs the profile and their percentage with respect to the number of SIMS that have participated in the analysis.
- Median of each of the three variables analysed.
- Range of values (with a maximum and a minimum) in which each of the analysed variables move.



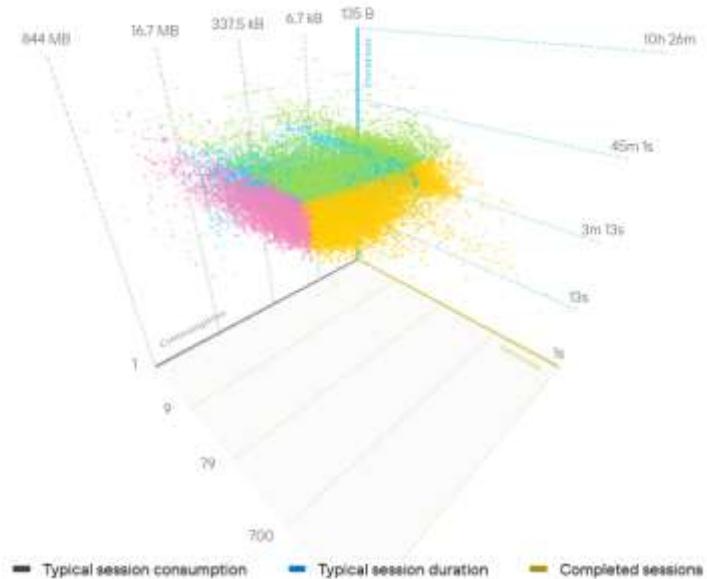
If the customer organisation has the Plus mode of the IoT Analytics supplementary service enabled, the label associated with the number of SIMs in the profile will appear as a link to the inventory in which the SIMs that are part of the selected profile will be listed.

**Central area of the interface.** It allows selecting a specific profile or all profiles by clicking on the "Profiles" label.



Each of the behavioural profiles identified in the analysis is shown, ordered according to the number of SIMs that make up each profile. Each profile is accompanied by a label and a visual set of thumbnails in which it is summarized how the ranges of the values of each variable analysed for that profile are distributed, within the minimum and maximum values of each variable considering all the data analysed.

**Right zone - 3D graphic.** It shows the distribution of the SIMs in a 3D space with dimensions corresponding to each of the variables that characterize the data traffic sessions. Each axis is labelled with the variable it represents and with a distinctive colour also indicated in the legend at the bottom.



In general, each point in that space represents a SIM. This point will be located according to the coordinates that define the behaviour of these SIMs in the study period.



Regarding the interpretation of the graph, it is important to consider the fact that the axes of the graph can map the points on them according to either a logarithmic or linear scale by selecting one or the other by clicking on the icon located in the lower right side of the graph. If the logarithmic scale is selected , the distance on the axis between any two values is not proportional to their linear distance. E.g.: if the perceived distance on the axis between 1 and 5 were 10 pixels, the distance between 5 and 10 could be greater or less than 10 pixels.

The reason for representing the axes on a logarithmic scale is to try to maximize the individual visualization of the SIMs in the available visual area. If you want to see the true magnitud of the distances, the linear scale icon , should be selected.

You can change the point of view of the graph using your pointing device. For example, you can rotate the camera by moving the mouse while holding down the left mouse button.

You can also move the camera anchor point by moving the mouse while holding down the right mouse button.



By clicking on the , the graph will be displayed in full screen.

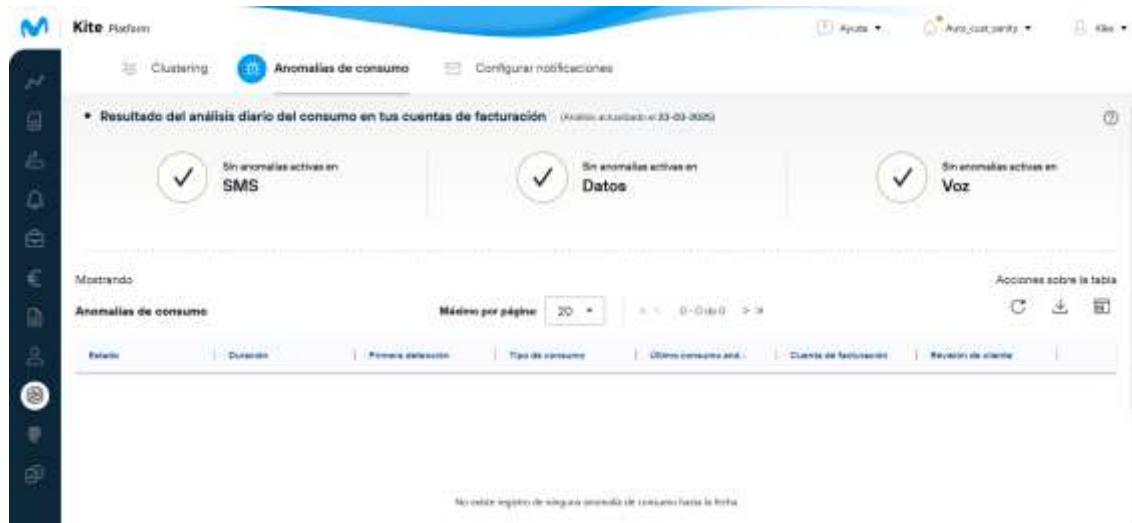
Regardless of what behaviour profiles are being displayed, on this graph you can activate and deactivate the display of SIMs considered abnormal by clicking on the  icon. This will facilitate the visual comparison between groups considered as habitual behaviour, of these other SIMs that leave it.

## 16.2 Consumption anomalies

The detection of consumption anomalies is added to other existing functionalities in Kite Platform whose objective is to avoid or minimize the possible negative impact that potential fraudulent use of subscriptions could have.

Daily, using AI algorithms, the consumption made by the subscriptions is analysed in each of the different types of traffic and for each of your billing accounts.

If any anomaly is detected, this information will be reflected within this section in one of the three indicators at the top. One for each type of traffic.



The indicators report the number of accounts that have active consumption anomalies.

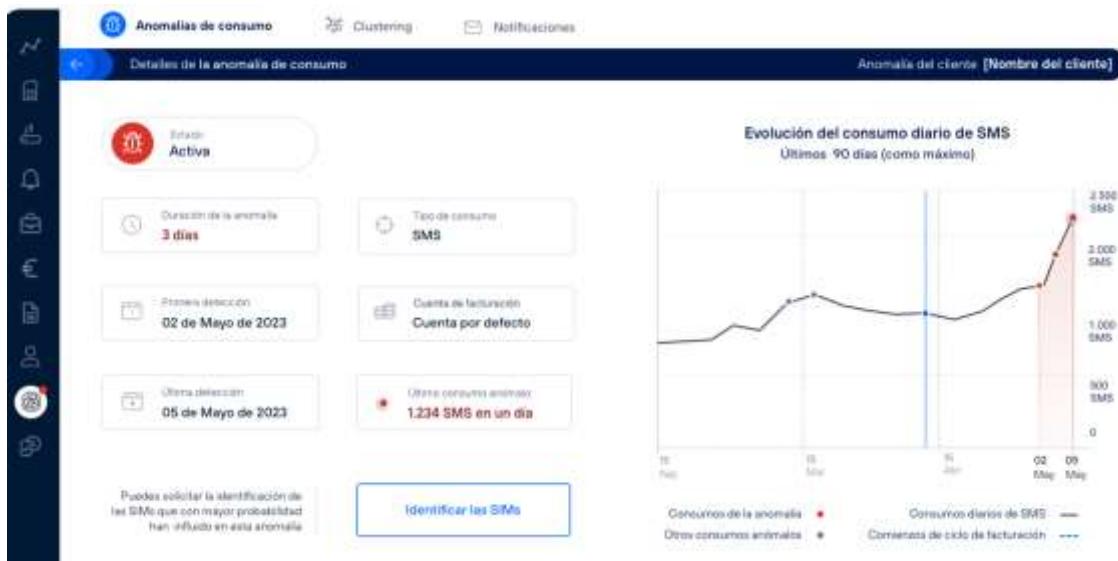
An anomaly is considered active if it was detected in the last scan (daily). In the event that it already existed in the previous analysis, it will add seniority instead of creating a new one. This is reflected in the "Duration" attribute of each of them.

If an active anomaly (in an account and for a type of traffic) is no longer detected in the new daily analysis, it will go to inactive status, since it loses relevance as a target of interest from the point of view of possible fraud, although it can always be consulted in the list of historical anomalies at the bottom, where you can filter by different criteria to facilitate the search.

We have classified the anomalies into three severity groups, depending on their status (active or inactive) and their duration. The one that has been detected for the longest time on consecutive days (longer duration) will be more severe. This will be the ordering criterion with which they are presented by default in the list, being able to select any other later.

To facilitate your internal control, we have included in the table two actions that will allow you to mark each anomaly as reviewed (or not reviewed). This action does not perform any action or operation on the affected account, it is simply a labelling for your internal management of this information.

A maximum of the last 90 days will be displayed.



From the table you can consult the detail of the anomaly where, among other data, the daily consumption made in the billing account in which it was detected will be graphically represented, including the last one considered abnormal.

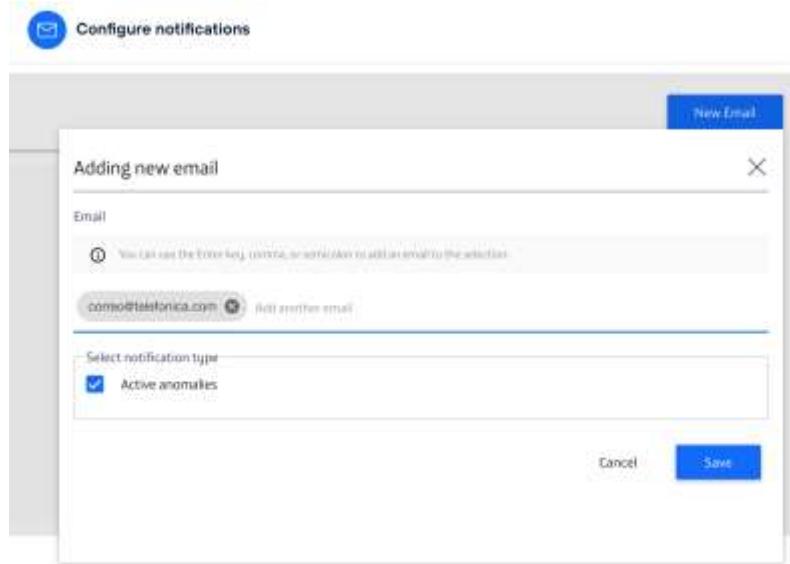
From the details of the anomaly you can request the identification of the SIMs that are most likely to be the cause of it. At most the 50 most probable will be presented. This identification will be made upon request of the user. Once identified, a list will be displayed with the identification of each SIM, ordered descendingly (from most probable to least) considering what the variation in consumption has been during the anomaly with respect to its behaviour in the previous 30 days.

So that you can compare the reason why the indicated SIMs have been selected and the order in which they are presented, a graphic representation of the traffic carried out by each SIM in the last few days is provided (the days that the anomaly lasts plus the previous 30). , the typical consumption of each SIM during these and the reference consumption considered for the SIM for the days in which the anomaly lasted. Based on these, the variation in consumption has been calculated, a factor that determines the order of presentation in the list.



Order	ICCI Number	Daily consumption last 30 days	Consumption during anomaly	Typical daily consumption	Consumption difference
1	anomalycandidate	10.0000	1.0000	< 10.000	->
2	anomalycandidate	10.0000	1.0000	< 10.000	->

From this table you can go to the details of the specific SIM if you want to delve deeper into its consumption or consult other parameters.



Optionally, although it is a use recommended by Kite Platform, you can stay informed through email, where we will send you a notification with the anomalies detected that day, if any.

You can configure more than one email from the "Configure notifications" section.

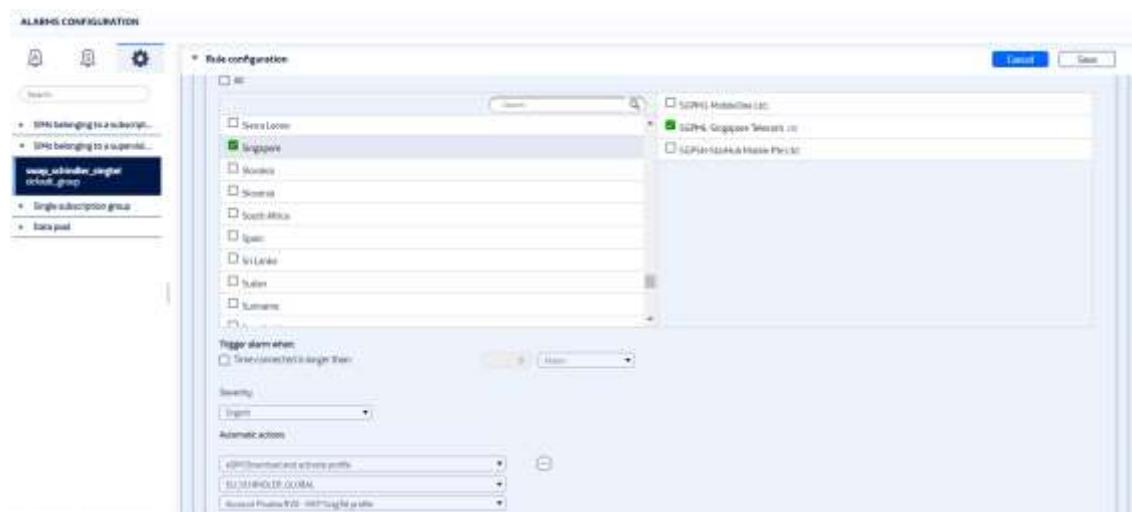
## 17 IoT Partner

Customers who have the service activated will be able to view SIMs from countries in which Telefónica does not have local operations but thanks to agreements with other operators (such as operator in Singapore) Kite has a stock of profiles that can be downloaded remotely in eUICCs of Kite.

Kite will display these profiles in a specific inventory for this service once they are downloaded to a Customer's eUICC.

### 17.1 Profile download

The customer, using supervision alarms, will be able to configure an action to download a new profile when visiting a country:



The special characteristics of an IoT Partner profile download operation are:

- The destination Customer can be the Customer itself, unlike what happened when the profile of another country was downloaded within the Kite footprint.
- There is no destination Subscription group, but you must indicate the partner to which the lines you wish to download belong and the target billing account .

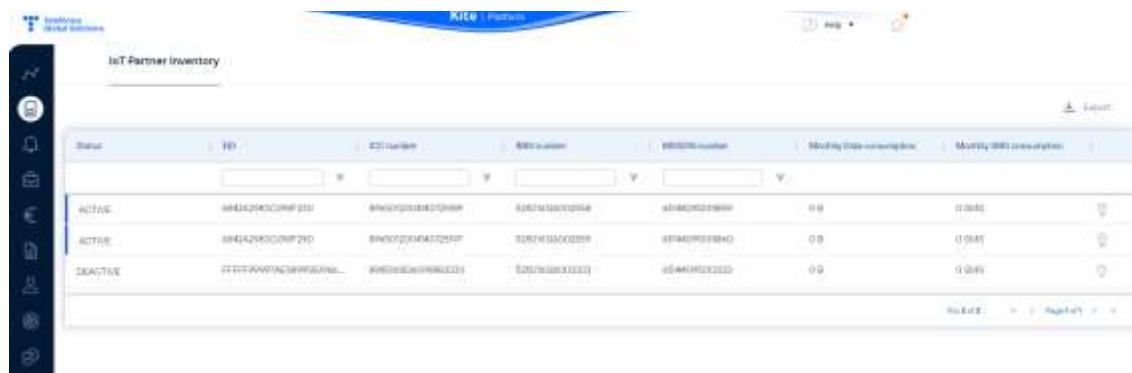
Given an eUICC with an alarm and action like the previous one, when visiting any country if the indicated list, the process to download and activate a profile that does not belong to the Telefónica footprint begins.

### 17.2 Inventory

The inventory allows obtaining information about the profiles through requests to the IoT Partner systems to which the out-of-footprint profiles belong. It is accessed through the

inventory menu  by selecting the option “IoT Partner Inventory”.

The inventory looks like this:



Status	EID	ICC number	IMSI number	MSISDN number	Monthly Data consumption	Monthly SMS consumption
ACTIVE	88E1A2900000F200	88E1A2900000F200	88E1A2900000F200	88E1A2900000F200	0.0	0.000
ACTIVE	88E1A2900000F210	88E1A2900000F210	88E1A2900000F210	88E1A2900000F210	0.0	0.000
INACTIVE	F1E1A2900000F200	F1E1A2900000F200	F1E1A2900000F200	F1E1A2900000F200	0.0	0.000

The fields that can be viewed are:

Campo	Descripción
Status	Life cycle's profile status according to the IoT Partner's systems.
EID	Kite's eUICC identifier in which the IoT Partner's profile has been downloaded.
ICC number	ICC number.
IMSI number	IMSI number.
MSISDN number	MSISDN number.
Monthly Data consumption	Monthly data consumption.
Monthly SMS consumption	Monthly SMS consumption.

The actions that can be done on the inventory are export () , which starts the download of an Excel or CSV file containing all the profiles filtered in the inventory, or perform the operation of activating () or deactivating () the profile.

### 17.3 Pre-bill

All charges associated with the use of IoT Partner profiles will be included in a new pre-bill section.

cus15a91e7daf9JLcP3201702030000

[IML](#) [PDF](#)

[Informe detallado](#) [Informe agregado](#)

\* Servicios básicos Partner IoT 1.400,00€

Setup:		1.400,00€
<b>Paquete de servicios básicos:</b>		
sp.profile		123
Nº de SIMs:		1231231234
Setup profiles:		12
Nº de perfiles:		11111111E/profile
Precio:		1231231234€
Perfiles servicio:		11111111E/profile
Nº de perfiles:		12
Precio:		11111111E/profile
Primeros:		10,00€
Datos:		437,17263€
Nº de perfiles con uso:		7
Usa datos:		1,168 GB
Voz:		76,6664€
Nº de perfiles con uso:		6
Usa voz:		5730,6726840€
SMS:		124,89€
Nº de perfiles con uso:		3
Usa SMS:		11,236,000 SMS

Cargos individuales:		56.823,05€	
Cargos a SIMs por grupo de suscripciones:			
GS_TestTVAU	3,00€	grupo.pool	-3,00€
Cliente final:		Cliente final:	
Plan Comercial:		Plan Comercial:	
sp.3mtl10.ap.automaticManual		sp.poss	
Nº de SIMs:	14670567	Nº de SIMs:	1
Cargos eventuales:	0,00€	Cargos eventuales:	0,00€
Cargas remuneradas:	3,00€	Cargas remuneradas:	3,00€

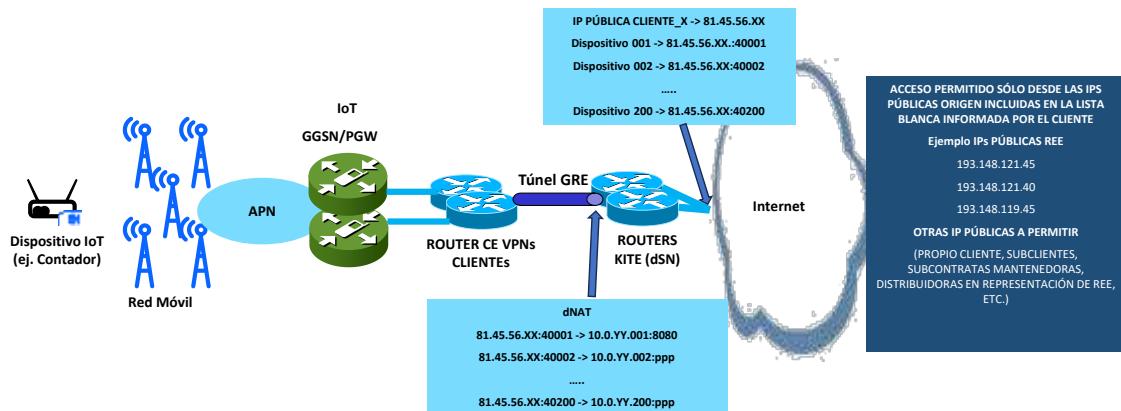
This section will include possible charges for: setup (download) of profiles, monthly fee per profile and data/voice/SMS usage charges. The pre-bill export in XML format will also collect these charges. The detailed report will be available in future releases.

## 18 IoT PAT

### 18.1 General aspects

The "IoT PAT" service is made available to customers that will allow them to use Kite to connect to their devices from the Internet without the need to make use of a VPN.

Below is a diagram with the network elements involved:



This service requires you to contract it for activation and has a monthly associated cost.

### 18.2 Typical use cases

In the electricity sector, REE (Spanish Electrical Network) needs access to certain meters, from energy generating and distributing companies. Traditionally, this type of access was carried out through CSD/modems (in the case of meters connected by the mobile network, while others use fixed lines). Since 2023 REE has been demanding the new IP access method over the internet, using public IP:port.

Other typical use cases include:

- When the customer accesses their devices via VPN but additionally wants to give access to third parties (maintainers, customers, etc.) that are outside their VPN and to whom they do not want or cannot give access through it.
- When the customer wants to avoid the complexity of setting up a VPN to access their devices, and it is enough for them to access them from the internet.
- As a backup for customers that access devices via VPN, or as more robust access than VPN, as it avoids unavailability due to drops or interruptions in the VPN customer elements.

### 18.3 Service Features

The following are the main features of the IoT PAT service:

- Compatible with **any communications protocol (TCP)**

- Compatible with **any radio technology** (2G/3G/4G/5G/NB-IoT/LTE-M)
  - In NB-IoT/LTE-M with PSM/eDRX states, device reachability may require synchronization/retries.
- It is possible to give visibility **to one or more ports** on the device.
- Compatible with any static APN in Kite, options are:
  - APN **iotpat.movistar.es** -> simple and fast provisioning, at no additional cost to the customer as an APN.
  - Customer-Side Static VPN APN -> requires configuration and tunneling. APN cost per customer.
  - Customer-Side Static private internet APN -> requires configuration and tunneling. APN cost per customer.
- **Security:** it is mandatory, for security reasons, to configure a **whitelist** of public IPs allowed.
  - Self-managed by the customer from Kite.
- Compatible with **Multi-Operator SIMs**.
- **Fully self-managed** by the customer for their lines from Kite

#### 18.4 How to activate the service

**I am interested in this service, how can I contract it?**

The customer must contact their service provider through the usual channel and request that they activate the service.

**I already have the IoT PAT service enabled. How do I set it up?**

Only 3 steps are necessary on the part of the customer:

- **Step 1:** Configure the whitelist of internet IPs from which we allow access to the devices (The Telefónica provision team may have provisioned a fictitious IP, because they do not have the real ones, which must be modified by the customer).

This is done in the "Business Management" → section "IoT PAT - Devices reachable from the Internet"

IoT PAT - Dispositivos alcanzables desde Internet

Estado de activación  
Activado Activado

Configuración de la lista blanca desde la que acceder a los dispositivos

128.127.10.2 Desbloq. Añadir nueva IP/Range

IP origen	Descripción	Estado de la operación	Acción
No hay datos para mostrar			

- **Step 2:** Associate the APN IoT PAT with the SIM. Typically, this APN will be `iotpat.movistar.es`.

To do this, you will access "SIM inventory", → "SIM detail", → "SIM identification", click on the "Edit" button and then on the "New APN" drop-down menu within the "NETWORK PARAMETERS" group.



- **Step 3:** Enable visibility on each device, for the port you want to be accessible. It is possible to give visibility to one or more ports of the device by creating different rules.

This will be done from "SIM Inventory" → "SIM Detail" → "IoT PAT - Device Reachable from the Internet".

▼ IoT PAT - Dispositivo alcanzable desde Internet

Puerto privado  Este campo es obligatorio

IPpuerto público	IPpuerto privado	Estado de la operación	Acción
81.45.56.65:40001	10.0.12.1:2001	Pendiente de creación	<input type="button" value=""/>
81.45.56.65:40000	10.0.12.1:2000	Creada	<input type="button" value=""/>

**When I want to add a rule to access my devices I get an error message.**

There may be several reasons why you may receive an error, but it will usually be due to a service configuration error.

If the message is:

“This service is not contracted. Contact your service provider.” or “The service is not activated. Contact your service provider.”

It indicates that the service provider has not finished configuring service activation. You have to wait or contact him.

If the message is:

“The SIM does not have any APN configured to be able to access the device from the Internet. You can access the top panel “SIM Identification” to make this configuration.”

It indicates that step 2 indicated above was not performed correctly.

## 19 Audit log

### 19.1 General aspects



The audit log module is accessible from the icon and allows the viewing, filtering and export of audit events associated with SIM cards, the same ones that appear in the audit log in the detail view of a SIM card.

The workspace of this module is as shown in the following figure:

From where you can perform the actions described below.

### 19.2 List of audit events

A table lists the set of audit events generated by all SIM cards in your organization. When entering the section, the most recent are ordered first and the oldest at the end.

- ⚠️** Unlike in the SIM card detail section, this list allows you to paginate and cycle through all audit events.
  
- ⚠️** For performance reasons, the list shows events from the last two weeks when entering the section. The user can change the filter once inside the section.
  
- ⚠️** For security reasons, usernames belonging to other organizations will not be displayed.

#### Columns in the audit events table

The following table shows the set of available columns and their description.

Column	Description
ID	SIM card ID associated with the audit event
ICC	ICC of the SIM card associated with the audit event
IMSI	IMSI of the SIM card associated with the audit event
MSISDN	MSISDN of the SIM card associated with the audit event
IMEI	IMEI of the SIM card associated with the audit event
Customer	Customer to which the SIM card associated with the audit event belongs
End customer	End customer to whom the SIM card associated with the audit event belongs
Date / time	Date and time the audit event occurred
Source	Source of the audit event (Portal / API / automatic...)
Parameter	The SIM card parameter on which the audit event occurs
Old value	Parameter value prior to audit event
New value	New parameter value associated with the audit event
Full name	Full name of the user who causes the parameter change, if applicable.
User	The username that causes the parameter change, if applicable.
Organisation	Organization to which the user who makes the parameter change belongs, if applicable.
Additional information	Additional information configured when executing the bulk operation. This can be used, for example, to set a code external to KITE.

## 19.3 Operations on audit events

### Event filtering

Hovering the mouse over a column that allows you to filter will bring up an icon  to access the filtering interface.



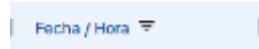
Due to technical limitations, the "Fullname" column cannot be filtered.

The filter interface appears after clicking on the icon and a menu with two tabs will appear where the one on the left is the filtering interface. For example:



Depending on the column, Kite will offer a list of options, an autocomplete list, a text entry, or enter a range of values as in the case of "Date and Time".

When a column has a filter applied, an icon like the one shown below appears:



### Refresh Table

Allows you to update the table to show the listed events. Icon .

### Export

Download a compressed file containing CSV files with all the filtered audit events (not just the page the user views but all the events). Icon .

Once the file is generated, the icon changes to  to start the download. The generated file is also available in the "Reports" section "Ready for download" tab.

### Manage Columns

Allows you to select the visible columns and their position. Icon .

## A. Annex A: Sample of pre-bill file in XML format

---

```

- <Application_Proto_PreBill_DataQuery_Response_ResponseData>
  <id>CRM-1201202061</id>
  - <period>
    <start_date>2012-01-07</start_date>
    <end_date>2012-01-07</end_date>
  </period>
  <external_id>CRM-4</external_id>
  <billing_account_name>Additional 1</billing_account_name>
  - <service_provider_data>
    <name>ORG_SRVPROVIDER</name>
    <commercial_name>org_srvprovider</commercial_name>
    <brand>movistar</brand>
    <fiscal_number>123123B</fiscal_number>
  - <company_address>
    <line1>Línea 1</line1>
    <line2>Línea 22</line2>
    <city>Ciudad</city>
    <state>Región</state>
    <country>ES</country>
    <postal_code>CP-12345</postal_code>
  </company_address>
  </service_provider_data>
  - <customer_data>
    <name>ORG_CUSTOMER</name>
    <fiscal_number>CIF-22222</fiscal_number>
  - <company_address>
    <line1>Line 1</line1>
    <line2>Line 2</line2>
    <city>City</city>
    <state>Region</state>
    <country>ES</country>
    <postal_code>28123</postal_code>
  </company_address>
  <crm_id_1>CRM-1</crm_id_1>
  <crm_id_2>CRM-2</crm_id_2>
  <id>ORG_CUSTOMER135aa6cf028vsHfSjjil</id>
  - <currency>
    <id>978</id>
    <name>Euro</name>
    <decimal>2</decimal>
  </currency>
  </customer_data>
  - <dates_data>
    <creation_date>2012-02-24</creation_date>
  </dates_data>
  - <total_charge_data>
    <total_amount>0</total_amount>
    <total_amount_before_taxes_and_discounts>0</total_amount_before_taxes_and_discounts>
  - <taxes>
    <total_amount>0</total_amount>
    - <customer>
      <name>Tax</name>
      <percentage>22</percentage>
    </customer>
    - <billing_account>
      <name>Tax 11</name>
      <percentage>11</percentage>
    </billing_account>
  </taxes>

```

## B. Annex B: Description of the presence values

---

### Meaning of unified presence states

State	Description
UNKNOWN	Unknown
NOT_REGISTERED	GSM unregistered
GSM	GSM registered
GPRS	GPRS context
IP	IP reachability

### Meaning of presence events

Event	Description
REGISTRATION	SIM registration
ASSUMED_IDLE	Idle SIM in GSM
CAMEL_BUSY	SIM busy by GSM voice/data call
NOT_PROVIDED_FROM_VLR	SIM with a status not provided by VLR
MS_PURGED	Purged terminal
IMSI_DETACHED	SIM disconnected from GSM network
RESTRICTED_AREA	SIM in roaming in a restricted zone
NOT_REGISTERED	Unregistered SIM in GSM
UNKNOWN_SUBSCRIBER	SIM with unknown GSM status
GPRS_UP	GPRS context opening
GPRS_DOWN_TER_OK	GPRS context down from terminal
GPRS_DOWN_TER_ERR	GPRS context down with error from terminal
GPRS_DOWN_NET_OK	GPRS context down from network
GPRS_DOWN_NET_ERR	GPRS context down with error from network
GPRS_DOWN_NET_TOUT	GPRS context down from network due to timeout
GPRS_OFF	Context down due to GGSN stop
GPRS_ON	Context down due to GGSN start

GPRS_UNKNOWN	Reachability loss with GGSN
IP_UP_ICMP	IP reachability via ICMP ping from platform
IP_DOWN_ICMP	IP reachability loss via ICMP ping from platform

## C. Annex C: How do adjustment and apportionments work?

---

### General aspects

- The monthly fees related to the life cycle are adjusted and apportioned according to the time (in days) of the given billing period that has elapsed.
- The change of a line from one Commercial Plan to another is always done through the change of the Subscriptions Group.
- To be able to change the Commercial Plan of a line, both plans (origin and target) must have an equivalent life cycle. Besides, there are states of the life cycle in which it is not possible to migrate lines from one Commercial Plan to another, specifically:
  - If the target plan has a commercial plant with a “Test” state defined in the associated life cycle.
  - If the target plan has the state “Activation ready” or “Activation pending” and it does not match the state associated to the commercial plan of origin.
- When a line is migrated from one Commercial Plan to another:
  - The change is executed at the moment of the request.
  - When the change takes place an adjustment (money refund) proportional to the data of the plan of origin that has not been consumed is made.
  - The Customer is not assigned the complete amount of data of the target plan; only the part proportional to the number of days remaining in the billing cycle is assigned. Likewise, the Customer is charged the proportional part of the fee of the new plan.
- The monthly fees related to Supplementary Services are adjusted and apportioned according to the amount of time of the billing cycle that has elapsed.
- When a line is changed from one Commercial Plan to another exactly in the middle of a billing cycle, there is no adjustment or apportionment related to Supplementary Services.
- With **individual tariffs** adjustments and apportionments are always performed at SIM level and take place as follows:
  - When a line is added to a Subscriptions group or activated in the middle of a billing cycle, proration is made proportional to the number of days remaining for the end of the billing cycle.
  - When a line is removed or deactivated in the middle of a billing cycle, an adjustment (money return) is made proportional to the amount of voucher not consumed.
- With **static pool tariffs** apportionments and adjustments are performed when creating and deleting a Subscription group only, that is, no prorations and/or adjustments are made when adding or removing individual SIM cards.

- With **dynamic pool tariffs** apportionments and adjustments are always made SIM by SIM, that is:
  - When several SIM cards are activated or added to a Subscription group, new (prorated) voucher size and cost are computed incrementally for each SIM being added to the pool proportionally to the number of days that are left till the end of the current billing cycle.
  - When SIM cards are deactivated or removed from a Subscription group, voucher size and cost adjustments are computed in the same ways as when adding SIM cards, that is, SIM by SIM proportionally to the number of days that are left till the end of the current billing cycle.
    - If the amount of traffic to decrement is bigger than the amount of available traffic, only the maximum amount of traffic that is possible will be decremented, and therefore the pool will start tariffing as pay-per-use. The voucher cost will decrement proportionally to the traffic reduction.
  - If the voucher cost is changed in the middle of the billing cycle, new tariff will be computed proportionally to the non-consumed traffic volume. Cost difference, between the new and old tariff, times the total number of SIM cards in the pool give us the total cost to be incremented or decremented.

### **Case 1: Apportionment when creating a commercial plan with traffic voucher included with individual tariff.**

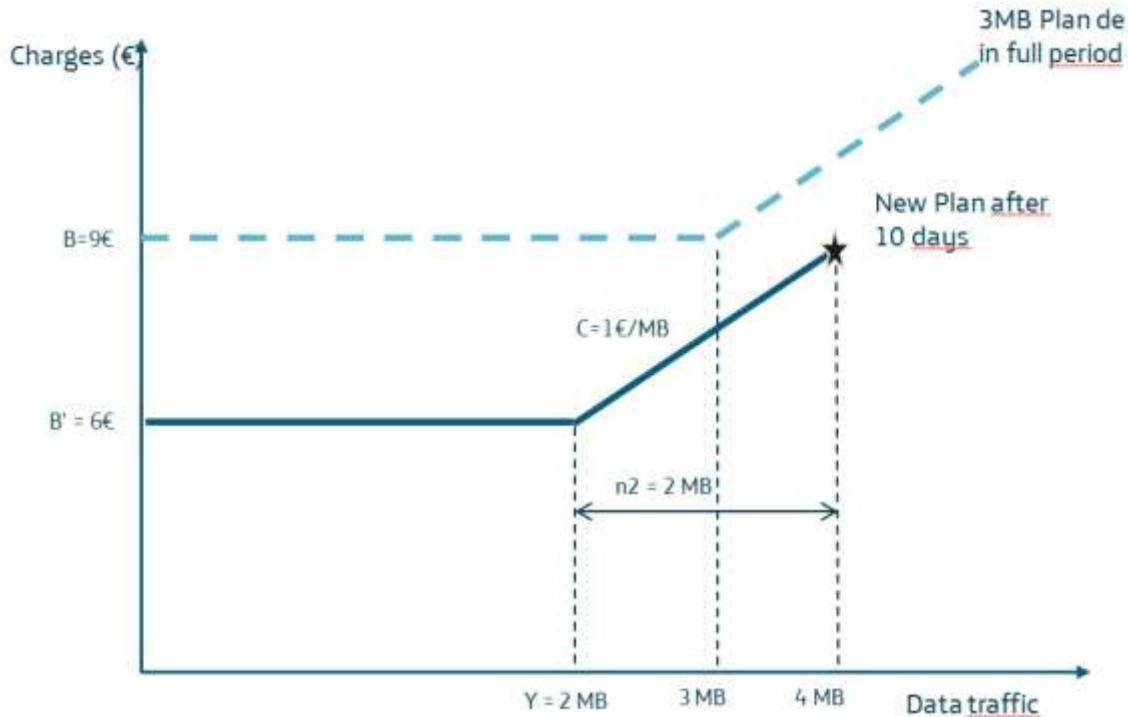
- Once  $x$  (e.g. 10) days of the billing cycle have elapsed, the Customer hires a commercial plan with an included 3MB traffic bonus, with an associated monthly fee  $B$  (e.g. 9) €.
- After consuming the traffic included, the Customer starts paying according to what he uses with a cost of  $c$  € (e.g. 1) € / MB
- The Customer consumes  $n_2$  (e.g. 2) MB after the bonus has expired
- The **apportionment** would consist of:
  - Of the 3MB bonus, the Customer is offered the proportional part of the data traffic for the remainder of the month and is changed the proportional part of the monthly fee for the remainder of the billing cycle
  - Apportionment of the monthly fee: 3MB → 2MB

$$Y = 3 \text{ MB} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 3 \text{ MB} \times 2/3 = 2 \text{ MB}$$

- Bonus apportionment: 9€ → 6€

$$B' = 9 \text{ €} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 9 \text{ €} \times 2/3 = 6 \text{ €}$$

- Charge at the end of the month =  $B' + c \times n_2 = 6 + 1 \times 2 = 8 \text{ €}$



### Case 2: Pack migration from 1MB to 3MB with individual tariff

- The Customer has an initial bonus of 1MB.
- On day 1, the Customer was charged **A (e.g. 5) €** for the 1MB bonus
- Once **x (e.g. 10)** days have elapsed, there is a migration to a 3MB bonus, with an associated fee of **B (e.g. 9) €** having consumed a part **n (e.g. 0.5) MB** of the 1MB bonus
- After consuming the included traffic, the cost of the MB is **c (e.g. 1) €**
- The Customer consumes **n<sub>2</sub> (e.g. 2) MB** after the bonus expiration
- The **adjustment** would consist of:
  - The Customer is reimbursed for the proportional part of the non-consumed voucher:

$$A' = A \times \frac{(1 - n) \text{ MB}}{1 \text{ MB}} = 5 \text{ €} \times 0,5 = 2,5 \text{ €}$$

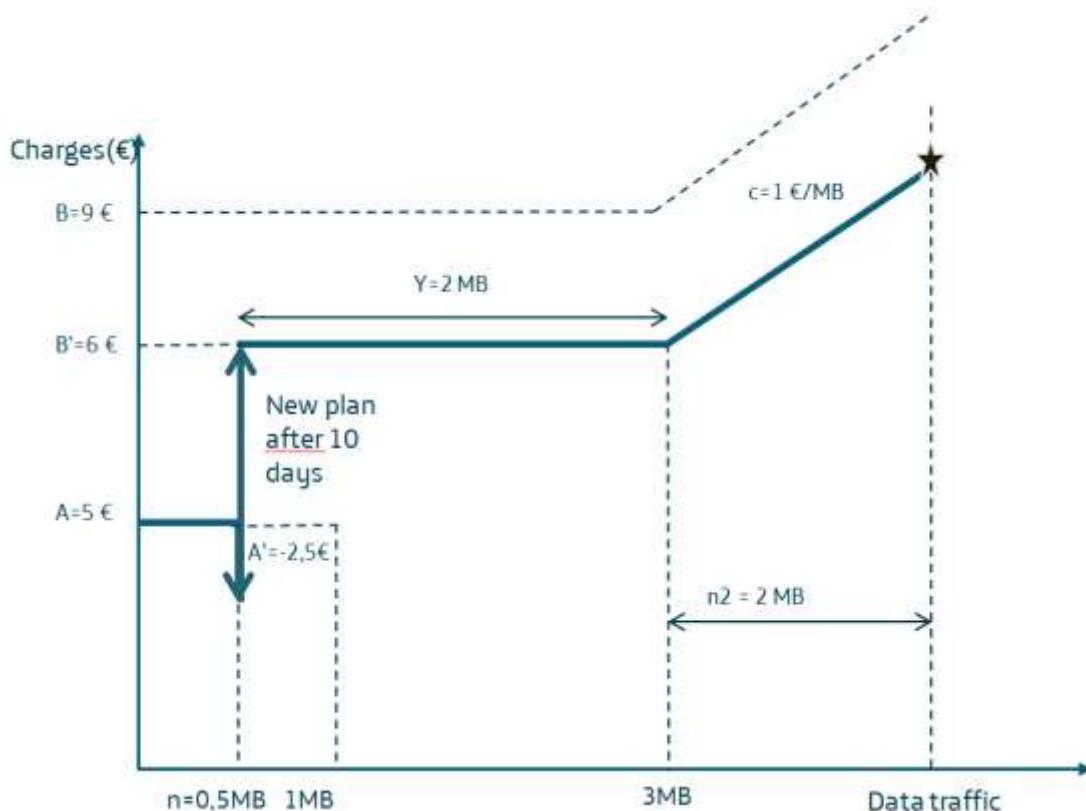
- The **apportionment** would consist of:
  - Of the 3MB bonus, the Customer is offered the part of the data that is proportional to the remaining time for the month and is also charged for the proportional part of the monthly fee
  - Apportionment of the monthly fee: 3MB → 2MB

$$Y = 3 \text{ MB} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 3 \text{ MB} \times 2/3 = 2 \text{ MB}$$

- Bonus apportionment: 9€ → 6€

$$B' = 9 \text{ €} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 6 \text{ €}$$

- **Charges at the end of the month** =  $A - A' + B' + c \times n_2 = 5 - 2.5 + 6 + 1 \times 2 = 10.5 \text{ €}$

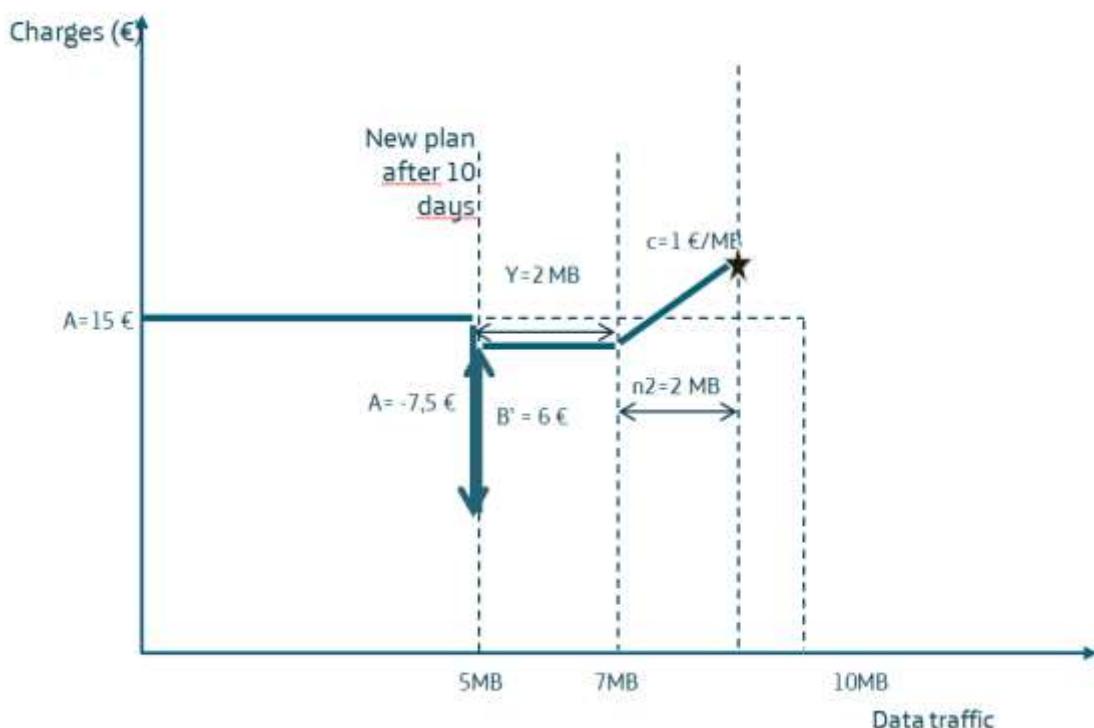


### Case 3: Pack migration from 10MB to 3MB with individual tariff

- The Customer has an initial bonus of 10MB.
- On day 1, the Customer was charged **A (e.g. 15)** € for the 10MB bonus
- Once **x (e.g. 10) days have elapsed** there is a migration to a 3MB bonus, with an associated monthly fee **B (e.g. 9)** € having consumed a part of **n (e.g. 5) MB** from the 10MB bonus
- After the bonus has expired, the MB cost is **c (e.g. 1)** €.
- The Customer consumes  **$n_2$  (e.g. 2) MB** after the bonus expiration
- The **adjustment** would consist of:
  - The Customer is reimbursed for the proportional part of the non-consumed voucher:

$$A' = A \times \frac{(10 - n) \text{ MB}}{10 \text{ MB}} = 15 \text{ €} \times 0.5 = 7.5 \text{ €}$$

- The **apportionment** would consist of:
  - Of the 3MB bonus, the Customer is offered the part of the data that is proportional to the remaining time for the month and is also charged for the proportional part of the monthly fee
  - Apportionment of the monthly fee: 3MB → 2MB
$$Y = 3 \text{ MB} \times \frac{(30 - x) \text{ días}}{30 \text{ días}} = 2 \text{ MB}$$
- Bonus apportionment: 9€ → 6€
$$B' = 9 \text{ €} \times \frac{(30 - x) \text{ días}}{30 \text{ días}} = 6 \text{ €}$$
- Charges at the end of the month** =  $A - A' + B' + c \times n_2 = 15 - 7.5 + 6 + 1 \times 2 = 15.5 \text{ €}$



#### Case 4: Adding of lines to a dynamic pool tariff

The increase of lines in a dynamic pool can occur either because a new line is added to the related Subscription Group, or because the line is passed to Activated.

D) Current situation:

- A Customer has a voucher per SIM defined as 3 MB / 6 €.
- Overage traffic is charged as **c (e.g. 1) €/MB**.
- The pool has **S (e.g. 10)** SIMs, thus the total size and cost of the voucher will be:

$$Y = S \times 3 \text{ MB} = 30 \text{ MB}$$

$$B = S \times 6 \text{ €} = 60 \text{ €}$$

- Billing cycle total days: **30 days**.

E) After  $x$  (e.g. 10) days  **$\Delta S$  (e.g. 5) SIMs** are added.

In order to derive the voucher size and cost we proceed in the following way:

- The voucher size and cost will be increased with every SIM being added to the pool proportionally to the remaining time in the billing cycle (**apportionment**):

$$\Delta Y_{SIM} = 3 \text{ MB} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 2 \text{ MB}$$

$$\Delta B_{SIM} = 6 \text{ €} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 4 \text{ €}$$

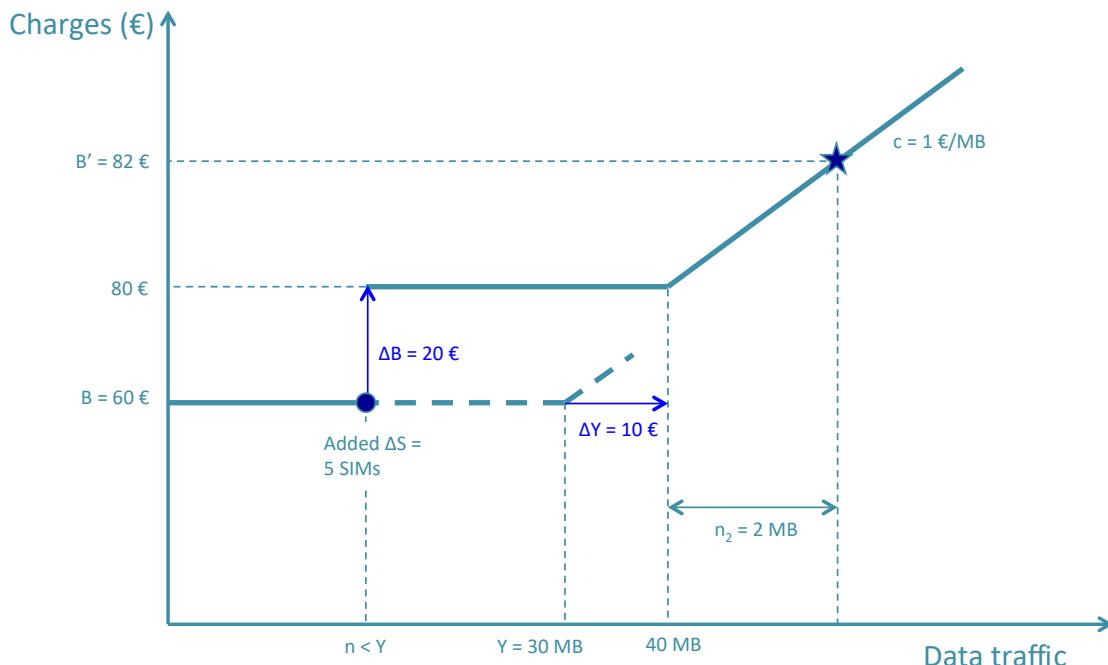
- As we have added 5 SIM to the pool, the total voucher increase will be:

$$\Delta Y = \Delta Y_{SIM} \times \Delta S = 2 \times 5 = 10 \text{ MB}$$

$$\Delta B = \Delta B_{SIM} \times \Delta S = 4 \times 5 = 20 \text{ €}$$

- After the voucher is exhausted the customer consumes  **$n_2$  (e.g. 2) MB**.
- Charge at the end of the month will be:

$$B' = B + \Delta B + n_2 \times c = 60 + 20 + 2 \times 1 = 82 \text{ €}$$



### Case 5: Removing lines from a dynamic pool tariff without voucher exhaustion after the operation

The decrease of lines in a dynamic pool can occur either because a new line is removed from the related Subscription Group, or because the line is set to Deactivated

F) Current situation:

- A Customer has a voucher per SIM defined as  $3 \text{ MB} / 6 \text{ €}$ .
- Overage traffic is charged as  **$c$  (e.g. 1) €/MB**.
- The pool has  **$S$  (e.g. 10)** SIMs, thus the total size and cost of the voucher will be:

$$Y = S \times 3 \text{ MB} = 30 \text{ MB}$$

$$B = S \times 6 \text{ €} = 60 \text{ €}$$

- Billing cycle total days: **30 days**.

G) After  $x$  (e.g. 10) days  **$ΔS$  (e.g. 5) SIMs** are removed when the voucher is not being exhausted yet, that is when ( $n < Y$ ) with e.g.  **$n = 15 \text{ MB}$** .

In order to derive the voucher size and cost we proceed in the following way:

- The voucher size and cost will decrease with every SIM being removed from the pool proportionally to the remaining time in the billing cycle (**adjustment**):

$$\Delta Y_{\text{SIM}} = 3 \text{ MB} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 2 \text{ MB}$$

$$\Delta A_{\text{SIM}} = 6 \text{ €} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 4 \text{ €}$$

- As we have removed 5 SIM from the pool, the total voucher decrease will be:

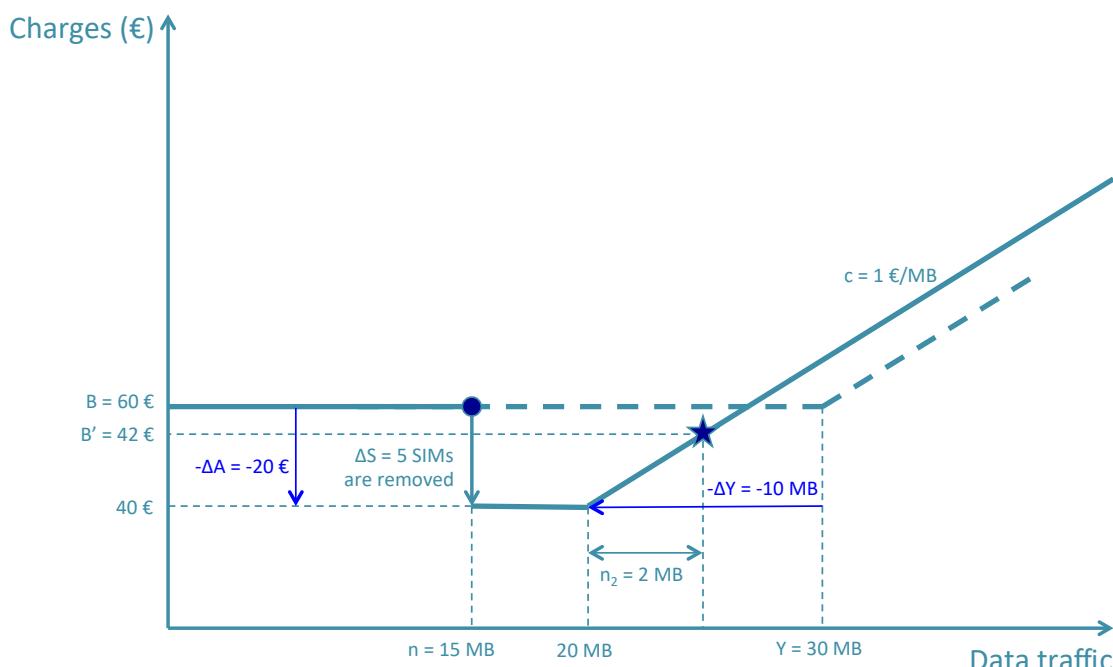
$$\Delta Y = \Delta Y_{SIM} \times \Delta S = 2 \times 5 = 10 \text{ MB}$$

$$\Delta A = \Delta B_{SIM} \times \Delta S = 4 \times 5 = 20 \text{ €}$$

- After the voucher is exhausted the customer consumes  **$n_2$  (e.g. 2) MB**

- Charge at the end of the month will be:

$$B' = B - \Delta A + n_2 \times c = 60 - 20 + 2 \times 1 = 42 \text{ €}$$



### Case 6: Removing lines from a dynamic pool tariff with voucher exhaustion after the operation

A) Current situation:

- A Customer has a voucher per SIM defined as 3 MB / 6 €.
- Overage traffic is charged as **c (e.g. 1) €/MB**.
- The pool has **S (e.g. 10)** SIMs, thus the total size and cost of the voucher will be:

$$Y = S \times 3 \text{ MB} = 30 \text{ MB}$$

$$B = S \times 6 \text{ €} = 60 \text{ €}$$

- Billing cycle total days: **30 days**.

B) After **x (e.g. 10) days** being elapsed  **$\Delta S$  (e.g. 5) SIMs** are removed when the voucher is not being exhausted yet, that is when ( $n < Y$ ) with e.g.  **$n = 23 \text{ MB}$** .

In order to derive the voucher size and cost we proceed in the following way:

- The voucher size and cost will decrease with every SIM being removed from the pool proportionally to the remaining time in the billing cycle:

$$\Delta Y_{SIM} = 3 \text{ MB} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 2 \text{ MB}$$

$$\Delta A_{SIM} = 6 \text{ €} \times \frac{(30 - x) \text{ days}}{30 \text{ days}} = 4 \text{ €}$$

- At the time of decreasing the voucher size, what is left is inspected, decreasing the voucher by the maximum available size. In our case, the maximum size the voucher that can be decreased is:

$$\Delta Y = Y - n = 30 \text{ MB} - 23 \text{ MB} = 7 \text{ MB}$$

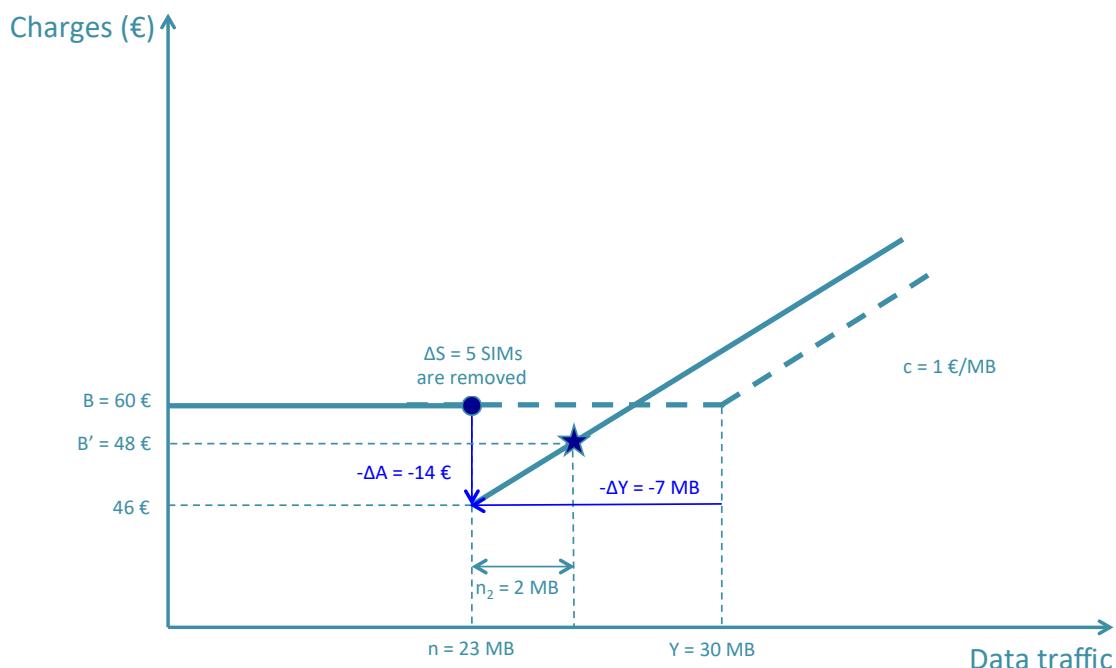
so that the voucher is automatically exhausted and pay-per-use starts.

- Cost decrease (**adjustment**) will be:

$$\Delta A = \Delta Y \times \frac{\Delta A_{SIM}}{\Delta Y_{SIM}} = 14 \text{ €}$$

- After the voucher is exhausted the customer consumes  **$n_2$  (e.g. 2) MB**
- Charge at the end of the month will be:

$$B' = B - \Delta A + n_2 \times c = 60 - 14 + 2 \times 1 = 48 \text{ €}$$



### Case 7: Changing the voucher cost in a dynamic pool tariff in the middle of the billing cycle

A) Current situation:

- A Customer has a voucher per SIM defined as  $Y_{SIM}$  (e.g. 3) MB /  $B_{SIM}$  (e.g. 6) €.
- Overage traffic is charged as  $c$  (e.g. 1) €/MB.
- The pool has  $S$  (e.g. 10) SIMs, thus the total size and cost of the voucher will be:

$$Y = S \times 3 \text{ MB} = 30 \text{ MB}$$

$$B = S \times 6 \text{ €} = 60 \text{ €}$$

- Billing cycle total days: **30 days**.

B) After consuming  $n$  (e.g. 10) MB voucher tariff is changed to  $B'_{SIM}$  (e.g. 10) €.

Then, the following steps are performed:

- A reimbursement corresponding to the non-consumed traffic with the old tariff is performed:

$$\Delta A = B \times \frac{(Y - n)}{Y} = 60 \times \frac{2}{3} = 40 \text{ €}$$

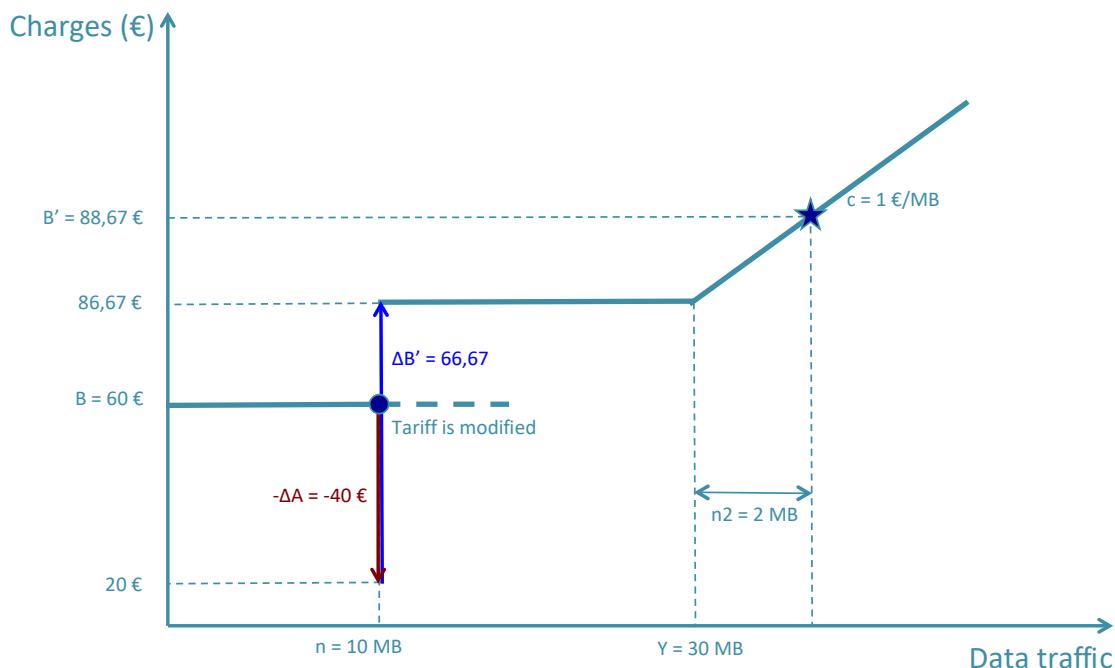
- A charge, corresponding to the non-consumed traffic volume with the new tariff is performed:

$$\Delta B' = B'_{SIM} \times S \times \frac{(Y - n)}{Y} = 10 \times 10 \times \frac{2}{3} = 100 \times \frac{2}{3} = 66,67 \text{ €}$$

- After the voucher is exhausted the customer consumes  $n_2$  (e.g. 2) MB

- Charge at the end of the month will be:

$$B' = B - \Delta A + \Delta B' + n_2 \times c = 60 - 40 + 66,67 + 2 \times 1 = 88,67 \text{ €}$$



## How apportionments and steps are rounded?

- **Rounding of steps:** steps are always rounded up. Rounding is always CDR based (whether they are partial or full CDRs) and if there is no traffic/consumption within a CDR then charges are always 0€. For a 10 bytes session with 1Kbyte step, the charge will be 1 Kbyte.
- **Rounding of apportionments:** apportionments, both for traffic units and charges are always computed by CORE and always HALF UP. If the value is X,5XXX (i.e. e. 0,52) o higher, it is rounded up to X+1 (i.e. 1). For lower values than X,5 they are prorated to X.

## D. Annex D: Secure Access to Kite Platform Using Microsoft Sign In Service Corporate Credentials – Setup Guide

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### Who can use this secure access feature

This feature is available to organizations that use the Microsoft Azure tool, Entra ID (formerly Active Directory), as their employee access system to their corporate systems.

Kite Platform users in these organizations will be able to log in to the Kite web portal using their corporate email.

### How does this help me?

In addition to offering all the security guarantees for accessing the Platform, secure access with corporate credentials helps Kite users by avoiding the inconveniences associated with current access (specific username and password to access Kite, two-factor authentication, etc.).

In addition, the organization administrator can centralize user management on their corporate server, allowing them, for example, to not have to worry about specifically deregistering users from Kite Platform when necessary.

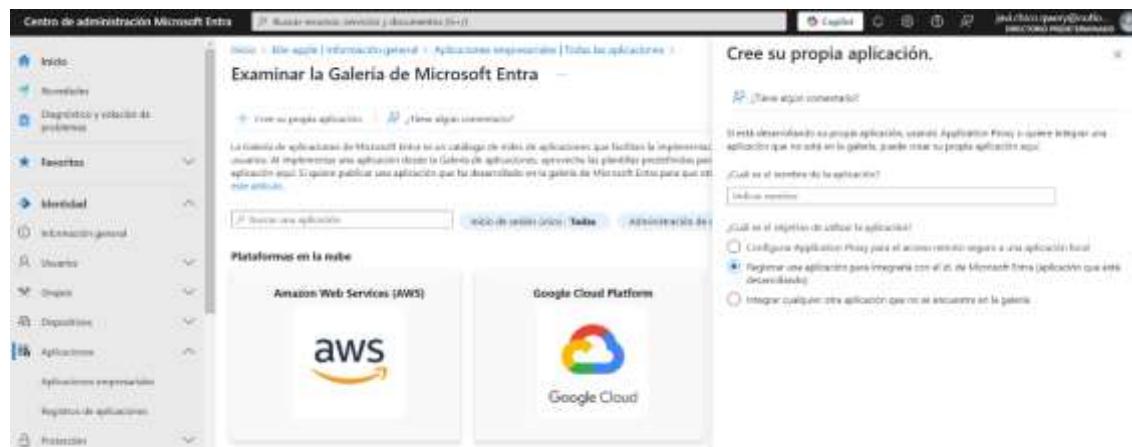
### How to configure this feature

To use this secure and convenient access feature to the portal, the organization administrator must (1) create a new business application (corresponding to Kite Platform) in their Microsoft Entra administration center; and (2) activate the feature and configure it appropriately in the Commercial Management section of the Kite Platform portal.

#### 1. Create a new business application (Kite Platform) in the Microsoft Entra admin center

The organization administrator must follow these steps:

1. Access the Microsoft Entra admin center.
2. In the Applications > Business Applications menu, create a new business application.



The screenshot shows the Microsoft Entra Admin Center interface. On the left, there's a navigation sidebar with options like 'Inicio', 'Requerimientos', 'Diagnóstico y solución de problemas', 'Favoritos', 'Identidad', 'Información general', 'Usuarios', 'Grupos', 'Dispositivos', 'Aplicaciones' (selected), 'Aplicaciones empresariales', 'Registros de aplicaciones', and 'Protección'. The main content area has a breadcrumb trail: 'Inicio > Añadir aplicación > Información general > Aplicaciones empresariales > Todas las aplicaciones'. It displays a section titled 'Examinar la Galería de Microsoft Entra' with a link to 'Crear su propia aplicación' and a 'Hacer algo más avanzado'. Below this, there's a 'Plataformas en la nube' section with links to 'Amazon Web Services (AWS)' and 'Google Cloud Platform', each accompanied by its respective logo.

It is important, when creating the application, to select the option “Register an application to integrate with the Microsoft Entra id” in the “What is the purpose of using the application” form.

Next, click “create” and in the “Name” field indicate the name with which you want to identify Kite Platform (for example “Kite-<customer\_name>”). In addition, in the “Redirect URI” field, select the “web” option and indicate the URL through which the organization enters Kite.



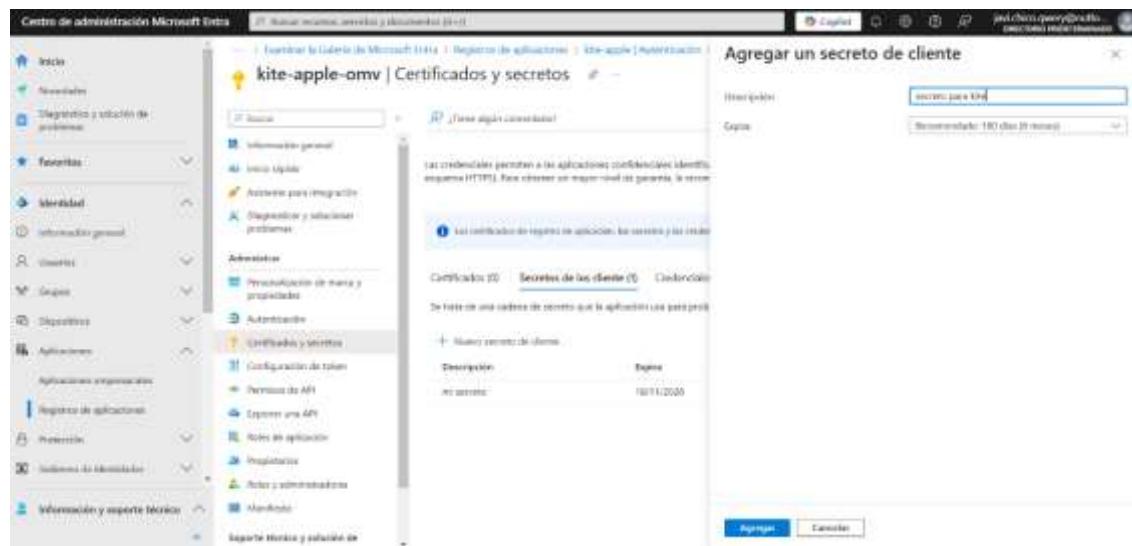
The screenshot shows the 'Autenticación' (Authentication) configuration page for the 'kite-apple-omv' application. The left sidebar shows 'Administrador' (Administrator) with options like 'Personalización de dominio y propiedades', 'Autenticación' (selected), 'Certificados y secretos', 'Configuración de token', and 'Permisos de API'. The main content area has a 'Configuraciones de plataforma' (Platform configurations) section with a note about platform-specific configurations. Below it is a 'Web' section with a 'URI de redirección' (Redirection URI) field containing 'https://kite.com'. There are also 'Nuevo' and 'Borrar' buttons.

Finally, click on “register” and the new Business Application will be created.

Among others, two parameters will be generated that will be used later in the configuration of the functionality in Kite Platform (step (2) of this guide):

- The “Application ID” parameter associated with the new application.
- The Metadata Document found in the “Application Records” section, under the “Endpoints” option, usually at the bottom.

3. In the Application Registration menu, select the new application. Within the new application menu, select the “Certificates and secrets” section to create a new secret.



To do this, select the “+ New client secret” option. You must indicate the desired description and duration.

The value generated in the “Value” field of the secret must be used later in the configuration of the functionality in Kite Platform (Point 2 of this guide).

**⚠️** Write down the expiration date of the secret key because it will need to be renewed, otherwise errors will occur when trying to access Kite once it has expired. This authentication method does not replace the Kite users that the organization has provisioned. It is complementary.

4. In the same menu as in the previous step, select “Authentication” and select the “ID tokens” option in the “Implicit and hybrid grant flows” section.
5. In the same menu as in the previous step, select “API Permissions” and check the option “Grant administrator consent for Default Directory”.
6. Finally, each corporate user that you want to be able to access Kite Platform will be added to the newly created application.

To do this, access the “Assign users and groups” -> “Add user or group” -> “Users” option of the created application.

## 2. Activating the functionality in the Commercial Management section of Kite Platform

In KITE, to activate it, you must enter the following values:

1. Company name: The organization name given in login page -> the one we want the user of our organization to indicate in the Kite login portal to be redirected
2. Application ID: represents Kite app in open ID domain. -> we have copied it from the Microsoft Entra administration center

3. Endpoint for OpenID Connect metadata document: URL to obtain metadata with service endpoints (auth, keys, oauth...) -> we have copied it from the Microsoft Entra administration center (step 2 of the Microsoft Entra configuration)
4. Secret key: shared credentials. -> we have copied it from the Microsoft Entra administration center Once registered, the new application will appear in the “Business Applications – All applications” list, showing the parameters associated with this new application. The “Application ID” parameter associated with the new application must be saved, since it must later be used in the configuration necessary to activate the functionality in Kite Platform (Point 2 of this guide).

### **3. Users accessing Kite using the integration with Microsoft Entra**

1. From now on, corporate users added in Microsoft Entra (in point 4 of the Microsoft Entra configuration) will be able to log in to Kite using their corporate credentials. To do so, in the Kite login window they must click on the “login with my organization” option located at the bottom of the login window.
2. The user must enter the “Company name” determined by their organization and will be redirected to their corporate server for authentication. Once this operation has been successfully completed, they will be logged into the Kite portal.