



APPLICATION USER MANUAL

INDICE

1. INSTALLATION	4
1.1. UPDATE	4
2. FIRST ACTIVATION.....	5
3. Driver login.....	6
3.1. Driver menu	8
3.1.1. New refilling	9
3.1.2. Maply.....	13
3.1.2.1. Tank load.....	14
3.1.2.2. DISPENSING OPERATION FOR VEHICLES REGISTERED TO THIRD-PARTY COMPANIES.....	15
3.1.2.3. DISPENSING GEO-LOCALISATION	16
3.1.2.4. GEOFENCING OPERATIONS.....	17
3.1.3. Ticket archive	21
3.1.3.1. Notification dispensing to other companies	22
3.1.4. Fuel economy module	23
3.1.4.1. Dispensing	23
3.1.5.1. Dispensable quantity limit.....	26
3.1.5.2. Working time	27
3.1.5.3. External Dispensing	28
3.1.5.4. Configuration.....	30
4. Manager login.....	31
4.1. Controller scan.....	32
4.2. Controller discovery.....	34
4.2.1. Data recovery	36
4.3. Summary screen	38
4.4. Menu manager	39
4.4.1. Calibration.....	40
4.4.2. Firmware update	42
4.4.3. Tank watchdog.....	48
4.4.4. OCIO	49
4.4.5. Tank monitoring.....	51
4.4.6. SETTINGS	54
5. Table of critical system alarms.....	55
6. Migration of the controller to a different site.....	55

7. Resetting a device	56
8. FAQs.....	57

Il presente manuale è proprietà di PIUSI S.p.A. Ogni riproduzione, anche parziale, è vietata.

Versione: 1.12.2

1. INSTALLATION

Connect to the respective stores using the following links to install the application:

- Play store - <https://play.google.com/store/apps/details?id=com.piusi.sssa>
- App-store - <https://apps.apple.com/om/app/piusi-b-smart/id1440012334>

The following minimum requirements are needed for correct operation:

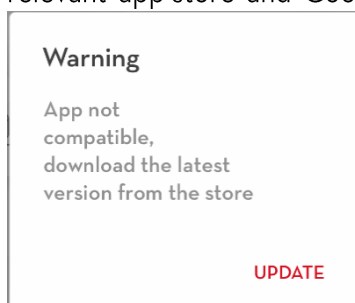
Use a smartphone with Android (Android 5.1 or later) or iOS (iOS 13.0 or later) operating system and Bluetooth module that can connect to the Internet (via a data network or WI-FI).

Important note

- If the application is uninstalled, all locally saved data that has not been synchronised with the cloud will be lost.

1.1. UPDATE

If the application is not updated to the latest compatible software version, it is not allowed to dispense from the dispensers of your site. If there are new updates, a message is always shown, that refers to the relevant 'app store' and 'Google play store' to download and install the latest update:



We recommend that you periodically check for new updates from the official stores

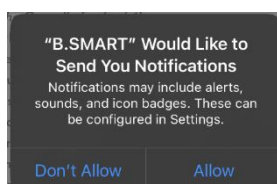
2. FIRST ACTIVATION

Start the application by pressing the icon. Read and accept the software licence terms upon the first activation.

Important note:

- The licence terms may change over time and must be accepted again.

Press "I AGREE" to continue.



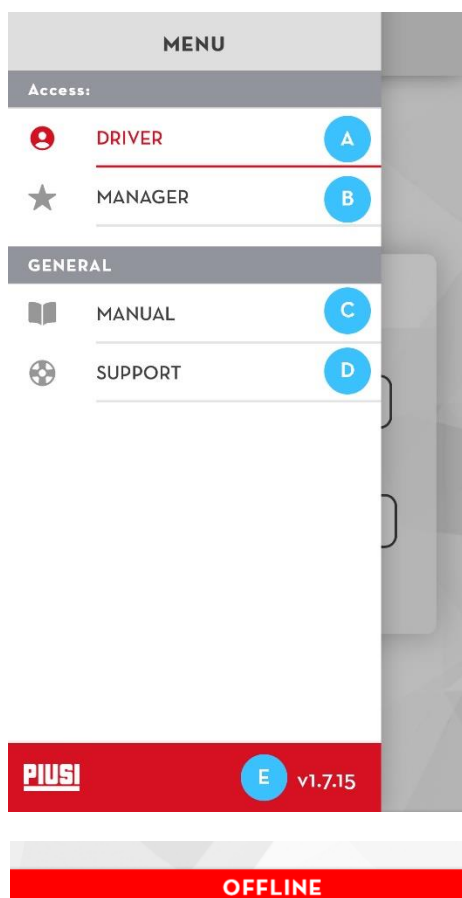
(iOS only) Allow the application to receive notifications.



The driver login screen as soon as the app starts (see Chapter 3).



Press the button to open the navigation menu.



- DRIVER** - To open the driver login page (see Chapter 3).
- MANAGER** - To open the manager login page (see Chapter 4).
- MANUAL** - the MANUAL button starts the downloading of the following manual that can be viewed directly from the phone. To view the manual you need to be connected to the internet.
- SUPPORT** - The REPORT button opens the section where the user of the APP (manager or driver) can send reports to PIUSI customer service for any problem related to the APP
- Version**
- Offline status bar** - This bar appears when no Internet connection available and some functions may not be available.

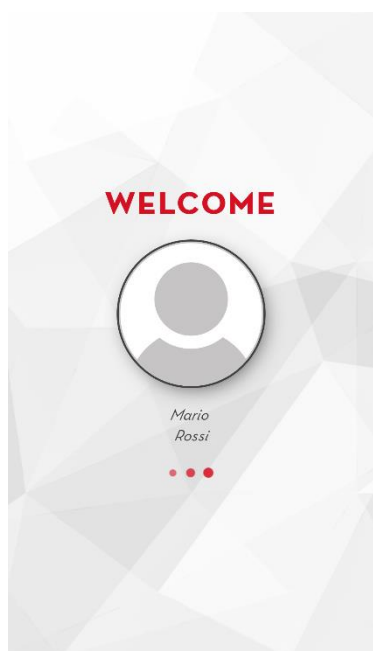
3. Driver login

Press the “DRIVER” menu item in the navigation menu to go to this section.

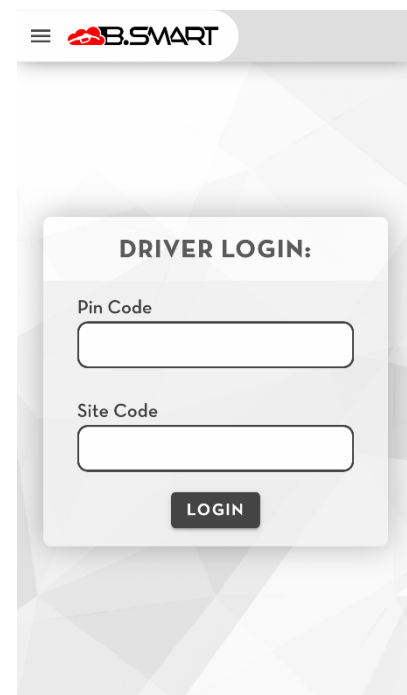
The driver must fill in the form with the following data to log into the site:

- a) **PIN code** - Numeric code that identifies the driver. This is assigned to the driver by the site manager while creating the registry (see B.Smart web-app manual).
- b) **Site code** - 8-digit alphanumeric code identifying the site. This is sent by e-mail to the operator after activating B.Smart on the PIUSI portal.

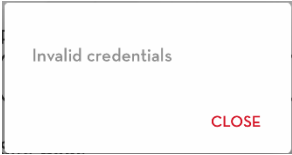
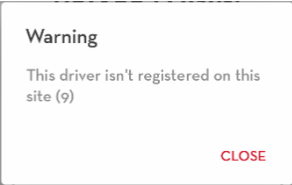
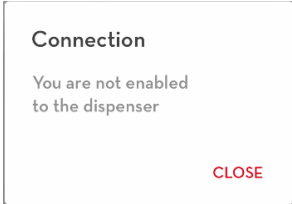
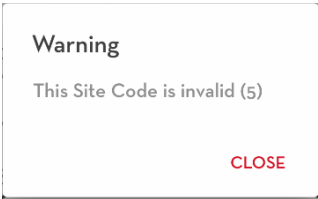
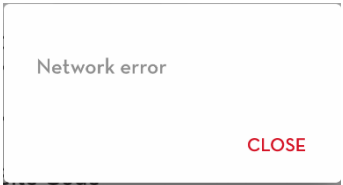
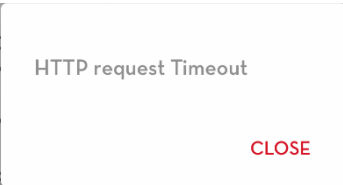
Press the “LOGIN” button to log in and wait for the result:



The screen shown by the side will appear if the login was successful and you will be shortly redirected to the “new refuelling” page (see Chapter 3.1.1).


 A screenshot of the "DRIVER LOGIN:" form. The form has a header with the B.SMART logo. It contains two input fields: "Pin Code" and "Site Code". Below these fields is a dark button labeled "LOGIN".

- If authentication fails, check the error:

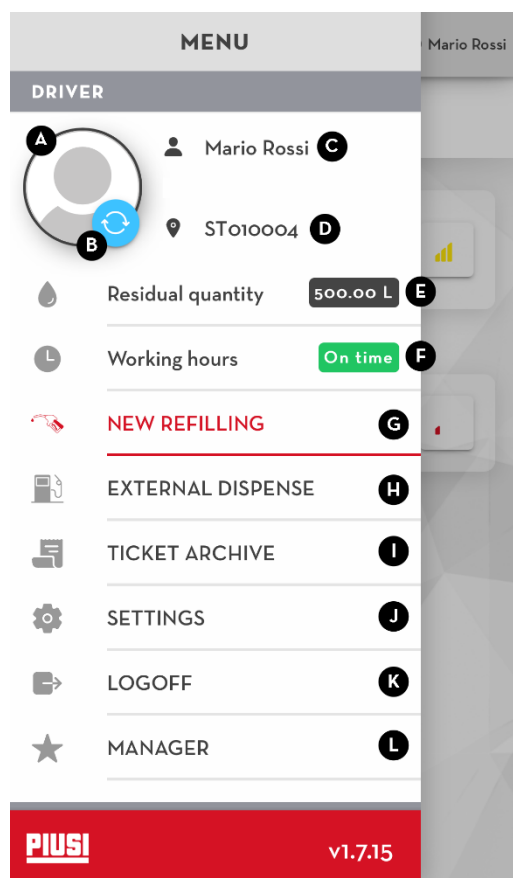
 <p>Invalid credentials</p> <p>CLOSE</p>	<p>The driver's credentials have changed from the last access. Connect to the internet and authenticate again.</p>
 <p>Warning</p> <p>This driver isn't registered on this site (9)</p> <p>CLOSE</p>	<p>Incorrect PIN code, the driver does not exist in the site.</p>
 <p>Connection</p> <p>You are not enabled to the dispenser</p> <p>CLOSE</p>	<p>The driver has been disabled by the operator and can no longer dispense.</p>
 <p>Warning</p> <p>This Site Code is invalid (5)</p> <p>CLOSE</p>	<p>The entered site code does not exist.</p>
 <p>Network error</p> <p>CLOSE</p>  <p>HTTP request Timeout</p> <p>CLOSE</p>	<p>No internet connection.</p>

Important note

- You must be connected to the internet to view the manual.
- Only one driver can be logged in on any one telephone at a time.
- The same driver can log in using different telephones.

3.1. Driver menu

After the driver has logged in, the following information is displayed in the navigation menu:



- A. **Driver image**
- B. **Data synchronisation button** - Press to force data synchronisation with the cloud.
- C. **Name and surname**
- D. **Code of the site** where the driver is authorised to dispense
- E. **Residual quantity** (function only available with “fuel economy” add-on active) - See Chapter 3.1.4.2
- F. **Working hours** (function only available with “fuel economy” add-on active) - See Chapter 3.1.4.3
- G. **New refilling** - This opens the tank scan page, where you can connect and start refuelling from a chosen fuel dispenser (see Chapter 3.1.1 and Chapter 3.1.4.1 if the “fuel economy” add-on is active)
- H. **External dispense** (function only available with the “fuel economy” add-on active) - This opens the page for creating a new external dispensing (see Chapter 3.1.4.4).
- I. **Ticket archive** - Enter the section to view the ticket history (see Chapter 3.1.3).
- J. **Settings** (function only available with the “fuel economy” add-on active) - Section for configuring data display settings (see Chapter 3.1.4.5).
- K. **Log off** - The driver is logged off and must log in again to

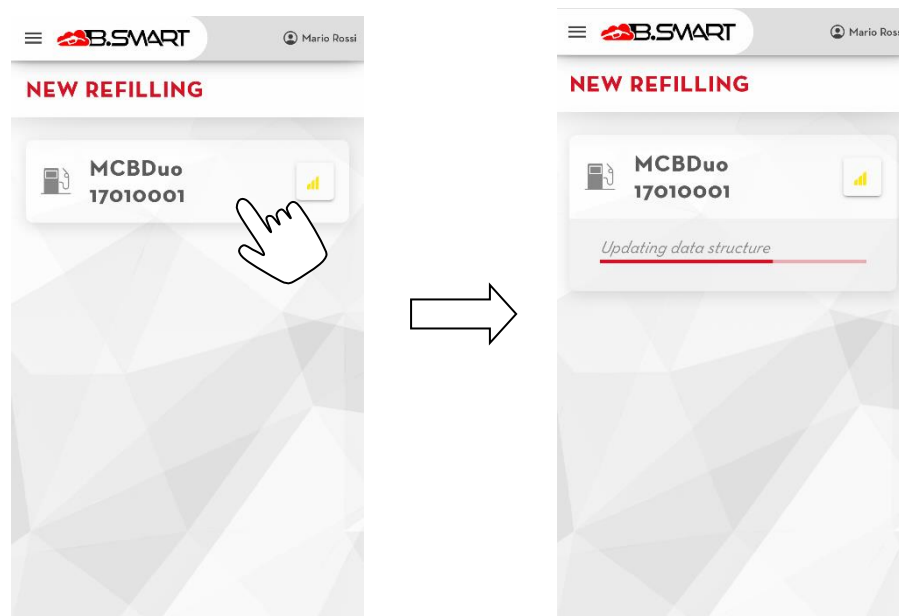
dispense (see Chapter 3).

- L. **Manager** - This opens the controller scan section for connecting and logging into a controller as a site manager (see Chapter 4).

3.1.1. New refilling

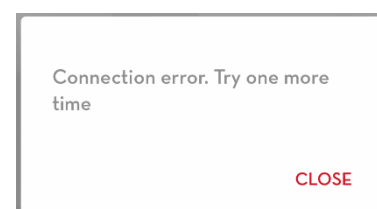
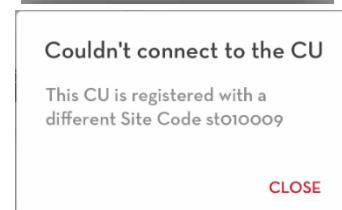
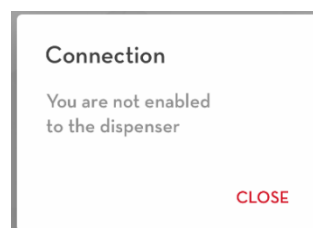
A BLE scan of the controllers is run as soon as this section is opened (see Chapter 3.1).

Press the controller from which you want to dispense and wait for the end of the connection procedure.



Caution: The connection procedure to the controller may fail in the following cases:

- The driver is not authorised to dispense from the selected controller - The site operator must authorise the driver to dispense from this controller (see web-app manual).
- The controller is not registered in the same site as the current driver - Drivers can only connect to controllers registered in their respective site.
- The controller is not updated to the latest available firmware version - The controller firmware is not compatible with the application version. It is necessary to connect to the panel as a manager to update the firmware (see Chapter 3.4.2).
- The app must be updated to the latest version available (see Chapter 1.1).
- Generic connection error - due to a BLE communication problem, the connection cannot be completed. Make sure not to turn off the smartphone monitor, close the application during the procedure and stay near the fuel dispenser.



- There are no vehicles available to dispense. This could have various causes:
 - The telephone cannot contact the CLOUD to download the updated list of vehicles (check internet connection).
 - (only if the “fuel economy” add-on is active) The current driver is not enabled to dispense to any vehicle in the site (check driver settings).
 - (only if the “fuel economy” add-on is active) There are no vehicles associated with the current controller (check vehicle/controller associations from B.smart web-app).
 - There are no vehicles registered in the site.

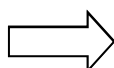
Warning

You cannot dispense to any vehicle from this pump

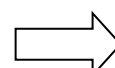
CLOSE

If the telephone is correctly connected to the controller:

(optional) Only in the case of a twin pump controller, you are asked to select which pump you want to dispense.

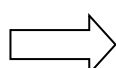


The page for creating a new refilling operation is opened:



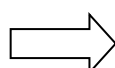
OPTIONAL request

This page appears if the operator has enabled the 'Use registration number' option on the control unit. A registration number must be selected before continuing.



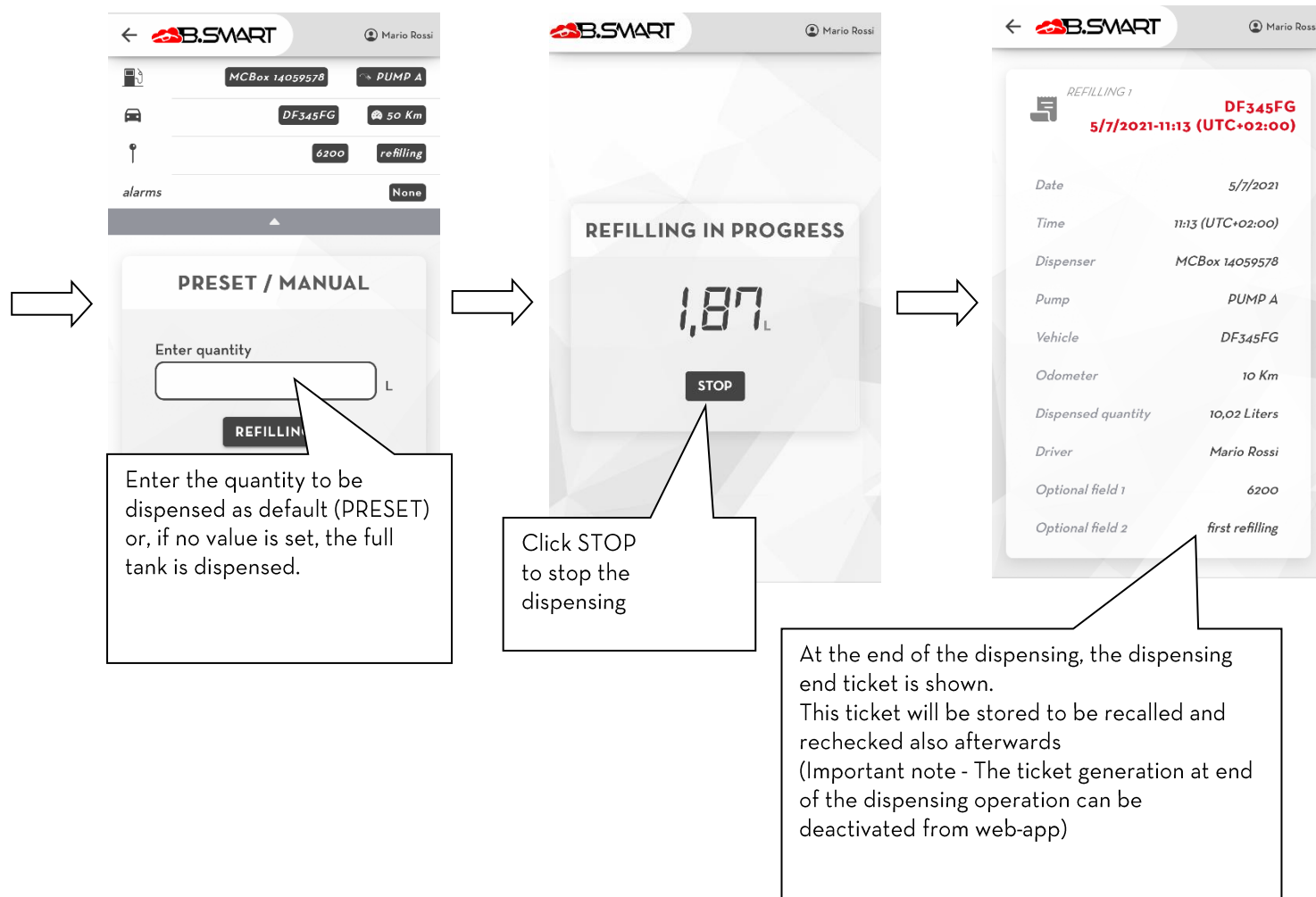
OPTIONAL request

Odometer insertion, this page is shown only if the manager has enabled the use of the odometer from WebApp.



OPTIONAL request

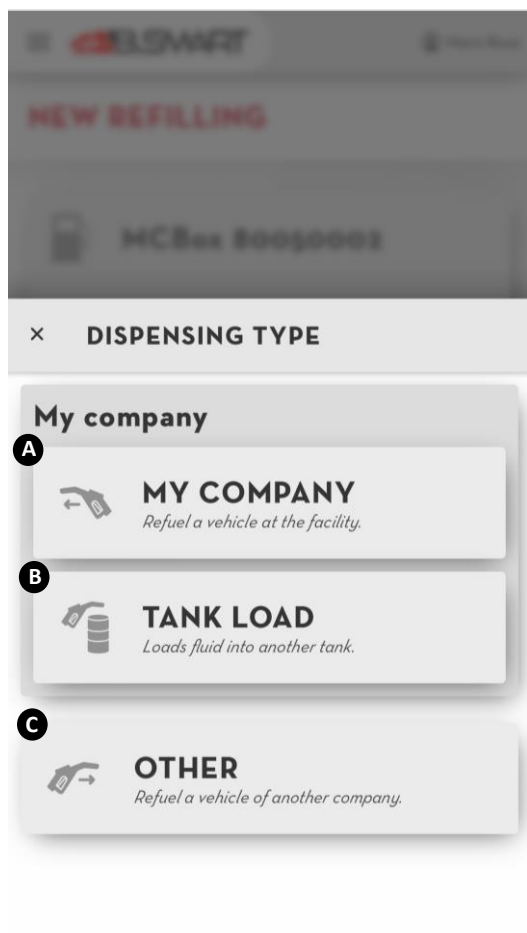
This page appears if the site manager has enabled the 'Optional Fields' option on the webApp. Two additional non-mandatory fields are activated to enter additional information on the refilling operation.



CAUTION

- Do not move away from the controller during the new refilling procedure creation to avoid losing the BLE connection.
- If the phone loses the Bluetooth communication and disconnects from the controller before the end of the dispensing then the ticket is not generated.
- In order to download and use the 'registration numbers' uploaded into the system, it is mandatory that the phone is connected to the internet while it is connected to the dispenser.

3.1.2. Maply



One of the suggested operations can be performed if the Maply add-on is activated and the third-party dispensing and transfer function is enabled on the device, when the device is connected via the Mobile app:

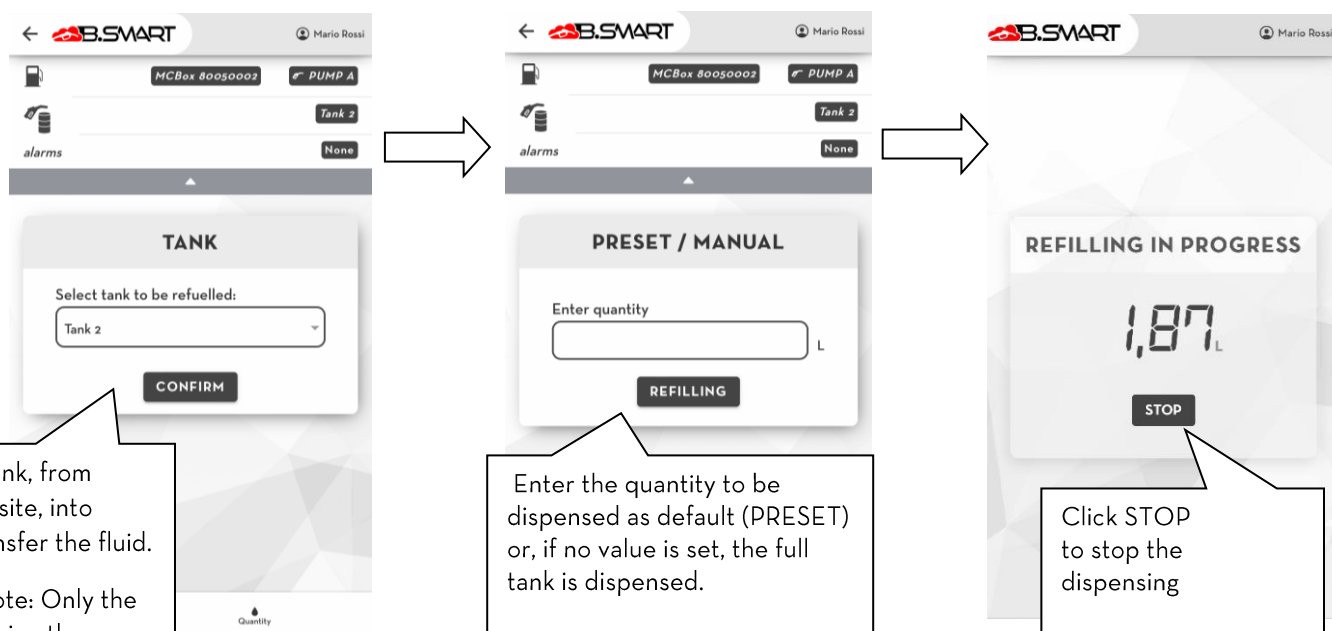
- A.** Filling vehicles/registration numbers of the site (Chapter 3.1.1)
- B.** Loading fluid from one tank to another (Chapter 3.1.2.1)
- C.** dispensing to a vehicle registered to a third-party company (Chapter 3.1.1.2)

3.1.2.1. Tank load

This function is available on driver profiles enabled for the loading activity and if the Tank Watchdog add-on is active at the site.

Loading is only possible between tanks containing the same fluid.

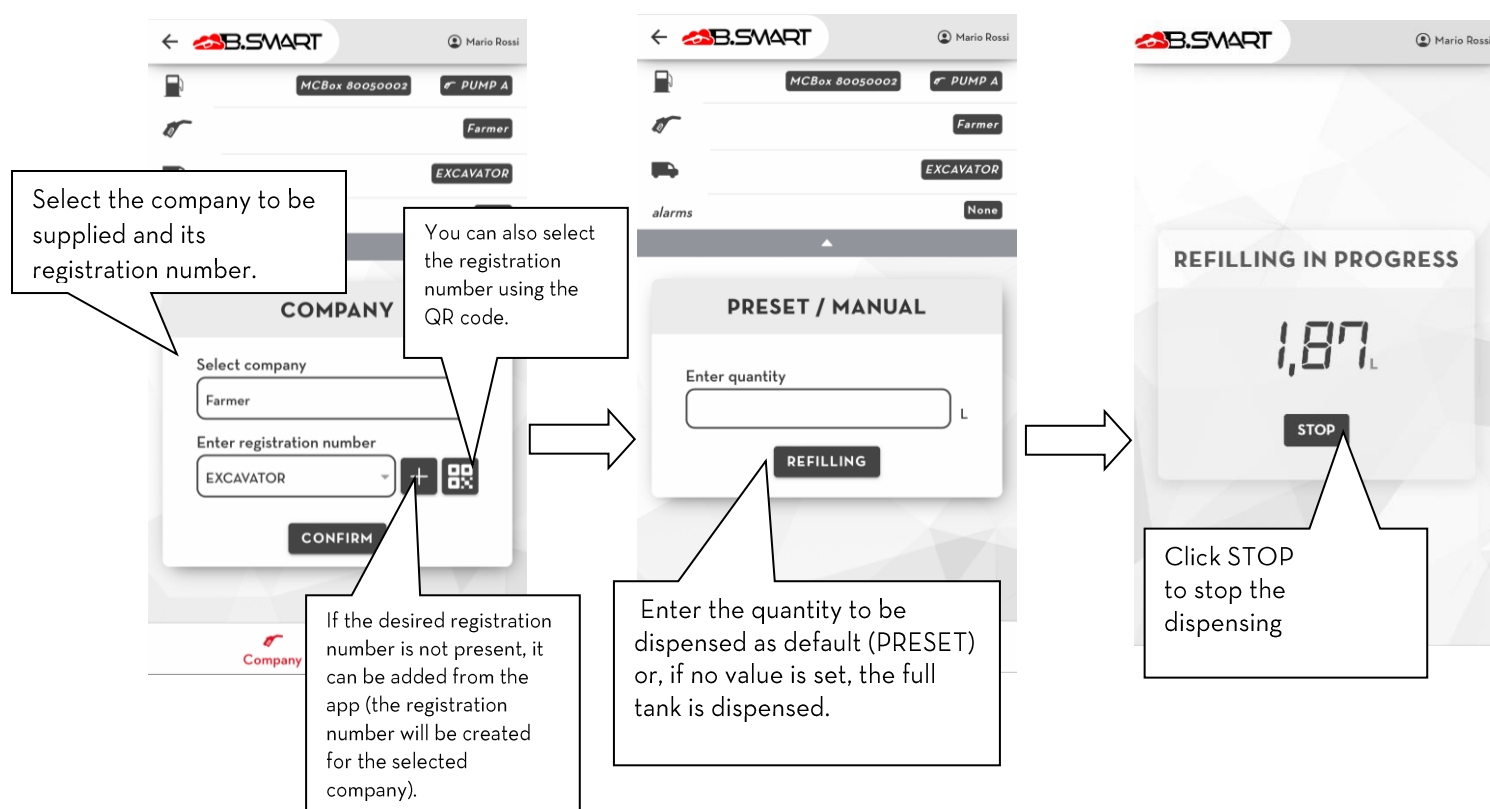
Loading is only available from devices with an associated tank.



3.1.2.2.DISPENSING OPERATION FOR VEHICLES REGISTERED TO THIRD-PARTY COMPANIES

The following configurations must have been made by the site operator to enable dispensing to a third-party vehicle:

- the management of vehicles registered to third-party companies must be active (configurable in the Maply add-on preferences)
- the “Enable tank loads and dispensing to companies” function must be active on the device (configurable from the web app in device configuration)
- the driver who connects to the device must have permission to make dispensing operations to third-party companies (configurable from the web app in the driver's master data)



CAUTION:

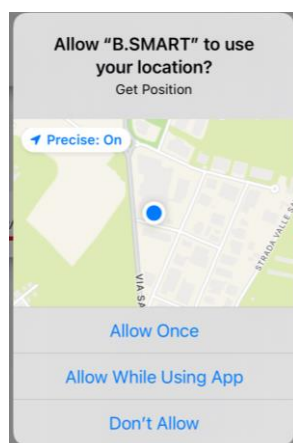
- An internet connection is required to create new registration numbers from the mobile app
- Companies cannot be created via the mobile app. Dispensing will not be possible if no company exists.

3.1.2.3.DISPENSING GEO-LOCALISATION

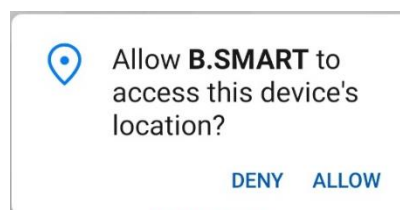
After activating the Maply add-on, the application geo-localises every dispensing operation made by every driver on the site.

If the mobile device cannot detect the GPS position, be sure to:

- granted the correct permissions to the app:
 - If you use the app on an iOS phone, you will be prompted for permission to use the device's location the first time you connect to a fuel dispenser:



- If using the app from an Android phone, you will be prompted for permission to access the device location the first time you start the app:

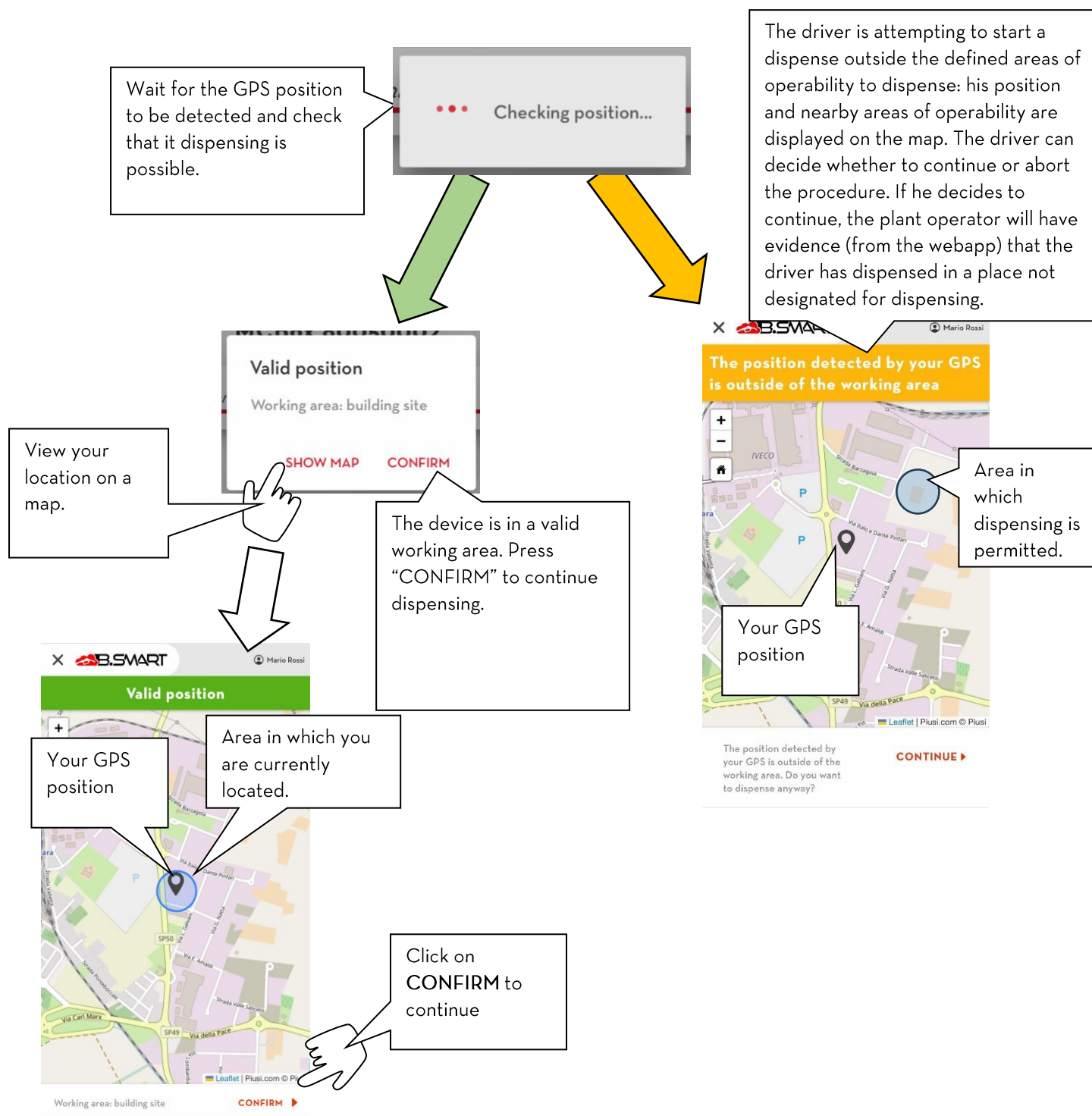


- activate the geo-localisation function on your mobile device

3.1.2.4. GEOFENCING OPERATIONS

If using a device installed on a continuously moving vehicle, the plant operator may want to define areas in which to dispense and have evidence if the driver dispenses outside these areas. These areas called 'working areas' are created by the plant operator via a web application.

If the option '**Report dispensing outside operability areas**' in the configuration of the dispenser is activated, the following GPS position check procedure is started when connecting to a device:



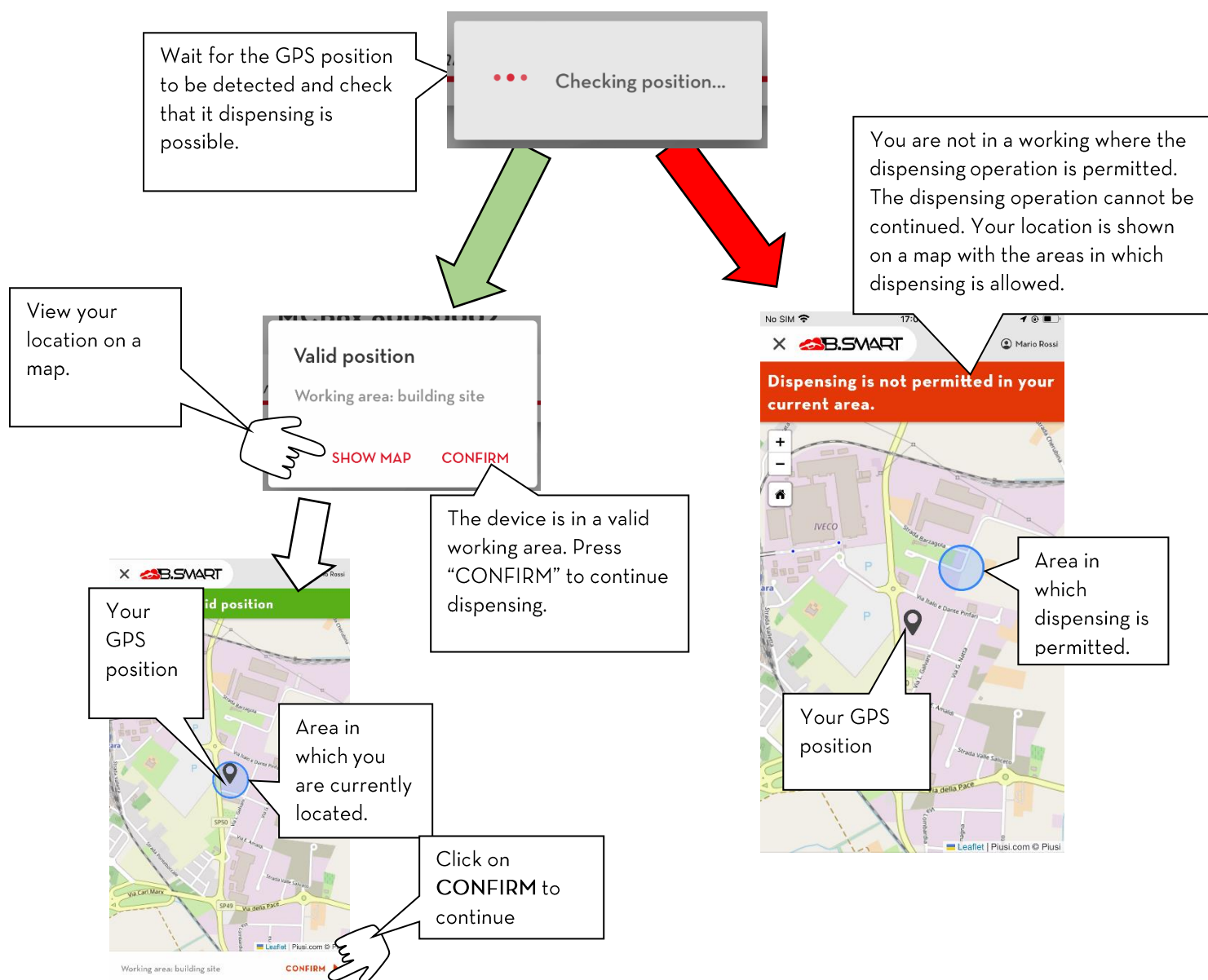
CAUTION:



If the phone from which a dispense is being started has its GPS switched off or is in an area without satellite coverage, if the 'Report dispensing outside areas of operation' option is active the driver will be able to choose whether to interrupt the dispense to check the GPS status or to proceed anyway. If he decides to continue, the operator of the installation will have evidence (from the webapp) that the driver has dispensed in a place not designated for dispensing.

If using a device installed on a continuously moving vehicle, the plant operator may want to define areas in which to dispense and have evidence if the driver dispenses outside these areas. These areas called 'working areas' are created by the plant operator via a web application.

If the option 'Block dispensing outside operability areas' in the configuration of the dispenser is activated, the following GPS position check procedure is started when connecting to a device:



CAUTION:**ERRORE GPS**

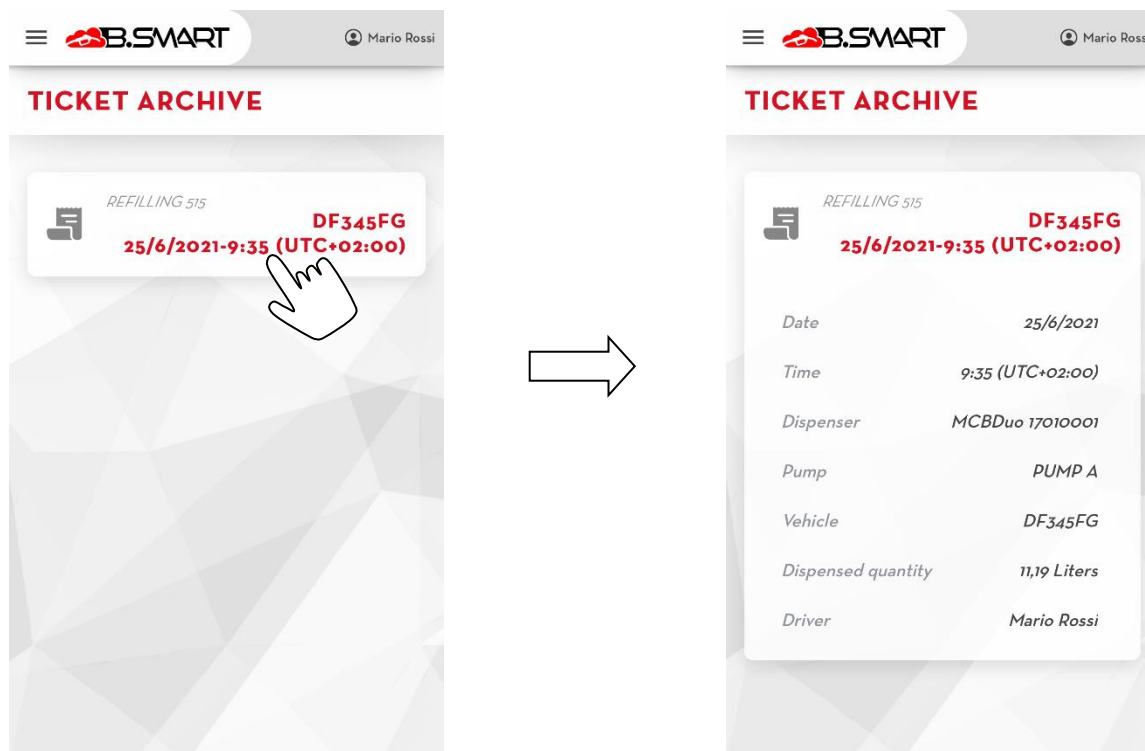
Non è stato possibile recuperare la posizione attuale, si prega di controllare se è attiva la geolocalizzazione.

CHIUDI

If the device is restricted to dispensing only in working areas, geolocalisation must always be active on the mobile device so that a valid GPS position can be obtained, otherwise dispensing will not be possible.

3.1.3. Ticket archive

This displays a list of all receipts generated at the end of each dispensing operation made by the telephone. Press the ticket to read the dispensing details.



3.1.3.1. Notification dispensing to other companies

If the Maply add-on has been activated and the “Notification dispensing to other companies” function is enabled in the preferences, a button will appear in the generated receipt of each dispensing operation to a third-party company, allowing you to send an email notification to the concerned company.

NOTIFICATION TO THE COMPANY

The content of the email will follow the configured template of the web app site manager (in the preferences section of the Maply add-on).

This can be done either from the end receipt or from the receipt archive.

- Email recipient field. It will be pre-filled if the company already has an email configured and can be edited by the driver.
- Note field (if enabled in Maply add-on preferences): additional message to be sent in the body of the e-mail.

3.1.4. Fuel economy module

Fuel Economy is an add-on (that can be purchased separately) for the advanced management of the fleet of vehicles of your site (calculating fuel consumption) and for monitoring each driver by limiting the quantity that can be delivered, the working time and vehicles that can refuel.

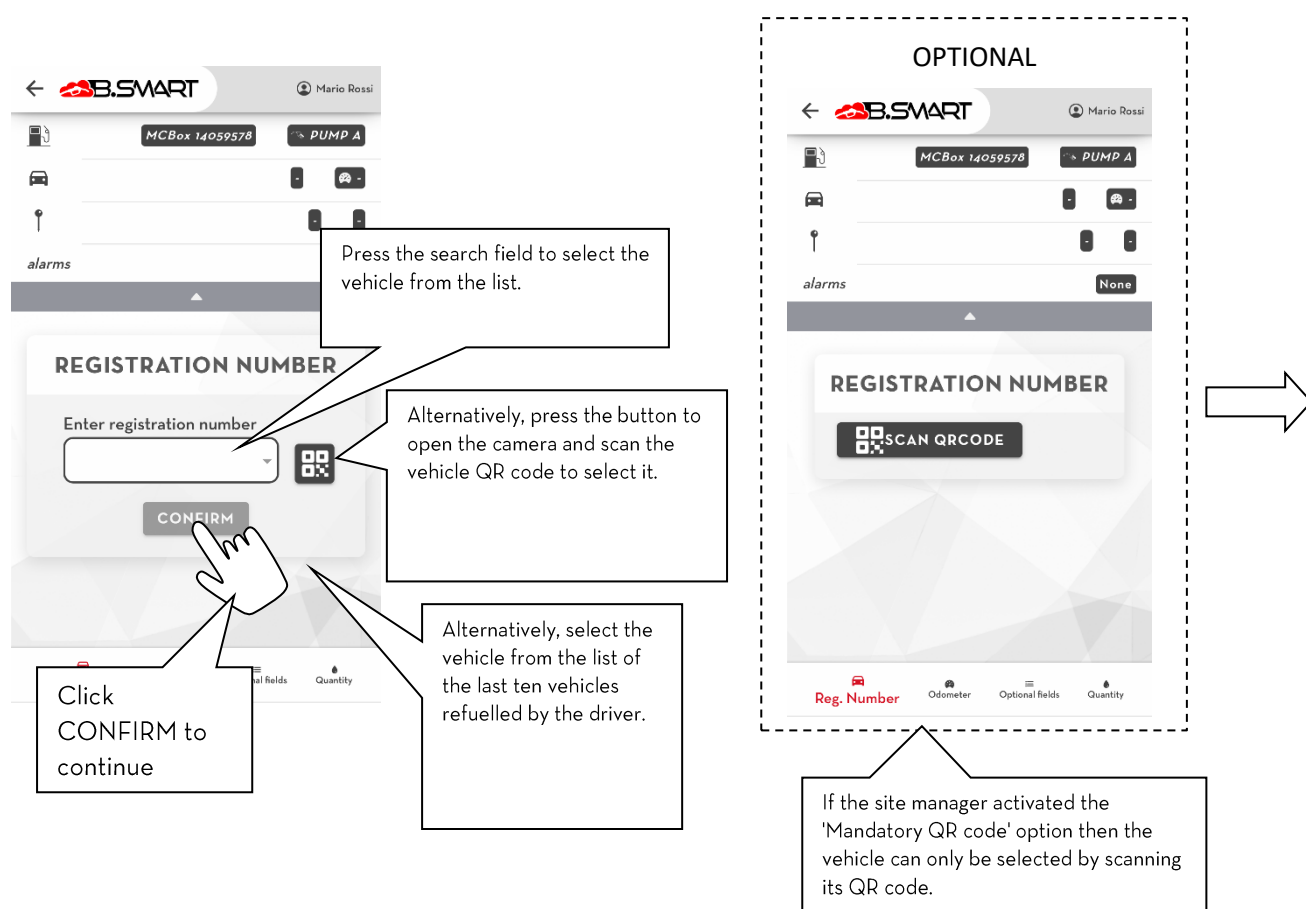
The following limits are applied to the application after activating the add-on (from B.Smart web application):

- It is no longer possible to add new vehicles (Registration Numbers) via a phone. The fleet is managed by the B.smart web application.
- Whenever you want to start a new dispensing operation, you must always select the vehicle you want to refuel (by manually selecting it from a list or scanning its QR code).

The new features are illustrated in the following chapters.

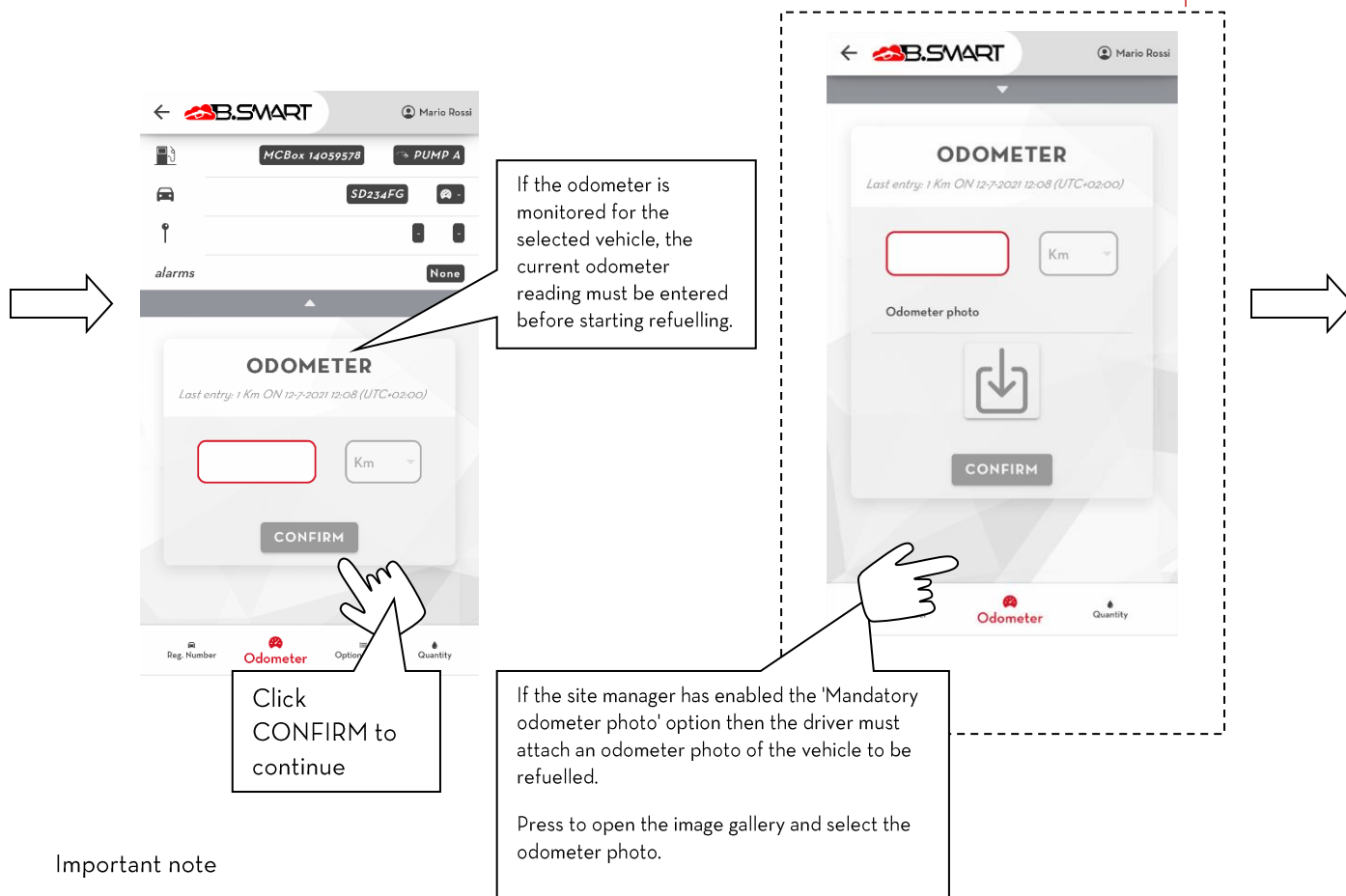
3.1.4.1. Dispensing

The changes in the new dispensing operation creation flow after activating the add-on are illustrated below. The procedure for searching and connecting to the fuel dispenser is the same as before and described in Chapter 4.1.



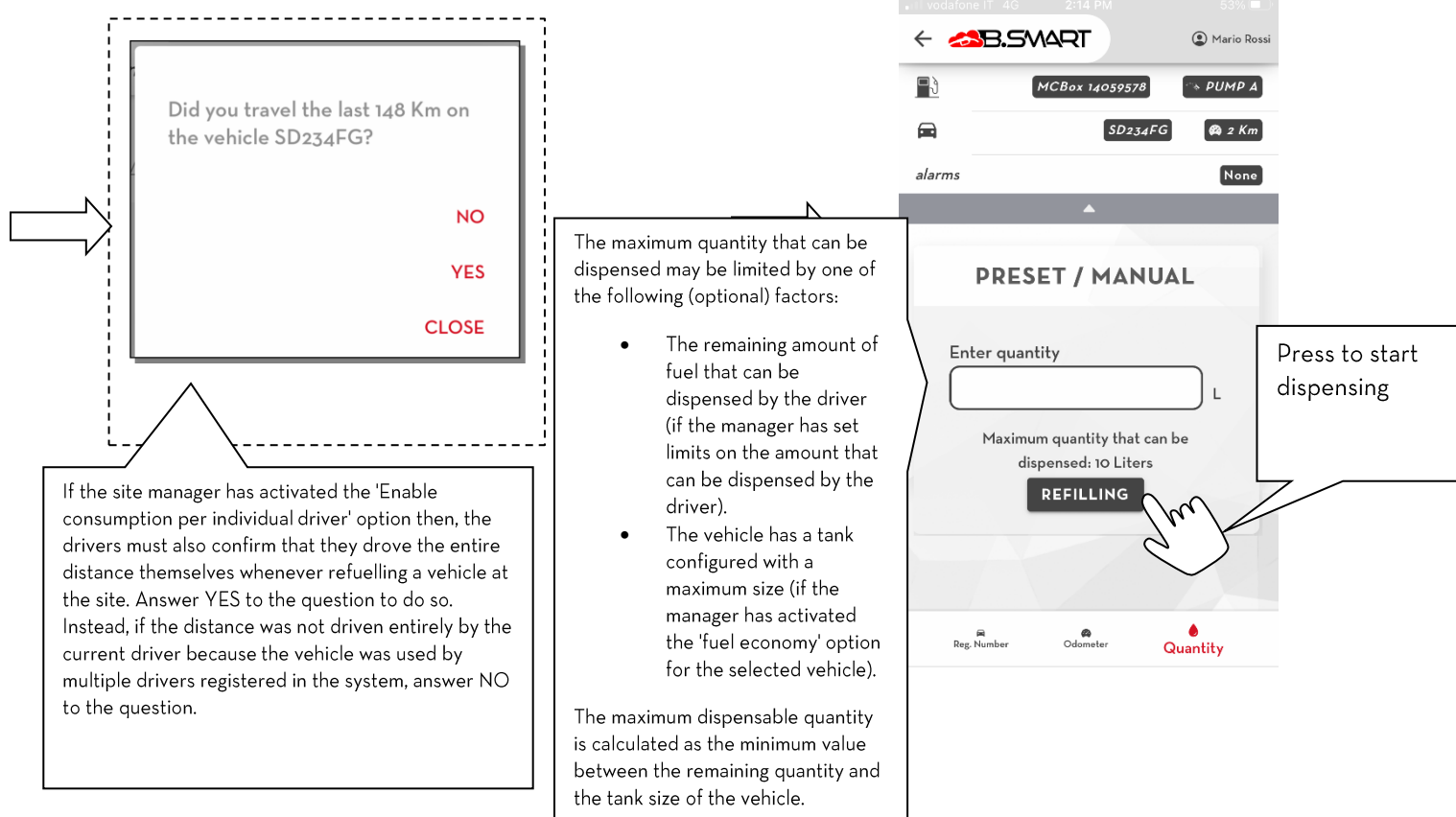
Important note

- The site manager can limit the driver to refuel a limited number of vehicles of choice (see the B.smart web app manual) so drivers can only select the vehicles for which they are enabled (by default each driver can refuel all vehicles of the site).
- You need to permit the app to use the camera of your phone to scan the QR code.
- It is not possible to dispense Adblue from pumps enabled to dispense on vehicles with the 'Fuel Economy' option active but without a configured Adblue tank



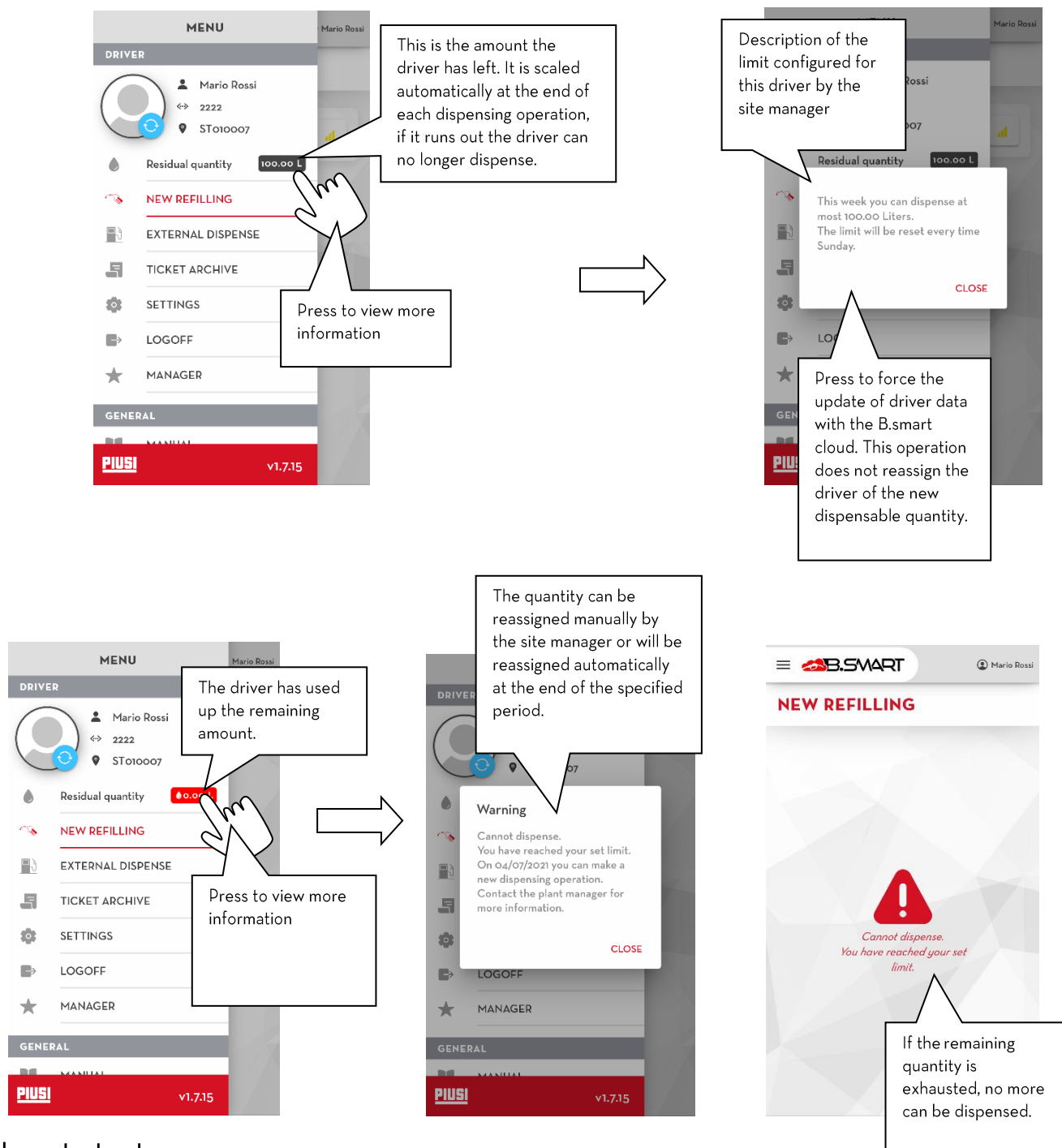
Important note

- It is always recommended to enter the real odometer reading for correctly calculating the vehicle consumption.
- If the 'Mandatory odometer photo' option has been enabled, the odometer photo must be taken before connecting to the controller.



3.1.5.1. Dispensable quantity limit

The manager (using the B.smart web app) can configure a maximum limit of the quantity that the driver can dispense from the site pumps over a predefined time. When the time expires, an additional dispensable amount is reassigned to the driver. If the quantity is exhausted, the driver will no longer be able to refuel at any of the site fuel dispensers. The driver's home page contains the following information:

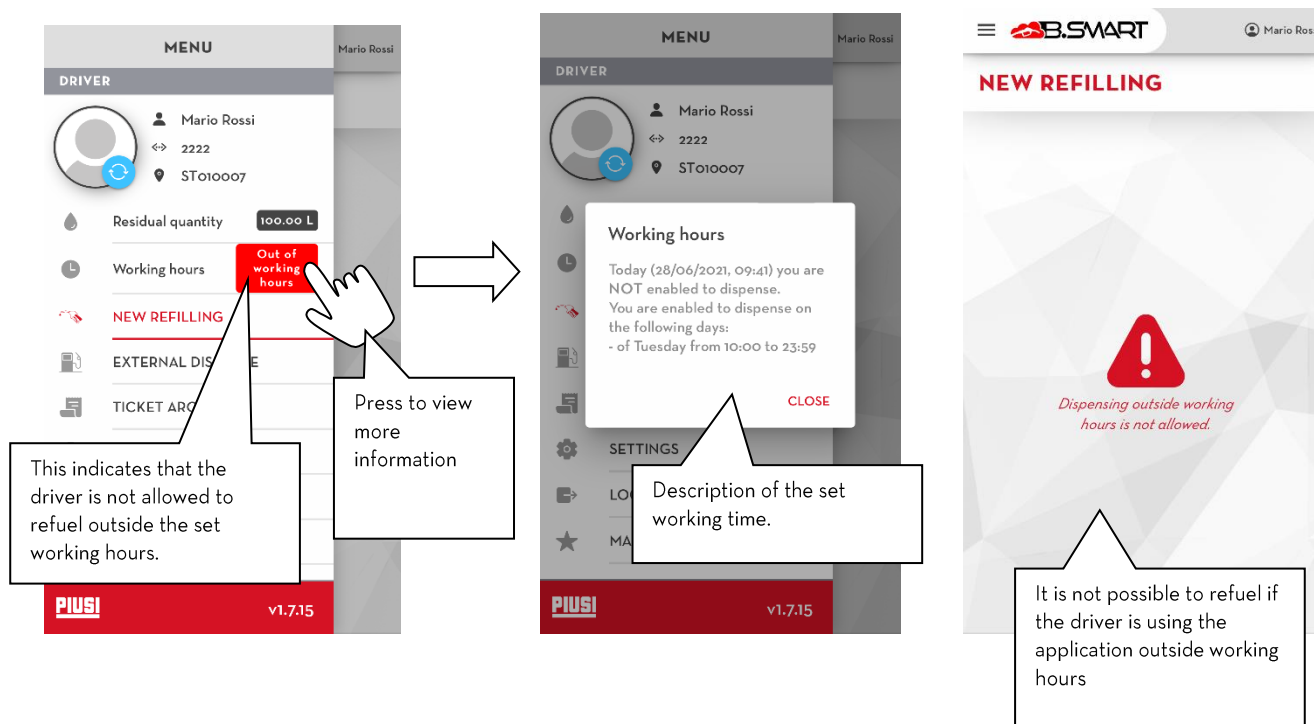
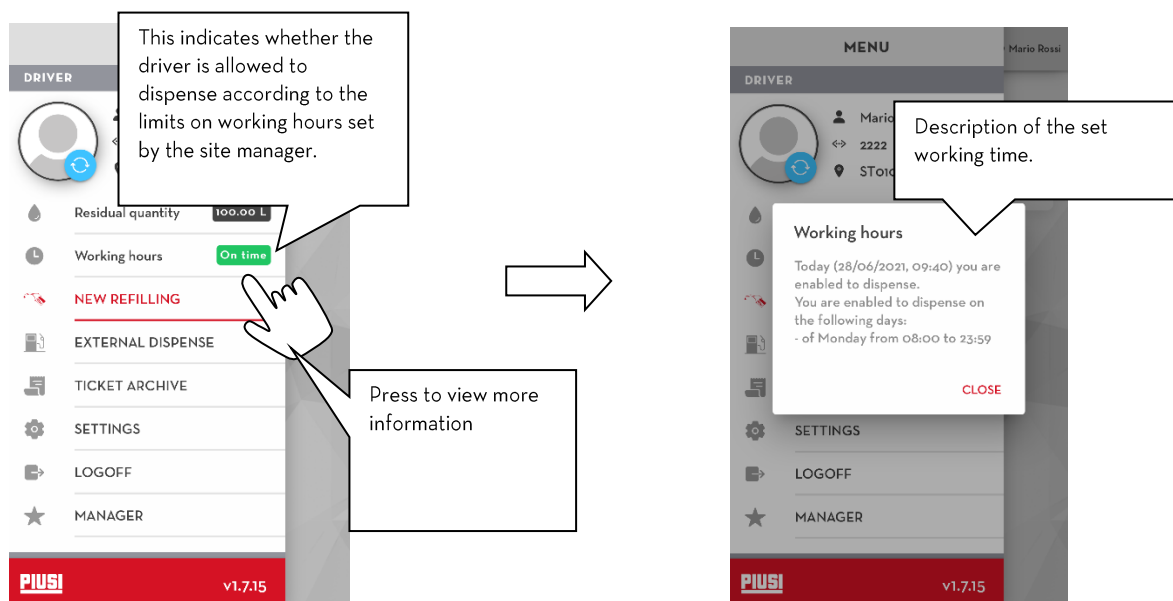


Important note

- The remaining quantity is correctly synchronised with the cloud only when there is a stable connection to the Internet

3.1.5.2. Working time

The site manager (using the B.smart web app) can set a working time for each driver to limit refuelling to certain times of the day or specific periods of the year.



Important note

- Working time information is updated whenever the driver opens the application and has a stable Internet connection.

3.1.5.3.External Dispensing

Each driver can record refuelling operations made in fuel stations off the B.smart site using the appropriate form. Follow the instructions on the driver main page:

EXTERNAL DISPENSE
Fill in the form to insert a new external dispensing operation

Date and Time
 28.06.21, 9:02 am

Vehicle
 [Dropdown menu]

Odometer
 [Text input] Km
Last entry: 0 Km

Fluid
 [Dropdown menu]

Did you refill the vehicle with ADBLUE? [Toggle switch]

Quantity
 [Text input] L

Cost
 [Text input] EUR

External station
 [Dropdown menu] [Add button (+)]

Additional information
 [Text area]

No photo of the enclosed receipt [Add button (+)]

SEND

Callout boxes:

- Enter the date and time of the operation. It is not possible to enter a dispensing operation in the future.
- Select the vehicle from the list. The drivers can only select the vehicles for which they are authorised.
- If the site manager has activated the 'External stations' option, it is mandatory to indicate in which service station where the refuelling operation was performed.
- If the external station is not present in the list, you can insert a new one by pressing the button.
- You can attach up to two photos of the refuelling operation receipt. Attaching photos is not mandatory.

↓

B.SMART

Mario Rossi

EXTERNAL DISPENSE

Fill in the form to insert a new external dispensing operation

Date and Time

28.06.21, 9:02 am

Vehicle

4321

Odometer

50

Km

Fluid

Disel

Did you refill the vehicle with ADBLUE?

Quantity

100

L

Cost

150

EUR

External station

Agip

+

Additional information

No photo of the enclosed receipt

+

SEND

Select the 'Fluid', i.e. the fuel used to refuel the vehicle.

The field is only visible if the 'tank watchdog' add-on is active.

If the vehicle was filled with ADBLUE, activate the option

Enter the last odometer reading, possibly a higher value than the last entered value.

Indicate how many litres/gallons were dispensed. The quantity must not exceed the maximum tank size of the vehicle.

It is possible to write a textual note to be attached to the dispensing operation.

This field is not mandatory.

After filling all mandatory fields, press to save the external dispensing operation to the cloud.

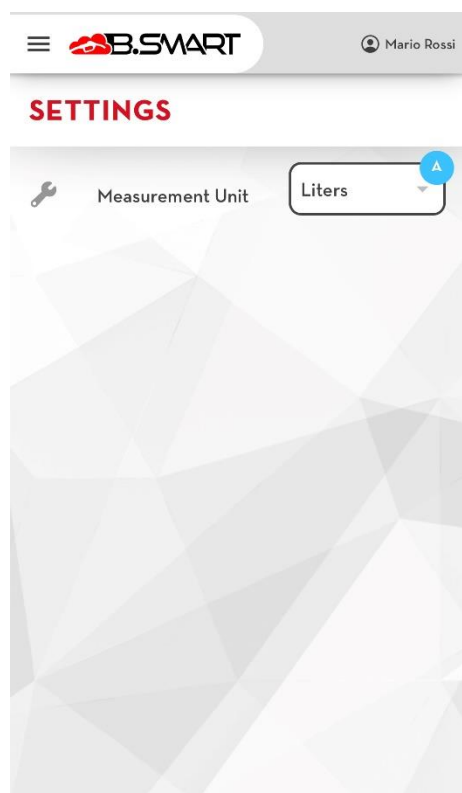
Caution

- The phone must be connected to the Internet to add a new external dispensing (refuelling) operation.
- The phone must be connected to the Internet to add a new external service station.

3.1.5.4. Configuration

In this section (visible only if the “fuel economy” add-on is active) it is possible to change the settings of the user using the B.smart app.

In detail:

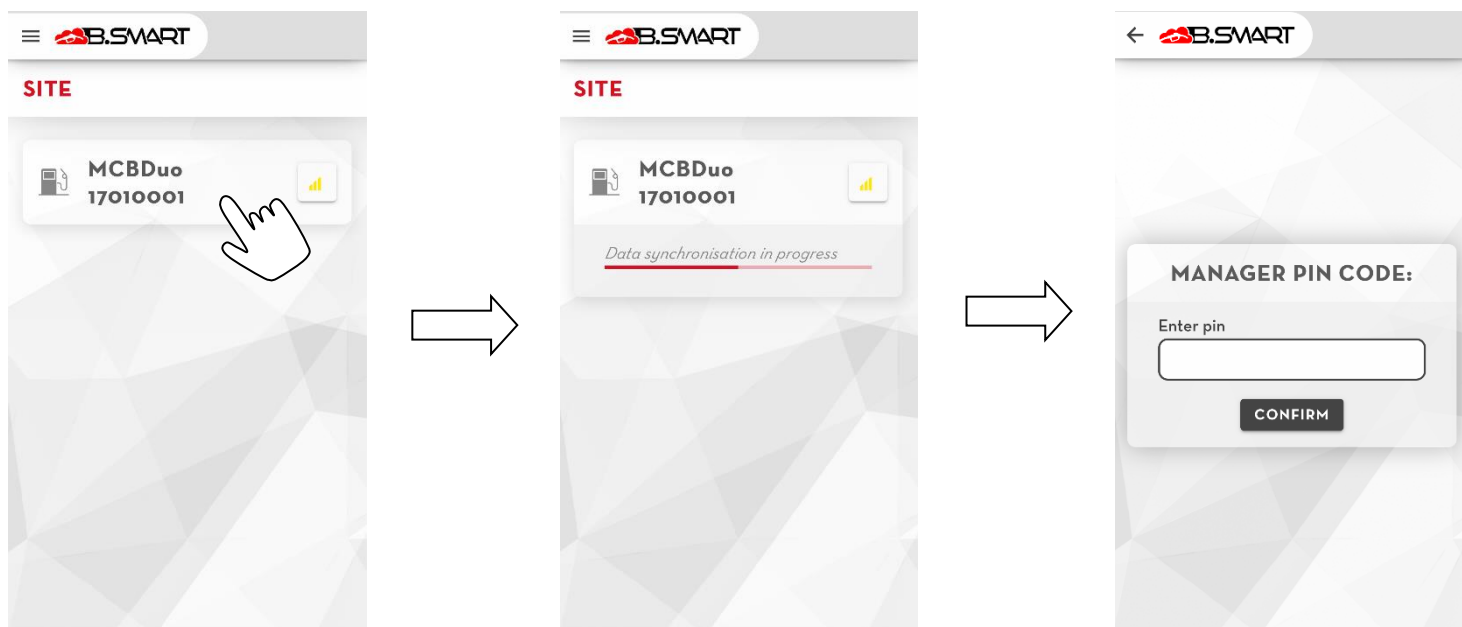


- a) **Unit of measurement** with which you want to display the remaining quantity and the maximum dispensable amount.

4. Manager login

Press the “MANAGER” menu item in the navigation menu to go to this section.

A BLE scan of the controllers is run as soon as this section is opened (see Chapter 4.1).



Press the desired controller to connect. The site manager can connect to the controllers by logging in with a special PIN code (the code can be different for each controller and is configured by web-app; default code: 123456) and can perform site management operations through advanced privileges (see Chapter 4.4).

If the manager connects to a controller that:

- has not yet been associated with an site: the discovery procedure is run (see Chapter 4.2).
- has the corrupted memory and either or both error codes A32 or A33 are present: the recovery procedure is automatically started (see Chapter 4.2.1).

4.1. Controller scan

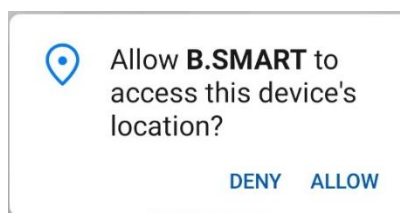
A BLE scan is automatically performed to detect the controllers near the telephone as soon as you open “New Refilling” section (see Chapter 3.1.1) or the “Manager Login” section (see Chapter 4).

Caution: The following prerequisites must be met to scan and connect to the B.Smart controllers:

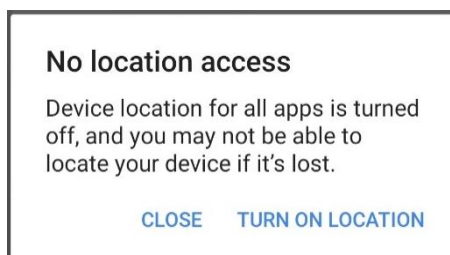
- Switch on the Bluetooth module of the telephone.



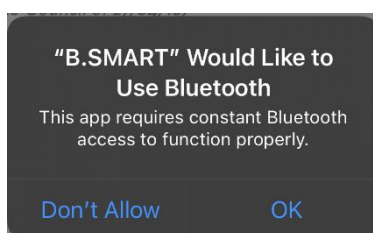
- (Android only) Allow location access



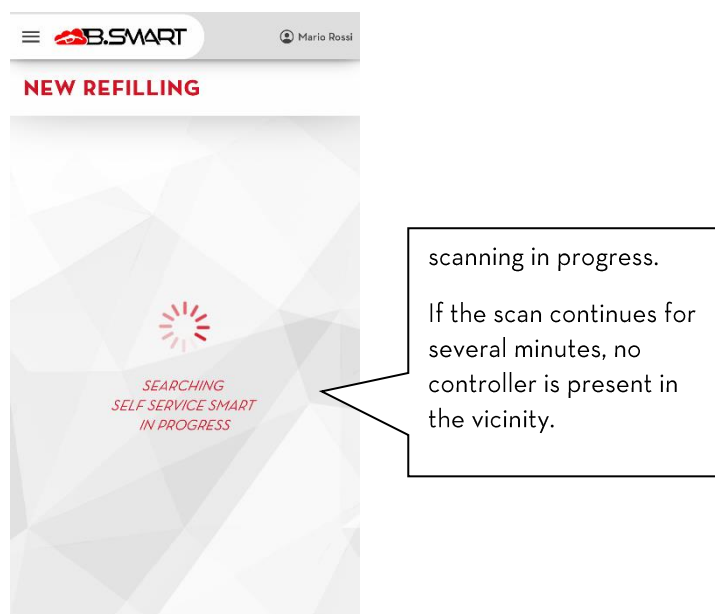
- (Android only) Activate geolocation service



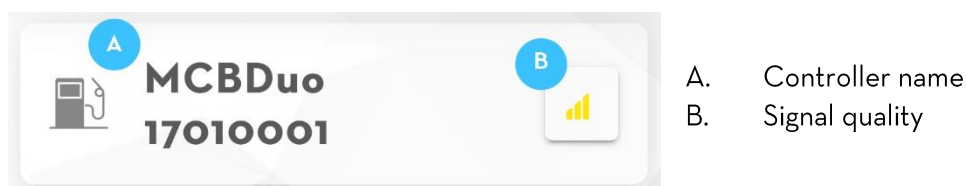
- (iOS only) Allow the application to use the Bluetooth function of the telephone.



If all prerequisites are met, an automatic scan is started:



The controllers detected during the scan are added to the list and appear as follows:



IMPORTANT NOTE

- A fuel dispenser is not detectable if a telephone is connected at that time

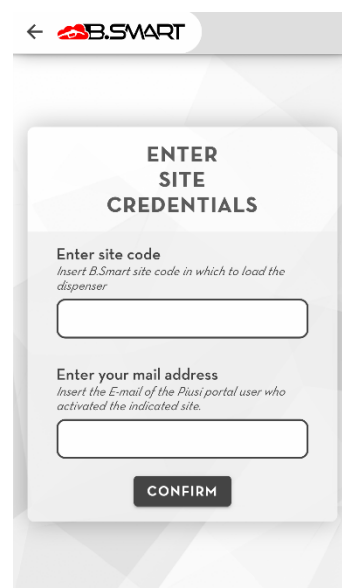
4.2.Controller discovery

The procedure can be used to register a newly purchased controller in the B.smart cloud site.

As soon as a connection to an unregistered controller is established, the Manager will be asked to:

- Enter the **code** of the destination site where the controller will be used.
- Enter the **e-mail address** of the portal user who registered the product code of the controller on the PIUSI portal.

The site will be recognised if the entered data are correct:




Press **NEXT** to end the procedure and register the controller in the site. The controller data description page is loaded (see Chapter 4.3).

It is always recommended to calibrate the pump(s) of the controller before starting to dispense (see Chapter 4.4.1).

If you want to add a “Piusi 3000 Supreme” pump to your site, you must have purchased and activated the “SUPREME discovery” add-on in B.SMART (the add-on must be activated for each Piusi 3000 Supreme pump that you want to add).

The following error appears if an attempt is made to detect a “Piusi 3000 Supreme” pump without first activating the add-on:

CAUTION:

- To upload a fuel dispenser in the cloud it is mandatory to ensure an internet connection for the entire duration of the discovery process;
- It is not possible to upload the same controller on different sites;

4.2.1. Data recovery

The data recovery procedure allows you to return a controller to its operating status (i.e. to the last configuration available in the cloud) following the appearance of one of the following faults:

- The controller memory is corrupted (error code: A32 or A33):

You must restore the factory configuration of the controller before proceeding with the recovery. When connecting as manager to the controller, you are prompted to perform a reset to the factory data:

Warning

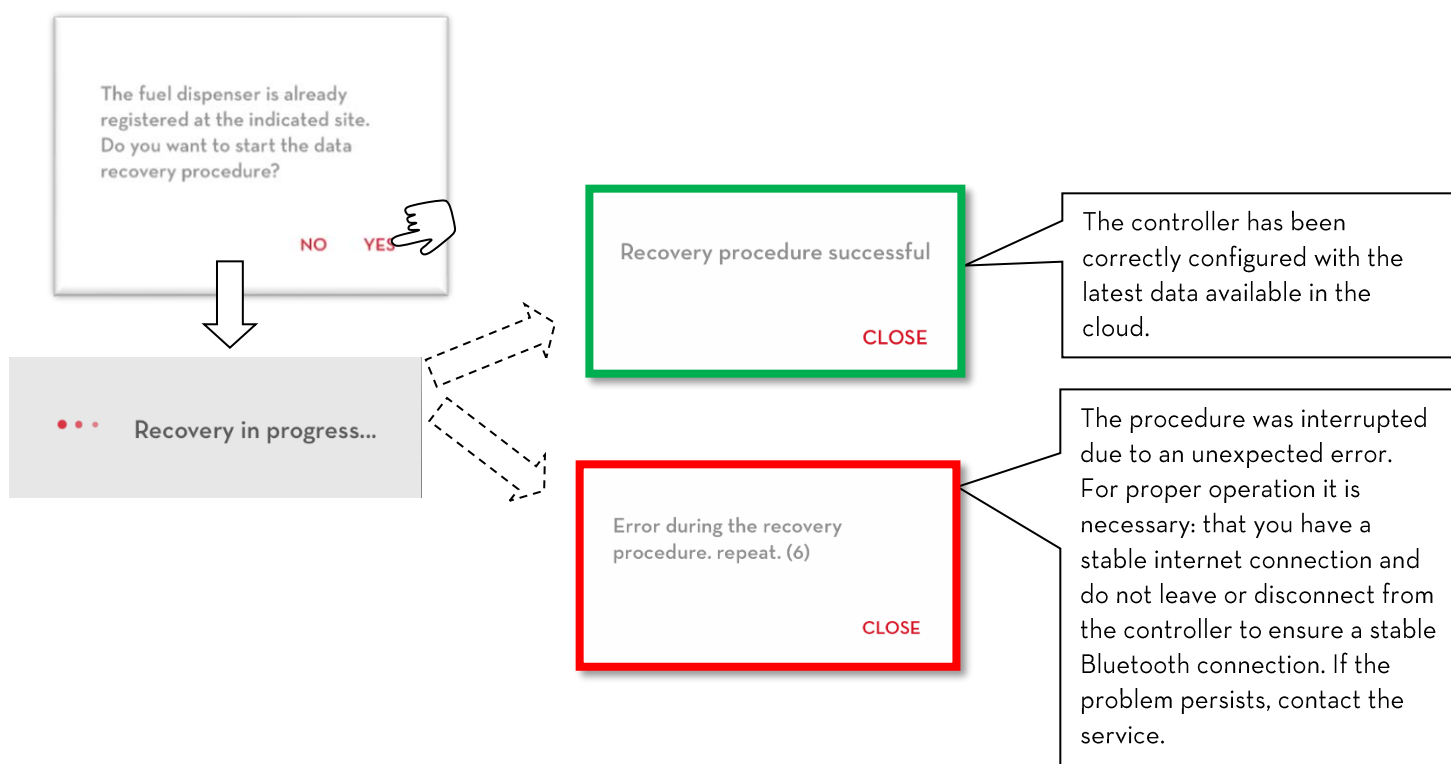
Controller memory corrupted.
Enter the authentication
credentials to reset to the factory
data.

CANCEL
START

Once the controller data are reset, reconnect to the panel as manager, repeat the discovery procedure and when the system automatically detects that the controller is already present in the indicated site you are prompted to start the recovery procedure.

- The panel discovery procedure failed or was suddenly interrupted:

Repeat the discovery procedure (see chapter 2a), when the system automatically detects that the controller is already present in the indicated site you are prompted to start the recovery procedure.
schema della procedura:



CAUTION:

- Only the site manager is allowed to recover a controller;
- A stable Internet connection must be guaranteed for the duration of the recovery process;
- Do not leave the panel after starting the procedure;
- Do not turn off the phone or close the application during the procedure;
- At the end of the procedure, for the proper functioning of the system you need to:
 - Repeat the OCIO detection procedure (if present and connected);
 - Perform a quantity adjustment on the virtual tanks (if any).

4.3. Summary screen

Once the connection has been established, a page opens showing the general information on the controller and its operating status:



RESET

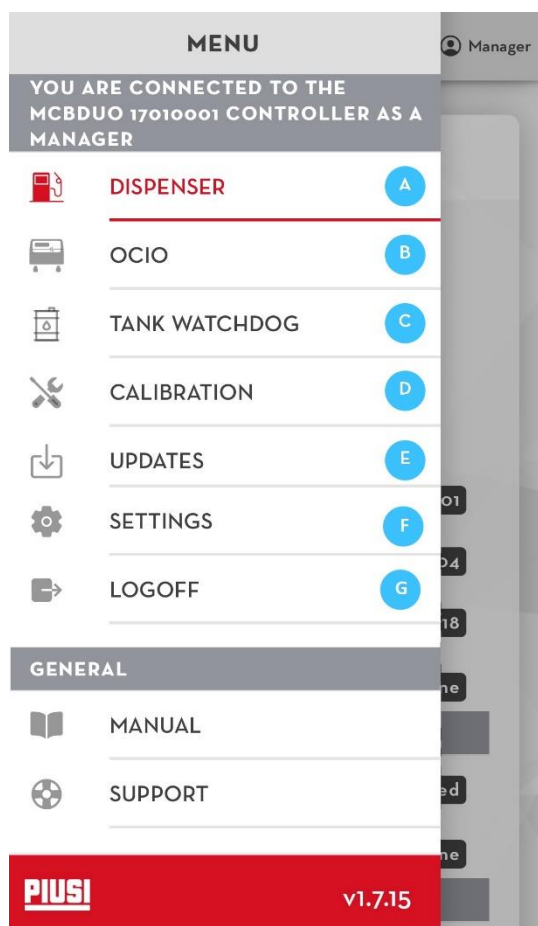
It is possible to ask the system manager to be able to reset the control unit.

See chap. 7

Synchronization (forced): Data synchronization between the PIUSI cloud and the phone is always active in the background. During normal use, if the internet connection is always guaranteed, it is not necessary to force the data uploading. The following procedure forces the execution of a normal data synchronization and must be used to test the correct communication between the phone and the controller and between the phone and the PIUSI cloud services.

4.4. Menu manager

Connect to the controller as manager (see Chapter 3) and press the button to open the navigation menu.



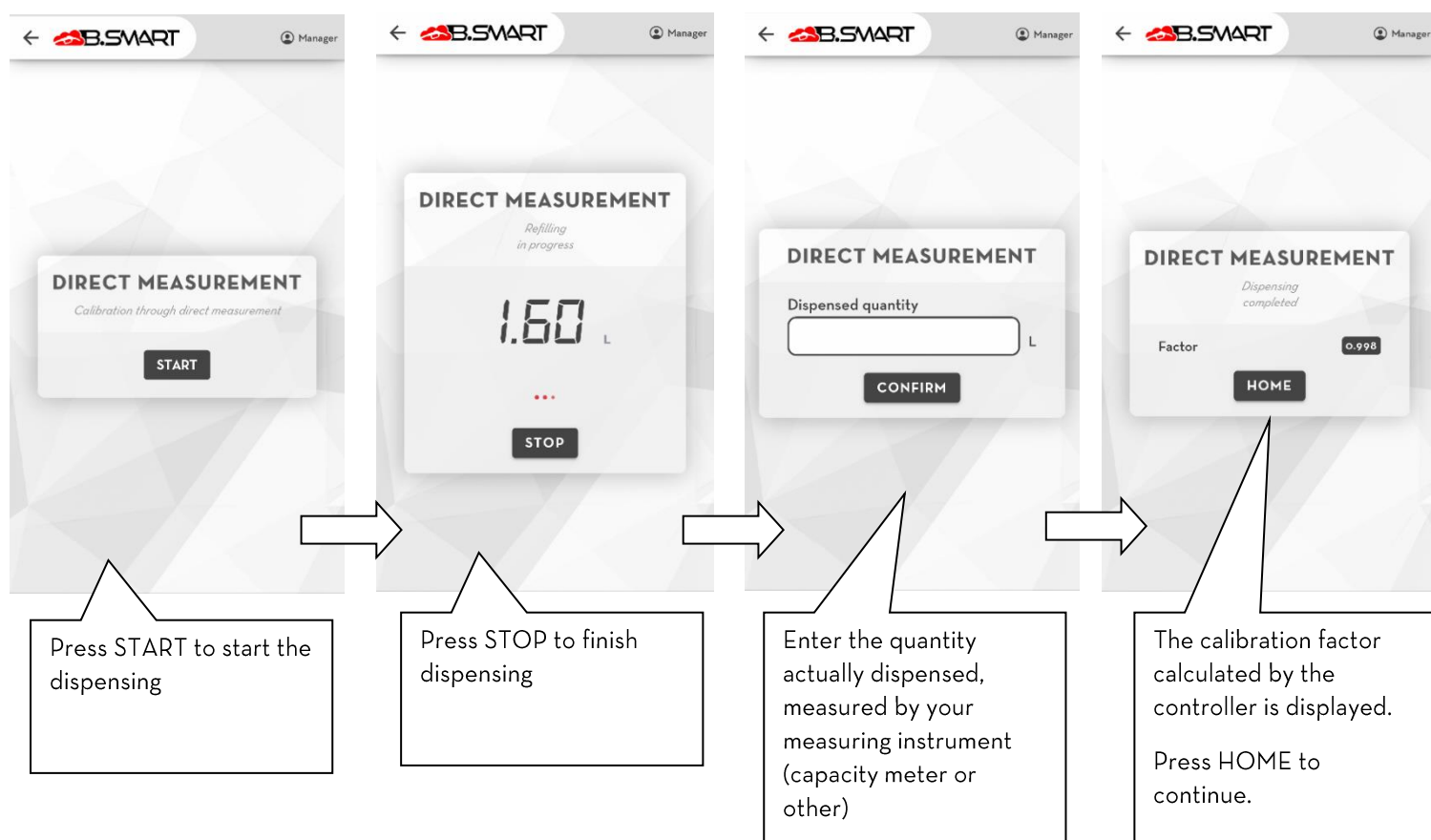
- A. **FUEL DISPENSER** - Go to the page summarising the controller status (see Chapter 4.3)
- B. **OCIO** - Section dedicated to the OCIO level sensors (see Chapter 4.4.4)
- C. **TANKS** - Section dedicated to real-time monitoring of configured tanks (see Chapter 4.4.5)
- D. **CALIBRATION** - Section for calibrating the pumps of the controller (see Chapter 4.4.1)
- E. **FIRMWARE UPDATES** - Section for downloading and installing the latest firmware updates available for the controllers (see Chapter 4.4.2).
- F. **SETTINGS** - section to configure manager settings
- G. **LOG OFF** - This interrupts the BLE connection between the controller and the telephone.

4.4.1. Calibration

The manager can calibrate the fuel dispenser pump(s) in this section. Calibration is used to correct dispensing errors. There are two ways to calibrate:



A. By direct measurement:



B. By manual input of the calibration factor:



← **B.SMART** Manager

CALIBRATION FACTOR

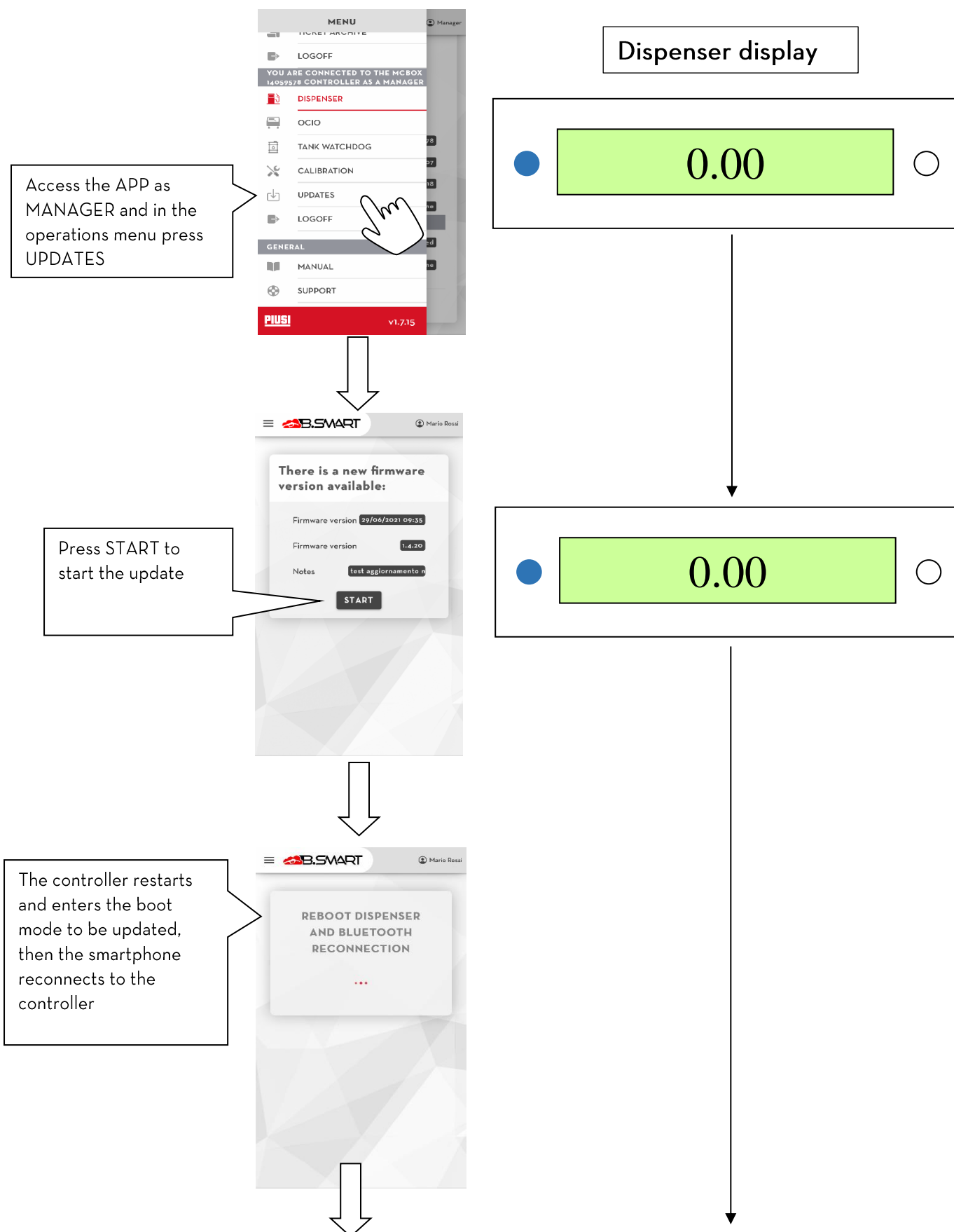
Current K factor 1.000

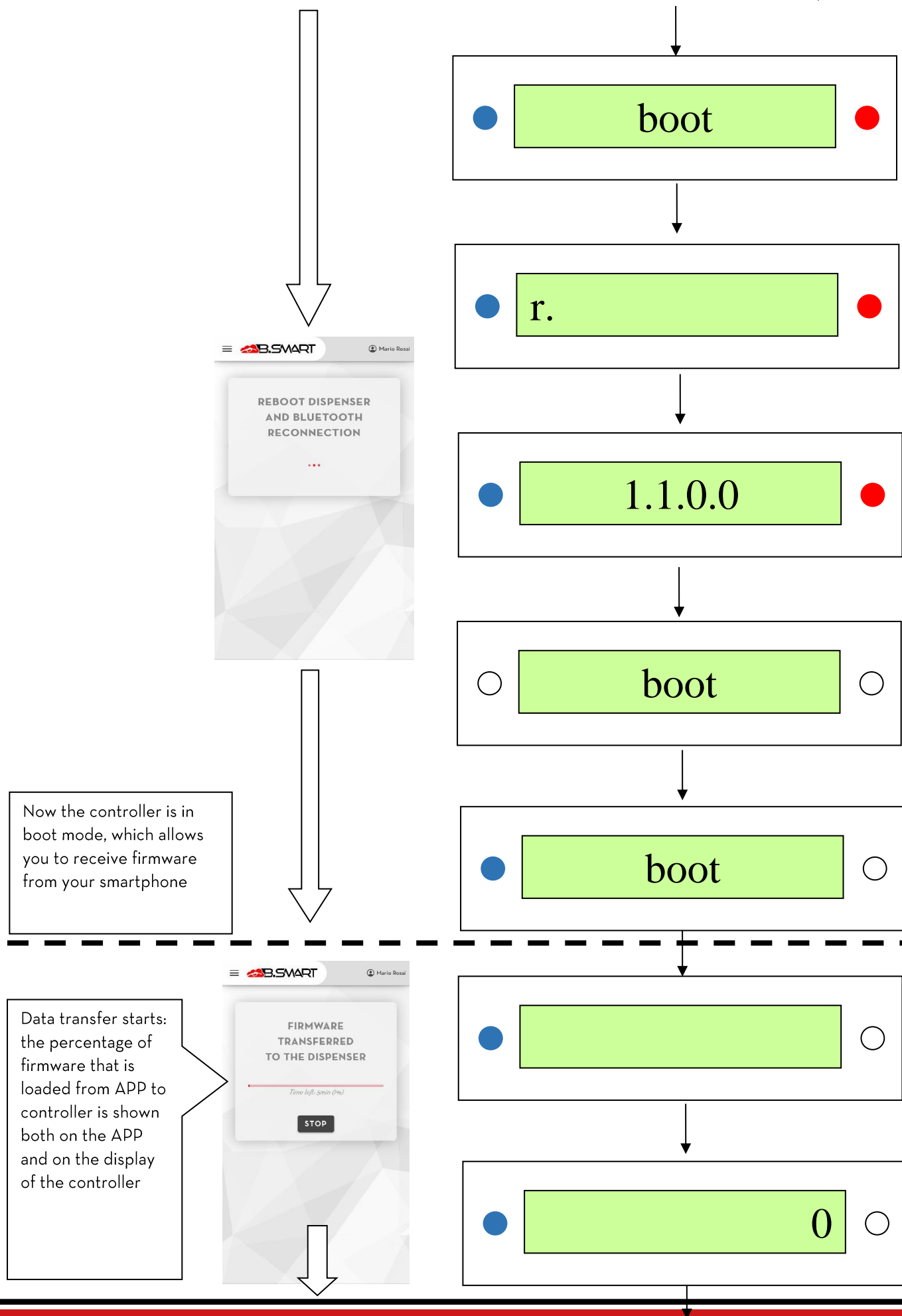
Factor

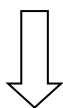
CONFIRM

Enter the calibration factor manually and press CONFIRM

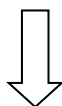
4.4.2. Firmware update







The percentage shown by the APP is also shown on the display of the controller



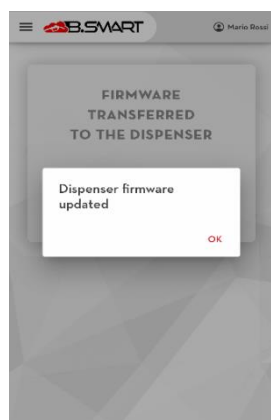
The firmware transfer can be interrupted at any time by pressing STOP

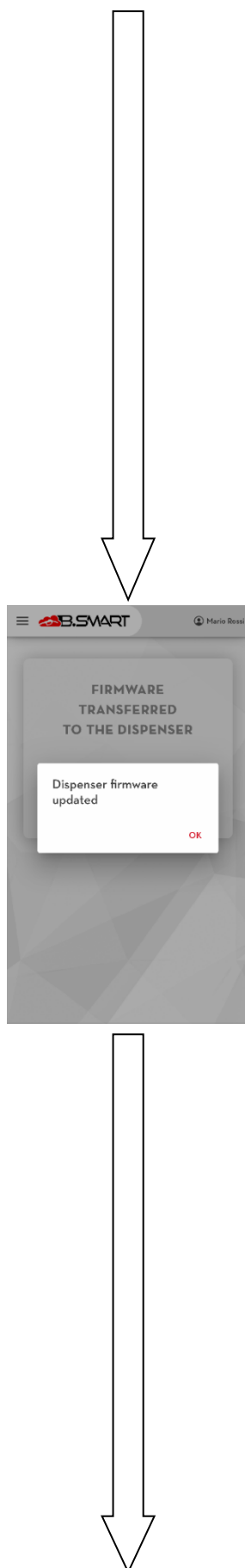


Firmware transfer from APP to controller



After all data has been transferred, the controller installs the firmware, restarts and connects to the smartphone

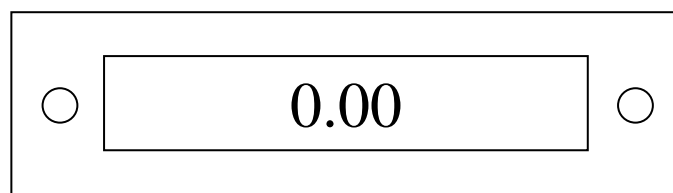
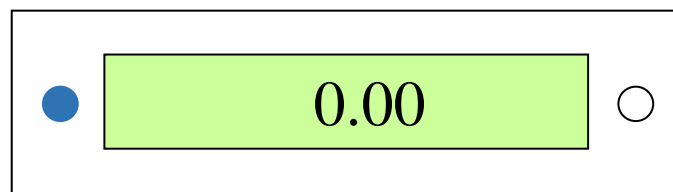
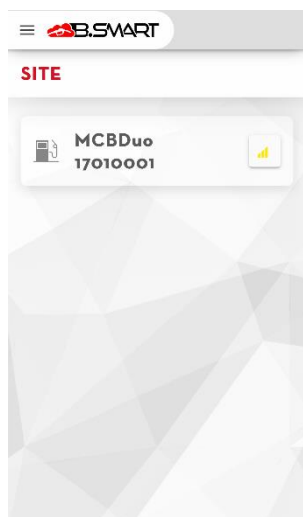
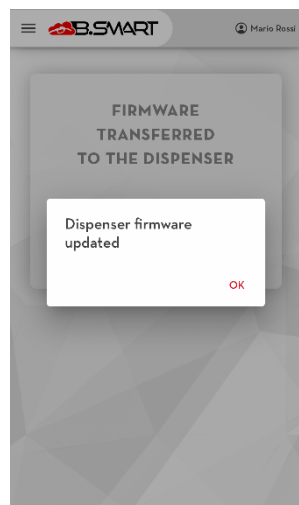




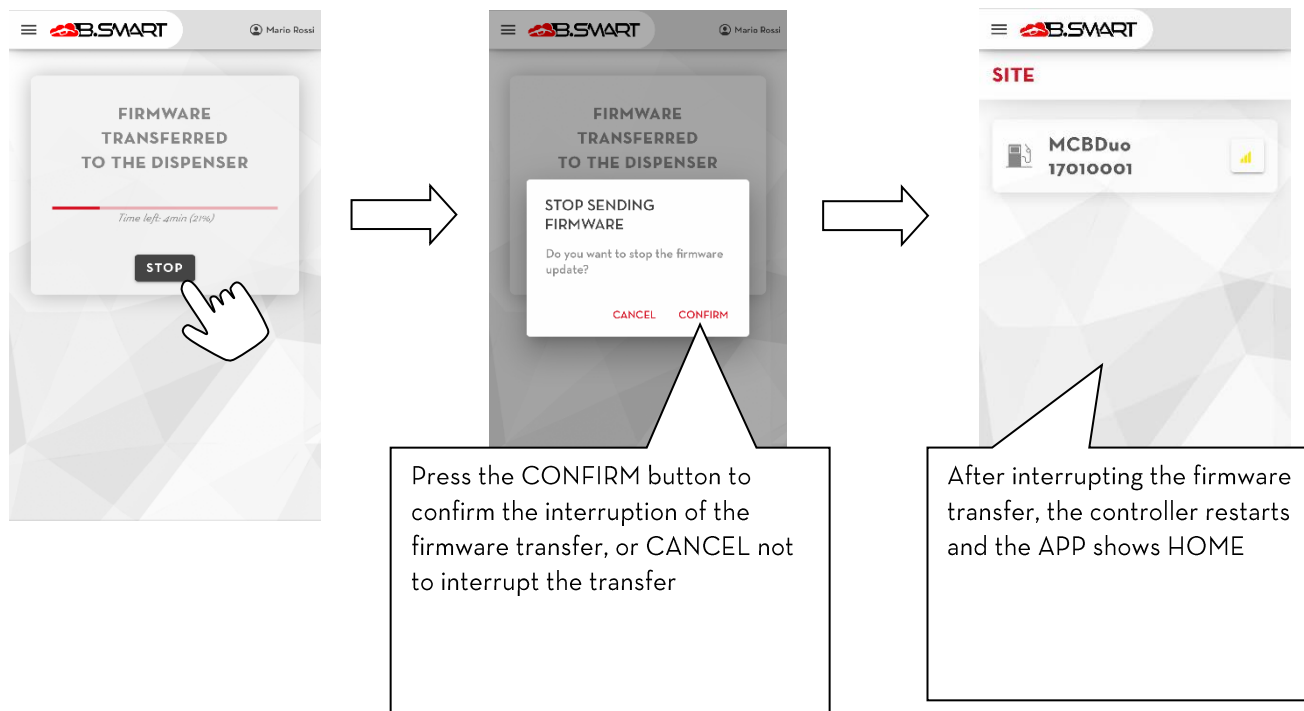
Firmware update completed

The firmware is installed, the control unit is restarted, and finally the smartphone reconnects to the controller.

Press **OK** to go back to the Manager login section (see Chapter 4).



The firmware update can be interrupted at any time by pressing the STOP button



CAUTION:

- do not turn the controller off during the update;
- do not turn the phone off during the update;
- do not turn the Bluetooth off on your phone during the update;
- keep your phone as close to the controller as possible and do not move away during the update;
- the update could take several minutes;
- you need an internet connection to download the latest firmware version;
- some updates may be mandatory in order to ensure the proper functioning of the system;
- it is not possible to dispense from the fuel dispenser during the update;

4.4.3. Tank watchdog

Tank management is automatically activated after the activation of the ADDON 'Tank watchdog' by the B.Smart web application (see user manual). With this integration it is possible to monitor the level of liquid contained in the tanks and manage different types of level probes connected to the controller.

For proper operation make sure you:

- Have purchased and activated the 'Tank watchdog' addon;
- Have configured and assigned the relevant tanks to the respective pumps (see web-app manual);
- Connect to the site controller and make sure you are connected to the internet to download and apply the new configurations applied by web-app.

The following chapters describe the new menus of the manager section (follow the steps of chapter 2A to access the section) that can be used for managing and displaying the system tanks.

CAUTION

- When the 'Tank watchdog' ADDON expires (if it is not renewed) it will no longer be possible to manage the tanks in the system: it will not be possible to display the residual product levels and calibrate any level probes;
- It is not possible to configure tank parameters via phone (system configurations are centralized and managed by web-app);
- It is not possible to create loading and unloading movements of the product from the tanks via phone (system operations are centralized and managed by web-app);
- Data on product levels and monitored tank alarms are only synchronized in the cloud when a phone connects to the relevant controller (either as driver or manager). Since real-time synchronization cannot be guaranteed, the data displayed on web-apps may deviate from reality.

4.4.4. OCIO

After configuring your tank (by web-app) to be monitored with the OCIO level sensor, wire the sensor to the fuel dispenser pump and enter as manager in this section to start the search procedure for connected OCIOs. The detected OCIOs are automatically connected to the tank configured on the respective pump (after correct synchronization of the data with the cloud).



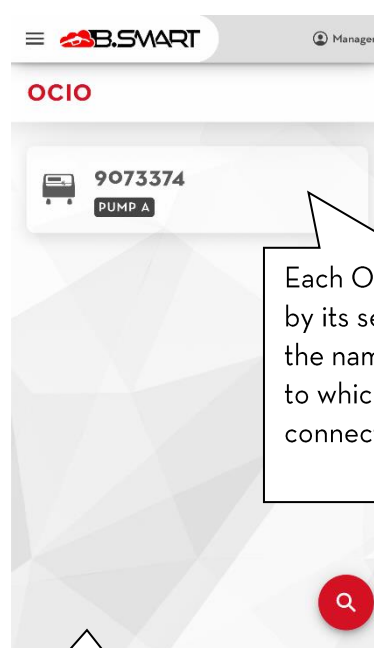
The detection procedure must be carried out in the following cases:

- when a new OCIO is to be connected.
- when a damaged OCIO (detected previously) is to be replaced with a new, functioning one.
- when after having de-wired and removed OCIO from the pump you want to remove it permanently from the system.

Press to start the procedure for searching for connected OCIOs.



Wait for the end of the procedure.
(it takes about 30 seconds)

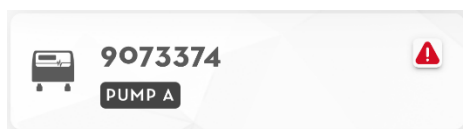


Each OCIO is identified by its serial number and the name of the pump to which it is connected.

List of the detected OCIOs.


CAUTION

- If no OCIO is found at the end of the detection procedure, then check that the device is correctly switched on and wired to the fuel dispenser (please refer to the fuel dispenser manual for more information).
- If an OCIO is disconnected, or switched off, or incorrectly connected to the pump, then an error of failed communication with the sensor is displayed:



4.4.5. Tank monitoring

In this section you can view the status of the tanks in the system in real time and perform calibrations of the connected sensors.




Press on the tank to access the detail sheet.

List of the tanks connected to the fuel dispensers and monitored in real time.

Identification panel of the monitored tank, with the following information:

- Name of the tank;
- Identification of the product contained;
- Quantity of the current fluid;
- Name of the pump to which it is connected;
- Percentage of the product contained;
- Level alarms:
 - Alarm 1, "notification" type, active
 - Alarm 1, "pump cut-off" type, active
 - Alarm 2, "notification" type, active
 - Alarm 2, "pump cut-off" type, active

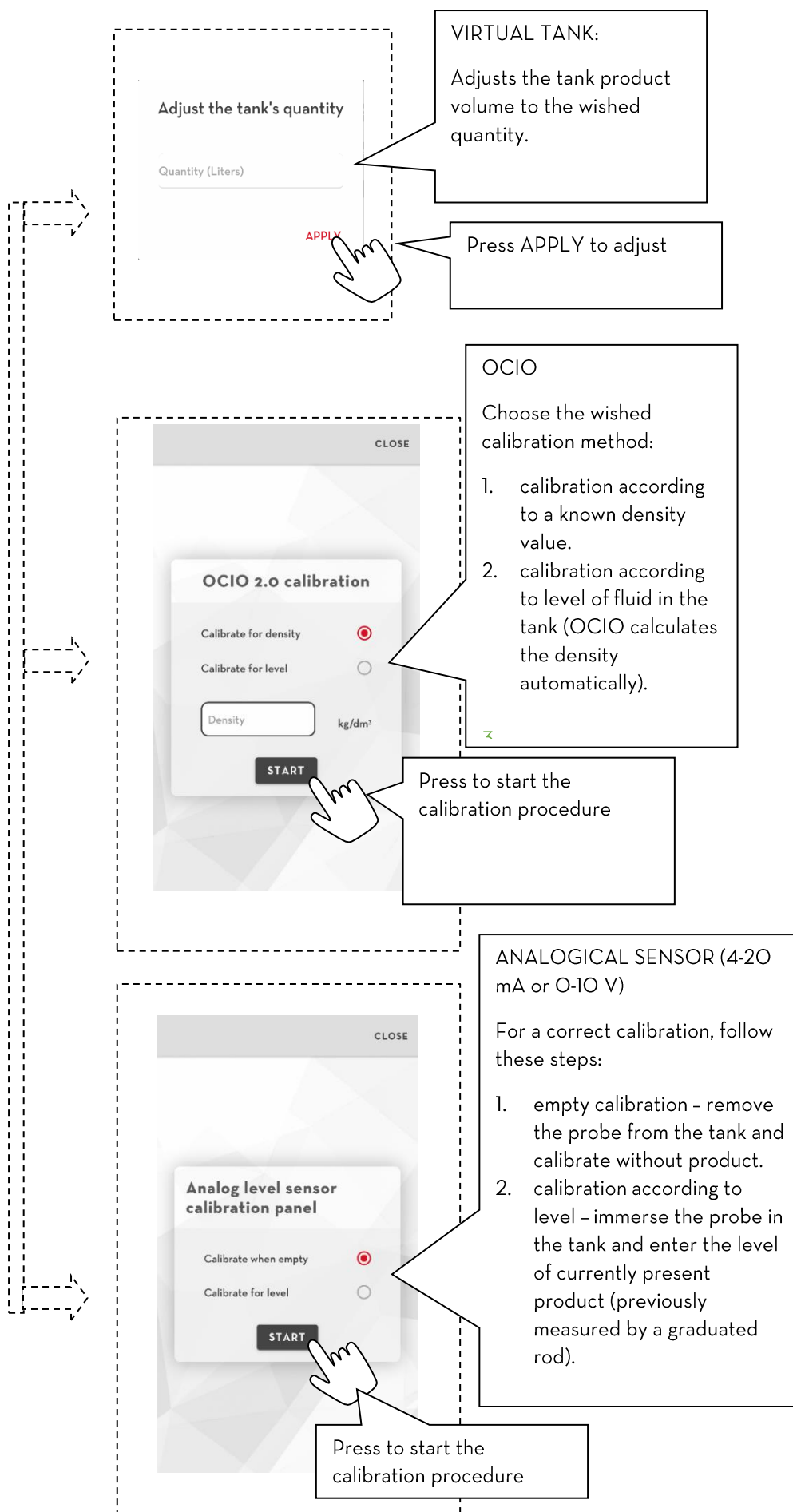


The level/volume of the product and the alarm status are monitored in real time.

The calibration methods vary depending on how the tank level is monitored.

Press CALIBRATE to adjust the level (in case of virtual tank) or to start a specific calibration procedure.

Tank description sheet.



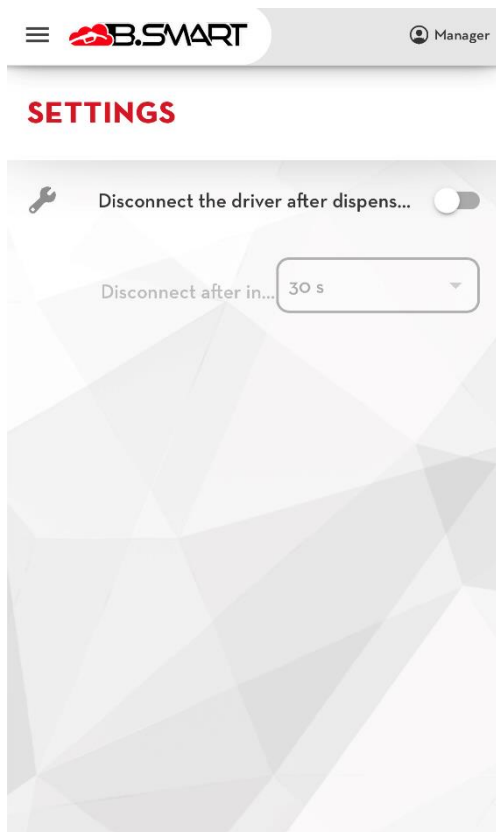
CAUTION

- For a correct operation it is recommended to periodically repeat the calibration of the sensors or the adjustment of the tanks;
- It is not possible to calibrate the sensors or make adjustments if, in a network of fuel dispensers, the current fuel dispenser delivers from a tank managed by another fuel dispenser of the site (the sensor is not physically connected to a pump of the current fuel dispenser but the measurement is managed and sent on the canbus network from another fuel dispenser of the site);
- whenever the configuration of a shared tank is changed between several fuel dispensers of the same network, go to each fuel dispenser to apply the new configuration;

4.4.6. SETTINGS

In this section it is possible to change the settings of the manager who uses the B.smart application.

In detail:



A. Disconnect the driver after dispensing, by enabling this setting, the driver will be disconnected from the application after each dispensing, useful if a single device is used to dispense.

B. Disconnect after inactivity time, active only if the previous setting is activated, allows you to set the inactivity timer, in seconds, before the driver is automatically disconnected.

5. Table of critical system alarms

Below is the table of critical alarms of the controller that block the dispenser pump and the actions to follow:

CONTROLLER CODE	DESCRIPTION
A28	Dispensing operation buffer full. Connect to the controller with a phone with an internet connection to download all the dispensing operations of the panel in the cloud.
A29	No pump enabled for dispensing. Check from web-app that there is at least one pump enabled for this fuel dispenser.
A31	RTC module damaged. Contact support.
A32, A33, A34	Controller memory corrupted. See chapter 5d.
A34	The controller is seriously damaged. Contact support.

In the presence of the following alarms the application always shows a notification message and does not allow dispensing from the fuel dispenser.

6. Migration of the controller to a different site

The following procedure is to be used if you want to move a fuel dispenser to a different site so as to bring it back to its initial configuration to be detected again.

Follow these steps in sequence:

1. Delete the fuels dispenser from the site via web-app b.smart (see web-app b.smart manual);
2. Perform a hardware reset using the button on the controller panel (see the controller manual);
3. Connect to the controller by the phone application and repeat the discovery procedure (see chapter 2a) indicating the credentials of the new target site. If you return the controller to a site where it was previously deleted, then the recovery procedure that returns the controller to its operating status is also started.

CAUTION

- The hardware reset procedure is not reversible and any data on the panel will be deleted.
- If you connect with the application to a controller deleted from the site, the following error message is displayed:

Warning

the dispenser has been removed from the site. (52)

CLOSE

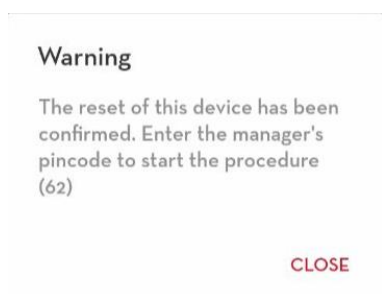
in this case it is always possible to dispense and use the controller but it is advisable to restore the situation as soon as possible following the correct procedure.

7. Resetting a device

Using the following procedure you can perform a hardware reset using your phone.

Perform the steps in order:

1. Connect to the device as manager (see chap. 4)
2. In the summary screen, it is possible to request, using the appropriate button, a hardware reset of the device (see chap. 4.3).
3. The system administrator from the web app can confirm or reject the request (see web app manual)
4. If the request is accepted, the next time the manager logs in, the following warning is displayed:



After logging in as manager, the device will be reset automatically.

ATTENTION

- The hardware reset procedure from the mobile application requires an internet connection.
- If you connect the application to a device with a reset request in progress, the following error message is shown:



in this case it is always possible to dispense and use the control unit.

8. FAQs

1) WHERE CAN I DOWNLOAD THE B.SMART APP?

You can download the B.SMART mobile application from the mobile store on your phone (see Chapter 1 for more information)

2) HOW CAN I ACCESS THE B.SMART APP?

To gain access, the driver must have the PIN code and site code (see Chapter 3 for the authentication procedure)

3) CAN I USE MY PHONE TO CONNECT TO MULTIPLE DEVICES?

Yes, you can. After logging in to the app, it is possible to choose from nearby devices. It is only possible to connect to devices registered on the site.

4) HOW CAN I DISPENSE?

After authentication, simply choose the device from which you want to dispense and enter the required information to dispense. For more information see Chapter 3.1.1

5) WHAT SHOULD I DO IF THE PHONE DOES NOT DETECT THE DEVICE?

If the device does not appear among those you can connect to, make sure that:

- the device is not already connected to another phone
- the device is near the phone

6) WHAT CAN THE MANAGER DO WITH THE B.SMART APP?

After authentication to the B.SMART app with the MANAGER PIN, you can

- synchronise Cloud Configurations with the device
- update the device in case there are updates (see Chapter 4.4.2)
- calibrate the pump flow (see Chapter 4.4.1)
- See tank status and calibrate tank level, if the TANK WATCHDOG add-ons installed and configured (see Chapter 4.4.5).
- Run OCIO discovery if the TANK WATCHDOG add-on is installed and configured with an OCIO level sensor (see Chapter 4.4.4).

7) WHAT OPERATIONS CAN THE DRIVER DO WITH THE B.SMART APP?

The driver can use the B.SMART app to:

- connect to a device to dispense
- display dispensing operation receipts (if management is enabled, see Chapter 3.1.3)
- enter dispensing operations made outside the site, only if the Fuel Economy add-on is active (see Chapter 3.1.4.4).

8) What happens if the GPS does not work during the dispensing operation?

No coordinates will be recorded if the GPS does not work. The manager can enter them manually afterwards from the web app (see Chapter 3.1.2.4).

9) Can I enter third-party registration numbers with the phone offline?

No, you must be connected to the Internet to enter registration numbers.