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**D-FLIGHT**

**User manual**

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**6<sup>th</sup> VERSION**  
**December 2020**

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## INTRODUCTION

The following manual is a guide to the use of basic d-flight services:

- ✓ Registration
- ✓ User authentication
- ✓ Navigation maps
- ✓ Navigation maps and layer for PRO users
- ✓ Profile management
- ✓ SAPR Operators List
- ✓ E-payment / D-Coin
- ✓ Drones management
- ✓ Declaration
- ✓ Drone Operation Area
- ✓ Drone Operation Plan
- ✓ Tracking\_V0
- ✓ Tracking\_V1
- ✓ Mobile App
- ✓ GNSS Real Time Monitoring



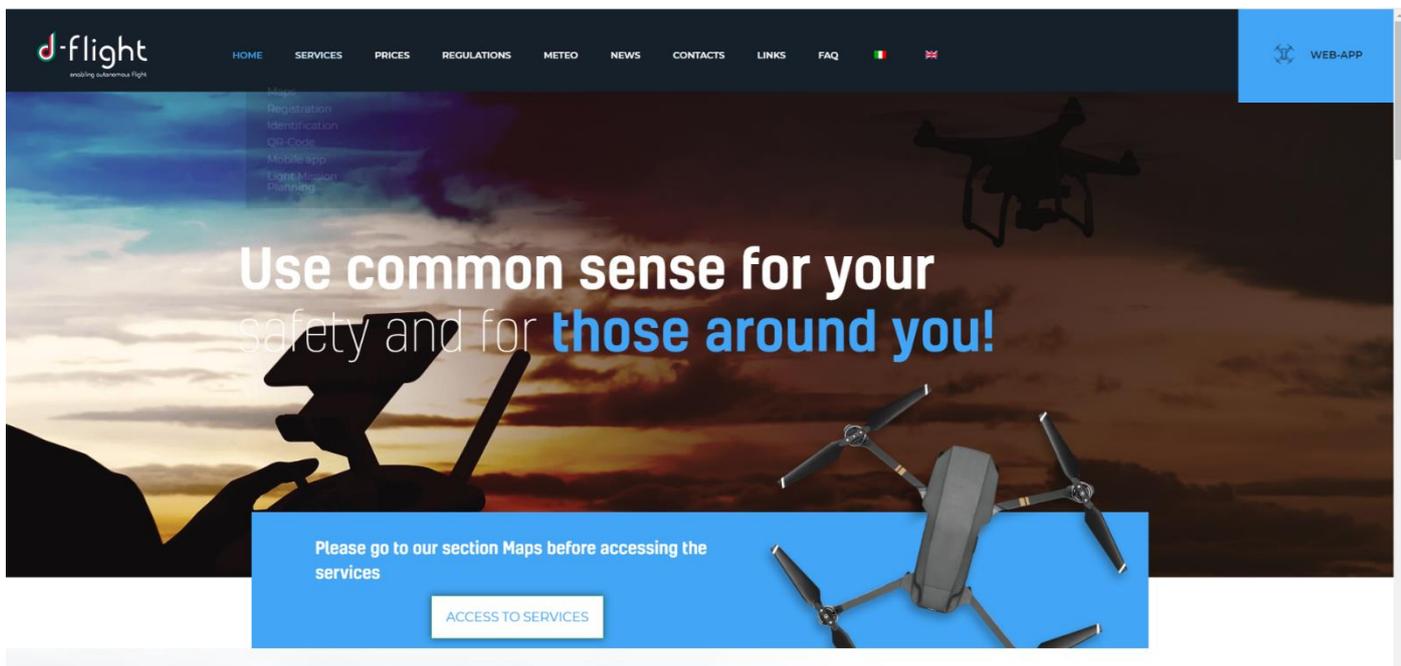
## 1. GUIDE

### 1.1 ACCESS TO THE SITE

The URL to access the site is [https://www.d-flight.it/new\\_portal/en/](https://www.d-flight.it/new_portal/en/).

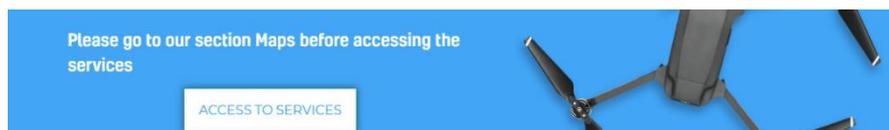
The welcome page to the site is shown below.

*Use of the Chrome / Firefox / Safari browser is recommended, please do not use IE. It is advisable to activate the activation link in the time indicated by the system (60 min).*

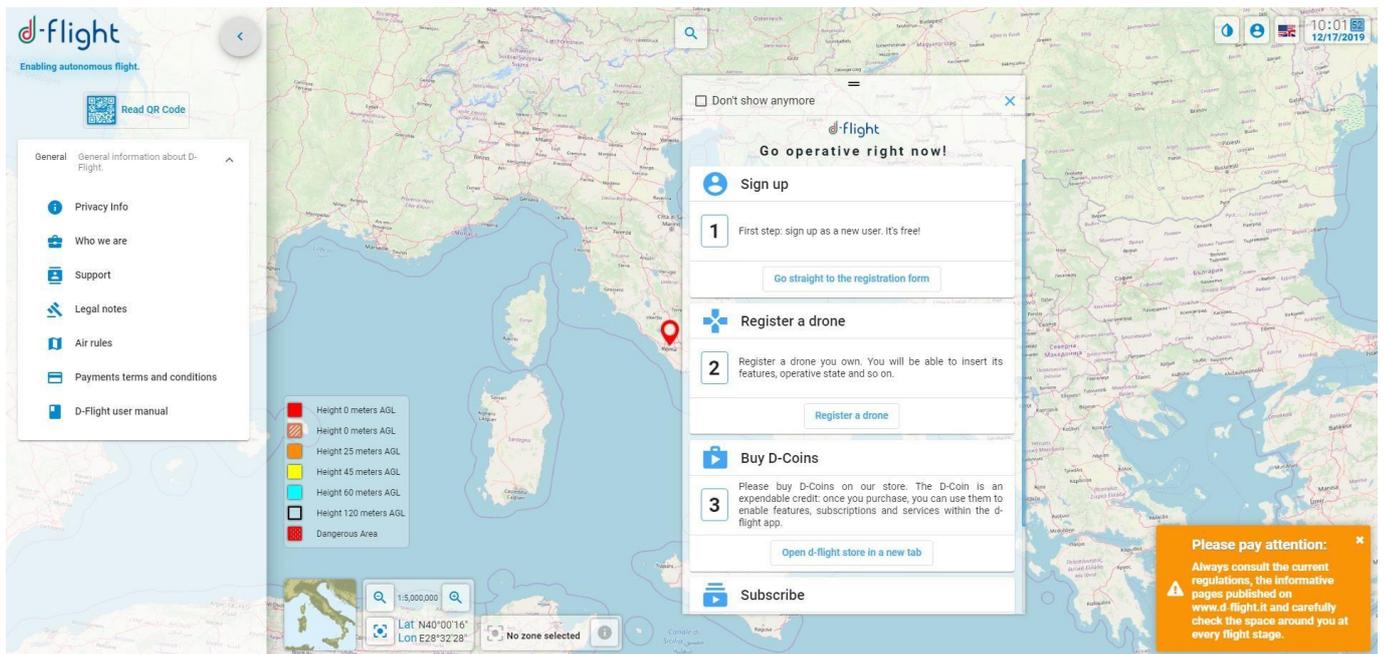


From the welcome page (**HOME**) it is possible to consult the information relating to the **SERVICES, PRICES, REGULATIONS, METEO, NEWS, CONTACTS, LINKS** and **FAQs**.

✓ **CLICK TO ACCESS THE SERVICES**



After the click you have the map available (below) that allows you to access the d-flight **SERVICES**.



## 1.2 REGISTRATION

It is the service through which users can register and authenticate to the portal. User enter its personal data and relevant flight qualifications in possession, qualifications and licenses, to create a "Virtual Curriculum".

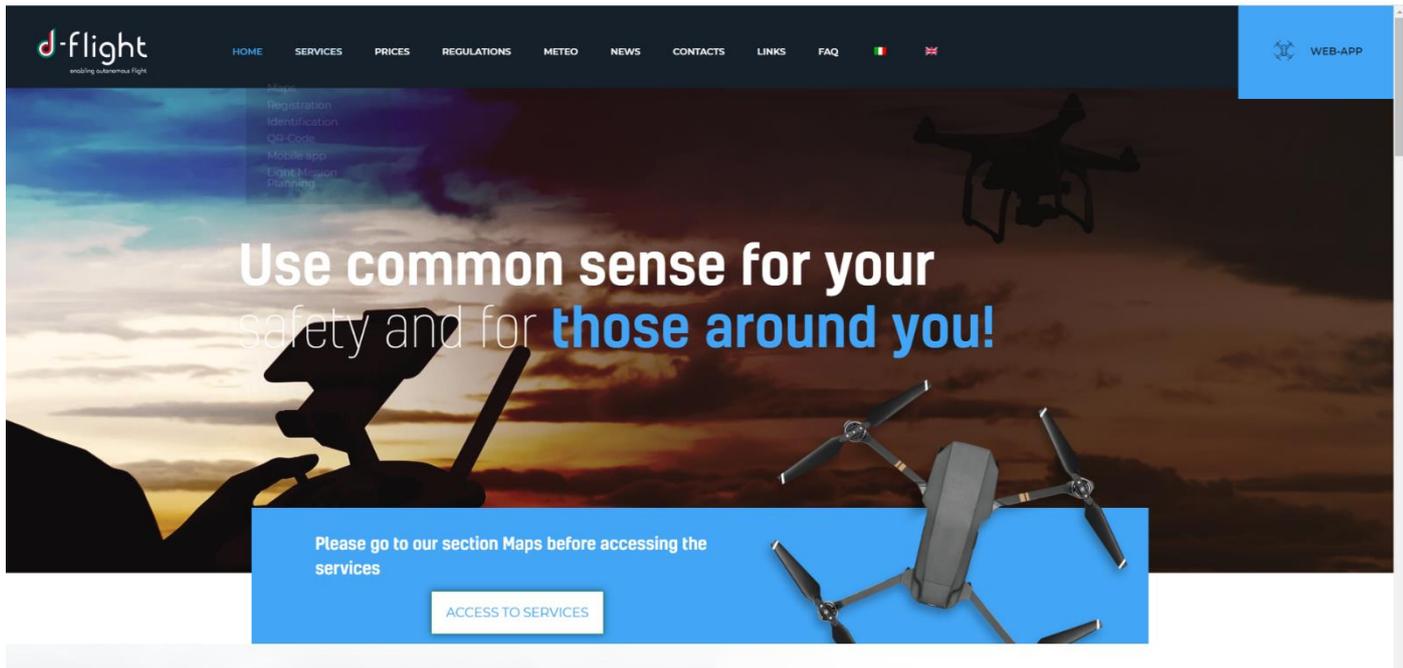
When a user who is not yet registered wants to register with the System, he must enter his credentials to be able to receive a request to confirm his identity via e-mail, with non-certified email address or certified e-mail address.

Then the user will receive the email with the login credentials with a temporary password, to activate it he must open the email received and click on the link provided to confirm the registration and be able to access the platform with the credentials indicated.

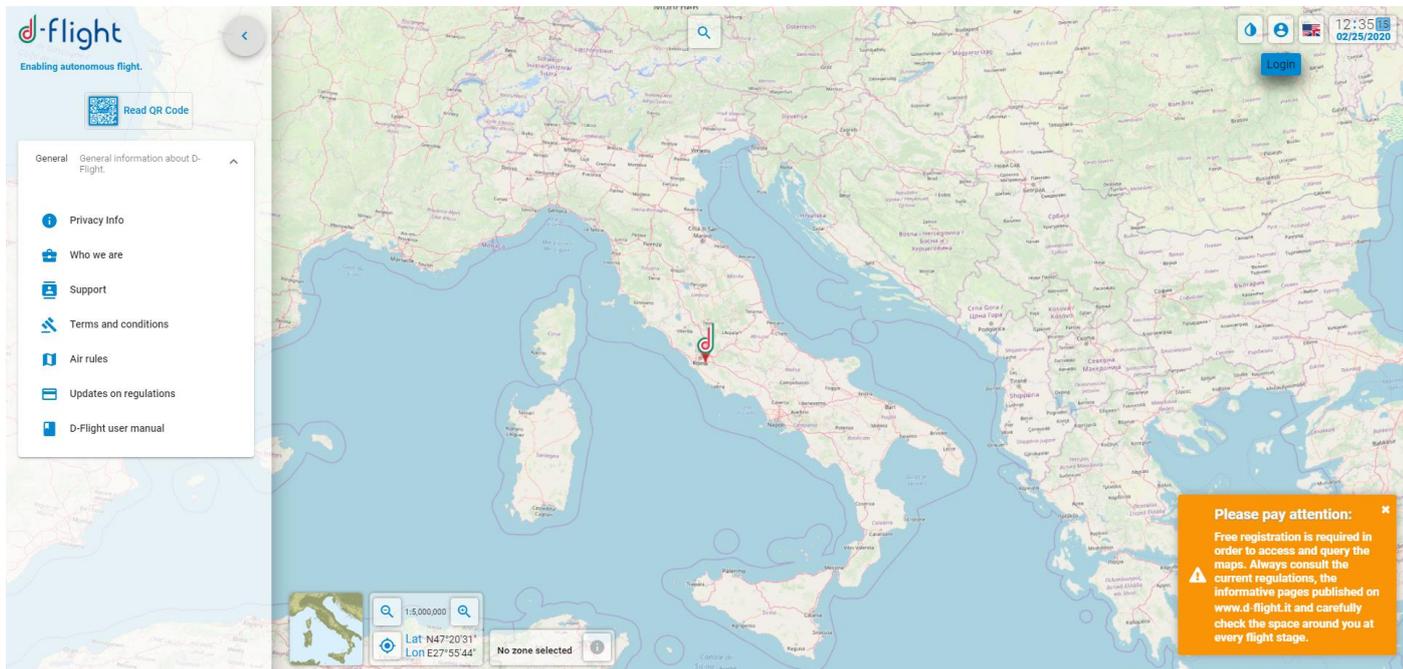
### 1.2.1 User Registration

1. From an internet browser connect to the d-flight website ([https://www.d-flight.it/new\\_portal/en/](https://www.d-flight.it/new_portal/en/)) and select <**ACCESS TO SERVICES**>

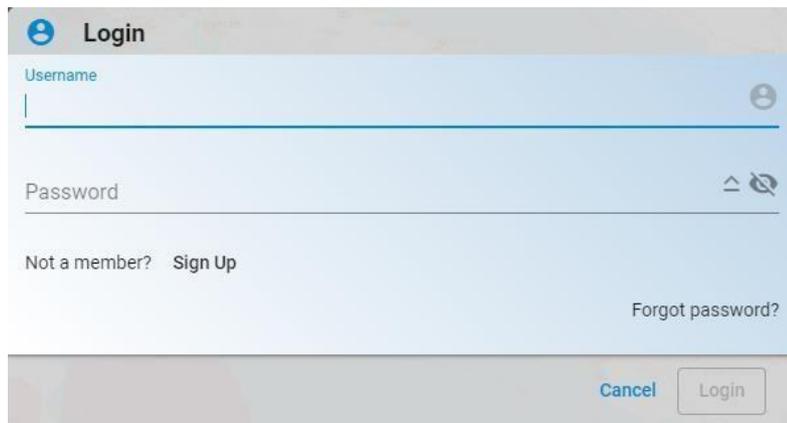
*Warning: the use of Chrome / Firefox / Safari browsers is recommended, please do not use IE*



2. Click on user icon (**LOGIN**) at the top right as shown in the following figure:



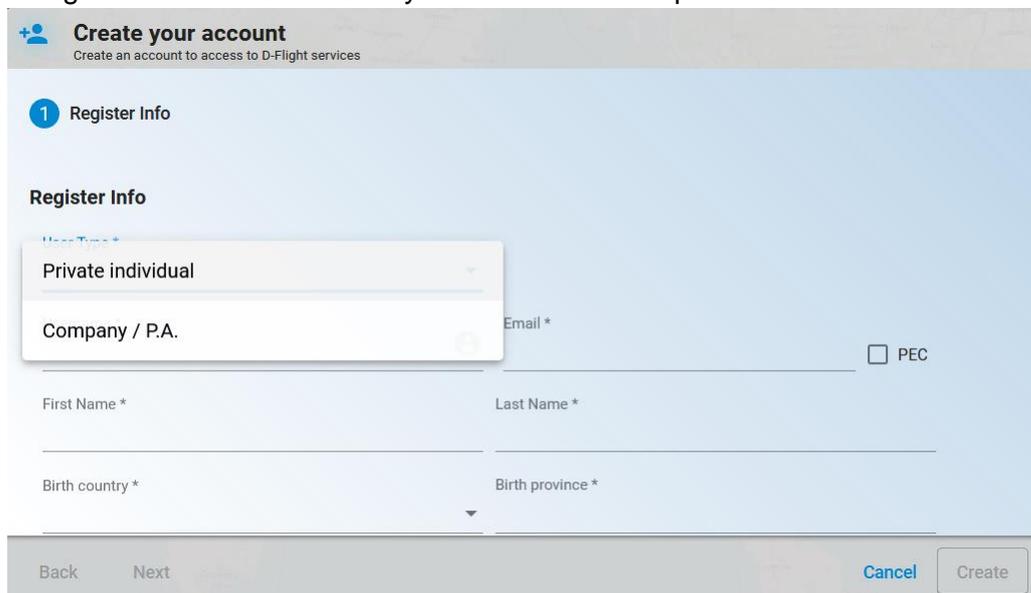
3. The following screen will appear and select <**SIGN UP**>



The screenshot shows a 'Login' form with the following elements:

- Username:** A text input field with a search icon on the right.
- Password:** A text input field with an eye icon to toggle visibility.
- Not a member? Sign Up:** A link to the registration page.
- Forgot password?:** A link for password recovery.
- Buttons:** 'Cancel' and 'Login' buttons at the bottom right.

After clicking on the icon <**SIGN UP**> you have several steps to do.



The screenshot shows the 'Create your account' form, specifically the '1 Register Info' step. The form includes:

- Register Info:** A section header.
- User Type \*:** A dropdown menu with options 'Private individual' and 'Company / P.A.'. A tooltip is visible over this field.
- Email \*:** A text input field with a checkbox for 'PEC'.
- First Name \*:** A text input field.
- Last Name \*:** A text input field.
- Birth country \*:** A dropdown menu.
- Birth province \*:** A dropdown menu.
- Buttons:** 'Back', 'Next', 'Cancel', and 'Create' buttons at the bottom.

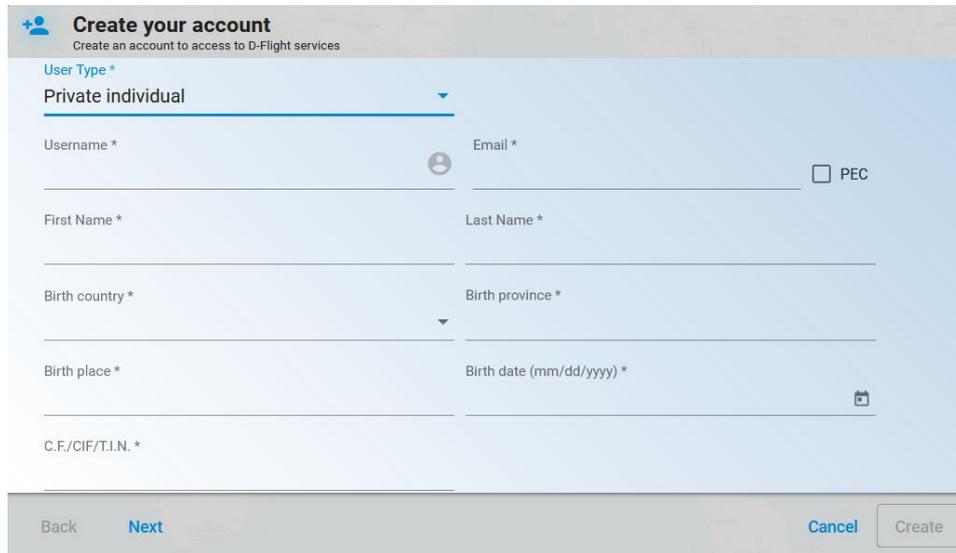
**Step 1** Enter the data related to <**Register Information**>

1. User Typology \* (Private individual, Company/P.A.)

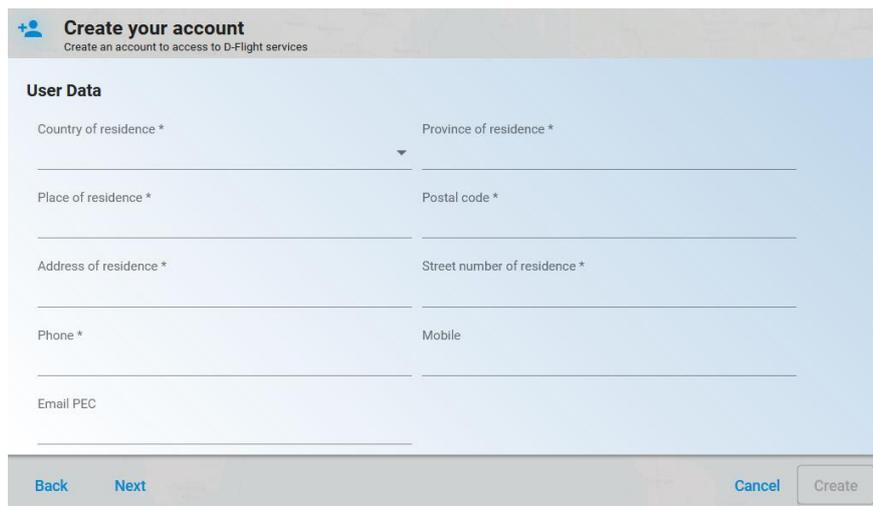
If **Private Individual** has been chosen please insert:

2. Username \* (user ID - nickname) **NW. do not use special characters**
3. Email \* (Activate the PEC flag if you want to register with certified mail)
4. First Name \*
5. Last Name \*
6. Birth country\*
7. Birth province\*
8. Birth place\*
9. Birth date\*
10. C.F./CIF/T.I.N \*
11. Select <Next>.

*Attention, fields marked with an asterisk (\*) are mandatory*



**Step2 Enter <User data>**



1. Place of residence \*
2. Country of residence \*
3. Province of residence \*
4. Postal code \*
5. Address of residence \*
6. Street number of residence \*
7. Phone\*
8. Mobile
9. Email PEC
10. Select <Next>

(If you want to go back to the previous page select <Previous>)

*Attention, fields marked with an asterisk (\*) are mandatory  
Note: if you do NOT have a license, select <Create> directly*

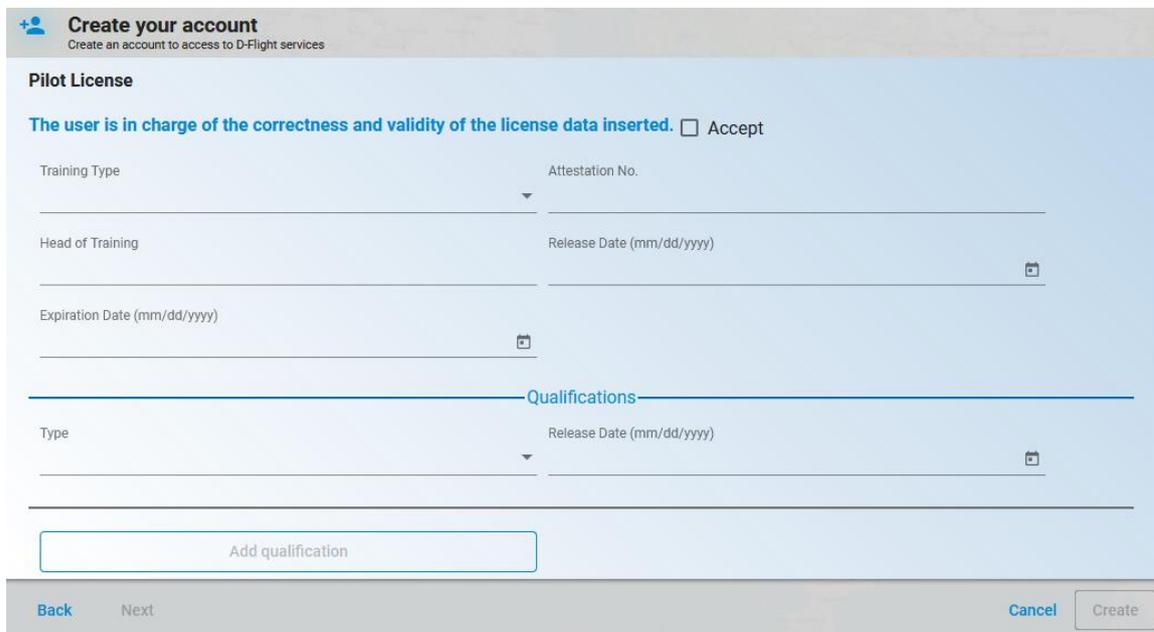
**Step 3** Enter the data related to your <Pilot license> NW. You can enter the data on this page even after completing the registration.

1. Attestation No.
2. Training center
3. Head of training
4. Release date
5. Expiration date

For **Qualifications**, complete the fields below:

1. Type
2. Release date
3. Select <Create>

(In case you want to return to the previous page, select <Previous>)



The screenshot shows a web form titled "Create your account" with the subtitle "Create an account to access to D-Flight services". The form is divided into two main sections: "Pilot License" and "Qualifications".

**Pilot License Section:**

- A warning message: "The user is in charge of the correctness and validity of the license data inserted." followed by an "Accept" checkbox.
- Fields for "Training Type" (dropdown), "Attestation No." (text), "Head of Training" (text), "Release Date (mm/dd/yyyy)" (calendar), and "Expiration Date (mm/dd/yyyy)" (calendar).

**Qualifications Section:**

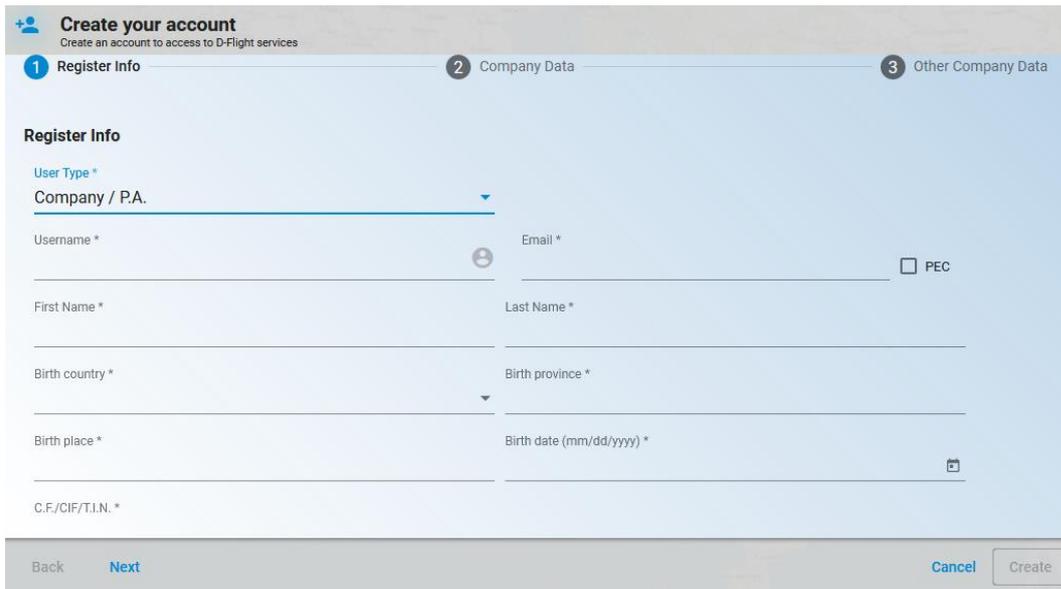
- Fields for "Type" (dropdown) and "Release Date (mm/dd/yyyy)" (calendar).
- An "Add qualification" button.

At the bottom of the form, there are navigation buttons: "Back", "Next", "Cancel", and "Create".

*Attention activate the flag <Accept> relating to the validity of the data entered to continue*

### 1.2.2 Company/P.A. Registration

If **Company/P.A.** has been chosen please insert:



**Create your account**  
Create an account to access to D-Flight services

1 Register Info      2 Company Data      3 Other Company Data

**Register Info**

User Type \*  
Company / P.A. ▾

Username \*      Email \*       PEC

First Name \*      Last Name \*

Birth country \*      Birth province \*

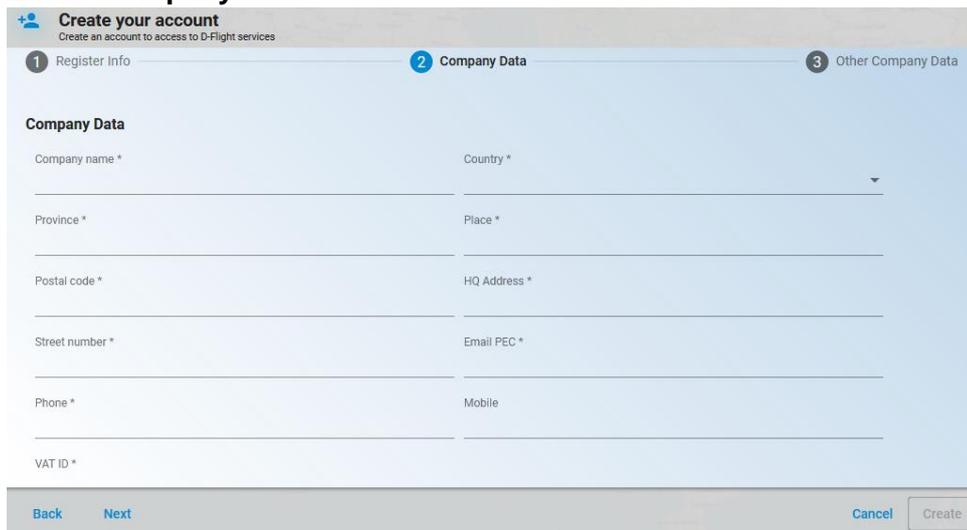
Birth place \*      Birth date (mm/dd/yyyy) \*      📅

C.F./CIF/T.I.N. \*

Back    Next      Cancel    Create

1. Username \*      (user ID - nickname)    **NW. do not use special characters**
2. Email \*
3. First name \*
4. Last name \*
5. Birth country \*
6. Birth province \*
7. Birth place \*
8. Birth date \*
9. C.F./CIF/T.I.N. \*

2 Step2 Enter <Company data>



**Create your account**  
Create an account to access to D-Flight services

1 Register Info      2 Company Data      3 Other Company Data

**Company Data**

Company name \*      Country \*      ▾

Province \*      Place \*

Postal code \*      HQ Address \*

Street number \*      Email PEC \*

Phone \*      Mobile

VAT ID \*

Back    Next      Cancel    Create

1. Company name \*
2. Country\*
3. Province\*
4. Place\*
5. Postal code \*

6. HQ Address \*
7. Street number \*
8. Email PEC \*
9. Phone \*
10. Mobile
11. VAT ID\*
12. Click on <next>

**Warning:**

- *The maximum number of characters that can be used to complete the company name is 32, abbreviations can be entered if the number is greater*
- *The pilot license is associated only to a private user, therefore it cannot be entered by a company / P.A user.*

*Attention, fields marked with an asterisk (\*) are mandatory*

**Step 3** Continue by entering <**Other company data**>:

1. Customer type \*
2. Destination code SDI \*
3. IPA code \*
4. Click on <Create>

The screenshot shows a web form titled "Create your account" with the subtitle "Create an account to access to D-Flight services". The form is divided into three steps: 1. Register Info, 2. Company Data, and 3. Other Company Data. The current step is "Other Company Data". The form contains the following fields:

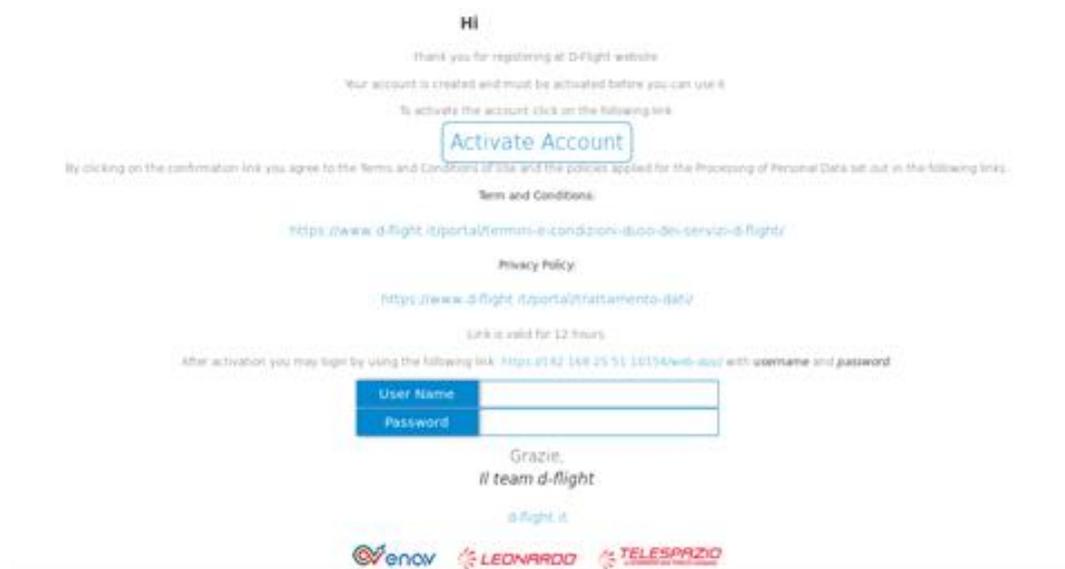
- Customer Type \***: A dropdown menu with "Other" selected.
- SDI/CIUU - Destination Code \***: A text input field.
- IPA Code**: A text input field.

At the bottom of the form, there are navigation buttons: "Back", "Next", "Cancel", and "Create".

(In case you want to return to the previous page, select <Previous>)

After clicking on <create> you must accept the platform's Terms and Conditions of Use and consent the processing of personal data to complete the registration.

**Step4** After completing the <**User registration**> procedure, you will receive the d-flight email containing the **Activation instructions** at the email address indicated.



#### 4.1 Click on "ACTIVATE ACCOUNT" and enter the username and password provided on the page where you are redirected

*Please remember that:*

- *after 2 hour from receiving the account activation email, if the link is not clicked, the account will be disabled and, you need to register again, 48 hours after failure to activate.*
- *to complete the registration and therefore the creation of the account it is not necessary to attach any document*

*Attention:*

*In the case of registration as a "Public Administration":*

- *the methods of payment for the services, in addition to credit cards, include bank transfers (IBAN: D-Flight Spa, Banca Intesa SanPaolo IT77W030690339010000002200);*
- *the invoice will be issued in split payment mode.*

*The e-mail supportopa@d-flight.it dedicated to the Public Administration is also active for the following aspects:*

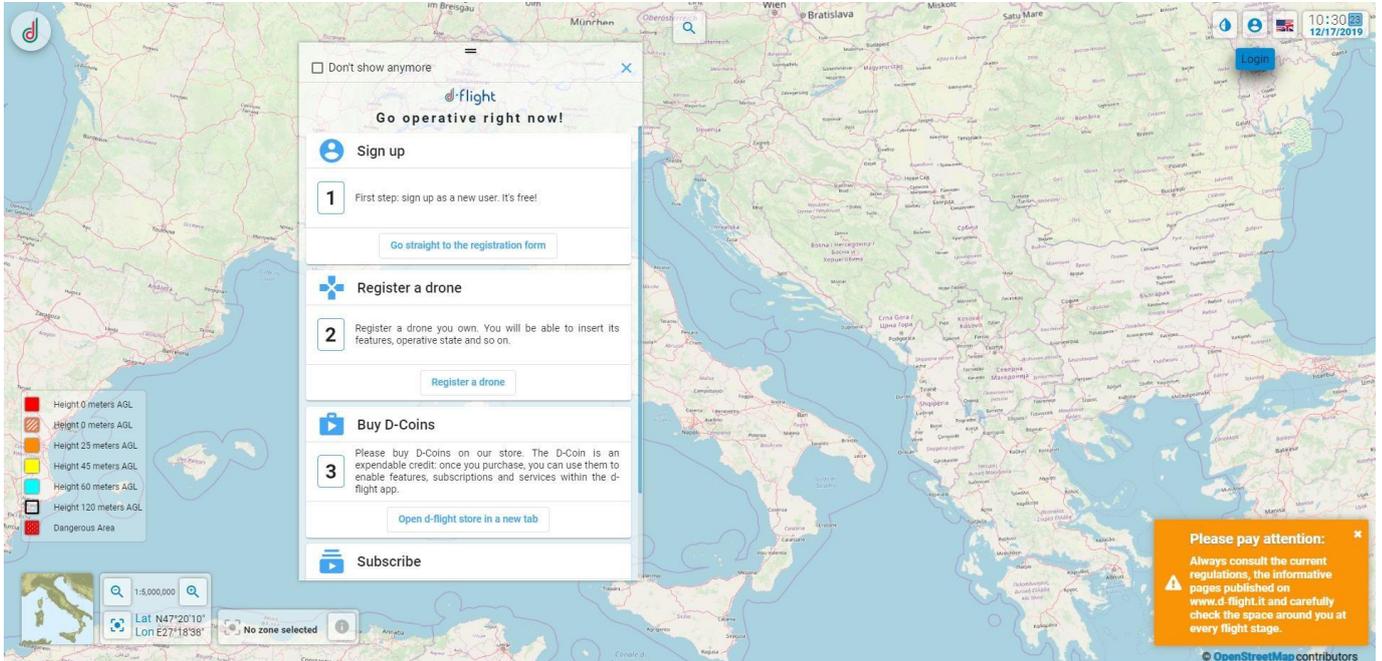
- *issue of a quote / quote order, invoice in advance of the transfer, or any supporting documentation (e.g. internal order, DURC, traceability of financial flows, etc.);*
- *request for inclusion in the CIG invoice and / or references to the determines / orders.*

### 1.3 USER AUTHENTICATION

The USER AUTHENTICATION section provides information for access to the d-flight portal. After registering, it is necessary to change the temporary password that is automatically assigned by the system upon registration.

### 1.3.1 Temporary password change

1. Click on <Login>



2. Enter the credentials shown in the attachment of d-flight PEC email

**Insert username and old password**

Username

Old Password

---

**Chose a new password**

Password

Confirm Password

Password criteria = 0%

- The minimum password length shall be 8 alphanumeric chars.
- Password shall not contain spaces.
- Password shall contain at least 1 of the following chars:
  - capital letters (A-Z)
  - lower case letters (a-z)
  - numbers (0-9)
  - special chars (eg. \$, \*, -, ?, #)

3. Insert new password and click on <Confirm>

## 1.4 MAP NAVIGATION

### 1.4.1 Map View

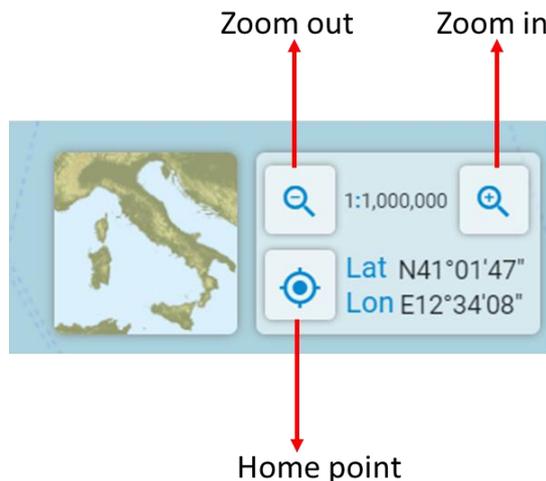
In order to access the map you must be registered.

The cartographic map allows you to view the air rules in the areas of Italy where you would like to fly, it also allows you to view the no fly zones (reserved air areas).

You can move along the map by holding down the left button and moving the mouse at the same time (like "drag and drop").

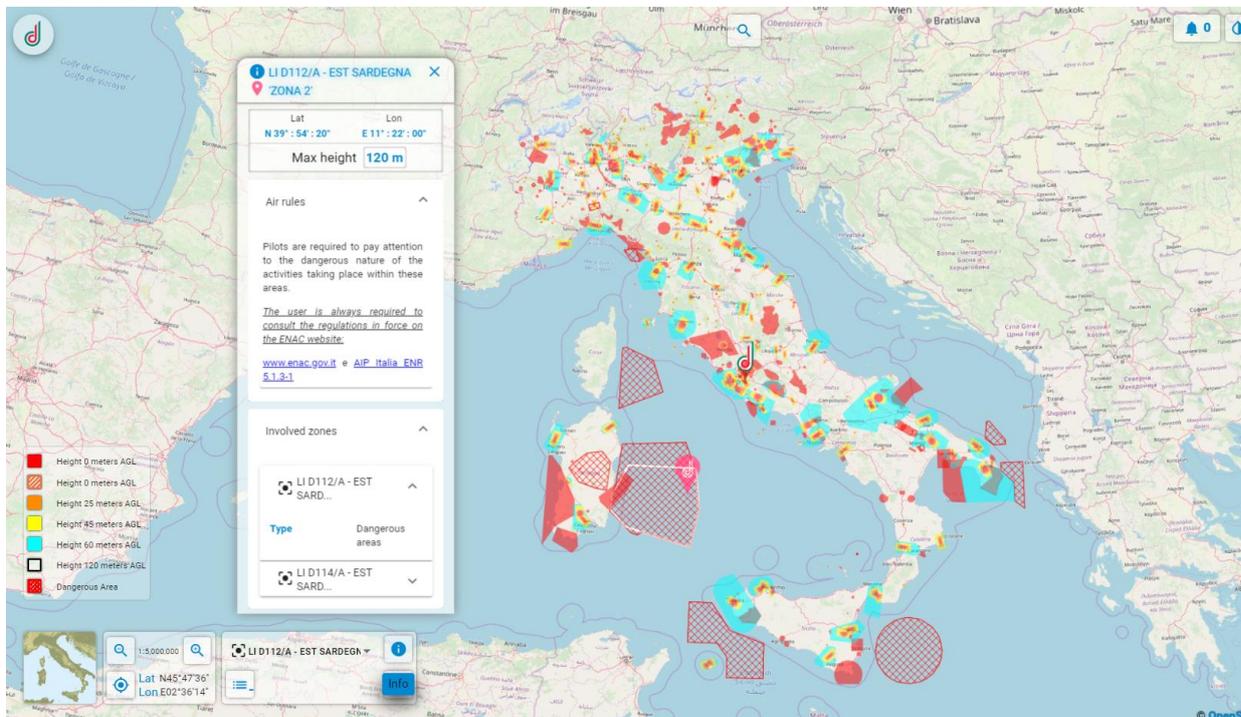
The **map scale** can be changed:

- ✓ Acting on the tabs of zoom in and zoom out (lower left of the screen)
- ✓ Acting on the mouse wheel



**Air rules** can be viewed:

- ✓ With <click left on the map>. The information of the selected point that will activate the corresponding area of interest, will appear briefly in the window below
- ✓ The detail of the information of the selected point will be available with click (left) on the info



- ✓ With <right click on the map>. The information of the selected point will activate the corresponding zone and it appear in the pop-up.

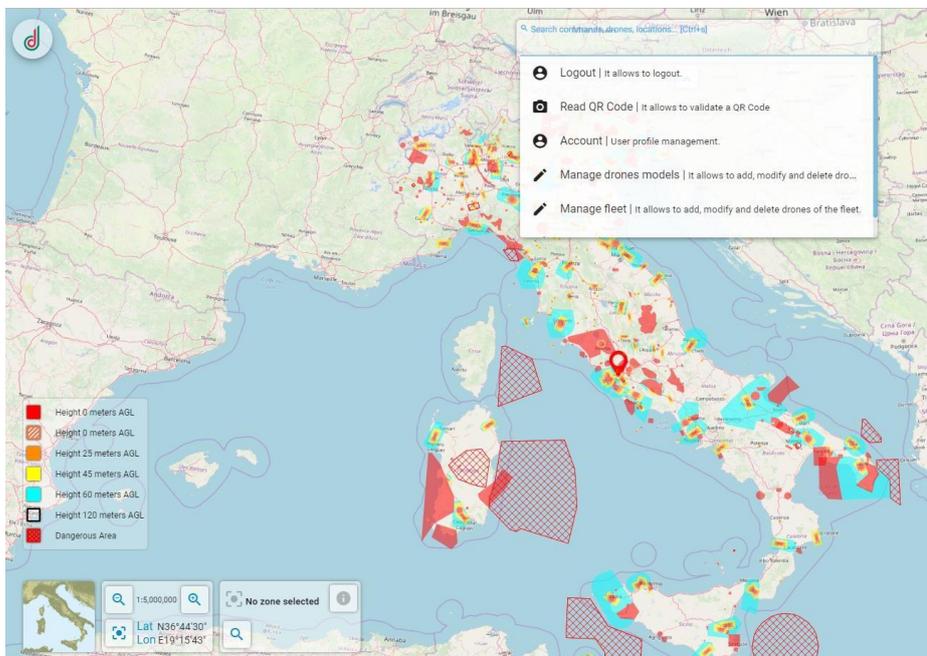
The <Information on the selected point> window will show the <air rules> and the <zones involved>.

The detail of the rules and zones is available by selecting the drop-down menu.

Information on the representation of the "maximum height" is shown in the legend with different colors.

Through the window <search commands or places> it is possible:

- **Search / Select a site** (city) of interest
- **Access the registration**
- **Read QR**
- **Manage drone models**
- **Manage fleet**



In order to **look for a site of interest** you can:

1. Write the name of the site you want to look for (a list will appear within the drop down menu)
  2. Click on the one you prefer and the system will automatically zoom on the site
- Or
- 1B. Write the geographical coordinates in WGS 84 format, with lat e lon separated by a space (example 46.1100 11.3083)
  - 2B. Press enter and the system will automatically zoom on the site

## 1.4.2 Map View and Layers for PRO Users only

On d-flight, in addition to maps which are accessible to all registered users, the following maps and added value layers are instead available to PRO users only:

## Maps

**Aerial** - This map shows orthophotos: geometrically correct and geo-referenced aerial photographs, so that the scale of representation of the photograph is uniform. The map can be considered equivalent to a geographical map

**Road** - This map that displays vectorial images of roads, buildings and geography in a graphic manner. The map can be considered equivalent to a political map.

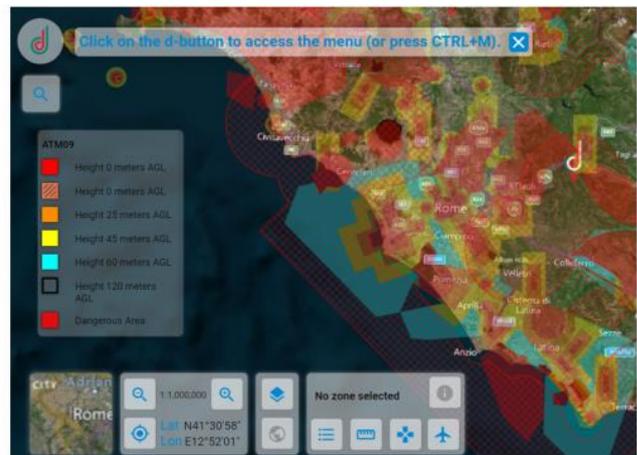
**Aerial Street** - This Aerial map highlights streets and main landmarks for easy identification of places through satellite images (in addition to the openstreetmap, already available on d-flight)

**Dark** - Map optimized for night viewing

'Aerial', 'Road', 'Aerial Street', 'Dark' Maps include Google Bing data (the data from which the default road map is rendered is licensed by Navteq) and will allow PRO Operators to analyze in more detail the area of operations.

## Activation

To activate Maps, open the Map Selection Panel [Pic. below] and click on the desired Map.



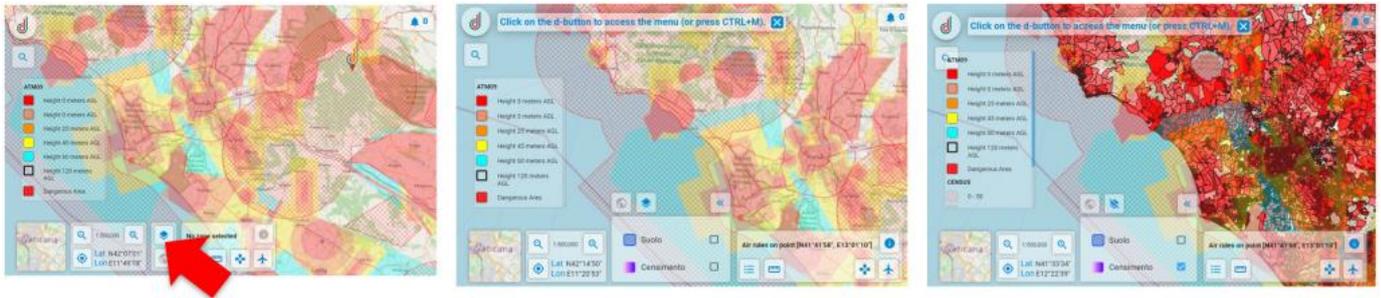
## Layers

- Land use - includes information relating to the environment on some priority issues for the European Union (air, water, soil, land cover, coastal erosion, biotopes, etc.)
- Census - includes information on the number of inhabitants by census section

The 'Land use' layer includes data provided by the CORINE 2018 project (a European program launched in 1985 by the European Commission) and will allow PRO Operators to carry out a preliminary analysis of the ground risk for the preparation of the SORA.

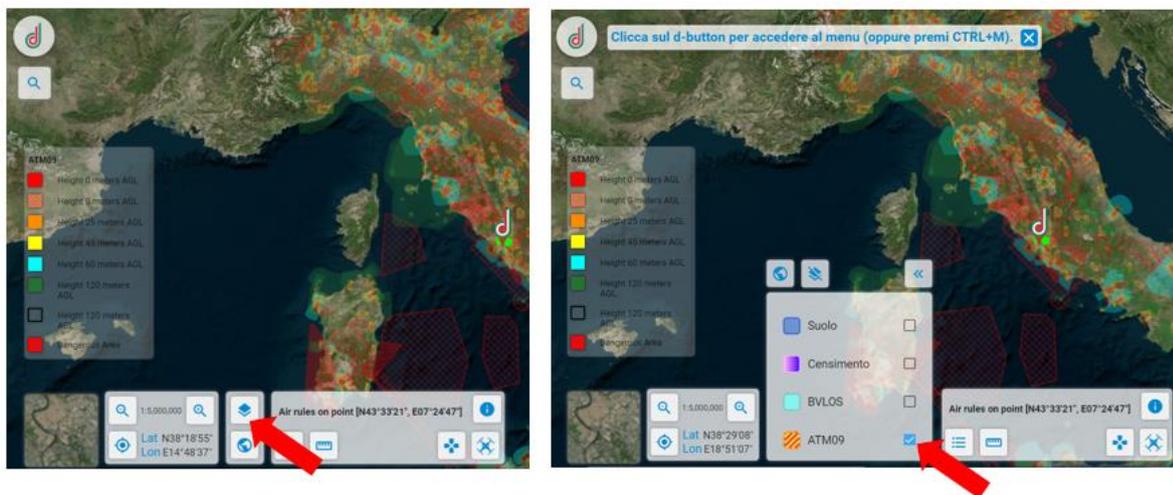
The 'Census' layer includes the ISTAT data from the 2011 census and will allow PRO Operators to carry out a preliminary analysis of the ground risk for the preparation of the SORA

To activate the Land Use and Census layers, click on the 'Show Layers' button and select the 'Soil' and / or 'Census' layer [Fig. 2]. NB. The 'Land Use' and 'Census' layers are visible when the zoom is equal to or greater than 1: 20,000 (Land Use) or 1: 50,000 (Census)



## ATM-09 activated/deactivated

Only for Pro users, the ATM-09 layer can be activated/deactivated. This operation can be done again from the panel 'Show Layers':



## 1.5 PROFILE MANAGEMENT

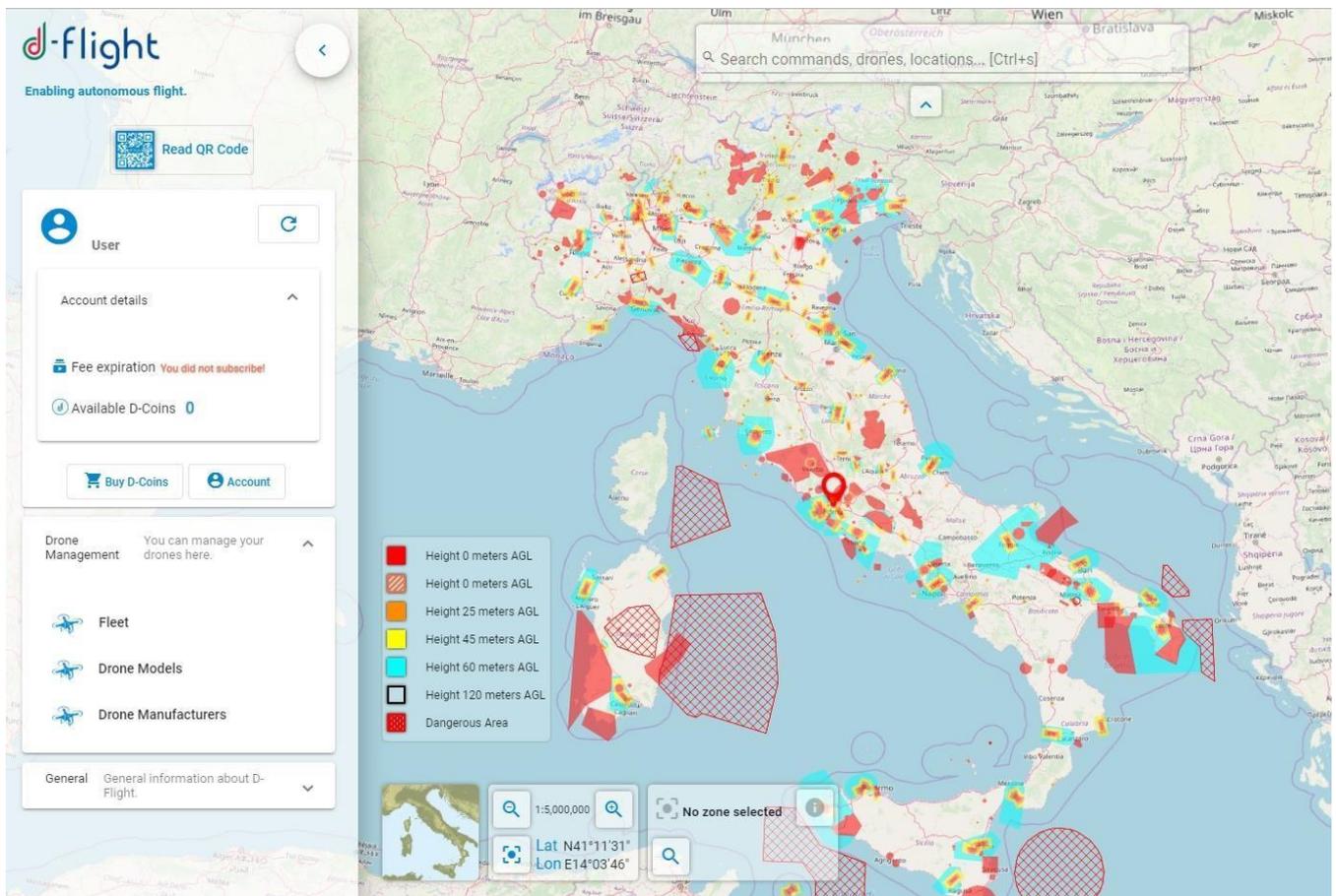
The PROFILE MANAGEMENT section provides information on the procedures for displaying and modifying your profile:

- ✓ View Data Edit
- ✓ Change PSW
- ✓ User Enabling as Operator

### 1.5.1 View/Edit Data

To view the details of your account (<Fee expiry> and <D-Coin>):

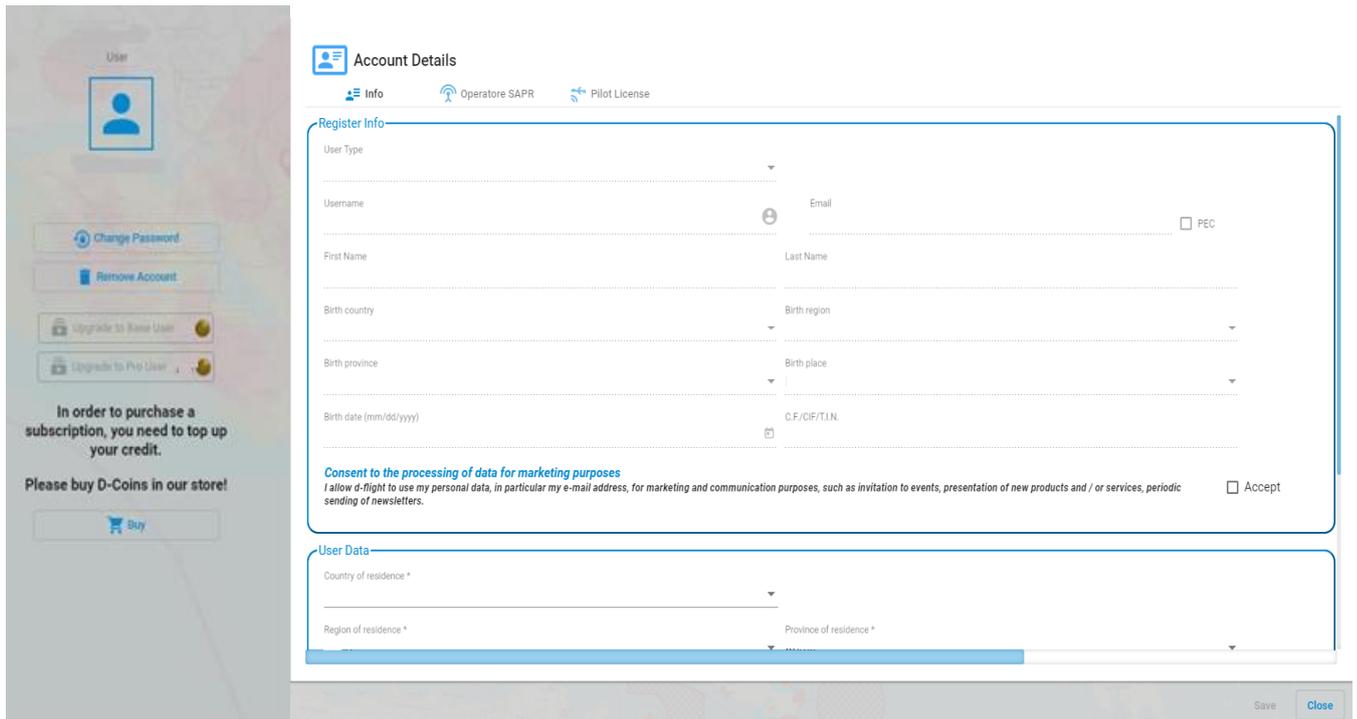
1. left click on the D-Flight icon
2. left click on <Account Details>



To **change** your profile details:

1. click left on **<Account>**

In the window of the **<Account Details>** the Tabs will be available for viewing and modifying the User and Pilot information



Selecting the <Information> Tab will be possible:

- ✓ display the <Registration Information>
- ✓ view / modify <User Data>

By selecting the <Pilot License> Tab it will be possible to **view / modify** the data of your <Pilot License> entered during the registration phase.

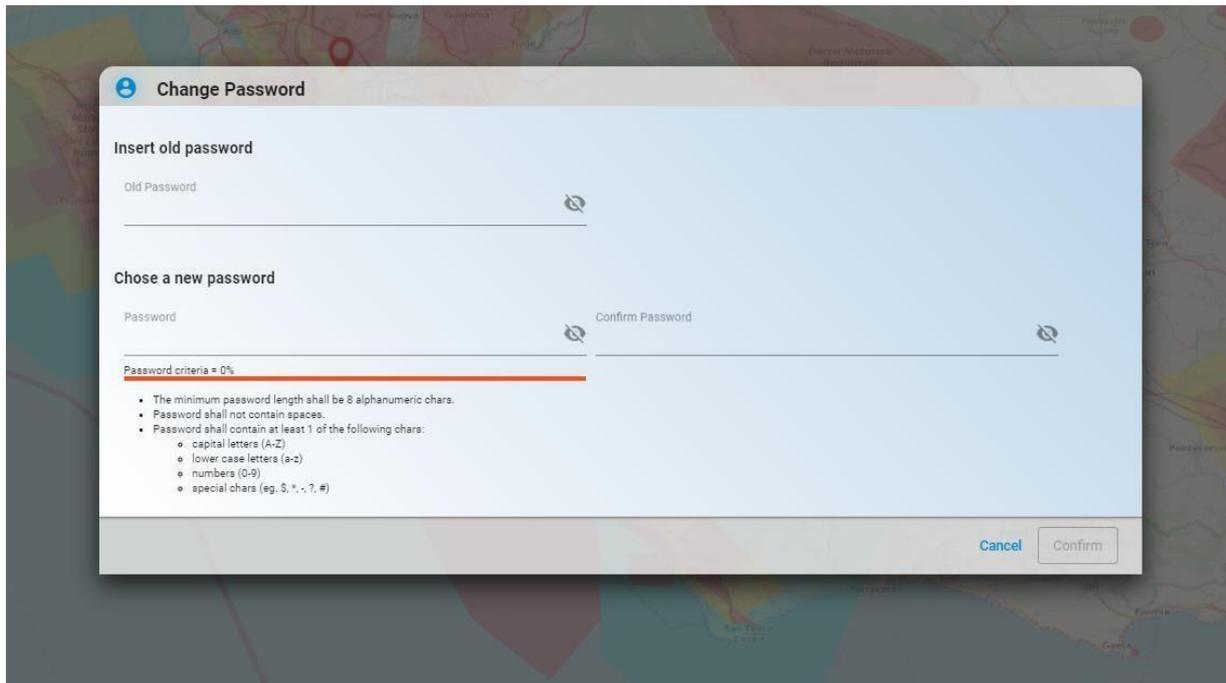
By selecting the Tab <Sapr Operator> it will be possible to register further as an operator Sapr and obtain the release of QR-Codes

In the <Account Details> window, the <Change Password> and <Remove Account> functions will be available;

### 1.5.2 Change Password

With <Change Password> you can update your password.

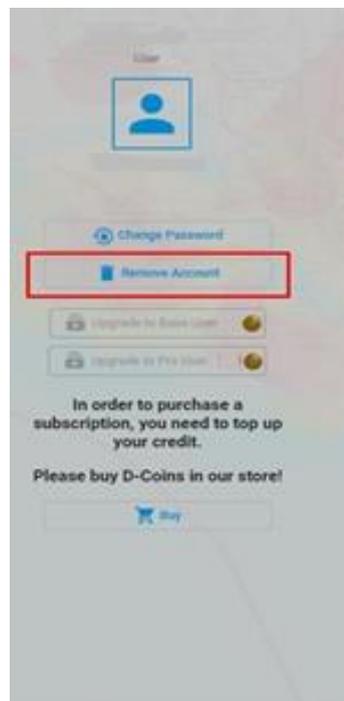
1. Enter the old password
2. Follow the pop-up instructions
3. Once all the fields have been updated, select <Save> to complete the procedure
4. <Close> to exit without making changes



*If they are not followed correctly, the error will be indicated in red*

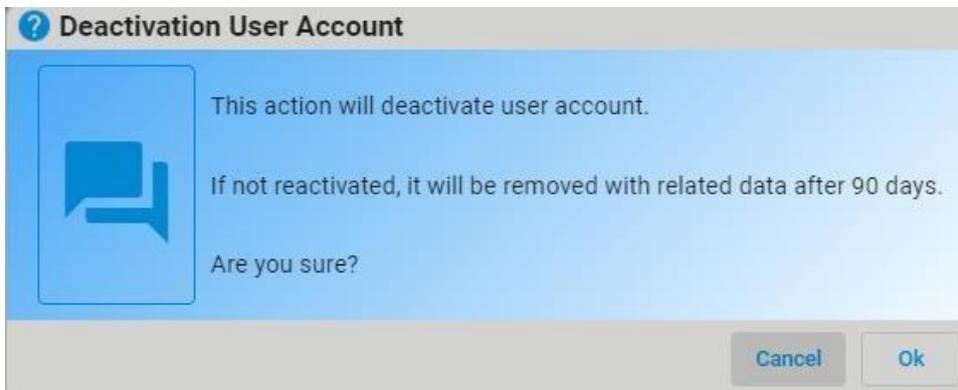
### 1.5.3 Remove Account

With **<Remove Account>** it will be possible to DELETE the account created in d-flight



1. Click left on **<Remove Account>**
2. The warning pop-up shown below will appear
3. Select:
  - ✓ **<Cancel>** to exit without make any changes

✓ <Ok> to cancel



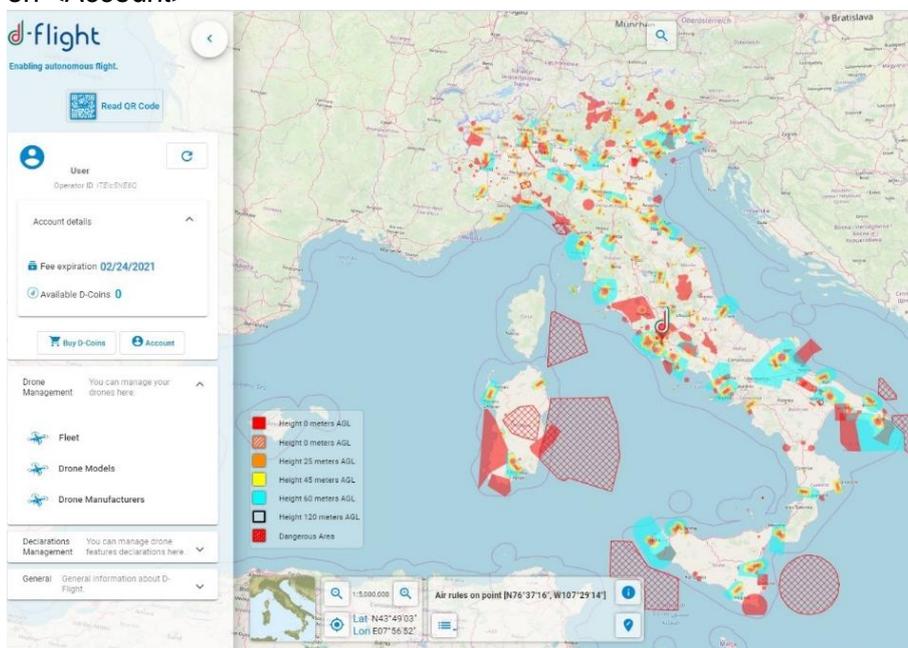
4. Check the receipt of the user de-activation confirmation e-mail
5. Click on the confirmation link

**ATTENTION.** By performing this procedure you will no longer be able to log in to the d-flight system as a registered user

#### 1.5.4 Enabling User As SAPR Operator

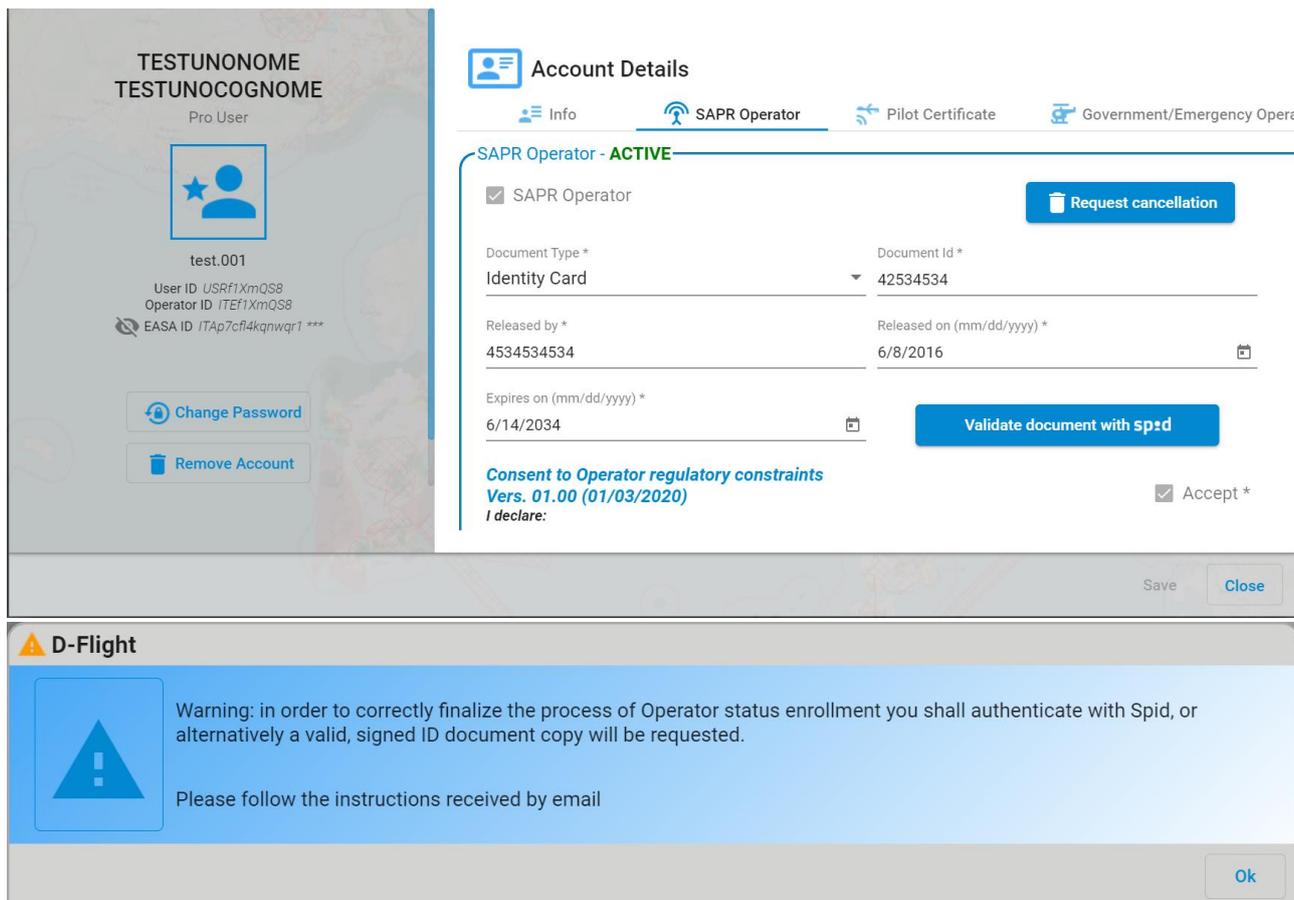
Left Click on the d-flight icon

1. Click on <Account Details> from which the drop-down menu will open
2. Click on <Account>



1. Left Click on < Sapr Operator> icon and select <ON>
2. Insert <Type of document> that can be:
  - ✓ Identity card
  - ✓ Electronic Identity card
  - ✓ Passport
3. Insert <ID Document>
4. Fill in <Released by>

5. Fill in <Released on>
6. Insert <Deadline>
7. Accept consent to regulatory and IT constraints
8. Click on <Save>, otherwise if you do not want to proceed click on <Close>
9. If you do not give your consent to the Operator's regulatory constraints and do not accept the informative constraints of Presidential Decree 445, the user is placed in a **suspended** state which is canceled once the flag has been made on the two boxes.



The screenshot displays the 'Account Details' page for a user named TESTUNONOME TESTUNOCOGNOME. The user is identified as a 'Pro User' with a profile picture and the name 'test.001'. Their credentials include User ID 'USRf1XmQS8', Operator ID 'ITEf1XmQS8', and EASA ID 'ITAp7cf4kqnwqr1 \*\*\*'. There are buttons for 'Change Password' and 'Remove Account'.

The 'SAPR Operator - ACTIVE' section shows the following details:

- SAPR Operator (with a 'Request cancellation' button)
- Document Type: Identity Card (Document Id: 42534534)
- Released by: 4534534534 (Released on: 6/8/2016)
- Expires on: 6/14/2034 (with a 'Validate document with sp:d' button)

At the bottom, there is a consent section: 'Consent to Operator regulatory constraints Vers. 01.00 (01/03/2020)'. The 'I declare:' checkbox is checked, and there is an 'Accept \*' checkbox.

A warning message from 'D-Flight' is displayed at the bottom of the page:

**Warning:** in order to correctly finalize the process of Operator status enrollment you shall authenticate with Spid, or alternatively a valid, signed ID document copy will be requested.  
Please follow the instructions received by email

**ATTENTION:** Before being completely registered as an operator, the user will receive an email with instructions for the activation procedure:

- send by e-mail with which you registered on d-flight to the e-mail address [registration@d-flight.it](mailto:registration@d-flight.it), within two working days, a copy of the identity document, legible and valid, signed, and the operator ID

If you are under the age of 18, you must also attach, still via pdf file, the signed scan of a document of your parent or guardian, valid.

If you are registering a legal personality, and you are not its legal representative, you must also attach, still via pdf file, the proxy of the legal representative and the signed copy of his identity document, currently valid (delegating)

If you are registering a public office or PA, and you are not its Manager in charge, you must also attach, always via pdf file, the proxy of the Manager in charge and the signed copy of his identity document, currently valid (delegating).

It is not possible to register on behalf of other people.

*The pilot license is associated only to a private user, therefore it cannot be entered by a company / P.A user.*

*Once the required documents have been sent to the email registration @d-flight.it and received the automatic notification of correct delivery email, **the registration as SAPR Operators must be considered immediately effective**; if incorrect and / or incomplete data emerge from the documentary confirmation, D-Flight will promptly send evidence for the necessary changes / additions.*

### 1.5.5 Publishing your data in the SAPR Operator List

As an option, PRO users can decide to provide d-flight with their consensus for the publishing of their personal data within the SAPR Operator List.

The list is published on d-flight portal and it is accessible to everyone who visits the website.

d-flight is not in way responsible and/or liable for the use or the unlawful processing, by any third party which has access to the site, of personal data published on d-flight portal.

To provide the Consensus for publishing your data, once logged in to d-flight platform:

1. Open your 'Account Detail' page
2. Go to the 'SAPR Operator' menu
3. Click on the right box next to **"Optional Consensus for publishing own personal data"**

You can eventually remove the consensus whenever you want, just clicking again on the box and removing the flag. Once the Consensus is removed, your personal data will be removed as well from the SAPR Operator List as soon as the List is refreshed (typically any Monday, or the first following working day in case of holiday).

### 1.5.6 Possible SAPR Operator Status

In the System, each registered Operator can be in one of the following states:

- ACTIVE
  - It is the status assumed by the Operator Account once the related user has performed the "Enable User as SAPR Operator" action
  - An "Active" Operator can perform all the "operational" actions like (e.g.) purchase a QR-Code, create a "Declaration" and create a Mission for its drones.
- SUSPENDED
  - It is the status assumed by the Operator Account if:
    - The user does not provide consensus for Operator's regulatory constraints and do not accept the informative constraints of Presidential Decree 445
    - The Authority performs a "Suspend Operator" action
  - A user with an Operator Account in "SUSPENDED" state must apply the prescriptions received from the Authority (ENAC) in order to obtain the re-activation of its Operator Account; differently, its Operator Account will be "revoked".
  - If an Operator Account moves in "SUSPENDED" state, also any QR-Code and Declaration associated to such account will automatically move to a "SUSPENDED" state.
  - If an Operator Account is in "SUSPENDED" state, it will move to "ACTIVE" state when the Authority performs a "re-activate Operator" action.

- If an Operator Account is in “SUSPENDED” state, it will move to “REVOKED” state when the Authority performs a “revoke Operator” action.
- REVOKED
  - It is the status assumed by the Operator Account if the Authority performs a “revoke Operator” action
  - This is a “blocking” state for the Operator Account. Only the Authority can change this status by moving the Operator Account to “CANCELED”.
- CANCELED
  - It is the status assumed by the Operator Account if the linked user decides to perform the “Remove Operator Account” action (which is allowed only if the Operator Account is in ACTIVE state) or the Authority performs a “Remove Operator Account” action in order to unlock an Operator Account in “REVOKED” state.
  - As soon as an Operator Account moves in “CANCELED” state, the user automatically loses all the “Declarations” associated to its drones.
  - A user with an Operator Account in “CANCELED” state can perform a new registration as SAPR Operator but he/she will have to create again all its QR-Codes and all the Declarations for its drones (as the ones previously created will have been automatically moved in CANCELED state).

A user with an Operator Account in “SUSPENDED”, “REVOKED” or “CANCELED” state cannot anymore perform its operational functions (as in ACTIVE state).

All state transitions are notified to the user by e-mail. Such e-mail will contain the reasons for the state transition and, in case such transition is due to an action performed by the Authority, it will contain the actions required to exit from the “REVOKED” or “SUSPENDED” state (as for “CANCELED” state the user can perform a new registration as Operator).

### 1.5.7 European Operator Code

As per EASA regulation “EU Reg. 2019/947”, each to Operator is assigned a European Operator Code composed by 20 characters (e.g.: ITAaz765d88sfq4z-abc).

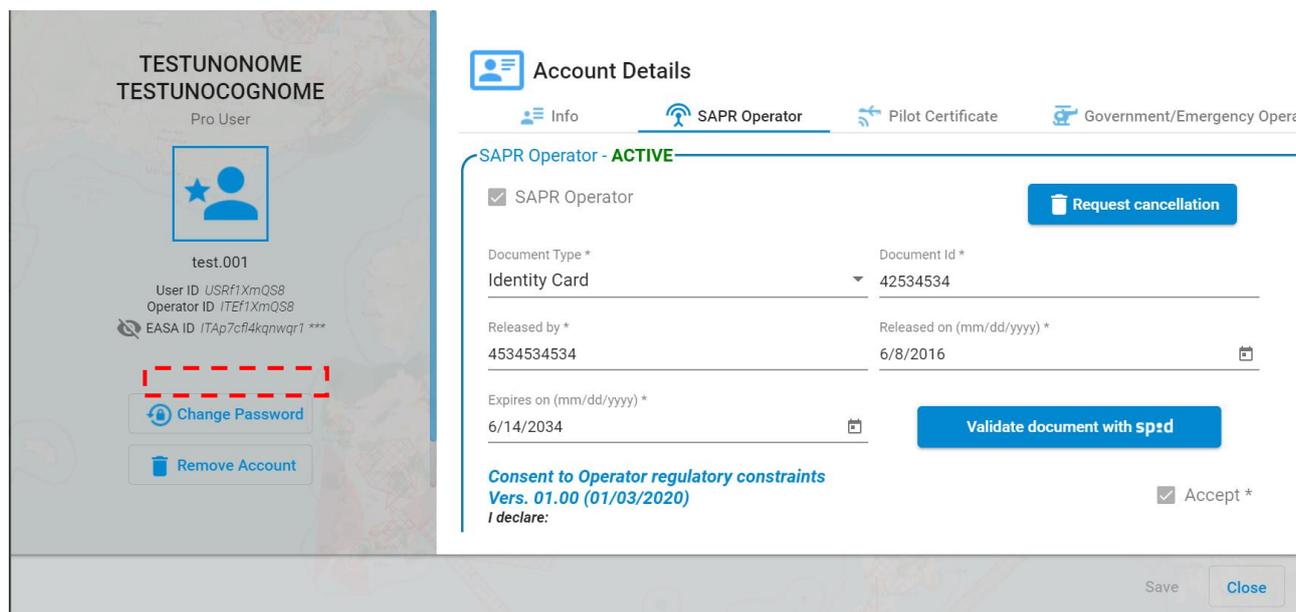
Such code is assigned once the enabling procedure (as SAPR Operator) is successfully concluded. The code is included in the confirmation e-mail that will be received at the positive completion of the procedure.

**Note:**

The last three characters of the European Operator Code are considered as “private” and, therefore, are not included in the PDF documents produced by d-flight such as:

- Document for the successful enabling SAPR Operator
- Drone declaration for critical operations in standard scenario

As highlighted in the following figure, the European Operator Code is shown in the Account details Tab of the user account. By clicking on the “eye” icon it is possible to temporarily read the last three hidden characters.



## 1.6 D-COIN AND E-PAYMENT Management

### 1.6.1 D-Coin

With the purchase of d-coins through d-flight Market Place it will be possible to purchase the basic / pro subscription and activate QR-Code.

Each d-coin has a value of € 1, once the required amount is reached it can be used for the purchase of the basic / pro subscription and therefore for the activation of the services. In addition, packages associated with the services offered by d-flight are available in the Market place to facilitate the purchase process.

After selecting the number of d-coins or packages you want to buy, from d-flight Market Place you are redirected to the page where you can enter the payment methods and finalize the operation. At this point, the d-coins are available for activate subscriptions and therefore for access to d-flight services.

From the page relating to your user profile, it is possible, through the use of the purchased d-coins / packages, to be promoted to a basic / pro user. As described in the next section (**1.6.2.2 Subscription Activation**), the basic subscription is free and it will be activated once you have registered while for the pro subscription you must register and pay the fee of € 24,00.

### 1.6.2 E-Payment Management

The E-PAYMENT MANAGEMENT section provides information on d-flight Market Place portal access and on how to purchase d-flight products:

- ✓ Access to the D-Flight Market Place Service
- ✓ Subscription Activation
- ✓ E-Payment. Account Management and Order Monitor
- ✓ Purchase QR-CODE

### 1.6.2.1. D-Flight Market Place Service Access

Profile: Registered User

1. From the "Main Page" select the d-flight icon (top left) and select <Buy>



This allows you to access to the d-flight Market Place WEB page, required for the purchase of D-Coins that can be used to subscribe the subscriptions (basic or pro) and / or to buy QR Code.

0 item(s) - 0.00€

Drone use	Registration	Yearly (VAT included)	QR Code (VAT included) for each drone
<b>Base use</b>	Free	0 €	6 €
<b>Advanced (PRO) use</b>	Free	24 €	96 €

Featured

**D-Coin**

The D-Coin is an expendable credit: once you purchase, you can use them to enable features, subscrip...

1.00€  
Ex Tax: 0.82€

**D-Coin package for 1-Year PRO Subscription [24 D-Coins]**

Thanks to this package it is possible to have the amount of D-Coin required to activate (from WebA...

24.00€  
Ex Tax: 19.67€

**D-Coin package for BASE QR Code [6 D-Coins]**

Thanks to this package it is possible to have the amount of D-Coin required to activate (from WebApp...

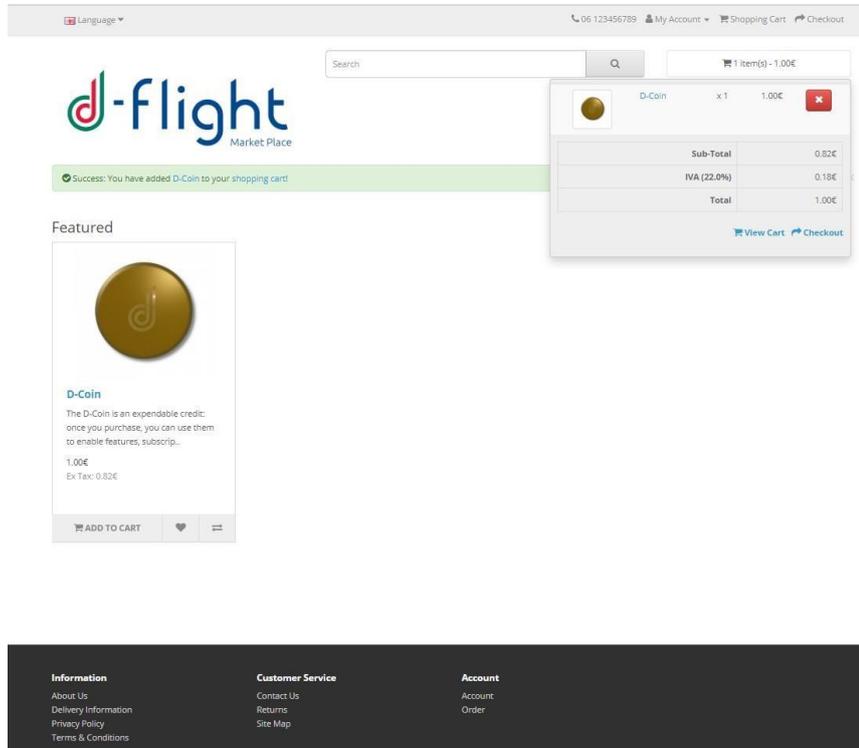
6.00€  
Ex Tax: 4.92€

**D-Coin package for PRO QR Code [96 D-Coin]**

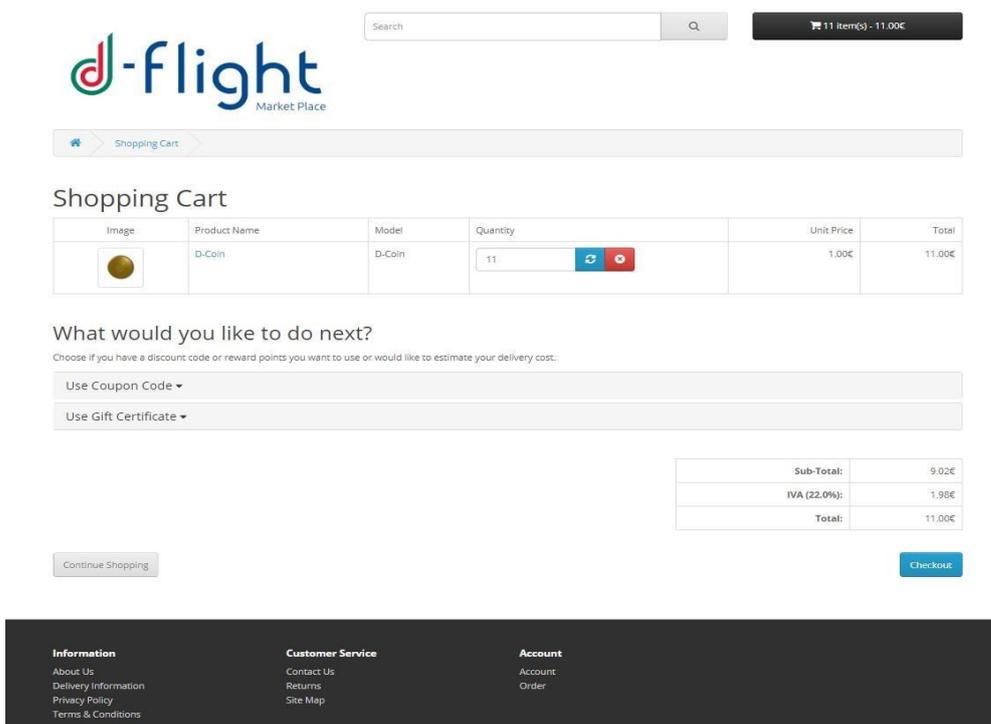
Thanks to this package it is possible to have the amount of D-Coin required to activate (from WebA...

96.00€  
Ex Tax: 78.69€

- At this point it is possible to purchase the D-Coin needed to subscribe and / or acquire QR Code by clicking on **<Add to Cart>**



- Select the shopping cart (top right) and press **<View cart>** to get a summary of the order and then proceed with the purchase by clicking on **<Buy>**



- Or press **<Checkout>** to purchase immediately

- You will be redirected to the following page, check the credentials with which you are making the purchase, if the credentials are correct select <Access>

Information	Customer Service	Account
<a href="#">About Us</a> <a href="#">Delivery Information</a> <a href="#">Privacy Policy</a> <a href="#">Terms &amp; Conditions</a>	<a href="#">Contact Us</a> <a href="#">Returns</a> <a href="#">Site Map</a>	<a href="#">Account</a> <a href="#">Order</a>

*Attention, the Email address to be entered is the one used to register on the d-flight portal*

- Enter the billing details
- Select the payment method and accept the "Terms and conditions"

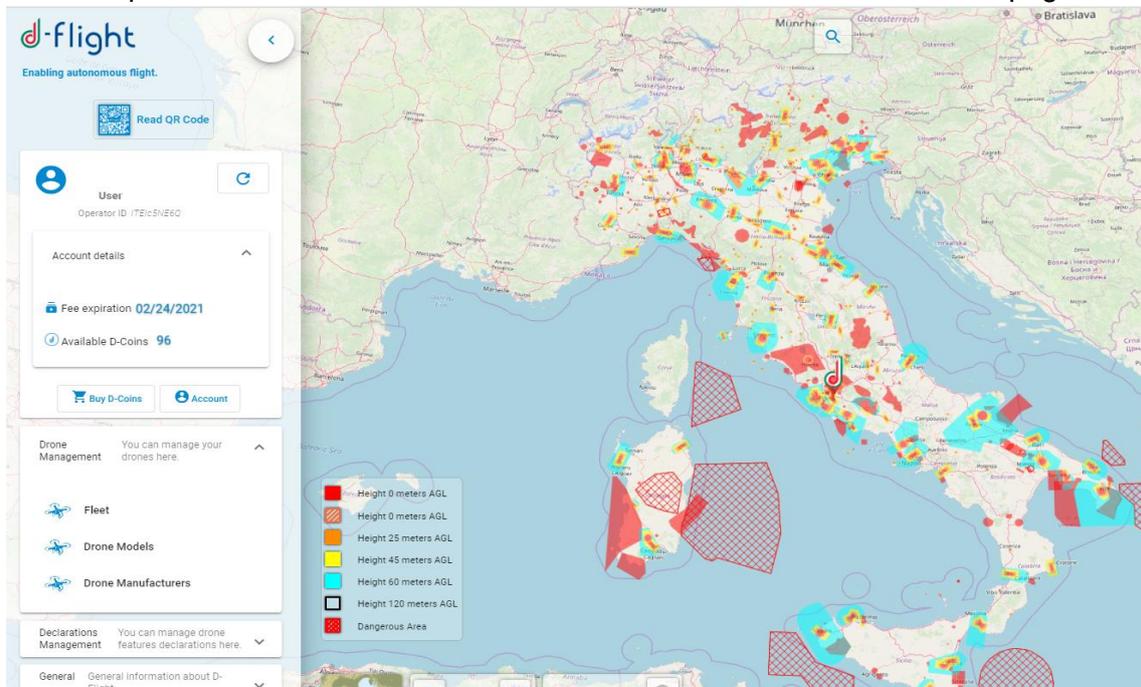
- Click on <Continue>
- Click on <Order Confirm >

10. If Credit card has been chosen, you are redirected to the following page, where you can enter your credit card details

*Attention: in the case of payment by coin web-credit card, please note that only VISA and MasterCard cards are accepted*

11. Click on <Go on> and <Pay>

12. At this point the number of D-coins available can be viewed from the main page



N.w. if you have chosen to pay by bank transfer:

- send a bank transfer to the following IBAN: IT77W0306903390100000002200
- insert holder: d-flight S.p.a.
- indicate the order ID in the reason for the transfer

Instead if you have chosen the web-credit card currency:

- Enter Card Number
- Insert CVV2 / CVC2 / 4DBC
- Enter the Expiration Date
- Enter the Cardholder
- Enter an email to confirm the order

### 1.6.2.2. Subscription Activation

Profile: Registered User

After D-Coins purchasing it is possible to activate a subscription which allows the acquisition of functional privileges valid in the time period in which the subscription is considered valid. The following table shows the privileges in relation to the type of subscription subscribed:

Drone User	Registration	Annual Subscription (VAT included)	QR Code (VAT included) for only one drone
<b>Basic User</b>	Free	0€	6€
<b>Pro User</b>	Free	24€	96€

The fees charged for each service are determined under the supervision and approval of ENAC.

#### < BASIC SUBSCRIPTION >

This subscription allows a User to access basic d-flight services for 1 year for free.

With this subscription it will be possible to activate the QR Code Base, for a cost of € 6.00 (each).

The basic subscription will be activated once the registration procedure has been successfully completed.

#### < PRO SUBSCRIPTION >

This subscription allows a Pro user to access d-flight services for 1 year for a cost of € 24.00.

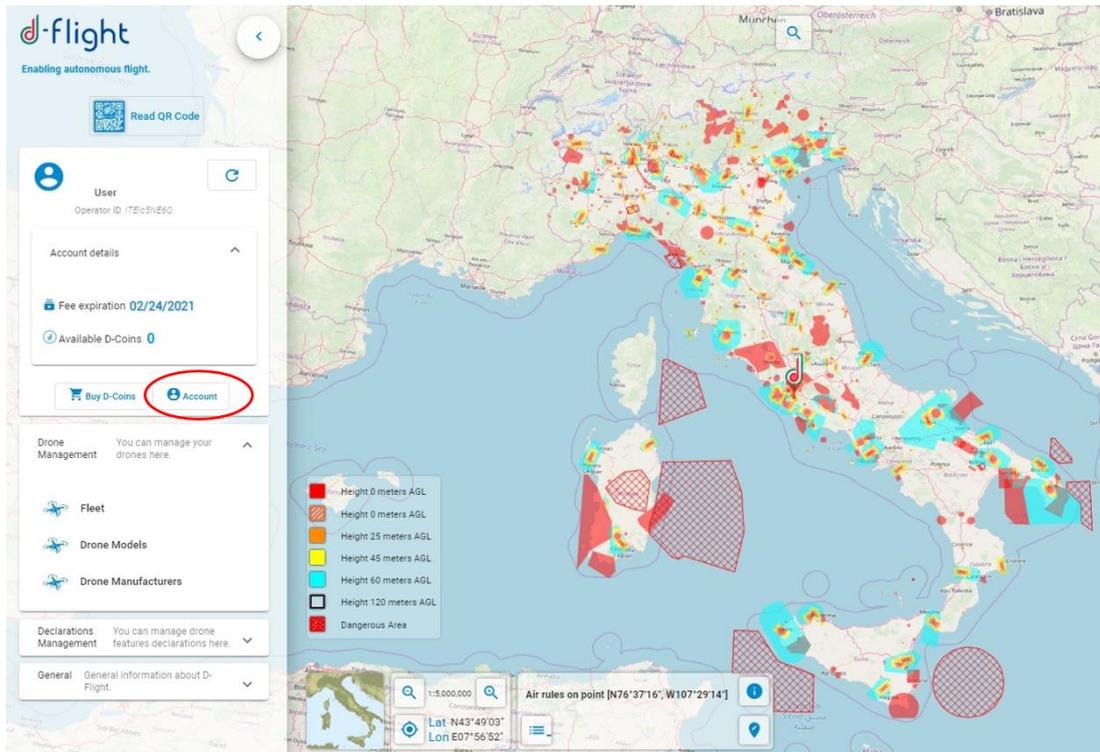
With this subscription, it will be possible to activate the QR Code Base or Pro, for a cost of € 6 and € 96 (each ones) respectively.

The pro subscription, unlike the basic one, will allow the user to make the declaration (standard VLOS scenarios) via the d-flight website.

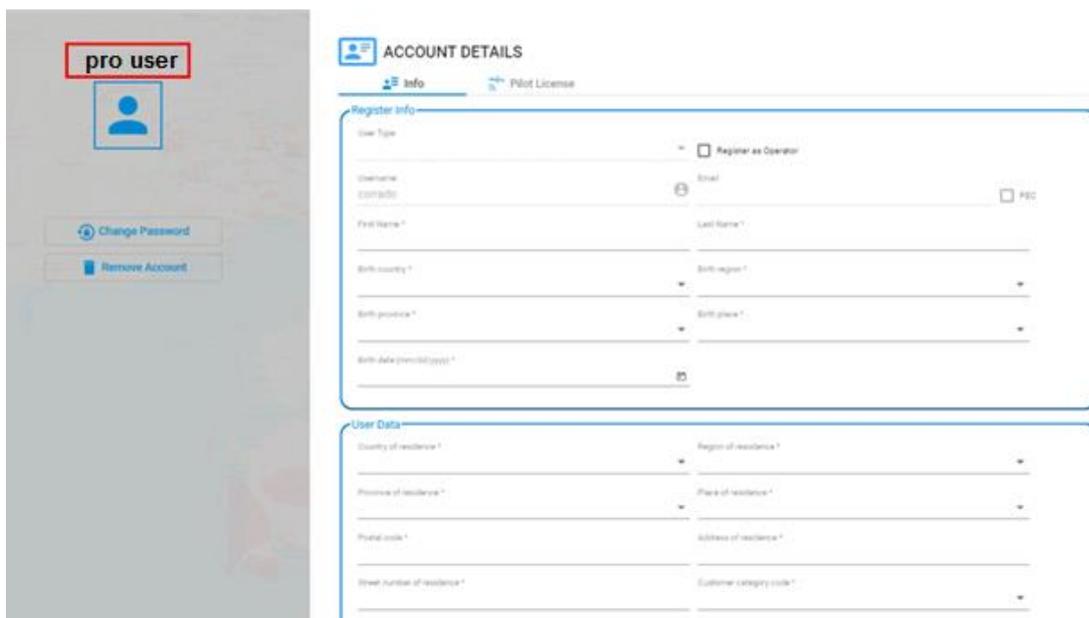
**Attention: the Company/ P.A. users can only subscribe PRO subscriptions.**

To proceed with the **purchase of the subscription**:

1. Left Click on d-flight icon
2. Left Click on <Account>



3. In the <Account Details> window, the two types of subscription, **Basic** and **Pro**, will be available
4. Select the subscription type **Pro**
5. Left click on <Ok>



The purchased subscription will appear to the left of the < Account Details >

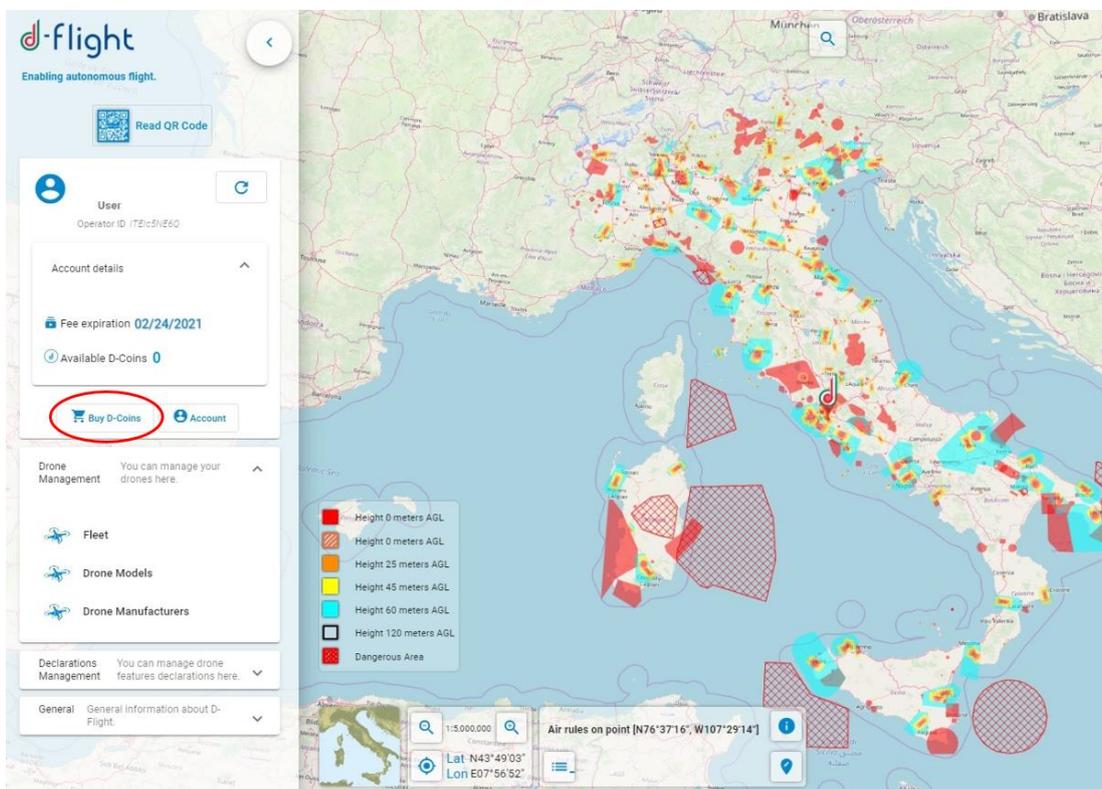
To complete the subscription registration activities, you will receive an email from d-flight CERTIFIED MAIL with confirmation that the subscription has been successfully activated. The subscription has been successfully activated.

### 1.6.2.3 E-Payment. Account Management and Orders Monitor

Profile: Registered User (Basic/PRO)

After logging in to d-flight Market Place you can view / edit your D-Flight Market Place account and view your orders.

1. Click on <Buy D-Coin>



2. You access the WEB page of d-flight Market Place
3. By selecting <My Account> you will have the possibility to access the menus of:
  - ✓ Change Password
  - ✓ Edit your addresses in the address book, to edit or add address
4. By selecting < My Orders> you will have the possibility to access the menus of:
  - ✓ View the Order History
  - ✓ View your transaction

### 1.6.2.4. QR-Code Purchasing

After purchasing the d-coins from d-flight Market Place, you can activate the QR-Codes (see section 1.7.4 Activate QR-Code).

To activate the QR code, you must have signed up for the pro / base subscription.

## 1.7 DRONES MANAGEMENT

It is the service through which a user can record the data of a drone in his possession with the brand, model, serial number and configuration (UAS).

The drone operator user can print the QR-Code containing information on the Drone, on the owner, on the operator himself and then fly with the drone.

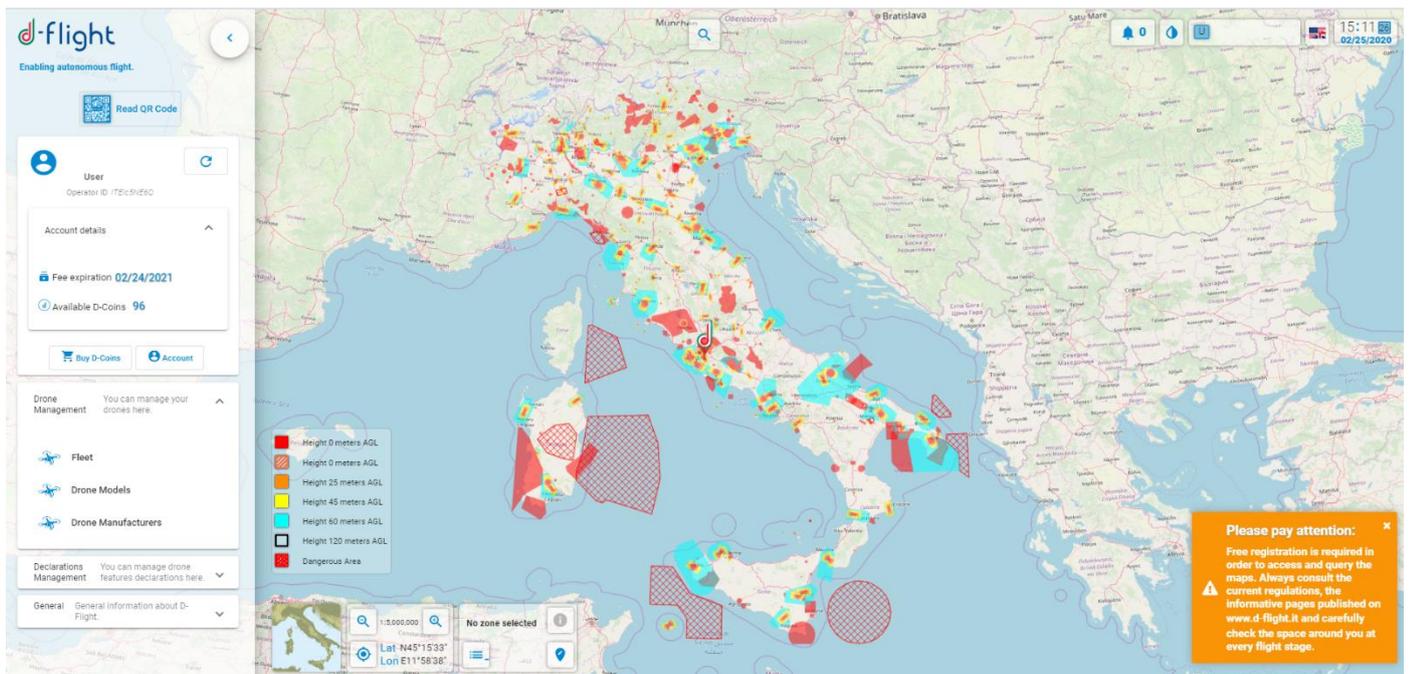
The section also provides information for fleet display and QR-code management, in particular:

- ✓ **Access to <Drones Management>**
- ✓ **Drone Management (Creation / Modification / Cancellation)**
- ✓ **Enable QR code**
- ✓ **QR code printing**
- ✓ **Reading QR code through mobile app**
- ✓ **Change Drone Status**
- ✓ **Declaration**

### 1.7.1 Access to <Drones Management>

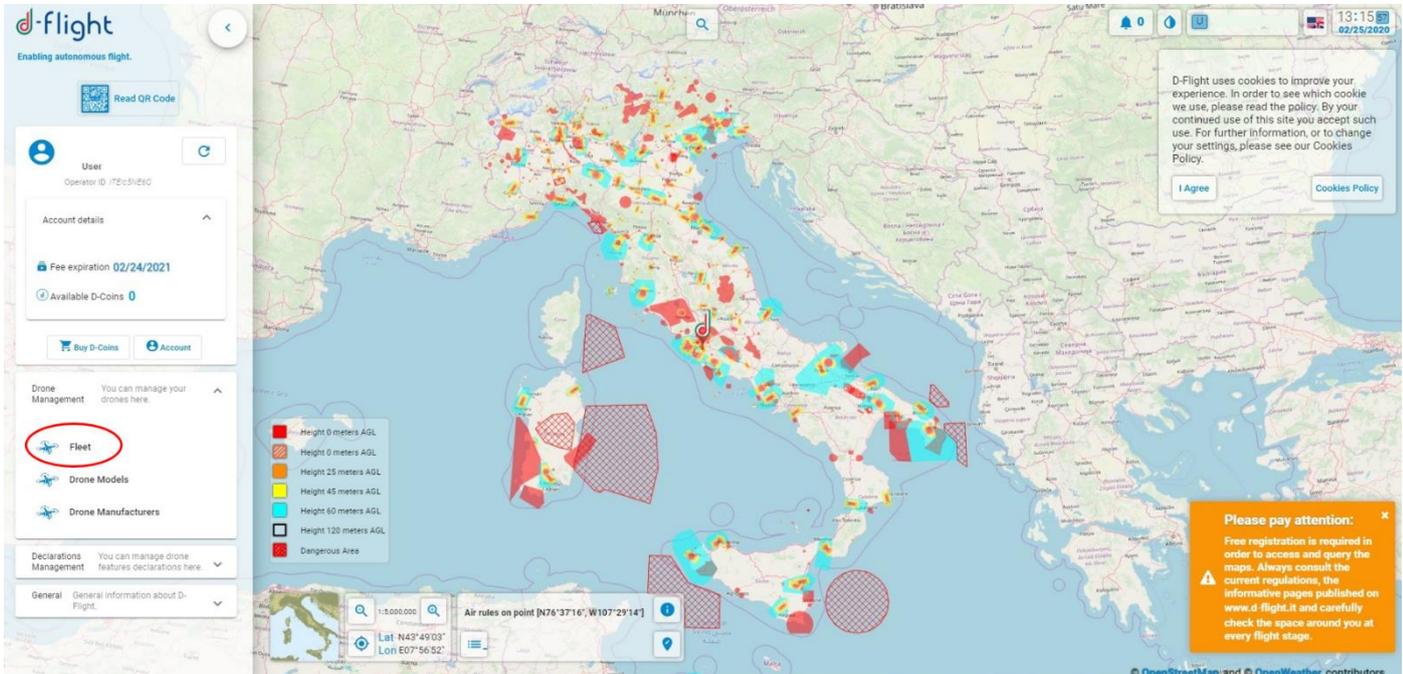
To access the display pages:

1. Left click on d-flight icon
2. Select *<Drone Management>*

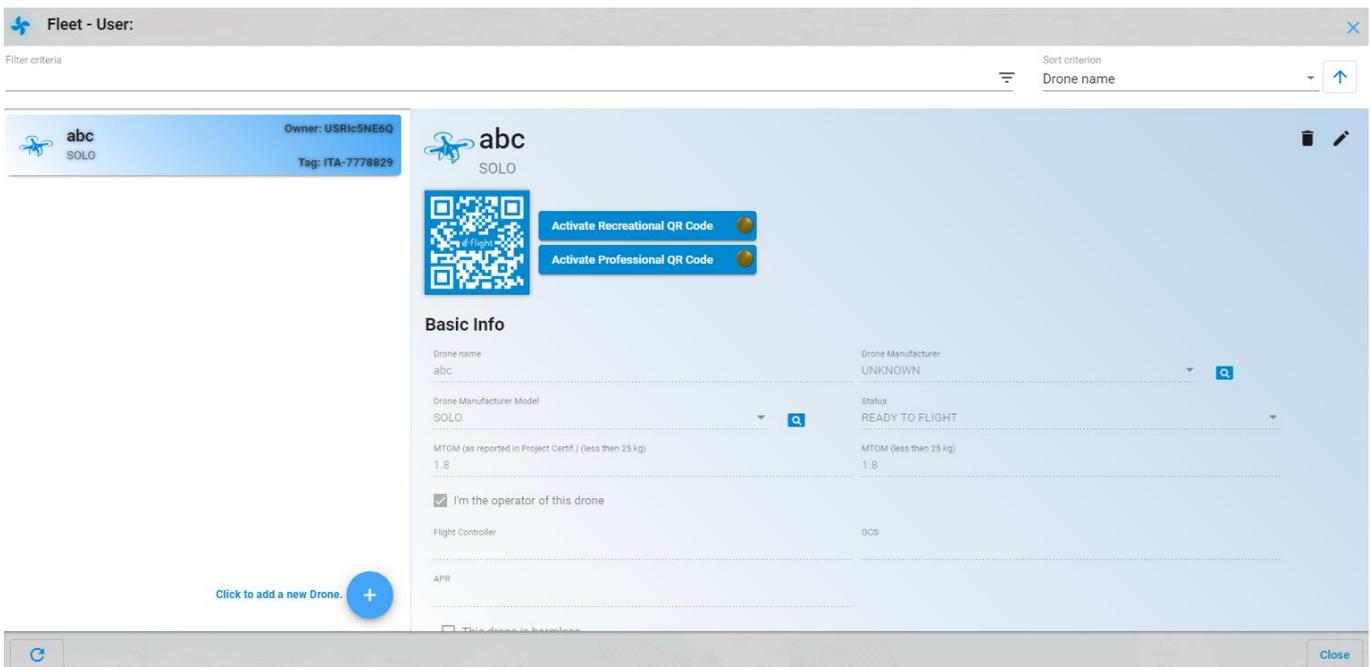


## 1.7.2 Drone Management (Creation/Modification/Cancellation)

From Drone Management page select <Fleet>



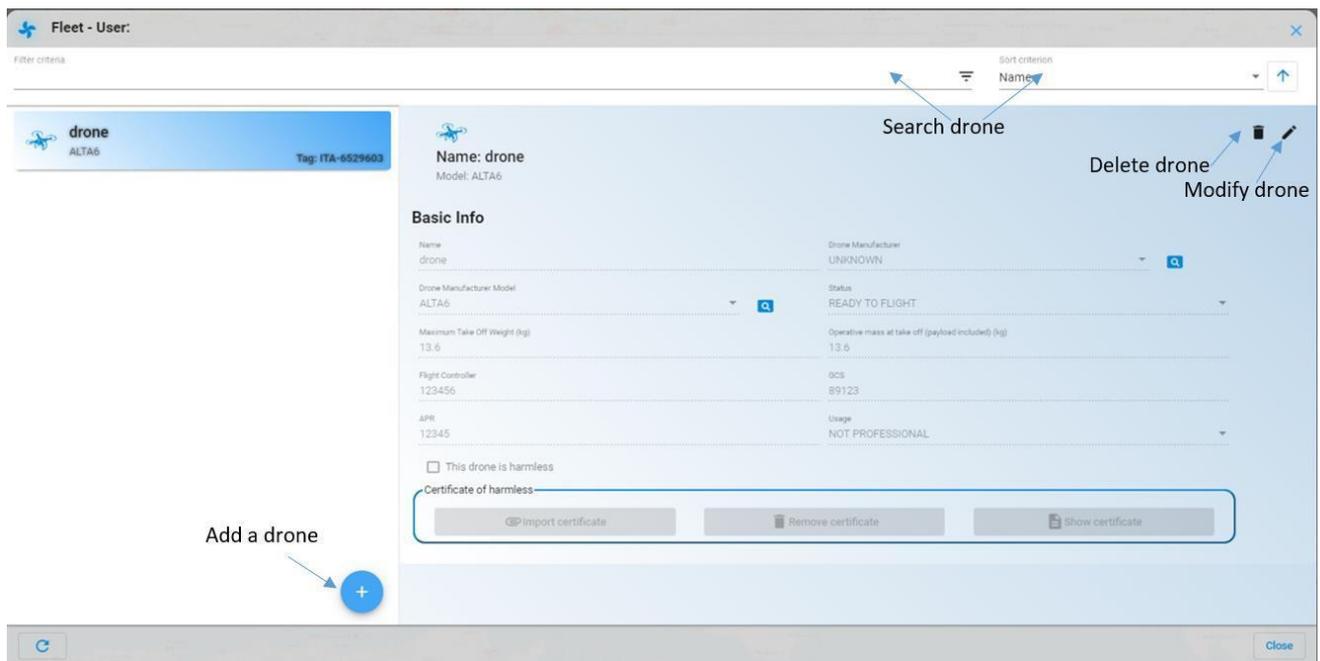
<Fleet>: allows viewing, editing and creating drones on your account. The system retrieves the list of drones for which the user is the owner. In the case of multiple drones it is possible to carry out searches with Filter or Sorting



To **create a new Drone** click on the icon create drone (+) and enter the data related to the drone:

1. Name \*
2. Drone manufacturer\*
3. Drone model\*
4. Status\*
5. MTOM\*
6. Flight Controller
7. GCS (\*),
8. APR (\*),
9. If non-offensive drone insert the flag on "this drone is non-offensive"
10. Click on <Save> to complete the entry
11. Click on <Close> to exit without saving

To **modify the data related to created drone** select the drone to be modified and click on the edit icon <modify drone>



To make changes, select:

- ✓ <OK> to confirm the changes
- ✓ <Cancel> to exit without making changes

To **delete the data related to a drone created** select the drone to be deleted and click on the delete icon <delete drone>.

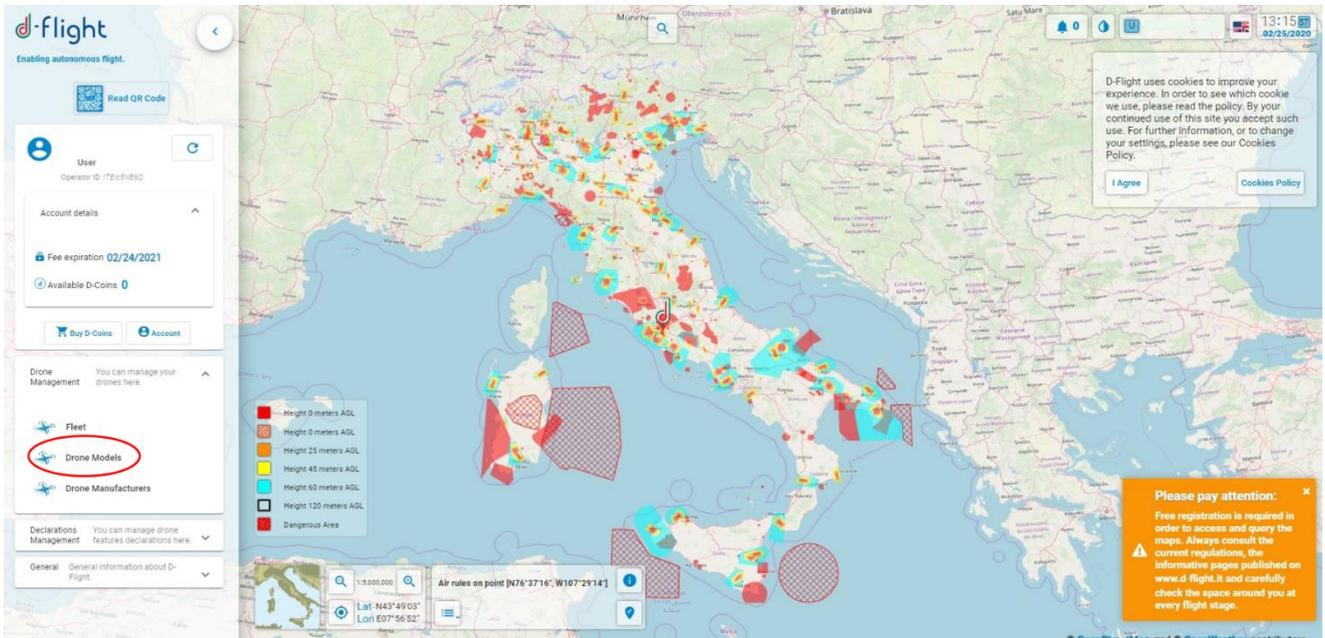
The system asks for confirmation of the cancellation operation.

Select:

- ✓ <OK> to confirm the deletion
- ✓ <Cancel> to exit without making changes:

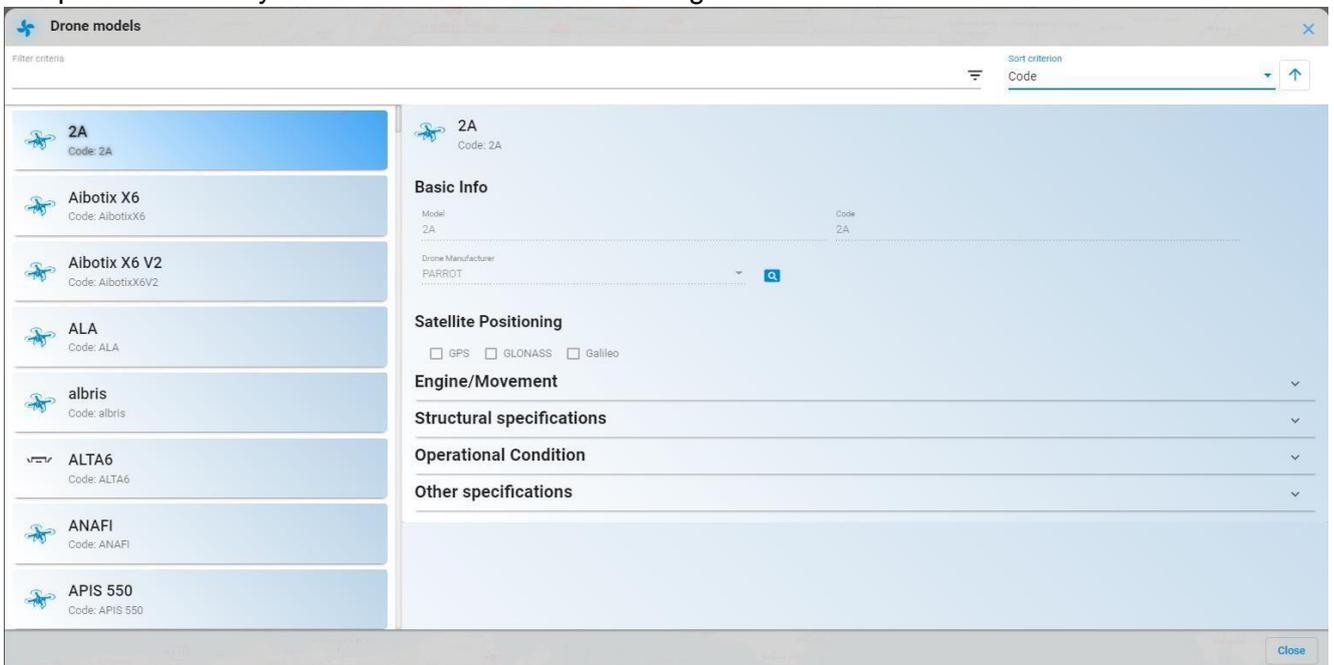
### 1.7.3 Viewing Drone Models / Manufacturers

From the Drones Management page select <Drone Models> to view drone types



The list of Drones Models is displayed on the left side.

It is possible to carry out searches with filter or sorting criteria

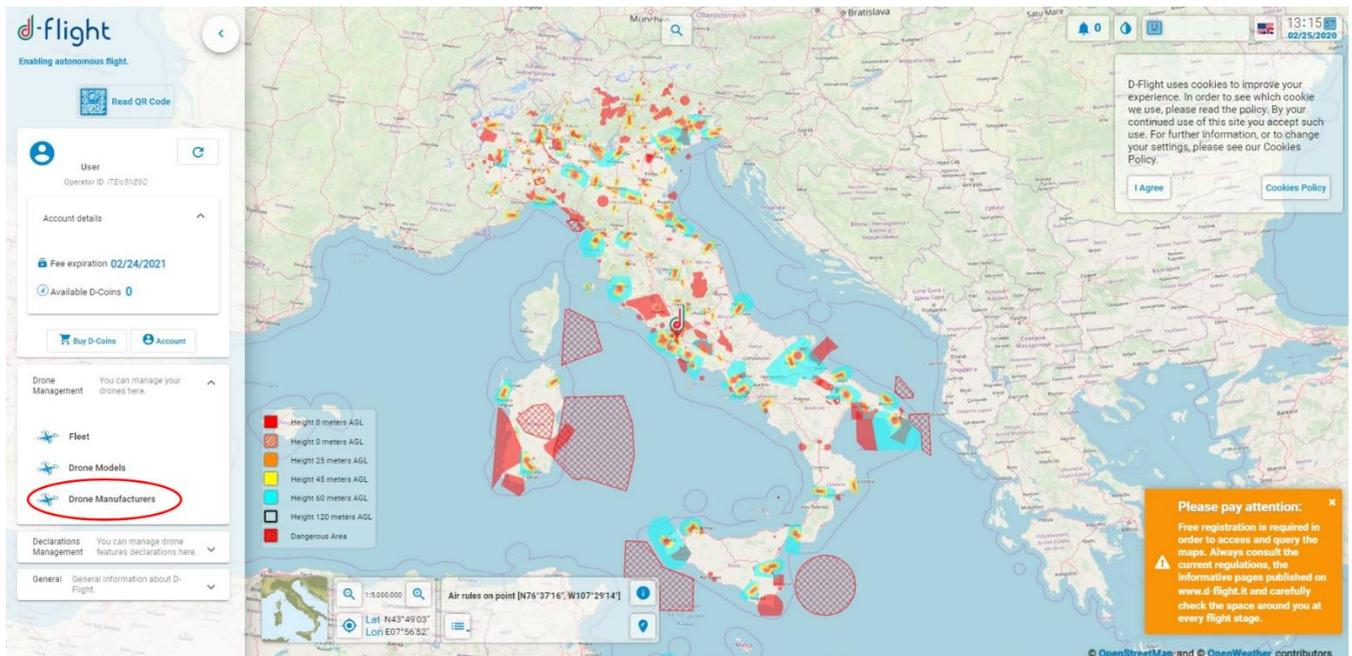


For each model the following are displayed:

- ✓ Basic Information
- ✓ Information on satellite positioning (GPS, GLONAS, Galileo)
- ✓ Engine / Movement information

- ✓ Structural specifications
- ✓ Information relating to operating conditions
- ✓ Other specifications

From the Drones Management page select <**Drones Manufacturers**> to view drone manufacturers

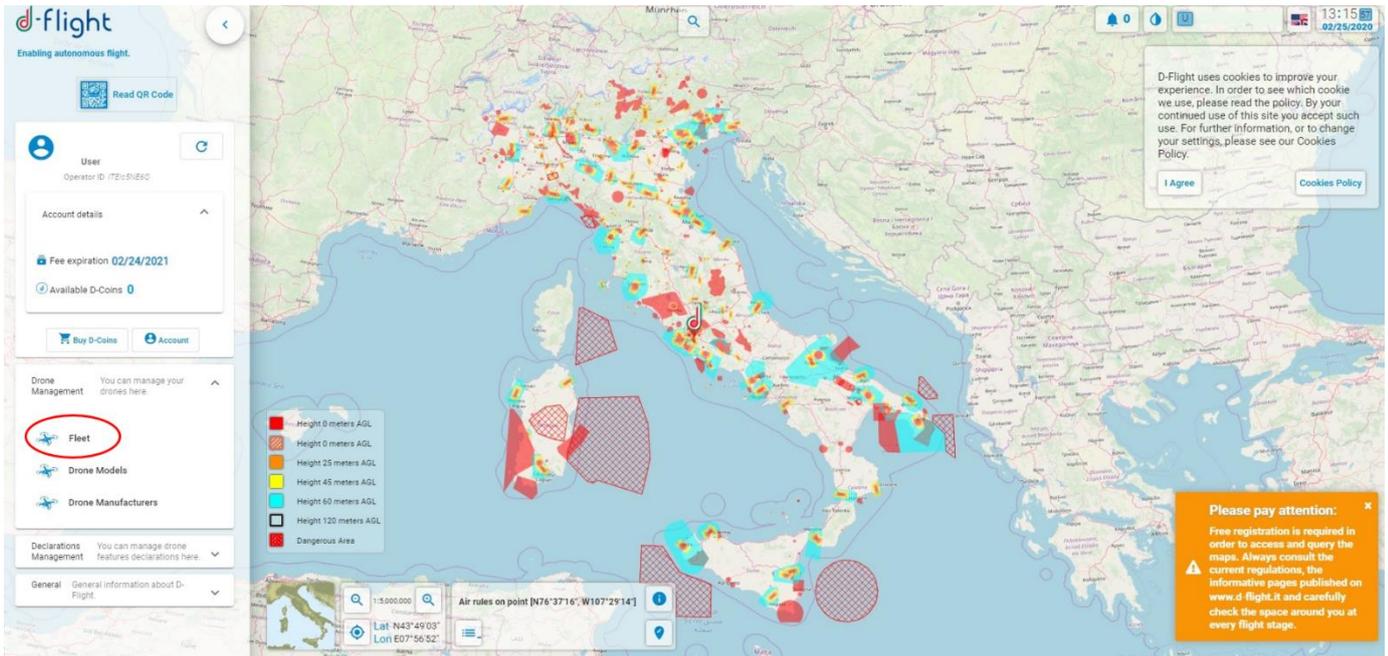


It is possible to carry out searches with filter or sorting criteria.  
For each manufacturer the information is displayed:

- ✓ First name
- ✓ Legal form
- ✓ Industrial sector
- ✓ Tax code or VAT number
- ✓ Reference email
- ✓ Web site
- ✓ Headquarters address
- ✓ Registered office address
- ✓ Production year
- ✓ CEO
- ✓ Division
- ✓ Number of employees
- ✓ Quality certification
- ✓ Share capital (KS)
- ✓ Share value (KS)

#### 1.7.4 Activate QR code

Profile: User Operator, subscription Basic or Pro

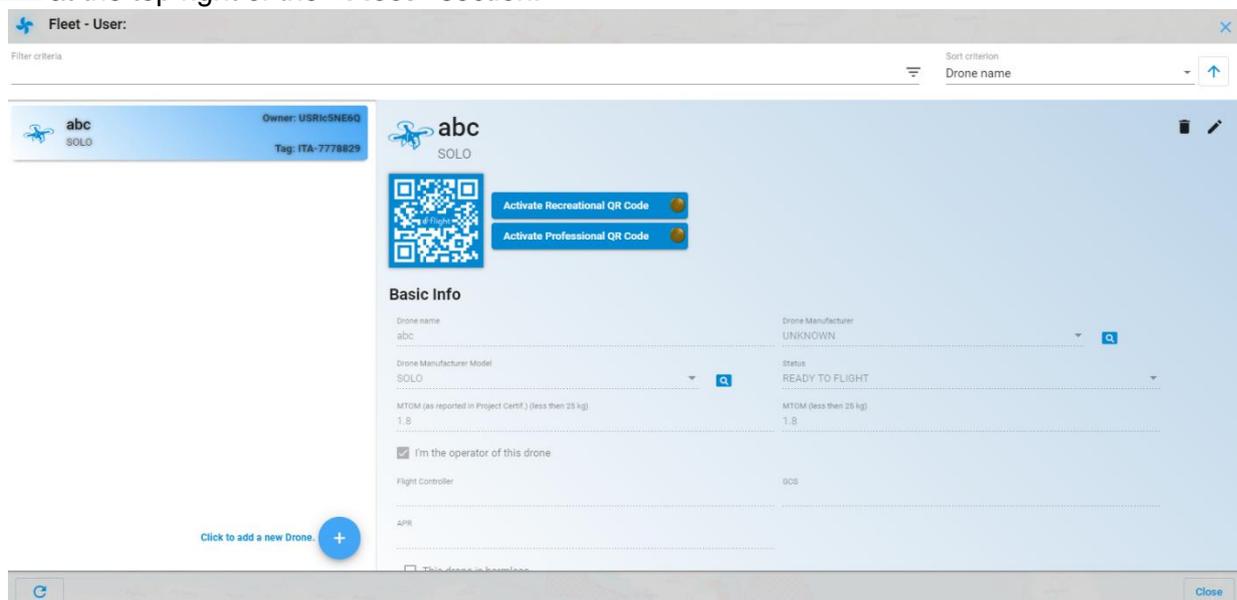


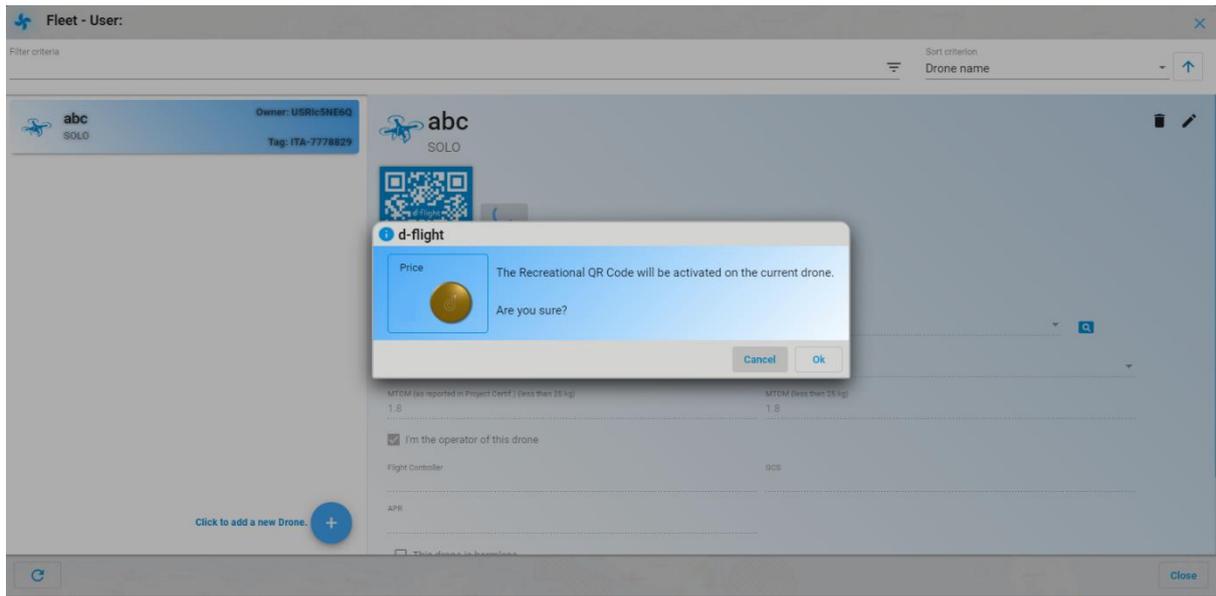
After having purchased enough D-Coin from d-flight Market Place to purchase and activate QR-Codes on their drones, the following are activated:

1. From the Drones Management page, click on **<Fleet>**:
2. From the list of your drones **<select the Drone>** for which you want to activate the QR-code
3. Select **<Activate>**
4. Select **<OK>**

Remember that for the activation of the QR-Code it is necessary to have subscribed to a basic or pro type subscription and that it is necessary to flag the box "I am operator of this drone" (for the drone you want to activate the QR-Code) after clicking **<modify drone>**

 at the top right of the **<Fleet>** section.





The QR code is activated.

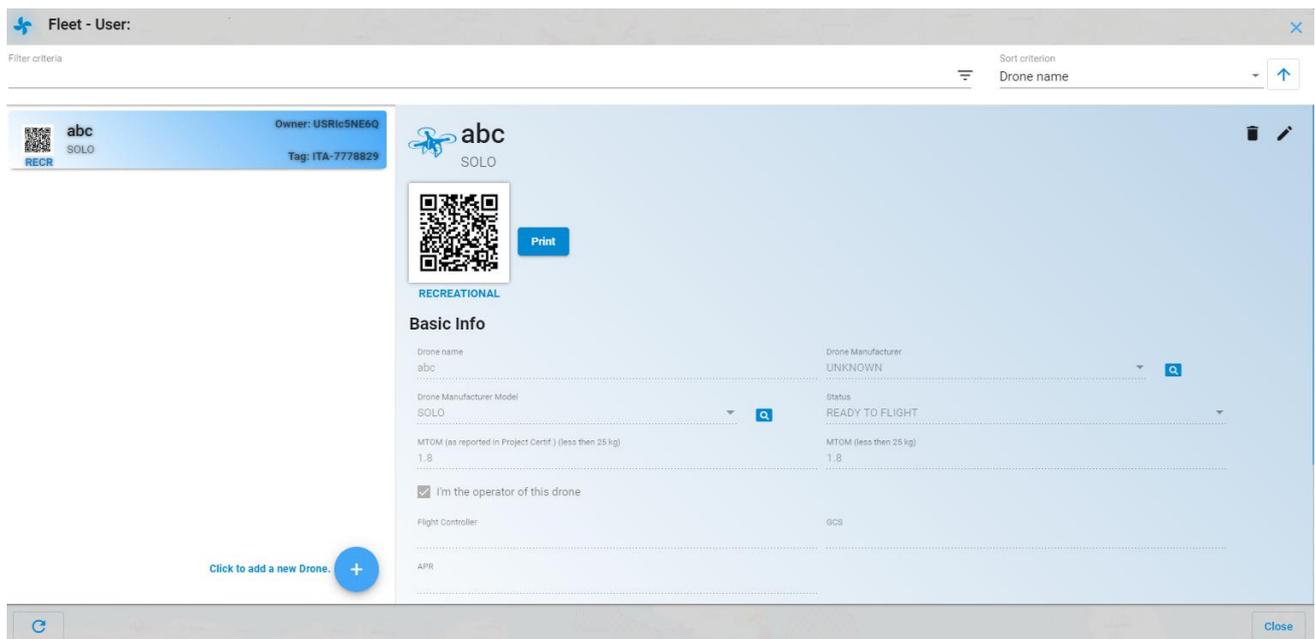
If the drone is deleted from its list, it is necessary to buy back a new QR Code.

*Warning: users can activate qr-code only if they are registered as SAPR operator*

### 1.7.5 Print QR code

Profile: User Operator, subscription Basic o Pro

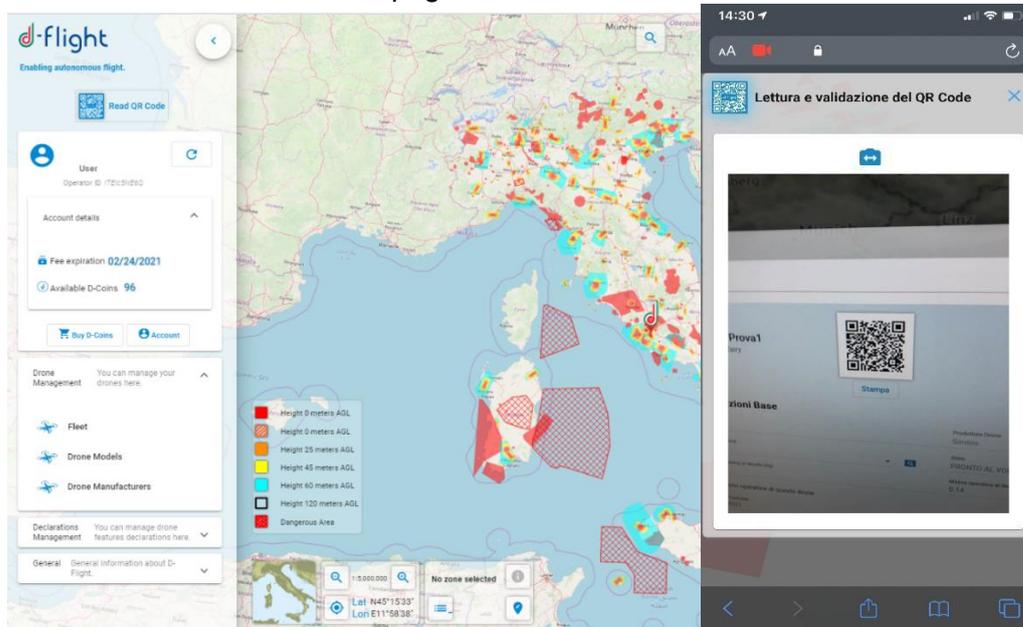
Once the QR-code is activated, the code can be printed by clicking on the <Print> icon



## 1.7.6 Reading QR-Code through Mobile App

After registering, purchasing and activating the QR Code, it is possible to decode the QR code which is encrypted by scanning with a mobile device:

1. Click on <Read QR-Code>
2. Scan the code on the fleet page with the mobile device

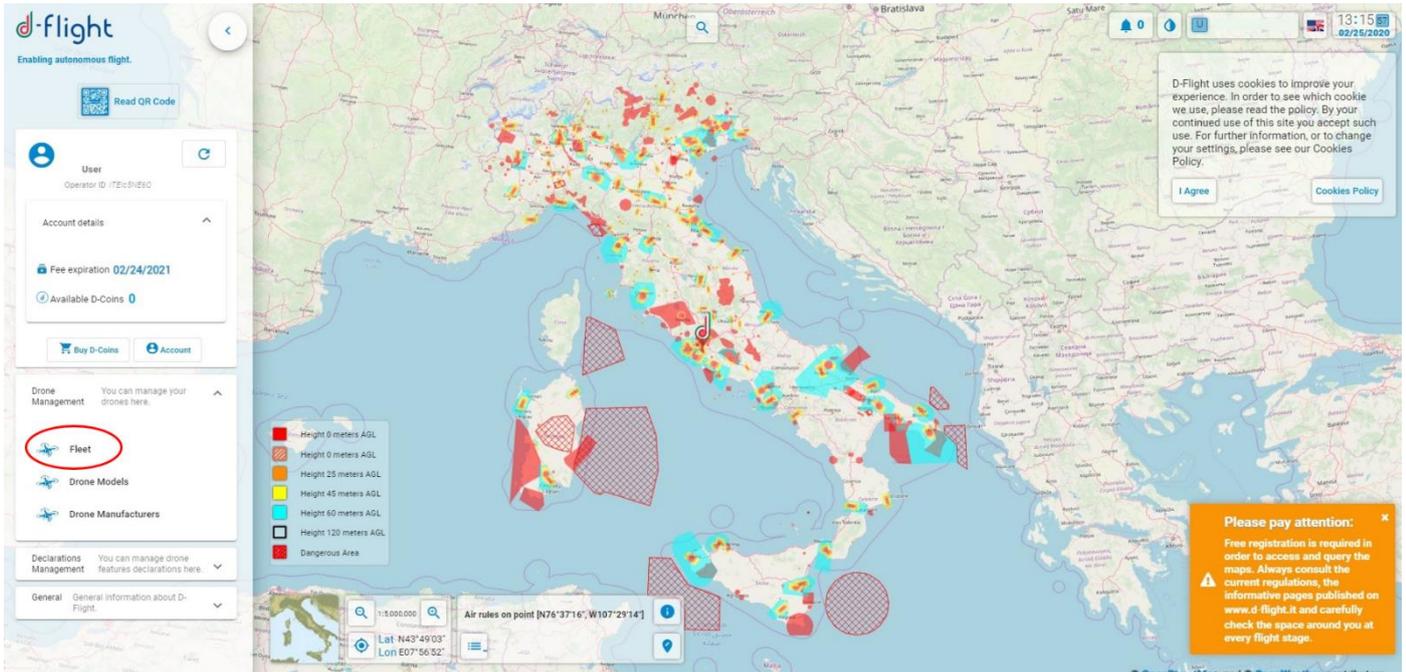


## 1.7.7 Change Drone Status

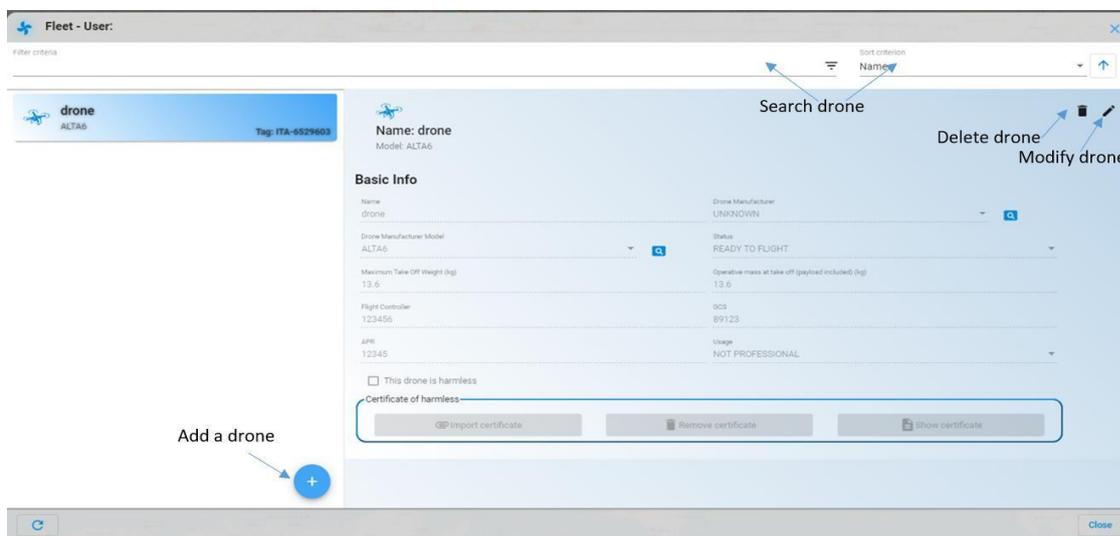
Profile: User registered

After registering, from the <Drones Management> page select <Fleet>

<Fleet>: allows the display, modification and creation of drones on your account. The system retrieves the list of drones for which the user is the owner.



To modify the data related to a drone created select the drone to modify and click on the edit icon *<Modify Drone>*



To make changes, select:

- ✓ **<OK>** to confirm the changes
- ✓ **<Cancel>** to exit without making changes

Among the data that can be changed is the "State" of the drone.

The possible states are:

- ✓ **READY TO FLY** for a drone ready to fly
- ✓ **NOT WORKING** for a drone that no longer flies and is forbidden to fly for a long time
- ✓ **IN MAINTENANCE** for a drone in maintenance and banned from flying for a short period

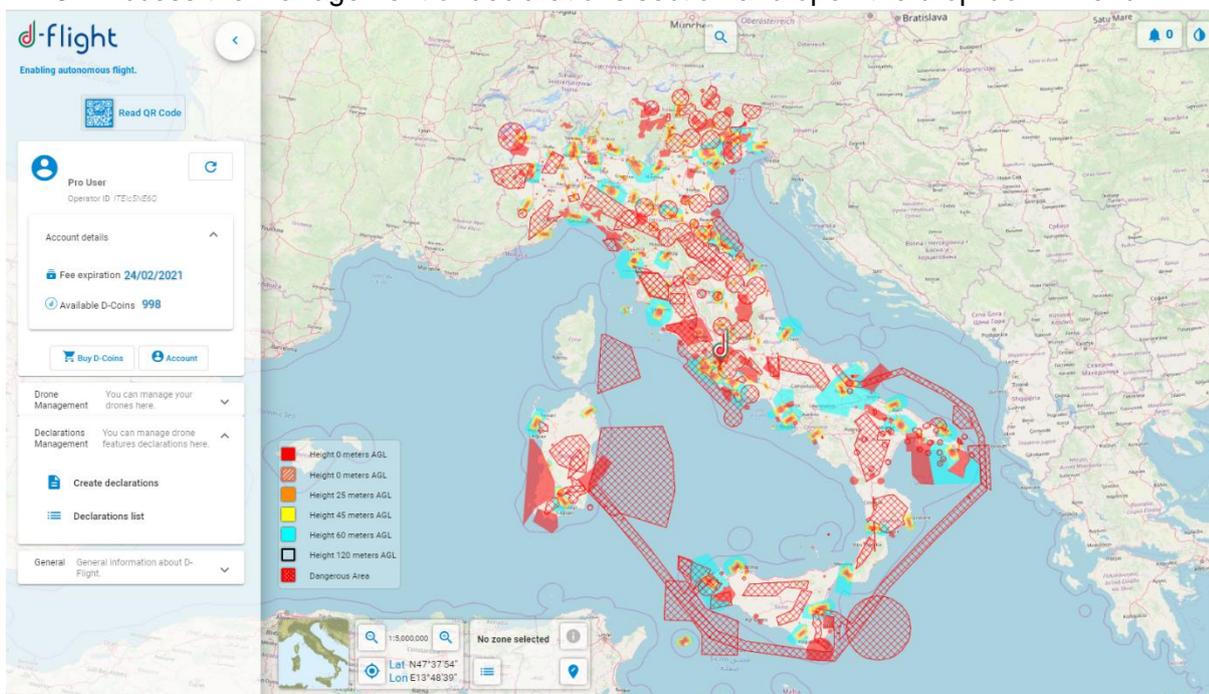
## 1.7.8. Declaration

As defined in Art. 10 and Art. 11 of the Regulation, mission Declaration must be made by the SAPR operator to ENAC to carry out critical specialized missions in accordance with the standard scenarios defined by ENAC itself.

To make the declaration it is necessary to have already made the declaration foreseen payment to ENAC on the ENAC website, as reported on the Authority's website <https://www.enac.gov.it/sicurezza-aerea/droni/fatturazione-droni>

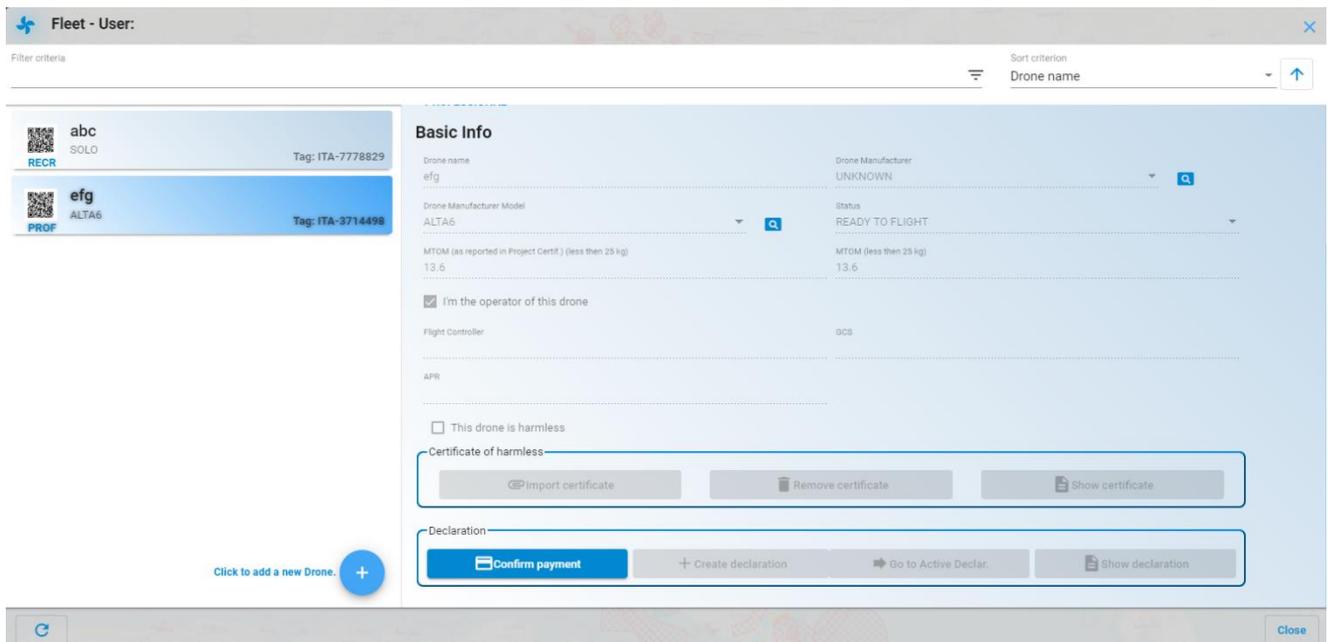
In order to make the declaration from the d-flight website:

1. Log in to the platform
2. Click on the d-flight logo
3. Access the Management of declarations section and open the drop-down menu



4. Click on <Create declarations>

5. After clicking, the following page will open



The screenshot shows the 'Fleet - User' interface. On the left, there are two drone cards: 'abc SOLO' (Tag: ITA-7778829) and 'efg ALTA6' (Tag: ITA-3714498). The 'efg' card is selected. Below the cards is a button 'Click to add a new Drone.' with a plus sign. The main area is titled 'Basic Info' and contains the following fields:

- Drone name: efg
- Drone Manufacturer: UNKNOWN
- Drone Manufacturer Model: ALTA6
- Status: READY TO FLIGHT
- MTOM (as reported in Project Certif.) (less than 25 kg): 13.6
- MTOM (less than 25 kg): 13.6
- I'm the operator of this drone
- Flight Controller: GCS
- APR: [empty]
- This drone is harmless

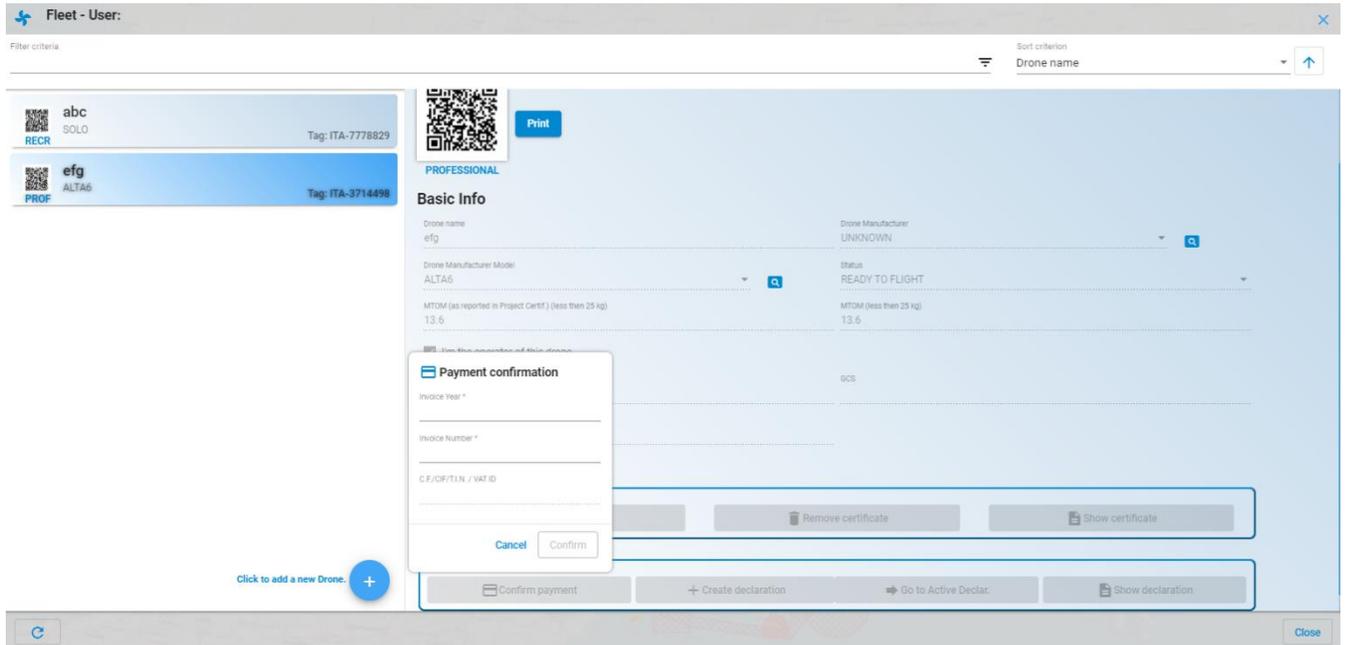
Below the 'Basic Info' section, there are two sections: 'Certificate of harmless' and 'Declaration'. The 'Certificate of harmless' section has buttons for 'Import certificate', 'Remove certificate', and 'Show certificate'. The 'Declaration' section has buttons for 'Confirm payment', '+ Create declaration', 'Go to Active Declar.', and 'Show declaration'.

**ATTENTION:** the declaration can be made only if:

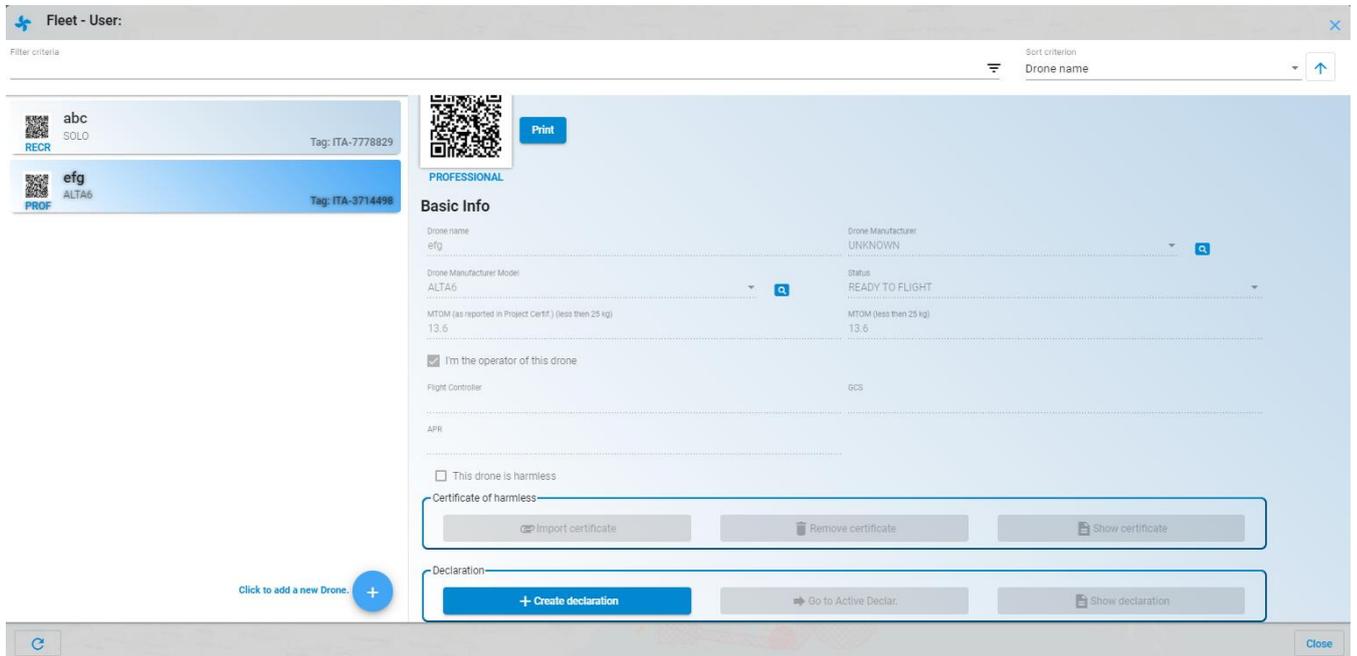
- a pro subscription has been subscribed
- the scheduled tariff was paid to ENAC
- the upgrade to SAPR operator user has been carried out
- a QR-Code Pro has been activated
- the drone for which you want to make the declaration is not harmless
- in the 'Account Details' section - having entered all the necessary information contained on your account page (including the PEC) and having flagged all the required consents.
- in the 'Drone management' section for the selected drone the check 'This drone is harmless' has not been ticked

6. To continue with the declaration, click on <Confirm payment> and complete the insertion of the required fields as shown in the following figure:

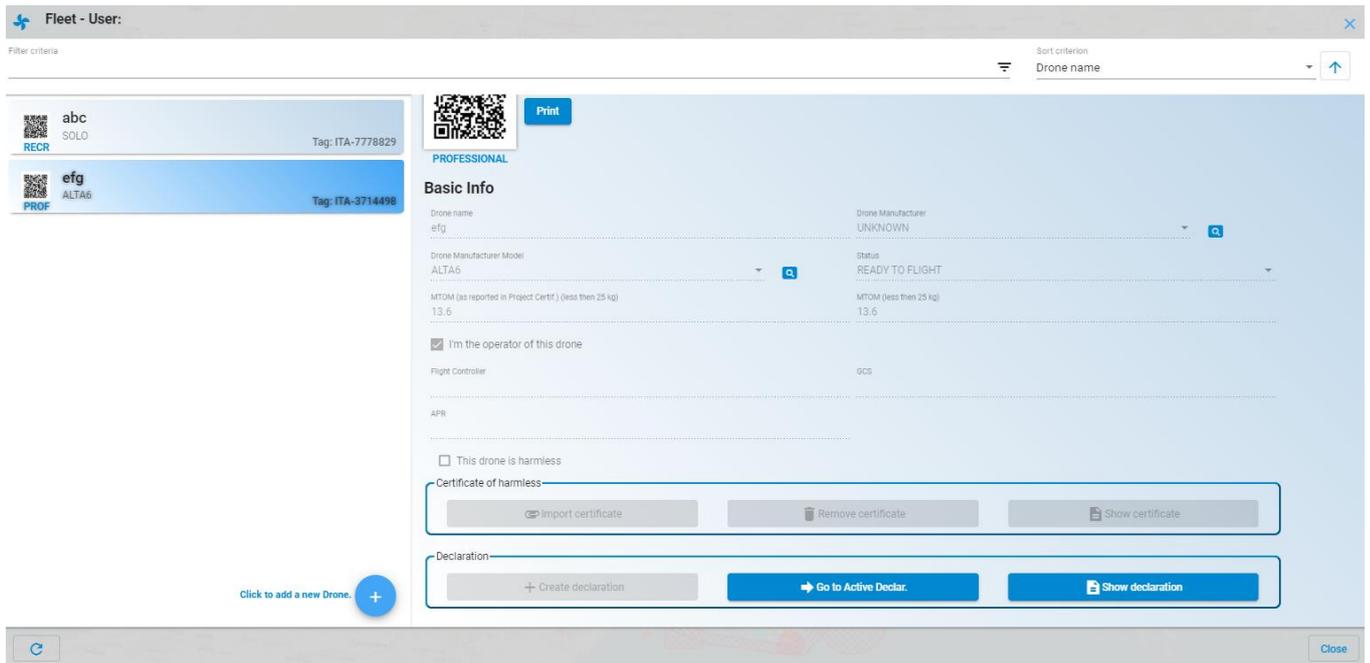
- invoice year
- invoice number



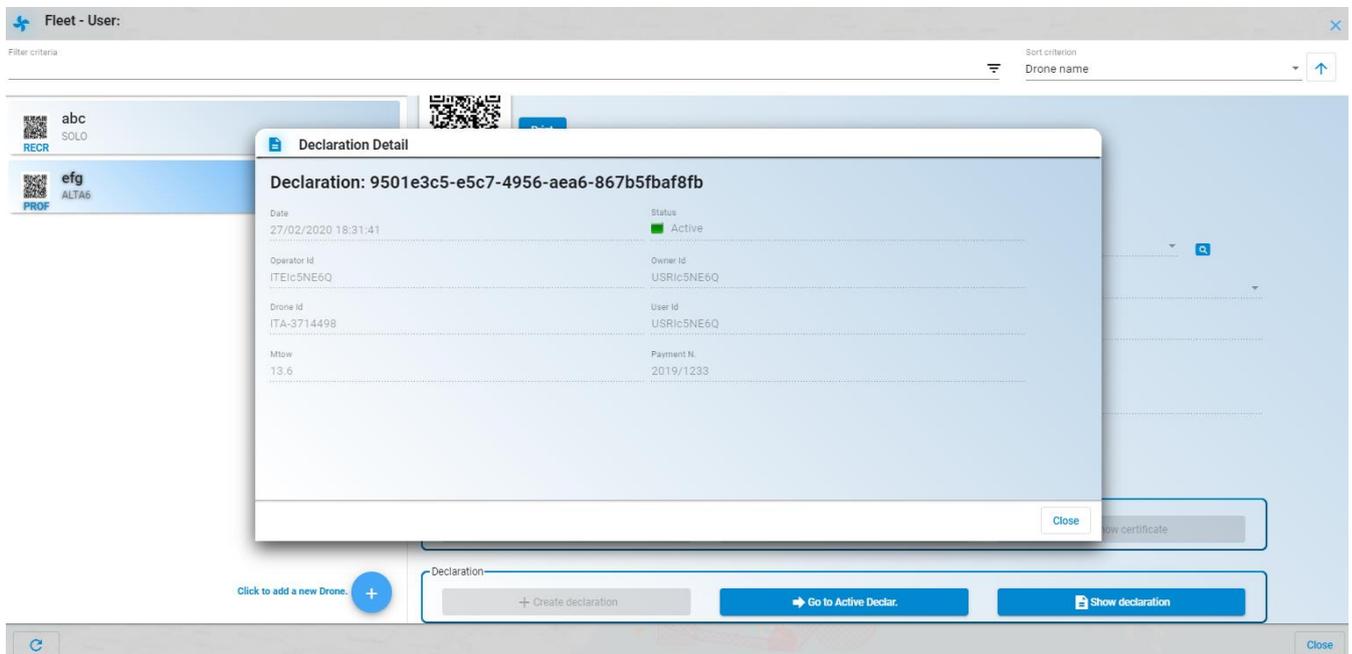
7. Once the payment has been confirmed, it is possible to proceed with the creation of the declaration



8. Click on <Create declaration> and if you want to continue press <Ok> otherwise press <Cancel>
9. To view if the declaration has been activated click on <Go to active declaration>



At this point the list of active declarations is available .  
 If you want to view the declaration made, click on *<Show declaration>*, at this point the detail of the declaration will open as in the following figure:



### 1.7.9. Possible Declaration Status

Each declaration registered in the system can be in one of the following states. Since each declaration is associated to the “couple” Operator Account-Drone, it can change its status in relationship to a change in the status of the Operator Account and/or the Drone to which it refers:

- ACTIVE
  - It is the status assumed by a Declaration after its creation (in relationship to a given Drone). If a Declaration is in ACTIVE state, the SAPR Operator is authorized to perform his operational services with the drone in conformance with what is referred in the Declaration.
  - The state of a Declaration follow 1 to 1 the evolution of the state of the Operator Account to which it is associated but, differently from the Operator Account Status, a Declaration permanently remains in “CANCELED” state (if it reach this state).
- SUSPENDED
  - It is the status automatically assumed by a Declaration in case the Operator Account of the Drone to which it is associated moves in SUSPENDED state.
  - If a Declaration is in SUSPENDED state, the Operator Account of the Drone associated to the Declaration is temporarily not authorized to perform the operational services with that Drone.
- REVOKED
  - It is the status automatically assumed by a Declaration in case the Operator Account of the Drone to which it is associated moves in REVOKED state due to an action of the Authority.
- CANCELED
  - It is the status automatically (and permanently) assumed by a Declaration in case the Operator Account of the Drone to which it is associated moves in CANCELED state or in case the status of the associated Drone (permanently) moves to CANCELED.

The status of each declaration is indicated in Tab containing its detailed information as illustrated in the figures included in §1.7.8. Declaration.

## **1.8 VLOS DRONE OPERATION AREA**

This service allows the declaration of a NON-CRITICAL VLOS mission by a registered user and subsequently its activation / deactivation, allowing the user to plan and activate their VLOS mission and make it visible to all users logged on the portal. This service constitutes an important contribution to situation awareness regarding the flight zone in which the user is interested, allowing him to find out if there are already active VLOS missions at the same time and in the same space.

The service allows the user to draw on the map the area where he will want to carry out his VLOS-type mission. The mission will be plannable if it respects the flight rules in the area concerned. Immediately before starting the flight, the pilot must have activated localization on the device used and sharing with the browser and will have to start the mission; only at that moment will the area he designed become visible on the map to all d-flight users present at that moment on the portal. The visualization will be anonymous, as the system will not present any data concerning the user (including drone) who planned and activated the mission.

At the end of the mission, the pilot will have to "end" the mission, and the planned area will no longer be visible otherwise the system will remove this area automatically after a timeout time from the start.

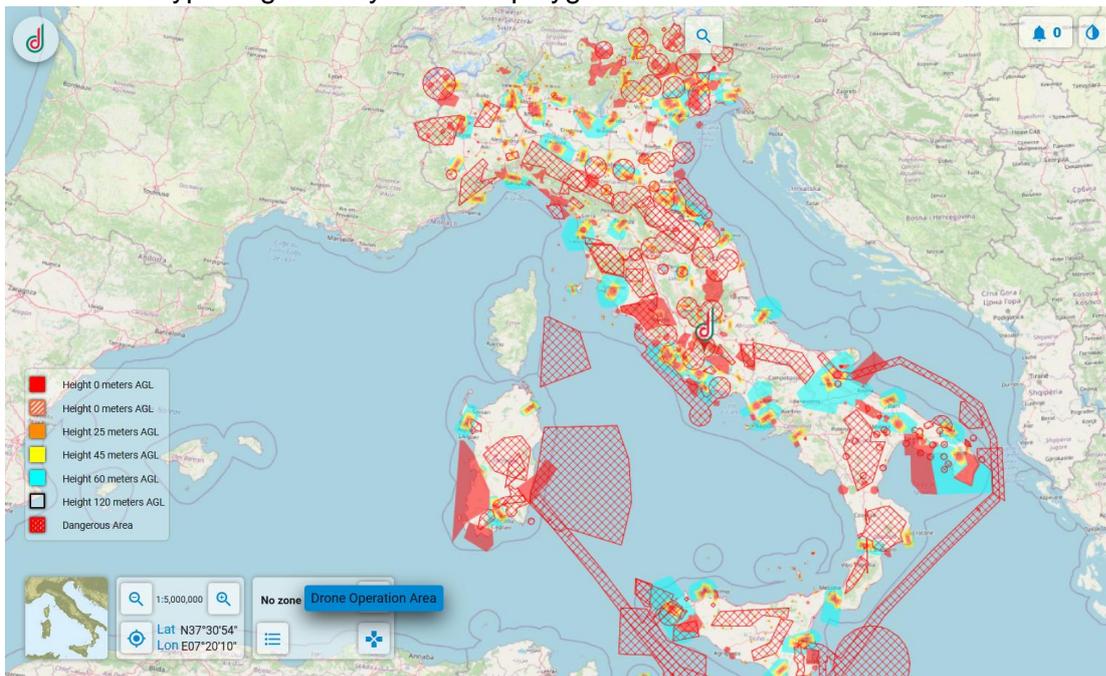
In order to access the VLOS Drone Operation Area it is necessary to be registered on d-flight as **SAPR operators**, to have a drone with **active Qr-Code** and in a **ready-to-fly status**.

An operator user must:

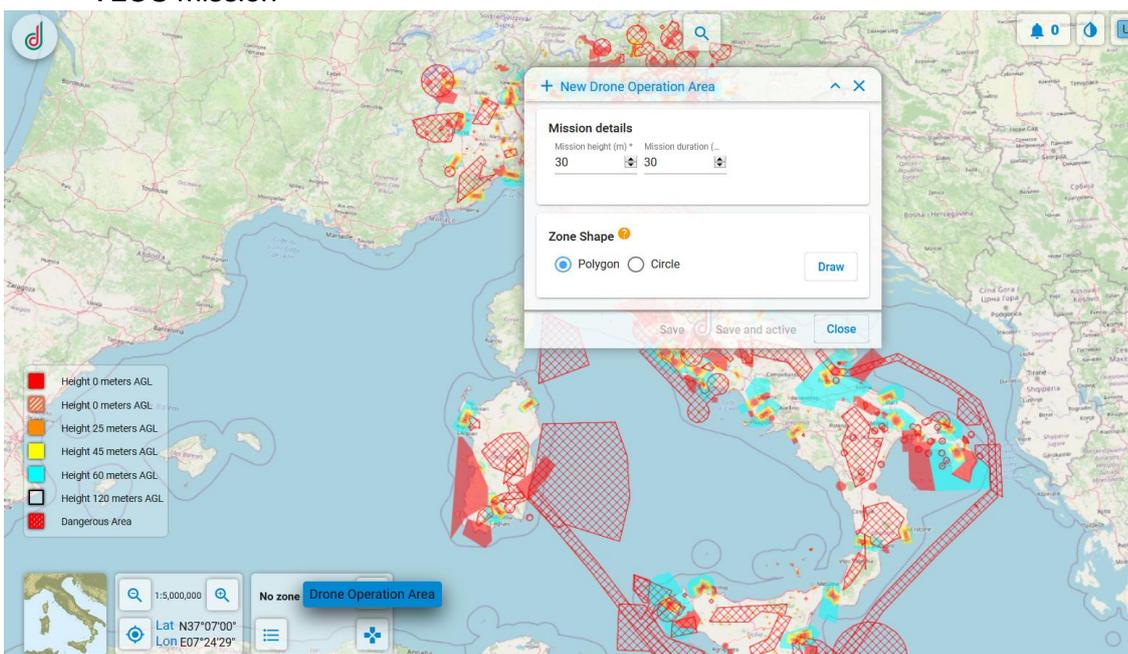
1. log in to the d-flight portal
2. select the VLOS - Drone Operation Area - flight declaration addition button (📍).

The application presents a panel with the mandatory data of the mission:

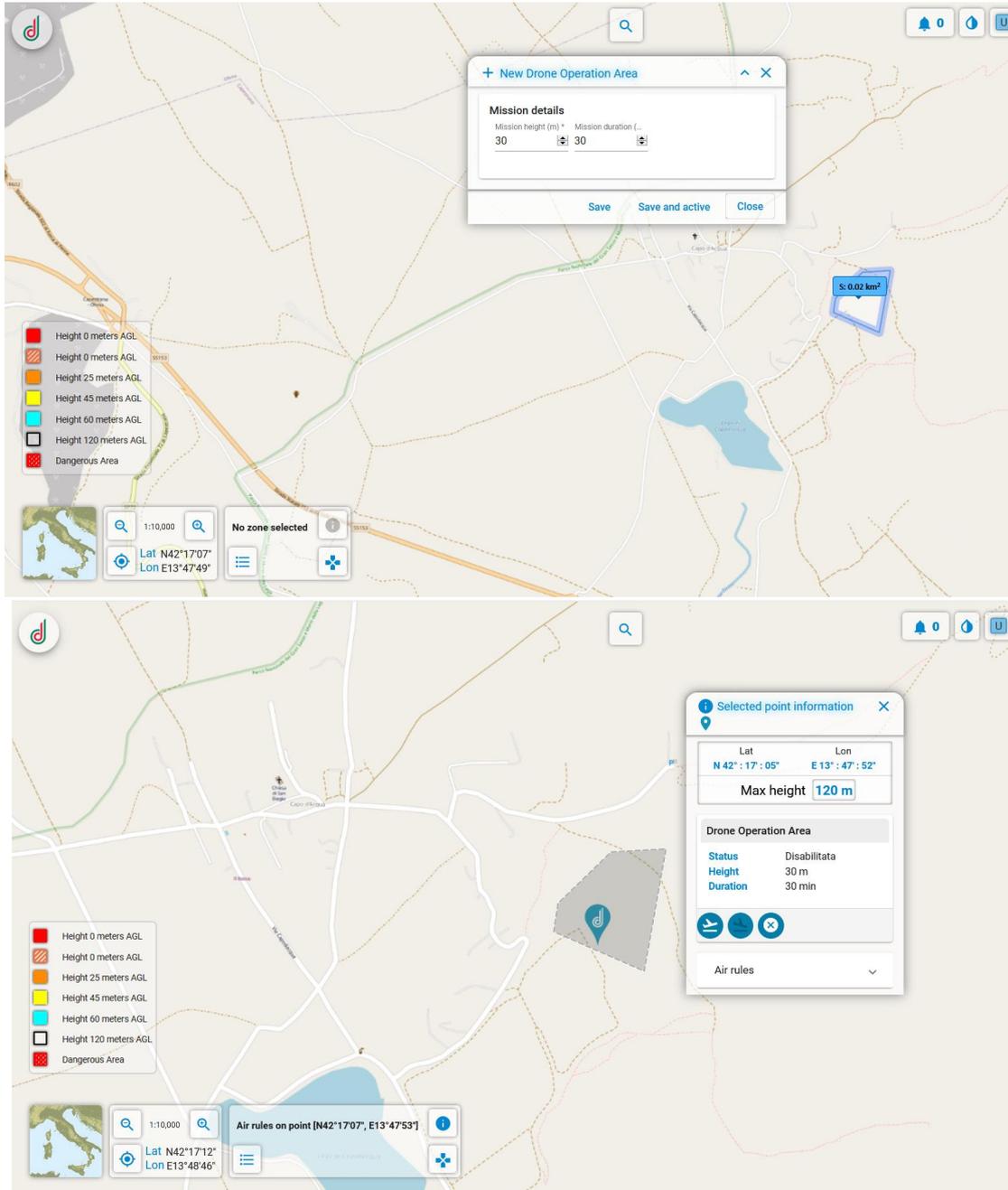
- Maximum flight height of the mission, maximum 120 m
- Mission duration in minutes
- Type of geometry: circle or polygon

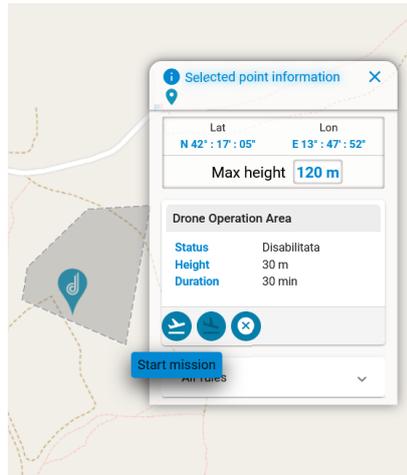


3. select the <draw> button and start defining the area that will interest you with your VLOS mission



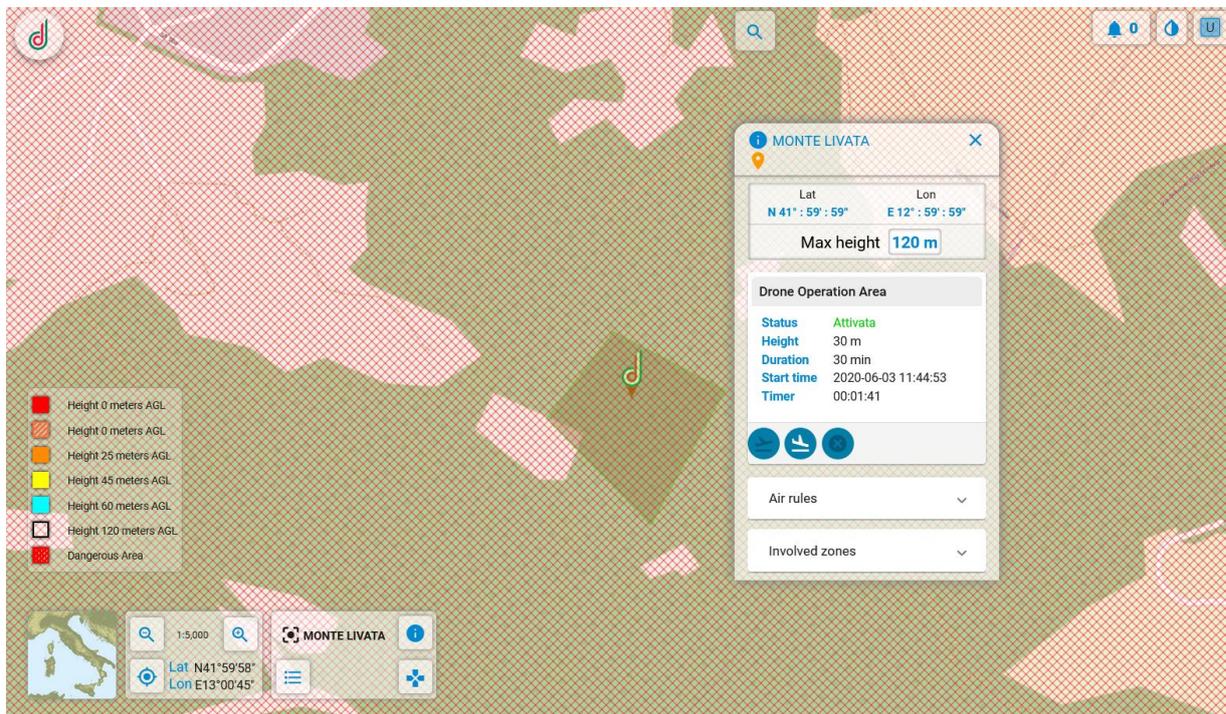
- save pressing on the button. Once the mission has been saved it is in the "DECLARED" state, the declared mission is displayed on the map only for the user creator with a grey color, in a special information window. To activate the mission, select the grey area and click on <Start> and then on <Ok>. At this point, the activation time is saved, the polygon changes color to green and is visible to all users in pink. The detailed information panel will be visible only to the user who created the mission.





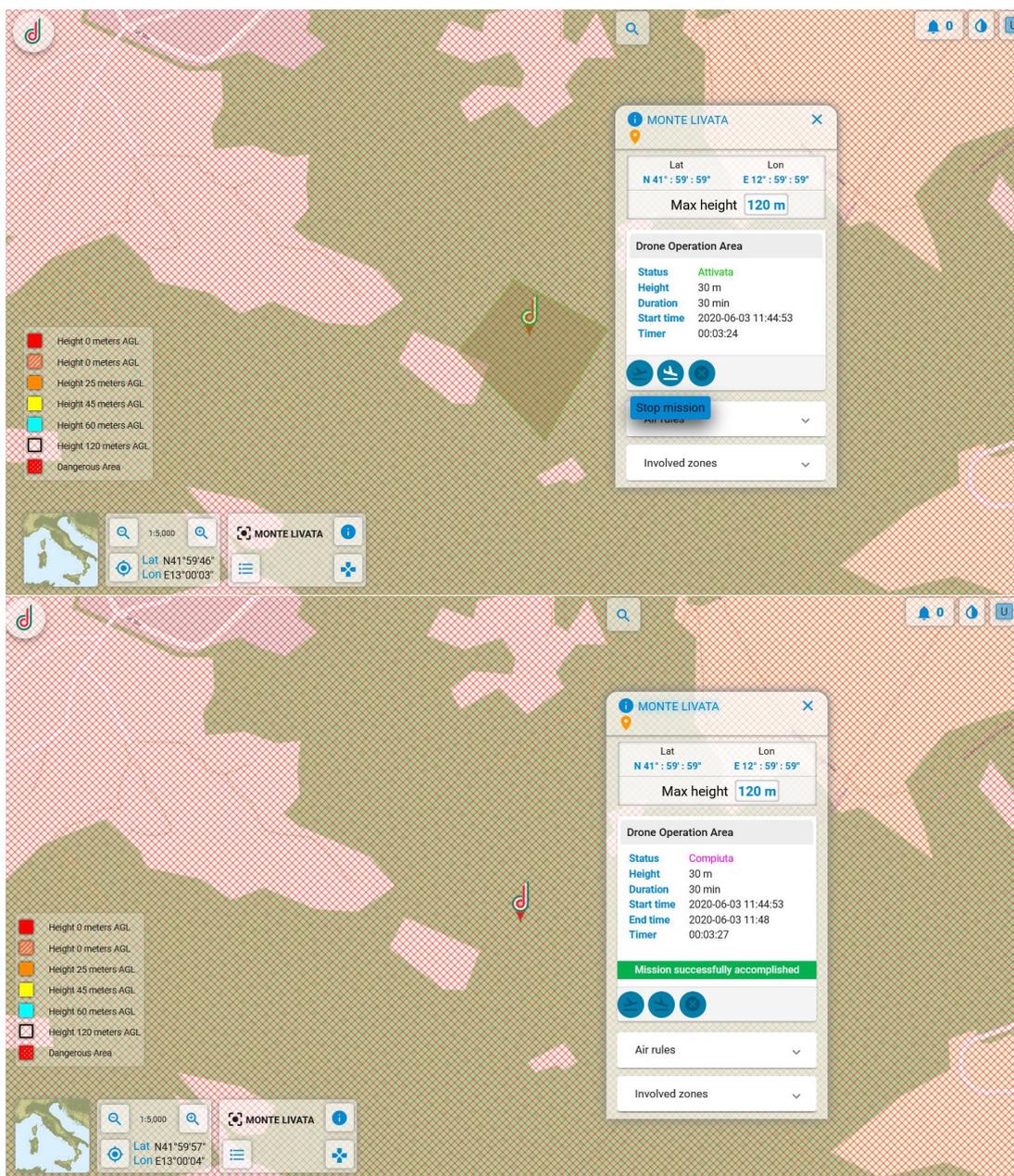
**ATTENTION.** The user must be inside the area declared to **ACTIVATE** the mission, having activated the location on the device used and sharing it with the browser

- on the other hand, the user can *save and start* the mission directly with the appropriate button.  
The mission is "ACTIVE", the activation time is saved, and the drawn polygon will become green and visible to all users in pink, while the detailed information panel will be visible only to the user who created the mission.



**ATTENTION.** The user must be inside the area declared to **ACTIVATE** the mission, having activated the location on the device used and sharing it with the browser

- select the *<Stop mission>* button on the information panel to end the mission



**ATTENTION.** If the user, after starting a mission, does not terminate it, the system automatically ends the mission after a time of 10 minutes in addition to the number of minutes entered during the declaration phase starting from the moment of start.

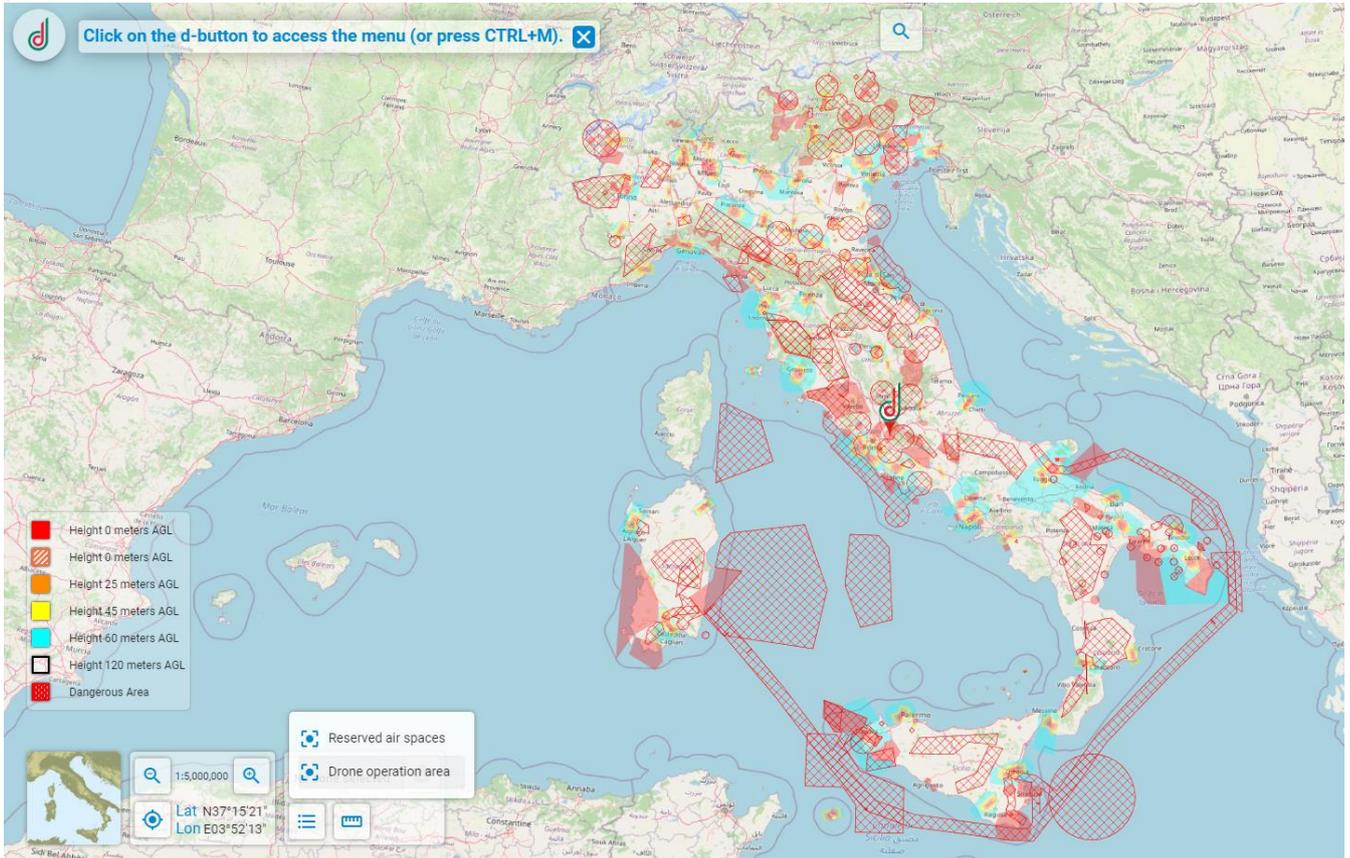
7. press the *<Delete>* button from the information panel to cancel the mission

**ATTENTION:**

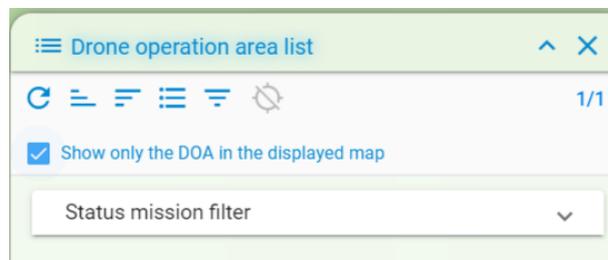
- Each user can declare only one mission at a time.
- The designed area must be outside of regulated and forbidden areas.
- The maximum height must be compatible with that of the most restrictive area intersected by the declared area (the system automatically updates the maximum height).
- The user must be within the area declared for the mission, having activated location on the device used and sharing it with the browser.
- The size of the area has a maximum extension of 1km, the user can move during the flight as long as he always keeps the drone in VLOS.

### 1.8.1. DOA list

You can access the list of your own disabled, enabled, accomplished and cancelled Drone Operation Area missions by clicking on the button where on the Drone Operation Area you can view the list mentioned above:



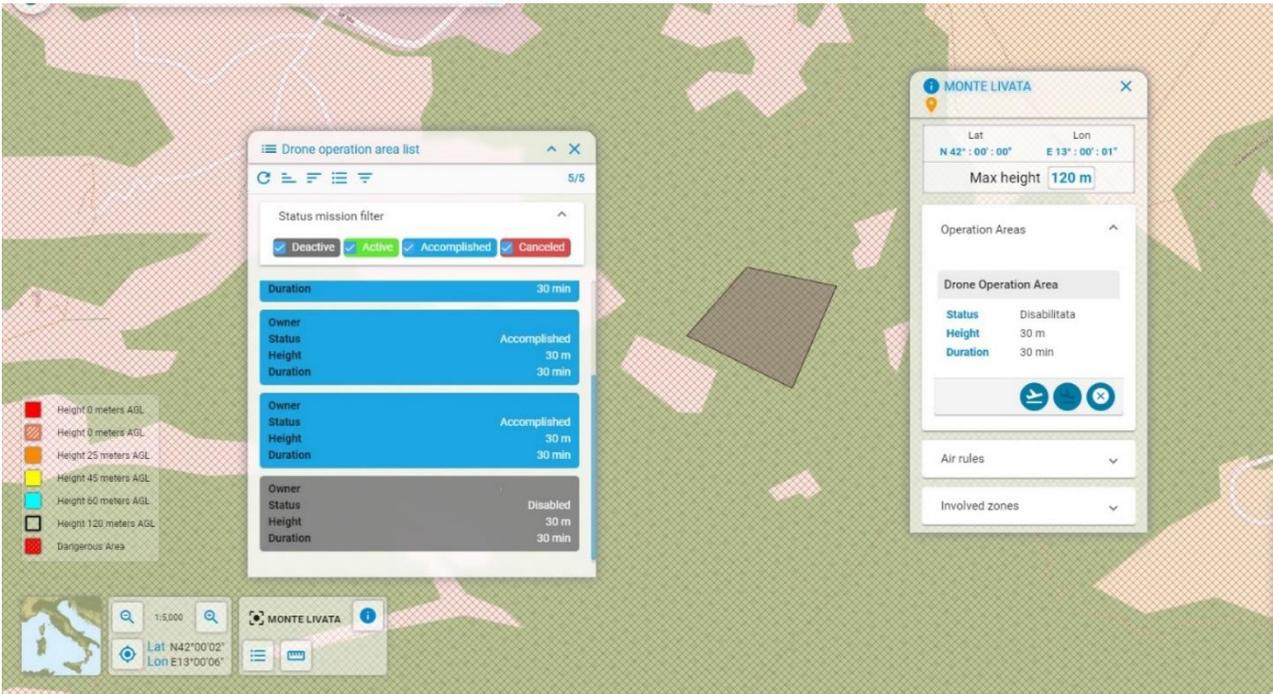
**ATTENTION: only the DOAs in the geographical area displayed on the screen are displayed. To view all DOAs, uncheck the box 'show only the DOA in the displayed map'**



Red shows cancelled missions, blue accomplished missions, grey deactive ones.

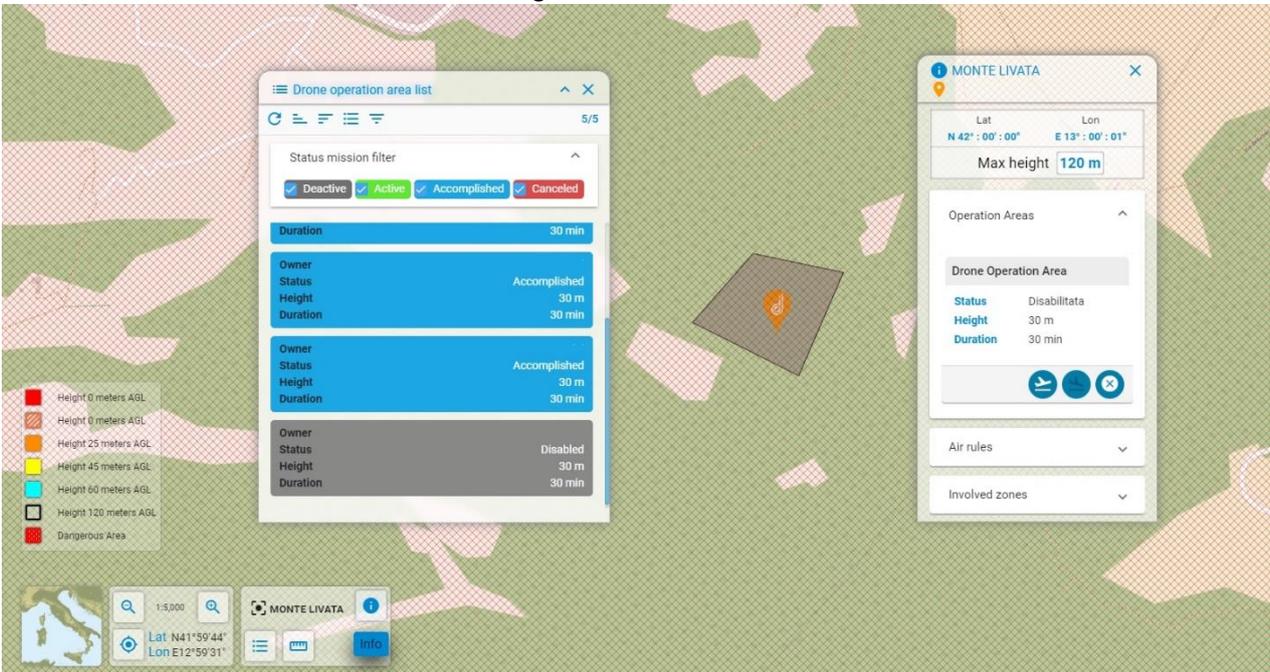
It is also possible to search faster for the desired mission by activating the filters available in the "Status Mission Filter" toolbar.

When selecting a DOA in the list, the cursor points directly to the chosen area, in the example in the following figure there is a mission accomplished and disabled:



It is also possible to activate DOAs in a deactive state:

1. click with the right button inside the area to which you are redirected or click on the information icon after selecting the area with the left mouse button



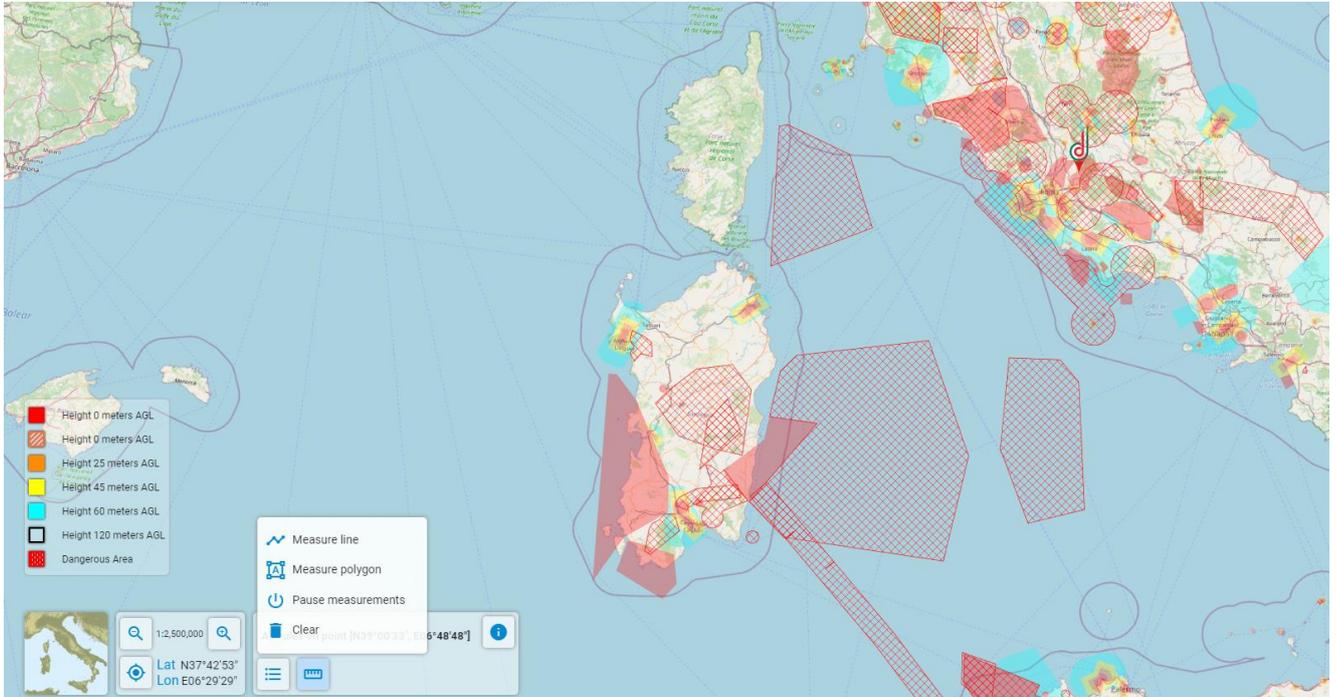
2. click the start mission icon
3. At this point the selected area will turn green and the mission will be "Enabled"

## 1.9 MEASUREMENTS

This service allows the user to measure the length of a line and the area of a polygon.

You can access the service by clicking on the icon .

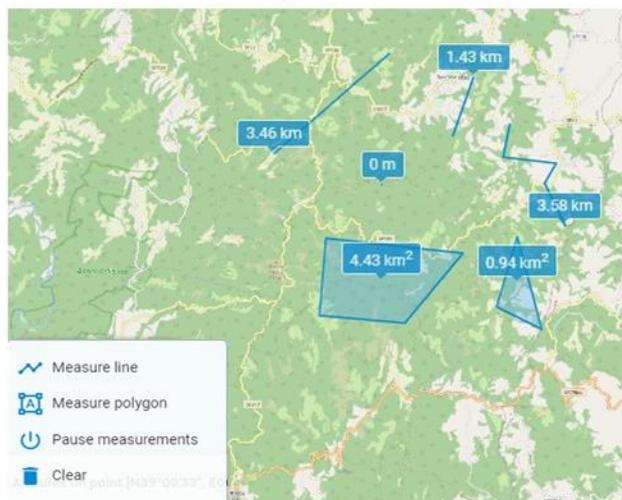
The user can choose whether to measure a line or the area of a polygon.



To make a measurement:

1. Click on "**line measurement**" or "**polygon measurement**"
2. Draw the line or polygon
3. Click with the left mouse button on the last drawn point

At this point, the line or area of the drawn polygon will be measured.



4. To delete the measurements made, click on the "**Clear**" button.

## 2 DRONE OPERATION PLAN

Users can access the Mission Planning & Validation service only if they:

1. are registered
2. have signed a Pro subscription
3. are upgraded to SAPR operator user
4. have an active QR-Code (BASE and / or PRO)
5. have at least one drone ready to fly



To access the service, click on the **<DOP>** icon

We recommend to use a device equipped with a mouse for easier editing the mission geometry.

Entering and submitting of a mission is NOT available from the Mobile App.

The Drone Operation Plan (DOP) service allows the user who meets the above characteristics to plan a mission by providing the following information (indicated with \* the mandatory information):

### 1. Type of mission:

- A. Drone \* (only drones ready to fly for which you are an operator will be displayed)
- B. Mission type \* (From the drop-down menu it will be possible to select one of the following mission types. Only missions compatible with the characteristics of the selected vehicle will be displayed.
  - VLOS;
  - Critical with a means declared harmless (i.e. with "weight including payload" of the vehicle not greater than 300gr or not greater than 2Kg with recognition of "harmlessness" issued by the ENAC);
  - Critical in standard scenario (IT-STS-01 and IT-STS-02) VLOS
  - BVLOS PDRA (IT-PDRA-01 to IT-PDRA-09)
  - VLOS and BVLOS critical in non-STD scenarios

### 2. Mission data

- A. Name of the mission \*
- B. Maximum height, including air risk buffer \*
- C. Space-time information affected by the mission \*
- D. Floor buffer \*

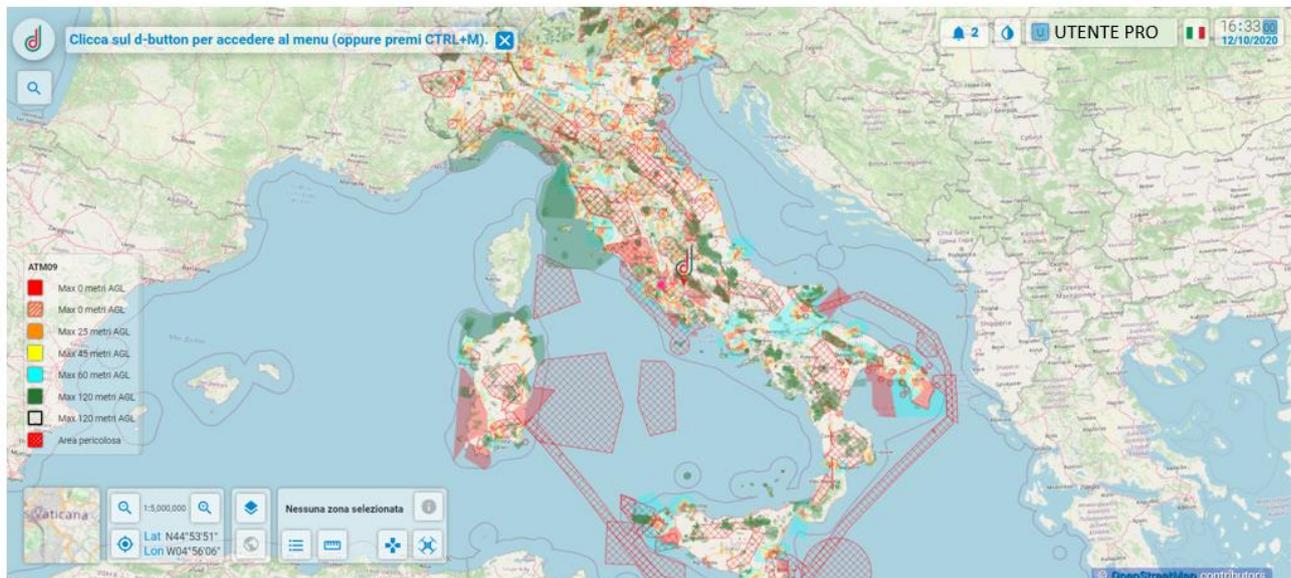
### 3. Mission pilot data

- A. Pilot license
- B. Pilot ID
- C. Team members

### 4. Authorizations;

- A. Authorizations necessary to carry out the mission (the data is mandatory depending on the mission identified)

Below panel by panel the instructions on data entry.



To access the service, click on the button **<Mission>**

After clicking, you can enter all the details relating to the mission:

1. Mission type
2. Mission data
3. Pilot data
4. Authorization (optional)

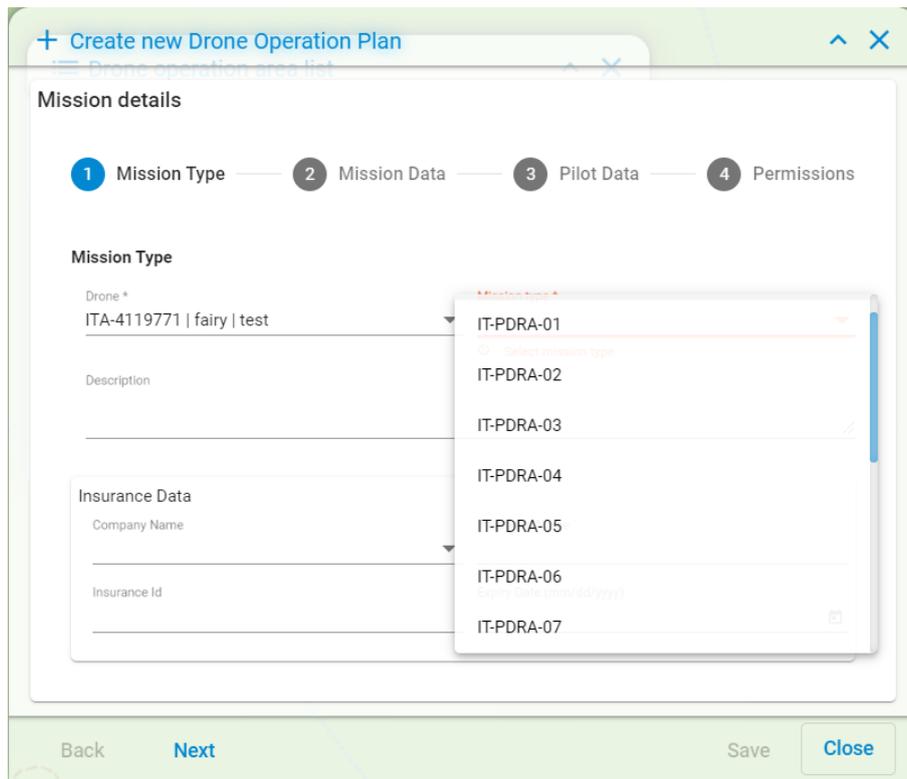
## 2.1 Mission Type

In this phase the user can retrieve the list of drones that he operates and fill in the *Drone field* \*.

Subsequently in the *Mission Type* \* section, the system allows the operator user to define the scenario in which the drone can operate, in relation to its weight.

There is also the possibility to insert a *Description* of the mission to be carried out.

*Attention the fields with asterisk (\*) are mandatory*



After selecting the drone from the user fleet, the system retrieves the details of the insurance policy defined in the drone database, displaying the information:

- Name of the insurance company
- Name of the insurance package
- Policy ID
- Expiry date

The user can:

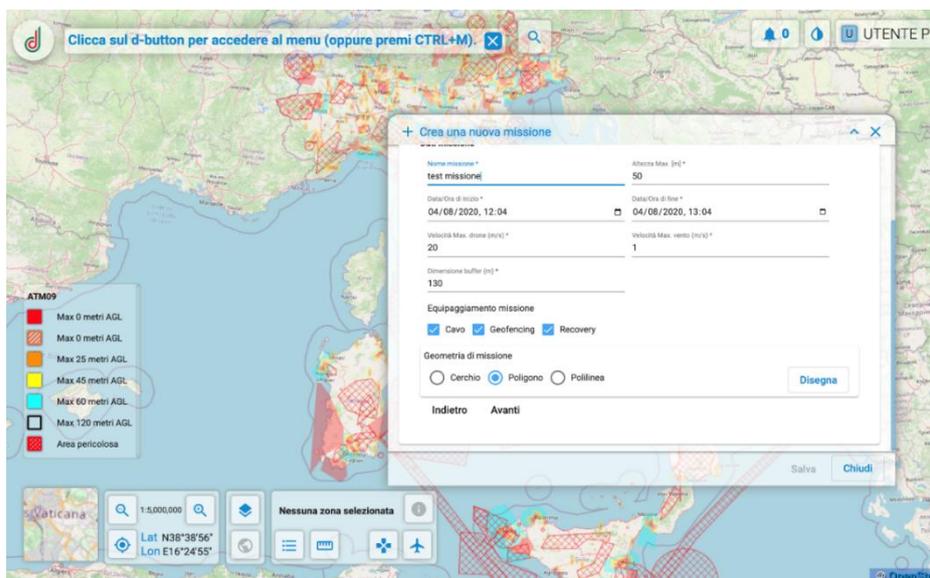
1. confirm the insurance defined for the drone;
2. specify the details of an insurance policy that applies to the mission only, by entering:
  1. Name of the insurance company
  2. Name of the insurance package
  3. Policy ID
  4. Expiry date
3. Leave the fields empty/Deleting the info automatically retrieved

After entering all the necessary information, click on **<Next>** to continue otherwise on **<Close>** to cancel.

## 2.2 Mission Data

Within this section, the User has the possibility to enter the spatial and temporal data of the mission:

- Mission Name \*
- Maximum Height \* [m] - **including air risk buffer**
- Start Date / Time \*
- End Date / Time \*
- Buffer size \* [m]

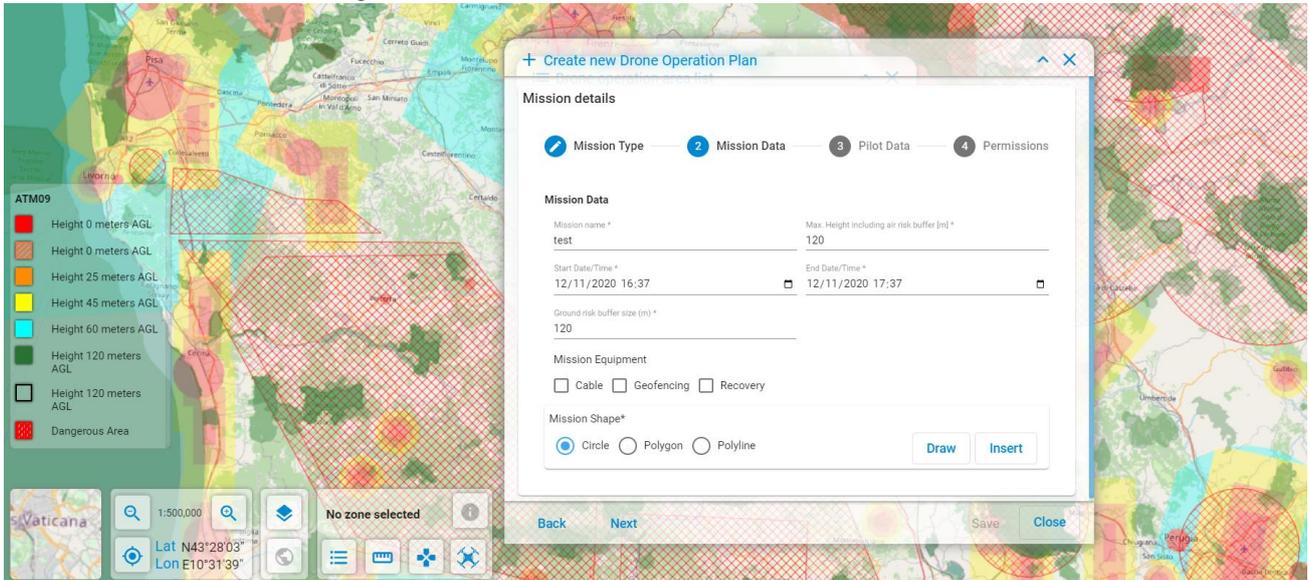


*Attention the fields with asterisk (\*) are mandatory*

The user must also enter the mission geometry. This can be done in three ways:

1. Selecting the type of mission geometry
  - Circle
  - Polygon
  - Polyline

And then clicking on the **'Draw'** button.



At this point it will be possible to draw the selected geometry on the map.  
**Before drawing, we recommend that you zoom to the maximum value on the area of interest.**

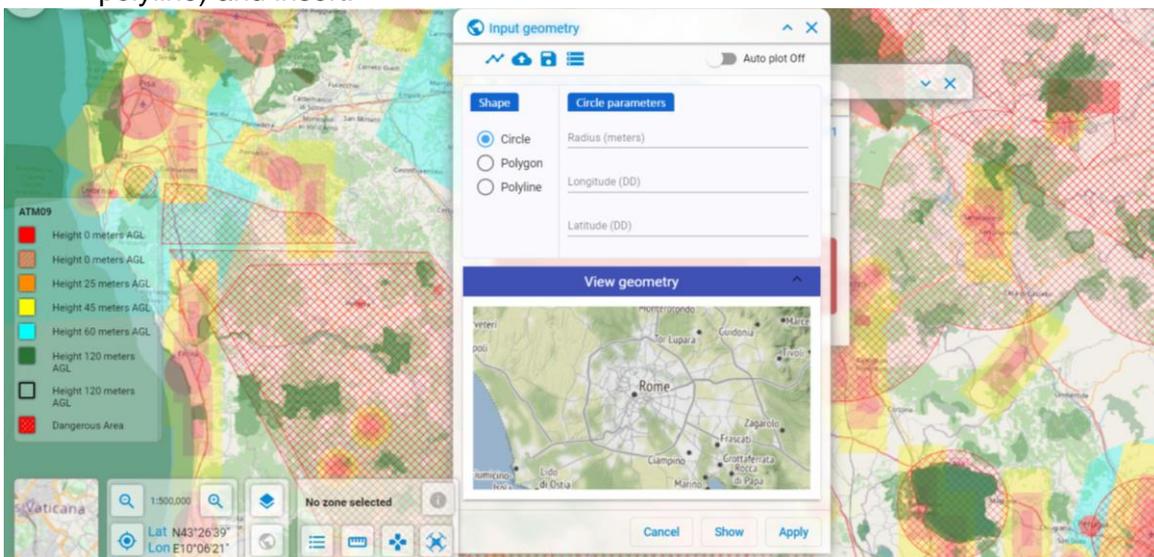
To cancel the drawing, press “Esc”.

2. Selecting the type of mission geometry

- Circle
- Polygon
- Polyline

And then by clicking on the **'Insert'** button

At this point it will be possible to modify the type of geometry (circle, polygon, polyline) and insert:



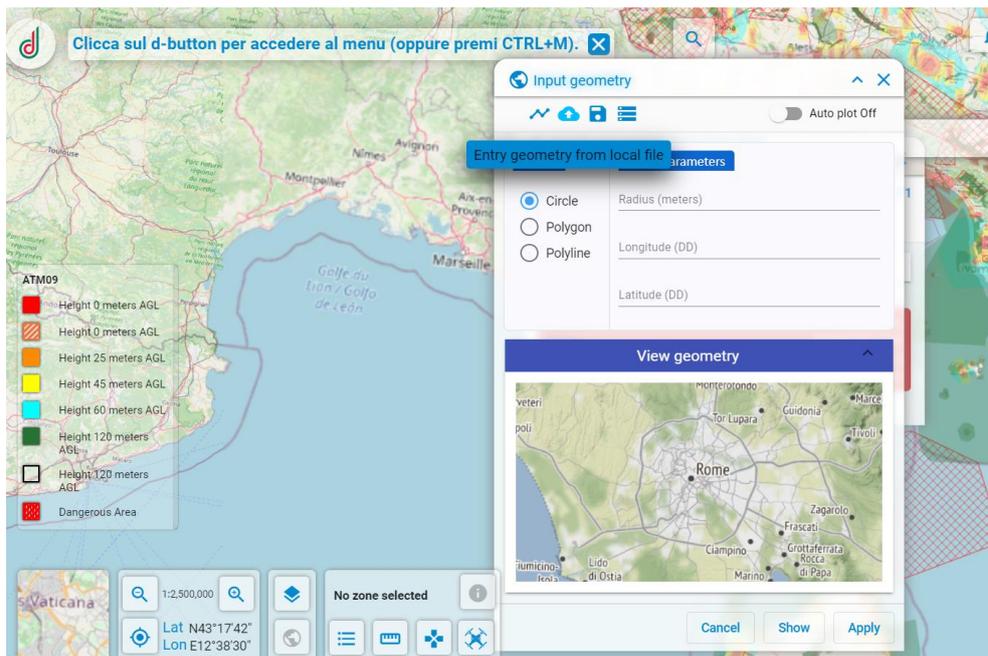
- For the circle: Latitude and Longitude of the circle and maximum radius (in meters)

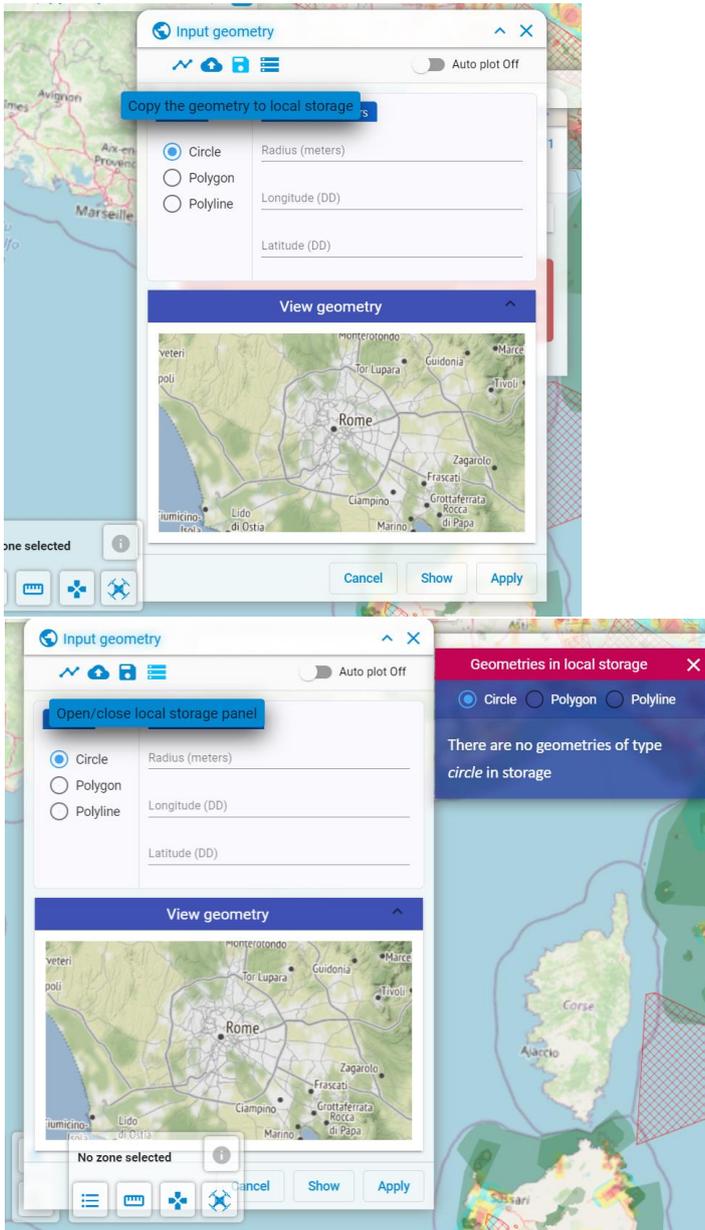
- For the polygon: Latitude and Longitude of each point
- For the polyline: Latitude and Longitude of each point

**To view geometry creation on the map activate Auto Plot**

**To cancel the inserted mission geometry, press “Esc”.**

3. Finally it is possible to import a geometry from a local file whose format can be: wkt, kml, geojson and view the geometry inserted in the "Geometry View" panel and in the map if Auto Plot has been activated





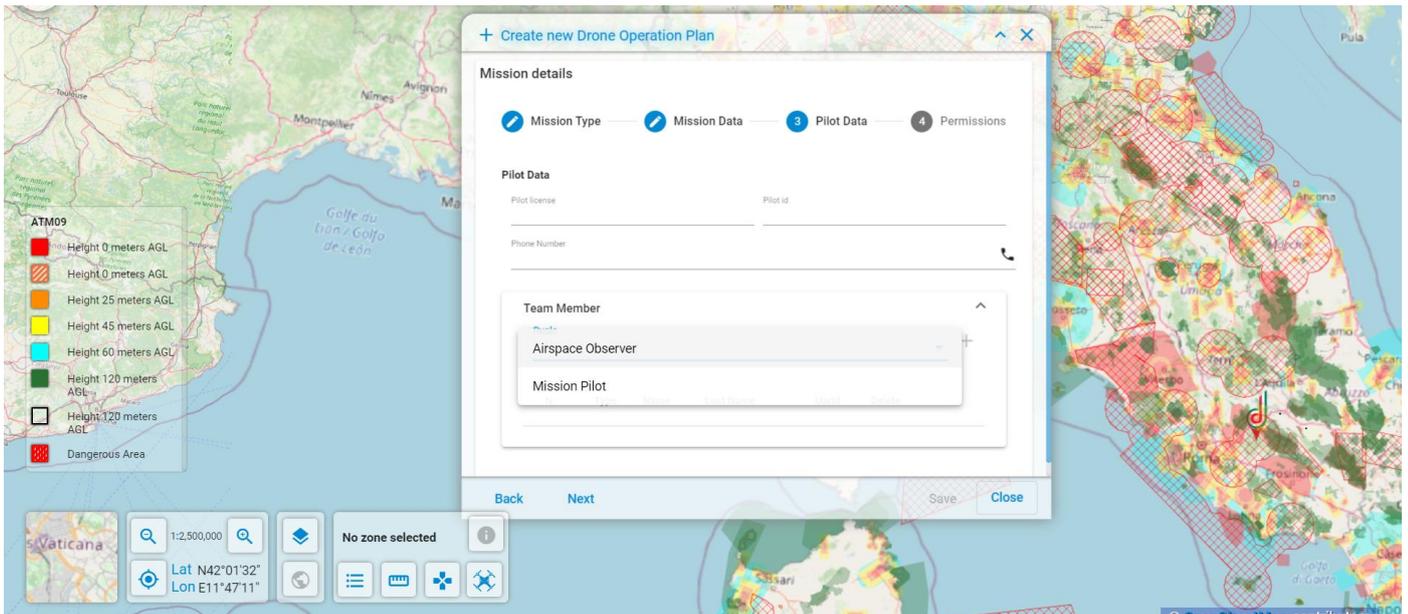
It is also possible to save the geometries created on local storage by clicking on the icon  and view them through the storage panel by clicking on the icon .

Once all the necessary information and geometry have been entered, click on **<Next>** to continue otherwise on **<Back>** to return to the previous panel.

## 2.3 Pilot Data

The system allows the operator user to define the pilot of the drone, by entering the information:

- Pilot License
- Pilot ID (identification of the registration on d-flight)
- Telephone number



After inserting the pilot data, it is possible to bring the list of people involved in the mission, characterized by the following information:

- Role
- Type
- First name
- Surname
- User id (d-flight ID)

Enter all the necessary information, click on **<Next>** to continue otherwise on **<Back>** to return to the previous panel or on **<Close>** to cancel and exit the service.

## 2.4 Authorizations

In this panel it is necessary to enter in pdf format the necessary authorizations to carry out the mission (the data is mandatory depending on the mission identified)

## 2.5 Saving the mission

Once you click on **<Save>** the mission is saved on the system and a unique identifier is generated.

In this state, the mission is not visible to other users and is displayed on the map (only by the user who created it) in yellow.

## 2.6 Submission and Starting of the mission

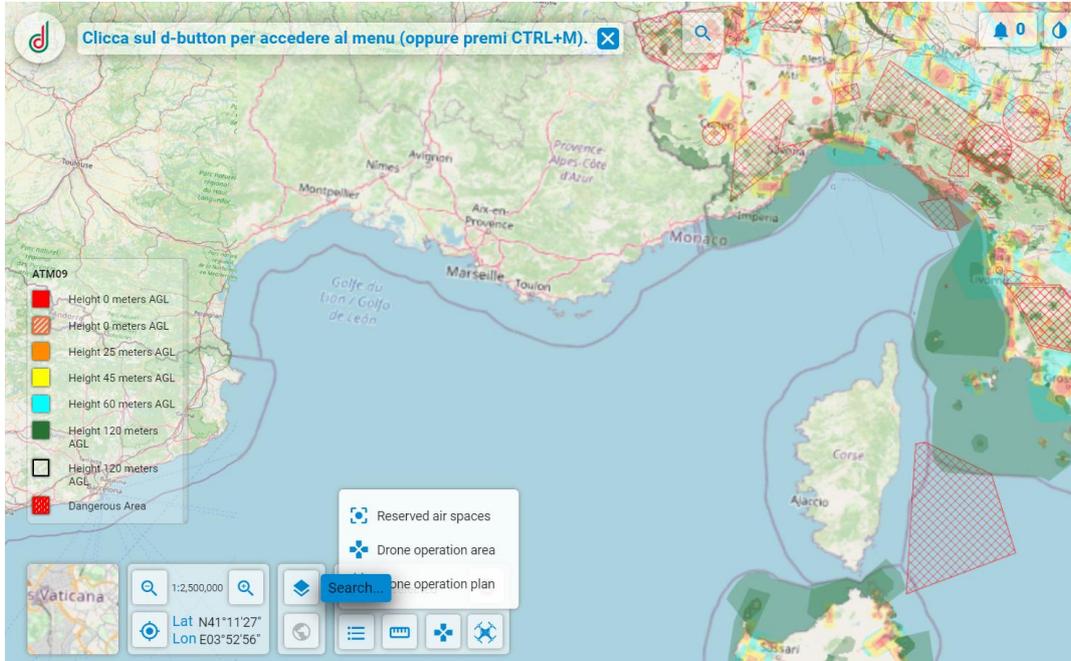
Subsequently, the saved mission must undergo the validation process by clicking on the **<Submit for approval>** button. The result of the validation process will be communicated by e-mail (approved by the system / rejected - with possible request for modification).

**NW: For the BVLOS PDRA missions it is possible to enter, save and submit your mission only starting from 4 days before and up to a maximum of 24 hours before the date / time scheduled for the mission itself, and only after having obtained the necessary**

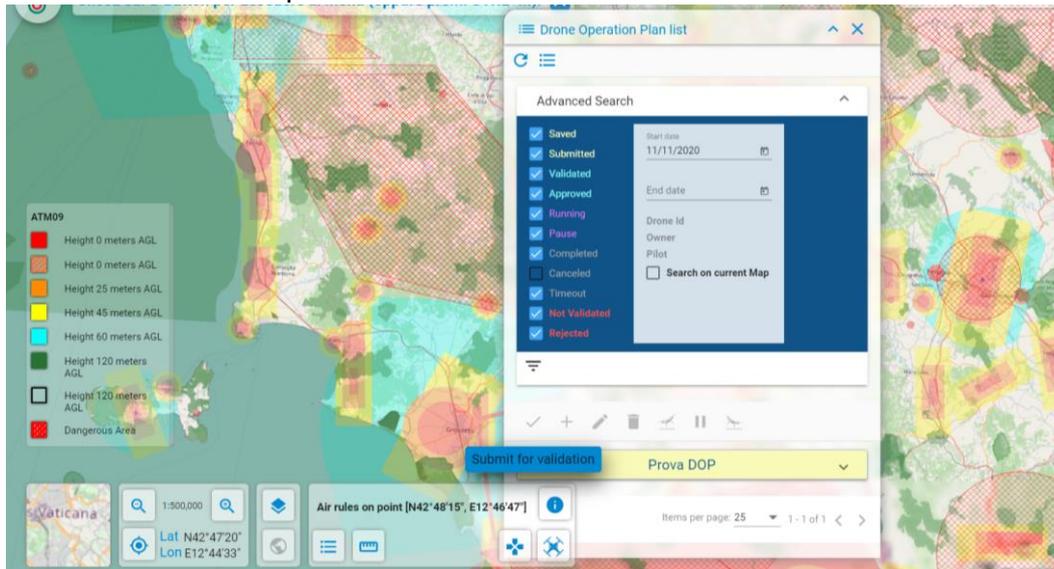
authorizations from ENAC. Any changes to the mission must respect the same constraints.

- **How to submit the mission?**

1. To submit the mission, you must open the list of 'Drone Operation Plans' accessible from **the search button** of the Rules of the air:



2. Subsequently, by clicking on the mission of interest, it is necessary to click on the 'v' shaped button



3. An email will be sent to the d-flight registration address with confirmation of the validation or with the 'rejection' of the mission and an indication of the error / incompatibility parameters.

The following are the two scenarios:

- mission validated
- mission rejected

## Mission Validated

The validated and approved mission is displayed on the map in blue color, only by the user who created it, except for the BVLOS PDRA approved missions: these are visible in pseudo-anonymous form also to other BASE and PRO users on the appropriate layer that can be activated / deactivated, in the event that their start date / time falls within the next 24 hours.

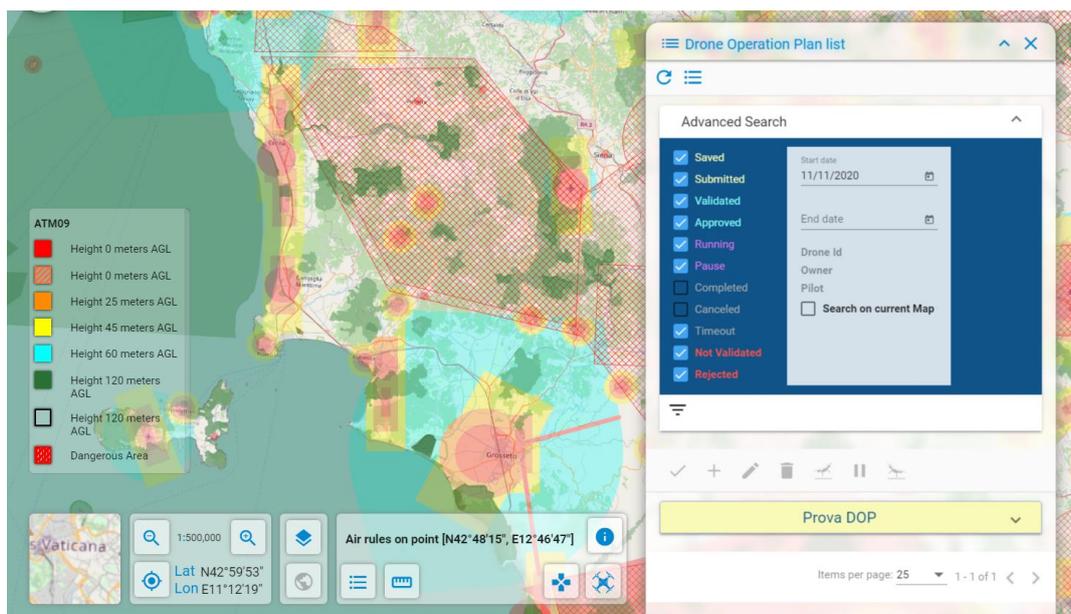
Once the mission has been approved, you can access the list of missions, select the validated mission and click on:

1. start mission (to start the mission - if within the scheduled time interval)
2. cancel mission (to cancel the mission)

Once you have clicked on start mission, you can pause the mission with the **<Stop>** button, end the mission with the **<Complete>** button or resume the mission with the **<Resume>** button.

Running missions are displayed in purple on the map by all users logged into the d-flight portal. For your own missions only, by pausing, the color changes from purple to grey. Your missions are displayed with a black border, unlike the others.

The missions in an expired, completed and cancelled state can only be viewed on the map in grey by the user who created them. To access missions in an expired, completed and cancelled state, you need to select the appropriate filters in the list of DOPs, within the advanced search menu:



The table below shows the list of error codes and the description of their meaning. In case of rejection of the mission, it will be necessary to return to the DOP list, select the mission of interest and modify what is indicated in the email received.

## Mission Rejected

If the mission is not validated, the user receives an email with a list of all errors / incompatibilities found during validation.

The table below shows the list of errors / incompatibilities that the user can receive with their description.

The user will have to access the mission and modify what is indicated in the email, and then submit the mission again.

**NW. For the BVLOS PDRA missions the above time constraints are also valid for the modifications: it is possible to insert, save and submit your mission only starting from 4 days before and up to a maximum of 24 hours before the date / time scheduled for the mission itself, and only after having obtained the necessary authorizations from ENAC.**

The rejected mission is displayed in red on the map and is visible only to the user who created it.

Failure received by e-mail	Code	Description	What to do?
DRONE_MTOW_CHECK,	800002	MTOW entered is outside the minimum and maximum limit	You can change the drone selected for the mission, choosing a drone with a MTOM in line with the selected scenario. You can verify your drone's MTOM from the page 'Fleet Management'. If the value you find is not correct, please open a ticket on Service Desk Portal ( <a href="https://www.d-flight.it/new_portal/contatti/">https://www.d-flight.it/new_portal/contatti/</a> ) to request the update.
DRONE_MAX_SPEED_CHECK,	800004	The maximum horizontal speed of the drone inserted is higher than that foreseen by the scenario	You can change the drone selected for the mission, choosing a drone with a max horizontal speed in line with the selected scenario. You can verify your drone's max horizontal speed from the page 'Drones Models'. If the value you find is not correct, please open a ticket on Service Desk Portal ( <a href="https://www.d-flight.it/new_portal/contatti/">https://www.d-flight.it/new_portal/contatti/</a> ) to request the update.
DRONE_MAX_DIMENSION_CHECK,	800032	The drone dimensions are larger than those foreseen for the selected scenario	You can change the drone selected for the mission, choosing a drone with dimensions in line with the selected scenario. You can verify your drone's dimensions from the page 'Drones Models'. If the value you find is not correct, please open a ticket on Service Desk Portal ( <a href="https://www.d-flight.it/new_portal/contatti/">https://www.d-flight.it/new_portal/contatti/</a> ) to request the update.
MISSION_MAX_HEIGHT_CHECK,	800019	The height entered for the mission exceeds the one foreseen by the selected scenario	Please update the mission modifying the maximum height: enter a max value in line with ATM09 and with the selected scenario, or attach the necessary documents in case of deviations from ATM-09
MISSION_RECOVERY_REQUIRED_CHECK,	800026	The recovery equipment for the mission has not been entered	Please update the mission including the requested data in the panel 'Mission Data'
MISSION_GEOFENCING_REQUIRED_CHECK,	800028	No geofencing entered for the mission	Please update the mission including the requested data in the panel 'Mission Data'
MISSION_REMOTE_PILOT_REQUIRED_CHECK,	800030	No remote pilot entered for the mission	Please update the mission including the requested data in the panel 'Pilot Data'
MISSION_MIN_BUFFER_CHECK,	800023	The minimum buffer entered for the mission is invalid	Please modify the mission updating the buffer as per the requested scenario instructions
PILOT_LICENSE_TYPE_CHECK,	800037	the pilot qualifications are not compatible with the type of pilot license required for the selected scenario	Please update the mission including the requested data in the panel 'Pilot Data'
ACTIVE_DECLARATION_CHECK,	800039	No declaration is active for the selected drone	Please activate the declaration for the drone selected for the mission (par 1.7.8) or plan a new mission with a new drone in line with requirements
BVLOS_MODULE_CHECK,	800054	BVLOS authorization missing for the selected mission	Please update the mission including the requested document in the panel 'Authorization'
DOCUMENTS_CHECK	800051	Authorization documents missing	Please update the mission including the requested document in the panel 'Authorization'
Intersected mission start/end time		Your BVLOS Mission intersects another BVLOS mission already approved, within the same time/space area.	Please modify the mission selecting a different time/date or geographical area

## 3 TRACKING

### 3.1 Tracking\_V0

The "Tracking\_V0" service allows the user to share his/her position with d-flight.

The position will be shared on the map, in pseudo-anonymous form (the drone license plate will be shown for the traces relating to the Drone Operation Plan, the user ID for the traces relating to the Drone Operation Area), with all other users logged in to the portal in relation to the area of interest, with a view to situation awareness.

In particular, Italy has been divided several areas of interest and users belonging to the same area of interest, viewing the map (always in the area of interest) with a zoom equal to or greater than 1: 25000 they will be able to view the tracks of other d-flight users.

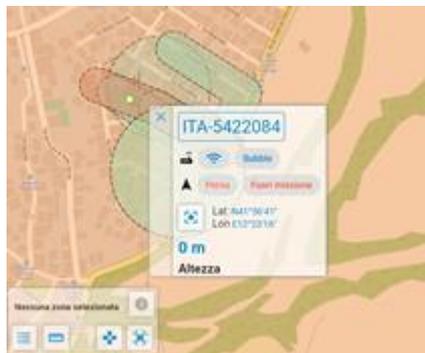
The position will be accompanied by the following information:

- drone license plate or user ID
- location

The tracks will be shown in green, red, orange or gray, depending on the "status" with respect to the planned mission:

- green trace: no anomaly
- red trace: the position is within a no-fly area (i.e. NFZ / ATM09)
- orange trace: the position is outside the planned area
- grey trace: data transmission error

Below an example of grey trace

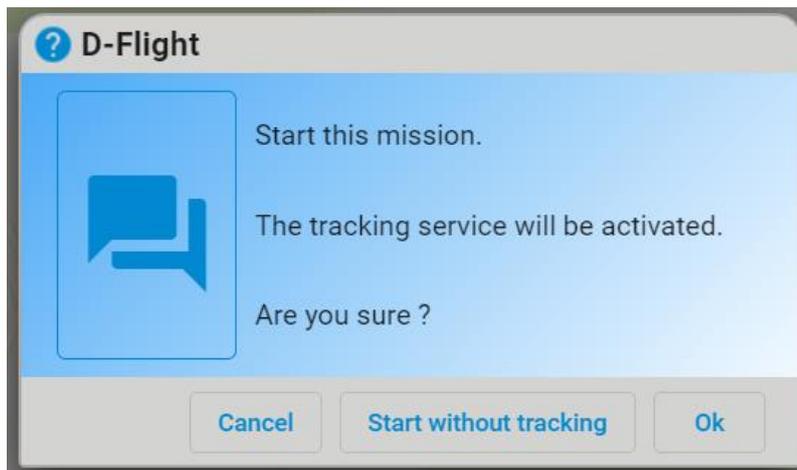


To activate the "Tracking - V0" service, or to send the position, it is necessary

1. accept the sending of the position by your device



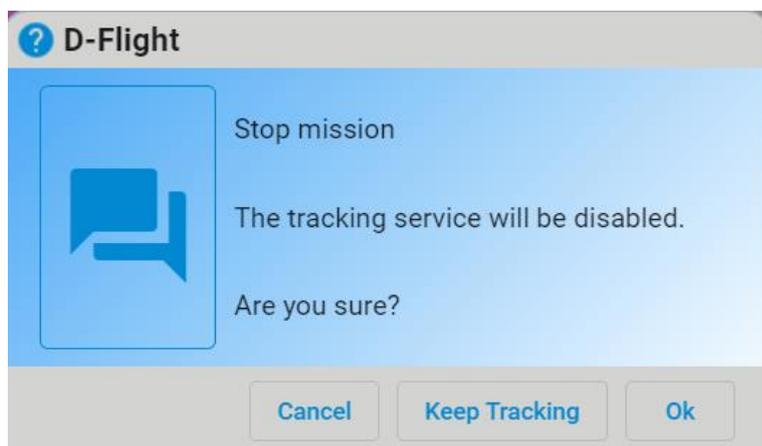
2. When your mission starts (by clicking on the icon through the DOP or DOA service), agree to start the tracking service [Ref. next figure]



You can also activate the tracking service in another time while the mission is running by clicking on the icon  again.

You can start missions (from DOP or DOA) even without sharing your track, by clicking on **'Start without tracking'**.

To block the sharing of your track, you can at any time click on the complete mission icon  and deactivate the tracking service by clicking on **'Ok'**



It is also possible to end the mission and keep the tracking service active by clicking on **'Keep Tracking'**. In this case, the track will be shared until you log out from the

platform or you can click again on the complete mission icon to disable the service.



### 3.2 Tracking\_V1

The "Tracking - V1" service, allows the user to share the position of their drone with d-flight. The position will be shared on the map, in pseudo-anonymous form (the license plate of the drone will be shown for the traces relating to the Drone Operation Plan, the user ID for the traces relating to the Drone Operation Area), with all other users logged in to the portal in relation to the area of interest, with a view to situation awareness.

In particular, Italy has been divided into several areas of interest and users belonging to the same area of interest, viewing the map (always in the area of interest) with a zoom equal to or greater than 1: 25000 they will be able to view the tracks of other d-flight users..

The position will be accompanied by the following information:

- drone license plate or User ID
- coordinates (Lat / Lon) of the drone's position
- mission Status
- duration of Mission
- start / end date
- quote

The drone track will be shown in addition to the pilot's position (fixed). The drone track will be joined to the pilot one's, by a line that qualitatively shows the distance between the two and allows you to recognize the position of the pilot associated with the operation.

The drone track is represented by a dashed line and is also highlighted with the following colors green, red, orange or gray, depending on the "status" of the planned mission:

- green track: no anomaly
- red track: the position is within a no-fly area (i.e. NFZ / ATM09)
- orange track: the position is outside the planned area
- gray track: data transmission error

To activate the "Tracking - V1" service, (i.e. to send the position of the drone), it is necessary to

- equip your drone with a device capable of sending all the necessary information to d-flight in the exact format (as described in the interface document available here [https://www.d-flight.it/new\\_portal/en/guide-manuali/](https://www.d-flight.it/new_portal/en/guide-manuali/) )
- or equip your GCS with an application capable of sending all the necessary information to d-flight in the exact format (as described in the interface document available here [https://www.d-flight.it/new\\_portal/en/guide-manuali/](https://www.d-flight.it/new_portal/en/guide-manuali/) )

and accept the sending of the position by your device, if you also want to share the position of the pilot (tracking V0) at the date and time scheduled for the mission, access the "Drone Operation

Plan" or "Drone Operation Area" service from a laptop or Mobile or Mobile App and start the mission (by clicking on Start) by selecting the start option with tracking.

The Tracking service on the pilot position will then be interrupted upon completion of the mission, by selecting the option to deactivate the service or on log-out from the platform. The drone position tracking service must be interrupted by the device (drone or GCS) that sends the messages at the end of the mission.

#### 4 MOBILE APP

D-flight Mobile APP allows to access the d-flight platform on mobile devices allowing, in particular, to have access to the following services:

SERVICE	BASE User	PRO User
<b>Map Navigation</b>	X	X
<b>Registration</b>	X	X
<b>User Authentication</b>	X	X
<b>Purchase of QR Code BASE</b>	X	X
<b>Purchase of QR Code PRO</b>	-	X
<b>Declaration</b>	-	X
<b>VLOS Drone Operation Area</b>	X	X
<b>Drone Operation Plan – Planning</b>	-	-
<b>Drone Operation Plan – Mission Start/Termination</b>	-	X
<b>Tracking</b>	X	X

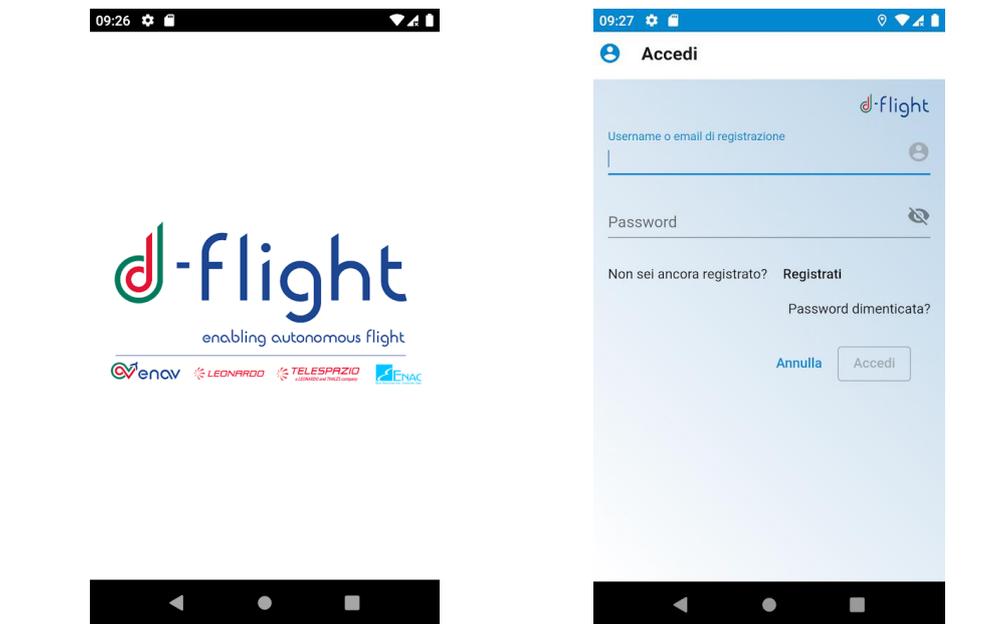
The functionalities indicated in the previous table are described in this document.

Some services are available only to “PRO Users” as indicated in the table.

D-Flight Mobile APP is currently available for Android devices.

In order to install and access the “Mobile APP”:

- Connect to Google Play Store at <https://play.google.com> and search for “D-Flight” (or directly access to this [link](#))
- Download and install on your device the application
- In the log-in screen, provide your d-flight website credentials or perform a new registration.



## 5 GNSS REAL TIME MONITORING

The GNSS Real Time Monitoring service is dedicated to PRO users only.

This service allows users to view on the map an indication of any malfunction status of the GNSS signal.

The service can be accessed

1. Accessing the map with a zoom level equal or higher than 1:100.000
2. By right-clicking on the map

If the GNSS signal is corrupted (e.g. due to problems on a GNSS satellite / interference due to significant ionosphere phenomena) an Alert (red traffic light) or a Warning (yellow traffic light) relating to the signal status in the selected map region.



**In both Alert and Warning conditions, flight with navigation based exclusively on GNSS is strongly discouraged**, as the signal performance is not as reliable as nominal performance.

The signal status is relative to reference conditions with respect to the ground. The service does not take into account the morphology of the terrain, or the actual condition of the drone - in other words, the GNSS signal could work in a nominal way (ie on the map there are no alarms) but if the

user is inside a gorge or in the shadow of an obstacle, however the GNSS communication could be impaired and the flight affected. It is therefore recommended to also pay attention to the information available on the GCS.

Finally, in the event of an alarm, by clicking on the detail expansion arrow it is possible to consult the following values on the GNSS signal:

- Minimum HDOP: index of the quality of the satellite arrangement in the horizontal reference condition
- Minimum VDOP: index of the quality of the satellite arrangement in the vertical reference condition
- Minimum elevation: the minimum elevation in degrees between the satellites visible in the reference condition (useful for evaluating the width of the local horizon, or the degree of visibility of the drone)
- Hor error: the estimate of the error in meters in the horizontal reference condition
- Error Up: the estimate of the error in meters in the vertical reference condition
- HPL: maximum horizontal error in meters estimated by EGNOS in the reference condition
- VPL: maximum vertical error in meters estimated by EGNOS in the reference condition