

Geoportal - Introduction

In the Grand-Duchy of Luxembourg, the UAS (« Drone ») geographical zones are dynamically represented with the support of the tool [geoportal.lu](http://www.geoportal.lu).

Geoportal.lu is the official national geoportal of the Grand-Duchy of Luxembourg, a state platform which aims to collect, describe and serve the official geodata of the country.

Geoportal is accessible :

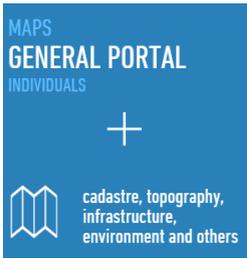
- Online with your web browser at the address www.geoportal.lu;
- With <http://map.geoportal.lu> on your smartphone and digital tablet:

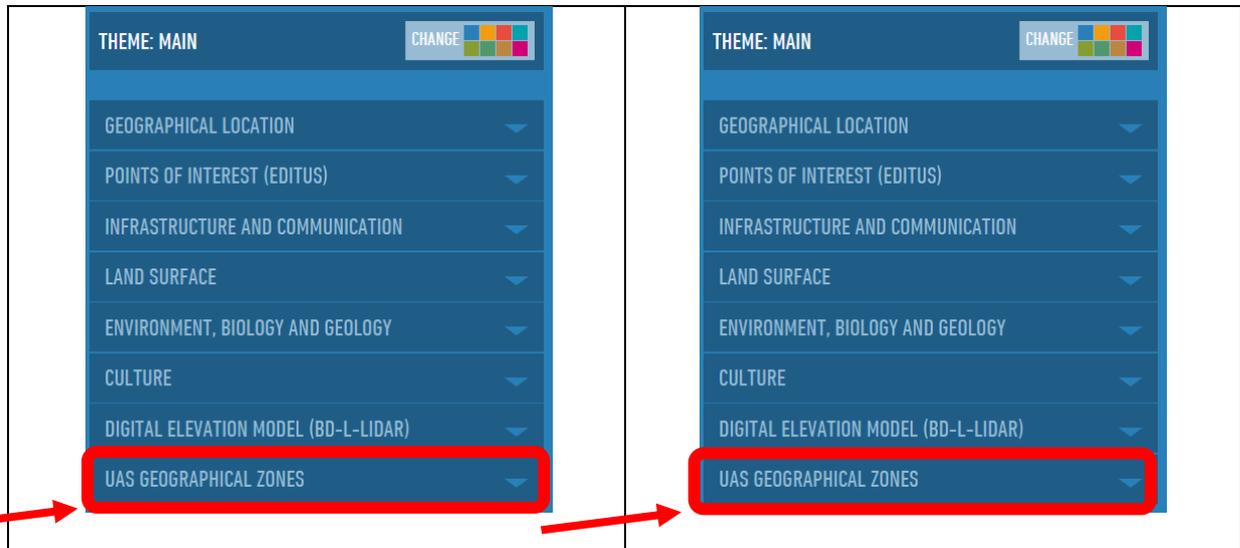
How do I find the « UAS geographical zones » in the geoportal?

The UAS geographical zones on the territory of the Grand-Duchy are available in 2 “layers” of information:

- The first layer represents the zones between the **ground and 50m** height;
- The second layer represents the zones between **50 and 120m** height;

These layers are displayed by selecting:

<p>www.geoportal.lu</p>	<p>http://map.geoportal.lu (Smartphone/tablet)</p>
<p>The maps from the general portal (Theme: « MAIN »)</p>  <p>Then directly the « UAS GEOGRAPHICAL ZONES » in the « CATALOG » tab</p>	<p>By selecting the « layers » icon</p>  <p>Then directly the « UAS GEOGRAPHICAL ZONES » in the « CATALOG » tab</p>



The 2 layers are then available as follow:



Which layer should I choose?

The chosen layer depends on the **maximum** height. This maximum height obviously depends on the planned operations, but also on the chosen operating category:

- The generic authorisation (**National System**) limit the maximum height to 50 meters above the ground;
- The EASA "**OPEN**" or "**OPEN Limited**" categories limit the maximum height to 120 meters above the ground;
- The EASA "SPECIFIC" category imposes a limit based on the SORA analysis. Authorization must be sought to DAC for this category.

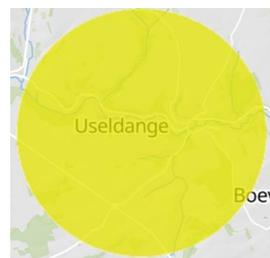
What does the zone color represent?

A layer represents dynamic data **in real time**. Therefore, it is important to **refresh** the web page at regular interval and always before any new flight.

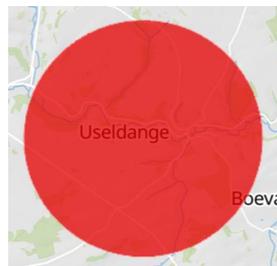
1. The grey zone: is an existing but inactive zone at the time of the consultation.



- The yellow zone: is a zone which is still inactive at the time of consultation. However, this zone will be activated soon and the pilots should anticipate this change.



- The red zone: is an **active** zone.



The conditions associated to a zone shall be strictly respected when the zone is active.

An inactive zone is systematically “activated soon” (colour yellow) before going to the active status (colour red). This prior notice for activation varies from 30 minutes to 6h depending on the nature of the zone.

Note: It is globally recommended to use the background « **Road map** » to optimize the color contrast. This background might be selected from the upper right end corner on the screen.



How to get the access conditions to a particular zone?

You just need to click on it. A window « Infos » appears on the left-hand side of the screen and reflect all the essential information:

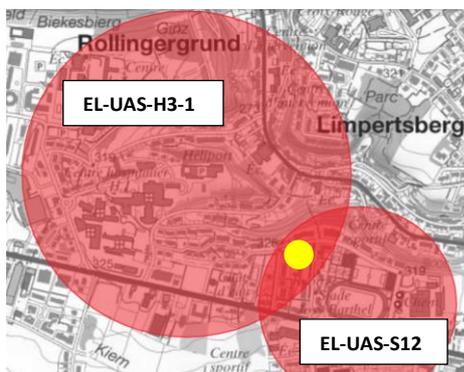
- Reference: reference according to the ministerial regulation;
- Description: short description of the zone (Object);
- Lower & upper limits: vertical limits of the zone;
- Start and end time: timeframe during which the zone is active;
- Remarks: potential remarks (E.g. anticipation period of the zone).

The access conditions to the zone are mentioned in the pdf to download (« **Fichier à télécharger** »: see section here below). It is mandatory to respect **all** the conditions to access a particular zone.

What shall I do if 2 zones are superimposed within the same layer?

UAS geographical zones might have different natures and objectives. The **access conditions are then cumulative**. If the pilot is willing to operate at a location where 2 zones are superimposed, it is then **mandatory** to respect the access conditions of the 2 zones.

Example 1

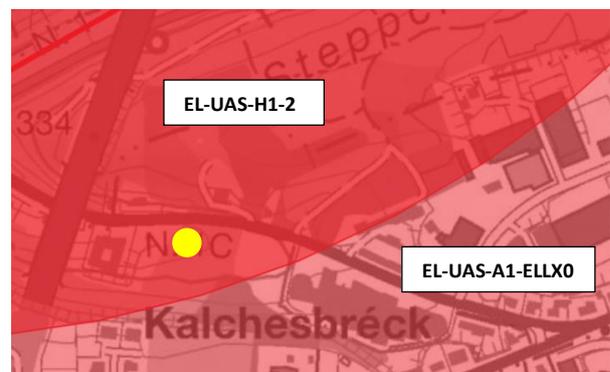


In the example here above, a pilot (yellow point) willing to operate at the superimposition of the 2 zones shall consider:

- The conditions from the zone protecting the helistation (**EL-UAS-H3-1** - left) **and**;
- The conditions from the zone protecting the stadium (**EL-UAS-S12** - right).

In this case, the conditions imply, amongst others, a flight notification in the zone EL-UAS-H3-1 whilst the zone EL-UAS-S12 prohibits flights during defined timeframe. Therefore, the flight in the superimposed zone is not authorized during this defined timeframe, even if the pilot respect all the conditions from the zone EL-UAS-H3-1.

Example 2



In the example here above, a pilot (yellow point) willing to operate at the superimposition shall consider:

- The conditions from the zone protecting the helistation (**EL-UAS-H1-2** - left) **and**;
- The conditions from the zone protecting Luxembourg airport (**EL-UAS-A1-ELLX0** - - right).

In this case, the conditions imply, amongst others, an authorisation from ANA for the zone EL-UAS-A1-ELLX0 and a notification for the zone EL-UAS-H1-2. The authorisation from ANA does **NOT** relief the pilot from the notification requested by EL-UAS-H1-2.

What are the conditions to access a zone?

By clicking on a particular zone, the window « Infos » appears on the left hand-side of the screen. The last information contains a pdf file to download (“Fichier à télécharger”). This pdf defines the conditions to access the zone. Example for **EL-UAS-H1-1** :

ZONE GEOGRAPHIQUE UAS
GEOGRAFISCHE UAS-ZONE
UAS GEOGRAPHICAL ZONE
UAS GEOGRAFESCH ZON

EL-UAS-H1-1

HELIPORT / HUBSCHRAUBERLANDEPLATZ

HRS KIRCHBERG

Regulatory reference for the zone

HAUTEUR / HÖHE / HEIGHT / HÉISCHT: **0 - 50M**

Lower and upper limits

1: VOL DE NUIT / NACHTFLUG / NIGHT FLIGHT / NUETSFLUCH																															
<p>Les vols de nuit nécessitent une autorisation préalable de la DAC. Nachtflüge sind, ausschließlich mit vorheriger Genehmigung der DAC, erlaubt. Night flights require prior authorisation from DAC. Nuetsflüch brauchen am Voraus eng Geneemegung vun der DAC.</p>																															
2: PRIORITÉ / PRIORITÄT / PRIORITY / PRIORITÉIT																															
<p>Les aéronefs habités ont la priorité. Le pilote à distance atterrit son UAS dès qu'un aéronef habité s'approche. Ein UAS muss einem bemannten Flugzeuge immer ausweichen. Der Fernpilot landet sein UAS, sobald sich ein bemanntes Flugzeug nähert. Manned aircraft have priority. The remote pilot lands the UAS as soon as a manned aircraft approaches. Bemannte Fliegeren hu Prioritéit. De Fernpilot lant säin UAS esoubal e bemannte Flieger mëi no kënn.</p>																															
3: FORMATION / AUSBILDUNG / TRAINING																															
<p>Le pilote à distance dispose d'une preuve de formation valable dans la catégorie A1/A3. Der Fernpilot verfügt über einen gültigen Ausbildungsnachweis in der Kategorie A1/A3. The remote pilot has a valid proof of training in the category A1/A3. De Fernpilot huet e gültige Beweis vun Training an der Kategorie A1/A3.</p>																															
4: NOTIFICATION / BENACHRICHTIGUNG / NOTIFIKATIION																															
<p>Le pilote à distance envoie le présent formulaire à : Der Fernpilot übermittelt dieses ausgefüllte Formular an: The remote pilot sends this form to: De Fernpilot schéckt dëse Formulaire un:</p> <p style="text-align: center; background-color: #cccccc; padding: 2px;">drone.hrs@hopitiauxchuman.lu AND ops@lar.lu (Click to send!)</p> <p>Pilote / Fernpilot / Pilot (Nom/Prénom – Nachname/Vorname – Name/First name – Numm/Virnumm): _____ N° mobile / Handynummer / Mobile number / Handysnummer: _____ Date du vol / Flugdatum / Flight date / Fluchdatum: _____</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>N°</th> <th>Position / Position (GPS)</th> <th>Hauteur / Höhe / Height / Héisch (m)</th> <th>Heure / Zeit / Time / Zeit (hh:mm)</th> <th>Durée / Dauer / Duration (min)</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <p style="font-size: x-small; text-align: center;"> Le présent document est à envoyer au minimum 24h avant le vol. Passé ce délai, la notification est considérée non-valable. Dieses Dokument muss mindestens 24 Stunden vor dem Flug eingereicht werden. Wird diese Frist nicht eingehalten, ist die Mitteilung als ungültig. This document must be sent at least 24 hours before the flight. After this period, the notification will be considered invalid. Dëst Dokument muss minimum 24 Stonnen virum geplante Fluch ageschéckt gin. No deem Délaie gëtt Är Mitteilunge als ongültig ungesin. </p>		N°	Position / Position (GPS)	Hauteur / Höhe / Height / Héisch (m)	Heure / Zeit / Time / Zeit (hh:mm)	Durée / Dauer / Duration (min)	1					2					3					4					5				
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<p>Le jour du vol prévu, le pilote à distance notifie le début et la fin de ses opérations au numéro : Am Tag des geplanten Fluges informiert der Fernpilot über den Beginn und den Abschluss des UAS Betriebs an folgende Nummer: The day of the scheduled flight, the remote pilot notifies the start and the end of his operations at the following number: Den Amant vu senger Operatioun dealt de Fernpilot den Ufank an de Schluss vu senger Operatioun op folgender Nummer matt:</p> <p style="text-align: center; color: red;">+352 2468 2424</p>																															

Conditions 1 / 2 / 3

Condition n°4 : some zones require a notification to particular entities. The pdf form has been created to facilitate the communication. **Once filled-in**, the form might be sent directly to the entities by clicking on the grey button.

Condition n°5: sending the form does not replace the need for a phone call!

Should it be required, the form is completed by an information sheet (verso).

It is mandatory to fulfill all the conditions to access the zone.

How do I locate myself on a map? How do I determine my GPS position?

Some zones require the transmission of the GPS coordinates for the operations. In aviation, the GPS coordinates are shared under the international WS84 format in degrees, minutes and second (“DM”).

Several options exist to determine the position in this format:

Online (www.geoportal.lu)

1. By selecting the information tab in the lower right-hand corner of the screen



The following bar appears :



Lon/Lat WGS84 DMS should be selected rather than LUREF (Local format). Depending on the mouse's position on the screen, the information are also modified.



The framed references are the correct ones

2. By positioning the mouse on the take-off point and with a right click, the infos window appears on the left.



The required info appears instantly. Alternately, the Url might also be used.

Smartphone/tablet <http://map.geoportal.lu>

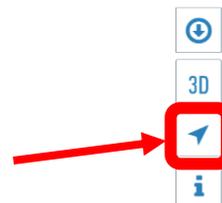
With map.geoportal.lu, it is not possible to get the information directly from the information bar.

However, the « right click » is performed by selecting and keeping the finger on the take-off point. The information screen appears:



The required info appears instantly. Alternately, the Url might also be used.

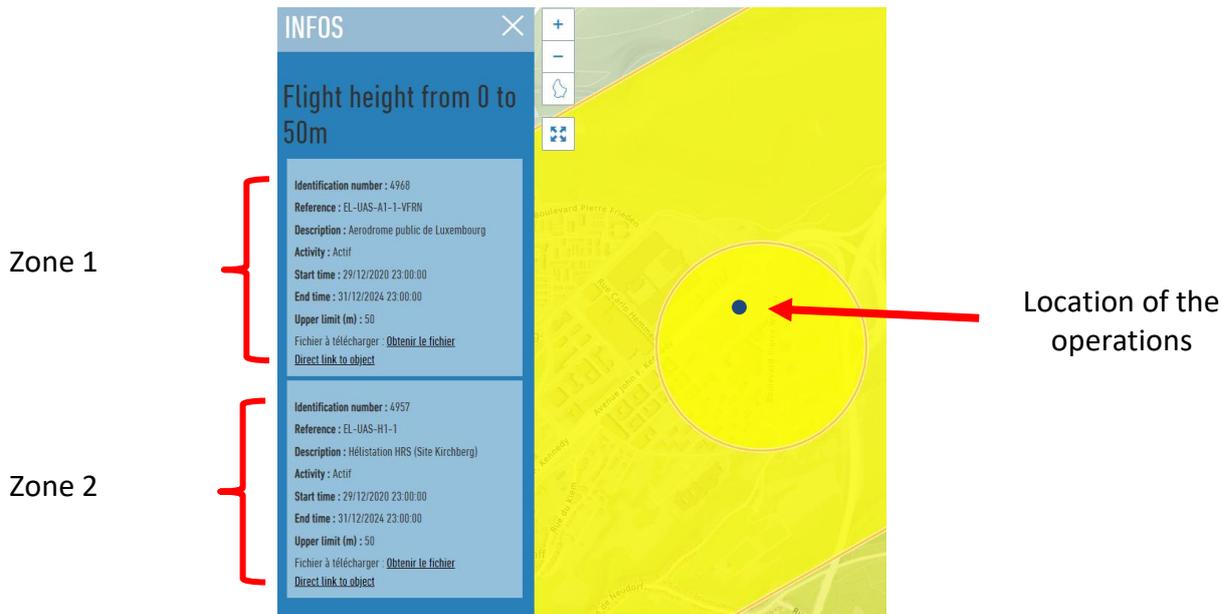
Finally, the arrow icon allows the precise identification of your own position (Geolocation).



How to prepare for a flight?

It is generally recommended to prepare for a flight before to move to the location to know the access conditions (Which sometimes require actions several days in advance) and to avoid issues with connection to the internet.

A simple click on the precise location of the operations identify all the existing zones at that particular point thanks to the information in the left-hand column. Example:



Most of the UAS geographical zones are permanent, i.e. they are active all year long. There are no quick changes to anticipate. Amongst them:

- The zones for Luxembourg airport and the helistations;
- The zones for the prisons, Police Grand-Ducale and the Maison du Grand-Duc ;
- The zone of the harbour of Mertert;
- The NSPA zone.

Others zones might be activated with prior notice, sometimes quite short. It is therefore very important to ensure these zones are not actives by refreshing the information from the system before **each flight**:

30 minutes prior notice:

- The zones around the airport of Useldange and Noertrange. These zones are activated during the corresponding aerial activities on these airfields;

6 hours prior notice:

- The zones related to the military TSAs. These zones are activated during the corresponding aerial activities;
- The zones around the stadiums.