

Federal Department of the Environment, Transport, Energy and Communications DETEC Federal Office of Civil Aviation FOCA Unmanned Aircraft Systems (UAS)

Swiss Confederation

# **FOCA GM**

**G**uidance **M**aterial

# **Local Conditions for UAS Operations in Switzerland**

Guidance to FOCA-UAS-APP-CBO – Application Form for Cross-Border Operations

| Scope      | AMC and GM to Article 13 of Implementing Regulation (EU) 2019/947     |
|------------|---|
| Applies to | UAS cross-border operations in the 'Specific' category in Switzerland |
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# Log of Revision (LoR)

| Date       | Issue | Revision | Highlight of Revision | Prepared<br>by | Released by |
|------------|-------|----------|-----------------------|----------------|-------------|
| 22.07.2025 | 1     | 0        | First Issue – UAS     | UAS/Ops        | UAS/Lead    |

# 0 Disclaimer and purpose

The following material is provided for informational purposes only and does not constitute legal advice. It is the responsibility of UAS operator and remote pilot to comply with all applicable laws and regulations related to UAS operations and privacy, data protection, liability, insurance, security and environmental protection in general.

This document compiles the local conditions in Switzerland for UAS operations in the 'Specific' category i.a.w. IR (EU) 2019/947.

For further guidance, please refer to the following:

- FOCA <u>SORA</u>, PDRA and CBO webpages and available guidance documents;
- the DETEC Ordinance on Special Category Aircraft (OSCA; AS 2022 802).

# 1 Minimum Age for Remote Pilots

In Switzerland, there are minimum ages for operating an UAS:

- 12 in the 'Open' category;
- 14 in the 'Specific' category:
- children under the age of 12 may pilot a drone provided they are supervised by a person over the age of 16 who has adequate piloting skills (training, examination).

# 2 UAS Geographical Zones

In Switzerland, there are areas where flying drones is prohibited or only possible to a limited extent.

#### 2.1 National and cantonal restrictions

Our <u>interactive drone map</u> shows the national and cantonal area restrictions. These include:

- 5km radius around civil or military airfields;
- control zones (CTR);
- civil airfield perimeter according to the sectoral plan for aviation infrastructure or military airfield perimeter according to the sectoral plan for the military;
- penal institutions;
- certain protected areas;
- the vicinity of nuclear power plants;
- over military zones;
- certain energy and gas supply infrastructure.

If you are unable to comply with the additional flight restrictions, you must contact the responsible authority to apply for authorization. The contact details of the competent authority and the conditions for flying in a given geographical area are specified directly on the map ('Object Information').

# 2.2 NOTAM / DABS

Most NOTAMs concerning navigation warnings and airspace changes (W series) are shown graphically (red zone) in the Daily Airspace Bulletin Switzerland (<u>DABS</u>). The map and the NOTAM text section are updated daily at 4pm for the following day.

Please refer to our <u>Guidelines for drone operators in the open category-DABS chart</u>.

#### 2.3 Beware of hot spots!

In order to prevent an 'airprox' or even a collision with another airspace user, drone pilots need to take particular care and precautions when operating in the vicinity of:

- hospitals and other health care facilities with helipads: Map;
- mountain landing sites: <u>Info</u> (DE) & <u>Map</u>;
- hazard zones of Swiss Armed Forces' shooting ranges: Map;
- high activity areas for gliding, paragliding and hang gliding: Glider Chart & Flying areas SHV.

See also the publications of Stay Safe (FOCA Safety Promotion) on drones.

# 2.4 Coordination with Skyguide

Skyguide, the Air Navigation Service Provider (ANSP) in Switzerland, is responsible for providing clearances for special flight operations in the airspace in which Air Traffic Control (ATC) approval is required, including airspace around airports and regional aerodromes.

UAS flights in the vicinity of aerodromes where Skyguide provides Air Traffic Control service are subject to Skyguide's approval, which must be requested through Skyguide's <u>SFO tool</u>. For further information, please consult Skyguide's <u>Special flights</u> webpage.

The table and graph below summarize the conditions under which Skyguide approval is required.

| Conditions under which Skyguide approval is required   |          |                              |  |  |  |  |
|--|----------|------------------------------|--|--|--|--|
| Operational Volume   | UAS MTOM | Height of operational volume |  |  |  |  |
| Within the airport perimeter, as defined in the Sectoral Aviation Infrastructure Plan (SAIP) | Any      | Any                          |  |  |  |  |
| Within the radius of 5 km around the runway  | > 250 g  | Any                          |  |  |  |  |
| Outside the radius of 5 km around the runway, but still                                      | > 250 g  | > 120 m AGL                  |  |  |  |  |
| within the lateral limits of the CTR (Control Zone)  | _33 9    | > 150 m AGL (model aircraft) |  |  |  |  |

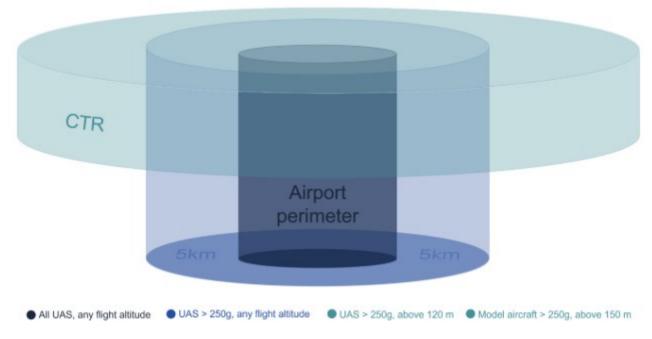


Figure 1 – When do you need an authorization from Skyguide (source: Special flights, Skyguide)

# 3 Population Density

In Switzerland, for the purposes of the Specific Operations Risk Assessment (SORA), the following definitions must be considered:

- 'sparsely populated areas': less or equal to 300 ppl/km² (3 ppl/ha);
- 'populated areas': more than 300 ppl/km² (3 ppl/ha);
- for the assessment of 'gatherings'/'assembly of people' within adjacent area, refer to: <u>FOCA UAS AltMoC to SORA Step 9 on Containment</u>.

| Legend   | Quantative category                      | Qualitative descriptor |  |
|--|--|------------------------|--|
| 1-29 people per km2                              | Blue (light blue, dark blue)             | Sparsely populated     |  |
| 30-300 people per km2<br>301-2499 people per km2 | [1-300 people per km <sup>2</sup> ]      | cpencery population    |  |
| 2500-25000 people per km2                        | Red (light red, dark red)                | Populated              |  |
|  | [301-25'000 people per km <sup>2</sup> ] | 1 opulatou             |  |

The primary tool used in Switzerland to assess population density is using the layer "SORA – Map for intrinsic ground risk" on <a href="https://map.geo.admin.ch">https://map.geo.admin.ch</a>.

The use of local or cantonal density maps (such as <u>geo.vd.ch</u> or <u>maps.zh.ch</u>) is also possible, as long as they are provided by an authoritative source.

# 4 Insurance

Anyone operating a drone weighing more than 250 grams must take out civil liability insurance with a guaranteed sum of at least CHF 1 million. The FOCA also recommends having insurance for lighter drones.

# 5 Accidents, Incidents and Emergency Contact Details

Drone incidents and accidents resulting in injuries or involving manned aircraft have to be reported. Voluntary reporting of every incident or accident is nonetheless encouraged.

Two distinct reporting procedures apply depending on the case:

- Firstly, drone operators/pilots are required to report accidents and serious incidents without delay to the Aviation division of the Swiss Transportation Safety Investigation Board (STSB) via the Rega alarm centre (tel. 1414, +41 333 333 37 from abroad).
- Secondly, drone operators/pilots are required to report all safety-related incidents within 72 hours to the Federal Office of Civil Aviation (FOCA) or the official reporting system (www.aviationreporting.eu).

Incidents, serious incidents and accidents involving unmanned aircraft are exempted from this obligation to report, provided that no serious or fatal injury to persons is recorded and no manned aircraft are involved.

In other words, UAS operators/pilots must report accidents and serious incidents via the REGA alarm centre (Tel. 1414 from outside Switzerland +41 333 333 333) immediately to the aviation department of the Swiss Transportation Safety Board (STSB) and report all safety-related incidents with serious or fatal injuries to persons or involving manned aircrafts within 72 hours to the FOCA through <a href="https://www.aviationreporting.eu">www.aviationreporting.eu</a>.

# 6 Use of Transponders

The use of transponders is only possible in certain cases. Please refer to the following FOCA document: Directive on the use of transponders and ADS-B for drones and model aircraft.

# 7 Use of Radio Frequencies

A drone, insofar as it contains a radio transmitter and/or receiver, constitutes radio equipment. As such it is subject to the Telecommunications Act. Questions relating to frequencies fall within the Federal Office of Communications' area of responsibility. Further information: <a href="https://www.bakom.admin.ch">www.bakom.admin.ch</a>.