

# CORUS five



Aerodromes/  
Vertiports



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## Short-term

### Some definitions:

- Aerodrome is defined by ICAO as *'A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and movement of aircraft'*.

ICAO Annex 14, Volume I Aerodrome Design and Operations.

Aerodrome is the regulated term, while “airport” is understood as certified aerodrome for commercial transport.

### • Sub-types:

- Heliport, defined also by ICAO and endorsed by EASA (Prototype Technical Design Specifications for Vertiports) as *'an aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters'*.
- Vertiport is defined by EASA (Prototype Technical Design Specifications for Vertiports) as *'an area of land, water, or structure used or intended to be used for the landing and take-off of VTOL aircraft.'* Only for VCAs according to EASA.



# Aerodromes/ Vertiports

Aerodrome/  
Vertiports Operations

CORUS five

Short-term

- In the STH, U-space airspace is located at a sufficient distance from any controlled aerodrome used by manned aircraft.

• But:

- UAS operations are already happening close or within airports (no U-space services) in controlled airspace.

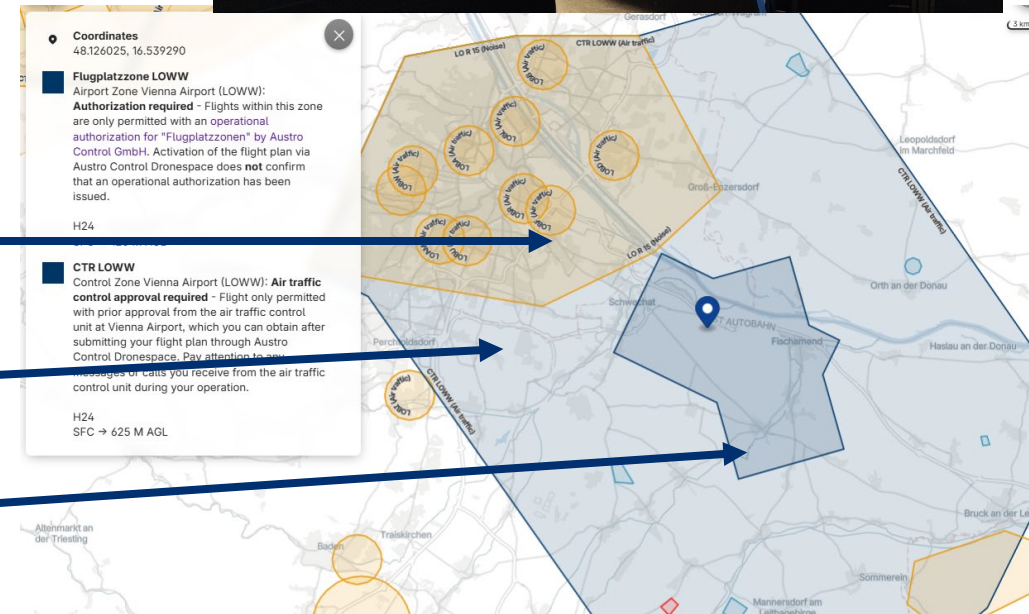
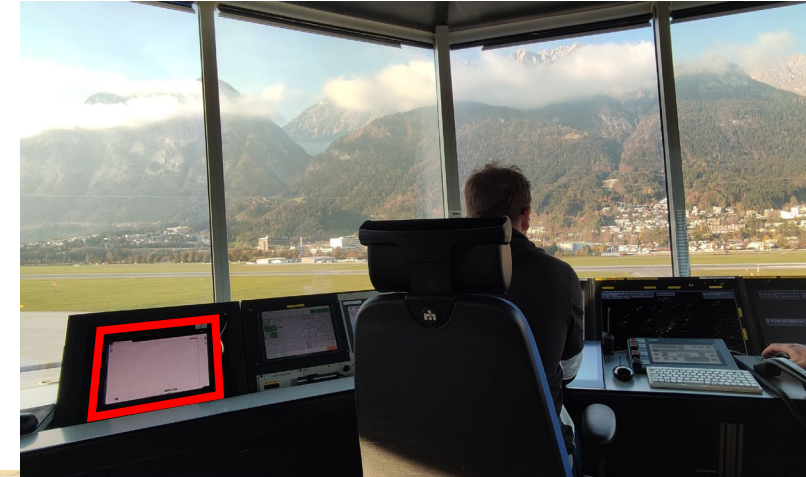
Example in Austria: **Dronespace**

(map.Dronespace.at)



## • Geo-zones within CTRs. Example in Vienna:

- The city of Vienna is a restricted geozone in which only UAS operations with a CAA permit are allowed, in particular around existing heliport infrastructure
- The entire control zone is a geozone in which ATC needs to approve your flight plan via dronespace
- An additional “airport zone”-geozone safeguards the immediate airport vicinity in which an additional CAA permit is required before flight



## Short-term

### Aerodromes not yet integrated into U-space

- In the STH there is no U-space service that manages the integration of aerodromes into the U-space environment.
- UAS flight authorisation service ensures that UAS operations are not conducted in prohibited (“no-fly”) geo-zones, and also warns UAS operators about the conditions to operate in restricted areas, such as obtaining prior permission.
- Any additional permissions (e.g. from CAA) would need to be obtained separately, prior to conducting the mission.



## Flexible UAS Operations

- Most UAS use small aircraft capable of takeoff and landing in flexible or ad-hoc locations **without fixed infrastructure.**

## Minimal Ground Facilities

- Specialized UAS operations like logistics may require simple facilities for charging and payload handling, but needs are modest.

## Internal Infrastructure Management

- Early UAS ground infrastructure is typically **managed internally by single operators**, reducing the need for shared services.

## Future Integration Potential

- As UAS scale and U-space grows, demand for shared regulated ground facilities and integration with aerodromes may increase.



## Geographical Zone Restrictions (regulation (EU) 2019/947)

- UAS operations must follow prohibitions and restrictions in designated geographical zones to reduce safety risks near aerodromes.
- It is assumed that additional geographical zones may also exist within U-space airspace. Thus, requirements of overlapping zones are cumulative

## Local Aerodrome Procedures

- Individual aerodromes impose specific restrictions based on traffic patterns and safety needs to manage UAS access effectively.

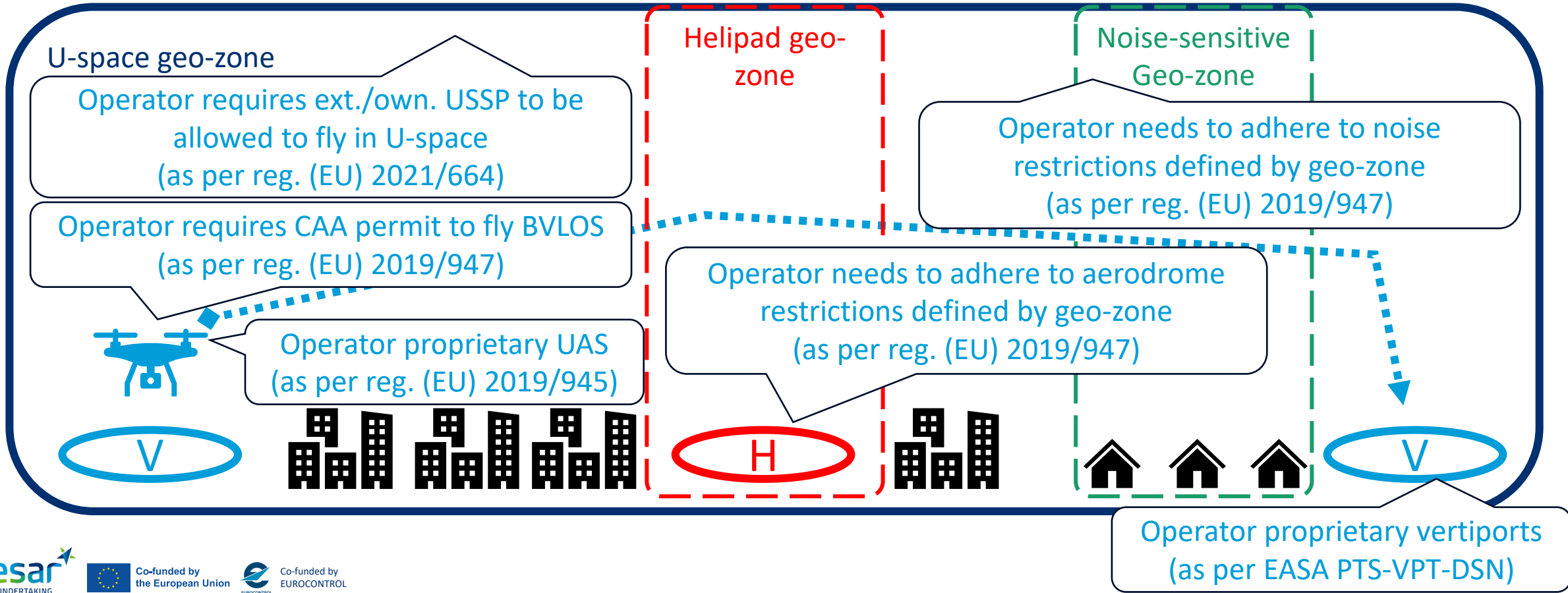
## Operator Accountability and Training (regulation (EU) 2019/947)

- Proper training and accountability are vital for UAS pilots to comply with access conditions and maintain safety standards.



## Example of aerodrome/vertiport impact on U-space ops. in the short term:

Coordinations with multiple, **non-integrated** stakeholders, (non-) U-space services and infrastructure operators may be necessary



DANKE!  
THANK YOU!  
MERCİ!  
GRAZIE!  
GRACIAS!  
DANK JE WEL!

ありがとうございます



# Thematic Area 2: Airspace Organisation and Management + Aerodrome (and Vertiports) Operations