

# AIM Workshop

Session One:  
The Future of Aeronautical Data Exchanges

**“UAS Geographical Zones and the European Regulation”**

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# Outline

- Legal Background
- EASA UAS Geographical Zones Task Force
- Main issues

# Legal Background

# Implementing Act

11.6.2019

EN

Official Journal of the European Union

L 152/45

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COMMISSION IMPLEMENTING REGULATION (EU) 2019/947

of 24 May 2019

on the rules and procedures for the operation of unmanned aircraft

# Implementing Act

## Article 15

### Operational conditions for UAS geographical zones

1. When defining UAS geographical zones for safety, security, privacy or environmental reasons, Member States may:
  - (a) prohibit certain or all UAS operations, request particular conditions for certain or all UAS operations or request a prior operational authorisation for certain or all UAS operations;
  - (b) subject UAS operations to specified environmental standards;
  - (c) allow access to certain UAS classes only;
  - (d) allow access only to UAS equipped with certain technical features, in particular remote identification systems or geo awareness systems.
2. On the basis of a risk assessment carried out by the competent authority, Member States may designate certain geographical zones in which UAS operations are exempt from one or more of the 'open' category requirements.
3. When pursuant to paragraphs 1 or 2 Member States define UAS geographical zones, for geo awareness purposes they shall ensure that the information on the UAS geographical zones, including their period of validity, is made publicly available in a common unique digital format.

# Article 15 amendment

COMMISSION IMPLEMENTING REGULATION (EU) 2020/639  
of 12 May 2020  
amending Implementing Regulation (EU) 2019/947 as regards  
standard scenarios for operations executed in or beyond the  
visual line of sight

(5) in Article 15, point (a) of paragraph 1 is replaced by the following:

‘(a) prohibit certain or all UAS operations, request particular conditions for certain or all UAS operations or require a prior **flight** authorisation for certain or all UAS operations;

# Applicability date article 15

**2019/947** Paragraph 3 of Article 15 shall apply from 1 July 2021.

COMMISSION IMPLEMENTING REGULATION (EU) 2020/746

of 4 June 2020

amending Implementing Regulation (EU) 2019/947 as regards postponing dates of application of certain measures in the context of the COVID-19 pandemic

Article 23 is amended as follows:

(a) in paragraph 1, the second subparagraph is replaced by the following:

‘It shall apply from 31 December 2020.’;

(b) paragraph 5 is replaced by the following:

‘5. Paragraph 3 of Article 15 shall apply from 1 January 2022.’.

# (EU) 2019/ 945 Delegated Act C1 (13)

(13) be equipped with a geo-awareness system that provides:

- (a) an interface to load and update data containing information on airspace limitations related to UA position and altitude imposed by the geographical zones, as defined by Article 15 of Implementing Regulation (EU) 2019/947, which ensures that the process of loading or updating such data does not degrade its integrity and validity;
- (b) a warning alert to the remote pilot when a potential breach of airspace limitations is detected; and
- (c) information to the remote pilot on the UA's status as well as a warning alert when its positioning or navigation systems cannot ensure the proper functioning of the geo-awareness system;



# EASA UAS Geographical Zones Task Force

# EASA UAS-Geographical Zones Task Force

## Objectives:

Timely development of AMC / GM to facilitate harmonized implementation of Article 15 (EU) 2019/947

## Members:

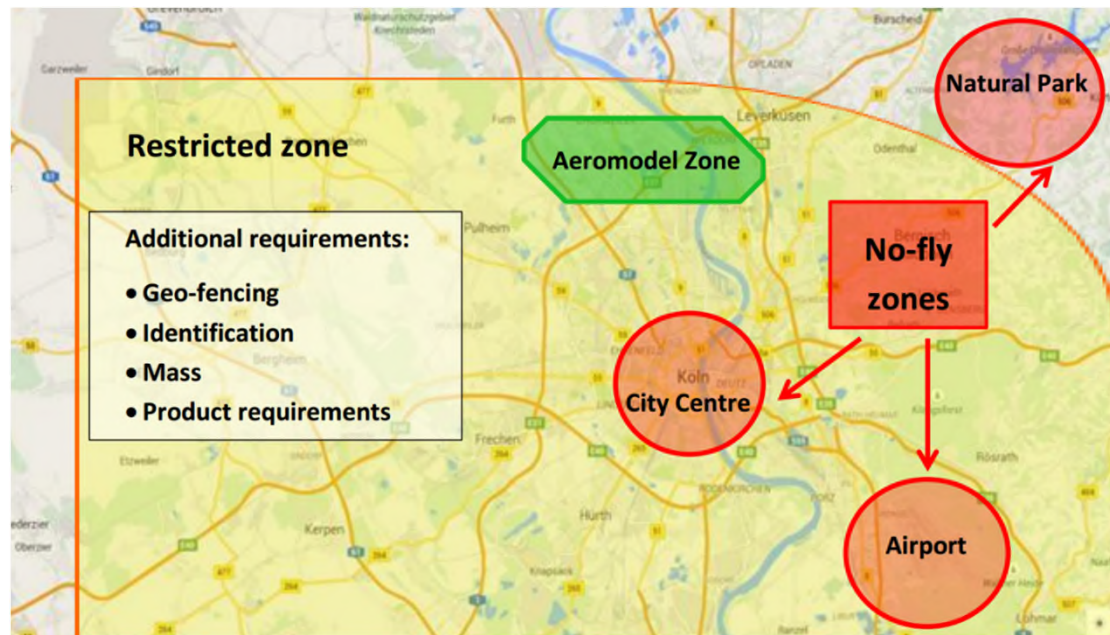
BAZL, DGAC (DSNA), ENAC, AESA, GE-MoT, IAA, TBST, MINIENW, A-MoT, BCAA (partially), EDA, ECTL, EUROCAE, ASD STAN

# Main Issues

# UAS Geographical Zones Definition

Geographical zones are defined by Member States

**!!! There is NO common definition !!!**



# Examples for UAS Geographical Zones

- Highways & express ways & roads,
- railroads,
- hospitals,
- artworks,
- rural & urban areas,
- local restriction to reduce the noise & climate & nature impact,
- nature parks,
- reserved areas,
- populated areas,

## Examples for UAS Geographical Zones ctd.

- bridges,
- critical sites,
- secure areas,
- electrical power lines,
- zones forbidden for aerial photography,
- harbour areas,
- industrial areas,
- emergency drone zones (e.g. areas for stacking or emergency landings in the event of traffic conflicts, equipment failure)

## Examples for UAS Geographical Zones ctd.

The logo for U-space, featuring a stylized 'U' with a green signal icon above it, followed by the text 'space' in blue.

**IS A  
UAS-GEOGRAPHICAL ZONE**



# Issues and related decisions/proposals

## Format

### COMMON UNIQUE DIGITAL FORMAT

The Common Unique Digital Format should be as described in [chapter 8](#) “UAS restriction zone data model” of the ED-269 MINIMUM OPERATIONAL PERFORMANCE STANDARD FOR GEOFENCING in the version published June 2020.



# Issues and related proposals

## Quality of data

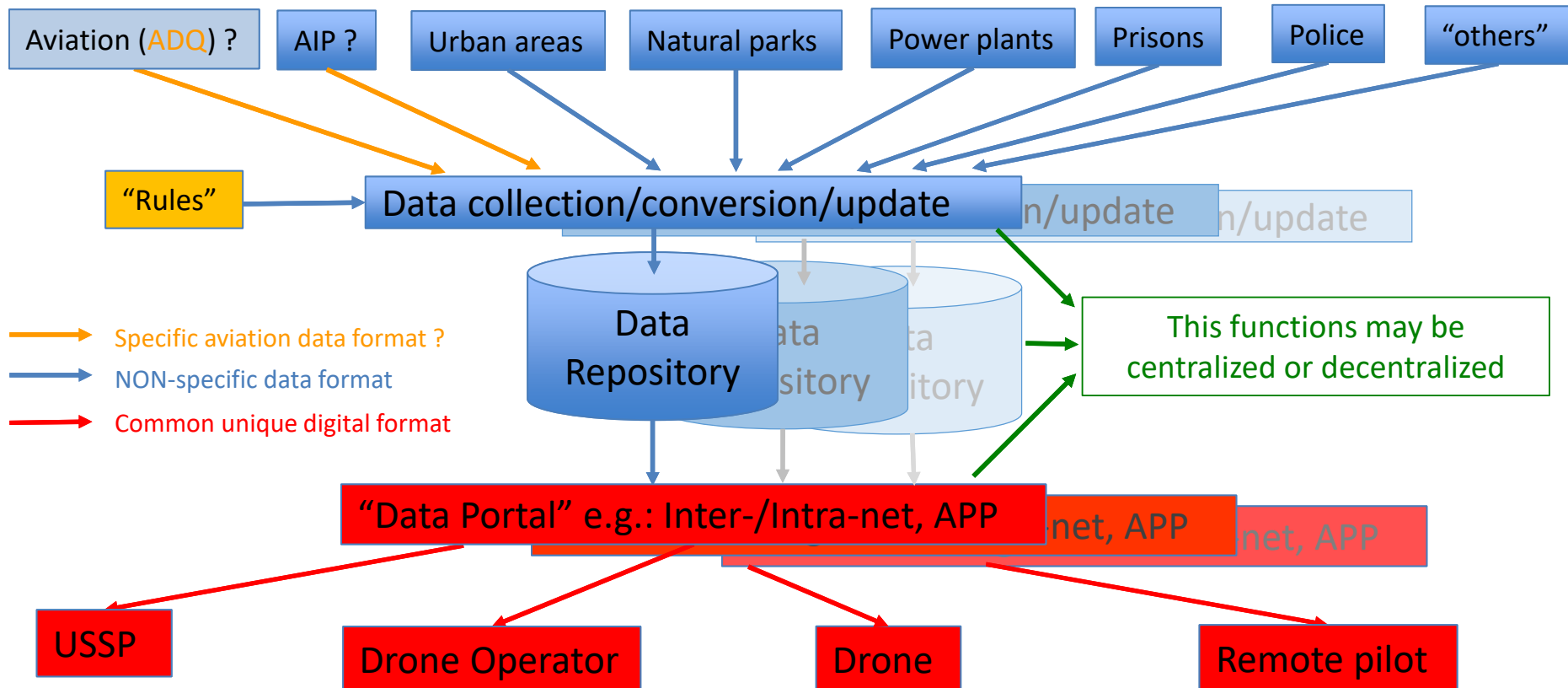
### GZ fully or partially in controlled airspace

requirements as for Prohibited/ Restricted / Danger -areas according to IR (EU) 373/2017 Part ATM/ANS.OR Appendix I Aeronautical data catalogue.

### GZ in uncontrolled airspace

requirements as considered relevant and practicable by the Member State may apply to data and zones related to features not addressed in part AIM or Annex 15 of Regulation (EU) 373/2017 data catalogue.

# Geographical Zones Data Flow



# Issues and related proposals

## Publication of UAS Geographical Zone data:

In case Member States decide to publish information related to UAS geographical zones in the AIP, **such information should be published in section ENR 5.1 of the AIP.**

Member States should publish in the AIP section ENR 5.1 **information on where / how data related to UAS geographical zones for Geo-awareness are made available.**

# Issues and related proposals

## Cross border issues

Formal arrangements between MS

Open question:

should data be provided by each MS or should each MS only provide data for the part in its own territory?

## Static vs dynamic

To be further developed when UAS capabilities evolve

## Altitude vs height

ED 269 supports both

# Summary

# Summary

- Member States define “their” UAS Geographical Zones
- The Common Unique Digital Format is the ED-269 (Chpt. 8)
- UAS geographical zone data are published centralised or de-centralised
- Data Quality requirements pend on the nature and location of the zone



# Questions?

[easa.europa.eu/connect](https://easa.europa.eu/connect)



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