

Towards Drone AIM in Latvia using UAS Geographical zones

SJSC “Latvijas gaisa satiksme”

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EC Implementing Regulation 2019/947, **Article 15**

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 authorization 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.

LGS AIS services and functions



Aeronautical Information Service (AIS)	Aeronautical information products (including distribution services)	Aeronautical information publication (AIP)	N/A	Riga FIR
		Aeronautical information circular (AIC)	N/A	Riga FIR
		Aeronautical charts	N/A	Riga FIR
		NOTAM	N/A	Riga FIR
		AIP data set	N/A	Riga FIR
		Terrain data sets	N/A	Riga FIR
		Obstacle data sets	N/A	Riga FIR
		Aerodrome mapping data sets	N/A	Riga FIR
	Pre-flight information services	N/A	N/A	Aerodrome “Riga”, aerodrome “Liepaja”



THE MINISTRY OF TRANSPORT
THE STATE AGENCY “CIVIL AVIATION AGENCY”

NATIONAL SUPERVISORY AUTHORITIES OF
THE REPUBLIC OF LATVIA, EUROPEAN UNION

CERTIFICATE

Reference: LV-ANS 01

Pursuant to the Regulation (EC) No 216/2008 of the European Parliament and of the Council, to the Regulation (EC) No 550/2004 of the European Parliament and of the Council and to the Commission Implementing Regulation (EU) No 1035/2011 and to for the time being in force and subject to the conditions specified in this Certificate, the State Agency “Civil Aviation Agency” hereby certifies:

State Joint Stock Company “Latvijas gaisa satiksme”

Current Aeronautical Information product and function nomenclature to be updated with UAS Geographical zones ?

LGS AIM Drone activities – AIS/AIM functional system changes identified



AIM Drone Data-centric process

- Data collection
- Data assemble
- Data selection
- Data Format (unique ...)
- Data Distribution
- Data display (National Requirements)

AIS/AIM Functional system changes

- AIM/AIS SW improvement to serve UAS GeoZone data based on EUROCAE ED-269 requirements
- Integrated AIM DB (IAIM DB) improvement to cover UAS Geographical zone data;
- Create IAIM DB export mechanism to provide data.

EC Implementing Regulation 2019/947, **Article 18 (f)**

The competent authority shall be responsible for:

(f) making available in a **common unique digital format information on UAS geographical zones** identified by the Member States and established within the national airspace of its State;

Procedures

- Formal Arrangement improvement to ensure timely and complete data provision to AIS from UAS GeoZone Originators (Aeronautical Data Catalogue extension is needed)
- Appropriate procedures will be added to reflect staff responsibility to process UAS Geographical zone data

Personnel

- ATSEP Training will be provided to achieve the UAS GeoZone competence

Transition from UAS Airspace restriction to GeoZone provision

Further information on using the application by phone +371 67300686
Information is updated automatically every 5 minutes!
Period: 2020-11-10 10:20 UTC - 2020-11-11 10:20 UTC
Vertical: GND 0 m - GND 120 m

Specify the total take-off mass, desired flight area, height and time.

Close Filter

Time period for information provision
2020-11-10 10:20 UTC - 2020-11-11 10:20 UTC

← Adjust settings parameters 🔍 Zoom to

Drone restrictions identified - 47

Static airspace

- 1 EVR RPAS NBS1
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 2 EVR RPAS NBS2
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 3 EVR RPAS NBS29
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 4 EVR RPAS NBS35
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 5 EVR RPAS NBS36
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 6 EVR RPAS NBS39
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 7 EVR RPAS NBS40
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 8 EVR RPAS NBS41
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 9 EVR RPAS NBS42
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 10 EVR RPAS NBS54
All period restricted
Restriction up to 50 m
Flash Zoom to Permission
- 11 EVR RPAS BAUMANI
All period restricted

Time period for information provision

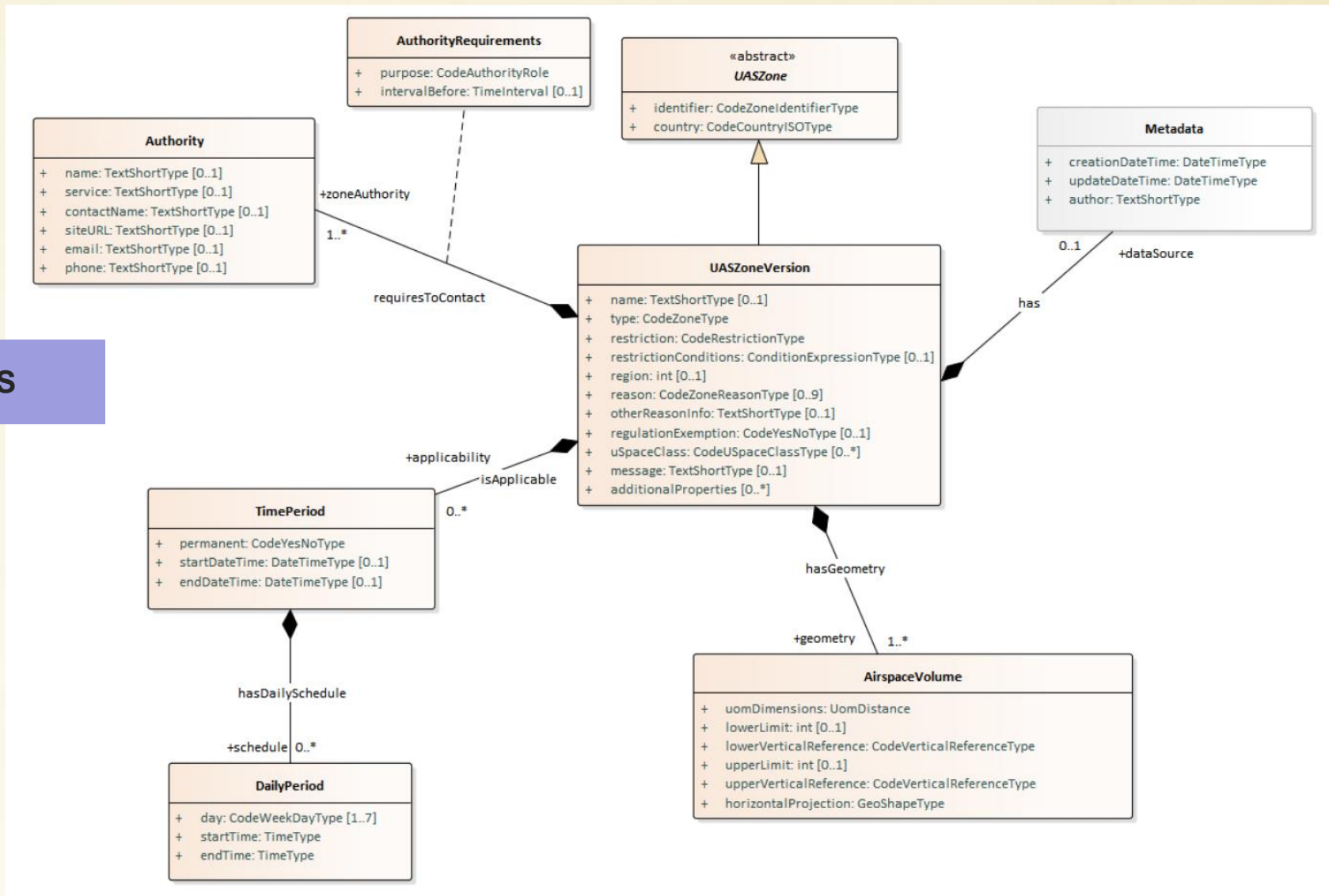
2020-11-10 10:20 UTC - 2020-11-11 10:20 UTC

← Adjust settings parameters 🔍 Zoom to

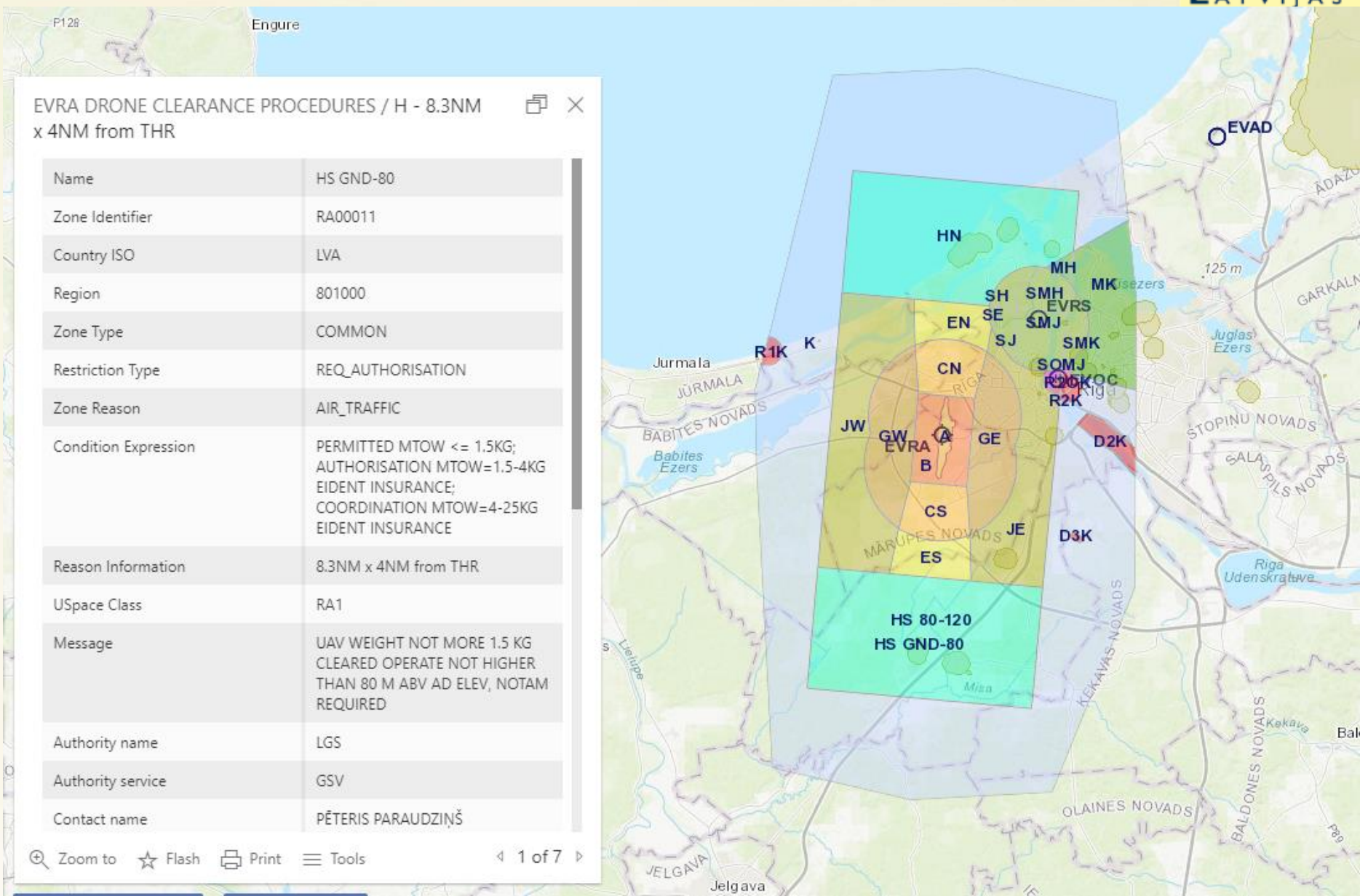
Drone restrictions identified - 47

- UAS Zone info
- Authority
- Authority requirements
- Time period
- Daily period
- Airspace volume
- Metadata

Figure 2: UAS ZONE – CLASSES



UAS Geographical zones within RIGA CTR information and visualization - example



THANK YOU FOR THE ATTENTION!

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