



SAKAERONAVIGATSIA

AERONAUTICAL INFORMATION SERVICE OF GEORGIA

Data Product Specification

For Obstacle Data Set for Area 1 - Georgia

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1. About the data product specification

Title	Data product specification for Obstacle Data Set for Area 1 - Georgia
Date	09.09.2021
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Web location	https://ais.airnav.ge/en/obstacles-dataset
Language	English
Topic category	Transportation
Terms and definitions	See ICAO Annex 15 and PANS-AIM (Doc 10066)
Abbreviations	See ICAO Annex 15 and PANS-AIM (Doc 10066)
Format	PDF
Maintenance	The data product specification is reviewed and updated as required.
Restrictions	NIL

2. Identification and purpose of the data product

Title	Obstacle Data Set for Area 1 - Georgia
ID	UGGG_OBS_AREA_1
Abstract	The product contains an obstacle data set for UGGG Area 1, which is compliant with the requirements laid down in ICAO Annex 15 and PANS-AIM (Doc 10066).
Purpose	The purpose of this document is to specify a harmonised data specification for Obstacle Data Set for Area 1 - Georgia and to provide obstacle data for air navigation applications. ICAO PANS-AIM, Chapter 5.3.3.2 provides possible uses of the data. It is the responsibility of the users to determine if the data product meets their needs.
Spatial representation	Vector
Spatial resolution	Not applicable
Supplemental information	NIL
Restrictions	For aviation use only
Extent	Entire territory of Georgia

3. Scopes

Scope ID	AREA_1
Level	Data set
Level Name	Area 1
Level description	The Area 1 scope defines the specifications which are for obstacles in Area 1.
Extent	Entire UGGG FIR

4. Data content and structure

Narrative description	The data model for obstacle data provided in AIXM format follows the model defined in AIXM 5.1.
Application schema	The application schema is according to the AIXM 5.1 model (source http://aixm.aero).
Feature catalogue	All necessary definitions are given in the AIXM 5.1 model. The full definitions as well as the mapping of all ICAO requirements to AIXM 5.1 can be found at http://aixm.aero .

5. Reference system

Horizontal reference system	WGS-84 EPSG:4326
Vertical reference system	EGM-96
Temporal reference system	Gregorian Calendar, UTC

6. Data quality

The following table shows basic quality requirements of obstacle data within Area 1. For further information, see ICAO Doc 10066 Data Catalogue Table A1-6: Obstacle Data.

AREA 1				
	Accuracy	Integrity	Origination Type	Resolution
Horizontal	50 m	routine	surveyed	1 sec
Vertical	30 m	routine	surveyed	1m or 1 ft

Assurance (Integrity)	The procedures for processing obstacles have been setup to meet the integrity requirements.
Traceability	All actions over the obstacle objects are traced and maintained.

Timeliness	Timeliness is assured by providing the start and end time position of all obstacles according to the temporality concept of AIXM.
Completeness	All features and attributes are expressed according to the AIXM model. The content of the data set was checked by visual inspection.

7. Data capture and production

Description	Obstacle data capture rules are based on Ordinance of the Government of Georgia No. 106 “Rules on geodetic services provision for civil aviation safety purposes”. Obstacle coverage areas have been created according to ICAO Annex 15 and PANS-AIM (Doc 10066).
Guide	Obstacle data capture rules are based on Ordinance of the Government of Georgia No. 106 “Rules on geodetic services provision for civil aviation safety purposes”.
Inclusion criteria	Obstacles must have a minimal height of 100 m above ground level to be included in an Area 1 obstacle dataset.
Data acquisition and processing	The data was captured and processed with terrestrial survey.

8. Maintenance of the data

Description	Obstacle Data Set for Area 1 - Georgia is updated based on AIRAC cycle as needed. New obstacles erection or existing obstacles modification/withdrawal between AIRAC dates will be announced by NOTAM.
Frequency	As needed
User defined	NIL

9. Portrayal rules

Not applicable.

10. Data Delivery

Obstacle Data Set for Area 1 - Georgia is provided in two formats:

Format	Description	Details
AIXM 5.1 (.xml)	Use for machine-readable applications.	AIXM (Aeronautical Information Exchange Model) enables the provision of aeronautical data in digital form.

Excel (.xls)	Use for human-readable applications.	The Excel (XLS) file format is a spreadsheet format. The Excel format enables digital transfer and analysis of the obstacle data.
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Obstacle Data Set for Area 1 – Georgia and data product specification document are available on the web: <http://ais.airnav.ge/en/obstacles-dataset>.

In addition, by request, obstacle data set can be provided via email.

11. Metadata

Metadata is provided only in excel (.xls) format of data set.

Specification	ISO 19115, Geographic information – Metadata
Encoding	ISO 19139, Geographic information – Metadata – XML schema implementation
Metadata elements	<p>The metadata is included in the data set as described in ICAO Doc 10066 PANS-AIM Chapter 5.3.2. The following metadata is provided:</p> <ul style="list-style-type: none"> • The name of the organisation providing the data set; • The date when the data set was provided; • Period of validity of the data set; • Any limitations with regard to the use of the data set.

12. Additional information

NIL