



Data Product Specification of *Obstacle* Data Set **AREAS 2, 3, 4 – Kaunas aerodrome (EYKA)**

Version:	0.3
Latest version	https://www.ans.lt/en/information-publications/digital-datasets-1
Published	2025-10-30
Language	English
Extent of the data product	Kaunas TMA
Topic category	Transportation
Keywords	Obstacles

Overview of the data products

Data set contains the digital obstacle data of Areas 2, 3, 4 of Kaunas aerodrome.

The digital obstacle data meets the numerical requirements defined in ICAO 15 and ICAO PANS-AIM (Doc 10066), Appendix 1, Table A1-6 for Areas 2, 3, 4.

Contact Information

Organisation	Aeronautical Information Service
Address	Balio Karvelio St. 25, LT-02184 Vilnius, Lithuania
Phone	+370 706 94 613
Email	ais@ans.lt
Web site	http://www.ans.lt

Content

1. About the data product specification.....	3
2. Identification and purpose of the data product.....	3
3. Scopes.....	4
4. Data content and structure.....	5
5. Reference system.....	5
6. Data quality requirements	5
7. Data capture and production.....	5
8. Maintenance of the data	6
9. Portrayal rules.....	7
10. Data delivery methods	7
11. Metadata	7
12. Additional information.....	8

1. About the data product specification	
Title	Data Product Specification of Obstacle Data Set of Areas 2, 3, 4 of Kaunas aerodrome.
This version	http://www.ans.lt
Latest version	NIL
Published	2025-10-30
Updated	In accordance with AIRAC cycle
Language	English
Contact	Aeronautical Information Service Balio Karvelio St. 25, LT-02184 Vilnius, Lithuania +370 706 94 613 ais@ans.lt
Web location	http://www.ans.lt
Format	PDF
Maintenance	The data product specification is updated regularly and reviewed at least once every year.
Handling restrictions	Unrestricted
Terms and definitions	See ICAO Annex 15 and PANS-AIM (Doc 10066).
Abbreviations	See ICAO Annex 15 and PANS-AIM (Doc 10066).

2. Identification and purpose of the data product	
Official title	Obstacle Data Set for Areas 2, 3, 4 of Kaunas aerodrome
ID	EYKA_ALL_ZONES_AIXM51_%AIRAC_date%.xml
Abstract	The digital obstacle data set covers Areas 2, 3, 4. The digital obstacle data meets the numerical requirements defined in ICAO 15 and ICAO PANS-AIM (Doc 10066), Appendix 1, Table A1-6 for Areas 2, 3, 4.
Purpose	The purpose of the data product is 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.
Topic category	Transportation
Keywords	Obstacles
Spatial representation	Vector
Spatial resolution	<i>Not applicable</i>
Supplemental information	<i>NIL</i>
Restrictions	Use limitations: For aviation use only Access restrictions: For http://www.ans.lt registered users only
Extent	Areas 2, 3, 4 of Kaunas aerodrome.

3. Scopes	
General scope	
Scope id	General scope
Level	Series
Level name	General scope
Level description	The general scope level defines the specifications which are applicable to all aeronautical data of Republic of Lithuania.
Extent	Republic of Lithuania
Coverage	Not applicable
Area 2	
Scope id	Area 2
Level	Dataset
Level name	Area 2
Level description	The Area 2 scope defines the specifications which are for obstacles in Area 2 and deviate from the general scope.
Extent	Area 2 of EYKA consisting of: Area 2a: The rectangular area around the runway that comprises the runway strip plus any clearway that exists. Area 2b: An area extending from the ends of Area 2a in the direction of departure, with a length of 10 km and a splay of 15 per cent to each side. Area 2c: The area extending outside Area 2a and Area 2b at a distance of not more than 10 km from the boundary of Area 2a. Area 2d: The area outside Areas 2a, 2b and 2c up to a distance of 45 km from the aerodrome reference point, or to an existing terminal control area (TMA) boundary, whichever is nearest.
Area 3	
Scope id	Area 3
Level	Dataset
Level name	Area 3
Level description	The Area 3 scope defines the specifications which are for obstacles in Area 3 and deviate from the general scope.
Extent	Area 3 of EYKA: The area bordering the aerodrome movement area that extends horizontally from the edge of a runway to 90 m from the runway centre line and 50 m from the edge of all other parts of the aerodrome movement area.
Area 4	
Scope id	Area 4
Level	Dataset
Level name	Area 4
Level description	The Area 4 scope defines the specifications which are for obstacles in Area 4 and deviate from the general scope.
Extent	Area 4 of EYKA: The area extending 900 m prior to the runway threshold and 60 m each side of the extended runway centre line

	in the direction of the approach on a precision approach runway, Category II.
--	---

4. Data content and structure

General scope

Narrative description	The data model for obstacle data follows the model defined in AIXM 5.1.
Application schema	AIXM 5.1 (http://aixm.aero)
Feature catalogue	All mappings are provided at http://aixm.aero .

5. Reference system

General scope

Spatial reference system	Horizontal reference system: WGS-84 Vertical reference system: EGM- 96 or LAS-07 (local)
Temporal reference system	Gregorian Calendar, UTC.

6. Data quality requirements

General scope

Requirement 1	Data quality element: Assurance (Integrity) The procedures for processing of the data have been setup to meet the integrity requirements.
Requirement 2	Data quality element: Traceability Data quality measure: All actions applied to the data are traced and saved in metadata.
Requirement 3	Data quality element: Timeliness Data quality measure: Timeliness is assured by providing the start and end time position of all obstacles according to the temporality concept of AIXM.
Requirement 4	Data quality element: Completeness Data quality measure: All features and attributes are expressed according to the AIXM model. The content of the data set was checked by visual inspection.

Area 2

Requirement 1	Data quality element: Horizontal accuracy Data quality measure: The horizontal accuracy is 5 m at 90% confidence level.
Requirement 2	Data quality element: Vertical accuracy Data quality measure: The vertical accuracy is 3 m at 90% confidence level. Vegetation vertical accuracy is increased to 6 m.
Requirement 3	Data quality element: Horizontal resolution Data quality measure: The horizontal resolution is 1/10 sec.

Requirement 4	Data quality element: Vertical resolution Data quality measure: The vertical resolution is 1 m.
Area 3	
Requirement 1	Data quality element: Horizontal accuracy Data quality measure: The horizontal accuracy is 0.5 m at 90% confidence level.
Requirement 2	Data quality element: Vertical accuracy Data quality measure: The vertical accuracy is 0.5 m at 90% confidence level.
Requirement 3	Data quality element: Horizontal resolution Data quality measure: The horizontal resolution is 1/10 sec.
Requirement 4	Data quality element: Vertical resolution Data quality measure: The vertical resolution is 0.1 m.
Area 4	
Requirement 1	Data quality element: Horizontal accuracy Data quality measure: The horizontal accuracy is 2.5 m at 90% confidence level.
Requirement 2	Data quality element: Vertical accuracy Data quality measure: The vertical accuracy is 1 m at 90% confidence level.
Requirement 3	Data quality element: Horizontal resolution Data quality measure: The horizontal resolution is 1/10 sec.
Requirement 4	Data quality element: Vertical resolution Data quality measure: The vertical resolution is 0.1 m.

7. Data capture and production	
General scope	
Description	Obstacle data capture rules are based on Ordinance of the Lithuanian transport safety administration No. 2BE-297 <i>Description of the procedure for the provision of air navigation information services</i> and Eurocontrol TOD Manual. Obstacle Collection Surfaces have been created according to ICAO Annex 15 and PANS-AIM (Doc 10066).
Guide	NIL
Inclusion criteria	Obstacles must penetrate Obstacle Collection Surfaces described in ICAO Annex 15 or be critical for flight procedure design.
Data acquisition and processing	The data was captured and processed using airborne laser scanning, photogrammetry and terrestrial survey.

8. Maintenance of the data	
General scope	
Description	The data set will be updated according to AIRAC cycle when

	necessary. New obstacles or changes between AIRAC dates will be announced by NOTAM.
Frequency	Continual
User defined	<i>Not applicable</i>

9. Portrayal rules

General scope

Portrayal rules	<i>Not applicable</i>
-----------------	-----------------------

10. Data delivery methods

.xml

Format name	AIXM (.xml)
Format version	5.1
Format specification	AIXM 5.1 Specification (source http://aixm.aero)
File structure	http://www.aixm.aero/schema/5.1/message/AIXM_BasicMessage.xsd
Language	English
Character set	UTF-8
Units of delivery	Dataset
Transfer size	Various
Medium name	Digital file transfer
Other delivery	<i>Not applicable</i>
Service property	https://www.ans.lt/en/information-publications/digital-datasets-1

11. Metadata

General scope

Specification	Title: ISO 19115, Geographic information – Metadata
Encoding	Title: ISO 19139, Geographic information – Metadata– XML schema implementation
Metadata elements	The metadata is included in the data set as described in ICAO PANS-AIM (Doc 10066) Chapter 5.3.2. The following metadata is provided: • Title of data set • Organisation providing the data set • Abstract • Creation date • Effective date • Validity • Constraint of use

12. Additional information	
<i>General scope</i>	
Additional information	<i>Not applicable</i>