EASA and ICAO Aeronautical Data Catalogue

1. Context

The ICAO Aeronautical Data Catalogue is defined in the ICAO Doc 10066 (PANS-AIM) Appendix 1.

The EASA Aeronautical Data Catalogue is defined in the Regulation (EU) 2017/373 Annex III (Part-ATM/ANS.OR) Appendix 1. The EASA Aeronautical Data Catalogue is **based on** the content of ICAO PANS-AIM Appendix 1.

2. Current Work on the EASA Regulation

AIRI SG 08 (held at EUROCONTROL HQ on 8-9 June 2022) produced a report concerning the differences between the EASA and ICAO Aeronautical Data Catalogue. The report is a comparison between:

- EASA Aeronautical Data Catalogue as it will be amended by EASA Opinion 03/2022 (based on NPA 2021-103); and
- ICAO Aeronautical Data Catalogue as amended by ICAO State Letter AN 2/33.1-20/26 (concerning the changes effective 4 November 2021).

The report is available to download at https://www.eurocontrol.int/publication/differences-aeronautical-data-catalogues .

It is also important to note that the contents of EASA Opinion 03/2022 has been published in the meantime in Regulation (EU) 2022/938 amending Regulation (EU) 2017/373 as regards the requirements for aeronautical data catalogue and aeronautical information publication.

The content of the attachment of the report (Differences in Aeronautical Data Catalogues Ed 2.0) is contained in Appendix A to this document for ease of reference.

3. Conclusion

As a summary, the differences between the EASA and ICAO Aeronautical Data Catalogue are:

- minor differences such as editorial differences, differences in wording and use of abbreviations
- the differences contained in the Appendix A

From Appendix A, **the most change proposals are to update the EASA Aeronautical Data Catalogue to reflect the information as it is in the ICAO Aeronautical Data Catalogue.**

It is important to understand that there will constantly be a delay regarding the adoption of ICAO changes due to the update process in EASA; thus, the EASA Aeronautical Data Catalogue is less extensive than the ICAO one.

Appendix A

Differences between EASA and ICAO Aeronautical Data Catalogues

Version 2.0 dated 05/05/2022

Version 2 of this document is a comparison between:

- the EASA Aeronautical Data Catalogue as it will be amended by EASA Opinion 03/2022 (based on NPA 2021-103)*; and
- the ICAO Aeronautical Data Catalogue as it has been amended by ICAO State Letter AN 2/33.1-20/26 *but* only concerning the changes effective 04 NOV 2021**.

* *The editorial corrections in NPA 2021-103 have not been considered.*

** *At the date of finalizing this document, the amendment to the Aeronautical Data Catalogue has not yet been incorporated in Appendix 1 of Doc 10066 PANS-AIM (Excel files).*

Remark: minor differences in wording or the use of abbreviations are not considered as differences.

To improve the clarity of this document, the following changes have been introduced to the previous version:

- the numbering of the referred table was included in each table;
- where possible the 'Item' indicates *subject* an *property*;
- the description under 'Difference' was improved to indicate more clearly the differences between the EASA and ICAO Aeronautical Data Catalogues;
- the order of the tables was updated to be in line with the Aeronautical Data Catalogue;
- the numbering of the tables has changed and is not related to the previous version of this document.

1	
Table	1. Aerodrome data
Item	Title table: **Aerodrome data**
Difference	
EASA changed the title of the table: ICAO: Aerodrome/Heliport data EASA: Aerodrome data	
Change proposal	
Change title of table to 'Aerodrome/Heliport data'	

2	
Table	1. Aerodrome data
Item	Subject: **Aerodrome / Heliport** – Property: **Certified**
Difference	
The property 'Certified ICAO' of the subject 'Aerodrome / Heliport' in the ICAO Aeronautical Data Catalogue has been changed to 'Certified' by EASA. The corresponding description has been modified likewise: ICAO: Indication if airport is/is not certified according to the ICAO rules EASA: Indication if an aerodrome is/is not certified in accordance with the ICAO rules or Regulation (EU) No 139/2014	
Change proposal	
No change is proposed	

3	
Table	1. Aerodrome data
Item	Subject: **Aerodrome beacon (ABN) / identification beacon (IBN)**
Difference	
In the **description** of this subject and its different properties in the ICAO Data Catalogue always refers to "aerodrome/heliport". EASA refers to "aerodrome" only: Subject => Description 1: • ICAO: Aerodrome beacon / identification beacon used to indicate the location of an aerodrome/heliport from the air. • EASA: Aerodrome beacon/identification beacon used to indicate the location of an aerodrome from the air Property 'Location' => Description 2: • ICAO: Location of aerodrome/heliport beacon/identification beacon • EASA: Location of the aerodrome beacon/identification beacon Property 'Characteristics' => Description 3: • ICAO: Description of aerodrome/heliport beacon/identification beacon • EASA: Description of the aerodrome beacon/identification beacon Property 'Hours of operation': • ICAO: Hours of operation of aerodrome/heliport beacon/identification beacon • EASA: Hours of operation of the aerodrome beacon/identification beacon	
Change proposal	
Change to 'aerodrome/heliport' (four instances)	

4 *(item added in V2.0 of this document)*	
Table	1. Aerodrome data
Item	Subject: **Runway** – Property: **Centre line points** – Sub-property: **Elevation**
Difference	
The 'Description' is different between ICAO and EASA – EASA elaborates concerning non-precision approaches. This should probably reflect to non-precision runways instead of non-precision approaches. ICAO: The elevation of the corresponding centre line point. EASA: The elevation of the corresponding centre line point. For non-precision approaches, any significant high and low intermediate points along the RWY shall be measured to the accuracy of one-half metre or foot.	
Change proposal:	
Update the text as necessary	

5	
Table	1. Aerodrome data
Item	Subject: **Runway** – Property: **Blast pad**
Difference	
1. ICAO uses the term 'Blastpad' – EASA uses 'Blast pad'. 2. The description of the property 'Blast pad' is significantly different in both Aeronautical Data Catalogues: ICAO: The area provided to reduce the erosive effects of jet blast and propeller wash. EASA: Specially prepared surface placed adjacent to the end of a RWY to eliminate the erosive effect of the strong wind forces produced by aeroplanes at the beginning of their take-off roll	
Change proposal:	
As the definition used by ICAO covers more possible situations then the one used by EASA it is proposed to use the ICAO definition.	

6	
Table	1. Aerodrome data
Item	Subject: **Runway Direction** – Property: **Threshold** – Sub-property: **Displacement**
Difference	
ICAO specifies a *publication resolution* of 1 m or 1 ft for this sub-property. No publication resolution is specified by EASA.	
Change proposal	
Include publication resolution	

7 *(item added in V2.0 of this document)*	
Table	1. Aerodrome data
Item	Subject: **Final-approach and take-off area (FATO)** – Property: **Approach lighting system** – Sub-property: **Type**
Difference	
The text of the 'description' is different in the ICAO Aeronautical Data Catalogue: • ICAO: Classification of the approach lighting system using as criteria the ICAO Annex 14 standards • EASA: Classification of the approach lighting system, using as criteria Regulation (EU) No 139/2014 and CS-ADR-DSN, specifically CS ADR-DSN.M.625 and CS ADR-DSN.M.626	
Change proposal	
No change is proposed	

8	
Table	1. Aerodrome data
Item	Subject: **RWY Direction** – Property: **RWY end** – Sub-property: **Elevation**
Difference	
ICAO specifies (in Note 3) the following accuracy requirements for this sub-property, depending on the type of runway: • Elevation of the runway end and any significant high and low intermediate points along the runway for non-precision approaches: 0.5 m or 1 ft • Elevation of the runway end and the highest elevation of the touchdown zone for precision approach runways: 0.25 m or 1 ft EASA does not make a distinction between the type of runway and only specifies 0.25 m (by referring to 'Centre line points').	
Change proposal	
Include Note 3 from the ICAO table 'Aerodrome/Heliport data under 'Runway'.	

9	
Table	1. Aerodrome data
Item	Subject: **Touchdown and lift-off area (TLOF)** – Property: **Centre point** – Sub-property: **Elevation**
Difference	
Under note 1, 2nd item, ICAO specifies criteria for the FATO threshold "for heliports intended to be operated in accordance with ICAO Annex 14, Appendix 2". EASA mentions "for heliports intended to be operated". This sentence does not seem to be complete and has no actual meaning. ICAO: Note 1), 2nd item FATO threshold, for heliports intended to be operated in accordance with ICAO Annex 14, Appendix 2 EASA: Note 1, 2nd item The FATO threshold for heliports intended to be operated	
Change proposal	
Update the EASA Note 1 to reflect/add the correct reference.	

10	
Table	1. Aerodrome data
Item	Subject: **Touchdown and lift-off area (TLOF)** – Property: **Centre point** – Sub-property: **Geoid undulation**
Difference	
Under note 2, 2nd item, ICAO specifies criteria for the WGS-84 geoid undulation "for heliports intended to be operated in accordance with ICAO Annex 14, Appendix 2". EASA mentions "for heliports intended to be operated" instead. This sentence does not seem to be complete and has no actual meaning. ICAO: Note 2), 2nd item WGS–84 geoid undulation at FATO threshold, TLOF geometric centre, for heliports intended to be operated in accordance with ICAO Annex 14, Appendix 2 EASA: Note 2, 2nd item The WGS–84 geoid undulation at the FATO threshold and the TLOF geometric centre, for heliports intended to be operated	
Change proposal	
Update the EASA Note 2 to reflect/add the correct reference.	

11	
Table	1. Aerodrome data
Item	Subject: **TWY** – Property: **RWY guard lights** – Sub-property: **Location**
Difference	
Amongst the sub-properties for this property, ICAO has in the Aeronautical Data Catalogue 'Position' of type 'Point' (to be used with configuration A) and 'Geometry' of type 'Line' (to be used with configuration B). In the EASA Aeronautical Data Catalogue, both these sub-properties are named 'Location' instead. ICAO: Runway guard lights Position Point Location of the stop bar Geometry Line Location of the stop bar EASA: Runway guard lights Location Point Location of the stop bar Location Line Location of the stop bar	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

12	
Table	1. Aerodrome data
Item	Subject: **INS checkpoint**
Difference	
In the ICAO Aeronautical Data Catalogue, this subject has a property 'Position'. EASA calls this property 'Location' instead. ICAO: INS checkpoint Position EASA: INS checkpoint Location	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

13	
Table	1. Aerodrome data
Item	Subject: **VOR checkpoint**
Difference	
In the ICAO Aeronautical Data Catalogue, this subject has a property 'Position'. EASA calls this property 'Location' instead. ICAO: VOR checkpoint Position EASA: Very-high-frequency (VHF) omnidirectional range (VOR) checkpoint Location	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

14	
Table	1. Aerodrome data
Item	Subject: **Altimeter checkpoint**
Difference	
In the ICAO Aeronautical Data Catalogue, this subject has a property 'Position'. EASA calls this property 'Location' instead. ICAO: Altimeter checkpoint Position EASA: Altimeter checkpoint Location	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

15	
Table	1. Aerodrome data
Item	Subject: **Aircraft stand** – Property: **Aircraft stand points**
Difference	
In the ICAO Aeronautical Data Catalogue, this property has a sub-property 'Position'. EASA calls this sub-property 'Location' instead. ICAO: Aircraft stand Acft stand points Position EASA: Aircraft stand Aircraft stand points Location	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

16	
Table	1. Aerodrome data
Item	Subject: **Helicopter stand**
Difference	
In the ICAO Aeronautical Data Catalogue, this subject has a property 'Position'. EASA calls this property 'Location' instead. ICAO: Helicopter stand Position EASA: Helicopter stand Location	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

17 *(item added in V2.0 of this document). Info: Table 2 is not treated in the NPA2021-103*	
Table	2. Airspace data
Item	Subject: **ATS Airspace** – Property: **Designation**
Difference	
Amongst the properties for this property, ICAO has in the Aeronautical Data Catalogue 'Name' where EASA uses 'Designation' instead. ICAO: ATS Airspace Name The designator given to an airspace by a responsible authority EASA: ATS airspace Designation The designator given to the airspace by a responsible authority	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

18 *Info: Table 2 is not treated in the NPA2021-103*	
Table	2. Airspace data
Item	Subject: **ATS Airspace** – Property: **Frequency**
Difference	
Amongst the properties for this property, ICAO has in the Aeronautical Data Catalogue 'SATVOICE number' where EASA uses 'Frequency' instead and the description is also different. ICAO: ATS Airspace — SATVOICE number — Value — The SATVOICE number of the ATS airspace EASA: ATS airspace — Frequency — Value — The frequency of the ATS airspace ICAO: ATS Airspace — SATVOICE number — Purpose — Indications for specific purposes of the SATVOICE number EASA: ATS airspace — Frequency — Purpose — Indications for specific purposes of the frequency	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

19 *Info: Table 2 is not treated in the NPA2021-103*	
Table	2. Airspace data
Item	Subject: **Special-activity airspace** – Property: **Lateral limits**
Difference	
Under note 2, ICAO specifies data quality requirements for prohibited, restricted and danger areas. Differentiation is made between areas inside and outside CTA/CTR. EASA lists the same data quality requirements but the text "inside CTA/CTR" and "outside CTA/CTR" has been omitted, making the note incomprehensible.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

20 *Info: Table 2 is not treated in the NPA2021-103*	
Table	2. Airspace data
Item	In ICAO Aeronautical Data Catalogue: Subject: **Aerial sporting activities airspace**
Difference	
This subject is missing from the EASA Aeronautical Data Catalogue.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

21 *(Text in 'change proposal' updated in V2.0 of this document)*	
Table	3. ATS and other routes data

Item	Subject: **ATS Route** – Property: **Designator prefix**
Difference	
The EASA Aeronautical Data Catalogue has a property 'Designator prefix' for this subject that is not present in the ICAO Aeronautical Data Catalogue.	
Change proposal	
This seems to be an omission in the ICAO Aeronautical Data Catalogue as otherwise the 'Note 1' on the tab-page 'ATS Route' is meaningless.	

22 *(Text in 'change proposal' updated in V2.0 of this document)*	
Table	3. ATS and other routes data
Item	Subject: **Route segment** – Property: **From point–** Sub-property: **Name**
Difference	
In the ICAO Aeronautical Data Catalogue, this subject has a sub-property 'Designator'. EASA calls this sub-property 'Name' instead. ICAO: Route segment From point Designator EASA: Route segment From point Name The text in the column 'Description' is not identical: ICAO: The coded designators or name-codes of significant point EASA: The coded designators or code names of a significant point	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

23	
Table	3. ATS and other routes data
Item	Subject: **Route segment** – Property: **To point –** Sub-property: **Name**
Difference	
In the ICAO Aeronautical Data Catalogue, this subject has a sub-property 'Designator'. EASA calls this sub-property 'Name' instead. ICAO: Route segment To point Designator EASA: Route segment To point Name	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

24	
Table	3. ATS and other routes data
Item	Subject: **Route segment** – Property: **Length**
Difference	
Under note 2, ICAO specifies data quality requirements with differentiation between airway segments and arrival/departure routes. EASA lists the same data quality requirements, but the text "Airway segments length" and "Terminal arrival/departure route segments length" has been omitted, making the note incomprehensible.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

25	
Table	3. ATS and other routes data
Item	Subject: **Route segment** – Property: **Performance-based navigation (PBN) requirements–** Sub-property: **Navigation specification**
Difference	
The ICAO Aeronautical Data Catalogue, the wording of the description for this sub-property is slightly different from the EASA text. ICAO: Designation of the navigation specification(s) applicable to a specified segment(s) - There are two kinds of navigation specifications: Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. Area navigation (RNAV) specification. A Navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1. EASA: Designation of the navigation specification(s) applicable to a specified segment or segments; there are two kinds of navigation specifications: (a) required navigation performance (RNP) specification: navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. (b) Area navigation (RNAV) specification: navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.	
Change proposal	
The EASA description is more clear – no change required.	

26	
Table	3. ATS and other routes data
Item	In ICAO Aeronautical Data Catalogue: Subject: **AMA**
Difference	
This subject is missing from the EASA Aeronautical Data Catalogue. They have AMA as a property of 'Route segment' instead (which is technically not meaningful).	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

27	
Table	3. ATS and other routes data
Item	In ICAO Aeronautical Data Catalogue: Subject: **MVA**
Difference	
This subject is missing from the EASA Aeronautical Data Catalogue. They have MVA as a property of 'Route segment' instead (which is technically not meaningful).	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

28	
Table	3. ATS and other routes data
Item	Subject: **ATS Route (Note 1)**
Difference	
In Note 1 ICAO indicates that the prefix for the helicopter type of route to be 'K'. EASA indicates the route prefix should be 'H'	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

29	
Table	3. ATS and other routes data
Item	Subject: **Waypoint** – Property: **Formation** – Sub-property: **Bearing**
Difference	
Under note 1, EASA publishes two sets of data quality requirements, but without indicating the applicability field of each set. The first set contains values identical to the ICAO requirements, which are only defined for a "bearing used for the formation of an en-route fix".	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

30	
Table	3. ATS and other routes data
Item	Subject: **Waypoint** – Property: **Formation** – Sub-property: **Distance**
Difference	
Under note 2, EASA publishes two sets of data quality requirements, but without indicating the applicability field of each set. The first set contains values identical to the ICAO requirements, which are only defined for a “distance used for the formation of an en-route fix”.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

31	
Table	4. Instrument flight procedure data
Item	Subject: **Procedure** – Property: **Obstacle clearance altitude/height (OCA/H)** – Sub-property: **Altitude**
Difference	
ICAO prescribes for this sub-property an accuracy and charting resolution “as specified in Doc 8168”. No accuracy or charting resolution is defined by EASA.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

32	
Table	4. Instrument flight procedure data
Item	Subject: **Procedure** – Property: **Obstacle clearance altitude/height (OCA/H)** – Sub-property: **Height**
Difference	
ICAO prescribes for this sub-property an accuracy and charting resolution “as specified in Doc 8168”. No accuracy or charting resolution is defined by EASA.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

33	
Table	4. Instrument flight procedure data
Item	Subject: **Procedure Segment** – Property: **Procedure altitude/height**
Difference	
ICAO prescribes for this property an accuracy and charting resolution “as specified in Doc 8168”. No accuracy or charting resolution is defined by EASA.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

34	
Table	4. Instrument flight procedure data
Item	Subject: **Procedure Segment** – Property: **True bearing**
Difference	
ICAO prescribes for this property a charting resolution of 1 degree. No charting resolution is defined by EASA.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

35	
Table	4. Instrument flight procedure data
Item	Subject: **Procedure fix** – Property: **Position**
Difference	
Under note 1, ICAO specifies data quality requirements with differentiation between en-route/approach and final approach. EASA lists the same data quality requirements, but the text “En-route navaids and fixes, holding, STAR/SID points” and “Final approach fixes/points and other essential fixes/points” has been omitted, making the note incomprehensible.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

36	
Table	4. Instrument flight procedure data
Item	Subject: **Procedure fix** – Property: **Bearing**
Difference	
Under note 2, ICAO specifies data quality requirements with differentiation between terminal fixes and instrument approach fixes. EASA also lists two sets of data quality requirements, but the text "Bearing used for the formation of a terminal fix" and "Bearing used for the formation of an instrument approach procedure fix" has been omitted, making the note incomprehensible. The integrity and publication resolution requirements for instrument approach fixes in the EASA table are also different from those in the ICAO table.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

37	
Table	4. Instrument flight procedure data
Item	Subject: **Helicopter Procedure Specifics** – Property: **Heliport crossing height (HCH)**
Difference	
ICAO prescribes for this property an accuracy of 0.5 m and the origination type 'calculated'. No accuracy or origination type is defined by EASA.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

38 *(Item has been split in two and was rephrased in V2 of this document)*	
Table	5. Radio navigation aids/systems data
Item	Subject: **Radio navigation aid** – Property: **Area of operation**
Difference	
ICAO has in the Aeronautical Data Catalogue 'Purpose'. The EASA Aeronautical Data Catalogue has 'Area of operation'. ICAO: Radio navigation aid Purpose EASA: Radio navigation aid Area of operation	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

39 *(2nd item of the previous item that has been split in two and was rephrased in V2 of this document)*	
Table	5. Radio navigation aids/systems data
Item	Subject: **Radio navigation aid** – Property: **Aerodrome served**
Difference	
ICAO has in the Aeronautical Data Catalogue 'Aerodrome/heliport served'. The EASA Aeronautical Data Catalogue has 'Aerodrome served' instead. Heliports are also omitted in the description of the latter property by EASA. ICAO: Radio navigation aid — Aerodrome/heliport served — The ICAO location indicator or name of the aerodrome/heliport served EASA: Radio navigation aid — Aerodrome served — The ICAO location indicator or name of the aerodromes served	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

40	
Table	5. Radio navigation aids/systems data
Item	Subject: **Radio navigation aid** – Property: **RDH**
Difference	
ICAO prescribes for this property a publication resolution of 0.1 m or 0.1 ft, and a charting resolution of 0.5 m or 1 ft. No publication nor charting resolution is defined by EASA.	
Change proposal	
Update the table to reflect the information in the ICAO Aeronautical Data Catalogue.	

41	
Table	8. Terrain data
Item	
Difference	
This table is missing from the EASA Aeronautical Data Catalogue.	
Change proposal	
Insert the table from the ICAO Aeronautical Data Catalogue.	

42	
Table	10. Information about national and local regulation, services and procedures
Item	
Difference	
This table is missing from the EASA Aeronautical Data Catalogue.	
Change proposal	
Insert the table from the ICAO Aeronautical Data Catalogue.	