



ICAO

International Civil Aviation Organization

Fifteenth Meeting of the ICAO Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/15)

Video Teleconference, 01 – 05 June 2020

Agenda Item 5: AIS-AIM Updates

STANDARDIZED AERONAUTICAL INFORMATION

(Presented by the Secretariat)

SUMMARY

This paper presents examples of inconsistencies in Aeronautical Information Services (AIS) Products which were identified by a review conducted by the ICAO Regional Office.

1. INTRODUCTION

1.1 At AAITF/14 IATA presented observations and recommendations from member airlines for the improvement of delivery of aeronautical information. The information provided included an example of best practice in the organization, distribution and display of aeronautical information, noting that, while the digitization of aeronautical information (AIS to AIM transition) was a priority, there was a need to ensure all aeronautical information was accurate, correctly updated, and easily accessible by airspace users.

1.2 The matter of change processes, and particularly compliance with AIRAC was also discussed, emphasizing the need for timely promulgation of operationally significant changes in aeronautical information to enable the update of aircraft navigation databases by the effective AIRAC date.

1.3 AAITF/14 drafted the following Conclusion, subsequently agreed by ATM/SG/7:

Conclusion ATM/SG/7-11: Standardized Aeronautical Information

That, noting:

- 1. previous APANPIRG Conclusions 23/8, 24/19 and 28/7, and ATM/SG Conclusion 6/14;*
- 2. lack of conformance of many States with the provisions of Annex 15 and PANS-AIM on the presentation and promulgation of aeronautical information; and*
- 3. the safety-critical requirement for standardized presentation and content of aeronautical information;*

States are urged to immediately take all necessary steps to fully review all aeronautical information products and rectify errors and omissions, to ensure full compliance with the provisions of Annex 15 Chapter 5 and PANS-AIM Chapter 5.

1.4 ICAO APAC Regional Office has conducted several mini reviews for Aeronautical Information Services and Products provided by Asia/Pacific States/Administrations for the past year and identified issues which need to be discussed at the AAITF meeting.

2. DISCUSSION

Publication resolution

2.1 Annex 15 – Aeronautical Information Services defines a data resolution as a number of units or digits to which a measured or calculated value is expressed and used. Specifications concerning the resolution of aeronautical data are contained in the PANS-AIM (Doc 10066), Appendix 1. Moreover, Annex 15 states that the resolution of the data contained in the database may be same or finer than the publication resolution.

2.2 The review indicates that publication resolutions are not consistently applied in AIS Products. The following examples are derived from a single AIP Page:

- a) Airway segment length (1/10 NM): 37NM (less than required publication resolution)
- b) Geographical location of way point (1 sec): (different publication resolutions in a single AIP Pages)
 - 265855.3N
 - 273350.06N
 - 0913031.076E
- c) En-route nav aids and fixes (1 sec): BJENA 27°25'04.9000" N (10000 times higher than required publication resolution)

2.3 As stated in Annex 15, finer publication resolution can be used. However, super high and mixed publication resolutions may lead to overlapped work. Thus Asia/Pacific States/Administrations should reconsider super high publication resolution and minimize mixed publication resolution in the same AIS product.

Indication of Geographical Coordinates

2.4 As stated in 5.2.1.2.10 b) of PANS –AIM (Doc 10066), symbols for degrees, minutes or seconds should be omitted from Aeronautical Information Publication (AIP). APAC States/Administrations should not publish symbols for degrees, minutes or seconds in the AIP.

Aeronautical Chart issues

2.5 It should be informed that chart resolutions may be differently stated in ICAO documents. For example, publication resolutions are stated differently in Annex 4 (2018), PANS AIM (2018) and Doc 8697 (2016). It is recommended that APAC Administrations use chart resolutions included in PANS AIM (Doc 10066) rather than ICAO Doc 8697 Aeronautical Chart Manual.

2.6 Duplication of aeronautical data should be minimized as much as possible. As stated in 13.6.1 b) and f) of Annex 4, Aerodrome/Heliport Charts shall show both elevations and geographical coordinates for thresholds. However, the review indicates that, for example, one APAC Administration has not complied with the Annex 4 standard (coordinates not provided, THR elevation duplicated).

AIP Content issues

2.7 According to PANS –AIM (Doc 10066) 5.2.1.1.1, AIP shall contain concise, current information relating to, and arranged under, the subject headings listed in Appendix 2 of PANS AIM. This facilitates both the locating of information under a specific heading and the storage/retrieval of the information using automated processing.

2.8 ICAO APAC Regional Office has reviewed 26 Administration's AIP and checked following AIP Subsections:

- a) GEN 2.1.4 Vertical Reference System
- b) AD 1.5 Status of certification of aerodromes
- c) AD 2.10 Aerodrome Obstacles

2.9 Only 5 Administrations (*Bhutan, India, Mongolia, Nepal and Republic of Korea*) have published information about 'Vertical Reference System' in the AIP. Regarding with AD 1.5, 9 Administration's AIP (*Afghanistan, Australia, Bhutan, Brunei Darussalam, China, Macao China, Fiji, New Zealand and Philippines*) are not compliant with PANS-AIM. Only 6 Administrations (*Indonesia, Mongolia, Myanmar, Nepal, Republic of Korea and Viet Nam*) have published AD 2.10 Aerodrome obstacle information in accordance with PANS AIM (Doc 10066) and AIS Manual (Doc 8126).

AIP Supplement Issues

2.10 As of March 2020, a total 1115 AIP Supplements were valid in the Asia/Pacific Region. Oldest AIP Supplement was published in 1989. 43% of total AIP Supplements were published in 2019.

2.11 Annex 15 – Aeronautical Information Services defines a AIP Supplement as temporary changes to the information contained in the AIP which are provided by means of special pages. 17% of total AIP Supplements have validity over 5 years.

2.12 Most of APAC States/Administrations are providing web based AIP Service. However, it is noticed that there is inconsistency between web page and Check list of valid AIP supplements. On the other hand, not all valid AIP Supplements uploaded in the AIS web page. Moreover, State/Administrations make sure hyperlinks for AIP Supplements and AICs are correct and working.

NOTAM Issues

2.13 At the AAITF/11, New Zealand presented working paper which highlighted inconsistencies in NOTAM Item D). Some of States/Administrations are still publishing NOTAMs with Item D) which is not compliant with 'Guidance Manual for Aeronautical Information Services in the Asia/Pacific Region'. Inconsistencies are shown in the MS Power Point presentation associated with this Working paper.

2.14 As included in 5.2.5.3.2 of PANS-AIM, one NOTAM checklist shall be issued for each series. Moreover, correct publication enables the automatic processing of NOTAM and ensures completeness of NOTAM Database. However, there are several noncompliant checklists of valid NOTAM published in Asia/Pacific Region. One example is shown in the MS Power Point presentation associated with this Working paper.

2.15 According to PANS AIM, Appendix 2, Status of Certification of aerodromes shall be published in the subsection AD 1.5 of AIP. Due to time constraints, this information can be published by NOTAM. However, it shall be incorporated into AIP in accordance with PANS AIM Procedure (6.4.4.4). Some States publish long term NOTAM for Aerodrome certificate instead of inclusion in the AIP. These long term NOTAMs will lead to NOTAM proliferation.

2.16 NOTAM text should be as short as possible and avoid unnecessary information such as rationale, background information and other text additions with no direct impact on aircraft operations or not containing any flight restrictions or other clear limitation. Examples of unnecessary information are shown in the MS Power Point presentation accompanying this paper.

2.17 Roll-over NOTAMs, with example included in MS Power Point presentation, were discussed at the AAITF/14 in 2019. Publishing State has published a total 9 NOTAMs for last 2 years. NOTAM subject is changes of application time which has already changed in 2018. No change, no positive result since last AAITF meeting.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) Take action as necessary to ensure compliance with Annex 4, Annex 15 and PANS-AIM provisions for standardized aeronautical information, and with ***Conclusion ATM/SG/7-11: Standardized Aeronautical Information***;
- c) Note that APANPIRG Air Navigation Deficiencies will be raised, where necessary, against non-compliant promulgation of aeronautical information; and
- d) discuss any relevant matters as appropriate.

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