



Agenda Item 3: Air navigation activities at global, inter-regional and intra-regional level

3.2 Follow-up on the implementation of global, inter-regional and intra regional activities

LATEST AIM DEVELOPMENTS

(Presented by Secretariat)

SUMMARY

This Information Paper presents the restructured amendment 40 to Annex 15 and the new PANS AIM.

Action by the meeting is at paragraph 4

REFERENCES

- Amendment 40 to Annex 15 and new PANS – AIM (Doc 10066 (State Letter Ref.: AN2/2.1.1-17/22) (ICAO-NET (<http://portal.icao.int>))

1. Introduction

1.1 Recently the ICAO Council Sessions, it was presented the new Amendment 40 to Annex 15 that sets an important milestone as aviation continues its current transition toward System Wide Information Management (SWIM) environments for modern aviation.

1.2 This decision by the ICAO Council will now enable global air transport operations to complete the transition from product-centric and paper-based aeronautical information services (AIS) legacy processes, to a fully data-centric aeronautical information management (AIM) environment for global civil aviation.

1.3 Concerning a more integrated and responsive global air traffic management (ATM) system, the ICAO Council, has adopted a new amendment to Annex 15 to the Convention on International Civil Aviation (Chicago Convention) covering *Aeronautical Information Services*. **Amendment 40 to Annex 15.**

1.4 After three-years' work it was delivered by the AIS-AIM Study group in Montreal HQs: end of 2015, Revised by the Secretariat and submitted for preliminary review by the ANC in **November 2016**, Translated in all 6 languages, **State Letter 2017/22 sent on the 21 of April 2017**, Responses by **21 July 2017**, Amendment 40 applicable in 2018.

1.5 Amendment 40 to Annex 15 defines the minimum data scope for interoperable digital data exchanges, strengthens the importance of quality controls along the aeronautical data process and supports the integration of modern aeronautical information products (digital data sets) that allow for automatic validation and verification procedures as well minimize the necessity of human intervention. It will also enable new capabilities to airspace users, consistent with the ICAO Global Air Navigation Plan.

2. Discussion

2.1 Some important Council comments were: "...Better aeronautical information is essential if we are to have an integrated and interoperable ATM system which enables air navigation service providers to safely handle more traffic in the same amount of space during the same amount of time..." and "...It's expected this new development will accelerate current transitions toward a global ATM capability which reduces costs and environmental impacts while improving access to congested airspace and remote airports in developing countries..."

2.2 The impact of the new technical changes on ICAO Member States and industry is expected to be minimal. The amendment allows States and industry to set their own pace to migrate their systems and services.

2.3 "The Council has appreciated that this important transition can be accomplished through a phased-approach that facilitates returns on investment and ensures that a solid foundation is available prior to the move to more advanced techniques,". Additionally, the Council observed that this will result in overall economic gains for States and operators by improving aeronautical information management through a faster, quality-controlled, and cost-effective exchange of data.

2.4 An effective date of July 2018 for the new Annex 15 changes was adopted, and a proposed applicability date of 8 November 2018 was agreed for the related implementation.

2.5 The meeting may wish to recall that Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) Study Group (AIS-AIMSG) set a strategy to restructure Annex 15 to include only requirements and performance specifications related to AIS/AIM in 6 new Chapters. First part of Annex 15 restructuring (Chapters 1 to 3) was published.

- 1) Chapter 1: General.
- 2) Chapter 2: Responsibilities and Functions.
- 3) Chapter 3: Aeronautical Information Management.
- 4) Chapter 4: Aeronautical data and information scope and collection.
- 5) Chapter 5: Temporality and Distribution
- 6) Chapter 6: Information Services

2.6 PANS AIM has also been developed to include procedures, processes, formats and technical specifications. An AIM data Catalogue is developed to be included in PANS AIM Appendix 1. The data Catalogue is considered as a reference for all provisions related to aeronautical data origination and publication. The Data Catalogue provides a common language that can be used by data providers/originators and AIS. Data Catalogue would also facilitate formal arrangements between AIS/AIM units with data originators.

2.7 The Data Catalogue consolidates data that may be collected and maintained by AIS and is the source of the accuracy and integrity requirements for determination and reporting of

aeronautical data to AIS. It is also the source of the resolution and integrity requirements for publication and charting of products including aeronautical data included in Annex 15. Information sub-domains of the Data Catalogue are as follows:

- a) Aerodromes
- b) Airspaces
- c) ATS Routes
- d) Instrument Flight Procedures
- e) Navigation Aids / Systems
- f) Obstacles
- g) Geographic Information

3. CONCLUSION

Restructured Annex 15 and the new PANS AIM

3.1 The meeting may wish to recall that the Regional Offices usually conduct a Seminar to review of the proposals and the AIM Strategy developed by ICAO HQs for the amendment 40 of Annex 15, the new Procedures for Air Navigation Services — Aeronautical Information Management (PANS-AIM) and consequential amendments to Annex 3, Annex 4, Annex 6 Part I, Annex 9, Annex 10 Volume I and Volume II, Annex 11, Annex 14 Volume I and Volume II, Doc 8126 (AIS Manual), Doc 4444 (PANS ATM), Doc 8168 (PANS OPS) Volume I and II, Doc 8400 (PANS ABC) and Doc 9981 (PANS Aerodrome), and others.

3.2 The meeting may wish also to note that the amendment 40 to Annex 15, new PANS-AIM and consequential amendments to the above mentioned ICAO Annexes and Documents were issued on 21 April 2017 (SL Ref.: AN2/2.1.1-17/22.), with applicability date 3 November 2018. Consolidated clean versions of the draft Annex 15 and the PANS AIM (English versions only) are at ICAO-NET <http://portal.icao.int> for information only.

4. ACTION BY THE MEETING

4.1 The meeting is invited to urge States and ICAO to:

- a) review the restructured Annex 15 and the new PANS AIM at ICAO-NET <http://portal.icao.int>;
- b) take necessary actions for the implementation of amendment 40 to Annex 15 and new PANS-AIM; and
- c) ICAO Regional Offices prepare a Seminar in order to present the strategy associated with the implementation of the new amendment and new Documentation according with their year programmes.