



| ICAO

CAPACITY & EFFICIENCY



**NO COUNTRY
LEFT BEHIND**



NCLB AIM Workshop

MID Office, Cairo, 11-13 September 2017



Quality Management System (QMS)

Abbas NIKNEJAD

Regional Officer, AIM/ATM





Annex 15 provisions related to QMS

- **Quality:** Degree to which a set of inherent characteristics fulfils requirements (ISO 9000*).
- **Data quality specifications:** accuracy, resolution, integrity (or equivalent assurance level), traceability, timeliness, completeness and format.
- **Quality management.** Coordinated activities to direct and control an organization with regard to quality (ISO 9000*).
- 3.7.1 Quality management systems shall be implemented and maintained encompassing all functions of an AIS, as outlined in 2.2. The execution of such quality management systems shall be made demonstrable for each function stage.



Annex 15 provisions related to QMS – Cont'd

- *Note 1.— An ISO 9000 certificate issued by an accredited certification body would be considered an acceptable means of compliance.*
- **3.7.2 Recommendation.—** *Quality management should be applicable to the whole aeronautical information data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data.*
- **3.7.3 Recommendation.—** *The quality management system established in accordance with 3.7.1 should follow the ISO 9000 series of quality assurance standards, and be certified by an approved organization.*



ICAO Roadmap

P-17 — Quality

- Quality management measures will be re-enforced to ensure the required level of quality of the aeronautical information. In order to assist States in the implementation of an efficient quality management system, guidance material for the development of a quality manual will be developed.

Description:

- *States must implement national regulation on the requirement for all organization involved in aeronautical data processing and publication, to have a Quality Management System in place, which shall manage the safety of all their services.*



Formal arrangement with Data Originators



Annex 15 provisions related to SLA

- *3.7.2 Note 2.— Letters of agreement concerning data quality between originator and distributor and between distributor and next intended user may be used to manage the aeronautical information data chain.*



New PANS AIM provisions related to SLA

- **Originator (aeronautical data or aeronautical information):** An entity that is accountable for data or information origination and from which the AIS organization receives aeronautical data and information. (new PANS AIM)
- The identification of data originators, or the relevant entities responsible for delivering data to the AIS, shall be documented based on the scope of aeronautical data and aeronautical information to be collected.
- A record of data originators should be maintained.
- Metadata requirements in Chapter 4 specify which information is to be recorded for each originator.
- Each data element to be collected should be mapped to an identified data originator, in accordance with the formal arrangements established between data originators and the AIS.
- The list of aeronautical information subjects and their properties, as contained in Appendix 1 (data catalogue), should be used to establish formal arrangements between the originators and the AIS.
- Valid codes for the code lists of the aeronautical data properties and sub-properties should be defined in the formal arrangements between the originators and the AIS.
- Data catalogue (Appendix 1) shall be considered as a reference for aeronautical data and aeronautical information origination and publication requirements.



ICAO Roadmap on SLA

P-18 — Agreements with data originators

- Data of high quality can only be maintained if the source material is of good quality. States will be required to better control relationships along the whole data chain from the producer to the distributor. This may take the form of template service level agreements with data originators, neighbouring States, information service providers or others.



More about SLA

- Agreements with data originators are usually made up in the form of Service level agreements (SLA's). The SLA package is a series of interrelated elements to facilitate the establishment of agreements between aeronautical data originators and Aeronautical Information Services (AIS).
- The SLA requirement must also be included into the national regulations to ensure compliance.
- The quality of data contained in P-01 (Data quality monitoring) can be measured by the implementation of SLA's (Service Level Agreements) between data originators and Aeronautical Information Service providers, to track the quality of data and to measure it against the ICAO Annex requirements.



MIDANPIRG Conclusion 15/17

CONCLUSION 15/17: FORMAL ARRANGEMENTS BETWEEN AIS AND DATA ORIGINATORS

That, States be urged to:

- *take necessary measures for the signature of formal arrangements between AIS/AIM and the data originators, commensurate with the Aerodrome operators, Air Navigation Service Providers (ANSPs) and the Military Authority; and*
- *inform the ICAO MID Regional Office of the actions taken before 31 December 2015.*



Appendix:

- *Appendix 1 to 10: Aeronautical Data Catalogue*



ICAO

CAPACITY & EFFICIENCY



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU