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INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



AIS Training Update

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SAM Regional Office, NOTAM Workshop

7-9 September 2022

Presentation Outline

01

Aeronautical Information Services Training Manual

Doc 9991

02

ICAO TRAINAIR Plus Training Courses

AIQM and AIS OPS

03

Custom Training

Example: NOTAM Workshop

01
Aeronautical Information Services Training Manual

Doc 9991



ICAO

Doc 9991
Aeronautical Information Services
Training Manual

First Edition (unedited) — 2022

Disclaimer
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INTERNATIONAL CIVIL AVIATION ORGANIZATION

AIS Training Manual – Background



- In 2018, publication of Annex 15 and PANS-AIM prepared for the transition from AIS to AIM
- This necessitated a complete review of AIS Manual (Doc 8126); release of 7th edition in Q2 2021
- Required guidance on quality requirement with Manual on QMS for AIS (Doc 9839); in Q2 2022
- Required guidance on training requirement with AIS Training Manual (Doc 9991); due in Q4 2022
- Development of two TRAINAIR Plus courses (AIQM and AIS OPS) by ICAO; in Q3 2022
- Doc 8126, Part IV Digital aeronautical information products and related services; expected Q1 2023

Aeronautical Information Services Training Manual

Doc 9991

As per QMS requirement, AIS personnel need to be competent to do their assigned tasks.

Hence the need for employing the adapted competency-based training and assessment (CBTA) model.

The model is based on the generic ICAO competency framework in PANS-TRG (Doc 9868).

Competency is defined as knowledge, skills and attitudes, as evidenced through observable behaviours, to perform an activity or task.

CBTA should be applied to all phases of AIS training, namely initial, functional, specialized and refresher training.



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Table of contents

Chapter 1. Introduction, contains background and guidance for establishing a CBTA programme for an AIS organization.

Chapter 2. contains guidance for adapting the ICAO competency framework to AIS, as well as regulatory, safety and performance aspects.

Chapters 3 and 4 provide specifics on designing an AIS CBTA and the various phases of AIS training.

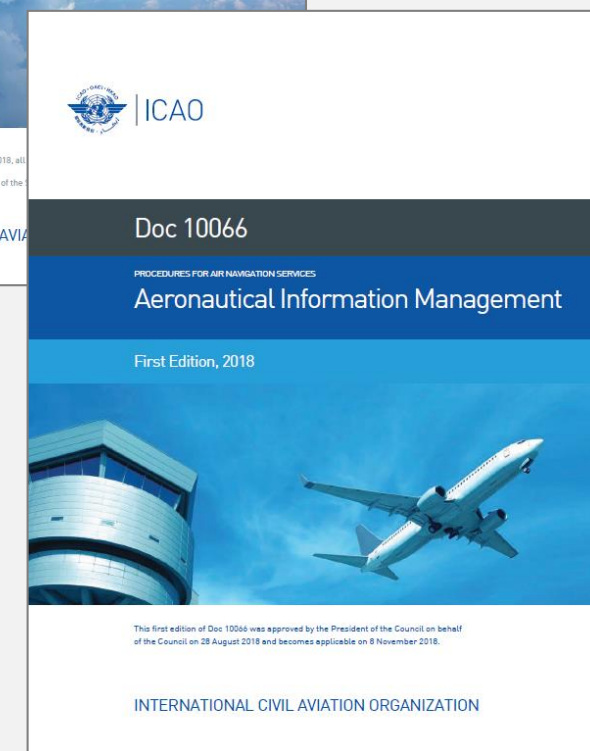
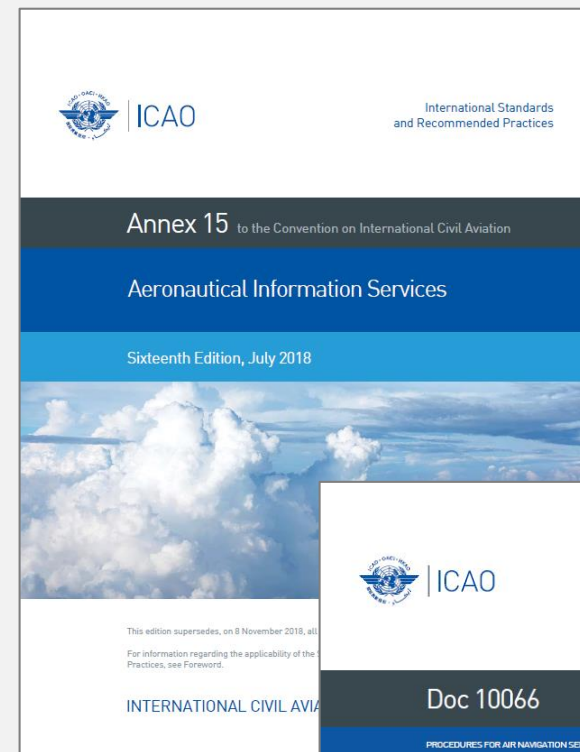
The appendices contain examples of a training specification, an AIS adapted competency model, as well as a sample training syllabus, among others.

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Annex 15 and PANS-AIM

Amendments and updated cross-references to the AIS Training Manual (Doc 9991) will be added in the next editions of Annex 15 and PANS-AIM (Doc 10066).



Procedures for Air Navigation Services – Training (PANS-TRG)

Doc 9868

Provides the generic ICAO competency framework which is then adapted to the various aviation domains (e.g., flight crews, aircraft maintenance personnel, ATCOs, etc).


PANS-TRG (Doc 9868) will be amended to include in Part VI – Training and assessment for other aviation personnel, the competency-based training and assessment for aeronautical information services (AIS) personnel.




02

ICAO TRAINAIR Plus Training Courses

AIQM
AIS OPS



GLOBAL AVIATION TRAINING
TRAINAIR PLUS™



Air Navigation

**Data-Centric
Aeronautical Information
System Operations (AIS OPS EN)**

 Virtual Classroom

www.icao.int/training



Air Navigation

**Aeronautical Information
Quality Management
(AIQM EN)**

 Virtual Classroom

ICAO TRAINAIR Plus Courses for AIS

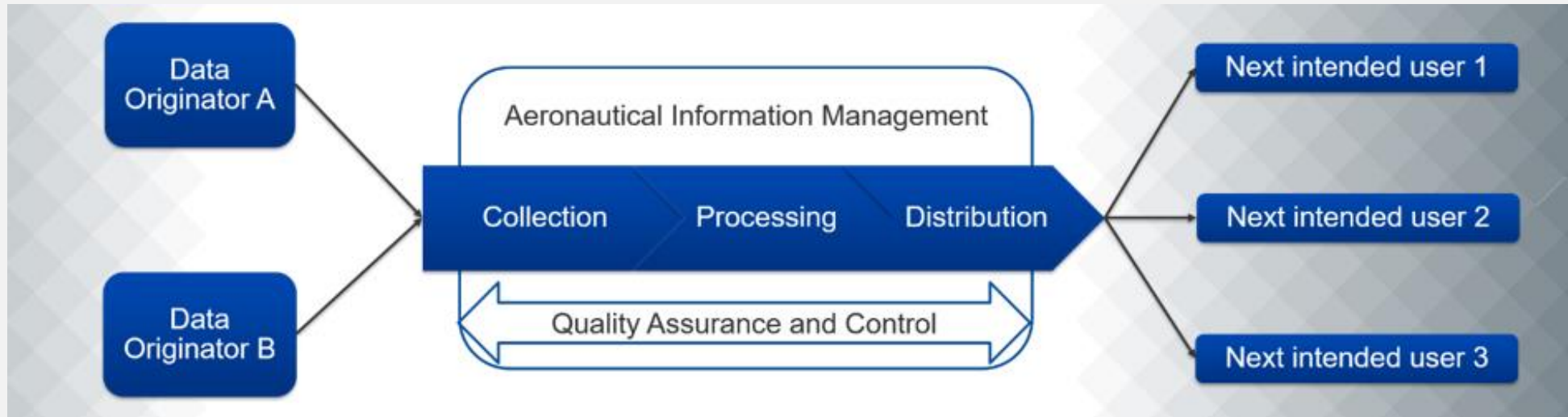
ITP/ANS/029/AIQM/046EN

Aeronautical Information Quality Management (AIQM)

- 2 day course
- Target audience: Managers (ANS, AIS providers, safety inspectors, airport operators, etc.)
- In English (other languages to follow)
- Developed using competency-based methodology, Training Development Guide (Doc 9941)
- Classroom or Virtual classroom
- Max. participants: 15 (25 with 2 instructors)
- ICAO Certification
- Register at <https://igat.icao.int/ated/TrainingCatalogue/Course/5639> or [5582](#)



AIQM – Course Overview



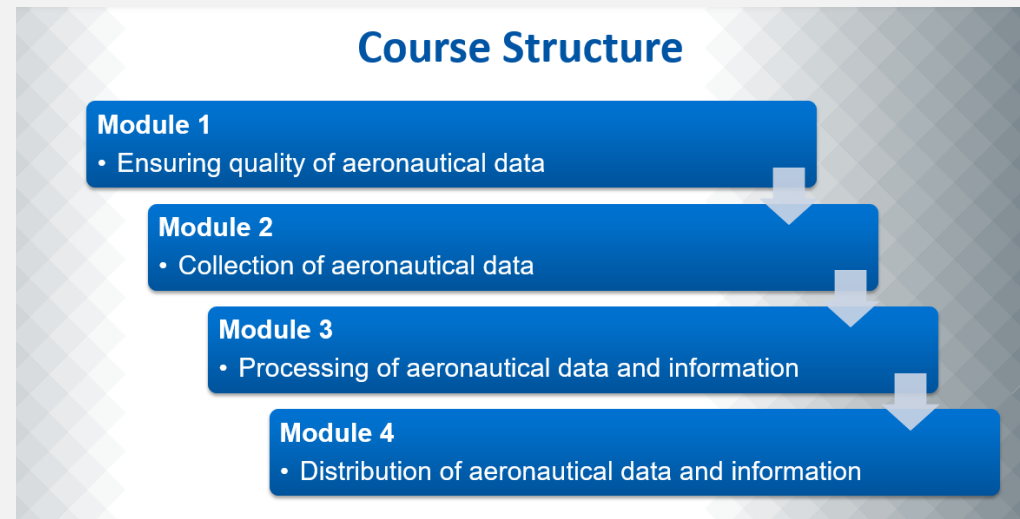
- Three modules:
 - Module 0 – Orientation
 - Module 1 – Aeronautical Information Quality Management
 - Module 2 – Wrap-up
- Introduces the aeronautical data chain
- Emphasizes that quality is established at origination and can subsequently only be maintained
- Highlights importance of Quality Management System and Formal Arrangements
- Contains group discussions, quizzes, hands-on exercises, progress and mastery tests

ICAO TRAINAIR Plus Courses for AIS

ITP/ANS/029/AIS OPS/047EN

Data-Centric Aeronautical Information System Operations (AIS OPS)

- 5 day course
- Target audience: AIS operational staff
- In English (other languages to follow)
- Developed using competency-based methodology, Training Development Guide (Doc 9941)
- Classroom or Virtual classroom
- Max. participants: 15 (25 with 2 instructors)
- ICAO Certification
- Register at <https://igat.icao.int/ated/TrainingCatalogue/Course/5640> or [5605](#)



- Four main modules: quality management, collection, processing, and distribution of aeronautical data and information
- Introduces and covers the entire aeronautical data chain from origination to next intended users
- Detailed description of all functions of an AIS
- Introduces and explains new concepts like aeronautical data catalogue, data quality requirements, metadata, data product specification, digital data sets, information exchange model, data set distribution service, etc.
- Contains group discussions, quizzes, practical exercises, progress and mastery tests

03

Custom Training

Example: TZA NOTAM Workshop



ICAO Technical Cooperation Bureau

Example Tanzania Civil Aviation Authority (TCAA)

Series of AIM Workshops

- 2 weeks of workshops (for managers and AIM operational staff)
- In preparation of acquisition of AIS automation system
- Based on AIQM and AIS OPS courses
- Custom NOTAM workshop, incl. review and analysis of TZA NOTAM
- Included briefing of Director General
- Well received by managers and operational staff

Suggestion for Regional Training Events

For example, organized in conjunction with a regional AIS meeting

AIS Training and/or NOTAM Workshops

- Can pool participants from multiple countries
- For example, 5 countries @ 3 participants = 1 instructor
- Currently, there is a roster of 3 instructors
 - Alexander Pufahl, TRAINAIR-certified instructor and course developer
 - Ruedi Schneeberger, Consultant
 - Roland Baumann, Consultant



Thank You!