

canso

civil air navigation services organisation

The Global Voice of ATM

AIM Training Guidance Material

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ICAO NCLB AIM WORKSHOP Cairo, Egypt , September 11-13 2017

Outline

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Civil Air Navigation Services Organisation - CANSO

- The Global voice of ANS providers
- Transforming global ATM performance
- Founded in 1997 , based in Amsterdam , have 5 regions
- 88 **Full Members** (ANSPs) representing 85% of the world traffic
- 80 **Associated Members** (Organisations that supply goods and services to the air traffic management industry, as well as academic institutions and aircraft operators)

Vision

To be the recognised leader in transforming global air traffic management (ATM) performance



Background:

On 20th March 2008 the **ICAO** Air Navigation Commission agreed to the establishment of a study group in order to assist the Secretariat with the development of a global strategy/roadmap for the:

Transition from

Aeronautical Information Services (AIS)

To

Aeronautical Information Management (AIM)

Background :

The expected outputs of the study group included a global

- **Roadmap for the transition from AIS to AIM,**

as well as amendments to:

Annex 4, Annex 15, the Aeronautical Information Services Manual (Doc 8126); and the Aeronautical Chart Manual (Doc 8697), and the development of two new manuals related to the AIM:

- **quality system** and

- **AIM training.**

Requirements:

ANNEX 15 :

3.7.4: Within the context of the established quality management system, the

- **competencies** and the associated
- **knowledge, skills and abilities** required for each function shall be identified, and personnel assigned to perform those functions shall be appropriately trained...

Note.— *Guidance material concerning training methodology to ensure the competency of personnel is contained in the **Aeronautical Information Management Training Development Manual (Doc 9991)**.*

The Competency based approach

The existing draft:

➤ **ICAO DOC 7192-AN/857 Part E-3**

“Training Manual for Aeronautical Information Services Personnel Preliminary Edition 2005” was reviewed:

- Outdated, unfit for today and tomorrow
- Inconsistent
- Lack of guidance for AIS-Providers, who have ARO or other ATS or MET-services (or parts of it) integrated.
- Absence of future developments
- Absence of recommendations concerning the qualifications and competence for trainers.

The Competency based approach

With support from

- **ICAO**
- **FAA**
- **EUROCONTROL**
- **industry-partners**

the CANSO AIM Working Group established a smaller focus group in spring 2009 with the objective to develop, coordinate and facilitate the drafting of the new ICAO AIM training material.

This was done under the workstream-leadership of **Augustin Lamprecht** (LPS/Slovak Republic) representing CANSO at the ICAO AIS-AIM SG.

The Competency based approach

„COMPETENCY“:

Knowledge, Skills and Abilities (KSA)

as the attributes required to perform a job.

- **Knowledge** is generally considered to be information that is applied directly to the performance of a function.
- **Skill** is an observable competence to perform a task.
- **Ability** is the competence to perform an observable behaviour or a behaviour that results in an observable outcome.

The principle for this approach uses performance as the measurement to identify the opportunity for competency-based training and how it can address gaps in performance.

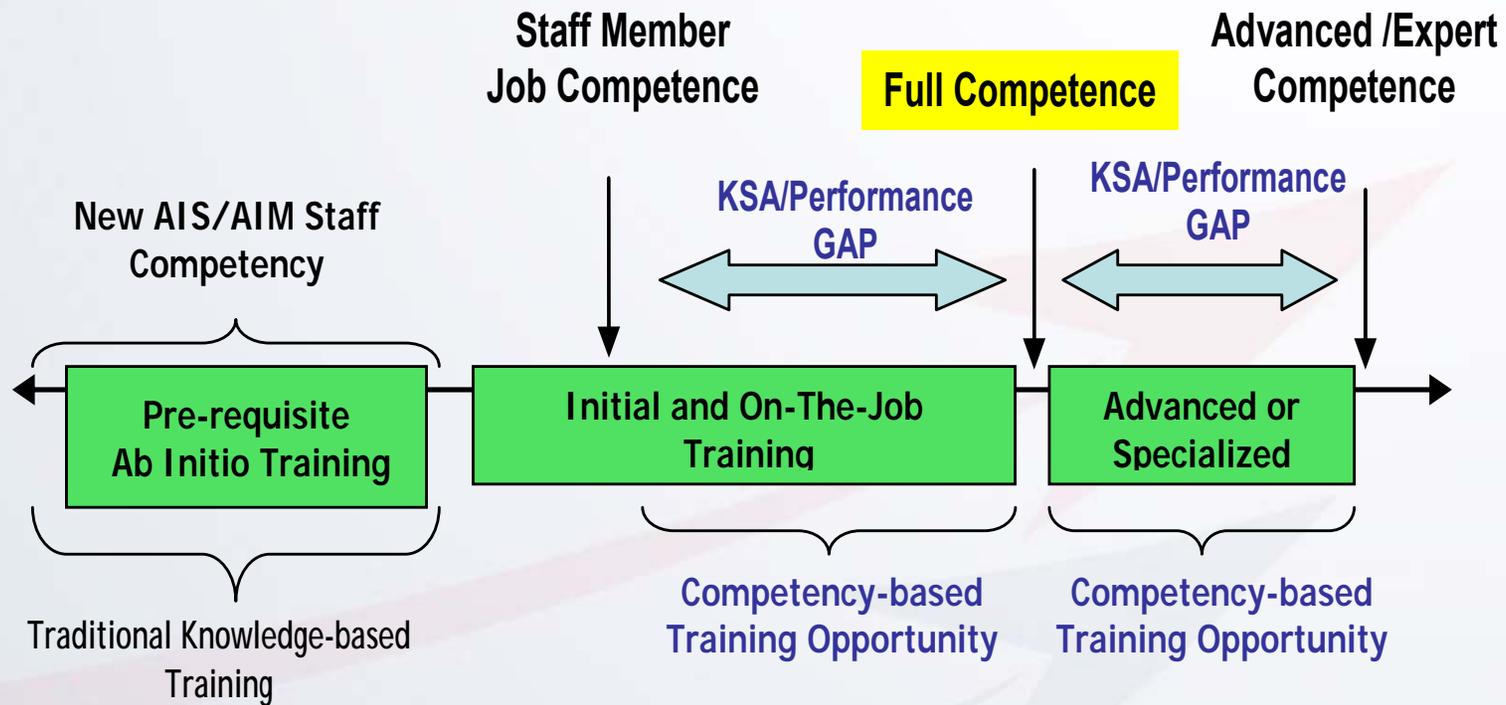
The Competency based approach

The development of competency-based training and assessment is based on a systematic approach whereby:

- Knowledge, skills, and abilities and their standards are defined
- Performance is measured against the standards
- Training is based on the **gaps** between the required competency and current performance

Assessment tools for these competencies are developed to determine whether these competencies have been achieved after the training has been conducted.

The Competency based approach



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Target audience:

- **AIS/AIM providers**
- **Training and Course Providers**
- **Regulators**
- **Aviation-Related Organizations**

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Basic structure:

- **Introduction**
- **The Basics of Competency-Based Training**
- **Curriculum Design**
- **Appendices** including the AIS/AIM **Competency Framework**

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Types of Training:

- Ab Initio Training
- Initial Training
- On-The-Job Training
- Advanced and/or Specialized Training
- Recurrent Training
- Refresher Training

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The Competency Framework:

Competency Unit	
	Competency Element
	Terminal Objective (Performance Criteria)
	Enabling Objectives

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Competency Units:

- Data and Information Management
- Static Data
- Dynamic Data
- Additional Products
- Pre- and Post-flight Information,
- Air Traffic Services Reporting Office (ARO) functions
- Business Continuity

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Example for the competency unit: STATIC DATA

2	STATIC DATA	
2.1	GENERATE AIP/AIP AMENDMENT	
2.1.1	Prepare content (text, tables, charts, and other elements)	ICAO Annex 15, Annex 4, Doc 8126, Doc 8400, Doc 8697, Local procedures
2.1.2	Coordinate with other relevant parties	Local procedures
2.1.3	Translate text into appropriate language	Local procedures
2.1.4	Verify content	Local procedures
2.1.5	Obtain approval of content	Local procedures
2.1.6	Compile product	Local procedures
2.1.7	Obtain approval of compiled product	Local procedures
2.1.8	Make AIP/AIP Amendment available (paper and/or electronic form)	Annex 15 Section 3.3, ICAO 9855 (use of internet) and Local procedures

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Example for the Competency Unit: DYNAMIC DATA

3	DYNAMIC DATA	
3.1	GENERATE NOTAM	
3.1.1	Prepare content (series, number, Q line, E field, etc.)	ICAO Annex 15 Chap. 5, ICAO Doc 8126
3.1.2	Coordinate with other relevant parties	Local procedures
3.1.3	Translate text into appropriate language	Local procedures
3.1.4	Verify content	Local procedures
3.1.5	Make NOTAM available	ICAO Annex 15 Chap. 5.3, Annex 10 Vol 2 Chap 4 ; Doc 8126; Doc 7910; Doc 8400; Local procedures

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Example for the Competency Unit: ARO

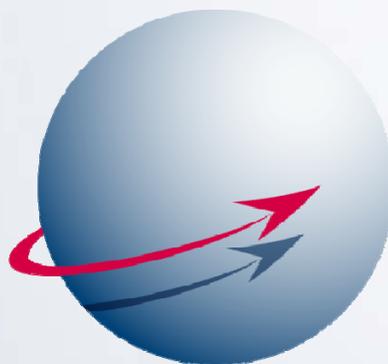
6	ARO	
6.1	PROCESS FPL	
6.1.1	Receive the FPL proposal	ICAO Doc 4444; Local procedures
6.1.2	Process the FPL (Verify FPL for compliance with format and data conventions, and for completeness and accuracy)	Local procedure
6.1.3	Receive, create and process associated /supplementary messages	Local procedures
6.1.4	Execute corrective action	Local procedures
6.1.5	Transmit FPL	ICAO Annex 10 Vol 2 Chap 4., Doc 4444; Local procedures

Next step:

The manual was developed so that today's AIS/AIM (inc. ARO) training requirements are broadly covered and accepted.

The appendices – in particular the Competency Framework – allow the flexibility to amend/update the manual accordingly.

The manual was published by CANSO in 2016 and is available free of charge on the CANSO website.



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