



*A project funded by the European Union
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AATIP
ASEAN Air Transport Integration Project

in partnership with EUROCONTROL, UKCAA and DGAC France



ATFM training requirements

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Background

- Doc 9971 only briefly mentions training
- Joint task between AEROTHAI and EUROCONTROL in context of ASEAN AATIP project to develop generic ATFM training requirements





Scope

- Staff requirement assessment
- Staff Competencies
- Staff Selection
- Staff Training
- Validation





Scope

- Staff Requirement assessment
 - What staff does your ConOps require
 - How many staff members at different levels





Staff Competencies

- Identify job responsibilities
- Identify the competencies required
- What do you consider are the main areas of competence required for ATFM?





Skills & Competencies

- ▶ Plan and coordinate ATFM Daily Plan
- ▶ Manage proper execution of TMIs
- ▶ CDM
- ▶ Conferencing
- ▶ IT skills
 - ▶ Microsoft Excel
 - ▶ Data Analysis
- ▶ Language skills





Training Phases

➤ Staff Training

- Induction

- Basic : Theoretical, Practical

- OJT

- Complementary Skills

➤ Validation





Operational and continuous training

- ▶ Training requirements for all stakeholders involved
 - ▶ ATFMU personnel
 - ▶ FMPs
 - ▶ ACC and TWR controllers
 - ▶ Aircraft Operators
 - ▶ Pilots
 - ▶ Etc etc



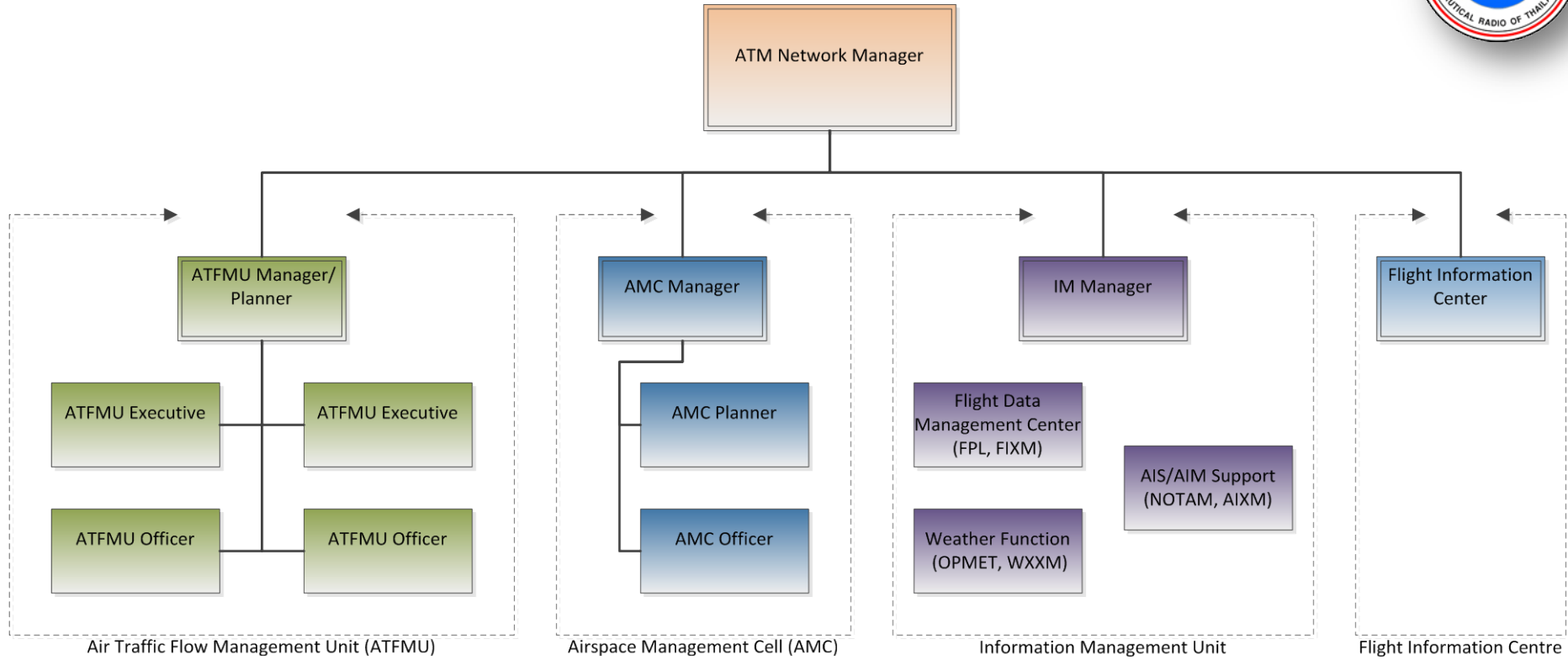
ATFM Roles and Responsibilities

- Operations Management
- ATFM Planner / Supervisor
- ATFM Executive
- ATFM Support Officer
- CDM partner





ATM Network Management Centre (ATM NMC)





Training Levels

- **Level 0:** Awareness.
- **Level 1:** A basic knowledge, remember essential points, to memorize and retrieve data.
- **Level 2:** Ability to understand and to discuss the subject matter intelligently.
- **Level 3:** Thorough knowledge of the subject and the ability to apply it with accuracy.
- **Level 4:** Ability to establish a line of action following the correct chronology and the adequate method to resolve a problem situation. This involves the integration of known applications in a familiar situation.
- **Level 5:** Ability to analyze new situations in order to elaborate and apply one or other relevant strategy to solve a complex problem.

Source : EUROCONTROL Specification for the ATCO Common Core Content Initial Training





Function vs Competency

	<i>Operations management</i>	<i>Supervision</i>	<i>Planner</i>	<i>Execution</i>	<i>Support</i>	<i>CDM partner</i>	<i>General ATM personnel</i>
Subject							
ATM	2	2	2	2	2	1	1
ATFM	2	3	4	3	2	2	1
ATC	2	2	2	1	1	1	1
Airport operations	2	2	2	2	1	1	1
Aircraft operations	2	2	2	2	1	1	1
Meteorology	2	2	3	3	2	1	1
ICAO	3	2	2	2	2	1	1
ATFM tools	2	2	3	3	3	2	1
Capacity assessment	2	2	2	1	1	1	1
Airspace design	2	2	2	1	1	1	1

Indicated levels are for illustration purposes only



Example Training Syllabus

Phase	Basic					
Subject	ATFM General – Objectives, Principles, Benefits					
Objective	•					
Content	Define ATFM.			ICAO Annex 11 definitions, section 3.7.5 Doc 4444 Section 3.2 ATFM		
	Explain <ul style="list-style-type: none"> • ATFM Objectives and Principles • Benefits of ATFM 			Doc 9971 chapter 1		
Terms	Capacity, Exemption, Priority, Strategic, Pre-tactical, Tactical, Post operations, Traffic orientation, Flight level allocation					
Role	Operations management	Supervision	Planner	Execution	Support	CDM partner
Level	4	4	4	4	3	2
Duration						



ATFM Phases

- ATM Planning
- ATFM Operations
 - Strategic ATFM
 - Pre-Tactical ATFM
 - Tactical ATFM
- Contingency and crisis management
- Post Operations





Proposed Training Content

- ATM
- ATFM
- Airport Operations
- Aircraft Operations (Airline Operations)
- Meteorology
- ICAO Framework
- Airspace design and capacity assessment
- ATFM tools
- General Skills and competences
- Procedures
- ASBU, SESAR, NEXTGEN





Next Steps for



➤ Draft Schedule

- Initial version available (Nov2014)
- AEROTHAI / AATIP review checkpoint (Nov 2014)
- Presentation to Global ATFM (Nov 2014)
- Presentation to ICAO APAC ATFM/SG (Dec 2014)
- Circulation to ASEAN ATM focal points
- Incorporation in Doc 9971 (2015)



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Thank you.

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