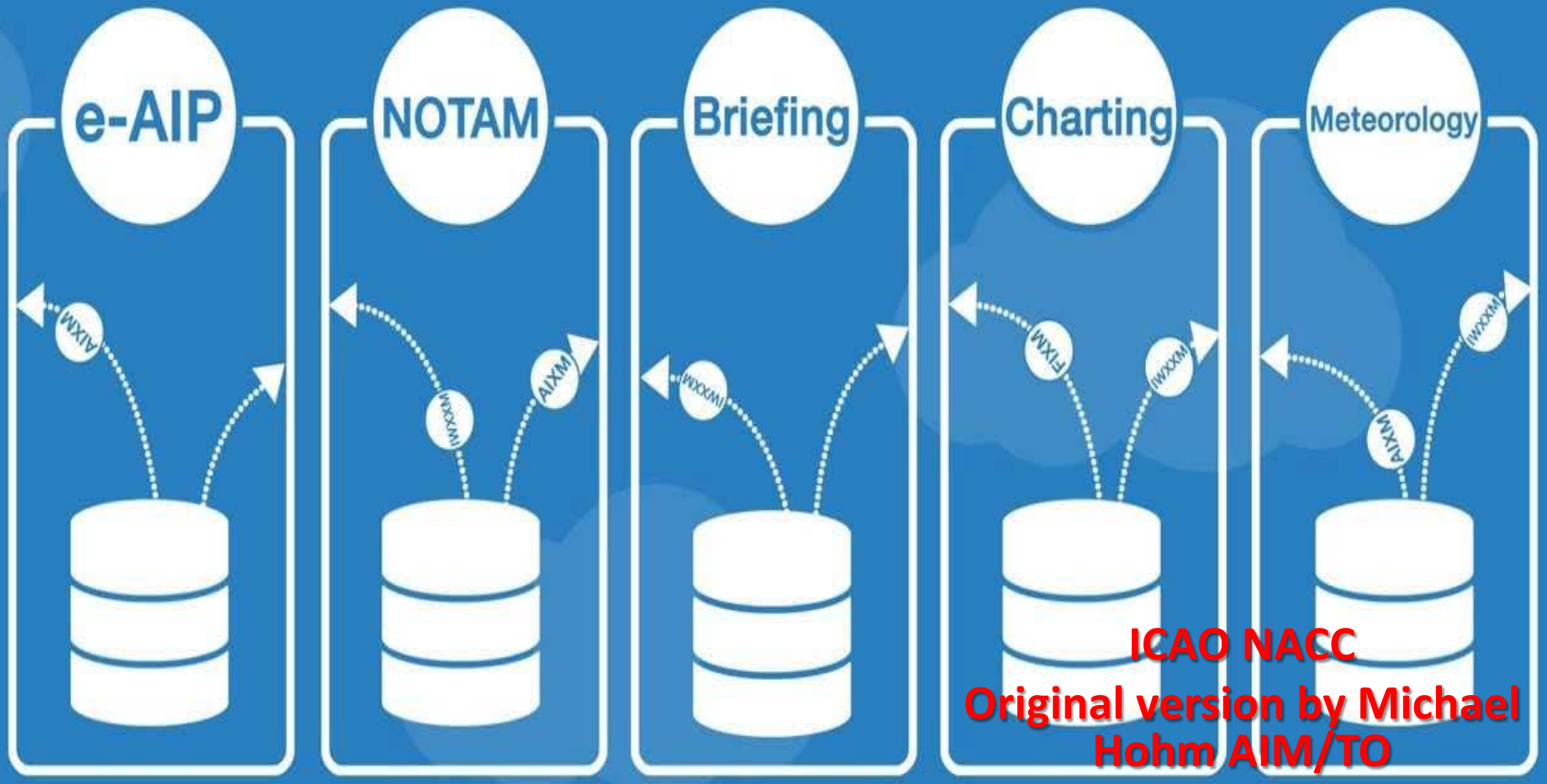
Global AIM Training



ICAO NACC
Original version by Michael Hohm AIM/TO
Tegucigalpa, Honduras, 2017

The Next Generation of Aviation Professionals

- Pilots
- Controllers
- Aircraft maintenance
- Other specialists
- AIM?

ICAO Forecast - Pilots

Most likely scenario

Pilot populations and associated training needs: 2010–2030

		Annual (Attrition: 4% per annum)		
	Pilots needed: 2030	Training needs	Training capacity	Shortage/surplus
Africa	55 932	3 814	1 010	-2 804
Asia/Pacific	229 676	13 983	4 935	-9 048
Europe	262 329	15 552	7 955	-7 597
Latin America	101 301	6 250	1 945	-4 305
Middle East	39 246	2 458	860	-1 598
North America	292 314	10 449	27 655	17 206
World	980 799	52 506	44 360	-8 146

ICAO Forecast – Air Traffic Control

Air traffic controller populations and associated training needs: 2010–2030

	Movements: 2030	ATCOs: 2030	Annual (Attrition: 5% per annum)		
			Training needs	Training capacity	Shortage/surplus
Africa	1 059 000	2 863	169	210	41
Asia/Pacific	16 379 000	44 282	2 931	1 865	-1 066
Europe	12 064 000	32 616	1 755	1 440	-315
Latin America	4 005 000	10 828	750	935	185
Middle East	1 507 000	4 074	253	90	-163
North America	16 694 000	45 133	2 860	2 200	-660
World	51 708 000	139 796	8 718	6 740	-1 978

ICAO Forecast - Maintenance

Maintenance personnel populations and associated training needs: 2010–2030

		Annual (Attrition: 5% per annum)		
	Maintenance personnel needed: 2030	Training needs	Training capacity	Shortage/surplus
Africa	58 635	3 769	600	-3 169
Asia/Pacific	289 510	19 010	4 266	-14 745
Europe	330 522	22 977	14 625	-8 352
Latin America	101 226	6 881	1 315	-5 566
Middle East	59 905	4 107	2 045	-2 062
North America	325 171	13 586	29 410	15 824
World	1 164 969	70 331	52 260	-18 071

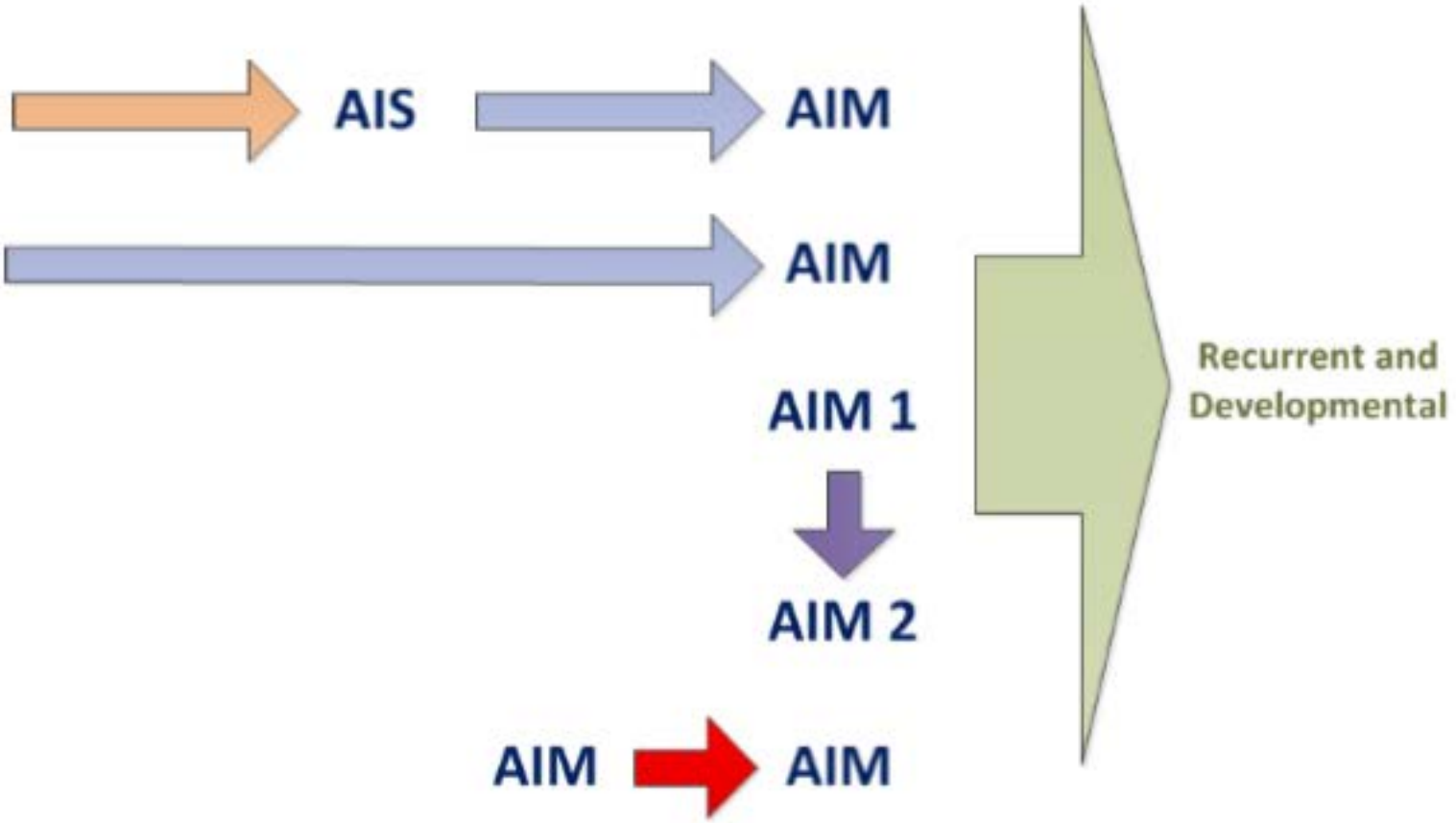
ICAO Forecast – AIM Specialists

Recruitment Demographics – Example Profile Indicators

- Median age
- Normal education levels
- Access to internet
- Digital skills

Staff development model

Training Scenarios



Competency-based Training and Assessment

Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards

Competency

A combination of skills, knowledge and attitudes required to perform a task to the prescribed standard.

ICAO Doc 9868 – PANS-Training

Differences in Training Approaches

Advantages

- Focus on the success of each learner
- Learner confidence grows as they master competencies
- Time is used efficiently

ICAO Competency Frameworks

Developed

- MPL (Doc 9868)
- Aircraft Maintenance Personnel (Doc 9868)
- Flight Procedure Designers (Doc 9906)
- Flight Validation Pilots (Doc 9906)
- Designated Medical Examiners (Doc 8984)

Under development

- EBT (FSTD component of recurrent training)
- Flight Instructors
- Air Traffic Controllers
- Air Traffic Safety Electronics Personnel
- Airport Safety Personnel
- Cabin Crew
- DG State employees, shippers and freight forwarders
- AIM personnel

Competency-based Training Requirements

- Thorough job/task analysis
- A system-based approach to training programme design & development
- Performance assessment criteria
- Tools

New elements in the manual

- List of pre-requisites to the AIS Competencies
- Better definition of temporality of aeronautical information:
  - "static information" and "dynamic information" replaced by "base information" and "information messaging"
- Expanded details concerning AIS/AIM Competency

New elements have been introduced in order to...

- Better incorporate the concept of temporality of information
  - All aeronautical data and information change over time, but to varying degrees in terms of frequency or magnitude
- Identify the pre-requisites for performing specific competencies
- Assist organizations in assessing the AIS personnel and facilitate its effective integration within an AIS organization
- Help identify the initial requirements to ensure an effective performance within an AIS organization
- Better specify the functions associated to the AIS/AIM Competency Units

Pre-requisites to the AIS Competencies

NEW! Pre-requisites to the AIS Competencies	AIS Competency Framework (main functional areas)
• Types and characteristics of aeronautical Information • Geodesy and Cartography • Air Traffic Management and Aeronautical Information Management Concepts • ARO and Aeronautical Information functions • Technological Requirements	• Data and Information Management • Base Information • Information Messaging • Additional Products and Services • Pre- and Post- Flight Information • ARO • Business Continuity

Way forward

- Organizational Development
- Human resource planning
- Competency-based training implementation

North American Central American and Caribbean (NACC) Office MexicoCity
South American (SAM) Office Lima
ICAO Headquarters Montreal
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) Office Bangkok
Thank You