

# AIM IMPLEMENTATION

—

# IFAIMA'S CONTRIBUTIONS



NCLB AIM WORKSHOP, CAIRO - EGYPT  
11<sup>TH</sup> - 13<sup>TH</sup> SEPTEMBER, 2017  
Kabir Y. Gusau – IFAIMA Vice President

# IFAIMA

International Federation of Aeronautical Information Management Associations

**“The Global voice of AIM”**

**as a non-partisan and non-profit-making  
Federation of AIM Associations**

**Since 2008**



NCLB AIM WORKSHOP, CAIRO - EGYPT  
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# Objectives

- To promote safety, efficiency and regularity in International Air Navigation;
- To assist and advise in the development of AIM, in order to maintain the safe, orderly and expeditious flow of air traffic;
- To uphold a high standard of knowledge and professional efficiency amongst AIM personnel;
- To protect and safeguard the collective professional interests of AIM personnel;
- To make mutual benefit affiliations with other professional organizations;
- To strive for a worldwide Federation of AIM Associations.



# Composition of IFAIMA

- Executive Board
- Regional Directors
- Member Associations
- Individual Associates
- Corporate Members



# IFAIMA Executive Board



**President**  
Fernando Lopes  
(Portugal)



**Vice-President**  
Kabir Gusau  
(Nigeria)



**Vice-President**  
Lukas Galbavy  
(Slovakia)



**Vice-President**  
Roseline Mumbo  
(Kenya)



**Executive Secretary**  
Jorge Dias  
(Portugal)



**Treasurer**  
João Mendonça  
(Portugal)

# IFAIMA Regional Directors



**Erdenebaatar Davaasuren**  
APAC  
(Mongolia)



**Lazarus Chesire**  
ESAF  
(Kenya)



**Michal Pufr**  
EUR/NAT  
(Czech Republic)



**Ahmed Allam**  
MID  
(Egypt)



**Alexis Amezquita**  
NACC  
(Dominican Republic)



**Fernando Cruz**  
SAM  
(Peru)



**Felix Anyanwu**  
WACAF  
(Nigeria)



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# Increasing Global Membership

IFAIMA represents:

1923 Persons resulting from:

34 Member Associations

166 Individual Associates

From 79 Countries

+

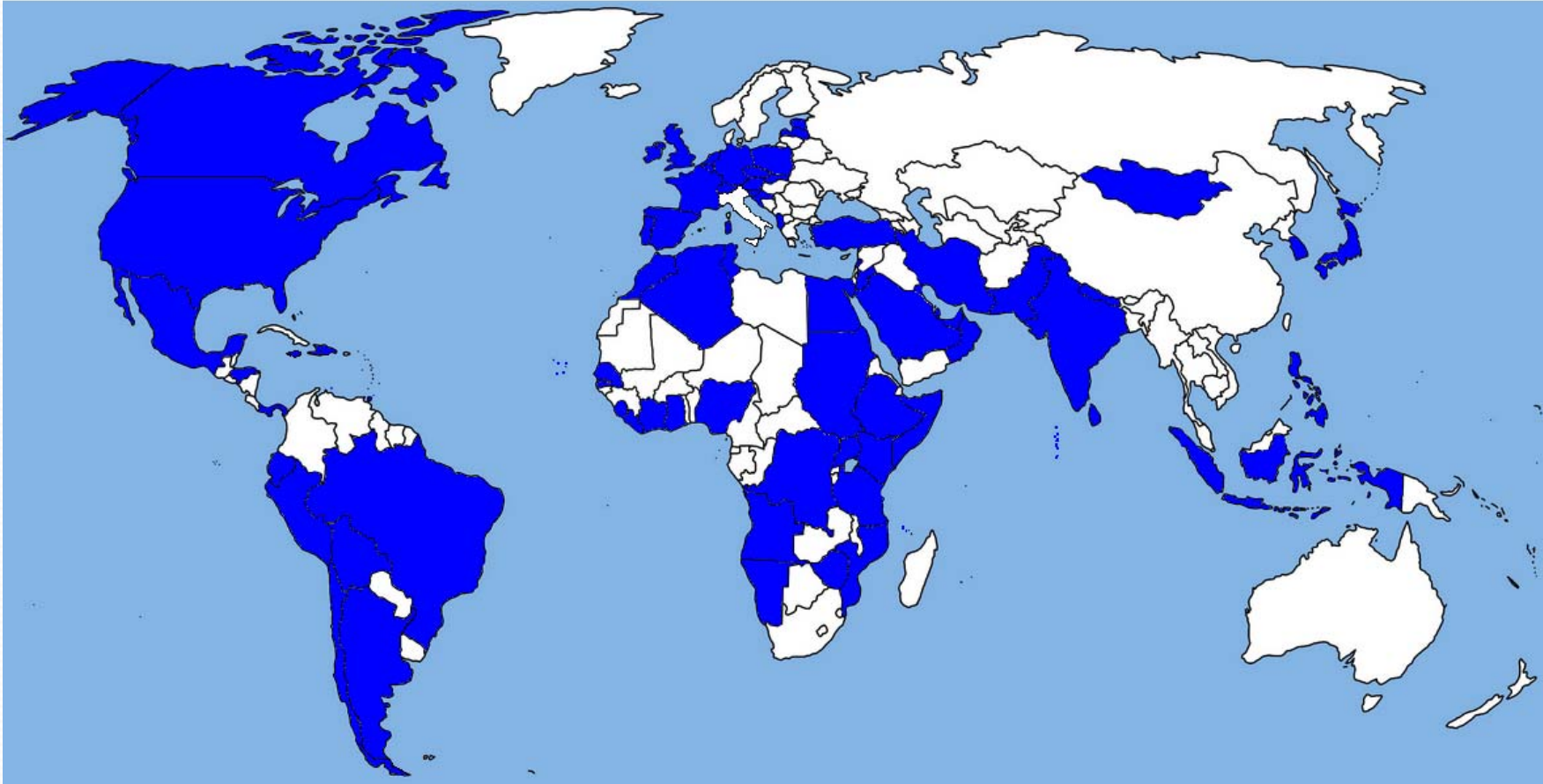
16 Corporate Members

Corporate Members



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# IFAIMA IN THE WORLD



**IFAIMA**

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# IFAIMA

## ICAO AIM/SWIM IFAIMA Activities



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# GLOBAL AIM

GLOBAL AIM CONFERENCE

GLOBAL AIM CONFERENCE

JOINT IFAIMA - ICAO - EUROCONTROL



27 - 29 JUNE 2011 - LISBON, PORTUGAL



28 - 30 MAY 2012 - BUENOS AIRES  
ARGENTINA



NCLB AIM WORKSHOP, CAIRO - EGYPT  
11<sup>TH</sup> - 13<sup>TH</sup> SEPTEMBER, 2017  
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# CONCLUSIONS AND RECOMMENDATIONS FROM GLOBAL AIM 2017



NCLB AIM WORKSHOP, CAIRO - EGYPT  
11<sup>TH</sup> - 13<sup>TH</sup> SEPTEMBER, 2017  
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# CONCLUSIONS

## No AIS Left Behind (what we have)

- The **global initiatives**
  - State Letter 2017/22: **new global framework for AIM!**
  - New PANS-AIM: the daily book for AIM practitioners
  - New expanded “AIM” manual coming soon
  - Implementation strategy to address non compliances on aeronautical charts
- The **regional initiatives**
  - Regional guidance publicly available
  - Regional templates to support national AIM implementation plan & roadmap
  - Regional workshops and conferences
  - Centralized resources and regional databases
- **Industry and International organizations** support
  - Intl. organizations providing guidance and tools to support implementation
  - Industry offering the technological means and training to go operational now



**IFAIMA**

# No AIS Left Behind (what we have)

- Several examples of **best practices**...
  - Kenya, Senegal and Nigeria experiences in establishing a reg. framework and oversight
  - Uganda example on steps taken to transition to AIM
  - Kenya example on how to maintain the standards across the chain
  - Belgium integration of civil-military information
  - Czech Republic model for training
  - Technological solutions, experiences and advice shared by the industry and agencies



# No AIS Left Behind (what we miss)

- Institutional challenges:

- Lack of understanding that multiple and uncoordinated rules can be extremely costly and potentially catastrophic
- Lack of clear requirements for the stakeholders involved: it increases friction and impacts quality of services
- Inability of service providers to understand the role of the oversight function in the Civil Aviation Administration;
- Need for more cooperation between regulators and ANSPs
- Lack of competent staff/Inadequate training



# No AIS Left Behind (what we miss)

- Service provision challenges:
  - AIM officer not recognized as a profession
  - Risk of working as “amateurs” to this sensitive profession is not realized
  - Need for ICAO specific training programs and more guidance
  - Issues with English language proficiency
  - Provision of raw data to the AIS must be strengthened
  - Digital datasets are still considered immature for implementation
  - Reliable exchange of data between stakeholders is still a challenge



# Technological challenges

- Technological challenges:
  - AIXM poses challenges in terms of data exchanges due to its verbosity
  - Mapping rules to convert AIXM to the ARINC data formats do not exist
  - It is difficult to make AIXM data available for airborne applications
  - eTOD is hardly used in avionics systems
  - No incremental AIXM updates (UUIDs issues)
  - AIXM is still too permissive; major bilateral coordination is required



# RECOMMENDATIONS

# Regulatory aspects

- Regulate AIM: To enjoy its benefits: clear guidance for stakeholders, major shift in economic value, more robust and sophisticated use of aeronautical information
- Think different: “AIS” is about the service, “AIM” is about data quality across different domains
- Make the primary legislation effective: Separation between the Regulatory and the Service Provision functions shall be spelt out right from primary legislation
- Encourage Cooperation between CAAs and ANSPs to ensure more effective audits, inspections and follow-ups;
- Make the current regulatory process more “resilient”. To protect from ambiguity potentially coming from the digital environment





# AIS to AIM transition... end to end

- AIM Transition Without Strong AIS Foundation is not effective
  - Eliminate the deficiencies in processes & quality issues in your existing products;
  - Understand fully how a “legacy AIS” is provided;
  - Do a complete quality management review of the existing AIS
- Need for a cultural change:
  - If the input is garbage, the output is garbage
  - Communicate, talk, discuss, with your data originators... and then learn how to listen to each other and reach the compromise to meet the common objective
  - Understand that AIS and data originators need each other
- Automation reduces human errors but do plan for fallback procedures: Automation reduces human errors but increases the possibility for machine errors; ensure staff competency and operator proficiency (even in case of machine failure)
- More cooperation among States to share best practices



# Interoperability ... way forward...

- We don't know... yet!
- We need to solve the problem of interoperability asap.
- Need to create more forums for discussion to find a concrete solution
- Need of a joint effort of all stakeholders which include ICAO, International Organizations, Industry and Service Providers
- Encourage discussions to the ICAO Information Management Panel (IMP), that is working on creating the basis for interoperability of data exchange
- Need for an **ICAO AIM working group**
  - *GLOBAL data and information-systems standards?*
  - *GLOBAL standardization and certification (FMS)?*
  - *Leverage existing international standards for data systems?*
  - *Leverage of other information domains examples (WIXXM)?*



# IFAIMA ACTIVITIES

- ICAO SAM Multilateral Meetings for the Transition from AIS to AIM (SAM AIM)
- ICAO North Atlantic Aeronautical Communications Sub-Group (NAT ACSG)
- ICAO European Air Navigation Planning Group (EANPG)
- ICAO North Atlantic Systems Planning Group (NAT SPG)
- ICAO APAC Aeronautical Information Management Implementation Task Force (AAITF)
- ICAO MID Air Navigation Planning and Implementation Regional Group (MIDANPIRG)
- ICAO AIS AIMSG
- ICAO Information Management Panel (IMP)
- Eurocontrol Harmonized VFR Flight Planning Procedures Focus Group – HVFP FG



# IFAIMA ACTIVITIES

- European Aviation Safety Agency RMT.0477 & 0478 Technical requirements and operational procedures for AIS and AIM
- European Commission – Expert group on the Social Dimension of the Single European Sky
- European Commission - Joint Meeting of ATM Partners on Just Culture
- European Transport Workers' Federation, Air Traffic Management sector (ETF-ATM)



# ICAO Recognition, 4<sup>th</sup> of March 2015

ICAO has added IFAIMA to the list of Organizations that may be invited to suitable meetings

~~IFAIMA  
OBSERVER~~



IFAIMA  
ACTIVE MEMBER



# IFAIMA Inside Activities



IFAIMA AIM Training Manual  
AIM AB-Initio - AIM-AI  
Course Description  
Version: 1  
Page 1 of 101

## AB-Initio (AI)

### COURSE DESCRIPTION

#### OBJECTIVES

Generally know the Aeronautical infra-structures, facilities, services and Aeronautical organizations that have a direct relationship with the normal performance of the AIS and LUM services, namely, their organization, objectives, functions and applicable general regulation. At the end of the course, participants should demonstrate knowledge that allows them to initiate the proper specializations of the AIS and LUM services. Note: This course shall be complemented with the specializations/qualifications AIS and LUM that will allow the trainees, after the on-job-training, to the performing of the AIM functions.

#### TARGET AUDIENCE

Candidates to AIM Staff.

#### PRE-REQUISITES

To have successfully completed the recruiting process to enter the AIM professional career.

#### UNITS

I	INTRODUCTION	INT
II	AERONAUTICAL LEGISLATION AND REGULATION	LEG
III	AERONAUTICAL INFORMATION MANAGEMENT	AIM
IV	COMMUNICATIONS	COM
V	AIR TRAFFIC MANAGEMENT	ATM
VI	AERODROMES AND HELIPORTS	AGA
VII	AIRCRAFT	ACF
VIII	METEOROLOGY	MEI
IX	NAVIGATION	NAV
X	QUALITY MANAGEMENT SYSTEM	QMS
XI	SAFETY AND SECURITY	SS
XII	HUMAN FACTORS	HUM
XIII	EQUIPMENTS AND SYSTEMS	EQPT
XIV	AERONAUTICAL ENGLISH	ENG

## IFAIMA Proposals on Training IFAIMA Proposals on Regulation IFAIMA Publications (Newsletter)

**IFAIMA**  
THE GLOBAL VOICE OF AIM  
IFAIMA Newsletter  
1st EUR/NAT - AIM Regional Meeting

**GdF**  
Gewerkschaft der Flugsicherung

April  
Issue 03/2017

**Inside this issue**

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**Special points of interest**

- Barbara Fröhlich (SIAIMA - Slovenian Aeronautical Information Management Association) and Oliver Wessolek (GdF - German Trade Union Air Navigation Services) discussed AIM issues in the last month. After they recognized, that there is no exchange of information between the different associations on international level, they started to organize this first meeting.
- At the beginning some doubts and planning issues had to be solved. After all the invitation was sent out to all known contacts in the EUR/NAT Region. In short time the interested associations registered to the meeting.
- The two-day meeting was a startup of a new Expert Group, to define actual and future upcoming issues in the professions of AIM and AIS. During the meeting, it was very clear, that not only AIM/AIS tasks will be faced with this upcoming changes and issues. So, the group decided to extend the profession of ABO, COM, FDP, FMP, MAP and PDB.
- The EUR/NAT AIM Expert group is formed to point out developments, ideas and advices to each other. IFAIMA, as the world leading international Associations of these professionals will be asked to establish and take over this group for further development. Outcomes of this group will be sent to the IFAIMA Executive Board for information.
- "MIDANPIRG" or The Middle East Air Navigation Planning and Implementation Regional Group is considered the most important high level management meeting for the whole Middle East states, runs every 18 months.
- Elections for Executive Board will take place during the Global AIM Conference Kampala 2017.

## LEGISLATIVE PROPOSAL FOR THE LICENSING OF AERONAUTICAL DATA MANAGEMENT AND AERONAUTICAL INFORMATION (AIM) SPECIALISTS

### PREAMBLE

Aiming at meeting the demands of the global ATM concept, it became necessary to improve several aspects of the Aeronautical Information management that include operational requirements, efficiency objectives, use of emerging information technologies and a regulatory dimension of competencies and adequate authorisation to perform the job at national aeronautical information administration and management services.

The AIM concept (Aeronautical Information Management) represents an ICAO vision for the administration, management, interchange and integration of the aeronautical information amidst the ATM community in a safe and efficient way. According to the Global Operational Air Traffic Management Concept (ICAO Doc. 9854), the management of aeronautical information has been identified as a key factor of the concept and the basis of all other interdependent components that constitute the future ATM concept, since the management, use and transmission of aeronautical data and aeronautical information is vital for the good performance of those components.

The shifting from the traditional AIS concept to AIM introduces new extremely demanding quality criteria and stresses the impact that the tasks and processes carried out by AIM technicians have on flight safety.

ESSAR 5 prescribes the need, as far as technicians that are involved, in an ATM context, in activities related to safety, for the safety regulators associated to those activities to define criteria for the granting of licences, so as to ensure without any doubt that the technical personnel involved perform their activity in full compliance with the defined requirements.

Accordingly, EU Regulation N. 73/2010 of the Commission, that establishes the applicability requirements to the quality of aeronautical data and aeronautical information in the European Single Sky, in Chapter II - Interoperability and Performance Requirements, Art. 7 - Coherence and Opportunity and Personnel Performance, establishes that the providers must ensure that the personnel in charge of providing aeronautical data or aeronautical information possess the training, proficiency and adequate authorisation to carry out the job that has been assigned to them.

In view of the above, the present diploma establishes the general regime for the licensing of Aeronautical Data Management and Aeronautical Information (AIM) Specialists.

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# IFAIMA Training & Consultancy Cooperation



- United ATS: Offers Training and Consulting Services to IFAIMA members at special prices and conditions
- Group EAD: Offers Training and Consulting Services to IFAIMA members at special prices and conditions
- IIES: Offers Training and Consulting Services to IFAIMA members at special prices and conditions



# IFAIMA on the Web

IFAIMA Website: [www.ifaima.org](http://www.ifaima.org)

LinkedIn Group

<http://www.linkedin.com/pub/ifaima-eb/12/b80/62b>

E-mail: [eb@ifaima.org](mailto:eb@ifaima.org)



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# Top Organizations



**IFAIMA**



**YOU**



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# Global AIM Santo Domingo 2018



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# FINALLY.....

**The future of aeronautical information management and ultimately SWIM looks good from where we stand...**

**The challenges of yesterday must be addressed today if we are to reach tomorrow...**

**We can not AIM if we have not served and we can not SWIM if we can't AIM.**



# Thank You



[www.ifaima.org](http://www.ifaima.org)  
[eb@ifaima.org](mailto:eb@ifaima.org)

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