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IATA-WMO Collaboration on AMDAR



WMO OMM

World Meteorological Organization Organisation météorologique mondiale

Agenda

- 1. Background on the IATA-WMO collaboration
- 2. Progress made
- 3. Concept of Operations
- 4. Next steps
- 5. Issues for WMO
- 6. IWCA at RA VI Session

Background on AMDAR - <u>here</u>



Background on IATA

- IATA now represents around 265 airlines in over 117 countries
- Carrying 83% of the world's air traffic, IATA members include the world's leading passenger and cargo airlines

See:

http://www.iata.org/about/members/Pages/index.aspx http://www.iata.org/about/members/Pages/airline-list.aspx?All=true

• IATA has associate membership of ET-ABO but there has been little contact with the IATA Secretariat previously



Background on Collaboration

- The CBS/ET-ABO looking for an opportunity to collaborate with IATA on AMDAR (ET-ABO-2, Dec. 2015)
- IATA was approached by airlines concerned that AMDAR data was being made available publicly and to private met. service and other contractors.
- IATA undertook a study on AMDAR and turbulence over 2016 to investigate the program and the data issues.
- In late 2016, IATA approached WMO regarding the outcomes of the study and an offer to collaborate on AMDAR.



Outcome of IATA Study on AMDAR

Key Recommendations from the study:

- IATA to work with the WMO to expand the AMDAR program across the globe and establish a more equitable cost-recovery mechanism for the participating airlines;
- 2. IATA to set up a global turbulence database with real-time data transmission to airlines during flight operations.



Progress on Collaboration

- Dec. 2016: WMO and IATA reps met in Geneva agreed on concept of collaboration and to develop Position Paper
- Feb 2017: IATA met with WMO ET-ABO Leadership in Silver Spring agreed to proceed
- Mar. 2017: Team formed to work on IATA-WMO collaboration
- April 2017: Contracted as consultant to coordinate development of the CONOP document.
- May 2017: EC approved document and <u>Decision 12.2(2)/1</u> to form Working Arrangement on AMDAR
- May 2017: Discussed at ET-ABO-3 endorsed proceeding
- July 2017: IATA-WMO Working Arrangement put in place
- Dec. 2017: Mature draft of Concept of Operations developed



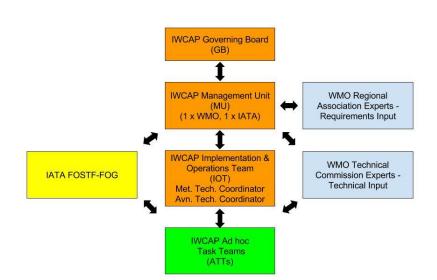
Concept of Operations Goals

- 1. establishing a better defined business relationship between AMDAR operators, data users, data providers and other stakeholders;
- 2. a more efficient and simplified process for airlines to join and contribute to the Programme;
- 3. an improved process for the establishment and provision of requirements for AMDAR data by NMHSs and data users;
- 4. development and implementation of a sustainable funding mechanism to support AMDAR operation and development;
- 5. introduction of a simplified, uniform, equitable and centralized costing and remuneration system for AMDAR operations and development;
- 6. more secure and better defined AMDAR data ownership and management practices;
- 7. a more efficient and optimized AMDAR programme derived from improved recognition and better integration of AMDAR with the aviation industry;
- 8. an expanded and enhanced global AMDAR data coverage; and
- 9. wider and improved use of AMDAR data in support of both meteorology, aviation and the wider community.



- 1. establishing a better defined business relationship between AMDAR operators, data users, data providers and other stakeholders;
- Agreements:
 - IATA-WMO: WA with Data license for use (GTS)
 - IATA-Airlines: Data provision
 - WMO-Members: Regulations
- Establish a governance structure
 - Governance Board
 - Management Unit
- Establish operational & developmental structure
 - Implementation & Coordination team
 - Ad hoc Task Teams
 - Expertise drawn from organizational bodies & experts.



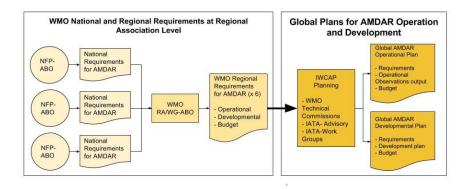


2. a more efficient and simplified process for airlines to join and contribute to the Programme;

- IATA to encourage airline participation based on requirements for data by NMHSs
- Simplified & standardised solutions for technical implementation
- Progam operation and agreement process simplified
- Costs and remunerations centralised, simplified



- 3. an improved process for the establishment and provision of requirements for AMDAR data by NMHSs and data users;
- Requirements for AMDAR established by each WMO region (6)
- National requirements -> consolidated regional plan & budget
- -> consolidated global plan & budget
- Annual cycle with 3-5 year forward planning



IWCAP Requirements and Planning Process

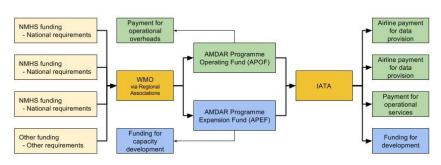


4. development and implementation of a sustainable funding mechanism to support AMDAR operation and development;

- 5. introduction of a simplified, uniform, equitable and centralized costing and remuneration system for AMDAR operations and development;
- Two funds established:
 - Operating Fund
 - Expansion Fund
- Standardised, simplified fee structure supports both funds
- Members commit funds according to requirements
- Funds transferred to WMO

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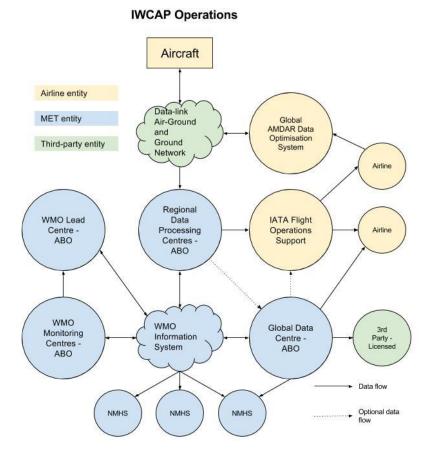
• IATA reimburses Airlines



IWCAP Financial Administration Framework

6. more secure and better defined AMDAR data ownership and management practices;

- Introduce Regional Data Processing Centres for data distribution on WIS
- Members licensed to use data for mandated met. Purposes
- Data archived in GDC
- IATA responsible for 3rd party commercialisation of data





7. a more efficient and optimized AMDAR programme derived from improved recognition and better integration of AMDAR with the aviation industry;

- IATA utilises industry membership, knowledge and expertise to drive efficiencies
- Global operation and expansion better organised:
 - Better arrangements with vendors and developers
 - Greater availability of standard AMDAR applications
- WMO and IATA to continue to standardise operations



8. an expanded and enhanced global AMDAR data coverage;

- Initial development and operation under new IWCA aimed at program expansion and enhancement
- Initial focus on new developments in datasparse areas
- Enhancement with water vapour measurement
- IATA to lead on industry uptake of turbulence monitoring and operations for airline use



9. wider and improved use of AMDAR data in support of both meteorology, aviation and the wider community.

- WMO and IATA continue to promote data use and impact
- Promote and push expanded and improved integration of data use by the aviation industry (e.g. use of turbulence information; use in flight operations and flight management)
- Program expansion and enhancement to drive greater use – if it's there, they'll use it.



Next Steps

- CONOP and ToR for IWCA to be developed by end of 2017 by WMO & IATA
- IATA Secretariat Decision to endorse by late 2017 \checkmark
- Side Event at WMO Regional Association VI 17th Session & Decision/Endorsement on RA VI Regional AMDAR Programme - early-Feb 2017
- Possible Decision to endorse by WMO EC-70 June 2018
- Possible Decision to endorse by IATA GA June 2018
- Cg-2017 Resolution to endorse collaboration mid-2019
- IWCA Commence Development in 2019 (Region VI?)
- IWCA Commence Operations in 2020 (Region VI?)
- Expand to other regions (RAs) gradually



Issues for WMO

- Can RAs develop coherent and harmonized requirements?
- Can RAs operate required regional infrastructure & functions (DPC, QC, QM)?
- WMO management of funds
- Legal aspects compliance with data licensing vs Res. 40
- Data commercialisation by IATA use of revenue
- Managing 3rd party access to data



IATA-WMO Collaboration at RA-VI

Side Session - 5 Feb 2018, 5:30pm:

- 1. Introduction and background (Dean) 5 mins
- 2. Presentation on the IWCAP/ConOps and USA perspective (Curtis) 15 mins
- 3. Presentation on the EUMETNET/E-AMDAR perspective on the IWCAP (Steve) 15 mins
- 4. Introduction to RA-VI decision to participate in the IWCAP (Dean) 5 mins
- 5. Questions and discussion

Document 3.2(5) -

https://drive.google.com/open?id=1plSmnWp
7Tv5WoDtVgQpMsIqSFmZkkLj



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