

(25.X.2011)

**JOINT MEETING:
CBS EXPERT TEAM ON AIRCRAFT BASED
OBSERVATIONS
(Third Session)
AND
AMDAR PANEL
(Fourteenth Session)**

ITEM: 4.1

Original: ENGLISH ONLY

(QUEBEC CITY, CANADA, 2-4 NOVEMBER 2011)

PROJECTS, PLANNING AND WORK PROGRAMME

WIGOS Pilot Project for AMDAR – Review and Planning Update

Metadata Management

(Submitted by Secretariat)

SUMMARY AND PURPOSE OF DOCUMENT

To provide an update on the status of the WIGOS Pilot Project task on Application of WMO Metadata relevant to AMDAR and present the metadata definitions that have been compiled.

ACTION PROPOSED

1. The Joint Meeting is invited to take into account the information contained in the document for further development of AMDAR metadata in the development of the future work plan.
-

BACKGROUND

1. Application of WMO Metadata relevant to AMDAR is a task of the WIGOS Pilot Project for AMDAR (WIGOS-PP-AMDAR).
2. At WIGOS Pilot Project for AMDAR (Fifth Session) (WIGOS-PP-AMDAR-5) two Metadata sets were compiled and were tabled as Appendices III and IV of WIGOS-PP-AMDAR-5 Final Report. Appendix III provided the metadata needed for describing data and products and Appendix IV provided the metadata required for airports used by AMDAR equipped aircraft. These metadata sets are provided in Appendix 1 to this document.
3. WIGOS-PP-AMDAR-5 agreed that the AMDAR Panel would consult with the airline industry partners in Europe to test whether these metadata for aircraft were feasible to be provided by airlines. Following this process the Joint Meeting agreed that the aircraft and airport metadata should then be made available to AMDAR Programs for comment before the final versions are submitted to the WMO Information System (WIS).

FUTURE WORK

4. In managing the further development of this metadata set in the future, it will be important for the Panel and ET-AIR to take into consideration the development of the WMO Core Profile of the ISO Metadata standard and ensure compliance.
 5. The following possibilities for future work on this task are offered for consideration by the Joint Meeting:
 - a. The Metadata sets that have been compiled and provided as Appendix 1 should undergo a review and refinement process coordinated by the Panel;
 - b. The AMDAR Panel and ET-AIR, perhaps through the Project Leader Improvement in Data Exchange and Quality Control, should consider the definition and specification of categories of metadata including:
 - 1) AMDAR metadata set for Global AMDAR Data Management;
 - 2) Complete AMDAR metadata set for Programme Management; and,
 - 3) Minimum AMDAR metadata set for Programme Management.
 - c. The AMDAR Panel and ET-AIR to incorporate the final metadata set definitions into appropriate regulatory material.
 - d. The AMDAR Panel and ET-AIR to develop a strategy, in consultation with WMO Information Systems, for the collection and maintenance of the metadata set for Global AMDAR Data Management as a component of the AMDAR Quality Management Framework.
-

APPENDIX 1

Aircraft Metadata

Parameter	Description	Examples	Additional Comments
Programme	AMDAR Programme responsible for the AMDAR report	E-AMDAR	
Country/Member	Country Member responsible for AMDAR report	UK	
Originating Centre	Centre for issuing the AMDAR report (ICAO Code)	EGRR	
Metadata File Identifier		wamis-bulletin-albania-en	
Metadata Publication Date		20090526	
Resource Name		AMDAR data	
Publisher Person Name		Michael Berechree	
Publisher Organization Name		WMO Observing Systems Division	
Publisher Phone		41227308212	
Publisher Fax		+4122 7308042	
Publisher Street Address			
Publisher City		Geneva	
Publisher Post Code		1211	
Publisher Country		Switzerland	
Publisher Person Email		(TBD)@wmo.int	
Resource Publication Date		2009	
Regional AMDAR Programme Contact Name			
Regional AMDAR Programme Organization Name			
Regional AMDAR Programme Phone			
Regional AMDAR Programme Fax			
Regional AMDAR Programme Street Address			
Regional AMDAR Programme City			
Regional AMDAR Programme Post Code			
Regional AMDAR Programme Country			

Regional AMDAR Programme Person Email			
Airline Contact Name	Person responsible - aircraft calibration & maintenance		
Airline Organization Name		British Airways	
Airline Phone			
Airline Fax			
Airline Street Address			
Airline City			
Airline Post Code			
Airline Country			
Airline Person Email			
Airline operating ISO 17025	Is the airline's calibration procedures well documented	Yes/No	
AMDAR Programme Identifier	Unique AMDAR aircraft identifier	AU0001	
Date Aircraft was activated for AMDAR		ddmmyyyy	
Aircraft Manufacturer		Boeing	
Aircraft MSN	Airframe unique identifier	nnnn	
Aircraft Model		B747	
Aircraft Series		4nn	
Avionics manufacturer		Teledyne	
Avionics Hardware part no.			
Avionics Software part no.			
Navigation System	Lat/Long and time (GPS or inertia)	GPS	Should move to GPS eventually
AMDAR Software		AAA	
AMDAR Software Version		V1	
Ascent/Descent interval reporting trigger type		Pressure level/time	
Date Ascent/Descent interval reporting trigger modified		ddmmyyyy	
AMDAR Software Temperature Smoothing		Yes/No	Would these be required in a final version of instrument level metadata.
Date Temperature Smoothing modified		ddmmyyyy	
AMDAR Software Wind Speed & Direction Smoothing		Yes/No	

Date Wind Speed & Direction Smoothing modified		ddmmyyyy	
AMDAR Software Humidity Smoothing		Yes/No	
Date Humidity Smoothing modified		ddmmyyyy	
Last date of aircraft maintenance and control	For all aircraft instrumentation/sensors	ddmmyyyy	Airline to provide information
Last type of aircraft maintenance and control performed	Airline specific		
Aircraft Temperature Sensor Manufacturer	All information relating to the measurement of temperature	Rosemount	Requirements for multiple sensors?
Aircraft Temperature Sensor Part no.		PT100	Which sensor(s) is used for AMDAR?
Aircraft Temperature Sensor Serial no.		nnnn	
Temperature Sensor Operational		Yes/No	
Date Temperature Sensor's Operational Status modified		ddmmyyyy	
Aircraft Temperature Sensor Date of installation		ddmmyyyy	
Aircraft Temperature Sensor Date of calibration		ddmmyyyy	
Aircraft Pressure Sensor Manufacturer	All information relating to the measurement of Pressure		
Aircraft Pressure Sensor Part no.			
Aircraft Pressure Sensor Serial no.		nnnn	
Pressure Sensor Operational		Yes/No	
Date Pressure Sensor's Operational Status modified		ddmmyyyy	
Aircraft Pressure Sensor Date of installation		ddmmyyyy	
Aircraft Pressure Sensor Date of calibration		ddmmyyyy	
Aircraft Pitot Sensor Manufacturer	All information relating to the measurement of Pitot		
Aircraft Pitot Sensor Part no.			
Aircraft Pitot Sensor Serial no.		nnnn	
Pitot Sensor Operational		Yes/No	
Date Pitot Sensor's Operational Status modified		ddmmyyyy	

Aircraft Pitot Sensor Date of installation		ddmmyyyy	
Aircraft Pitot Sensor Date of calibration		ddmmyyyy	
Aircraft Humidity Sensor Manufacturer	SpectraSensors Inc., USA		
Aircraft Humidity Sensor Part no.			see Engineering Bulletin
Aircraft Humidity Sensor Serial no.		nnnn	Changes at each C-Check
Humidity Sensor Operational		Yes/No	
Date Humidity Sensor's Operational Status modified		ddmmyyyy	
Aircraft Humidity Sensor Date of installation		ddmmyyyy	
Aircraft Humidity Sensor Date of calibration		ddmmyyyy	
Aircraft Turbulence Sensor Manufacturer	All information relating to the measurement of Turbulence		
Aircraft Turbulence Sensor Part no.			
Aircraft Turbulence Sensor Serial no.		nnnn	
Turbulence Sensor Operational		Yes/No	
Date Turbulence Sensor's Operational Status modified		ddmmyyyy	
Aircraft Turbulence Sensor Date of installation		ddmmyyyy	
Aircraft Turbulence Sensor Date of calibration		ddmmyyyy	
Aircraft Icing Sensor Manufacturer	All information relating to the measurement of Icing		
Aircraft Icing Sensor Part no.			
Aircraft Icing Sensor Serial no.		nnnn	
Icing Sensor Operational		Yes/No	
Date Icing Sensor's Operational Status modified		ddmmyyyy	
Aircraft Icing Sensor Date of installation		ddmmyyyy	
Aircraft Icing Sensor Date of last calibration		ddmmyyyy	

Airport Metadata

Airport Metadata Parameters	Description	Examples	Comments
Airport Name		London (Heathrow)	
Airport Country		UK	
IATA code		LHR	These organization shall inform the NMHS of any changes to these codes through the WMO
ICAO code		EGLL	
WMO Code		03772	
Lat/Long		51.3/-0.3	
Altitude (with respect to msl?)	+ msl	25m	
Programme responsible for maintaining information	Regional AMDAR Programme responsible for maintaining information	E-AMDAR	
Date last updated	Refers to the table update	ddmmyyyy	