
**WMO AMDAR PANEL
(Fifteenth Session)**

(25.X.2012)

(BOULDER, USA, 6-9 NOVEMBER 2012)

ITEM: 4.4

Original: ENGLISH ONLY

AMDAR PROGRAMME STATUS

Development and Maintenance of the Aircraft Observing System QMS

WIGOS Pilot Project for AMDAR

(Submitted by the Secretariat and the Chairman of the AMDAR Panel)

SUMMARY AND PURPOSE OF DOCUMENT

Provides a summary of the current status of the AMDAR Programme and a summary of the achievements and progress made since the previous Joint Meeting.

ACTION PROPOSED

1. The Panel is invited to note the information contained in the document.
2. The Panel is invited to consider the recommendations made in the document.

References:

1. [The WMO Integrated Global Observing System \(WIGOS\)](#)
 2. [WIGOS framework IMPLEMENTATION PLAN \(WIP\), Version 1.0](#)
 3. [AMDAR Reference Manual WMO-No.958](#)
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BACKGROUND

1. In July 2008, the AMDAR Panel was given the task of managing the WIGOS Pilot Project: for AMDAR for the Integration of AMDAR into WIGOS (WIGOS-PP-AMDAR), which has been incorporated into the AMDAR Panel and ET-AIR work programmes. With the activation of the WIGOS Implementation Plan (EC-64, 2012), the outstanding tasks associated with the WIGOS-PP-AMDAR should now be integrated separately into the Aircraft-based Observations Work Programme, which will be drafted within this meeting under agenda items 4.6.
2. In relation to the aims and tasks under WIGOS-PP-AMDAR the following progress has been made:

(1) Development of a standardised BUFR Template for AMDAR:

This activity has been completed with the new BUFR AMDAR Template (Code Table 3 11 10, Version 7) has been approved under the Fast-track Procedure of the WMO Technical Regulations relating to Procedure for Amending the Manual on Codes. The amendments were approved by the president of CBS, on behalf of Executive Council (EC) and were to be implemented on 2 May 2012.

(2) Application of WMO Metadata relevant to AMDAR:

This task has been advanced under the activity of the Workshop on Aircraft Observations Data Management (June, 2012), which will be further discussed under agenda item 4.4.

(3) Development of a standardised Quality Management Framework for AMDAR data:

This activity has also been advanced under the activity of the Workshop on Aircraft Observations Data Management (June, 2012), which will be further discussed under agenda item 4.4.

(4) Validation and preparation for inter-comparison of available Water Vapour sensor performance:

This activity has been advanced under the 2012 work programme with the development of a draft Implementation Plan of Water Vapour Sensing Capability for AMDAR, which will be discussed in detail under agenda item 4.2.

(5) Update of the AMDAR Reference Manual WMO-No.958:

No progress has been made on this task and should be incorporated into the future work programme.

(6) Development of the framework for generic software specification for AMDAR.

This activity has progressed markedly in 2012 with the appointment of a contractor under a WMO Special Services Agreement (SSA) to develop the AMDAR Onboard Software Functional Requirements Specification, which is expected to be complete later in 2012. This document will constitute the WMO standard for AMDAR software requirements. Addressed further under agenda item 4.4.

3. **Recommendation:** The Panel ensures that the outstanding tasks associated with WIGOS-PP-AMDAR are incorporated into the updated work programme as appropriate

FUTURE WORK UNDER THE WIGOS IMPLEMENTATION PLAN

Background on the WIGOS Implementation Plan

4. WMO Executive Council LXIII (EC-LXIII) established the Inter-Commission Coordination Group on WIGOS (ICT-WIGOS) to provide technical guidance and assistance for the planning, implementation and further development of the WIGOS components.

5. WMO Executive Council LXIV (EC-LXIV), the WIGOS Framework Implementation Plan (WIGOS-IP) version 1.0 was approved.
6. The Inter-Commission ICG-WIGOS is authorized to establish Inter-Commission task teams as and when required with representatives of international partner organizations to address the WIGOS standardization process, WMO regulatory material issues, and improvement of WIGOS observing components. The following Task Teams have now been established under ICG-WIGOS:
 - 1) Task Team on the WIGOS Implementation Plan (TT-WIP) ([Term of Reference and Membership](#))
 - 2) Task Team on the WIGOS Regulatory Material (TT-WRM) ([Term of Reference and Membership](#))
 - 3) Task Team on the WIGOS Metadata (TT-WMD) ([Term of Reference and Membership](#))
7. The Aircraft-based Observations programme will be represented to TT-WRM by Jitze van der Meulen, TT-WMD by Stewart Taylor and will be supported by the CBS Expert Team on Aircraft-based Observations and the Secretariat (SO/ARO, Dean Lockett)
8. Under the activities of the WIGOS-IP, it is expected the TT-WRM will be responsible in particular for:

No	Activity	Deliverables	Timeline
1. Management of WIGOS Implementation			
G 1.1.1	Develop/Revise/Update WMO Regulatory Material (Technical Regulations, WIGOS Manual). Develop WIGOS Guide. Develop WIGOS Functional Architecture (FA)	Updated WMO Technical Regulation No. 49 WIGOS Manual for Cg-17 approval WIGOS Guide and Functional Architecture	Cg-17 (2015)

9. TT-WMD will be responsible for:

No	Activity	Deliverables	Timeline
N 7.3.1	Collect, maintain and provide the metadata required by WIGOS support tools.	Compliance on requirements for metadata by all Members.	Cg-17
8. Data discovery, delivery and archival			
G 8.1.1	Develop WIGOS metadata standards and guidance practices for maintenance of and access to WIGOS metadata	1) Initial WIGOS Metadata standard approved 2) Initial access to WIGOS Metadata through portal 3) Practices established in manual & guide 4) Body(s) created or identified for maintenance of MD standard	1) 2015 2) 2013 3) 2015 4) 2013

10. Both the Aircraft-based Observations metadata framework and the regulatory material will need to be compatible with and integrated into the WIGOS Information Resource (See WIGOS-IP, Section 2.7)

11. Recommendations:

- 1) The WIGOS-PP-AMDAR Task 5, Update of the AMDAR Reference Manual WMO-No.958 should be incorporated into WIGOS activity 1.1.1.
 - 2) The Panel should discuss the future of WMO No.958 and whether it will be maintained or should be withdrawn from the WMO publication catalogue.
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