

WORLD METEOROLOGICAL ORGANIZATION

ET-AIR-3 and AMDAR Panel-14/Doc.3.4.1(1)

(13.X.2011)

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

ITEM: 3.4.1

Original: ENGLISH ONLY

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

AMDAR PROGRAMME STATUS

Status Reports on National and Regional AMDAR Programmes

Established AMDAR Programmes

Australian AMDAR Implementation Report and Plans for Future Activities

(Submitted by Australia)

Summary and purpose of document

This document provides information on the activities and plans for the Australian AMDAR Programme.

ACTION PROPOSED

1. The Panel is invited to note the information contained in the document.
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PROGRESS/ACTIVITY REPORT

Current Status:

1. The current Australian operational AMDAR fleet, as at September 2011, is shown in the table below. The Australian AMDAR fleet contributes around 8000 observations per day to the Global AMDAR program.

Airline	Model	Number	Operation	System / Software
Qantas	B747-4nn	19	International	AAA V1*
Qantas	B767-336	7	Regional/Domestic	AAA V1*
Qantas	B737-838	41	Regional/Domestic	AAA V3
JetConnect (Qantas)	B737-838	3	Regional/Domestic	AAA V3
Air Vanuatu	B737-838	1	International/Regional	AAA V3
SkyTraders	A319	1	Antarctic Operations & Regional/Domestic	AFIRS
Total				72

* will be upgraded to AAA V3 in the next 12 months

Development and other Activities:

2. AMDAR Software Development

- Qantas:
 - The Qantas B747 and B767 fleets are in the process of upgrading their software to AAA V3. The software is currently installed on several aircraft for testing. Full rollout should be completed over the next 3-6 months. This will allow uplink and control by the (Australian) AMDAR Data Optimisation System (ADOS).

3. Fleet Expansion and Improved Data Coverage

- Jetstar Asia
 - AAA V3 software has been tested and was rolled out to 2 A320 aircraft in April 2011. Agreement has been reached on a terms for a data sharing contract and rollout to their fleet of 14 A320s (based in Singapore and flying throughout SE Asia) should occur in the next 3-6 months. Negotiations underway with Jetstar Australia.
- Air Vanuatu
 - Air Vanuatu have recently installed AAA V3 software on their B737-800 aircraft which does the Regional/International flights between the main ports in Vanuatu, New Zealand and Eastern Australia.
- Virgin Australia
 - The Bureau continues to conduct discussions with representatives of Virgin Australia regarding the development of an AMDAR Program for their Embraer E190 fleet

4. Data Optimisation System

Some minor upgrades to the Australian AMDAR Data Optimisation System have occurred to allow uplinking to the Qantas B747 and B767 fleets and to make the system more robust against malformed messages.

A system is also under development that provides a web interface to a range of diagnostic and analytical functions that previously required “external” graphing packages to produce.

Future Plans:

5. Water Vapour Sensor Program

Business cases have been developed and presented to Airlines within the Australian region. The response from the airlines has been positive.
