

WORLD METEOROLOGICAL ORGANIZATION

ET-AIR-3 and AMDAR Panel-14/Doc.3.4.1(7)

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

ITEM: 3.4.1

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AMDAR PROGRAMME STATUS

Status Reports on National and Regional AMDAR Programmes

Established AMDAR Programmes

AMDAR Progress Report of Hong Kong, China

(Submitted by Hong Kong, China)

Summary and purpose of document

This document provides information on the activities and plans for the Hong Kong, China 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. Six B-747 aircraft of the Cathay Pacific Airways continued to provide AMDAR data to the AMDAR programme of Hong Kong, China during the past year. The average number of AMDAR observations received at the Hong Kong International Airport (HKIA) stayed at around 1,000 per day.
2. Apart from providing actual wind information along flight path and supporting aviation weather forecasting at HKIA, the high-resolution AMDAR data available from departure flights are utilized for identification of windshear.

Development and other Activities:

3. **AMDAR data received from GTS are routinely assimilated into the 3-dimensional variational data assimilation (3DVAR) system of mesoscale non-hydrostatic numerical weather prediction (NWP) model running at horizontal resolution of 10 km for improving the wind and temperature analysis in the initial condition.**

Future Plans:

4. The AMDAR data received from the six B747 aircraft are disseminated on GTS in both BUFR and FM42 formats to facilitate smooth transition from the use of character-based code form to table-driven code form. The parallel run is expected to last until late 2011 and dissemination in FM42 format will then be discontinued.
 5. Apart from the basic quality control of AMDAR data before dissemination on GTS, Hong Kong, China plans to enhance the monitoring of AMDAR data quality via the use of NWP model.
 6. Hong Kong, China plans to expand its AMDAR programme to include airbus aircraft over the next few years, subject to discussion with the local airline concerned. The aim is to increase data availability near HKIA to support development of new aviation-specific MET services, e.g. new meteorological services for terminal area (MSTA).
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