CGMS-XXXII WMO WP-9 Prepared by WMO Agenda item: I/3.3

## **ASDAR STATUS REPORT**

(Submitted by WMO)

# Summary and purpose of document

The purpose of this document is to inform CGMS Members of the current status of the ASDAR Programme

## **ACTION PROPOSED**

CGMS Members are invited to note the report.

### STATUS OF THE OPERATIONAL ASDAR PROGRAMME AT FEBRUARY 2004

### 1. Introduction

The operational Aircraft to Satellite Data Relay (ASDAR) programme has currently only 2 equipped aircraft reporting routinely. The extent of the decline led the AMDAR Panel annual meeting in October 2003 to decide that it no longer had the resources to spend on keeping the very small programme going and declared the programme closed as of 31 December 2003. Therefore, there will be no new installations and the 2 remaining reporting systems will be allowed to continue for as long as they operate reliably but without maintenance support from the Panel. Of the 7 ASDAR units still installed, 4 have reported during the 6 months prior to February 2004 and only 2 have reported since then providing valuable data in data sparse areas. The Netherlands agreed to continue supporting data quality monitoring as part of its automated quality management support for E-AMDAR. Data quality on one aircraft shows slightly large biases in temperature data and some scatter in wind observations.

### 2. Coverage

As indicated above, 2 ASDAR aircraft are still reporting over Africa, the western, northern and southern Indian Ocean, and parts of Asia. Much of this area is either infrequently covered by in situ upper air observations or not at all, but the volume of data has declined from around 710 observations per day in June 2002 to 370 in July 2003 and 230 in January 2004. The good news is that at least five of the ASDAR airlines are actively working to replace older ASDAR equipped aircraft with much larger fleets of AMDAR equipped aircraft. Significant improvement in coverage in data sparse areas has been achieved over the past two years as more AMDAR aircraft replaced decommissioned ASDAR systems.

## 3. Aircraft Status and IDCS Requirements

As has been mentioned in previous reports to CGMS, the ASDAR programme peaked early in 1998 with 21 operational systems. However, the number of reports has declined since then. All airlines that have decommissioned ASDAR units (BA, KLM, SAA, Lufthansa and Saudia) have replaced them with fleets of AMDAR equipped aircraft so data coverage has been improved significantly. The 2 units reporting routinely, namely ASDAR/SA015 and ASDAR/MK022 that will be allowed to continue to do so until they fail and 2 other units that may return to operations, namely ASDAR/AR007 and ASDAR/MK021 will still require the IDCS addresses and time slots. Therefore, only 4 channels are required for the next 12 months. It is likely that additional units will be decommissioned during the next 12 months. However, units ASDAR/SV003, ASDAR/SV023 and ASDAR/AR006 will not report again and will be formally decommissioned and their 3 IDCS channels are no longer required for ASDAR.

The attached table summarizes the operational status of all remaining ASDAR units and includes information on the associated IDCS ID, address and reporting time slot.

# STATUS OF ASDAR UNITS AS AT AUGUST 2003

Inst. No.	Tail No.	IDCS Ident	IDCS address	Time Slot	GTS Address	First Operat'nl	End Owner	Operator	Airline	Aircraft Type	Remarks
NO.	NO.	ident	auuress	Siot	Address	Operaciii	Owner				
	G-MULL		A020142A	02-03	BA001LLZ	29 Nov. 1990	UK	UK	BA	DC10 - 30	Decommissioned 23 Oct.1998
	G-BEBM		A02071CC	18-19	BA009BMZ	11 Feb. 1992	UK	UK	BA	DC10 - 30	Decommissioned 28 Mar. 1999
	G-BHDJ		A02062BA	16-17	BA008DJZ	19 Dec. 1991	Switzerland	UK	BA	DC10 - 30	Decommissioned 28 Mar.1999
24	G-BBPU		A0208148	20-21	BA010PUZ	15 June 1991	UK	UK	BA	B747-136	Decommissioned 4 Sept. 1999
30	G-AWNE		A020075C	00-01	BA000NEZ	12 June 1992	Australia	UK	BA	B747-136	Decommissioned 14 Aug. 1999
33	G-BNLF		A02116D0	50-51	BA025LFZ	11 Mar. 1994	UK	UK	BA	B747-436	Decommissioned 21 Apr. 2000
34	G-BNLG		A021234A	52-53	BA026LGZ	10 Mar. 1994	UK	UK	BA	B747-436	Decommissioned 15 May 2000
35	G-BNLJ		A021303C	54-55	BA027LJZ	24 Mar. 1994	UK	UK	BA	B747-436	Decommissioned 29 Apr. 2000
36	G-BNLL		A02146AC	56-57	BA028LLZ	10 Apr. 1994	Switzerland	UK	BA	B747-436	Decommissioned 24 May 2000
37	G-BNLY		A02155DA	58-59	BA029LYZ	7 July 1994	Switzerland	UK	BA	B747-436	Decommissioned 7 June 2000
27	HZ-AIM	ASDAR/SV003	A02021BO	06-07	SV003IMZ	12 Oct. 1995	Saudi Arabia	Saudi Arabia	Saudia	B747-368	To be Decommissioned
45	HZ-AIK	ASDAR/SV023	A02105A6	46-47	SV023IKZ	18 Mar. 1999	OCAP	Saudi Arabia	Saudia	B747-368	To be Decommissioned
31	D-ABVN		A02032C6	10-11	LH005VNZ	23 Jun. 1993	Germany	Germany	Lufthansa	B747-430	Decommissioned 4 April 2003
32	PH-BUM		A020923E	24-25	KL012UMZ	23 Apr. 1992	Netherlands	Netherlands	KLM	B747-206B	Decommissioned 22 Oct. 2003
40	PH-BUP		A0223732	26-27	KL013UPZ	19 Dec. 1994	USA	Netherlands	KLM	B747-206B	Decommissioned 5 April 2001
41	PH-BUR		A02241A2	28-29	KL014URZ	2 Mar. 1995	OCAP	Netherlands	KLM	B747-206B	Decommissioned 23 Nov 2001
38	ZS-SAT		A020D134	32-33	SA016ATZ	23 Oct. 1995	UK	UK	S. African	B747-344	Decommissioned 8 June 2002
39	ZS-SAU	ASDAR/SA015	A020C242	30-31	SA015AUZ	14 Dec. 1995	Netherlands	Netherlands	S. African	B747-344	Operational – high temp. bias
42	3B-NAK	ASDAR/MK021	A020E4AE	42-43	MK021AKZ	16 Jul. 1996	Mauritius	UK	Air Mauritius	B767-200ER	Not Operational – on hold
43	3B-NAL	ASDAR/MK022	A020F7D8	44-45	MK022ALZ	17 Jul. 1996	Mauritius	UK	Air Mauritius	B767-200ER	Operational – good quality obs.
44	LV-MLO	ASDAR/AR006	A0204456	12-13	AR006LOZ	19 Dec. 1997	Spain	Spain	Aerolineas	B747-287B	To be Decommissioned
46	LV-OEP	ASDAR/AR007	A0205720	14-15	AR007EPZ	27 Mar. 1999	UK	UK	Aerolineas	B747	Not Operational - on hold