



International Civil Aviation Organization

**Seventh Meeting of CNS/MET Sub-Group of APANPIRG and
Tenth Meeting of CNS/ATM IC Sub-Group of APANPIRG**

Bangkok, Thailand, 15 – 21 July 2003

Agenda Item 8 (1): Review implementation of ISCS and SADIS

IMPLEMENTATION OF ISCS AND SADIS IN THE ASIA/PAC REGIONS

(Presented by Secretariat)

SUMMARY

This paper presents information regarding progress in implementation of the ISCS and SADIS and actions taken by States and Secretariat to foster implementation of the systems.

1. INTRODUCTION

1.1 The information concerning implementation by States of the International Satellite Communications System (ISCS/2) provided by the United States of America and the Satellite Distribution System for information relating to air navigation (SADIS) provided by the United Kingdom, as integral part of the ICAO aeronautical fixed service (AFS), is presented in this paper.

2. DISCUSSION

Progress in implementation of the ISCS and SADIS by the ASIA/PAC States

2.1 The current status of implementation of SADIS and ISCS is provided in FASID Table MET 7. The table has been reviewed and updated by the CNS/MET SG/5 and SG/6 Meetings in 2001 and 2002. It should be recalled that FASID Table MET 7 is included in the FASID for information purposes and kept up-to-date by the Regional Office concerned.

2.2 as been proposed that the provision related to WAFS, including those related to SADIS and ISCS, should be harmonized between the ICAO regions. In this regard, a new simplified format of FASID Table MET 7 has been proposed as shown in Attachment 1. The meeting is invited to review the proposed table and to consider the following draft conclusion:

**Draft Conclusion 7/xx – Status of Authorized Access to SADIS and ISCS/2
Satellite Broadcasts in Asia/Pacific Regions – FASID
Table MET 7**

That, table MET 7 of ASIA/PAC FASID, Part VI – Meteorology, be amended as indicated in Appendix xx to this part of the report.

Issues related to SADIS

2.3 Assessment of SADIS operational efficacy. The annual survey on the SADIS operational efficacy in the ASIA/PAC Regions for the period 2002-2003 was carried out by the Secretariat during March - April 2002. The survey was aimed at assisting the SADISOPSG/8 meeting (Bangkok, July 2003) to develop the annual statement of efficacy. The Office has received 13 answers to the questionnaire from 11 SADIS user States and 2 special administrative regions. The overall assessment of the SADIS operational performance was satisfactory, but several States reported that they experienced problems during this period, mainly related to the receiving equipment.

2.4 The need for SADIS workstations software upgrade. As a follow-up of SADISOPSG/7 Conclusion 7/13, SADIS user States have been reminded by a letter from the ICAO Office, Bangkok that in order to be able to display the SIGWX forecasts in the BUFR code, the users should obtain the latest versions of the GRIB and BUFR visualisation software from the software vendors concerned. Information on the available visualisation software packages has been posted on the SADIS web site of the UK MET Office. Information on the State's plans for software upgrade has been collected through a regional survey undertaken by the WAFS/T Task Force has. The results from this survey will be presented in a separate paper.

2.5 Improvement of administrative messages. UK prepared information concerning administrative messages on the SADIS broadcast and the UK SADIS web-site. This information was circulated to all ASIA/PAC SADIS user States and focal points seeking their views on the optimum means of transmission of, and on the range of issues to be covered by, the administrative messages in the future. The responses received were sent to the SADISOPSG Secretary for consideration by the SADISOPSG/8 meeting.

Upgrading of the ISCS

2.6 The CNS/MET SG/6 meeting (2002) was informed about the plans of the US for upgrading of the ISCS. A transition to a successor ISCS has been planned by the US NWS in connection with advances in computer and telecommunication technologies and also because the telecommunication provider's contract for the current ISCS would terminate in September 2003. The transition would involve all user States under the ISCS footprint and would require:

- a) replacement of some subsystems in the VSAT stations currently in use due to the change from X.25 to TCP/IP protocol; and
- b) replacement of the STAR4 workstations for processing and display of WAFS data received through ISCS.

2.7 A State letter which contained as attachment detailed instructions provided by the US NWS on the transition plan to the new ISCS, was sent to all ASIA/PAC States under the ISCS footprint on 28 February 2003. States were informed of the transition schedule and necessary action to be undertaken in order to meet the target dates.

2.8 The US informed the States concerned that, while the upgrading of the telecommunication component will be taken up by the US NWS, the replacement of the terminal/display equipment will fall into the purview of each Contracting State. It should be emphasized that all ISCS user States should have their new ISCS workstations operational by early 2004 in order to ensure reception of the WAFS products and OPMET data.

2.9 Meeting of the specified target dates by the States is of vital importance in order to ensure a seamless transition to the new ISCS system. In this regard, the ISCS provider State is invited to update the meeting with the latest information available on the ISCS transition schedule and on the preparations by the ISCS user States. In case that it would become evident that a number of States would not be in a position to meet the schedule for transition to the new ISCS system, the SADIS

internet-based back-up service could be considered as an interim solution for providing WAFS products and OPMET data to those States through Internet. The meeting is invited to consider this option and if necessary to formulate a draft conclusion on the matter.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information regarding implementation of the ISCS/2 and SADIS;
- b) agree on the proposed draft conclusion; and
- c) consider further action to be taken to foster implementation of the SADIS and ISCS/2 in the ASIA/PAC Regions.

**FASID TABLE MET 7 — IMPLEMENTATION AUTHORIZED USERS OF THE SADIS
AND ISCS2 SATELLITE BROADCAST**

EXPLANATION OF THE TABLE

Column

1. Name of the State or Territory.

2. User of the satellite broadcast. Abbreviations used:

CAA	—	civil aviation authority
NMS	—	national meteorological service
O	—	other than the civil aviation authority or the national meteorological service.

3. Location of VSAT : town and, where applicable, aerodrome to be indicated.

~~4. Indication whether the access to the satellite broadcast has been approved:~~

X	yes
[blank]	no

~~54.~~ Indication whether the equipment is operational:

2w	—	two-way VSAT operational
1w	—	one-way VSAT operational
[blank]	—	no

<i>Editorial Note.</i> —	Column 4 considered redundant and proposed therefore for deletion.
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FASID TABLE MET 7 – ~~Implementation of the ISCS/2 and~~
~~SADIS in the ASIA/PAC Regions~~ Authorized Users of the SADIS and ISCS2 Satellite
broadcast

International Satellite Communication System (ISCS/2) <u>provided by the United Kingdom</u>					
State/Territory	WAFS User	Location of VSAT	Aceess Approved	Equipment Installed	Equipment Operational
<u>1</u>	<u>2</u>	<u>3</u>			<u>4</u>
American Samoa (United States)		Information received from the US NWS, Honolulu via a dedicated circuit			
Australia	Bureau of Meteorology	Melbourne	✗	✗	✗ <u>1w</u>
China	China Meteorological Administration (CMA)	National MET Centre, Beijing	✗		
	Civil Aviation Administration	Beijing Intl. Airport	✗	✗	✗ <u>1w</u>
	Civil Aviation Administration	Shanghai Intl. Airport	✗	✗	✗ <u>1w</u>
	Hong Kong Observatory	Hong Kong Intl. Airport	✗	✗	✗ <u>1w</u>
	Chinese Aeronautical Meteorology Association	Taibei	✗		
Cook I.	Meteorological Service				
Fiji	Meteorological Service	Nadi Intl. Airport	✗	✗	✗ <u>1w</u>
French Polynesia (France)	Meteo France	Information received from France via satellite	✗		
Indonesia	Meteorological and Geophysical Agency	Soekarno – Hatta International Airport	✗	✗	✗ <u>1w</u>
Japan	Japan Meteorological Agency	Kokusai Denshin Denwa Co.	✗	✗	✗ <u>1w</u>
Kiribati					
Malaysia			✗		
Mongolia	Civil Aviation Authority	Ulaanbaatar	✗		
Nauru					
New Caledonia (France)	Meteo France		✗	✗	✗ <u>1w</u>
New Zealand	MET Service of New Zealand, Ltd.	Auckland Wellington	✗ ✗	Backup only ✗	✗ <u>1w</u>
Niue					
Papua New Guinea	Meteorological Department	Port Moresby Intl. Airport	✗	✗	✗ <u>1w</u> ¹
Philippines	Department of Meteorology	Manila	✗	✗	✗ <u>1w</u> ¹
Republic of Korea	Korea Meteorological Administration	Incheon Intl. Airport	✗	✗	✗ <u>1w</u>
Samoa					
Singapore	Singapore MET Service	Singapore/Changi Intl. Airport	✗	✗	✗ <u>1w</u>
Thailand	Meteorological Department	Bangkok Intl. Airport	✗		
Tonga					
Tuvalu					
Vanuatu	Meteorological Service	Port Vila	✗		
Viet Nam	Meteorological Service	Hanoi City	✗	✗	✗ <u>1w</u>

¹ Information received from the State that equipment is not operational.

FASID TABLE MET 7 – ~~Implementation of the ISCS/2 and~~
~~SADIS in the ASIA/PAC Regions~~ Authorized Users of the SADIS and ISCS2 Satellite
broadcast

International Satellite Communication System (ISCS/2) <u>provided by the United Kingdom</u>					
State/Territory	WAFS User	Location of VSAT	Access Approved	Equipment Installed	Equipment Operational
<u>1</u>	<u>2</u>	<u>3</u>			<u>4</u>
United States	National Weather Service	Guam Hawaii	× ×	×	× <u>1w</u>
Wallis I. (France)	Meteo France	Wallis	×	×	× <u>1w</u>

Satellite Distribution System (SADIS) <u>provided by the United Kingdom</u>					
State/Territory	WAFS User	Location of VSAT	Access Approved	Equipment Installed	Equipment Operational
<u>1</u>	<u>2</u>	<u>3</u>			<u>4</u>
Bangladesh	Department of Meteorology	Dhaka			× <u>1w</u>
Brunei	Department of Civil Aviation	Brunei Intl. Airport	×	×	×
China	China Meteorological Administration (CMA)	National MET Centre, Beijing	×	×	× <u>1w</u> × <u>1w</u> × <u>1w</u>
	Civil Aviation Administration	Beijing Intl. Airport	×	×	
	Civil Aviation Administration	Shanghai Intl. Airport	×	×	
	Hong Kong Observatory	Hong Kong Intl. Airport	×	×	
	Chinese Aeronautical Meteorology Association	Taibei	×	×	
	Civil Aviation Administration	Macau Intl. Airport	×	×	× <u>1w</u>
DPR of Korea	General Administration of Civil Aviation	Pyongyang Intl. Airport	×	×	× <u>1w</u>
India	Meteorological Department	New Delhi	×	×	× <u>1w</u>
Indonesia	Meteorological and Geophysical Agency	Headquarters	×	×	
Lao PDR	Department of Meteorology	Vientiane, Watty	×	×	× <u>1w</u>
Malaysia	Department of Meteorology	Kuala Lumpur Intl. Airport	×	×	× <u>1w</u>
Maldives	Department of Meteorology	Male Intl. Airport	×	×	× <u>1w</u>
Mongolia	Civil Aviation Authority	Ulaanbaatar Intl. Airport	×	×	× <u>1w</u>
Nepal	Department of Meteorology	Kathmandu Intl. Airport	×	×	× <u>1w</u>
Pakistan	Meteorological Department	Karachi Intl Airport	×	×	× <u>1w</u>
Republic of Korea	Korea Meteorological Administration	Incheon Intl. Airport	×	×	× <u>1w</u>
Sri Lanka	Department of Meteorology	Colombo	×	×	× <u>1w</u>
Thailand	Thai Meteorological Department	Bangkok Intl. Airport	×	×	× <u>1w</u>
Vietnam	Civil Aviation Administration	Gialam Airport, Hanoi	×	×	× <u>1w</u>
	Civil Aviation Administration	Tan-Son-Nhat Intl. Airport, Ho Chi Minh	×	×	