



ICAO

*International Civil Aviation Organization*

**INFORMATION PAPER**

**Twenty-fifth Meeting of the Meteorology Sub-group  
(MET SG/25)**

Online, 18 – 22 October 2021

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**Agenda Item 5:** Research, development and other initiatives

**SADIS UPDATE**

(Presented by WAFC London)

**SUMMARY**

This paper reports the operation of the Secure Aviation Data Information Service (SADIS) since the MET SG/24 meeting in last meeting of the APANPIRG MET sub-group in November of 2020.

**1. INTRODUCTION**

1.1 This paper presents developments to the SADIS since the twenty-fourth meeting of the APANPIRG MET Sub-Group. There has been one meeting of the Meteorological Operations Group Working Group relating to SADIS (WG-MOG15 SADIS<sup>1</sup>) since MET SG/24. The reports from the MOG meetings are published publicly and are available here: <https://www.icao.int/airnavigation/METP/Pages/MOG.aspx>

1.2 Appendix A provides a list of SADIS users located within the Asia Pacific region and is a subset of the latest “Status of Implementation of SADIS” document that can be found on the ICAO METP public webpage.

**2. SADIS Operation**

**November 2020 SADIS upgrade**

2.1 On 4 November 2020, ICAO Annex 3 - *Meteorological Service for International Air Navigation* made it mandatory for States to produce their METARs, TAFs, SIGMETs, AIRMETs, VAA and TCAs in IWXXM format (ICAO Meteorological Information Exchange Model). At the same time SADIS was upgraded to publish the available IWXXM data sets.

2.2 At present only IWXXM data that ROC London has access to can be published, therefore the data set primarily consists of European data. As soon as more inter-regional exchange pathways for IWXXM data are established, this data will automatically go to SADIS.

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<sup>1</sup> Virtual Meeting held on 15 April 2021

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2.3 IWXXM data is published as sets of nested zipped files, with 1-minute, 5-minute and hourly files available. For example, the 5-minute zip file will contain up to five of the 1-minute files (note: a 1-minute file is only created if any new data comes in, so there may not be a file for every minute).

2.4 In addition, on 4 November 2020, improved WAFS hazard data sets became operational in line with changes listed in ICAO Annex 3 Amendment 79. The WAFS hazard data sets (icing, turbulence and cumulonimbus) are provided at an increased horizontal resolution of 0.25 degrees.

**SADIS Efficacy Survey**

2.5 The 2021 SADIS efficacy survey has now commenced and is available via <https://response.questback.com/metoffice/j2snwpjd7s>. All SADIS users are encouraged to participate in this survey prior to 31 December 2021, and invitations to participate in the survey are also being sent out via SADIS administrative messages.

2.6 The SADIS provider would like to thank those who responded last year. The results of the survey can be found here: <https://www.icao.int/airnavigation/METP/15th%20Meeting%20SADIS/METPWGMOG15%20SN03%20-%20SADIS%20Efficacy%20Survey.pdf>

**SADIS Data Catalogue**

2.7 A catalogue of METAR and TAF data usually present on SADIS has been created (from data obtained during a February 2021 monitoring period) so that missing data can be more easily identified. The latest edition of the catalogue is hosted within the documentation section on the SADIS server, and the WG-MOG public webpage (<https://www.icao.int/airnavigation/METP/Pages/Public-Documents.aspx>).

2.8 If a SADIS user identifies that some METAR or TAF data is absent, the list should be consulted to see if it is usually present before reporting it to [sadis.manager@metoffice.gov.uk](mailto:sadis.manager@metoffice.gov.uk). There are two courses of action:

- The aerodrome is listed: the SADIS manager will raise the issue with ROC London who will investigate and work with the other ROCs to try and restore the data.
- If the aerodrome is not listed: the data feeds will be checked to see if the data is internationally disseminated however it may be necessary for the SADIS user to contact the State in question to ask for it to be disseminated internationally.

**Trial of Low-level Area Forecasts in graphical format on SADIS FTP.**

2.9 The group may recall at MET SG/24 that the trial to include Low Level Area Forecasts in Graphical Format on SADIS FTP was continuing. At METP-WG/MOG 10 the decision was made to extend this trial until 2024 unless an IWXXM equivalent product becomes possible (through the creation of new IWXXM low level significant weather components) and is made available through a centralized source.

2.10 If you wish to participate in the trial, please contact the SADIS manager and she will provide information on the specific file naming and sizing conventions that must be adhered to, and instructions on how to transmit the files.

### **SADIS Workstation Evaluations**

2.11 The SADIS provider has put together a SADIS evaluation guide which users can use to evaluate their own systems. The intention of this guide is to assist users in identifying problems with their SADIS data visualization system/software by clearly showing what constitutes an acceptable standard. Users can then feed back any “non-compliance” issues to their software provider.

2.12 The new guide is called the ‘SADIS Workstation Evaluation Guide’ and is hosted in the documentation section on SADIS as well as on the ICAO METP public webpage.

2.13 Individual SADIS Workstation evaluations can still be carried out by the SADIS provider if required, however this work will be chargeable. Please contact the SADIS Manager to discuss should this be required.

### **SADIS Backup Account**

2.14 Users are encouraged to establish and regularly test backup accounts with the alternative provider (WIFS) to be used in the rare event SADIS is unavailable. Information can be found on the ICAO METP public webpage in the “Obtaining access to WIFS as a backup to SADIS FTP” document.

### **Upcoming SADIS Changes (November 2023)**

2.15 In November 2023 the next generation of SADIS will be introduced in order to effectively provide the new higher resolution WAFS data sets. The “SADIS API” will give users the ability to access WAFS gridded data, the new WAFS SIGWX forecasts, and OPMET data sets via a SWIM compliant system<sup>2</sup>. The SADIS API will allow users to customise the data sets to meet their needs but allowing regional sub-setting, as well as the ability to choose the required types or levels of data.

2.16 The OPMET part of the API is currently in development and it is hoped that the initial demonstration version (Beta) will be available for trial use in early to mid-2022. All SADIS users will be invited to try out this new software (via SADIS administrative messages) so that feedback can be gathered and initial set up activities can be started.

## **3. ACTION BY THE MEETING**

3.1 Note the information contained in this paper.

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<sup>2</sup> Conforming to the <https://www.eurocontrol.int/publication/eurocontrol-specification-swim-technical-infrastructure-ti-yellow-profile>

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**Appendix A**

New users in the past year are shown with a highlighted background. Entries in blue will be added to the list when it is next published on the ICAO website.

**STATUS OF IMPLEMENTATION OF SADIS FTP (LISTED BY ICAO REGIONS)****(as 28 February 2021)**

*Note. – Non-operational approved users, and those who no longer take the service (for whatever reason) or who have not used SADIS for a period of at least two years are indicated in italics*

Key:

*SADIS FTP = operational user ('X') of SADIS FTP service*

*\* = approved SADIS hardware and/or software supplier*

ICAO Contracting State		User		Location	SADIS FTP
No	Name	No	Name	Name	
<b>ASIA REGION</b>					
1.	Afghanistan	1.	PACTEC International	Kabul	X
	<i>Afghanistan</i>		<i>National Meteorological Service</i>	<i>Kabul Airport</i>	
2.	Australia	2.	Bureau of Meteorology	Melbourne	X
	Australia	3.	WeatherZone	North Sydney	X
	Australia	4.	Air Services Australia	Canberra	X
3.	Bangladesh	5.	National Meteorological Service	Dhaka Airport	X
4.	Cambodia	6.	State Secretariat of Civil Aviation (SSCA)	Phnom Penh International Airport	X
5.	China	7.	Civil Aviation Administration of China (CAAC)	Aviation Meteorological Center	X
	China	8.	Civil Aviation Administration of China (CAAC)	Beijing Airport	X
	China	9.	Civil Aviation Administration of China (CAAC)	Guangzhou Airport	X
	China	10.	Hong Kong Observatory	Hong Kong Intl. Airport	X
	China	11.	Civil Aviation Authority	Macau Airport	X
	China	12.	Meteorological and Geophysical Bureau	Macau	X
	<i>Democratic People's Republic of Korea</i>		<i>Civil Aviation Authority</i>	<i>Pyongyang Airport</i>	
6.	India	13.	India Meteorological Department	New Delhi	X
	India	14.	Sheory Digital Systems	Mumbai	X
7.	Indonesia	15.	Badan Meteorologi Klimatologi dan Geofisika (BMKG)	Sultan Hasanuddin International Airport, Makassar	X
8.	Lao People's Democratic Republic	16.	Ministry of Natural Resource and Environment	Vientiane International Airport	X
9.	Maldives	17.	National Meteorological Service	Male Airport	X
	<i>Mongolia</i>		<i>Civil Aviation Authority</i>	<i>Ulan Bator Airport</i>	
	<i>Myanmar</i>		<i>DMH</i>	<i>Yangon</i>	
10.	Nepal	18.	National Meteorological Service	Kathmandu Airport	X

<i>ICAO Contracting State</i>		<i>User</i>		<i>Location</i>	<i>SADIS FTP</i>
<i>No</i>	<i>Name</i>	<i>No</i>	<i>Name</i>	<i>Name</i>	
11.	Pakistan	19.	Meteorological Department	Karachi	X
	<i>Sri Lanka</i>		<i>GHP Dharamaratna</i>	<i>Colombo</i>	
12.	Thailand	20.	Thai Meteorological Department	Suvarnabhumi Airport	X
	Thailand	21.	Thai Meteorological Department	Don Mueang Airport	X
13.	Viet Nam	22.	Civil Aviation Authority	Hanoi	X
	Viet Nam	23.	Southern Airports Corporation	Tan Son Nhat Airport, Ho Chi Min City	X
	Viet Nam	24.	Northern Airports Corporation	Noi Bai Int. Airport	X