Agenda Item 4.1: Review of the implementation of WAFS and SADIS

(Cairo, Egypt, 1 - 3 March 2015)

# SUMMARY OF RECENT AND FORTHCOMING DEVELOPMENTS TO THE SADIS

(Presented by the SADIS Provider)

#### **SUMMARY**

This paper reports on the progress of the SADIS since the last meeting of the MID MET Sub Group in September of 2014. Some of these developments have had a direct impact on end users. A number of important developments are planned to the SADIS in future years and these are highlighted in this paper for the consideration of the group.

Action by the meeting is at paragraph 5.

#### 1. Introduction

- 1.1 This paper presents developments to the SADIS since the fifth meeting of the MID MET Sub Group (2<sup>nd</sup> to 4<sup>th</sup> September 2014, Jeddah, Saudi Arabia). The SADIS Operations Group was disbanded in 2015, and the responsibility for overseeing the operational aspects of SADIS is now transferred to the Meteorological Operations Group Working Group (WG-MOG) of the Meteorological Panel (METP). The first meeting of the METP Meteorological Operations Group Working Group (WG-MOG/1) was held 8<sup>th</sup> to 11<sup>th</sup> September, Gatwick. It should be noted that the three other Working Groups¹ under METP will also have roles to play in the development of SADIS.
- 1.2 Users are encouraged to review information available on the ICAO MET Panel webpages at http://www.icao.int/airnavigation/METP/Pages/default.aspx, and provides access to all Working Groups that will report to the METP. Of particular interest will be the reference documents within the WG-MOG section at http://www.icao.int/airnavigation/METP/MOG/Pages/default.aspx. It is understood that for the foreseeable future, the SADIS Operations Group website at URL: http://www.icao.int/safety/meteorology/sadisopsg/Pages/default.aspx will be maintained *as a repository of historical information*.

#### 2. RECENT DEVELOPMENTS

2.1 Cessation of the SADIS 2G satellite broadcast at 1200 UTC, 31 July 2016 (Secure SADIS FTP will continue unaffected)

<sup>&</sup>lt;sup>1</sup> Meteorological Requirements and Integration (WG-MRI), Meteorological Information and Service Development (WG-MISD), and Meteorological Information Exchange Group (WG-MIE).

Owing to the impending decommissioning of the existing satellite platform (Intelsat 904) from which SADIS 2G is broadcast, and following briefing to and discussions with the (then extant) SADISOPSG, the METP/1 meeting agreed that the SADIS 2G satellite broadcast should be withdrawn on 31 July 2016, and that it **would not** be replaced with an alternative satellite broadcast service.

The Secure SADIS FTP service will therefore become the sole method of accessing SADIS from 1200 UTC 31 July 2016.

A separate paper, providing more information on this matter, is presented to this meeting.

Suggested action: All current SADIS 2G users who have not yet obtained access to Secure SADIS FTP are encouraged by the ICAO METP and the SADIS Provider State to transition to the Secure SADIS FTP platform as early as possible. Although the SADIS 2G signal will be available until 1200 UTC 31 July 2016, it is strongly recommended that all SADIS 2G migrate to Secure SADIS FTP by 1 June 2016 at the latest. This will ensure they are fully operational on Secure SADIS FTP well in advance of cessation of the SADIS 2G service.

## 2.2 Implementation of WAFS re-issuance policy for WAFS GRIB2 and WAFS SIGWX forecasts

In accordance with WAFSOPSG Conclusion 7/5 (and as also noted in the separate 'Summary of Recent and Forthcoming Developments to the WAFS' Working Paper); the WAFCs have implemented processes to enable the transmission of corrections to WAFS SIGWX and WAFS GRIB2 forecasts in the event that errors or corruptions are identified. Information with regard to the methodology is provided in Appendix A of the separate "Summary of recent and forthcoming developments to the WAFS" paper presented to this meeting. *Note: The above policy refers only to corrections and does not concern amendments for which there is no requirement.* 

The Secure SADIS FTP service was modified accordingly to ensure that the system processed the correction bulletins in an appropriate manner.

**Suggested action:** It is recommended that users of WAFS data confirm with their software providers that their systems can process corrected WAFS data.

## 2.3 Provision of one-minute updates to traditional alphanumeric OPMET data on Secure SADIS FTP

A change was implemented to permit access to one-minute updates of traditional alphanumeric OPMET data via Secure SADIS FTP on 29 Oct 2014 at 1200 UTC. This addresses WAFSOPSG Conclusion 8/7; and SADISOPSG Conclusion 19/19.

**Suggested action:** It is recommended that users of WAFS data confirm with their software providers that their systems can process the one minute update data.

#### 2.4 Removal of redundant folders on Secure SADIS FTP

Redundant folders relating to GRIB1 and Trial WAFS products were deleted from Secure SADIS FTP on 12 August 2014. For reference, the folders affected are listed below.

- a) GRIB1;
- b) GRIB2/COMPRESSED/EGRR/TRIAL\_FORECASTS; and
- c) GRIB2/COMPRESSED/KWBC/TRIAL FORECASTS

Suggested action: Note this information.

#### 2.5 Increase of Secure SADIS FTP Individual client connections limit

At 1200 UTC on 27 October 2015, and following endorsement by the WG-MOG/1 meeting, the overall bandwidth (that bandwidth that is *shared* between *all* Secure SADIS FTP users) was increased from 16Mbit/sec bursting 24Mbit/sec to 24 Mbit/sec bursting 42Mbit/sec. Individual client connections to Secure SADIS FTP have had the limit raised from 512Kbit/sec to 2048Kbit/sec.

Suggested action: Note this information.

### 2.6 SADIS Gateway mid-life upgrade

The SADIS Gateway Mid-Life Upgrade became operational at 1000 UTC 6th January 2016. This important upgrade will continue to provide the existing functionality in addition to a SADIS Reception Comparator function to monitor 'round-trip' quality of alphanumeric OPMET data on the SADIS system.

Suggested action: Note this information.

#### 2.7 Cessation of distribution of last T4 formatted Volcanic Ash Graphic product

The SADIS Provider ceased distribution of the last T4 formatted Volcanic Ash Graphic product with effect from 1200 UTC 17 November 2015. Note: all ICAO Volcanic Ash Advisories in traditional alphanumeric and the equivalent Volcanic Ash Graphics in PNG format continue to be distributed.

Suggested action: Note this information.

#### 3 FORTHCOMING DEVELOPMENTS

### 3.1 Modification of GRIB2 concatenation processes

The SADIS Provider plans to modify the processes by which WAFS GRIB2 gridded forecasts are presented to the 'GRIB2' folders of the Secure SADIS FTP server. Specifically, the files should only be presented to the 'GRIB2' folders if: a) all required GRIB2 bulletins have been received; or b) if the specified cut-off time threshold has been reached.

Note.— The cut-off times to be applied will be T+4 hours 20 minutes for wind, temperature, humidity, geopotential altitude and tropopause WAFS GRIB2 data; and T+4 hours 50 minutes for cumulonimbus cloud, icing and turbulence WAFS GRIB2 data.

**Suggested action:** Note this information. The change should be transparent to users. Monitor SADIS Administrative messages for updates.

## 3.2 Removal of "Removal of the 'LAST\_18\_ HOURS\_DATA' file from Secure SADIS FTP"

The SADIS Provider plans to remove the 'LAST\_18\_HOURS\_DATA' file from Secure SADIS FTP. This is largely redundant file that is rarely used. Additionally, it is increasingly large and is of limited use.

**Suggested action:** Note this information. The change should be transparent to users since no SADIS Workstation provider makes use of the file. For users who develop bespoke software, monitor SADIS Administrative messages for updates.

### 3.3 Provision of low-level area forecasts in graphical format on Secure SADIS FTP

The SADIS Provider, in coordination with the SADIS Gateway Provider plans to undertake a 6 month trial to make available on Secure SADIS FTP European graphical low-level area forecasts. The trial is expected to take place during the second quarter of 2016.

**Suggested action:** Note this information. Monitor SADIS Administrative messages for updates regarding the trial.

#### 4 STANDING ARRANGEMENTS

#### 4.1 Access to Internet based services (Secure SADIS FTP/WIFS)

SADIS users are encouraged to apply for WIFS accounts for the establishment of backup/contingency processes in the rare event of a failure of SADIS. Users should note that there are agreed policies with regard to accessing data from SADIS and WIFS, and the use of such backup/contingency accounts. Details are available on the SADISOPSG Website:

http://www.icao.int/safety/meteorology/sadisopsg/SADIS%20User%20Guide/Obtaining%20access%20to%20WIFS%20as%20a%20backup%20to%20SADIS%20FTP.pdf.

Note, it is the user's responsibility to apply for and arrange a WIFS account. *The SADIS Provider is not in a position to arrange such accounts on behalf of users.* 

Suggested action: Note this information. Users are encouraged to establish and regularly test backup accounts with the alternative provider to be used in the rare event that their normal service (Secure SADIS FTP or WIFS, as specified by Regional Air Navigation Plan) is unavailable.

## 5. ACTION BY THE MEETING

- 5.1 The meeting is invited to:
  - a) note the information in this paper; and
  - b) consider the 'suggested actions' as appropriate.

- END -