

EIGHTEENTH MEETING
SADIS OPERATIONS GROUP
(Dakar, Senegal, 29 to 31 May 2013)

EXECUTIVE SUMMARY¹

1. INTRODUCTION

1.1 The eighteenth meeting of the SADIS Operations Group (SADISOPSG/18) was held at the Western and Central African (WACAF) Regional Office, Dakar, 29 to 31 May 2013. Twenty-eight (28) participants from eight (8) States, including the focal point representative of the European OPMET Data Management Group (EUR OPMET DMG), and three (3) international organizations (the Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA), the International Air Transport Association (IATA) and the World Meteorological Organization (WMO)) attended the meeting.

1.2 As Chair, Ms. Gaborekwe Khambule (South Africa) presided over the meeting throughout its duration, assisted by Ms. Juan Zou (China) as Vice-Chair.

2. FOLLOW-UP OF SADISOPSG/17 CONCLUSIONS

2.1 With regard to the follow-up of the SADISOPSG/17 conclusions, the group agreed that action had been completed on all of the conclusions (Decision 18/1).

3. OPERATION OF THE SADIS

3.1 With regards to the SADIS strategic assessment tables, included in the annual SADIS management report, the group agreed that taking into account the maturity of SADIS, whereby changes had not been significant over the last 10 years and that future changes to service delivery would be explicitly considered by the group on a case-by-case basis, the group agreed that the SADIS strategic assessment tables no longer added value and should therefore henceforth be eliminated from the annual SADIS management reports (Decision 18/2). Concerning the annual SADIS management report, which provides a point of reference for the reporting of important SADIS-related events during the period under review (previous 12-months) and a repository for information relating to the provision and availability of the service, the group reviewed and endorsed a revised content of the annual SADIS management report to be henceforth used as the basis of the annual reports (Decision 18/3).

3.2 With regards to the list of SADIS operational focal points, the group concurred that it provided useful contacts for the SADIS Provider State and the ICAO Regional Offices concerned to resolve operational issues, and agreed that ICAO should update the list in time for the dispatch of the SADIS efficacy questionnaire in December 2013 (Conclusion 18/4).

3.3 The group reviewed the operation of SADIS during 2012/2013 based on the annual management report from the SADIS Provider State and on responses from forty-five States to the annual questionnaire on the operational efficacy of the SADIS. Concerning the annual questionnaire, the group was pleased to note the consistently high percentage of users reporting good availability of the OPMET information and the WAFS forecasts on both the SADIS 2G satellite broadcast and the Secure SADIS

¹The full report is available at the following website: www.icao.int/safety/meteorology/sadisopsg/

FTP service. Taking into account forthcoming changes to SADIS service, specifically the cessation of the WAFS upper-air gridded global forecasts in WMO GRIB 1 code form in view of the availability of superior WAFS products in WMO GRIB 2 code form, as well as other changes of a mainly editorial nature, the group agreed to a revised content of the annual questionnaire to be used for the dispatch of the 2013/2014 SADIS operational efficacy questionnaire in December 2013 (Decision 18/5).

3.4 The group, including IATA, agreed that the SADIS 2G satellite broadcast and the Secure SADIS FTP service had continued to meet the operational requirements during the period under review (namely 2012/2013) and that the SADIS Cost Recovery Administrative Group (SCRAG) be informed accordingly (Conclusion 18/6).

3.5 The group reviewed the SADIS inventory for 2013/2014, and, in order to ensure that SADIS continued to meet the approved operational requirements, proposed amendments to the inventory that would be forwarded to the SCRAG accordingly (Conclusion 18/7).

4. CONTENT OF THE SADIS BROADCAST

4.1 OPMET information

4.1.1 The group considered matters related to the non-implementation of the requirements for OPMET information on SADIS – more specifically, the lack of availability of METAR/SPECI and TAF from certain aerodromes within States. In this regard, recognizing the importance of the OPMET information for users, and that States are required to provide or have agreed to provide the OPMET information from the AOP aerodromes or non-AOP aerodromes respectively listed in Annex 1 of the SADIS User Guide (SUG), the group concurred that regional OPMET bulletin exchange schemes that exist in all ICAO Regions should be aligned with the OPMET information requirements contained in Annex 1 of the SUG and that States whose OPMET information had been identified as “not available” on SADIS should ensure that the OPMET information is produced as a matter of urgency and disseminated through the regional OPMET bulletin exchange schemes (Conclusion 18/8).

4.1.2 With regards to the requirements for OPMET information (METAR/SPECI and TAF) from non-AOP aerodromes, the group reviewed a revision of the requirements based on a proposal made by IATA. In this regard, the group agreed that States should be consulted accordingly on the new or amended requirements and that States that have notified of their concurrence to provide the OPMET information from non-AOP aerodromes should, as part of the consultation, be requested to provide an indication of the availability of the OPMET information concerned (Conclusion 18/9).

4.1.3 The group noted that the level of alignment of the scheduled OPMET information on SADIS and the WAFS Internet File Service (WIFS) with Annex 1 of the SUG continued to show improvement. For example, the SADIS Provider State has attained a level of alignment of at least 95 per cent for METAR/SPECI and TAF. In respect of the level of alignment of the OPMET information available on the SADIS with the WIFS, the group agreed that the provider States concerned, in coordination with the European OPMET Data Management Group, should continue efforts to align the scheduled and, to the extent possible, the non-scheduled OPMET information (Conclusion 18/10).

4.1.4 Appreciating that quality controlled OPMET information was made available on the SADIS 2G satellite broadcast and the Secure SADIS FTP service as routine, and that the quality control of the information was undertaken by the SADIS Gateway in accordance with the SADIS Gateway Operations Handbook, the group gave due consideration to the provision of non-quality controlled OPMET information on SADIS during periods of service disruption. The group agreed that non-quality controlled OPMET data should be made available on SADIS, by the SADIS Provider State, during such contingency circumstances until normal service resumed (Decision 18/11).

4.2 WAFS forecasts

4.2.1 The group noted forthcoming changes to the provision of WAFS forecasts from the world area forecast centres (WAFCs) in line with the applicability of Amendment 76 to Annex 3 on 14 November 2013. Specifically, the cessation of WAFS upper-air gridded global forecasts in WMO GRIB 1 code form (in view of the operational availability of superior forecasts in GRIB 2 code form), the availability of WAFS forecasts in GRIB 2 code form for flight level (FL) 410, and the availability of WAFS forecasts in GRIB2 code form for icing, turbulence, cumulonimbus cloud which can be used operationally with effect Amendment 76. In view of these developments, the group determined the associated implications of the provision of the WAFS forecasts on SADIS 2G satellite broadcast and the Secure SADIS FTP service, including necessary modifications to the Secure SADIS FTP service folder structure (Conclusions 18/12, 18/13, 18/14 and 18/15).

5. DEVELOPMENT OF THE SADIS

5.1 Report of the SADISOPSG Technological Developments Team

5.1.1 The group recalled that the SADISOPSG Technological Developments Team (TDT) was expected to monitor, report, and propose action on, technological developments having an impact on SADIS. The group noted that the issues dealt with by the SADISOPSG TDT since the last meeting were related to:

- a) recommendations concerning the provision of a satellite-based distribution system beyond 2015;
- b) initiation of integrated services digital network (ISDN) backup tests on SADIS 2G;
- c) maintenance of the SADIS 2G ground segment infrastructure; and
- d) implementation of a mid-life upgrade to the SADIS Gateway Coremet system (NATS Message switch).

5.1.2 In respect of recommendations concerning the provision of a satellite-based distribution system, having considered a detailed report of the options available and the associated costs and impacts on States/users and taking into account other associated developments including the imminent introduction (as part of Amendment 76 to Annex 3) of the exchange of OPMET information in a digital format, the group agreed to recommend to the Meteorology Divisional Meeting to be held in Montreal in July 2014 that the existing SADIS 2G satellite broadcast should be extended beyond 2015 but only until November 2019 (Conclusion 18/16).

5.1.3 In respect of the initiation of ISDN backup tests on SADIS 2G, which had been requested at the last meeting, the group was pleased to learn that such backup tests had been successfully initiated by the SADIS Provider State and used operationally several times to prevent interruption of SADIS 2G during periods of essential work. In respect of the maintenance of the SADIS 2G ground segment infrastructure, the group was pleased to learn that the SADIS Provider State had procured a replacement SMS-301 modem protection switch as requested at the last meeting.

5.1.4 In respect of the implementation of a mid-life upgrade to the SADIS Gateway Coremet system (Message switch), noting that the SADIS Gateway provides 24/7 functionality to ingest, collate, quality control and distribute OPMET information to States/users around the world via the SADIS infrastructure, and recognizing the main expected benefits associated with the mid-life upgrade included extendible ATS message handling system (AMHS) capability, ingestion, conversion and delivery of

OPMET information in XML/GML digital data formats, ingestion and re-distribution of WAFS forecasts in GRIB 2 code form, various capacity improvements, and enhanced monitoring and data comparison capability, the group agreed that the SADIS Provider State should proceed with the implementation of the SADIS requirements and capability within the mid-life upgrade to the Coremet message switch system at the SADIS Gateway (Conclusion 18/17).

5.2 **SADIS satellite broadcast**

5.2.1 Having been provided with a necessary progress report on the implementation of alternative SADIS 2G uplink/downlink monitoring at the SADIS Provider (United Kingdom Met Office) and SADIS Gateway (United Kingdom NATS), the group was apprised that a weaker-than-expected SADIS 2G satellite reception signal at the SADIS Provider premises was resulting in too many “false alarms” of missing data. In this regard, the group agreed that the SADIS Provider should continue its investigations to determine the root cause so that it could fulfil its uplink/downlink monitoring commitments (Conclusion 18/18).

5.3 **SADIS Internet-based FTP Service**

5.3.1 Having considered a detailed report into increasing the allocated bandwidth of the Secure SADIS FTP service (i.e. the bandwidth between the SADIS Provider and the SADIS Provider’s Internet service provider) and taking into account the day-to-day utilization of Secure SADIS FTP – which demonstrated identifiable “peaks” in utilization around the time of the availability of the WAFS forecasts in GRIB code form – the group agreed that the SADIS Provider State should implement an increased bandwidth allocation for Secure SADIS FTP together with ‘Dynamic Partitioning’ which enforce a fairer allocation of available bandwidth between users (Conclusion 18/19).

5.4 **SADIS workstation software evaluations**

5.4.1 The group reviewed and endorsed an update to the fourth-round SADIS workstation software evaluation criteria and agreed to further encourage the SADIS workstation software providers to have their software packages evaluated against the (updated) fourth round criteria (Decision 18/20 and Conclusion 18/21).

6. **LONG-TERM PLANNING OF SADIS**

6.1 Based on an update by the SADIS Provider State, the group endorsed a concise long-term plan for SADIS for the years 2014 to 2018 inclusive (Decision 18/22).

7. **THE SADIS USER GUIDE**

7.1 The group reviewed and endorsed an amendment to the fifth edition of the SADIS User Guide, available on the SADISOPSG website, which addressed, *inter alia*, improved specificity of the WAFS forecasts available on SADIS, the elimination of references to the (now decommissioned) Classic SADIS FTP service, clarification on the use of Secure SADIS FTP by authorized users, and Secure SADIS FTP and WIFS operational use criteria (Decision 18/23).

8. **FUTURE WORK PROGRAMME**

8.1 The group reviewed and updated the deliverables in its work programme for the years 2013 to 2013 inclusive (Decision 18/24).

9. **ANY OTHER BUSINESS**

9.1 **SADIS administrative messages**

9.1.1 In being apprised of Conclusion 7/8 of the World Area Forecast System Operations Group (WAFSOPSG), the group agreed that there was a need to refine the definitions used for the administrative messages used on SADIS to notify users of, *inter-alia*, new or updated guidance, system documentation or changes to WAFS/SADIS-related services (Conclusion 18/25). In addition, the group agreed that the SADIS Provider should enhance the complement of SADIS administrative messages available on the SADIS Operational Administrative Messages webpage, as a supplement to their continued availability on the SADIS 2G satellite broadcast and Secure SADIS FTP service (Conclusion 18/26).

9.2 **SADIS user registration form**

9.2.1 Taking into account the recent success of a SADIS user registration form used for the migration of users to the Secure SADIS FTP service, the group agreed that the SADIS Provider should implement a suitably modified form to augment the standing SADIS authorized access process which would ensure that, once approved by the meteorological authority of the State concerned, all users would supply the same, structured information in a formal manner to the SADIS Provider to facilitate record keeping (Conclusion 18/27).

9.3 **ICAO provisions regarding WAFS satellite distributions systems and Internet-based services**

9.3.1 In considering whether amendment to or clarification of references to the WAFS satellite distribution systems and Internet-based services was required in ICAO provisions – taking into account recent developments such as the cessation of the ISCS G2 satellite broadcasts by the WAFS Washington Provider State in July 2012 – and recognizing their intended use in time-critical or non-time critical aeronautical applications, the group agreed that ICAO provisions (specifically Annex 3 – *Meteorological Service for International Air Navigation*) warranted review and update by the WAFSOPSG in this regard (Conclusion 18/28).