

SEVENTEENTH MEETING

SADIS OPERATIONS GROUP (Cairo, Egypt, 29 to 31 May 2012)

EXECUTIVE SUMMARY¹

1. INTRODUCTION

1.1 The seventeenth meeting of the SADIS Operations Group (SADISOPSG/17) was held at the Middle East (MID) Regional Office, Cairo, 29 to 31 May 2012. Fifteen (15) participants from nine (9) States, including the focal point representative of the European OPMET Data Management Group (EUR OPMET DMG), and one international organization (the International Air Transport Association (IATA)) attended the meeting.

1.2 The group elected Ms. Gaborekwe Khambule (South Africa) as the Chair of the group, and Ms. Zou Juan (China) as the Vice-Chair. Ms. Khambule presided over the meeting throughout its duration.

2. FOLLOW-UP OF SADISOPSG/16 CONCLUSIONS

2.1 With regard to the follow-up of the SADISOPSG/16 conclusions, the group noted that action had been completed on all the conclusions except for Conclusions 16/12 and 16/23 a). In respect of Conclusion 16/12, the group noted that the prioritization of WAFS forecasts in the GRIB code form on SADIS would be implemented on 5 July 2012 in accordance with the previously agreed schedule. In respect of Conclusion 16/23 a) concerning the restoration of a comparator functionality for the SADIS second-generation (SADIS 2G) satellite broadcast, the group agreed to implement alternative monitoring capability under Conclusion 17/28 (Decision 17/1).

3. OPERATION OF THE SADIS

3.1 With regards to the SADIS management report, prepared annually by the SADIS Provider State, the group agreed to conduct a review of its future content to ensure that it remained a point of reference for the reporting of important SADIS-related events during the period under review, and a repository for information relating to the provision and availability of the service (Conclusion 17/2).

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 2012 (Conclusion 17/3).

3.3 The group reviewed the operation of SADIS during 2011/2012 based on the annual management report from the SADIS Provider State and on responses from fifty-three States to the annual questionnaire on the operational efficacy of the SADIS. Concerning the annual questionnaire, the group was particularly pleased to note the consistently high percentage of users reporting good availability of the world area forecast system (WAFS) forecasts (in GRIB and BUFR code forms) and OPMET information on both the SADIS 2G satellite broadcast and the SADIS Internet-based file transfer protocol

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

(FTP) services. Recognizing that the SADIS FTP service would be withdrawn from service on 30 November 2012 (in accordance with Conclusion 16/15), and given the availability (on SADIS) of WAFS forecasts in the GRIB 2 code form in addition to GRIB 1 code form, the group agreed to a revision to the format of the annual questionnaire in this regard (Decision 17/4). The group, including IATA, also agreed that the SADIS satellite broadcast and SADIS Internet-based FTP services had continued to meet the operational requirements during the period under review and that the SADIS Cost Recovery Administrative Group (SCRAG) be informed through its Chair accordingly (Conclusion 17/5).

3.4 The group reviewed the SADIS inventory for 2012/2013, 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 through its Chair accordingly (Conclusion 17/6). The group agreed that a recently identified faulty switch on the SADIS 2G uplink infrastructure should be replaced by the SADIS Provider State to maintain the expected level of service resilience, acknowledging the associated costs and timescale to implement a replacement unit, and that the SCRAG be informed through its Chair accordingly (Conclusion 17/7).

3.5 The group reviewed and consequently endorsed a policy that describes the process for determining from which Internet-based service (SADIS FTP/Secure SADIS FTP and/or the WAFS Internet File Service (WIFS)) a State/user should obtain authorized access to the OPMET information and WAFS forecasts (Decision 17/8), and noted that this was included in a new (fifth) edition of the SADIS User Guide accordingly.

4. CONTENT OF THE SADIS BROADCAST

4.1 OPMET information

4.1.1 With regards to recurrent requests for the modification of TAF requirements from AOP aerodromes, it was recalled that such requests should be addressed to the ICAO regional office(s) concerned, since the provision of TAF was subject to formal regional air navigation (RAN) agreement. Meanwhile, the group reviewed a proposal made by IATA concerning OPMET information from non-AOP aerodromes. The group noted that the proposal also included a request by the Netherlands, through IATA, that included OPMET information from offshore structures (non-AOP) located in the North Sea to align with the facilities and services implementation document (FASID) Table MET 1C of the ICAO European Air Navigation Plan (Doc 7754). Having reviewed and endorsed the aforementioned proposals, the group tasked the Secretariat to modify the requirements, subject to States' concurrence, accordingly (Conclusion 17/9).

4.1.2 With regards to the harmonization of OPMET information on SADIS and the ISCS/WIFS, the group agreed to readdress the issue in the form of an alignment activity of SADIS and WIFS with Annex 1 of the SADIS User Guide (noting that ISCS would be withdrawn on 1 July 2012) (Conclusion 17/10). In view of a need to maintain the currency of OPMET information requirements and provision on SADIS and ISCS/WIFS, the group agreed to the establishment of a notification process for the SADIS and ISCS/WIFS Gateway Providers and the regional OPMET data banks when updates to Annex 1 of the SADIS User Guide have taken place (Conclusion 17/11).

4.1.3 The group, including IATA, reaffirmed a requirement recorded at SADISOPSG/1 for the dissemination of special air-reports on SADIS (Decision 17/12) and agreed that SADIS Gateway implement necessary routing of such reports received to the SADIS broadcast accordingly (Conclusion 17/13). In addition, the group requested the development, by an appropriate ICAO group, of a draft amendment proposal to Annex 3 – *Meteorological Service for International Air Navigation* that provides for the dissemination of special air-report to the centres designated by regional air navigation agreement for the operation of aeronautical fixed service satellite distributions systems (Conclusion 17/14).

Recognizing that the incorrect allocation, by States, of WMO abbreviated header lines (AHL) for special air-reports could hamper availability at the SADIS Gateway and thus on the SADIS broadcast, the group agreed to the establishment of an inventory of WMO AHLs used by States to promulgate special air-reports (Conclusion 17/15).

4.2 WAFS forecasts

4.2.1 With regards to Annex 4 to the SADIS User Guide, which lists the WAFS forecasts disseminated on SADIS, the group noted that no substantive changes to WAFS service provision had occurred since the last meeting. However, as part of the annual review of the SADIS User Guide, Annex 4 had been realigned concerning the WAFS GRIB and significant weather (SIGWX) forecast content and the examples of WAFS SIGWX forecast charts. Additionally, there had been a transfer of non-WAFS related material from Annex 4 of the SADIS User Guide to a new Annex (namely Annex 5).

5. DEVELOPMENT OF THE SADIS

5.1 Report of the SADISOPSG Technical Developments Team

5.1.1 The group recalled that the SADISOPSG Technical Developments Team 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 Technical Developments Team since the last meeting were related to:

- a) Establishment of an integrated services digital network (ISDN) backup capability for SADIS 2G;
- b) Establishment of a threshold for an operational data volume concerning the SADIS FTP/Secure SADIS FTP services; and
- c) Procurement of an additional VadEdge 4200 unit at the SADIS Provider for improved SADIS 2G reception capability.

5.1.2 In respect of the establishment of an ISDN backup capability for SADIS 2G between the ISCS/WIFS Gateway Provider and the SADIS Gateway Provider; and between the SADIS Gateway Provider and the SADIS satellite uplink facility, the group was pleased to note that a test programme instigated since the last meeting had demonstrated the operational capability of the link, and that the link had proven very effective during an operational contingency mode in July 2011. The group agreed that the ISDN backup capability for SADIS 2G could therefore be considered operational (Decision 17/16). In addition, the group invited to SADIS Provider State to initiate routine tests and optional stress tests of the ISDN link, with the costs associated with such tests and any operational activation of the backup arrangement being recoverable under the SADIS cost recovery arrangement. In this regard, the group requested that the SCRAG being informed through its Chair accordingly (Conclusion 17/17).

5.1.3 In respect of the establishment of a threshold of data volume to be used to determine if a user of the SADIS Internet-based FTP services (SADIS FTP/Secure SADIS FTP) was making use of the service(s) operationally, and in view of the availability of the WIFS as a backup for authorized SADIS users, the group reviewed and endorsed access criteria (Decision 17/18), and concurred that they be considered for inclusion in the SADIS User Guide accordingly (Conclusion 17/19).

5.1.4 In respect of the procurement of an additional VadEdge 4200 unit to align the SADIS Provider State's SADIS 2G reception capability with that of the users, the group was pleased to learn that an additional VadEdge 4200 unit had been procured in August 2011.

5.2 **SADIS satellite broadcast**

5.2.1 The group reviewed a comprehensive report by an ad-hoc group concerning the future of the SADIS satellite broadcast beyond 2015. The report provided a technical overview of satellite and alternative technologies, future data content, and costs estimates for a range of possible solutions. The group noted that the ad-hoc group had concluded that if any significant change to the current SADIS 2G satellite broadcast were considered necessary, then guidance should be sought from the planned ICAO Meteorology Divisional Meeting in 2014 due to the potentially far-reaching consequences for SADIS user States. In addition, the group recognized that there was a need to consider future (SADIS) service provision in the context of the aviation system block upgrades (ASBU) concept that was forming a principle component of the ICAO's Twelfth Air Navigation Conference (AN-Conf/12) in November 2012 in view of fostering the implementation of the global air traffic management system. In this regard, the group agreed to develop recommendations concerning future (SADIS) service provision in time for the next meeting (Conclusion 17/20).

5.3 **SADIS Internet-based FTP Service**

5.3.1 Recalling that the SADIS FTP service would be withdrawn on 30 November 2012, and taking into account a comprehensive progress report prepared by the SADIS Provider State on the SADIS FTP and Secure SADIS FTP services, the group agreed that States/users should be reminded of the importance of registering for, migrating to and making operational use of the Secure SADIS FTP service (Conclusion 17/21). In addition, the group agreed that progress reports on the SADIS Internet-based FTP services be ceased forthwith, noting that usage and availability statistics would instead be included in the annual SADIS management report (Decision 17/22).

5.3.2 Taking into account an investigation conducted by the WAFS Implementation Task Force of the CNS/MET Sub-Group of the APANPIRG concerning the operational use of services and products from service providers of the WAFS in the Asia/Pacific Region, including the Secure SADIS FTP Service, the group concluded that it would be beneficial to conduct a feasibility study into increasing the allocated bandwidth of the Secure SADIS FTP service in time for the next meeting (Conclusion 17/23).

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 2013 to 2017 (Decision 17/24).

7. **THE SADIS USER GUIDE**

7.1 The group noted that amendments to the SADIS User Guide had been necessary to take into account, *inter alia*, the cessation (on 30 November 2012) of the SADIS FTP service, the cessation of the ISCS G2 satellite broadcast (on 1 July 2012), the distribution of GRIB 2 code form WAFS forecasts on SADIS, enhancement of Annex 4 of the SADIS User Guide and the development of a (new) Annex 5 of the SADIS User Guide, and the transfer of the terms of reference of the SADISOPSG from the SADIS User Guide to the SADISOPSG website². In view of the scope of these changes, and others of a largely editorial nature, the group endorsed a new (fifth) edition of the SADIS User Guide accordingly (Decision 17/25).

² www.icao.int/safety/meteorology/sadisopsg/

8. FUTURE WORK PROGRAMME

8.1 The group reviewed and endorsed (as editorial and factual changes) a revision to the terms of reference of the SADISOPSG that took into account an update to the roles of the SADISOPSG and the European OPMET Data Management Group, realignment of regional aeronautical information services (AIS) groups, and alphabetical re-ordering of concerned ICAO planning and implementation regional groups (PIRGs) (Decision 17/26). In addition, the group reviewed and updated the deliverables in its work programme for the years 2012 to 2016 (Decision 17/27).

9. ANY OTHER BUSINESS

9.1 SADIS 2G comparator functionality

9.1.1 Concerning the restoration of the SADIS 2G comparator functionality that would enable SADIS 2G uplink/downlink monitoring at the SADIS Provider State, the group concurred that in view of continued problems in implementing an originally proposed topology, and due to newly installed infrastructure that could be used to more effectively to monitor data on the SADIS Provider's premises, an alternative approach be taken. In this regard, the group agreed to the implementation of an alternative SADIS 2G uplink/downlink monitoring topology (Conclusion 17/28).

9.2 SADIS 2G data losses

9.2.1 The group considered a comprehensive report into user-reported data error types on the SADIS 2G satellite broadcast. The investigation had proven that the SADIS 2G transmission was reliable, and fully meets ICAO Annex 10 – *Aeronautical Telecommunications*, Volume III (Communications Systems), 10.2.1 provisions concerning service via satellite for the dissemination of WAFS products. Accordingly, the group agreed that the investigation into data losses on the SADIS 2G satellite broadcast be considered closed (Decision 17/29).

9.3 Impending cessation of the ISCS satellite broadcast

9.3.1 The group was informed that in lieu of the operational availability of WIFS, the ISCS/WIFS Provider State would be terminating the ISCS G2 satellite broadcast on 1 July 2012. In this regard, and noting that a number of existing SADIS-related documents make reference to ISCS and/or WIFS, the group agreed that all references to ISCS should be replaced by WIFS accordingly unless they were to be maintained for historical context (Conclusion 17/30).

9.4 Annual support to SADIS provided by the ICAO Secretariat

9.4.1 Noting discussions that had taken place during the tenth, eleventh and twelfth meetings of the SADIS Cost Recovery Administrative Group (SCRAG) concerning a review of the costs attributable for the annual support to SADIS provided by the ICAO Secretariat, the group reviewed and endorsed an inventory of tasks undertaken before, during and after each SADISOPSG meeting and recurrent tasks (such as the maintenance of Annex 1 of the SADIS User Guide), and requested that the SCRAG be informed through its Chair accordingly (Conclusion 17/31).