



**WORKING PAPER**

**SATELLITE DISTRIBUTION SYSTEM OPERATIONS GROUP (SADISOPSG)**

**THIRTEENTH MEETING**

**Dakar, Senegal, 27 to 29 May 2008**

**Agenda Item 8: Future work programme**

**UPDATE OF THE WORK PROGRAMME**

(Presented by the Secretary)

**SUMMARY**

The group will review and update its work programme based upon updated executive summaries for each task attached to this working paper.

**1. INTRODUCTION**

1.1 Under this agenda item, the group should undertake the customary review of its work programme.

**2. TERMS OF REFERENCE**

2.1 The group will note the composition of the group and its terms of reference shown in Appendix A to this paper. The group will recall that the terms of reference reflect the overall tasks of the group and need to be revised only when major changes are introduced to the SADIS programme. Furthermore, any change (except for editorials and factual changes) would have to be subject to a draft conclusion to be endorsed by all the planning and implementation regional groups (PIRG) concerned. It may be agreed that there is no need to amend the terms of reference at this meeting.

**3. REVISION OF THE WORK PROGRAMME**

3.1 The group may wish to review its work programme which is shown in Appendix B to this working paper. When reviewing the work programme, the group is expected to update the following elements:

- a) future work programme for 2008 to 2012;

- b) executive summaries for each recurrent task; and
- c) terms of reference of the following teams:
  - 1) SADISOPSG Gateway Development Team;
  - 2) SADISOPSG Strategic Assessment Team; and
  - 3) SADISOPSG Technical Developments Team.

3.2 It will be noted that the draft work programme has been subject to only editorial improvements which do not influence its substance.

3.3 The group is invited to review the draft work programme, endorse the changes proposed and formulate the following decision:

**Decision 13/... — Future work programme of the SADISOPSG**

That, the work programme of the group be updated as shown in Appendix<sup>1</sup>.... to this report.

*Note. — The Secretariat will place the updated work programme on the SADISOPSG website.*

**4. ACTION BY THE SADISOPSG**

4.1 The SADISOPSG is invited to:

- a) note the information in this paper;
- b) review the draft work programme; and
- c) decide on the draft decision proposed for the group's consideration

— — — — —

---

<sup>1</sup> The updated work programme is at Appendix B to this working paper.

## **APPENDIX A**

### **COMPOSITION AND TERMS OF REFERENCE**

#### **COMPOSITION**

China, Côte d'Ivoire, Egypt, Germany, India, Kenya, Netherlands, Russian Federation, Saudi Arabia, Senegal, South Africa, Ukraine, United Kingdom, United States, Agency for the Security of Aerial Navigation in Africa and Madagascar (ASECNA), International Air Transport Association (IATA) and World Meteorological Organization (WMO).

#### **1. TERMS OF REFERENCE**

1.1 The SADIS Operations Group should keep under review the SADIS operations to ensure that the system meets agreed requirements. It should also make recommendations to ICAO for the further development of the SADIS. In its work the group should take into account the financial implications of its technical and operational decisions and conclusions. The group should:

Coordinate with States in the area served by the system on the following:

- 1) identification of user States' requirements;
  - 2) content and schedule of broadcasts with the WAFC provider State based on user States' requirements identified under a) above; and
  - 3) necessary remedial action to overcome identified deficiencies.
- b) Organize the flow of message traffic to:
- 1) define and establish OPMET collection exchange/dissemination programmes in close co-ordination with the MET and CNS/MET Sub-groups concerned in the AFI, ASIA, EUR and MID Regions;
  - 2) review channelling and routing schemes; and
  - 3) establish transmission priorities.
- c) Ensure SADIS adherence to relevant ICAO and WMO standards, recommended practices and procedures.
- d) Organize the monitoring of the service to ensure the service meets user requirements.

- e) Monitor and review, as necessary, back-up procedures.
- f) Liaise effectively with operational, and when required financial, experts in user States; other ICAO management groups; SCRAG; VAACs; TCACs; and the two WAFCs to develop recommendations, as necessary, for consideration by ICAO to ensure that the SADIS evolves to meet existing and future aeronautical requirements in harmony with developments the WAFS.
- g) Coordinate the operational aspects of the joint ICAO/WMO use of the system as regards ICAO aeronautical requirements.
- h) Study the use of SADIS for the collection and distribution of AIS information in co-operation with the EUR AFS Group and the EUROCONTROL EATMP AIS Team, APANPIRG AFS Management Task Force and ATS/AIS/SAR Sub-group, and MIDANPIRG AIS/ATM Sub-group.
- i) Report regularly to the EANPG, APIRG, MIDANPIRG and APANPIRG regarding the status of SADIS and on the activities of the SADIS Operations Group (SADISOPSG).

— — — — —

APPENDIX B

FUTURE WORK PROGRAMME 2008-2012

ID	Task	Source	Recent progress Next milestone and its deadline			Final results (completion)
1.	Oversee the implementation and operation of SADIS	SADISOPSG 1/4 , 1/8 and 2/3 b)	Information provided at SADISOPSG/13			management report (annual); operational efficacy statement (annual); update to inventory (annual); annual updates to the long-term plan
			F/U of SADISOPSG/13	13/06/08	P	
2.	Develop, maintain and monitor the SADIS broadcast content, schedule and priorities	143-5; 149/18 (TOR)	Data-base oriented Annex 1 and FASID Table MET 1A operational			amendments to Annex 1 and Annex 4 of the <i>SADIS User Guide</i> (annual)
			F/U of SADISOPSG/13	13/06/08	P	
3.	Organize the flow of OPMET message and NOTAM traffic through SADIS gateway to SADIS node	143-5; 149/18 (TOR) EANPG 38/33	Review SADISOPSG/12			amendments to the <i>SADIS Gateway Operations Handbook</i> (annual)
			F/U of SADISOPSG/13	13/06/08	P	
4.	Prepare a 5-year outlook for volumes of OPMET and NOTAM data to be broadcast on the SADIS	SADISOPSG 2/9	Update based on reports from the PIRGs concerned at SADISOPSG/13			Update to the Strategic Assessment Tables (annual)
			F/U of SADISOPSG/13	13/06/08	P	
5.	Monitor, report on and propose technological developments having an impact on the SADIS	SADISOPSG 3/13	Report at SADISOPSG/13			(Draft) conclusions to the SADIS Provider State (and PIRGs) (annual)
			F/U of SADISOPSG/13	13/06/08	P	
6.	Maintain, update and extend, as necessary, the <i>SADIS User Guide</i>	EANPG 37/20	New fourth edition endorsed at SADISOPSG/13			Amendments to the <i>SADIS User Guide</i> (annual)
			WP for SADISOPSG/14	30/04/09	P	
7.	Study the potential impact of the introduction of BUFR-coded METAR/SPECI and TAF on the SADIS gateway operations	SADISOPSG 9/13	Work suspended until the results of the WMO ET on XML are known			SADISOPSG/15 (05/2010)
			WP for SADISOPSG/14	30/04/09	P	

## SADISOPSG EXECUTIVE SUMMARIES OF RECURRENT TASKS

### SADISOPSG Task No. 1: Implementation and operation of SADIS

**Task:** Routine issuance of annual management report, operational clearance and update of SADIS inventory for submission to SCRAG.

**Source:** SCRAG

**Coordination:** SCRAG, WAFC London

**Output:** Annual management report by the Provider State  
Annual statement of SADIS operational efficacy by the SADISOPSG Operational Efficacy Assessment Team  
Annual amendment to the SADIS Inventory by the SADIS Provider State  
Annual amendment to the long-term plan

**Progress:** 1995/1996 operational clearance and inventory issued by SADISOPSG/1  
1996/1997 operational clearance and updated inventory issued by SADISOPSG/2  
1997/1998 operational clearance and inventory issued by SADISOPSG/3  
1998/1999 operational clearance and inventory issued by SADISOPSG/4  
1999/2000 operational clearance and inventory issued by SADISOPSG/5  
2000/2001 operational clearance and inventory issued by SADISOPSG/6  
2001/2002 operational clearance and inventory issued by SADISOPSG/7  
2002/2003 operational clearance and inventory issued by SADISOPSG/8  
2003/2004 operational clearance and inventory issued by SADISOPSG/9  
2004/2005 operational clearance and inventory issued by SADISOPSG/10  
2005/2006 operational clearance and inventory issued by SADISOPSG/11  
2006/2007 operational clearance and inventory issued by SADISOPSG/12  
2007/2008 operational clearance and inventory issued by SADISOPSG/13

**References:** SADISOPSG/1 Conclusions 1/6 and 1/8;  
SADISOPSG/2 Conclusions 2/2, 2/3 and 2/5;  
SADISOPSG/3 Conclusion 3/7  
SADISOPSG/4 Conclusions 4/5 and 4/6  
SADISOPSG/5 Conclusions 5/5 and 5/7  
SADISOPSG/6 Conclusions 6/5 and 6/6  
SADISOPSG/7 Conclusions 7/4 and 7/5  
SADISOPSG/8 Conclusions 8/4 and 8/5  
SADISOPSG/9 Conclusions 9/6 and 9/7  
SADISOPSG/10 Conclusions 10/6 and 10/7  
SADISOPSG/11 Conclusions 11/5 and 11/6  
SADISOPSG/12 Conclusions 12/4 and 12/5  
SADISOPSG/13 Conclusions 13/... and 13/...

**Group responsible:** SADISOPSG Operational Efficacy Assessment Team  
Rapporteur: Greg Brock

**SADISOPSG Task No. 2:        Development, maintenance and monitoring of the SADIS broadcast content, schedule and priorities**

- Task:**                    The content of the SADIS broadcast has to be developed, maintained and monitored, in line with operational requirements developed by the ICAO planning and implementation regional groups. The broadcast has to be backed-up, as necessary, by the SADIS Provider State.
- Source:**                SADISOPSG terms of reference; SADIS Gateway High-Level Technical Requirements (paragraph 3.4)
- Coordination:**        MET and CNS/MET sub-groups of APANPIRG, APIRG, EANPG and MIDANPIRG; EUR BMG; WAFCS London and Washington; WAFSOPSG and IAVWOPSG, as necessary
- Output:**                Up-to-date annexes to the *SADIS User Guide* placed on the ICAO SADISOPSG website.
- Progress:**             OPMET information and WAFS forecasts to be included on the SADIS broadcast incorporated in Annexes 1 and 4 of the *SADIS User Guide*, respectively. The actual content of broadcast is indicated in Annexes 2 and 3. SADISOPSG/4 agreed that Annexes 2 and 3 should be based on the EUR BMG OPMET tables.
- References:**           SADISOPSG/1 paragraphs 9.1 to 9.14  
SADISOPSG/3 paragraph 5.4, Conclusion 3/15  
SADISOPSG/4 paragraphs 3.1 to 3.6, Conclusion 4/8  
SADISOPSG/5 paragraphs 3.7 to 3.9, Conclusion 5/9  
SADISOPSG/6 paragraphs 3.2 to 3.13, Conclusions 6/8 and 6/9  
SADISOPSG/7 paragraphs 3.1 to 3.11, Conclusions 7/6, 7/8 and 7/9  
SADISOPSG/8 Conclusions 8/6, 8/7, 8/8 and 8/9.  
SADISOPSG/9 Conclusions 9/8, 9/9, 9/10 and Decision 9/11  
SADISOPSG/10 Conclusions 10/8, 10/9, 10/10 and Decision 10/11  
SADISOPSG/11 Conclusions 11/8, 11/9, 11/10, 11/12 and Decision 11/11  
SADISOPSG/12 Conclusions 12/7, 12/8 and Decisions 12/6, 12/9 and 12/10  
SADISOPSG/13 Conclusions 13/.., 13/.. and Decisions 13/..., 13/... and 13/...

**SADISOPSG Task No. 3:      Organization of flow of OPMET messages and NOTAM traffic through SADIS gateway to SADIS node**

<b>Task:</b>	The flow of OPMET traffic must be organized to ensure smooth and reliable transit through the SADIS gateway at the London switch to the SADIS node for uplink on the broadcast. Pattern of flow based on the various OPMET exchange systems in existence in the AFI, ASIA, EUR and MID Regions (AMBEX, ROBEX), and the inclusion of ISCS data, as necessary.
<b>Source:</b>	SADISOPSG terms of reference; MOTNEG/1 (paragraph 2.18) and METG/5, Appendix A to Agenda Item 5
<b>Coordination:</b>	MET and CNS/MET sub-groups of APANPIRG, APIRG, EANPG and MIDANPIRG
<b>Output:</b>	SADIS Gateway High-Level Technical Requirements and <i>SADIS Gateway Operations Handbook</i>
<b>Progress:</b>	Technical requirements kept up-to-date in the <i>SADIS Gateway Operations Handbook</i> .
<b>References:</b>	SADISOPSG/2 Appendices H and I SADISOPSG/6 paragraph 4.12 SADISOPSG/7 paragraphs 4.11 to 4.13 SADISOPSG/8 paragraphs 4.12.1 to 4.12.4 SADISOPSG/9 paragraphs 5.2.1 to 5.2.3 SADISOPSG/10 paragraphs 5.1.1 to 5.1.3 SADISOPSG/11 paragraphs 6.1.1 to 6.1.7 SADISOPSG/12 paragraphs 6.1.1 to 6.1.8 SADISOPSG/13, paragraphs 6.1.1 to 6.1....
<b>Group responsible:</b>	SADISOPSG Gateway Development Team Rapporteur: Mike Williamson



**SADISOPSG Task No. 4: Preparation of a 5-year outlook for OPMET and NOTAM data volumes to be broadcast on the SADIS**

<b>Task:</b>	Forward the SADIS strategic assessment tables containing the 5-year outlook for OPMET and NOTAM data volumes to be broadcast on the SADIS for update by the MET and CNS/MET sub-groups of the APANPIRG, APIRG, EANPG and MIDANPIRG.
<b>Source:</b>	SADISOPSG Decision 2/9, SADISOPSG/3 Draft decision endorsed by APANPIRG, APIRG, EANPG and MIDANPIRG
<b>Coordination:</b>	MET and CNS/MET sub-groups of APANPIRG, APIRG, EANPG and MIDANPIRG
<b>Output:</b>	Strategic Assessment Tables updated annually to correspond to the outlook for the next five years.
<b>Progress:</b>	2001/2005 strategic assessment tables issued by SADISOPSG/6 2002/2006 strategic assessment tables issued by SADISOPSG/7 2003/2007 strategic assessment tables issued by SADISOPSG/8 2004/2008 strategic assessment tables issued by SADISOPSG/9 2005/2009 strategic assessment tables issued by SADISOPSG/10 2006/2010 strategic assessment tables issued by SADISOPSG/11 2007/2011 strategic assessment tables issued by SADISOPSG/12 2008/2012 strategic assessment tables issued by SADISOPSG/13
<b>References:</b>	SADISOPSG/6 Conclusion 6/12 SADISOPSG/7 Conclusion 7/12 SADISOPSG/8 Conclusion 8/17 SADISOPSG/9 Conclusion 9/14 SADISOPSG/10 Conclusion 10/14 SADISOPSG/11 Conclusion 11/17 SADISOPSG/12 Conclusion 12/16 SADISOPSG/13 Conclusion 13/...
<b>Group responsible:</b>	SADISOPSG Operational Efficacy Assessment Team Rapporteur: Greg Brock

**SADISOPSG Task No. 5:           Technological Developments**

<b>Task:</b>	Monitor, report on and propose action on technological developments having an impact on the SADIS.
<b>Source:</b>	SADISOPSG terms of reference
<b>Coordination:</b>	SCRAG
<b>Output:</b>	Annual reports to SADISOPSG
<b>Progress:</b>	<p>SADISOPSG/4: Study of possible TPC/IP output part on SADIS VSATs. TCP/IP conversion unit developed by MMS in 2000.</p> <p>SADISOPSG/7: Assessment of the SADIS second-generation broadcast (SADIS 2G) using a combination of a new-type modulation and new receiving equipment.</p> <p>SADISOPSG/8: Development of the operational concept for the second-generation SADIS two-way system based on approved VSAT technology studied; however, implementation not pursued due to the lack of a clear operational requirement.</p>
<b>References:</b>	<p>SADISOPSG/3 Decision 3/14 and Appendix I</p> <p>SADISOPSG/4 Decision 4/12 and Appendix J; Conclusion 4/13</p> <p>SADISOPSG/5 paragraph 4.3</p> <p>SADISOPSG/6 paragraph 4.18</p> <p>SADISOPSG/7 paragraphs 4.23 and 4.24, Conclusion 7/14</p> <p>SADISOPSG/8 paragraphs 4.11.5 to 4.11.11, Decision 8/14</p> <p>SADISOPSG/9 paragraphs 5.4.1 to 5.4.5, Conclusion 9/15</p> <p>SADISOPSG/10 paragraph 5.3.1</p> <p>SADISOPSG/11 paragraphs 6.3.1 to 6.3.3</p> <p>SADISOPSG/12 paragraphs 6.3.1 to 6.3.3</p> <p>SADISOPSG/13 paragraphs 6.... to 6.....</p>
<b>Group responsible:</b>	<p>SADISOPSG Technological Developments Team</p> <p>Rapporteur: B. Richter</p>

**SADISOPSG Task No. 6: SADIS User Guide**

**Task:** Maintain, update and extend, as necessary, *SADIS User Guide*.

**Source:** EANPG Conclusion 37/20; METG/5 paragraph 5.27

**Coordination:** NIL

**Output:** *SADIS User Guide* and amendments thereto

**Progress:** *SADIS User Guide* was issued in 1997. Guide available from the SADISOPSG website since 2000. The second, third and fourth editions issued in 2001, 2004 and 2008, respectively.

**References:**

- SADISOPSG/1 Decision 1/11
- SADISOPSG/2 Decision 2/15.
- SADISOPSG/3 Decision 3/15
- SADISOPSG/4 Decision 4/1, Conclusions 4/2 and 4/17 and Appendix E
- SADISOPSG/5 paragraphs 5.1 to 5.3
- SADISOPSG/6 paragraphs 5.1 to 5.5
- SADISOPSG/7 paragraphs 5.1 to 5.5
- SADISOPSG/8 Conclusions 8/6, 8/9 and 8/18
- SADISOPSG/9 Conclusion 9/22
- SADISOPSG/10 Conclusion 10/20
- SADISOPSG/11 paragraphs 7.1.1 to 7.1.3
- SADISOPSG/12 Conclusion 12/23
- SADISOPSG/13 Decision 13/...

**SADISOPSG TASK TEAMS**

**SADISOPSG GATEWAY DEVELOPMENT TEAM**

**1. COMPOSITION**

China, Germany, Netherlands, United Kingdom, United States, ASECNA, EUR BMG and IATA.

**2. TASKS**

- a) Maintain the Technical Requirement Document for the SADIS gateway. This will include a continuous review of requirements;
- b) maintain the *SADIS Gateway Operations Handbook*. This will include a continuous review of validation, monitoring and procedures; and
- c) report on its activities to the SADISOPSG on an annual basis.

Rapporteur: Mike Williamson behalf of the *ex-officio* Member from the BMG

## **SADISOPSG STRATEGIC ASSESSMENT TEAM**

### **COMPOSITION**

Germany, Saudi Arabia, United Kingdom, ASECNA, IATA and WMO

### **3. TASKS**

- a) Analyse the tables of assessed future regional requirements provided by the MET and CNS/MET sub-groups of the PIRGs concerned;
- b) assist the SADIS Provider State in updating the long-term plan and
- c) develop a report, for endorsement by the SADISOPSG, on a annual basis.

Rapporteur: Greg Brock

## **SADISOPSG TECHNICAL DEVELOPMENTS TEAM**

### **COMPOSITION**

Germany, Netherlands, United Kingdom, United States, ASECNA and IATA.

### **4. TASKS**

- a) Evaluate options for technological development in respect of the technical and financial impacts;
- b) coordinate any funded study/evaluation, if approved by SCRAG; and
- c) report on its activities to the SADISOPSG on an annual basis.

Rapporteur: Bernd Richter

## **SADISOPSG OPERATIONAL EFFICACY ASSESSMENT TEAM**

### **COMPOSITION**

Chairman of the SADISOPSG, *ex-officio* Member from the BMG and United Kingdom.

### **5. TASKS**

- a) Analyse the completed questionnaires returned by States related to the operational efficacy of the SADIS broadcast; and
- b) report back to the SADISOPSG on an annual basis

Rapporteur: Greg Brock

— END —