



**SCRAG/12 - REPORT**

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**REPORT OF**

**THE TWELFTH MEETING OF THE  
SADIS COST RECOVERY ADMINISTRATIVE GROUP  
(SCRAG/12)**

*(London, 3-4 November 2011)*

THE DESIGNATIONS AND THE PRESENTATION OF MATERIAL IN THIS PUBLICATION DO NOT IMPLY THE EXPRESSION OF ANY OPINION WHATSOEVER ON THE PART OF ICAO CONCERNING THE LEGAL STATUS OF ANY COUNTRY, TERRITORY, CITY OR AREA OF ITS AUTHORITIES, OR CONCERNING THE DELIMITATION OF ITS FRONTIERS OR BOUNDARIES.

**TABLE OF CONTENTS**

	<i>Page</i>
<b>Introduction</b>	2
Place and duration	2
Attendance	2
Officers and Secretariat	2
Agenda	2
<b>Agenda Item 1: Review of SCRAG’s Terms of Reference, Composition and Working Arrangements</b>	2
<b>Agenda Item 2: Consideration of issues relevant to the SCRAG’s work addressed by the SADIS Operations Group (SADISOPSG)</b>	3
<b>Agenda Item 3: Review of actual SADIS costs and cost shares for the period 1 January to 31 December 2010</b>	3
<b>Agenda Item 4: Review of estimated SADIS costs and cost shares for the period 1 January to 31 December 2012</b>	6
<b>Agenda Item 5: Amendments to Annexes to the Agreement on the Sharing of Costs of the Satellite Distribution System relating to Air Navigation</b>	8
<b>Agenda Item 6: Future work and arrangements for the SCRAG/13 Meeting</b>	9
<b>Agenda Item 7: Other business</b>	9
<b>Appendix A: List of participants</b>	A-1
<b>Appendix B: List of SCRAG/12 working papers</b>	B-1
<b>Appendix C: Inventory of assets as at 31 December 2011 employed by the United Kingdom to provide SADIS services</b>	C-1
<b>Appendix D: Status of accession to the SADIS Agreement as at 1 October 2011</b>	D-1
<b>Appendix E: Actual cost shares for the period 1 January to 31 December 2010 and adjustment for 2010</b>	E-1
<b>Appendix F: SADIS cost estimates for 2012 to 2015 for SADIS services provided by the United Kingdom Meteorological Office</b>	F-1
<b>Appendix G: Status of payment of the assessment for 2010 and of balances for years prior to 2010 as at 25 October 2011</b>	G-1
<b>Appendix H: Estimated cost shares and assessments for the period 1 January to 31 December 2012</b>	H-1
<b>Appendix I : Amounts to be billed for the period 1 January to 31 December 2012</b>	I-1
<b>Appendix J: Amendment to Annex II, SADIS Inventory, to the SADIS Agreement</b>	J-1
<b>Appendix K: Amendment to Annex I, SADIS Services, to the SADIS Agreement</b>	K-1
<b>Appendix L: Process for obtaining access to SADIS or WIFS</b>	L-1

## INTRODUCTION

### Place and duration

i.1 The Twelfth Meeting of the SADIS Cost Recovery Administrative Group (SCRAG) was held at the UK CAA in London on 3 and 4 November 2011.

### Attendance

i.2 The Meeting was attended by two of the five Members of the Group and one of the three Observers. The list of participants is in Appendix A and a list of working papers issued for the Meeting is in Appendix B.

### Officers and Secretariat

i.3 Mr. L.J.N. Rolvink, from the Netherlands, was Chairman of the Meeting. Mr. C. Gauthier, Coordinator, Joint Financing, ICAO Headquarters, Montreal, was Secretary of the Meeting.

### Agenda

i.4 The following agenda was adopted:

**Agenda Item 1:** Review of SCRAG's Terms of Reference, Composition and Working Arrangements

**Agenda Item 2:** Consideration of issues relevant to the SCRAG's work addressed by the SADIS Operations Group (SADISOPSG)

**Agenda Item 3:** Review of actual SADIS costs and cost shares for the period 1 January to 31 December 2010

**Agenda Item 4:** Review of estimated SADIS costs and cost shares for the period 1 January to 31 December 2012

**Agenda Item 5:** Amendment to Annexes to the Agreement on the Sharing of Costs of the Satellite Distribution System relating to Air Navigation

**Agenda Item 6:** Future work and arrangements for the SCRAG/13 Meeting.

**Agenda Item 7:** Other business.

#### **AGENDA ITEM 1: REVIEW OF SCRAG'S TERMS OF REFERENCE, COMPOSITION AND WORKING ARRANGEMENTS**

1.1 The Group noted that the Parties to the SADIS Agreement from the European Region still represent in the aggregate more than 50% of the total assessments, which results in the nomination of two SCRAG members from this Region, in accordance with Article VII, paragraph 2 of the SADIS Agreement.

1.2 The Group noted its Terms of Reference assigned by Article VII of the SADIS Agreement, which reads:

“The SADIS Cost Allocation and Recovery (SCAR) arrangement shall be administered by a group, the *SADIS Cost Recovery Administrative Group* (SCRAG) which shall:

- a) assess the annual cost share attributable to each Party, including re-assessments arising from new Parties adhering to this Agreement; and
- b) audit the costs of the SADIS provision and any related financial activities, incurred by the provider State and subject to cost sharing.”

1.3 The Group was informed that ICAO had received a formal notification of accession to the SADIS Agreement from 46 States. Three of these States had the service withdrawn and three of these States are Least Developed Countries (LDCs), which are exempted from payment of SADIS cost share. The Group was also informed that 11 States had informed ICAO of their intention to accede to the SADIS Agreement but had not yet sent a formal notification of accession and that 53 other States receiving the SADIS service had not yet notified their intention to accede to the SADIS Agreement. It was also informed that from these last 53 States, 27 are LDCs, which are exempted from payment of SADIS cost share. The Group also noted that Maldives which used to be a LDC has recently been removed from the list of LDCs and therefore should be assessed for the year 2012.

**AGENDA ITEM 2: CONSIDERATION OF ISSUES RELEVANT TO THE SCRAG’S WORK ADDRESSED BY THE SADIS OPERATIONS GROUP (SADISOPSG)**

2.1 The Group was informed of the main conclusions of the Sixteenth Meeting of the SADIS Operations Group (SADISOPSG/16, Paris, 23 to 25 May 2011) provided by the Chairman of SADISOPSG in the Executive Summary of Discussions of this meeting.

2.2 In accordance with Conclusion 16/4 of SADISOPSG/16, the Group noted the Statement of SADIS operational efficacy received from the Chairman of SADISOPSG relaying the advice from the Group at its Sixteenth meeting to SCRAG that the operational efficacy of the SADIS had continued to be satisfactory, meeting all operational requirements since the SADISOPSG/15 Meeting (Paris, 26 to 28 May 2010).

2.3 The Group noted Conclusion 16/5 of SADISOPSG/16 instructing the Chairman of SADISOPSG to forward to the Chairman of SCRAG an updated SADIS Inventory. This proposal is dealt with under Agenda Item 5 (see below paragraphs 5.1, 5.2 and Appendix J).

2.4 The Group also noted Conclusion 16/24 of SADISOPSG/16 instructing the Chairman of SADISOPSG to notify the Chairman of SCRAG that, in considering a need to align the SADIS Provider State’s SADIS 2G satellite reception equipment with systems used by users, the procurement of an additional vadEDGE 4200 unit as part of the SADIS 2G hub equipment was required. The estimated cost of such equipment would be £1 650. The SADISOPSG noted that the unit may be used as an operational spare, should other identical units in the transmission process fail.

**AGENDA ITEM 3: REVIEW OF ACTUAL SADIS COSTS AND COST SHARES FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2010**

**Review of the 2010 Actual SADIS Costs**

3.1 The Group reviewed the actual costs of providing the SADIS services in the year 2010. These actual costs are presented in Appendix E and total £843 740. A summary of these costs is presented in Table 1.

**TABLE 1**  
**SUMMARY OF ACTUAL SADIS COSTS**  
**FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2010**

Cost Item	Actual Costs (UK £)
UK Meteorological Office	460 200
UK NATS Gateway	332 320
UK administrative costs	4 668
Sub-total UK	797 188
ICAO support services costs	46 552
<b>TOTAL</b>	<b>843 740</b>

### **Review of the 2010 Actual SADIS Cost Shares**

3.2 The Group noted that two States, Morocco and the Russian Federation, which were not assessed for the year 2010 by the SCRAG/10 Meeting, have had the service withdrawn respectively on 6 August 2002 and 8 November 2006 but reinstated respectively on 1 July 2010 and 7 October 2010. Consequently, their share of the actual costs for 2010 was calculated based respectively on 6 and 2 full months of service in 2010.

3.3 The Group noted that one State, Namibia, which was not assessed for the year 2010 by the SCRAG/10 Meeting, is included in the calculation of the actual cost shares for 2010 considering that it receives the SADIS service since 1 July 2010. Consequently, its share of the actual costs for 2010 was calculated based on 6 full months of service in 2010.

3.4 The Group determined the actual cost shares for the period 1 January to 31 December 2010 to be borne by the States party to the SADIS Agreement which are not exempted because they are on the list of the Least Developed Countries or because they denied their accession to the SADIS Agreement, on the basis of the number of available tonne-kilometres (ATKs) in scheduled services for 2010, in accordance with Article XI, paragraph 3 of the SADIS Agreement. The cost share in percentage terms and the share in £ sterling to be borne by each State participating in the SADIS Cost Allocation and Recovery (SCAR) Arrangement are shown in Appendix E.

3.5 The Group noted that the adjustment for 2010, which is the difference between the 2010 actual costs and the 2010 estimated costs approved by the SCRAG/10 Meeting, amount to £129 734. It also noted that the share of China (Beijing) and of the United Arab Emirates in this adjustment is significantly more than for the other States. This is due to the significance of these States ATKs compared to the other States, but also to the fact that their ATKs for 2010 are significantly higher than their ATKs for 2008 which were used in the calculation of their share of the 2010 estimated costs. The Group formulated the following Conclusion:

*Conclusion 12/1 -*

*The actual cost shares for 2010 as shown in Appendix E to the SCRAG/12 Report for the States participating in the SCAR Arrangement are approved by the SCRAG/12 Meeting, in view of the adjustments to be made by the United Kingdom in its billing of these States.*

3.6 The Group received information from the observer from the United Kingdom on the status of payment of the cost shares of 2010 as at 25 October 2011. It noted that a total amount of £773 553 was collected for 2010 (see Appendix G – Table 1), representing 98.2% of the original assessments for 2010 as approved by the SCRAG/10 Meeting. It also noted that an amount of £1 762 was collected for

years prior to 2010 (see Appendix G – Table 2).

3.7 The Group noted that six States have not yet paid their assessment in full for the year 2010 and that the total amount due for 2010 is £14 260 (see Appendix G – Table 1). The Group agreed that the SADIS Provider State write to these States to inform them that if they do not pay the amount due for 2010, the SADIS service will be withdrawn.

3.8 Having noted the information in Table 1 and paragraphs 3.2 to 3.7 above, the Group agreed that the net amount of the under-recovery of SADIS cost shares for the year 2010 amount to £26 541 as shown in Table 2. The net under-recovery of 2010 is the amount subject to collection for 2010 (£931 590), less the amounts collected for 2010 (£773 553), less the amounts collected for years prior to 2010 (£1 762), less the adjustment for 2010 (£129 734, as shown in Appendix E). Since this adjustment for 2010 will be billed separately in 2012 to the States that received the SADIS service in 2010, if it is not deducted in the calculation of the net under-recovery of 2010, it would be billed twice which would result in a significant over-recovery in 2012. The Group formulated the following Conclusion:

*Conclusion 12/2 -*

*A net under-recovery, amounting to £26 541 of the SADIS cost shares for the year 2010 will be taken into account in the calculation of the SADIS cost shares for the year 2012, in accordance with Article XI, paragraph 4 of the SADIS Agreement.*

**TABLE 2  
UNDER-RECOVERY FOR 2010**

		(UK £)	References
(1)	Actual costs for 2010	843 740	Table 1
(2)	Under-recovery for 2008	87 850	SCRAG/10 Report, Table 2
(3)	Subject to collection for 2010	931 590	(1) + (2)
(4)	Collected from States for 2010 (as at 25 October 2011)	- 773 553	Appendix G – Table 1
(5)	Collected from States for years prior to 2010 (as at 25 October 2011)	- 1 762	Appendix G – Table 2
(6)	Preliminary under-recovery for 2010	156 275	(3) + (4) + (5)
(7)	Adjustment for 2010 (to be recovered separately in 2012)	- 129 734	Appendix E
(8)	Net under-recovery for 2010 (to be added to the assessments for 2012)	26 541	(6) + (7)

### **Depreciated Assets**

3.9 The Group noted the information presented by the United Kingdom regarding the depreciated assets as at 31 December 2011 (see Appendix C) and approved the depreciation charges applicable from 2011 to 2015 inclusive.

**AGENDA ITEM 4: REVIEW OF ESTIMATED SADIS COSTS AND COST SHARES FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2012**

**Review of the 2012 Estimated SADIS Costs**

- 4.1 The Group reviewed the cost estimates for providing the SADIS services in the year 2012.
- 4.2 At the SCRAG/11 Meeting, the Group requested that, once in post, the new Chief of the ICAO Meteorology Section carry out a revision of the time allocated to the tasks performed for the SADISOPSG and that the SADISOPSG review the operations of the ICAO Meteorology Section (SCRAG/11, Conclusion 11/3 c). The Group noted that the new Chief of the Meteorology Section at ICAO reported for duty in May 2011, at the same time as the SADISOPSG/16 Meeting, and that it has not been possible for him to carry out the requested analysis for presentation at the SADISOPSG/16 Meeting.
- 4.3 The Group did not agree to include in the 2012 estimated costs the increased ICAO administrative costs presented in SCRAG/12-WP/9. It decided to reduce the amount of the estimated personnel costs for the services provided to the SADISOPSG to the actual amount in Canadian dollars for the year 2010. This represents a reduction of £9 823 for the year 2012 and future years.
- 4.4 The Group indicated that the requested revision of the tasks performed by the ICAO Meteorology Section for the SADISOPSG should be carried out for presentation at the SADISOPSG/17 Meeting in May 2012 and that a report should be provided to the SCRAG/13 Meeting.
- 4.5 The cost estimates are detailed in Appendix F and total £766 928. A summary of these costs is presented in Table 3.

**TABLE 3  
SUMMARY OF ESTIMATED SADIS COSTS  
FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2012**

Cost Item	Estimated Costs (UK £)
UK Meteorological Office	381 179
UK NATS Gateway	332 320
UK CAA administrative costs	5 000
Sub-total UK	718 499
ICAO support services costs	48 429
<b>TOTAL</b>	<b>766 928</b>

- 4.6 The Group considered the net under-recovery in Table 2 in the calculation of the amount to be assessed under the SADIS Agreement for 2012. The calculation of the amount to be assessed is presented in Table 4.

**TABLE 4**  
**AMOUNT TO BE ASSESSED UNDER THE SADIS AGREEMENT FOR 2012**

		(UK £)	References
(1)	Net under-recovery for 2010	26 541	Table 2
(2)	Estimated costs for 2012	766 928	Table 3
(3)	Amount to be assessed for 2012	793 469	(1) + (2)

#### **Review of the 2012 Estimated SADIS Cost Shares**

4.7 The Group determined the cost shares for the period 1 January to 31 December 2012 to be borne by the States party to the SADIS Agreement which are not exempted because they are on the list of the Least Developed Countries, on the basis of the number of available tonne-kilometres (ATKs) in scheduled services for 2010, in accordance with Article XI, paragraph 3 of the SADIS Agreement.

4.8 The Group noted that one State, Maldives, which used to be on the list of Least Developed Countries (LDCs), thus exempt from payment of the SADIS cost share, has recently been removed from that list. Consequently, Maldives is included in the calculation of the assessment of cost shares for 2012.

4.9 The Group noted that two States, Albania and France, who acceded to the SADIS Agreement in 2011 and receive the SADIS service respectively since 21 August 2011 and 1 October 2011, are included in the calculation of the assessment of cost shares for 2012.

4.10 The Group noted that one State, Australia, that is a user of SADIS FTP data, is included in the calculation of the assessment of cost shares for 2012.

4.11 The Group noted that two States, Indonesia and Seychelles, that have expressed serious interest in receiving the SADIS service, are included in the calculation of the assessment of cost shares for 2012. Since Indonesia will likely take the service only from 1 March 2012, its share of the assessment of cost shares for 2012 was calculated based on 10 full months of service in 2012.

4.12 The cost share in percentage terms and the share in £ sterling, including the share of under-recovery for 2010, to be borne by each State, are shown in Appendix H. Appendix I shows the amounts to be billed to each State in 2012, corresponding to the adjustment for 2010 (Appendix E), plus the assessment for 2012 (Appendix H), less the deduction of unused credit balances from previous years. The Group formulated the following Conclusion:

#### *Conclusion 12/3 -*

*The estimated cost shares for 2012 as shown in Appendix H to the SCRAG/12 Report for each State participating in the SCAR Arrangement are approved by the SCRAG/12 Meeting for collection by the United Kingdom. The Secretariat will place the tables in the SCRAG web page.*

#### **Cost estimates for the years 2013 to 2015**

4.13 The Group considered the estimates provided by the United Kingdom (Appendix F) and summarised in Table 5 of providing the SADIS services for the years 2013 to 2015 as well as the

estimates for the United Kingdom administrative costs and the costs of ICAO support services.

4.14 The Group noted the future projects regarding the refresh of the hub infrastructure in 2015 and the new hardware associated with it. It also noted that a mid-life upgrade to the SADIS Gateway Infrastructure is expected to be implemented in 2013.

4.15 The Group requested that starting next year, the detailed cost estimates for future years included in Appendix F, also include two additional columns to show the comparison with the previous year's actual costs and the current year's updated estimated costs.

**TABLE 5**  
**SUMMARY OF ESTIMATED SADIS COSTS**  
**FOR THE YEARS 2013, 2014 AND 2015\***

Cost Item	Estimated Costs 2013 (UK £)	Estimated Costs 2014 (UK £)	Estimated Costs 2015 (UK £)
UK Meteorological Office	381 179	378 275	391 563
UK NATS Gateway	406 840	368 896	366 952
UK CAA administrative costs	5 000	5 000	5 000
Sub-total UK	793 019	752 171	763 515
ICAO support services costs	48 429	48 429	48 429
<b>TOTAL</b>	<b>841 448</b>	<b>800 600</b>	<b>811 944</b>

\* Estimates based on 2011 prices.

**AGENDA ITEM 5: AMENDMENT TO ANNEXES TO THE AGREEMENT ON THE SHARING OF COSTS OF THE SATELLITE DISTRIBUTION SYSTEM RELATING TO AIR NAVIGATION**

5.1 The Group reviewed the amendments to Annex II, SADIS Inventory, to the SADIS Agreement as proposed by the SADISOPSG and agreed upon by the United Kingdom as the SADIS Provider State. These amendments were necessary to ensure that the inventory would continue to meet the approved operational requirements. The additions and deletions to the existing text of Annex II appear in outline and strikeout formats in Appendix J.

5.2 As a result of its review, the Group adopted the following Conclusion:

*Conclusion 12/4 -*

*With the consent of the United Kingdom as the SADIS Provider State, in accordance with Article XVII, paragraph 5 of the SADIS Agreement, Annex II, SADIS Inventory, of the SADIS Agreement is amended as indicated in Appendix J to the SCRAG/12 Report.*

5.3 The Group reviewed information by the United Kingdom as the SADIS Provider State, on clarifying and confirming access to SADIS Internet based services and the corresponding United States administered WIFS.

5.4 The Group also reviewed the amendments to Annex I, SADIS Services, to the SADIS Agreement as proposed by the United Kingdom as the SADIS Provider State. The Group noted that, to remove any potential for ambiguity, more explicit references to the SADIS FTP and Secure SADIS FTP versions of the service are proposed to be included in Annex I and at the same time the glossary in Annex I is being updated.

5.5 As a result of its review, the Group adopted the following Conclusion:

*Conclusion 12/5 -*

*With the consent of the United Kingdom as the SADIS Provider State, in accordance with Article XVII, paragraph 5 of the SADIS Agreement, Annex I, SADIS Services, of the SADIS Agreement is amended as indicated in Appendix K to the SCRAG/12 Report.*

5.6 The Group reviewed the process for obtaining access to SADIS (and as a consequence WIFS) presented by the United Kingdom as the SADIS Provider State (Appendix L).

5.7 As a result of its review, the Group adopted the following Conclusion:

*Conclusion 12/6 -*

*The SCRAG formally endorse the process for obtaining access to SADIS Internet based services as presented in Appendix L to the SCRAG/12 Report and asks that the Secretariat inform the Chairs of both SADISOPSG and WAFSOPSG of this endorsement and asks that the SADIS Provider update the User Documentation accordingly.*

**AGENDA ITEM 6: FUTURE WORK AND ARRANGEMENTS FOR THE SCRAG/13 MEETING**

6.1 The Group agreed that, subject to confirmation, its Thirteenth Meeting should be a one day meeting to be held during the first week of November 2012 at a Conference Room to be provided by the UK NATS at London Heathrow Airport.

**AGENDA ITEM 7: OTHER BUSINESS**

7.1 The Group reviewed the information in SCRAG/12-WP/14 on the criteria determining “operational use” when accessing SADIS FTP/Secure SADIS FTP, presented by the SADIS Provider State. It noted that the necessary amendments to the SADIS User Guide will be prepared in the coming months by the ICAO MET Section, in coordination with the SADIS Provider State, for presentation at the SADISOPSG/17 Meeting. The Chairman of the SADISOPSG will inform the SCRAG of the action taken and of the cost recovery implications from States that are not under the SADIS footprint.

7.2 The Group expressed its appreciation and thanks to the UK CAA and the UK Met Office for their hospitality and excellent support received during the meeting.

-----



**APPENDIX A**

**LIST OF PARTICIPANTS**

**Members**

**Mr. L.J.N. Rolvink**

Coordinator Charges  
Air Traffic Control  
P.O. Box 75200  
1117 ZT Luchthaven Schiphol  
The Netherlands  
Tel.: +31 20 406 3210  
Fax: +31 20 406 2743  
Email: [l.j.n.rolvink@lvnl.nl](mailto:l.j.n.rolvink@lvnl.nl)

**Mr. Leander Jamin**

Personnel and Finance Department  
Head of Controlling and Accounting  
Deutscher Wetterdienst  
Frankfurter Str 135  
63067 Offenbach  
Germany  
Tel. : +49 69 8062 44 11  
Fax : +49 69 8062 44 76  
Email : [Leander.Jamin@dwd.de](mailto:Leander.Jamin@dwd.de)

**Observers**

**United Kingdom as SADIS provider**

**Mr. Andy Wells**

Head of Met Authority  
Civil Aviation Authority  
Directorate of Airspace Policy  
CAA House (K6G1)  
45-59 Kingsway  
London WC2B 6TE  
United Kingdom  
Tel: +44 207 453 6526  
Fax: +44 207 453 6565  
Email: [andy.wells@caa.co.uk](mailto:andy.wells@caa.co.uk)

Advisors

**Mr. Nigel Gait**

International Aviation Manager  
Met Office  
Fitzroy Road, Exeter  
EX1 3PB  
United Kingdom  
Tel: +44 1392 886268  
Fax: +44 1392 885681  
Email: [nigel.gait@metoffice.gov.uk](mailto:nigel.gait@metoffice.gov.uk)

**Mr. Chris Tyson**

SADIS Manager & International Aviation Analyst  
Met Office  
Fitzroy Road, Exeter  
EX1 3PB  
United Kingdom  
Tel: +44 1392 884892  
Fax: +44 1392 885681  
Email : [chris.tyson@metoffice.gov.uk](mailto:chris.tyson@metoffice.gov.uk)

**Mr. Kevin Loy**

Manager CACC & Operational Information  
NATS Swanwick  
Sopwith Way  
Swanwick SO317AY  
United Kingdom  
Tel: +44 1489 612797  
Email : [kevin.loy@nats.co.uk](mailto:kevin.loy@nats.co.uk)

**ICAO Secretariat**

**Mr. Claude Gauthier**

Secretary SCRAG  
Coordinator, Joint Financing  
International Civil Aviation Organization  
999 University Street  
Montreal, QC, Canada H3C 5H7  
Tel: + 1 514 954 8219 ext.8158  
Fax: + 1 514 954 6744  
Email: [cgauthier@icao.int](mailto:cgauthier@icao.int)

-----

**APPENDIX B****LIST OF SCRAG/12 WORKING PAPERS**

Working Paper No.	Agenda Item	Subject	Presented by
1	1 to 7	Provisional agenda	Secretariat
2	1, 3 & 4	Status of accession to the SADIS Agreement	Secretariat
3	2, 4 & 5	Reports on Conclusions of the SADISOPSG/16 Meeting	Chairman, SADISOPSG
4	3	2010 ICAO actual SADIS administrative costs	Secretariat
5	3	2010 actual SADIS costs	United Kingdom
6 Revised	3 & 4	Status of payments for the year 2010	United Kingdom
7	3	Summary of actual costs and cost shares for the year 2010	Secretariat
8	3	Depreciated assets: SADIS costs	United Kingdom
9	4	2012 ICAO estimated SADIS administrative costs	Secretariat
10	4	Estimated SADIS Costs: 2 to 5 years	United Kingdom
11 Revised	4	Summary of estimated costs and assessments for the year 2012	Secretariat
12	5	Amendment to Annex II, SADIS Inventory, to the SADIS Agreement	Secretariat
13	3 & 4	Clarifying and confirming access to SADIS Internet based services and the corresponding USA administered WIFS	United Kingdom
14	7	Criteria determining "operational use" when accessing SADIS FTP/Secure SADIS FTP	United Kingdom

-----



## APPENDIX C

**INVENTORY OF ASSETS AS AT 31 DECEMBER 2010  
EMPLOYED BY THE UNITED KINGDOM TO PROVIDE SADIS SERVICES**

<b>(1) Inventory of Assets: 2011</b>	<b>(2) Original Value</b>	<b>(3) Depreciated charges in 2011</b>	<b>(4) Total accumulated depreciation</b>	<b>(5) Net depreciated values at end of 2011</b>
<b>Original HUB Investment, Trial Systems and Capitalized Operation Asset</b>	£713 769	£0	£713 769	£0
<b>Two-Way Hub enhancement, VSATS and development</b>	£375 000	£0	£375 000	£0
<b>SADIS 2G Operational System</b>	£87 428	£0	£87 428	£0
<b>SADIS 2G Hardware Refresh</b>	£59 988	£11 616	£28 044	£31 944
<b>Total UKMO</b>	£1 236 185	£11 616	£1 204 241	£31 944
<b>SADIS Gateway</b>	£227 462	£0	£227 462	£0

-----



## APPENDIX D

## STATES WHICH FORMALLY ACCEDED TO THE SADIS AGREEMENT

STATES	LDC's Exempted
Albania	
Austria	
Bahrain	
Belgium	
Botswana	
Cameroon	
China	
Congo	
Côte d'Ivoire	
Croatia	
Cyprus	
Czech Republic	
Democratic People's Republic of Korea	
Democratic Republic of the Congo	X
Denmark	
Egypt	
Estonia	
Finland	
France	
Gabon	
Georgia	
Germany	
Hungary	
Italy	
Jordan	
Madagascar	X
Mauritius *	
Mongolia *	
Morocco	
Netherlands	
Oman	
Pakistan	
Portugal	
Republic of Moldova	
Romania	
Russian Federation	
Senegal	
Sweden	
Switzerland	
Thailand	
Tunisia	
Turkmenistan *	
United Arab Emirates	
United Kingdom	
United Republic of Tanzania	X
Viet Nam	

\* Although they formally acceded to the SADIS Agreement, these States do not presently receive the service.

## APPENDIX D (cont'd)

## STATES WHICH INFORMED OF THEIR INTENTION TO ACCEDE TO THE SADIS AGREEMENT

STATES	LDC's Exempted
Armenia	
Azerbaijan	
Greece	
Ireland	
Kenya	
Kuwait	
Malta	
Saudi Arabia	
Serbia	
Turkey	
Ukraine	

## APPENDIX D (cont'd)

## STATES WHICH HAVE NOT YET NOTIFIED THEIR INTENTION TO ACCEDE TO THE SADIS AGREEMENT

STATES	LDC's Exempted
Afghanistan	X
Algeria	
Angola	X
Australia	
Bangladesh	X
Benin	X
Bosnia and Herzegovina	
Bulgaria	
Burkina Faso	X
Cape Verde	
Central African Republic	X
Chad	X
Comoros	X
Djibouti	X
Equatorial Guinea	X
Ethiopia	X
Gambia	X
Ghana	
Guinea	X
Guinea-Bissau	X
Iceland	
India	
Indonesia	
Iran (Islamic Republic of)	
Lao People's Democratic Republic	X
Latvia	
Libya	
Lithuania	
Malawi	X
Maldives **	
Mali	X
Mauritania	X
Mozambique	X
Myanmar	X
Namibia	
Nepal	X
Niger	X
Nigeria	
Poland	
Qatar	
Rwanda	X
Seychelles	
Somalia	X
South Africa	
Sri Lanka	
Swaziland	
Syrian Arab Republic	
The former Yugoslav Republic of Macedonia	
Togo	X
Uganda	X
Uzbekistan	
Yemen	X
Zimbabwe	

\*\* Maldives is no longer in the list of Least Developed Countries.

-----



## APPENDIX E

ACTUAL COST SHARES FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2010\*  
AND ADJUSTMENT FOR 2010

STATES	2010 Available Tonne-Kilometres in Scheduled Services (000)	Percentage Cost Share	Share of 2010 Actual Costs (£ Sterling)	Share of 80% of 2010 Estimated Costs (SCRAG/10) (£ Sterling)	Adjustment for 2010 (£ Sterling)
Algeria	1 086 523	0.274%	2 315.05	995.73	1 319.32
Armenia	163 512	0.041%	348.39	364.27	- 15.88
Austria	3 445 051	0.870%	7 340.36	6 130.85	1 209.51
Azerbaijan	257 673	0.065%	549.02	611.19	- 62.17
Bahrain	3 481 455	0.879%	7 417.93	3 760.88	3 657.05
Belgium	3 399 688	0.859%	7 243.71	6 972.09	271.62
Bosnia and Herzegovina	66 086	0.017%	140.81	29.34	111.47
Botswana	29 206	0.007%	62.23	46.41	15.82
Bulgaria	179 190	0.045%	381.80	489.93	- 108.13
Cameroon (note 3)	0	0.000%	0.00	308.02	- 308.02
China: - Beijing	74 491 954	18.811%	158 719.83	117 667.74	41 052.09
- Hong Kong	20 559 338	5.192%	43 805.73	52 348.38	- 8 542.65
- Macau	368 052	0.093%	784.21	1 013.20	- 228.99
Congo (note 3)	90 673	0.023%	193.20	164.69	28.51
Côte d'Ivoire (note 3)	160 423	0.041%	341.81	291.38	50.43
Croatia	190 563	0.048%	406.03	434.87	- 28.84
Cyprus	685 042	0.173%	1 459.62	1 493.03	- 33.41
Czech Republic	1 128 595	0.285%	2 404.69	2 326.15	78.54
Democratic People's Republic of Korea	14 299	0.004%	30.47	22.96	7.51
Denmark	1 637 428	0.413%	3 488.86	4 008.44	- 519.58
Egypt	4 156 294	1.050%	8 855.81	7 026.31	1 829.50
Estonia	85 559	0.022%	182.30	299.62	- 117.32
Finland	3 765 765	0.951%	8 023.71	8 412.88	- 389.17
Gabon	84 565	0.021%	180.18	1 099.44	- 919.26
Georgia	170 974	0.043%	364.29	212.39	151.90
Germany	39 295 736	9.923%	83 727.33	84 245.04	- 517.71
Ghana (note 3)	27 096	0.007%	57.73	49.21	8.52
Greece	1 410 995	0.356%	3 006.40	3 287.72	- 281.32
Hungary	1 409 144	0.356%	3 002.46	2 146.10	856.36
Iceland	748 151	0.189%	1 594.08	1 646.72	- 52.64
India	15 457 999	3.904%	32 936.32	32 134.29	802.03
Iran (Islamic Republic of)	2 558 278	0.646%	5 450.92	3 984.85	1 466.07
Ireland	12 701 712	3.208%	27 063.51	19 781.67	7 281.84
Italy	7 206 114	1.820%	15 354.05	17 801.43	- 2 447.38
Jordan	1 929 561	0.487%	4 111.31	2 739.58	1 371.73
Kenya	1 942 032	0.490%	4 137.88	3 499.78	638.10
Kuwait	1 646 831	0.416%	3 508.90	3 342.67	166.23
Latvia	534 139	0.135%	1 138.09	673.19	464.90
Libya	739 436	0.187%	1 575.51	629.34	946.17
Lithuania	244 513	0.062%	520.98	329.93	191.05
Malta	918 902	0.232%	1 957.90	889.25	1 068.65
Morocco (note 1)	893 824	0.226%	1 904.47	0.00	1 904.47

**APPENDIX E (cont'd)**  
**ACTUAL COST SHARES FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2010\***  
**AND ADJUSTMENT FOR 2010**

STATES	2010 Available Tonne-Kilometres in Scheduled Services (000)	Percentage Cost Share	Share of 2010 Actual Costs (£ Sterling)	Share of 80% of 2010 Estimated Costs (SCRAG/10) (£ Sterling)	Adjustment for 2010 (£ Sterling)
Namibia (note 2)	240 475	0.061%	512.38	0.00	512.38
Netherlands	18 727 715	4.729%	39 903.10	39 410.63	492.47
Nigeria	176 321	0.045%	375.69	577.02	- 201.33
Oman	740 474	0.187%	1 577.73	4 237.27	- 2 659.54
Pakistan	2 476 492	0.625%	5 276.66	6 136.01	- 859.35
Poland	1 360 774	0.344%	2 899.40	2 957.73	- 58.33
Portugal	4 576 762	1.156%	9 751.70	9 880.37	- 128.67
Qatar	13 734 069	3.468%	29 263.15	19 496.38	9 766.77
Republic of Moldova	94 218	0.024%	200.75	191.31	9.44
Romania	726 600	0.183%	1 548.16	2 086.59	- 538.43
Russian Federation (note 1)	2 560 467	0.647%	5 455.58	0.00	5 455.58
Saudi Arabia	8 167 129	2.062%	17 401.68	16 367.84	1 033.84
Senegal (note 3)	204 503	0.052%	435.73	370.48	65.25
Serbia	187 531	0.047%	399.57	453.13	- 53.56
South Africa	5 891 707	1.488%	12 553.45	11 947.77	605.68
Sri Lanka	1 680 026	0.424%	3 579.63	3 548.53	31.10
Swaziland	1 775	0.000%	3.78	3.22	0.56
Sweden	1 421 119	0.359%	3 027.97	3 191.95	- 163.98
Switzerland	7 377 097	1.863%	15 718.36	13 405.78	2 312.58
Syrian Arab Republic	674 883	0.170%	1 437.97	968.28	469.69
Thailand	12 057 416	3.045%	25 690.71	23 005.75	2 684.96
The former Yugoslav Republic of Macedonia	28 943	0.007%	61.67	55.58	6.09
Tunisia	680 744	0.172%	1 450.46	1 200.76	249.70
Turkey	10 472 334	2.645%	22 313.38	13 611.40	8 701.98
Ukraine	1 385 587	0.350%	2 952.27	2 481.57	470.70
United Arab Emirates	47 407 414	11.972%	101 010.87	49 708.29	51 302.58
United Kingdom	38 639 243	9.758%	82 328.55	86 361.83	- 4 033.28
Uzbekistan	1 190 965	0.301%	2 537.60	2 210.42	327.18
Viet Nam	3 637 186	0.918%	7 749.74	5 830.34	1 919.40
Zimbabwe	110 024	0.028%	234.43	598.81	- 364.38
<b>TOTAL</b>	<b>395 992 364</b>	<b>100.000%</b>	<b>843 740.00</b>	<b>714 006.00</b>	<b>129 734.00</b>

\* Excludes Least Developed Countries exempted.

Note 1: Considering that the service to Morocco and the Russian Federation had been withdrawn respectively on 6 August 2002 and 8 November 2006 and reinstated respectively on 1 July 2010 and 7 October 2010, their share of the 2010 actual costs was calculated based respectively on 6 and 2 full months of service in 2010.

Note 2: Considering that Namibia receives the service since 1 July 2010, its share of the 2010 actual costs was calculated based on 6 full months of service in 2010.

Note 3: The number of ATKs for Cameroon is nil in 2010 since its only airline ceased operating in March 2008.

We did not receive the number of ATKs in 2010 for Congo, Côte d'Ivoire, Ghana and Senegal. The number of ATKs shown is that of 2008 for the first four States and 2009 for the last State adjusted based on the growth rate of ATKs for Africa of -1.7% in 2009 and 17.2% in 2010.

-----

F - 1  
APPENDIX F

**TABLE 1: UKMO Cost and manpower resource projections until year 2015 (at 2011 prices)**

INVENTORY REF:	Note	DESCRIPTION	2012	2013	2014	2015
<b>1</b>		<b>UK MET OFFICE COSTS</b>				
		<b>1. Equipment</b>				
		<b>Principally procured for SADIS</b>				
	a	comms between Whitehill & Met Office	6,364	6,364	6,364	6,364
		comms link SADIS Gateway & Met Office	3,340	3,340	3,340	3,340
		ISDN Back-up	372	372	372	372
		<b>Not procured principally for SADIS</b>				
	b	message switch (FROST/FTP)	16,000	16,000	16,000	16,000
		message switch (FROST/2G)	10,000	10,000	10,000	10,000
		internet bandwidth (FTP)	11,500	11,500	11,500	11,500
		FTP equipment running costs	20,000	20,000	20,000	20,000
		Service Desk Equipment Costs	15,000	15,000	15,000	15,000
		Serial Comms Costs and maintenance	10,000	10,000	10,000	10,000
		<b>sub total</b>	<b>92,576</b>	<b>92,576</b>	<b>92,576</b>	<b>92,576</b>
		<b>2. Procured Services</b>				
	c	space segment annual lease	54,660	54,660	54,660	54,660
	d	annual maintenance	33,548	33,548	33,548	33,548
		2G Maintenance	4,275	4,275	4,275	4,275
		2G Facilities Management	17,000	17,000	17,000	17,000
		IT Hall Space				
	e	ad hoc maintenance	5,000	5,000	5,000	5,000
		<b>sub total</b>	<b>114,483</b>	<b>114,483</b>	<b>114,483</b>	<b>114,483</b>
	f	<b>3. Annual Staff Requirements</b>				
		<b>Help Desk</b>				
		Help Desk 0.5%	5,500	5,500	5,500	5,500
		Technical Team Leader 4%	11,000	11,000	11,000	11,000
		Network Systems Supervisor 7%	22,000	22,000	22,000	22,000
		<b>Additional Support</b>				
		Systems Integration Team	4,866	4,866	4,866	4,866
		Message Switching	5,214	5,214	5,214	5,214
		Administrator	55,612	55,612	55,612	55,612
		International Aviation Management	12,805	12,805	12,805	12,805
		Data Traffic	1,738	1,738	1,738	1,738
		Contract Management	1,390	1,390	1,390	1,390
		Message Switching Team	5,214	5,214	5,214	5,214
		Invoice Administration	12,165	12,165	12,165	12,165
	g	SADIS Satellite Upgrade/decommissioning				10,000
		<b>Travel Costs</b>				
		SADISOPSG & SCRAG	5,000	5,000	5,000	5,000
		<b>sub total</b>	<b>142,504</b>	<b>142,504</b>	<b>142,504</b>	<b>152,504</b>
		<b>TOTAL</b>	<b>349,563</b>	<b>349,563</b>	<b>349,563</b>	<b>359,563</b>
		<b>Cost of Depreciated Capital</b>				
	h	SADIS 2G	11,616	11,616	8,712	0
		FTP enhancements	0	0	0	0
	i	Satellite Service upgrade				12,000
		<b>sub total</b>	<b>361,179</b>	<b>361,179</b>	<b>358,275</b>	<b>371,563</b>
		Cost of Capital	20,000	20,000	20,000	20,000
		<b>Total UKMO Costs</b>	<b>381,179</b>	<b>381,179</b>	<b>378,275</b>	<b>391,563</b>

## APPENDIX F (cont'd)

TABLE 2: NATS and other SADIS Cost Projections until 2014

INVENTORY REF:	Note	DESCRIPTION	2012	2013	2014	2015
<b>2 NATS Gateway Costs</b>	j					
<b>Staff Costs</b>						
Operational Staff		Air Traffic Services Asst.	268,039	268,039	268,039	268,039
Engineering Staff		Systems Engineer	12,511	12,511	12,511	12,511
Administration Support		Administration Officer	25,022	25,022	25,022	25,022
asset engineering support		asset management activities	7,194	7,194	7,194	7,194
		<b>sub total</b>	<b>312,766</b>	<b>312,766</b>	<b>312,766</b>	<b>312,766</b>
Communications		ip comms link to ukmo	12,040	12,040	12,040	12,040
		x25 comms link	0	0	0	0
Maintenance		Systems Maintenance	6,264	6,264	6,264	6,264
Sadis Gateway Upgrade	k	Project Management		36,000		
Cost of Depreciated Capital		Depreciation	0	28,800	28,800	28,800
		Cost of Capital	0	9,720	7,776	5,832
Sadis Backup enhancement		procurement & Installation	0	0	0	0
		annual support costs	1,250	1,250	1,250	1,250
<b>Total NATS Gateway Costs</b>			<b>332,320</b>	<b>406,840</b>	<b>368,896</b>	<b>366,952</b>
<b>CAA Administration Costs</b>			<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>
<b>ICAO Administration Costs</b>			<b>48,429</b>	<b>48,429</b>	<b>48,429</b>	<b>48,429</b>
<b>TOTAL SADIS COSTS</b>			<b>766,928</b>	<b>841,448</b>	<b>800,600</b>	<b>811,944</b>

G - 1  
APPENDIX G

TABLE 1  
STATUS OF PAYMENT OF THE ASSESSMENT FOR 2010  
AS AT 25 OCTOBER 2011

(£ Sterling)

STATES	Total amount billed for 2010 (SCRAG/10 Report, Appendix I)	Amount Collected as at 25 October 2011	Application of credit balance (or part of)	Unpaid amount (excess paid) as at 25 October 2011
Algeria	856.27	856.27		0.00
Armenia	330.93	330.93		0.00
Austria	4 405.48	4 405.48		0.00
Azerbaijan	541.15	541.15		0.00
Bahrain	4 070.25	4 070.25		0.00
Belgium	8 217.08	8 217.08		0.00
Bosnia and Herzegovina	32.95	28.88		4.07
Botswana	48.85	48.85		0.00
Bulgaria	496.76	496.76		0.00
Cameroon	333.99	333.99		0.00
China: - Beijing	137 386.73	137 386.73		0.00
- Hong Kong	56 721.18	56 721.18		0.00
- Macau	662.34	662.34		0.00
Congo	186.72	186.72		0.00
Côte d'Ivoire	346.00	346.00		0.00
Croatia	471.60	471.60		0.00
Cyprus	1 509.11	1 509.11		0.00
Czech Republic	2 365.81	2 365.81		0.00
Democratic People's Republic of Korea	22.84	22.84		0.00
Denmark	4 177.70	4 177.70		0.00
Egypt	7 990.85	7 990.85		0.00
Estonia	318.59	318.59		0.00
Finland	10 161.61	10 161.61		0.00
Gabon	1 190.75	1 190.75		0.00
Georgia	224.49	225.00		- 0.51
Germany	90 401.42	90 401.42		0.00
Ghana	41.21	42.00		- 0.79
Greece	3 145.21	3 145.21		0.00
Hungary	2 633.72	2 633.72		0.00
Iceland	1 522.82	1 522.82		0.00
India	41 085.64	41 085.64		0.00
Iran (Islamic Republic of)	4 475.14	4 475.14		0.00
Ireland	25 041.99	25 041.99		0.00
Italy	14 670.98	14 670.98		0.00
Jordan	2 742.02	2 742.02		0.00
Kenya	4 812.86			4 812.86
Kuwait	3 102.25	3 102.25		0.00
Latvia	1 265.25	1 265.25		0.00
Libyan Arab Jamahiriya	1 182.83	1 182.83		0.00
Lithuania	620.10	620.10		0.00
Malta	939.90	939.90		0.00

G - 2

## APPENDIX G (cont'd)

TABLE 1 (cont'd)

## STATUS OF PAYMENT OF THE ASSESSMENT FOR 2010

AS AT 25 OCTOBER 2011

(£ Sterling)

STATES	Total amount billed for 2010 (SCRAG/10 Report, Appendix I)	Amount Collected as at 25 October 2011	Application of credit balance (or part of)	Unpaid amount (excess paid) as at 25 October 2011
Netherlands	41 043.36	41 043.36		0.00
Nigeria	1 048.13		10.99	1 037.14
Oman	5 067.41		180.27	4 887.14
Pakistan	5 129.48	5 129.48		0.00
Poland	3 267.47	3 267.47		0.00
Portugal	11 960.93	11 960.93		0.00
Qatar	25 719.64	25 719.64		0.00
Republic of Moldova	226.20	226.20		0.00
Romania	2 816.88	2 816.88		0.00
Saudi Arabia	18 401.48	18 401.48		0.00
Senegal	405.64	405.64		0.00
Serbia	433.23	433.23		0.00
South Africa	10 485.97	10 485.97		0.00
Sri Lanka	3 446.02	3 446.02		0.00
Swaziland	4.80			4.80
Sweden	2 652.54	2 652.54		0.00
Switzerland	16 053.77	16 053.77		0.00
Syrian Arab Republic	777.81	916.54		- 138.73
Thailand	23 213.83	23 213.83		0.00
The former Yugoslav Republic of Macedonia	33.77	33.77		0.00
Tunisia	1 271.29		99.34	1 171.95
Turkey	15 777.69	15 777.69		0.00
Ukraine	2 900.60	2 900.60		0.00
United Arab Emirates	55 540.68	55 540.68		0.00
United Kingdom	88 859.65	88 859.65		0.00
Uzbekistan	2 482.39			2 482.39
Viet Nam	7 676.24	7 676.24		0.00
Zimbabwe	653.64	653.64		0.00
TOTAL	788 103.91	773 552.99	290.60	14 260.32

## APPENDIX G (cont'd)

TABLE 2

STATUS OF PAYMENT OF BALANCES FOR YEARS PRIOR TO 2010  
AS AT 25 OCTOBER 2011

(£ Sterling)

STATES	Balance due for years prior to 2010	Amount Collected as at 25 October 2011	Application of credit balance (or part of)	Unpaid amount (excess paid) as at 25 October 2011
Seychelles	1 762.05	1 762.05		0.00
Swaziland	6.66			6.66
TOTAL	1 768.71	1 762.05	0.00	6.66

-----



**APPENDIX H**  
**ESTIMATED COST SHARES AND ASSESSMENTS**  
**FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2012 \***

STATES	2010 Available Tonne-Kilometres in Scheduled Services (000)	Percentage Cost Share	Share of 2012 Estimated Costs (£ Sterling)	Share of Under-recovery for 2010 (£ Sterling)	Amount to be Assessed for 2012 (£ Sterling)
Albania	7 644	0.002%	12.83	0.44	13.27
Algeria	1 086 523	0.238%	1 823.70	63.11	1 886.81
Armenia	163 512	0.036%	274.45	9.50	283.95
Australia	12 159 987	2.661%	20 410.20	706.33	21 116.53
Austria	3 445 051	0.754%	5 782.42	200.11	5 982.53
Azerbaijan	257 673	0.056%	432.50	14.97	447.47
Bahrain	3 481 455	0.762%	5 843.53	202.23	6 045.76
Belgium	3 399 688	0.744%	5 706.28	197.48	5 903.76
Bosnia and Herzegovina	66 086	0.014%	110.92	3.84	114.76
Botswana	29 206	0.006%	49.02	1.70	50.72
Bulgaria	179 190	0.039%	300.77	10.41	311.18
Cameroon **	0	0.000%	0.00	0.00	0.00
Cape Verde	117 273	0.026%	196.84	6.81	203.65
China: - Beijing	74 491 954	16.303%	125 032.69	4 326.99	129 359.68
- Hong Kong	20 559 338	4.500%	34 508.28	1 194.22	35 702.50
- Macau	368 052	0.081%	617.77	21.38	639.15
Congo	90 673	0.020%	152.19	5.27	157.46
Côte d'Ivoire	160 423	0.035%	269.27	9.32	278.59
Croatia	190 563	0.042%	319.85	11.07	330.92
Cyprus	685 042	0.150%	1 149.82	39.79	1 189.61
Czech Republic	1 128 595	0.247%	1 894.32	65.56	1 959.88
Democratic People's Republic of Korea	14 299	0.003%	24.00	0.83	24.83
Denmark	1 637 428	0.358%	2 748.38	95.11	2 843.49
Egypt	4 156 294	0.910%	6 976.22	241.43	7 217.65
Estonia	85 559	0.019%	143.61	4.97	148.58
Finland	3 765 765	0.824%	6 320.73	218.74	6 539.47
France	25 207 656	5.517%	42 310.36	1 464.23	43 774.59
Gabon	84 565	0.019%	141.94	4.91	146.85
Georgia	170 974	0.037%	286.98	9.93	296.91
Germany	39 295 736	8.600%	65 956.81	2 282.56	68 239.37
Ghana	27 096	0.006%	45.48	1.57	47.05
Greece	1 410 995	0.309%	2 368.32	81.96	2 450.28
Hungary	1 409 144	0.308%	2 365.21	81.85	2 447.06
Iceland	748 151	0.164%	1 255.75	43.46	1 299.21
India	15 457 999	3.383%	25 945.83	897.90	26 843.73
Indonesia	2 477 679	0.542%	4 158.72	143.92	4 302.64
Iran (Islamic Republic of)	2 558 278	0.560%	4 294.00	148.60	4 442.60
Ireland	12 701 712	2.780%	21 319.47	737.80	22 057.27
Italy	7 206 114	1.577%	12 095.26	418.58	12 513.84
Jordan	1 929 561	0.422%	3 238.71	112.08	3 350.79
Kenya	1 942 032	0.425%	3 259.65	112.81	3 372.46
Kuwait	1 646 831	0.360%	2 764.16	95.66	2 859.82
Latvia	534 139	0.117%	896.54	31.03	927.57
Libya	739 436	0.162%	1 241.12	42.95	1 284.07
Lithuania	244 513	0.054%	410.41	14.20	424.61

**APPENDIX H (cont'd)**  
**ESTIMATED COST SHARES AND ASSESSMENTS**  
**FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2012 \***

STATES	2010 Available Tonne-Kilometres in Scheduled Services (000)	Percentage Cost Share	Share of 2012 Estimated Costs (£ Sterling)	Share of Under-recovery for 2010 (£ Sterling)	Amount to be Assessed for 2012 (£ Sterling)
Maldives	1 150	0.000%	1.93	0.07	2.00
Malta	918 902	0.201%	1 542.35	53.38	1 595.73
Morocco	3 875 770	0.848%	6 505.37	225.13	6 730.50
Namibia	480 949	0.105%	807.26	27.94	835.20
Netherlands	18 727 715	4.099%	31 433.95	1 087.83	32 521.78
Nigeria	176 321	0.039%	295.95	10.24	306.19
Oman	740 474	0.162%	1 242.87	43.01	1 285.88
Pakistan	2 476 492	0.542%	4 156.72	143.85	4 300.57
Poland	1 360 774	0.298%	2 284.02	79.04	2 363.06
Portugal	4 576 762	1.002%	7 681.97	265.85	7 947.82
Qatar	13 734 069	3.006%	23 052.26	797.77	23 850.03
Republic of Moldova	94 218	0.021%	158.14	5.47	163.61
Romania	726 600	0.159%	1 219.58	42.21	1 261.79
Russian Federation	20 083 987	4.396%	33 710.42	1 166.61	34 877.03
Saudi Arabia	8 167 129	1.787%	13 708.30	474.40	14 182.70
Senegal	204 503	0.045%	343.25	11.88	355.13
Serbia	187 531	0.041%	314.77	10.89	325.66
Seychelles	210 529	0.046%	353.37	12.23	365.60
South Africa	5 891 707	1.289%	9 889.07	342.23	10 231.30
Sri Lanka	1 680 026	0.368%	2 819.88	97.59	2 917.47
Swaziland	1 775	0.000%	2.98	0.10	3.08
Sweden	1 421 119	0.311%	2 385.31	82.55	2 467.86
Switzerland	7 377 097	1.615%	12 382.25	428.51	12 810.76
Syrian Arab Republic	674 883	0.148%	1 132.77	39.20	1 171.97
Thailand	12 057 416	2.639%	20 238.04	700.38	20 938.42
The former Yugoslav Republic of Macedonia	28 943	0.006%	48.58	1.68	50.26
Tunisia	680 744	0.149%	1 142.61	39.54	1 182.15
Turkey	10 472 334	2.292%	17 577.52	608.30	18 185.82
Ukraine	1 385 587	0.303%	2 325.67	80.48	2 406.15
United Arab Emirates	47 407 414	10.375%	79 572.04	2 753.74	82 325.78
United Kingdom	38 639 243	8.456%	64 854.90	2 244.45	67 099.35
Uzbekistan	1 190 965	0.261%	1 999.00	69.18	2 068.18
Viet Nam	3 637 186	0.796%	6 104.92	211.27	6 316.19
Zimbabwe	110 024	0.024%	184.67	6.39	191.06
<b>TOTAL</b>	<b>456 920 222</b>	<b>100.000%</b>	<b>766 928.00</b>	<b>26 541.00</b>	<b>793 469.00</b>

\* Excludes Least Developed Countries exempted, States for which the access to SADIS is not operational and States which refused to accede to the SADIS Agreement.

\*\* Cameroon does not have any ATK reported for 2010.

-----

I - 1  
**APPENDIX I**  
**AMOUNTS TO BE BILLED**  
**FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2012**  
**(£ Sterling)**

STATES	Adjustment for 2010 (Appendix E)	Assessment for 2012 (Appendix H)	Deduction of Unused Credit Balance from Previous Years	Total Amount to be Billed for 2012
Albania	0.00	13.27		13.27
Algeria	1 319.32	1 886.81		3 206.13
Armenia	- 15.88	283.95		268.07
Australia	0.00	21 116.53		21 116.53
Austria	1 209.51	5 982.53		7 192.04
Azerbaijan	- 62.17	447.47		385.30
Bahrain	3 657.05	6 045.76		9 702.81
Belgium	271.62	5 903.76		6 175.38
Bosnia and Herzegovina	111.47	114.76		226.23
Botswana	15.82	50.72		66.54
Bulgaria	- 108.13	311.18		203.05
Cameroon	- 308.02	0.00		- 308.02
Cape Verde	0.00	203.65		203.65
China: - Beijing	41 052.09	129 359.68		170 411.77
- Hong Kong	- 8 542.65	35 702.50		27 159.85
- Macau	- 228.99	639.15		410.16
Congo	28.51	157.46		185.97
Côte d'Ivoire	50.43	278.59		329.02
Croatia	- 28.84	330.92		302.08
Cyprus	- 33.41	1 189.61		1 156.20
Czech Republic	78.54	1 959.88		2 038.42
Democratic People's Republic of Korea	7.51	24.83	- 32.34	0.00
Denmark	- 519.58	2 843.49		2 323.91
Egypt	1 829.50	7 217.65		9 047.15
Estonia	- 117.32	148.58		31.26
Finland	- 389.17	6 539.47		6 150.30
France	0.00	43 774.59		43 774.59
Gabon	- 919.26	146.85		- 772.41
Georgia	151.90	296.91		448.81
Germany	- 517.71	68 239.37		67 721.66
Ghana	8.52	47.05	- 55.57	0.00
Greece	- 281.32	2 450.28		2 168.96
Hungary	856.36	2 447.06		3 303.42
Iceland	- 52.64	1 299.21		1 246.57
India	802.03	26 843.73		27 645.76
Indonesia	0.00	4 302.64		4 302.64
Iran (Islamic Republic of)	1 466.07	4 442.60		5 908.67
Ireland	7 281.84	22 057.27		29 339.11
Italy	- 2 447.38	12 513.84		10 066.46
Jordan	1 371.73	3 350.79		4 722.52
Kenya	638.10	3 372.46		4 010.56
Kuwait	166.23	2 859.82		3 026.05
Latvia	464.90	927.57		1 392.47
Libya	946.17	1 284.07		2 230.24
Lithuania	191.05	424.61		615.66

**APPENDIX I (cont'd)**  
**AMOUNTS TO BE BILLED**  
**FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 2012**  
**(£ Sterling)**

STATES	Adjustment for 2010 (Appendix E)	Assessment for 2012 (Appendix H)	Deduction of Unused Credit Balance from Previous Years	Total Amount to be Billed for 2012
Maldives	0.00	2.00		2.00
Malta	1 068.65	1 595.73		2 664.38
Morocco	1 904.47	6 730.50		8 634.97
Namibia	512.38	835.20		1 347.58
Netherlands	492.47	32 521.78		33 014.25
Nigeria	- 201.33	306.19		104.86
Oman	- 2 659.54	1 285.88		- 1 373.66
Pakistan	- 859.35	4 300.57		3 441.22
Poland	- 58.33	2 363.06		2 304.73
Portugal	- 128.67	7 947.82		7 819.15
Qatar	9 766.77	23 850.03		33 616.80
Republic of Moldova	9.44	163.61		173.05
Romania	- 538.43	1 261.79		723.36
Russian Federation	5 455.58	34 877.03		40 332.61
Saudi Arabia	1 033.84	14 182.70		15 216.54
Senegal	65.25	355.13		420.38
Serbia	- 53.56	325.66		272.10
Seychelles	0.00	365.60		365.60
South Africa	605.68	10 231.30		10 836.98
Sri Lanka	31.10	2 917.47		2 948.57
Swaziland	0.56	3.08		3.64
Sweden	- 163.98	2 467.86		2 303.88
Switzerland	2 312.58	12 810.76		15 123.34
Syrian Arab Republic	469.69	1 171.97		1 641.66
Thailand	2 684.96	20 938.42		23 623.38
The former Yugoslav Republic of Macedonia	6.09	50.26	- 38.35	18.00
Tunisia	249.70	1 182.15		1 431.85
Turkey	8 701.98	18 185.82		26 887.80
Ukraine	470.70	2 406.15		2 876.85
United Arab Emirates	51 302.58	82 325.78		133 628.36
United Kingdom	- 4 033.28	67 099.35		63 066.07
Uzbekistan	327.18	2 068.18		2 395.36
Viet Nam	1 919.40	6 316.19		8 235.59
Zimbabwe	- 364.38	191.06		- 173.32
<b>TOTAL</b>	<b>129 734.00</b>	<b>793 469.00</b>	<b>- 126.26</b>	<b>923 076.74</b>

-----

## SADIS INVENTORY

The inventory items identified below cover the equipment and staffing required to provide, operate and maintain the SADIS. The inventory includes: hub infrastructure (including all additions following the ~~completion of the hub enhancement project~~ implementation of Secure SADIS FTP) and communications circuits, ISCS data back-up system, procured services, and staff. It should be noted that some equipment items are under lease and form part of a wider infrastructure. Costs of individual items cannot be separated from the required infrastructure that includes a significant part of the development of the software and technical configuration. The inventory is in accordance with the SADIS User Guide.

### 1. EQUIPMENT

#### A. Key components of Hub infrastructure and communications circuits

The SADIS 2G hub infrastructure connection to the Met Office message switch (Frost) consists of a number of units developed in conjunction with ~~VADOS Systems~~ AEP Networks and other suppliers. These are installed either at Exeter or at the uplink site at Whitehill, Oxfordshire, UK.

The SADIS FTP and Secure SADIS FTP hub infrastructure connection to the Met Office message switch (Frost) consists of a number of units installed at Exeter.

##### i) Solely procured for SADIS (major components)

SADIS gateway function software (developed specifically for the gateway as part of the NATS CoreMet system; see items under “Not procured principally for SADIS”).

Dell Poweredge R900 servers to provide SADIS FTP service and Secure SADIS FTP service (see Section 1 C).

##### ii) Principally procured for SADIS

a) At the Met Office;

See Section 1 C for itemized components

b) Communications between Met Office Exeter and Whitehill uplink facility;

2 Fibre Optic 64 Kbps circuits in support of SADIS 2G service

c) At the uplink site (Whitehill);

1) Units and services leased from Cable and Wireless Communications Ltd. to support SADIS 2G services:

- 1 (70 to 140 MHz) convertor;
- Use of 1 (140 to C band) convertor;
- Use of satellite hub (lease represents only a very small part of this large aperture) for SADIS 2G services; and

2) Units forming part of a totally integrated rack structure to provide SADIS 2G service, with back-up (see the list under Section 1 C).

d) Dual contingent communication links (utilising WMO TCP/IP sockets protocol) between SADIS Gateway and Met Office in support of SADIS 2G service.

iii) **Not procured principally for SADIS**

a) Met Office Message switch (FROST): Total investment £1.02M<sup>1</sup> of which 1.71 1.48 per cent is attributable to SADIS FTP service usage: switching data to operational FTP service;

b) ~~1) Met Office Message switch (FROST): Total investment £1.02M<sup>1</sup> of which 0.86 per cent is attributable to SADIS usage: switching data to operational (2G) broadcast service (excluding GRIB2) and to 2G monitoring system (Corobor Comparator);~~

~~2) Met Office Message switch (FROST): Total investment £1.02M<sup>1</sup> of which 1.06 1.02 per cent is attributable to SADIS usage: switching data to operational (2G) broadcast service (including GRIB2) and to 2G monitoring system (Corobor Comparator);~~

*Note. — Information regarding the cost with (2) and without (1) the WAFS GRIB2 data are provided since delivery of WAFS GRIB2 data over SADIS 2G has yet to be endorsed by the SADISOPSG, and a date of provision decided. WAFS GRIB2 data began to be transmitted operationally over SADIS 2G with effect from 18 November 2010.*

c) Allocated bandwidth 4 Mbps bursting to 8 Mbps ~~(as of 31 January 2010)~~ between server and Internet Service Provider (ISP) in support of the SADIS FTP service;

d) At the moment Secure SADIS FTP bandwidth is sufficient to deal with foreseen data traffic, and will be monitored. It is expected that as take up of Secure SADIS FTP increases, a “guaranteed” 4 Mbps bursting to 8 Mbps between server and Internet Service Provider (ISP) arrangement, similar to that used for existing SADIS FTP, may be needed;

~~e~~e) NATS Message switch (CoreMet System);

*Note. — Some elements of the CoreMet System are exclusively for the support of the SADIS gateway function.*

~~e~~f) SADIS FTP equipment running costs;

*Note. — These costs are applied to all MET Office internet facing services and primarily relate to costs associated with ensuring high levels of IT security.*

~~f~~g) Met Office Service Desk equipment; and

*Note. — Equates to 3.5 per cent of the total share of Met Office IT Operations equipment.*

<sup>1</sup> budgeted cost for providing FROST service during the fiscal year 2010/2011.

~~g-h~~) Met Office Serial Communications.

*Note. — Equates to 20 per cent of total share of Met Office Serial Communications. Includes cost of switching serial data from FROST Message Switch to SADIS 2G, comprising staff and equipment costs of supporting serial WAN, TTL Routers, Serial Modems and TTL matrix switches.*

**B. SADIS data back-up system**

ISCS VSAT receiving system, including TCP/IP receiver and cables, on SADIS Provider (UK Met Office) premises.

*Note 1.— This hardware is not currently used in an operational environment.*

*Note 2.— The SADIS Gateway (UK NATS) has procured a dedicated SADIS data backup arrangement with the ISCS Provider State. The backup infrastructure includes an ISDN connection between the NWS Telecommunications Gateway and the SADIS Gateway, and an ISDN connection between the SADIS Gateway and Whitehill uplink facility, to provide SADIS data backup. This hardware is currently undergoing final testing of functionality and process before becoming operationally acceptable.*

**C. Hub equipment and services located at Exeter and Whitehill**

<i>Item</i>	<i>Description</i>	<i>Quantity</i>
<b>1.</b>	<b>Whitehill services (leased from Cable &amp; Wireless)</b>	
1.1	70 MHz to 140 MHz converter	1
1.2	140 MHz to C band converter	1
1.3	Satellite Hub leased bandwidth	1 slot
<b>2.</b>	<b>ISDN back-up service to Washington (NWSTRG)</b>	
2.1	VadEDGE 4202	3*
2.2	ISDN 2e circuit	1
2.3	Interface cables	2
<b>3.</b>	<b>SADIS FTP service</b>	
3.1	Dell Poweredge R900 servers with 1 Gb RAM	2
3.2	26.8 Gb internal disk drives	2
3.3	VMWave Virtual Platform with Red Hat Linux 5.3 OS	2
3.4	Intel Xeon X7350, 2.93 GHz Processors	2
3.5	Licenses, misc. support and maintenance costs	1

*Note. — Hardware listed under Section 2 is located at Whitehill.*

*Note. — Hardware listed under Section 3 is located at Exeter.*

**4. Secure SADIS FTP service**

4.1	Dell Poweredge R900 servers with 1 Gb RAM	2
4.2	Dell Poweredge R900 (4 core) servers with 32 Gb RAM *	2
4.3	Shared Storage Arrays (analogous to hard disk storage, but with dynamic upper limit)	2
4.4	VMWave Virtual Platform with Red Hat Linux 5.3 OS	2
4.5	Intel Xeon X7350, 2.93 GHz Processors	2
4.6	Licenses, misc. support and maintenance costs	1

*Note. — Item 4.2 relates to Digital Signing servers.*

**4.5. SADIS 2G Infrastructure**

4-5.1	Frost port	1
4-5.2	MegaPAC V-IX Base System Dual PSU including Chassis, 1 CP6000, and 1 switch	2*
4-5.3	CP6000 for use with MegaPAC V-IX	1*
4-5.4	VadEDGE 4202	3*
4-5.5	Uplink modem (Comtech EF Data SDM-300a)	3*
4-5.6	Communications cabinet and lease	1
4-5.7	MegaWatch including Enterprise Reports, and PC	1
4-5.8	Comtech SDM300L demodulator (NER5 downlink)	1
4-5.9	Corobor comparator software and PC	1
4-5.10	Communications rack floor space at Exeter in IT Hall 1 and IT Hall 2, and at Whitehill	3
4-5.11	Space in stores at Exeter to locate spare hardware	1
4-5.12	WAN Module	2
4-5.13	Comtech EF Data SMS 301 – redundancy switch	2*
4-5.14	BRI Module for VadEDGE 4202	2
4-5.15	Interface cabling	8

*\* Includes one unit/module stored as a cold spare.*

*Note. — Hardware listed under Section 4-5 is located at Exeter and Whitehill.*

**2. PROCURED SERVICES**

- A. Space segment annual lease: 4-5 1.3 MHz wide frequency band of which 57 46 per cent is utilised to support SADIS 2G, with 64 Kbps data rate (less communications overhead);

*Note. — SADIS 1G was terminated on 5 January 2009. The percentage allocation of satellite space segment has, however, remained unchanged because the SADIS 1G satellite bandwidth allocation was maintained in 2009 and 2010, as called for by SADISOPSG Decision 13/26 reserved for SADIS 1G was finally relinquished on 31 December 2010.*

- B. Annual maintenance of Met Office Exeter and Whitehill uplink site equipment (SADIS 2G and SADIS FTP server); and

C. Gateway function:

- i) Communication circuits between Met Office and NATS infrastructure site; and
- ii) System maintenance.

**3. ANNUAL STAFF REQUIREMENTS**

**A. United Kingdom Met Office**

**i) Service Desk**

*Note.— The Service Desk acts as a first point of contact for all inquiries, including those concerning the OPMET Gateway function. Complex inquiries will be passed to a relevant expert. Experts are available either on a 24-hour rota basis, or as a daytime support with limited on-call capability.*

*24-hour Weather Desk support*

*Skill*

- |  |   |
|--|---|
| 1. Service desk (first point of contact) | <del>Scientific supervisor</del>  |
| 2. Additional Service Desk operator      | Incident Management<br><del>Systems analyst</del><br>Customer Enquiries |

*Note. — Total support for SADIS provided by the Met Office Service Desk team equates to 0.3 per cent of the total Weather Desk budget.*

*24-hour IT Operations support*

*Skill*

- |  |   |
|--|---|
| 1. Technical Team Leader (TTL)           | <del>Computer engineer</del>  |
| 2. Networks and Systems Supervisor (NSS) | Technical Supervisor<br><del>Technical supervisor</del><br>Service Continuity |

*Note. — Total support for SADIS provided by the Met Office IT Operations team equates to 3.5 per cent of the total IT Operations budget.*

*Normal working hours support*

*Skill*

- |                                     |  |
|-------------------------------------|--|
| 1. Change and problem manager (CPM) | <del>Systems analyst</del><br>Process Specialist |
|-------------------------------------|--|

**ii) Additional support**

<i>Day support</i>	<i>Resource</i>
1. Systems integration team <del>(Note 1)</del>	14 staff-days of network computer engineer
2. Message Switching Manager	15 staff-days of MSS manager
3. Administrator	160 staff-days of executive officer
4. International aviation management	30 staff-days of manager
5. Data traffic	5 staff-days of communications engineer
6. Contract procurement and management <del>(Note 2)</del>	4 staff-days of senior procurement officer
7. Message switching Team <del>(Note 3)</del>	15 staff-days of technical officer
8. Invoice Administration	20 staff-days of invoicing officer and 15 staff-days of business accountant

~~Note 1. — Due to re-organisation and rationalisation within the Met Office’s IT services division, the CIDA role is now included within the Network Computer Engineer’s responsibilities. Effort required also significantly reduced since decommissioning of SADIS 1G.~~

~~Note 2. — Reduced effort required since cessation of SADIS 1G.~~

~~Note 3. — Responsibility for support and maintenance to the SADIS FTP service transferred from the Web Team to the Message Switching Team during 2009.~~

**B. NATS infrastructure site – CACC (OPMET Gateway function)**

Note 1. — The CACC provides the OPMET Gateway function, which is provided from a single operational site, but with a full capability at an alternative site. Staff are available either on a 24-hour basis, or as a daytime support with on-call capability.

Note 2. — The resource demand of 610 days required to provide the SADIS Gateway service comprises 6 watches of 1 ATSA4 and 1 ATSA3 each (Operations), 1 ATCE4 (Engineering Watchkeeping) and 3 ATCE4 (Engineering Day Support).

<i>24-hour support</i>	<i>Resource</i>
1. Operational staff support	523 staff-days per annum
2. Engineering staff support	22 staff-days per annum

<i>Day Support</i>	<i>Resource</i>
3. SADIS administration support	50 staff-days per annum
4. Engineering (including on-call)	15 staff-days per annum

**C. Bought-in services**

Additional support and maintenance agreements with third parties are in place to provide third line support of the SADIS 2G service.

-----

## SADIS SERVICES

*Note.— A glossary of abbreviations as used in this Annex is provided at the end of the Annex.*

### 1. Broadcast service

A summary of products available on SADIS 2G, SADIS FTP and Secure SADIS FTP. Detailed descriptions are contained within the specific User Guides to each of these services.

- a) distribution of WAFS upper-air forecasts in GRIB1 and GRIB2 codes;
- b) distribution of WAFS SIGWX forecasts in BUFR code;
- c) distribution of WAFS SIGWX forecasts in PNG chart form;
- d) distribution of OPMET information in alphanumeric format (METARs, TAFs, SIGMET, special AIREPs, volcanic ash and tropical cyclone advisories) from those regions whose OPMET information is needed to satisfy approved requirements in the regions served by SADIS;
- e) distribution of meteorological information in graphical format (e.g. Volcanic Ash Trajectory and Dispersion Graphics).

### 1. Collection service

- a) collection of ~~relevant~~ OPMET information by the SADIS Gateway from States in accordance with approved requirements stated by PIRGs and actioned by SADISOPSG;
- b) monitoring, validation and repair of data received at the SADIS Gateway to the required standards, for the provision of real-time scheduled reports and for off-line quality control analysis.

### 3. Back-up service

ISDN backup link between NWSTG and SADIS Gateway. ~~Reception of US ISCS broadcasts for back up purposes.~~

ISDN backup link between SADIS Gateway and SADIS 2G Uplink facility at Whitehill (UK).

### 4. User support service

- a) 24-hour help line/faults desk;
- b) dissemination of administrative messages, including amendments to bulletin headers given in the SADIS User Guide.

### 5. File transfer protocol service

Provision of facilities dedicated to establishing and receiving an FTP connection, using password protected access, to the SADIS FTP server that enables the transfer of WAFS upper-air forecasts in GRIB code, WAFS SIGWX forecasts in BUFR code, WAFS SIGWX forecasts in PNG chart form and OPMET data over the Public Internet.

**Glossary of abbreviations**

<i>AIREP</i>	Air report
<i>BUFR</i>	Binary Universal Form for the Representation of meteorological data (code)
<i>FTP</i>	File Transfer Protocol (Internet based)
<i>GRIB1</i>	Gridded binary edition 1 (code)
<i>GRIB2</i>	Gridded binary edition 2 (code)
<del><i>ISCS</i></del>	<del>International Satellite Communication System (U.S. satellite broadcasts similar to SADIS covering North and South America, the Caribbean and Central America, the Pacific and Eastern Asia)</del>
<i>ISDN</i>	Integrated Services Digital Network
<i>METAR</i>	Routine aviation weather report in code form
<i>NWSTG</i>	National Weather Service Telecommunications Gateway (Washington, USA)
<i>OPMET</i>	Operational meteorological (information or data)
<i>PIRG</i>	ICAO planning and implementation regional group
<i>PNG</i>	Portable Network Graphics (image format)
<i>SADIS</i>	Satellite Distribution for Information Relating to Air Navigation
<i>SADIS FTP</i>	Internet based version of SADIS
<i>Secure SADIS FTP</i>	Internet based version of SADIS using Digital Signatures and Digital Certificates to confirm data integrity and authenticity of the data.
<i>SADIS Gateway</i>	The United Kingdom message-handling system which receives data from the Aeronautical Fixed Service for transmission on SADIS
<i>SADISOPSG</i>	SADIS Operations Group
<i>SIGMET</i>	Information of specified en-route weather phenomena which may affect the safety of aircraft operations
<i>SIGWX</i>	Significant weather
<del><i>T4</i></del>	<del>Coded digital facsimile transmission format</del>
<i>TAF</i>	Aerodrome forecast in code form
<del><i>TROPICS</i></del>	<del>Transmission and reception of observational and product information by computer based switching (message switching equipment)</del>
<i>WAFS</i>	World area forecast system

## **PROCESS FOR OBTAINING ACCESS TO SADIS OR WIFS**

1.1 Following discussions at SCRAG/11, WAFSOPSG/6 and SADISOPSG/16, and in consultation with the WIFS Provider, the following processes are to be followed with regard to the provision of WAFS data via the internet based services: SADIS FTP, Secure SADIS FTP, and WIFS. The guidance below is expected to be included in forthcoming updates to both the SADIS FTP/Secure SADIS FTP and WIFS User Guides.

### **1) States directed in RANPs to take WAFS data from SADIS for primary operational use**

For those States that are directed by the RANP to use SADIS as their primary source of WAFS data the following procedures are applicable:

- SADIS2 accounts will be provided (following normal authorization processes) on request to the SADIS Provider; and,
- Participation in the SADIS Cost Recovery Scheme will be required (excepting LDCs<sup>3</sup> as defined by UN)
  - WIFS accounts will be provided by the WIFS Provider on condition that:
    - A SADIS account has been authorized and provided
    - There are no outstanding balances in respect of the SADIS Cost Recovery Scheme
    - That use is restricted to backup/contingency purposes, as well as occasional testing.

### **2) States directed in RANPs to take WAFS data from WIFS for primary operational use**

For those States that are directed by the RANP to use WIFS as their primary source of operational WAFS data the following procedures are applicable:

- WIFS accounts will be provided (following normal authorization processes) on request to the WIFS Provider
  - SADIS accounts will be provided by the SADIS Provider on condition that:
    - A WIFS account has been authorized and provided
    - That use is restricted to backup/contingency purposes, as well as occasional testing.

### **3) States identified in RANPs as being able to *select either WIFS or SADIS* for WAFS data for primary operational use**

The State, having selected which of the two services from which they wish to receive their primary operational supply of WAFS data, the procedures in 1) and 2) above will apply.

1.2 In exceptional circumstances, States that have an operational requirement to access both WIFS and SADIS FTP/Secure SADIS FTP on a continuous basis will have their requests considered on a case by case basis. Under such circumstances a State taking both services will be required to contribute fully to the SADIS Cost Recovery Scheme (LDCs as defined by UN excepted).

---

<sup>2</sup> SADIS 2G, SADIS FTP, Secure SADIS FTP or any combination thereof

<sup>3</sup> Least Developed Country

1.3 The definition of the usage criteria defining 'operational' vs 'backup/contingency purposes' to be applied to the SADIS and WIFS Internet based services will be that as determined - and adjusted from time to time as deemed necessary - by the SADIS Technical Developments Team in consultation with the WIFS Provider.

— END —