

# AGREEMENT

on the Sharing of Costs of  
the Satellite Distribution System for  
Information Relating to Air Navigation



*Approved by the Council of the International Civil Aviation Organization on 24 November 2000  
(Annexes amended by SCRAG/1 to SCRAG/17, last amended on 10 November 2016)*

# **AGREEMENT**

## **on the Sharing of Costs of the Satellite Distribution System for Information relating to Air Navigation**

WHEREAS the Council of the International Civil Aviation Organization on 6 March 2000 decided that effective 1 January 2001 all States receiving the service provided by the Satellite distribution system for information relating to air navigation (SADIS) shall participate in the SADIS Cost Allocation and Recovery (SCAR) arrangement, hereinafter referred to as the SCAR arrangement, thereby rendering null and void the *Agreement on the Voluntary Sharing of Costs of the Satellite Distribution System for Information relating to Air Navigation* as of that date;

The undersigned Civil Aviation Administrations or other such entities as may be designated by States, hereinafter referred to as the Parties,

HAVE AGREED AS FOLLOWS:

### **Article I**

#### *Definitions*

For the purpose of this Agreement:

*Council* means the Council of the International Civil Aviation Organization

*Group* means SCRAG

*Organization* means the International Civil Aviation Organization

*SADIS* means the Satellite distribution system for information relating to air navigation

*SCAR arrangement* means the SADIS Cost Allocation and Recovery (SCAR) arrangement

*SCRAG* means the SADIS Cost Recovery Administrative Group

*Secretary General* means the Secretary General of the International Civil Aviation Organization or the officer(s) designated by that person to act on his/her behalf with regard to this Agreement.

### **Article II**

#### *Objective*

The objective of this Agreement is for the Parties to establish and administer a mechanism to share in an equitable and fair manner the costs of providing, operating and maintaining the SADIS as approved by the Council, the services of which are described in Annex I to this Agreement.

### **Article III**

#### *Obligations of the Parties*

1. The United Kingdom, as the provider State, shall provide, operate and maintain the SADIS and do so in conformity with all relevant ICAO standards and recommended practices and in accordance with relevant recommendations and decisions approved by the ICAO Council or other authorized ICAO body.
2. Each Party receiving the SADIS service, including the United Kingdom, but excluding the Parties referred to under Article IV, shall pay its share of the costs of providing, operating and maintaining the SADIS as attributable to it in accordance with Article XI.

### **Article IV**

#### *Exemptions*

Any Party receiving the SADIS service and which falls within the group of States defined by the United Nations as “least developed countries (LDCs)” shall, unless it chooses not to, be exempt from paying its share of the respective costs as far as it remains in that situation.

### **Article V**

#### *Facilities and personnel required*

The facilities and personnel required by the United Kingdom fully or in part for the purpose of providing, operating and maintaining the SADIS are listed in Annex II to this Agreement.

### **Article VI**

#### *Liability*

None of the Parties shall be liable for any damages or losses, physical or financial, inflicted as the consequence of failures and/or omissions in the provision, operation and maintenance of the SADIS.

### **Article VII**

#### *Administration*

1. The 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 reassessments 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.

2. The SCRAG shall be composed of one Party from the European Region nominated by the European Air Navigation Planning Group (EANPG), one Party from the AFI Region nominated by the AFI Planning and Implementation Regional Group (APIRG), one Party from the MID Region nominated by the MID Air Navigation Planning and Implementation Regional Group (MIDANPIRG) and one Party from the Asia Region nominated by the ASIA/PAC Air Navigation Planning and Implementation Regional Group (APANPIRG). An additional member shall be nominated by the planning and implementation regional group for the region wherein Parties are located which in the aggregate are responsible for more than 50 per cent of the total current assessments. The representative from the Party so nominated shall be chairman of the SCRAG. If none of the regions includes Parties which in the aggregate are responsible for more than 50 per cent of the total current assessments, SCRAG shall elect its chairman from among its members.
3. Only those Parties which participate in the SCAR arrangement are eligible to serve on the SCRAG.
4. The United Kingdom, in its capacity as the SADIS provider State, shall participate in the SCRAG as an observer. Furthermore, the International Air Transport Association (IATA), as a representative of user interests, shall be invited to participate as an observer. The Chairman of the SADIS Operations Group (SADISOPSG) shall be invited to participate as an observer as needed to provide information on the technical efficacy of the SADIS services provided and on the inventory of the facilities and services falling under the SCAR arrangement.
5. Each member Party of the SCRAG shall have one vote, and when voting is required, decisions by the Group shall be arrived at by simple majority; however, when the votes are equally divided, the Chairman's vote shall prevail.

## **Article VIII**

### *Support services provided by the Secretary General*

Support services for the SCRAG specifically attributable to administering the SCAR arrangement shall be performed by the Secretary General, the costs of which shall be included in the costs to be shared amongst the Parties participating in the arrangement.

## **Article IX**

### *Determination of costs*

1. The costs to be shared among the Parties shall be the full costs to the United Kingdom of employing fully or in part the facilities and personnel listed in Annex II to this Agreement for the purpose of providing, operating and maintaining the SADIS, including depreciation of assets and cost of capital and an appropriate amount for administration.
2. The United Kingdom shall furnish the SCRAG through the Secretary General, on or before 15 September of each year, estimates, expressed in pounds sterling or any successor currency that may become legal tender in the United Kingdom, of the costs of the SADIS for the following calendar year for approval by the Group. The estimates shall be drawn up in accordance with Annex III to this Agreement.

3. The United Kingdom shall furnish to the SCRAG on or before 30 June of each year, a statement of the actual costs of the SADIS, expressed in pounds sterling or any successor currency that may become legal tender in the United Kingdom, for the previous calendar year.
4. Pursuant to Article VII, paragraph 1 b), the SCRAG shall subject such statements of actual costs of the SADIS to such audit and other examination as the Group deems appropriate and shall furnish to the Parties a report of the audit or examination.

## **Article X**

### *Limitations on cost increases*

Increases in the costs to the United Kingdom of operating the SADIS in any one year over and above the rate of inflation in the United Kingdom as measured by the Retail Price Index (RPI) shall not be recoverable under this Agreement unless agreed upon in writing by Parties responsible for not less than ninety per cent of the assessments. These limitations do not apply if the increases over and above the rate of inflation are solely attributable to the approved costs of new services added in that year to the services provided under the SADIS.

## **Article XI**

### *Determination of cost share of each Party*

1. Each Party as encompassed by Article III, paragraph 2, shall be assessed a share of the total costs of the SADIS arrangement in proportion to the total number of available tonne-kilometres (ATKs) in scheduled services (international and domestic) performed by air carriers based in the territory of the State of that Party. The share of each Party shall be calculated from the total number of ATKs performed by all air carriers based in the territory of the State of that Party as a percentage of the total number of such ATKs performed by all air carriers of all the Parties participating in the arrangement. The total costs to be shared shall include the costs attributable to the Parties exempted from paying.
2. On or before 1 November of each year, the Secretary General shall with regard to each Party furnish the SCRAG with the total number of ATKs performed in scheduled services (international and domestic) in the preceding calendar year by air carriers based in the territory of the State of that Party.
3. The assessments for year  $n$  shall be calculated on the basis of the cost estimates for that year as approved by the SCRAG and ATKs as provided with regard to each Party by the Secretary General for year  $n-2$ . The cost basis for the assessments in year  $n$  shall, however, first be adjusted upwards or downwards as the case may be by the amount by which the total estimated costs for year  $n-2$  were below or above the approved actual costs for that year. Likewise the assessment of each Party shall be adjusted to take into account any difference between the amounts paid by it under this Agreement as advances for year  $n-2$  and its share as determined on the basis of actual ATKs and approved actual costs in year  $n-2$ .
4. Any under-recovery of costs for year  $n$  arising from the failure of a Party to pay the SADIS cost share attributable to it for that year shall be added to the total SADIS costs to be shared for year  $n+2$ . Any subsequent remittance by the Party concerned to offset the consequential debt shall be deducted from the total costs to be shared for the year following that in which the remittance was received.

5. Pursuant to Article VIII and Annex III to this Agreement, the costs of the support services provided by the Secretary General shall be added to the costs to be shared.

## **Article XII**

### *Collection by SADIS provider*

1. The SCRAG shall communicate to the United Kingdom as the SADIS provider State on or before 1 December each year the approved estimated assessments for each Party adjusted as provided for in Article XI and authorize their collection by the United Kingdom, which thereupon may proceed to issue the invoices to each Party for its respective assessment as adjusted.
2. The invoices and payments made shall be in pounds sterling or any successor currency that may become legal tender in the United Kingdom.
3. On 1 January each calendar year or within one month of the date of invoice, each Party, or the entity or agent it designates, shall pay to the United Kingdom the amount assessed on it as provided for in paragraph 1 of this Article.
4. The payments that are due to the Secretary General pursuant to Article VIII above shall be remitted by the United Kingdom as the SADIS provider State to the Secretary General on 1 May each year.
5. The United Kingdom shall maintain a separate bank account specifically for handling all payments received and payments made with regard to the services covered under this Agreement. Any interest accruing on that account shall be considered a collective property of the Parties and shall be applied for a purpose deemed appropriate by the SCRAG, with the approval of the Parties.
6. The United Kingdom shall keep proper accounts of the billings and collections under this Agreement.

## **Article XIII**

### *Failure to pay*

Failure by a Party receiving the SADIS service to pay its share of the costs of providing the service (other than a Party exempted in accordance with Article IV) shall lead to the service to that Party being withdrawn at the end of the calendar year in which payment was due. The service shall not be re-instated until the Party concerned has fully settled its debt.

## **Article XIV**

### *Recovery of costs from users*

It is the prerogative of each Party to decide whether or not to recover the assessment it has paid under this Agreement from users (aircraft operators). Such cost recovery by a Party shall, however, in so far as it applies to international civil aviation, be in conformity with the principles and practices set out in the *Convention on International Civil Aviation* (Doc 7300) and *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082).

## **Article XV**

### *Reporting to Parties*

On or before 30 September each year or more frequently if required, the SCRAG shall submit a report to the Parties on its activities in the preceding year and other relevant issues.

## **Article XVI**

### *Settlement of disputes*

Any dispute relating to the interpretation or application of this Agreement which is not settled by negotiation between the Parties involved shall, upon request of any of these Parties, be referred to the Council of the International Civil Aviation Organization for its recommendation.

## **Article XVII**

### *Amendments*

1. Any proposal for an amendment of this Agreement may be initiated by a Party, directly or through the planning and implementation regional group for the air navigation region within which the Party is located, or by the Council. The proposal shall be communicated in writing to the Secretary General who shall circulate it to all the Parties with the request that they advise the Secretary General formally whether or not they agree to it.
2. Adoption of an amendment shall require the agreement of two-thirds of all the Parties that have paid their share of the costs of providing the SADIS service.
3. An amendment so adopted shall enter into force for all Parties on 1 January of the year following the year in which formal written acceptances of the amendment have been received by the Secretary General from two-thirds of all the Parties that have paid their share of the costs of providing the SADIS service.
4. The Secretary General shall send certified copies of each amendment as adopted to all the Parties and shall notify them of any acceptances and of the date of entry into force of any amendment.
5. The SCRAG may amend the Annexes to this Agreement, subject always to the terms and conditions of the Agreement and the consent of the United Kingdom as the SADIS provider.

## **Article XVIII**

### *Accessions and withdrawals*

1. This Agreement shall be open to accession by the civil aviation administration or other such designated entity of any State being served by the SADIS. Accession shall be effected by notice in writing to that effect given to the Secretary General by the head of the civil aviation administration or other such designated entity in the State concerned.

2. Any Party may withdraw from participation in this Agreement on 31 December in any year by notice in writing to that effect given to the Secretary General not later than 1 January of that year by the Party concerned.

## **Article XIX**

### *Termination*

1.
  - a) This Agreement may be terminated by the United Kingdom as the SADIS provider State on 31 December in any year by notice in writing given to the Secretary General not later than 1 January of that year.
  - b) If at any time it proves impossible for the United Kingdom to perform the services within the limit determined pursuant to the provisions of Article X, the United Kingdom shall immediately notify the Secretary General in writing of such fact and shall furnish to the SCRAG through the Secretary General a detailed estimate of the additional amount required. The SCRAG shall promptly examine such estimate and, after any necessary consultation with the United Kingdom, determine the amount needed in excess of the aforesaid limit. The SCRAG shall then approach the Parties with a view to obtaining their consent as required pursuant to the provisions of Article X. Unless, within three months after the SCRAG has determined the additional amount required, the Group notifies the United Kingdom that the Parties have given their consent, the United Kingdom may thereafter terminate this Agreement on three months' notice in writing given to the Secretary General.
  - c) This Agreement may be terminated on 31 December in any year by Parties other than the Civil Aviation Authority of the United Kingdom responsible for assessments in the aggregate of not less than two-thirds of the limit determined pursuant to the provisions of Article X by notice in writing given to the Secretary General not later than 1 January of that year.
2. Upon receipt of a notice or notices of desire to terminate this Agreement in accordance with paragraph 1 of this Article, the Secretary General shall notify the Parties.

## **Article XX**

### *Entry into force*

This Agreement, and its Annexes which form an integral part thereof, shall enter into force on 1 January 2001.



## ANNEX I

### SADIS SERVICES

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

#### 1. Internet based (FTP) service

A summary of products available on SADIS. Detailed descriptions are contained within the SADIS User Guide (Parts 1 and 2) of the service.

- a) distribution of WAFS upper-air forecasts in GRIB2 code form;
- b) distribution of WAFS SIGWX forecasts in BUFR code form;
- 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 Graphics).

#### 2. Collection service

- a) collection of OPMET information by the SADIS Gateway from States in accordance with approved requirements stated by PIRGs and actioned by Meteorological Operations Working Group (WG-MOG), the Working Group tasked by the Meteorological Panel (METP) to oversee the operational provision of SADIS;
- 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;

#### 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 (Parts 1 and 2).

#### 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. The FTP service implements Digital Signatures and Digital Certificates to confirm data integrity and authenticity of the data.

## 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>GRIB2</i>	Gridded binary edition 2 (code)
<i>ISDN</i>	Integrated Services Digital Network
<i>METAR</i>	Routine aviation weather report in code form
<i>METP</i>	Meteorological Panel
<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>	Secure Aviation Data Information Service
<i>SADIS FTP</i>	Internet based provision of SADIS
<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. Tasked with the oversight of SADIS until its dissolution in 2015. Superseded by Meteorological Operations Working Group (WG-MOG) under the Meteorological Panel (METP). Reference retained for historical purposes.
<i>SIGMET</i>	Information of specified en-route weather phenomena which may affect the safety of aircraft operations
<i>SIGWX</i>	Significant weather
<i>TAF</i>	Aerodrome forecast in code form
<i>WAFS</i>	World area forecast system
<i>WG-MOG</i>	Meteorological Operations Working Group (under METP)

## ANNEX II

### SADIS INVENTORY

*(Annex II updated during the Third Meeting of the Meteorology Panel Working Group on Meteorological Operations Group in Gatwick, 13-16 June 2016)*

**Note: The SADIS 2G Service will be withdrawn at 1200 UTC on 31 July 2016. As such, a number of items will be decommissioned/withdrawn and, therefore, removed from the inventory after that date. These are indicated as appropriate in this amendment.**

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 implementation of Secure SADIS FTP) and communications circuits, ISDN 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**

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

**NOTE: The SADIS 2G ground-hub equipment will be decommissioned during August 2016, following cessation of the SADIS 2G service.**

2. The Secure SADIS FTP hub infrastructure connection to the Met Office message switch (MetSwitch) 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 the 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 Kbit/sec circuits in support of SADIS 2G service

**NOTE: These communications links will be decommissioned during August 2016, following cessation of the SADIS 2G service.**

c) At the uplink site (Whitehill):

1) Units and services leased from Vodafone to support SADIS 2G uplink services:

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

**NOTE: The SADIS 2G ground-hub equipment will be decommissioned during August 2016, following cessation of the SADIS 2G service.**

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).

**NOTE: These units will be decommissioned during August 2016 following cessation of the SADIS 2G service.**

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

**NOTE: These communications links will be decommissioned during August 2016, following cessation of the SADIS 2G service.**

iii) **Not procured principally for SADIS**

a) Met Office Message switch (MetSwitch): Total investment £738K<sup>1</sup> of which 1.00 per cent is attributable to the Secure SADIS FTP service usage: switching data to operational FTP service;

b) Met Office Message switch (MetSwitch): Total investment £738K<sup>2</sup> of which 0.74 per cent is attributable to SADIS 2G usage: switching data to operational (2G) broadcast service and to 2G monitoring system (MetSwitch Dev);

c) Allocated bandwidth 24 Mbit/sec bursting to 42 Mbit/sec between server and Internet Service Provider (ISP) in support of the Secure SADIS FTP service. Individual client connections have a maximum throughput of 2048 Kbit/sec.;

d) NATS Message switch (CoreMet System);

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

e) Secure SADIS FTP equipment running costs;

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<sup>1</sup> budgeted cost for providing MetSwitch service during the fiscal year 2016/2017.

<sup>2</sup> budgeted cost for providing MetSwitch service during the fiscal year 2016/2017.

*Note. — This comprises support and maintenance of the servers underpinning the Secure SADIS FTP services, a share of the cost for the underlying storage capacity on which the Secure SADIS FTP services are reliant, and operational monitoring of the Secure SADIS FTP services by Tivoli ensuring problems can be identified and resolved in a timely manner.*

- f) Met Office Service Desk equipment; and

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

- g) 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 MetSwitch Message Switch to SADIS 2G, comprising staff and equipment costs of supporting serial WAN, TTL Routers, Serial Modems and TTL matrix switches.*

**NOTE:Item b) will not be required after 31 July 2016, following cessation of the SADIS 2G service.**

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

The SADIS Gateway (UK NATS) has procured a dedicated SADIS data back-up arrangement with the WIFS Provider State. The back-up infrastructure includes an ISDN connection between the National Weather Service Telecommunications Gateway (NWSTG) and the SADIS Gateway, and an ISDN connection between the SADIS Gateway and Whitehill uplink facility, to provide SADIS data back-up.

## **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>Items 1.1 to 1.3 will be decommissioned during August 2016, following cessation of SADIS 2G.</b>		
<b>2.</b>	<b>ISDN back-up service to Washington (NWSTG)</b>	
2.1	VadEDGE 4200	3*
2.2	ISDN 2e circuit	1
2.3	Interface cables	2

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

**Items 2.1 to 2.3 will be decommissioned during August 2016, following cessation of SADIS 2G.**

### **3. Secure SADIS FTP service**

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

*Note 1. — Item 3.2 relates to Digital Signing servers.*

*Note 2. — Items listed under Section 3 are located at Exeter.*

### **4. SADIS 2G Infrastructure**

4.1	MetSwitch port	1
4.2	MegaPAC V-IX Base System Dual PSU including Chassis, 1 CP7000 and 1 switch	2*
4.3	CP7000 for use with MegaPAC V-IX	1*
4.4	VadEDGE 4200	4*
4.5	Uplink modem (Comtech EF Data SDM-300a)	3*
4.6	Communications cabinet and lease	1
4.7	MegaWatch including Enterprise Reports and PC	1
4.8	Comtech SDM300L demodulator (NER5 downlink)	1
4.9	MetSwitch Comparator functions	1
4.10	Communications rack floor space at Exeter in IT Hall 1 and IT Hall 2, and at Whitehill	3
4.11	Space in stores at Exeter to locate spare hardware	1
4.12	WAN Module	2
4.13	Comtech EF Data SMS 301 – redundancy switch	2*
4.14	BRI Module for VadEDGE 4200	2
4.15	Interface cabling	8

*\*Includes one unit/module stored as a cold spare and one unit as part of downlink that may also be used as a spare for the uplink circuit, if necessary.*

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

**Items 4.1 to 4.15 will be decommissioned during August 2016, following cessation of SADIS 2G.**

## **2. PROCURED SERVICES**

- A. Space segment annual lease: Allocated frequency band to SADIS 2G, providing a 64 Kbit/sec data rate (less communications overhead).
- B. Annual maintenance of Met Office Exeter and Whitehill uplink site equipment (SADIS 2G and Secure SADIS FTP server).

**Item A will no longer be required after 31 July 2016 following cessation of SADIS 2G.**

**Item B will be reduced, following cessation of SADIS 2G**

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) | Incident Management |
| 2. Additional Service Desk operator      | 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)           | Technical Supervisor |
| 2. Networks and Systems Supervisor (NSS) | 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) | Process Specialist |
|-------------------------------------|--------------------|

##### ii) Additional support

##### *Day support*

##### *Resource*

- |  |  |
|--|--|
| 1. Systems integration team            | 14 staff-days of network computer engineer                                     |
| 2. Message switching manager           | 15 staff-days of MSS manager   |
| 3. Administrator                       | 150 staff-days of executive officer  |
| 4. International aviation management   | 15 staff-days of manager   |
| 5. Data traffic                        | 5 staff-days of communications engineer  |
| 6. Contract procurement and management | 4 staff-days of senior procurement officer                                     |
| 7. Message switching team              | 15 staff-days of technical officer   |
| 8. Invoice administration              | 20 staff-days of invoicing officer and<br>15 staff-days of business accountant |



## **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 608 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) and 2 Gateway day support administrative staff.*

### *24-hour support*

### *Resource*

- |                                   |                          |
|-----------------------------------|--------------------------|
| 1. Air Traffic Services Assistant | 521 staff-days per annum |
|-----------------------------------|--------------------------|

*Note. — Total support for SADIS provided by the 24-hour support for the OPMET Gateway function equates to 18 per cent of the total CACC Helpdesk budget.*

- |                                |                         |
|--------------------------------|-------------------------|
| 2. H24 Maintenance Engineering | 14 staff-days per annum |
|--------------------------------|-------------------------|

### *Day Support*

### *Resource*

- |                                     |                         |
|-------------------------------------|-------------------------|
| 3. Administration                   | 54 staff-days per annum |
| 4. Meeting Attendance               | 6 staff days per annum  |
| 5. Staff Training and Documentation | 3 staff days per annum  |
| 6. Day Support Engineering          | 10 staff days per annum |

*Note. — Total support for SADIS provided by the day support for the OPMET Gateway function equates to 5 per cent of the total day support budget.*

## **C. Bought-in services**

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

References to SADIS 2G will be removed in 2016, following cessation of SADIS 2G.

**ANNEX III**  
**FINANCIAL ISSUES**

**GENERAL**

1. Determination of any costs to be recovered under the SCAR arrangement must be carried out in conformity with the ICAO policies and principles stated in the *Convention on International Civil Aviation* (Doc 7300) and its Annexes, and ICAO's *Policies on Charges for Airports and Air Navigation Services* (Doc 9082).
2. Where facilities or personnel are only used partially to provide SADIS, the cost share attributable to SADIS shall be correspondingly reduced.

**CHARGEABLE COSTS**

1. The costs which the United Kingdom as the SADIS provider State may charge under this Agreement are set out hereunder:

a) *Cost of operation and maintenance*

These refer to personnel costs (including direct remuneration, pension contributions, social security costs, etc.), power, supplies, services contracted or procured and other costs of operation and maintenance.

b) *Administrative costs*

Costs incurred in administering SADIS, including invoicing and collection of payments, and in preparation of reports to the SCRAG.

c) *Depreciation* shall not exceed:

Building space: 5 per cent a year

Furniture and fittings: 10 per cent a year

Communication equipment: 20 per cent a year

*Note 1. — The residual value of a fixed asset disposed of shall be charged to depreciation in the year the disposal takes place. Also, the proceeds from a disposal, if any, shall be deducted from the total estimated costs to be shared amongst the Parties as calculated in the year when the disposal took place, unless this occurs after the calculation of the assessments in which case the proceeds shall be applied against the assessments in the following year.*

*Note 2. — In the event this Agreement is terminated, the United Kingdom may, to the extent it is unable to reallocate any fixed asset(s) to other use, charge the undepreciated portion of the asset(s) concerned to the costs recoverable from the participating States in the last year the Agreement remains in force.*

d) *Cost of capital*

This falls into two basic categories. The first is the interest on debt capital (other than equity). The second is the appropriate cost of capital applied to equity. The latter would be defined as fixed and net current assets minus long-term debt. The rate to be applied either would be set by an independent economic regulator appointed by the United Kingdom Government or should be derived from the average government bond rate in the United Kingdom for the preceding year.

e) *Interest on temporary cash surplus or deficit*

Article XII, paragraph 5 of the Agreement stipulates that “the United Kingdom shall maintain a separate bank account specifically for handling all payments received and payments made with regard to the services covered under this Agreement. Any interest accruing on that account shall be considered a collective property of the Parties and shall be applied for a purpose deemed appropriate by the SCRAG, with the approval of the Parties.” In the events of the funds in this bank account not being sufficient to cover the disbursements required for the services covered under this Agreement, the United Kingdom may charge interest on the shortfall during the period it lasts at that rate of interest that would be paid by the United Kingdom for short-term loans it may negotiate to finance its own operations.

## **PRESENTATION OF ACCOUNTS**

1. The format and detail of the presentation of the accounts by the United Kingdom as the SADIS provider State shall be determined by the SCRAG.
2. An inventory of assets should also be maintained showing for each major asset or group of assets: original value, depreciation charged in the current year, total accumulated depreciation and net depreciated value at the end of the year.

## **COSTS OF SUPPORT SERVICES PROVIDED BY THE SECRETARY GENERAL**

Estimates of the total costs of the support services provided by the Secretary General for year  $n$  shall be provided by the Secretary General for inclusion in the estimated assessments of the costs of the SADIS for that year. The actual costs of the support services provided by the Secretary General in year  $n$  shall be presented after their audit by the Organization’s external auditor.

— END —