

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/12, last amended on 4 November 2011)

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. 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 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 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;
ISDN backup link 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)
<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
Secure <i>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
<i>TAF</i>	Aerodrome forecast in code form
<i>WAFS</i>	World area forecast system

ANNEX II

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 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 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 £1.02M¹ of which 1.48 per cent is attributable to SADIS FTP service usage: switching data to operational FTP service;
- b) Met Office Message switch (FROST): Total investment £1.02M¹ of which 1.02 per cent is attributable to SADIS usage: switching data to operational (2G) broadcast service (excluding GRIB2) and to 2G monitoring system (Corobor Comparator);

Note. — 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 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) NATS Message switch (CoreMet System);

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

- 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.

- g) Met Office Service Desk equipment; and

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

- 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.

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

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>
1.	Whitehill services (leased from Cable & Wireless)	
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
2.	ISDN back-up service to Washington (NWSTG)	
2.1	VadEDGE 4202	3*
2.2	ISDN 2e circuit	1
2.3	Interface cables	2

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

3.	SADIS FTP service	
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 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.

5. SADIS 2G Infrastructure

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

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

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

2. PROCURED SERVICES

- A. Space segment annual lease: 1.3 MHz wide frequency band of which 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 allocation of satellite space segment 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) | 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 | 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 | 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
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 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.

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.

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