#### SADIS COST RECOVERY & ADMINISTRATIVE GROUP (SCRAG)

#### **TWELFTH MEETING**

(London, November 3-4 2011)

#### 2010 ACTUAL SADIS COSTS

(Presented by the United Kingdom)

#### REFERENCES

SADIS Agreement

SCRAG Reports 1-11

SADISOPSG/16 Executive Summary

## 1. INTRODUCTION

- 1.1 Article IX of the SADIS Agreement identifies that the United Kingdom shall furnish on or before 30 June of each year, a statement of the actual costs of the SADIS, expressed in pounds sterling, for the previous calendar year. These costs are identified in TABLE 1.
- 1.2 The format of the table is similar to that provided for previous years and is consistent with information provided in the SADIS Inventory.

## . DISCUSSION

## 2.1 Notes to the actual costs for 2010 and forecast costs for 2011

## a. Communications between Whitehill and the Met Office

Terrestrial communications costs between Exeter and the SADIS Uplink site at Whitehill became effective from  $1^{st}$  October 2003. The cost in 2010 covers one circuit for SADIS 2G of £1569.75 and a further circuit at £4795 per annum billed from May 5 2004.

#### b. NATS Links

Communications costs between the SADIS Gateway, operated by NATS, and the Met Office are provided here. NATS own the links and are billed for the circuits. NATS invoice the Met Office for the Met Office share of the costs. An additional link supporting SADIS 2G became operational early in 2005 but UKMO has not been billed for this. The ISDN back-up link remains in place at September 2011 and has been used operationally.

#### c. Message Switch

In 2010, data feeds were provided to SADIS 2G, SADIS FTP server and the Corobor comparator systems. FTP equipment running costs include software licences, depreciation and contractor support.

#### d. Service Desk equipment and Serial Communications

Following an internal audit of SADIS charges in 2008, new costs were included from 2009 covering equipment charges for the service desk functions and support of serial communications equipment.

#### e. Satellite Segment

The lease for the satellite segment was renewed through Cable & Wireless PLC for a period of 24 months covering the period 1 January 2009 to 31 December 2010. From 1 January 2011 a new 5-year lease was negotiated using a reduced bandwidth providing a significant cost saving to SADIS users.

## f. Annual Maintenance

Maintenance comprises:- (i) A Facilities Management charge with C&W for the SADIS 2G Equipment at Whitehill of £4275 per annum. (ii) A maintenance contract for SADIS 2G with AEP Networks for the 12 months to 31 Dec 2010 for £31633 and for the 12 months to 31 Dec 2011 for £32414. (iii) IT Halls costs are charges made to the SADIS Programme based on floor usage of the IT Halls at Exeter for all SADIS equipment.

## g. Ad-hoc maintenance

SCRAG/6 proposed that a charge of  $\pounds$ 5,000 be budgeted for ad-hoc maintenance activity in future years. In 2010, ad-hoc maintenance charges were nil. Ad-hoc maintenance of  $\pounds$ 3150 had been incurred up to the end of September 2011.

## h. Help Desk and Other staff costs

The cost rates have been updated using the latest available figures. The percentage attribution rates can be found in the SADIS Inventory.

## i. Additional support

In 2010, revised staff costs have been utilised using updated resource usage figures that can be found in the SADIS Inventory. The CIDA role is now included within the Network Computer Engineer's responsibilities. Responsibility for the support and maintenance to

the SADIS FTP service transferred from the web team to the Message Switching Team in 2009. Message Switching Manager costs were inadvertently omitted in the 2010 and 2011 forecasts. The net effect of these changes was neutral. Staff costs for 2011 are expected to be similar to 2010.

#### j. Travel Costs

Actual travel and subsistence costs for two members of UKMO staff to attend the SADISOPSG and SCRAG meetings are included here.

#### k. Cost of depreciated capital

See WP/8

## I. Cost of Capital

Cost of capital for 2010 has been calculated using the revised methodology applied in 2008 and described in SCRAG 10/ WP/13.

## 2.2 Notes on SADIS Gateway Costs

#### m. Staff Costs – Systems Engineers

SADIS Gateway costs were detailed in SCRAG 10/WP/14 and the revised basis of calculation was applied from January 1<sup>st</sup> 2009.

#### n. Systems Maintenance

Full cost of software maintenance was  $\pounds 31,324$  per annum commencing in June 2005. 20% of these costs are allocated to SADIS ( $\pounds 6,264$ ).

#### o. Depreciation

The SADIS Gateway became fully depreciated during 2008.

## 2.3 Notes on CAA and ICAO Administration Costs

#### p. CAA Administration Costs comprise the following:

| Met Authority Regulatory oversight | £3,845 |
|------------------------------------|--------|
| Travel costs                       | £823   |
| Total                              | £4,668 |

## q. ICAO Administration costs are detailed in WP/4.

## 3 ACTION

3.1 The SCRAG/12 is requested to note the cost information provided by the United Kingdom and approve for these costs to be recovered from States within the Cost Recovery Scheme.

#### SCRAG/12 WP/5 Annex 1.

TABLE 1: 2010 and 2011 SADIS Costs

| INVENTORY REF:                        | Note | DESCRIPTION                     | 2010<br>Actual<br>(Jan-Dec) | 2010<br>FOO<br>(SCRAG11) | 2010<br>Estimate<br>(SCRAG10) | 2011<br>FOO<br>(SCRAG12) | 2011<br>Estima<br>(SCRAG |
|---------------------------------------|------|---------------------------------|-----------------------------|--------------------------|-------------------------------|--------------------------|--------------------------|
| UK MET OFFICE COSTS                   |      |                                 |                             |                          |                               |                          |                          |
|                                       |      |                                 |                             |                          |                               |                          |                          |
| 1. Equipment                          |      |                                 |                             |                          |                               |                          |                          |
| Principally procured for SADIS        |      |                                 |                             |                          |                               |                          |                          |
| comms between Whitehill & Met Office  | а    | SADIS 2G                        | 6,364                       | 6364                     | 6364                          | 6364                     | 6                        |
| comms link SADIS Gateway & Met Office | b    | SADIS 2G                        | 3,340                       | 3340                     | 0                             | 3340                     | 3                        |
| ISDN back-up link                     |      | ISDN Back-up                    | 372                         | 372                      | 372                           | 372                      |                          |
| Not procured principally for SADIS    |      |                                 |                             |                          |                               |                          |                          |
| message switch (FROST/FTP)            | С    | SADIS FTP                       | 17,442                      | 17442                    | 24000                         | 15096                    | 24                       |
| message switch (FROST/2G)             |      | SADIS 2G                        | 8,772                       | 8772                     | 12500                         | 10404                    | 10                       |
| internet bandwidth (FTP)              |      | FTP                             | 11,356                      | 11500                    | 7000                          | 9758                     | 11                       |
| FTP equipment running costs           |      | FTP                             | 14,521                      | 16000                    | 16000                         | 19975                    | 40                       |
| Service Desk Equipment costs          | d    | Service Desk eqpt               | 16,030                      | 15680                    | 15700                         | 10045                    | 15                       |
|                                       | u    |                                 |                             |                          |                               |                          |                          |
| Serial Comms Costs and maintenance    |      | Serial Comms<br>sub total       | 9,945<br><b>88,142</b>      | 10000<br><b>89,470</b>   | 13600<br><b>95,536</b>        | 9247<br><b>84,601</b>    | 10<br><b>122</b> ,       |
| 2. Procured Services                  |      |                                 |                             |                          |                               |                          |                          |
| space segment annual lease            | е    | Satellite Segment               | 91,197                      | 91197                    | 91197                         | 54660                    | 70                       |
| annual maintenance                    | f    | 2G Maintenance                  | 31,633                      | 31633                    | 31616                         | 32414                    | 32                       |
|                                       | •    | 2G Facilities Mgmt              | 4,275                       | 4275                     | 4275                          | 4275                     | 4                        |
|                                       |      | 0                               |                             |                          |                               |                          |                          |
|                                       |      | IT Halls                        | 13,504                      | 13504                    | 15578                         | 16660                    | 15                       |
|                                       | g    | ad hoc maintenance              | 0                           | 1500                     | 5000                          | 5000                     | 5                        |
|                                       |      | sub total                       | 140,609                     | 142,109                  | 147,666                       | 113,009                  | 126                      |
| 3. Annual Staff Requirements          |      |                                 |                             |                          |                               |                          |                          |
| Help Desk                             | h    | Help Desk                       | 5,500                       | 5800                     | 5800                          | 5510                     | 5                        |
|                                       |      | Technical Team Leader           | 10,477                      | 11066                    | 11066                         | 10045                    | 11                       |
|                                       |      | Network Systems Supervisor      | 20,954                      | 22134                    | 22134                         | 20090                    | 22                       |
| Additional Support                    |      |                                 |                             |                          |                               |                          |                          |
| Systems Integration Team              | i    | Network Computer Engineer       | 4,866                       | 4866                     | 7,390                         | 4866                     | 4                        |
| Message Switching                     |      | Message Switching Manager       | 5,214                       | 0                        | 0                             | 5214                     |                          |
| Administrator                         |      | Executive Officer               | 55,612                      | 55612                    | 55,428                        | 55612                    | 55                       |
| International Aviation Management     |      | Aviation Manager                | 12,805                      | 12805                    | 13,616                        | 12805                    | 12                       |
| Data Traffic                          |      | Communications Engineer         | 1,738                       | 1738                     | 3,695                         | 1738                     | 1                        |
|                                       |      |                                 |                             |                          |                               |                          |                          |
| Contract Management                   |      | Senior Procurement Officer      | 1,390                       | 1390                     | 3,695                         | 1390                     | 1                        |
| Unix Support                          |      | Computer Engineer               | 0                           | 0                        | ,                             | 0                        |                          |
| Message Switching Team                |      | Technical Officer               | 5,214                       | 5214                     | 7,390                         | 5214                     | 5                        |
| Invoice Administration                |      | Invoice Officer & Business Acct | 12,165                      | 12165                    | 11,086                        | 12165                    | 12                       |
| CIDA                                  |      | CIDA & Infrastructure Engineer  | 0                           | 5214                     | 12,500                        | 0                        | 5                        |
| enhancements to FTP service           |      | FTP enhancements                | 62,304                      | 67000                    | 67000                         | 0                        |                          |
| GRIB2 data trial                      |      | GRIB2 over SADIS Trial          | 0                           | 0                        | 3000                          | 0                        |                          |
| Travel Costs                          | j    | SADISOPSG & SCRAG               | 1,948                       | 2000                     | 6000                          | 2000                     | e                        |
|                                       |      | sub total                       | 200,187                     | 207,004                  | 237,190                       | 136,649                  | 144                      |
|                                       |      | TOTAL                           | 428,938                     | 438,583                  | 480,392                       | 334,259                  | 392                      |
| Cost of Depreciated Capital           |      |                                 |                             |                          |                               |                          |                          |
| Cost of Depreciated Capital           | k    | SADIS 2G                        | 11,616                      | 19996                    | 19246                         | 11616                    | 11                       |
|                                       |      | sub total                       | 440,554                     | 458,579                  | 499,638                       | 345,875                  | 404                      |
|                                       |      |                                 |                             |                          |                               |                          |                          |
|                                       | I    | Cost of Capital                 | 19,646                      | 20,000                   | 26,000                        | 20,000                   | 20                       |

# TABLE 1: 2008 and 2009 SADIS Costs

|                             |      |                             | 2010      | 2010      | 2010      | 2011     | 2011     |
|-----------------------------|------|-----------------------------|-----------|-----------|-----------|----------|----------|
|                             |      |                             | Actual    | FOO       | Estimate  | FOO      | Estimate |
| INVENTORY REF:              | Note | DESCRIPTION                 | (Jan-Dec) | (SCRAG11) | (SCRAG10) | SCRAG12) | (SCRAG1  |
|                             |      |                             |           |           |           |          |          |
| NATS Gateway Costs          |      |                             |           |           |           |          |          |
| Staff Costs                 | m    |                             |           |           |           |          |          |
| Operational Staff           |      | Air Traffic Services Asst.  | 268,039   | 268,039   | 255,275   | 268,039  | 268,0    |
| Engineering Staff           |      | Systems Engineer            | 12,511    | 12,511    | 11,915    | 12,511   | 12,5     |
| Administration Support      |      | Administration Officer      | 25,022    | 25,022    | 23,830    | 25,022   | 25,0     |
| Asset Engineering Support   |      | Asset Management Activities | 7,194     | 7,194     | 6,851     | 7,194    | 7,1      |
|                             |      | sub total                   | 312,766   | 312,766   | 297,871   | 312,766  | 312,7    |
| Communications              | n    | IP Comms link to UKMO       | 12,040    | 12,040    | 12,040    | 12,040   | 12,0     |
|                             |      | X.25 Comms link to UKMO     | 0         | 0         | 0         | 0        |          |
| Maintenance                 |      | Systems Maintenance         | 6,264     | 6,264     | 6,264     | 6,264    | 6,2      |
| Cost of Depreciated Capital | 0    | Depreciation                | 0         | 0         | 0         | 0        |          |
|                             |      | Cost of Capital             | 0         | 0         | 0         | 0        |          |
| SADIS Backup Enhancement    |      | Procurement & Installation  | 0         | 0         | 0         | 0        |          |
|                             |      | Annual support costs        | 1,250     | 1,250     | 1,250     | 1,250    | 1,2      |
| Total NATS Gateway Costs    |      |                             | 332,320   | 332,320   | 317,425   | 332,320  | 332,3    |
| CAA Administration Costs    | р    |                             | 4,668     | 5,000     | 5,000     | 4,668    | 5,0      |
| ICAO Administration Costs   | q    |                             | 46,552    | 43,114    | 44,444    | 57,998   | 57,9     |
| TOTAL SADIS COSTS           |      |                             | 843,740   | 859,013   | 892,507   | 760,861  | 819,7    |