

SADIS COST RECOVERY ADMINISTRATIVE GROUP

FOURTH MEETING

(Bangkok, 4th and 5th November 2003)

ESTIMATED SADIS COSTS : 2 to 5 YEARS

(Presented by the United Kingdom)

REFERENCES

SADIS Agreement
SCRAG/1/2/3 Reports
SADISOPSG/8 Executive Summary

1. INTRODUCTION

1.1 The medium term (two to five years) forecast of the expected costs of operating the SADIS Services are provided in this Working Paper. Resource requirements will vary due to changing demand and these have been anticipated where possible and identified in the Tables presented. The SADISOPSG identified potential changes to the SADIS inventory as a result of new projects and these have been reflected where possible.

2. DISCUSSION

2.1 **TABLE 1** identifies expected budgets for the years 2004, 2005, 2006 and 2007 based on expected trends for expenditure by the United Kingdom Met Office and NATS.

2.2 It should be noted (**Note 1**) that extra helpdesk effort may be required to meet demand for the use of SADIS to up-link BUFR coded messages, though any additional cost is likely to be small. This increase is included in the staff costs from 2005.

2.3 **2G Implementation.** Allowance has been made for the project costs associated with the implementation of the SADIS 2G Broadcast. A cost of £20,000 is estimated for configuration, installation and testing. Equipment costs are estimated at £80,000, this being depreciated over 5 years. More precise figures will be available once technical solution is finalised. Implementation is also subject to approval by the relevant PIRGs.

2.4 **Satellite Segment.** The existing lease for satellite bandwidth comes up for renewal in mid-2005. While the cessation of transmission of charts in the T.4 format will considerably reduce the bandwidth required, and the 2G Broadcast is already accommodated, there may be demands for additional bandwidth to host additional 2-way VSATs, increased BUFR bulletins etc. It is suggested that a realistic assessment of future SADIS Satellite Bandwidth be made at the next SADISOPSG meeting.

2.5 **Annual Maintenance.** This figure comprises:

Leases for 2 racks (1G & 2G)	£12,600
C&W Maintenance charge	£19,632
Allowance for ad-hoc Maintenance	£2,768
Total estimated Maintenance charge	£35,000

2.6 **Message Switch.** This is estimated on the basis that message switch costs will double in order to carry data for the 2G broadcast. This is a worst case scenario and actual costs may well be lower.

2.7 **Depreciated Capital.** An allowance of £80000 depreciated over 5-years has been made for capital equipment to support the SADIS 2G Broadcast.

2.8 **TABLE 2** identifies the agreed inventory headings (SADISOPSG/6) for the SADIS Gateway: the values identified in this Table are provisional and subject to amendment after the completion of the contractual action being taken by the UK National Air Traffic Services.

2.9 The SADIS Gateway became operational in early July 2003. The depreciation figures shown in **TABLE 2** assume that additional bandwidth is procured in order to extend the SADIS operation until December 2006. Total capital costs of the SADIS Gateway are £206,400. The cost of capital is calculated on the average net book value for the period using a regulatory rate of return of 7.75%.

TABLE 1 : UKMO Cost and manpower resource projections until Year 2006.

Table 1	Year 2004 Projected Costs at 2003 prices	Year 2005 Projected Costs at 2003 prices	Year 2006 Projected Costs at 2003 prices	Year 2007 Projected Costs at 2003 prices
() resource in man/yr				
<u>ANNUAL STAFF COSTS</u>				
Help Desk (see note 1) Engineer	40926 (0.25)	49111 (0.30)	49111 (0.30)	49111 (0.30)
Network Computer Engineer	3273 (0.02)	3273 (0.02)	3273 (0.02)	3273 (0.02)
Executive Officer	34652 (0.55)	34652 (0.55)	34652 (0.55)	34652 (0.55)
Support Specialist	44103 (0.70)	44103 (0.70)	44103 (0.70)	44103 (0.70)
2G Implementation	20000	0	0	0
<i>STAFF COST SUB-TOTAL</i>	175694	163879	163879	163879
<u>SERVICES</u>				
Satellite Segment	96067	90000	80000	80000
Annual Maintenance	30000	35000	35000	35000
Message-Switch	40000	53000	53000	53000
SUB TOTAL	166067	178000	168000	168000
<u>COST OF DEPRECIATED CAPITAL</u>				
2G	16000	16000	16000	16000
SUB-TOTAL	16000	16000	16000	16000
<u>TOTAL FOR UKMO SADIS</u>	£357761	£357879	£347879	£347879

Note 1. The introduction of BUFR coded SIGWX and SIGMETS, if required by the ICAO Regions to be sent to the UK message-Switch, will require some expansion to the help desk requirement, though this is likely to be small.

Table 2. NATS and other SADIS Cost Projections until 2007

<u>NATS GATEWAY</u>	Year 2004 Projected Costs at 2003 prices	Year 2005 Projected Costs at 2003 prices	Year 2006 Projected Costs at 2003 prices	Year 2007 Projected Costs at 2003 prices
Operational Staff Support: Air Traffic Services Assistant	47280	47280	47280	47280
Engineering Staff Support: Systems Engineer	15450	15450	15450	15450
SADIS Administration Support	12875	12875	12875	12875
SUB TOTAL	75605	75605	75605	75605
Communication Link to UKMO	7140	7140	7140	7140
System maintenance	14280	14280	14280	14280
SUB TOTAL	21420	21420	21420	21420
<u>COST OF DEPRECIATED CAPITAL</u>				
OPMET Gateway Function	58972	58972	58972	0
Cost of Capital	11426	6855	2285	0
<u>TOTAL FOR GATEWAY</u>	167423	162852	158282	97025
CAA Admin	20000	20000	20000	20000
ICAO Admin	20000	20000	20000	20000
TOTAL Costs	565184 (note 2)	560731	546161	484904

Note 2. This amount does not include the under-recovery and non payment from States for 2001.

3. CONCLUSIONS

3.1 The annual running costs are subject to change. Costs may change as a result of changes in satellite bandwidth, maintenance and communication costs, new requirements and technological developments agreed by the PIRGS and SADISOPSG.

3.2 These figures should therefore be treated as first guess to give guide to trends for the **2 to 5 year period** and are subject to change.

4. ACTION

4.1 The SCRAG/4 is requested to note these provisional figures for the SADIS Costs.