SADIS COST RECOVERY ADMINISTRATIVE GROUP

SIXTH MEETING

(Paris, 21st and 22nd November 2005)

<u>**ESTIMATED SADIS COSTS : 2 to 5 YEARS**</u>
(Presented by the United Kingdom)

REFERENCES

SADIS Agreement

SCRAG/1/2/3/4/5 Reports

SADISOPSG/10 Executive Summary

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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 requirements and these have been reflected where possible.

2.   DISCUSSION

2.1   **TABLE 1** identifies expected budgets for the years 2006, 2007, 2008 and 2009 based on expected trends for expenditure by the United Kingdom Met Office and NATS.

2.2   The following notes should be read in conjunction with Table 1.

     a.   SADIS 1G will be disbanded at the end of 2008. Costs are therefore nil for 2009.

     b.   Cost in 2009 assumes that data feed for comparator will be switched from 1G to 2G.

     c.   ISP bandwidth costs are subject to change. Prices per unit bandwidth are expected to fall in the short term but are likely to be balanced by demand for faster access for an increasing number of users.

     d.   Equipment running costs include infrastructure and service delivery costs (server hall usage, network connection, WAN costs) and platform support team costs. No allowance has been made for enhancements to the service which is the subject of another paper.

e. A new contract for the satellite bandwidth has been negotiated till the end of 2006. Costs are assumed to remain level until 2008, and will then reduce once 1G broadcast ceases.

f. New contract for SADIS 1G Maintenance will be effective from mid-2006.

g. Maintenance and rack costs are included here for the operational SADIS 2G service. No allowance has been made for any ad-hoc maintenance that may be required.

h. The SADIS 2G operational equipment will become fully depreciated at the end of 2008.

i. A rate of return of 10% has been applied as the cost of capital.

2.3 **TABLE 2** identifies the agreed inventory headings (SADISOPSG/6) for the SADIS Gateway.

2.4 The SADIS Gateway became operational in early July 2003. Total capital costs of the SADIS Gateway are £227,462 with a depreciation period of five years. The cost of capital is calculated on the average net book value for the period using a regulatory rate of return of 7.75%.

2.5 The equipment was under warranty until July 2005. A half-year's maintenance was charged in 2005, and the full annual maintenance cost will be charged from 2006. The full cost of software maintenance is £31,323.75 per annum, with 20% of this (£6,264) being allocated to SADIS.

2.6 CAA administration costs are estimated at £20,000 per annum. ICAO administration costs are forecast to be £35,154 (see further information in SCRAG/6-WP/9).

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/6 is requested to note these provisional figures for the SADIS Costs.

TABLE 1: UKMO Cost and manpower resource projections until year 2009 (at 2005 prices)

INVENTORY REF:	Note	DESCRIPTION	2006	2007	2008	2009
1 UK MET OFFICE COSTS						
1. Equipment						
Principally procured for SADIS						
comms between Whitehill & Met Office	a	SADIS 1G	3,139	3,139	3,139	0
		SADIS 2G	6,364	6,364	6,364	6,364
comms link SADIS Gateway & Met Office		SADIS 1G	3,340	3,340	3,340	0
		SADIS 2G	3,000	3,000	3,000	3,000
Not procured principally for SADIS						
message switch (FROST/SADIS)	a	SADIS 1G	32,280	32,280	32,280	0
message switch (FROST/FTP)		SADIS FTP	12,720	12,720	12,720	12,720
message switch (FROST/2G)	b	SADIS 2G	13,680	13,680	13,680	26,000
internet bandwidth (FTP)	c	FTP	26,000	26,000	26,000	26,000
FTP equipment running costs	d	FTP	11,000	11,000	11,000	11,000
		sub total	**111,523**	**111,523**	**111,523**	**85,084**
2. Procured Services						
space segment annual lease	e	Satellite Segment	94,576	94,576	94,576	80,000
annual maintenance	f	SADIS 1G C&W	10,500	11,000	11,000	0
		1G Facilities Mgmt	6,300	6,300	6,300	0
	g	2G Maintenance	23,570	24,000	24,000	24,000
		2G Facilities Mgmt	6,300	6,300	6,300	6,300
		FTP Maintenance	8,000	8,000	8,000	8,000
		SADIS Spares Storage	542	542	542	542
		sub total	**149,788**	**150,718**	**150,718**	**118,842**
3. Annual Staff Requirements						
Help Desk		Help Desk	25,018	25,018	25,018	25,018
Additional Support						
Systems Integration Team		Network Comp Eng.	12,326	12,326	12,326	12,326
Administrator		Executive Officer	54,066	54,066	54,066	54,066
International Aviation Management		Aviation Manager	13,324	13,324	13,324	13,324
Data Traffic		Communications Engineer	3,604	3,604	3,604	3,604
Contract Management		Senior Procurement Officer	3,604	3,604	3,604	3,604
UNIX Support		Computer Engineer	3,604	3,604	3,604	3,604
Web Team Support		Website Designer	7,208	7,208	7,208	7,208
Enhancements to FTP Service			12,000	32,000	17,000	0
Travel Costs		SADISOPSG & SCRAG	5,000	5,000	5,000	5,000
		sub total	**139,754**	**159,754**	**144,754**	**127,754**
		TOTAL	**401,065**	**421,995**	**406,995**	**331,680**
Cost of Depreciated Capital						
	h	SADIS 2G	17,485	17,485	17,485	0
		FTP enhancements	10,000	11,000	13,000	13,000
		sub total	**428,550**	**450,480**	**437,480**	**344,680**
	i	Cost of Capital	42,855	45,048	43,748	34,468
		Total UKMO Costs	**471,405**	**495,528**	**481,228**	**379,148**

TABLE 2: NATS and other SADIS Cost Projections until 2009

INVENTORY REF:	Note	DESCRIPTION	2006	2007	2008	2009
2 **NATS Gateway Costs**						
Staff Costs						
Operational Staff		Air Traffic Services Asst.	50,256	50,256	50,256	50,256
Engineering Staff		Systems Engineer	20,368	20,368	20,368	20,368
Administration Support		Administration Officer	13,686	13,686	13,686	13,686
		sub total	**84,310**	**84,310**	**84,310**	**84,310**
Communications		link to UKMO	0	0	0	0
Maintenance		Systems Maintenance	6,264	6,264	6,264	6,264
Cost of Depreciated Capital		Depreciation	45,492	45,492	12,999	0
		Cost of Capital	6,296	2,770	504	0
Total NATS Gateway Costs			**142,362**	**138,836**	**104,077**	**90,574**
CAA Administration Costs			**20,000**	**20,000**	**20,000**	**20,000**
ICAO Administration Costs			**35,154**	**35,154**	**35,154**	**35,154**
TOTAL SADIS COSTS			**668,921**	**689,518**	**640,459**	**524,876**