

SADIS COST RECOVERY ADMINISTRATIVE GROUP

NINTH MEETING

(London, October 30 2008)

ESTIMATED SADIS COSTS : 2 to 5 YEARS

(Presented by the United Kingdom)

REFERENCES

SADIS Agreement
SCRAG/1/2/3/4/5/6/7/8 Reports
SADISOPSG/13 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 requirements and these have been reflected where possible.

2. DISCUSSION

2.1 The attached Table 1 identifies expected budgets for the years 2009 to 2012 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 onwards.
- b. Allowance has been made for increased switching costs of data in GRIB2 format from 2009.
- 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. Enhancements to the service are itemised separately.

- e. Following an internal audit of SADIS charges in 2008, new costs are included from January 2009 covering equipment charges for the service desk functions and support of serial communications equipment (i.e x.25).
- f. The current contract for the satellite bandwidth runs to the end of 2008. A new contract will be required from January 2009. The bandwidth needed will depend on the future requirement for the amount of data and speed of transmission. The current assumption is that the bandwidth will not be changed.
- g. New SADIS 2G maintenance contract required from 1/1/2009. Estimate based on inflationary uplift to current contract plus inclusion of 5 consultancy days per annum.
- h. An annual allowance of £5k is being made for ad-hoc maintenance as requested by the SCRAG/6. Allowance in 2009 for cost for decommissioning SADIS 1G hub equipment (estimated £4510).
- i. Helpdesk costs as previous years at 0.5% of the total cost. An internal audit of SADIS costs has identified that support provided by the Technical Team Leader and Network Systems Supervisors has not been charged to the SADIS programme but is included from 1/1/09.
- j. Covers work carried out by the Met Office Co-ordinated Design Installation Authority in accordance with JSP-480.
- k. FTP enhancements project as presented to the SADISOPSG/13. Estimated costs £30k over two years to be confirmed at SADISOPSG/14.
- l. Trial of GRIB2 data over SADIS 2G to ascertain future bandwidth requirements. Estimated cost £30k in 2009 endorsed by SADISOPSG/13.
- m. No capital requirements are currently envisaged for SADIS2G or FTP infrastructure.
- n. A rate of return of 10% has been applied as the cost of capital subject to further discussion at SCRAG/9.

2.3 Notes on SADIS Gateway costs and UK CAA and UK Met Office administration costs

- o. The substantial increase to Air Traffic Services Assistants costs (SCRAG/8 2009 estimated cost was £53,629, SCRAG/9 2009 estimated cost as shown is £255,275) from 2009 onwards is due to a restructure initiative within NATS and a re-allocation of costs. NATS' new policies and protocols require making due allowance for full resource costs, overheads, finance charges and other costs not previously included. The re-allocation has seen costs for systems engineers decrease and administration officer costs increase.
- p. The full annual cost of software maintenance is £31,323.75. 20% of this cost (£6,264 per annum) is allocated to SADIS.
- q. The SADIS gateway was fully depreciated in 2008. No further capital requirements are currently envisaged.
- r. Costs of supporting a revised SADIS back-up of WAFC services. Proposal to be presented to SADISOPSG/14.

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 an initial estimate of costs for the planning period and are subject to change.

4. ACTION

4.1 The SCRAG/9 is requested to note these provisional figures for the SADIS Costs.

TABLE 1: UKMO Cost and manpower resource projections until year 2012 (at 2008 prices)

INVENTORY REF:	Note	DESCRIPTION	2009	2010	2011	2012		
1		UK MET OFFICE COSTS						
		1. Equipment						
		Principally procured for SADIS						
		comms between Whitehill & Met Office	a	SADIS 1G	0	0	0	0
				SADIS 2G	6,364	6,364	6,364	6,364
		comms link SADIS Gateway & Met Office	a	SADIS 1G	0	0	0	0
				SADIS 2G	0	0	0	0
				ISDN back up	372	372	372	372
		Not procured principally for SADIS						
		message switch (FROST/SADIS)	a	SADIS 1G	0	0	0	0
		message switch (FROST/FTP)	b	SADIS FTP	24,000	24,000	24,000	24,000
		message switch (FROST/2G)	b	SADIS 2G	8,000	15,000	15,000	15,000
		internet bandwidth (FTP)	c	FTP	7,000	7,000	7,000	7,000
		FTP equipment running costs	d	FTP	16,000	16,000	16,000	16,000
		Service Desk Equipment Costs	e	Service Desk eqpt	35,000	35,000	35,000	35,000
		Serial Comms Costs and maintenance	e	Serial Comms	24,000	24,000	24,000	24,000
		sub total			120,736	127,736	127,736	127,736
		2. Procured Services						
		space segment annual lease	f	Satellite Segment	83,610	83,610	83,610	83,610
		annual maintenance	a	SADIS 1G C&W	0	0	0	0
			a	1G Facilities Mgmt	0	0	0	0
			g	2G Maintenance	31,000	31,000	31,000	31,000
			g	2G Facilities Mgmt	3,150	3,150	3,150	3,150
				IT Hall Space	11,000	11,000	11,000	11,000
			h	ad hoc maintenance	5,000	5,000	5,000	5,000
				SADIS 1G decommissioning	4,510	0	0	0
		sub total			138,270	133,760	133,760	133,760
		3. Annual Staff Requirements						
		Help Desk	i	Help Desk 0.5%	19,250	19,250	19,250	19,250
			i	Technical Team Leader 4%	15,000	15,000	15,000	15,000
			i	Network Systems Supervisor 7%	20,000	20,000	20,000	20,000
		Additional Support						
		Systems Integration Team		Network Comp Eng.	6,795	6,795	6,795	6,795
		Administrator		Executive Officer	50,963	50,963	50,963	50,963
		International Aviation Management		Aviation Manager	12,900	12,900	12,900	12,900
		Data Traffic		Communications Engineer	3,398	3,398	3,398	3,398
		Contract Management		Senior Procurement Officer	3,398	3,398	3,398	3,398
		UNIX Support		Computer Engineer	6,795	6,795	6,795	6,795
		Web Team Support		Website Designer	6,795	6,795	6,795	6,795
		Invoice Administration		Finance Officer	10,193	10,193	10,193	10,193
		CIDA	j	CIDA and Infrastructure Engineer	12,500	12,500	12,500	12,500
		Enhancements to FTP Service	k	FTP enhancements	15,000	15,000	0	0
		GRIB2 data trial	l	GRIB2 over SADIS Trial	30,000	0	0	0
		Travel Costs		SADISOPSG & SCRAG	6,000	6,000	6,000	6,000
		sub total			218,985	188,985	173,985	173,985
		TOTAL			477,991	450,481	435,481	435,481
		Cost of Depreciated Capital						
			m	SADIS 2G	0	0	0	0
				FTP enhancements	0	0	0	0
		sub total			477,991	450,481	435,481	435,481
			n	Cost of Capital	47,799	45,048	43,548	43,548
		Total UKMO Costs			525,790	495,529	479,029	479,029

TABLE 2: NATS and other SADIS Cost Projections until 2011

INVENTORY REF:	Note	DESCRIPTION	2009	2010	2011	2012
2		NATS Gateway Costs				
		Staff Costs				
	o	Operational Staff Air Traffic Services Asst.	255,275	255,275	255,275	255,275
		Engineering Staff Systems Engineer	11,915	11,915	11,915	11,915
		Administration Support Administration Officer	23,830	23,830	23,830	23,830
		asset engineering support asset management activities	6,851	2,805	2,805	2,805
		sub total	297,871	293,825	293,825	293,825
	p	Communications ip comms link to ukmo	12,040	12,040	12,040	12,040
		x25 comms link	0	0	0	0
		Maintenance Systems Maintenance	6,264	6,264	6,264	6,264
	q	Cost of Depreciated Capital Depreciation	0	0	0	0
		Cost of Capital	0	0	0	0
	r	Sadis Backup enhancement procurement & Installation	0	0	0	0
		annual support costs	1,250	1,250	1,250	1,250
		Total NATS Gateway Costs	317,425	313,379	313,379	313,379
		CAA Administration Costs	6,000	6,000	6,000	6,000
		ICAO Administration Costs	43,700	43,700	43,700	43,700
		TOTAL SADIS COSTS	892,915	858,608	842,108	842,108