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

#### NINTH MEETING

#### (London, October 30 2008)

#### 2007 ACTUAL SADIS COSTS

(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 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 the 2006 Actual Costs and is consistent with information provided in the SADIS Inventory.

# . DISCUSSION

#### 2.1 Notes to the actual costs for 2007 and forecast costs for 2008

## 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 2007 covers two circuits at £1569.75 per annum for SADIS 1G, 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 was still in place at September 2008. It is expected to cease when alternative arrangements are in place.

## c. Message Switch

In 2007, data feeds were provided to SADIS 1G, SADIS 2G, SADIS FTP server and the Corobor comparator systems. FTP equipment running costs include software licences, depreciation and contractor support.

## d. 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 2007 to 31 December 2008.

## e. Annual Maintenance

Maintenance comprises:- (i) A maintenance contract with Cable & Wireless for SADIS 1G Infrastructure, (ii) and (iii) A facilities Management Charge for the SADIS 1G and 2G Equipment. (iv) A maintenance Contract for SADIS 2G with Vados Systems for 24 months to 31 Dec 2008 at a cost of £24,920 per annum (v) IT Halls costs are charges made to the SADIS Programme based on floor usage of the IT Halls at Exeter for all SADIS equipment.

## f. Ad-hoc maintenance

SCRAG/6 proposed that a charge of £5,000 be budgeted for ad-hoc maintenance activity in future years. In 2007, ad-hoc maintenance charges totalled £7,844 comprising £3,000 for SADIS 2G System crash repair. £3,750 for SADIS 1G repairs, £1,094 for Tivoli software licences.

## g. and 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. Enhancements to FTP service

Up to the end of June 2007, £3,580 had been expended on PKI auditing work specific to the SADIS FTP service. The broader Met Office project that included this work was ceased in September 2007 as the business case was no longer viable. No costs have been charged to the SADIS Programme. A new programme of work to support SADIS FTP enhancements was proposed and endorsed by the SADISOPSG/13 meeting.

## 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

In 2007 and 2008 the overall mark-up on costs applied is 10.0%.

# 2.2 Notes on SADIS Gateway Costs

## m. Staff Costs – Systems Engineers

10% of the time allocated to the CoreMet system is dedicated to supporting the SADIS Gateway. 24-hour engineering support equates to 10% of an ATCE4 (£12,125 per annum). Daytime support for the SADIS Gateway equates to 10% of 0.75 of an ATCE4 (£9,092 per annum). Total Engineering support for 2006 was therefore £21,217. The cost of operational and administration staff have increased in line with inflation. A further staff cost, Asset Engineering Support, has been introduced. Commencing in 2007, this cost will cover the activities associated with the provision of data for SADIS Management Report and other Asset Management activities associated with the provision of the Gateway. This work is carried out by Air Traffic Engineering grades.

## n. Systems Maintenance

No maintenance costs will be incurred until the end of the warranty period. Full cost of software maintenance will be £31,324 per annum commencing in June 2005. 20% of these costs are allocated to SADIS (£6,264).

## o. Depreciation

The actual capital expenditure of the project was £1,137k. 20% of this sum is allocated to SADIS (£227.4k). This cost is to be depreciated over 5 years at £45.5k per annum. The SADIS Gateway becomes fully depreciated during 2008.

## p. Cost of Capital

A rate of 7.75% has been applied to the average net book value of the asset. In 2007 the average NBV was  $\pounds 35,744 * 7.75\% = \pounds 2,770$ .

## q. SADIS Backup Enhancement

The implementation of the backup has been delayed due to restrictions on the siting of VSAT equipment and other technical difficulties. An update will be provided at SCRAG/9.

# 2.3 Notes on CAA and ICAO Administration Costs

## r. CAA Administration Costs comprise the following:

Met Authority Regulatory oversight	£2,625
Travel costs to SADISOPSG/12 in Bangkok	£2,609
Travel costs of 2 staff to SCRAG/8 in Paris	£ 902

£6,136

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

#### 3 ACTION

3.1 The SCRAG/9 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/8 WP/5 Annex 1.

TABLE 1: 2007 and 2008 SADIS Costs

INVENTORY REF:	Note	DESCRIPTION	2007 Actual (Jan-Dec)	2007 FOO (SCRAG8)	2007 Estimate (SCRAG7)	2008 FOO (SCRAG9)	2008 Estima (SCRA
UK MET OFFICE COSTS							
1. Equipment							
Principally procured for SADIS							
comms between Whitehill & Met Office	а	SADIS 1G	3,139	3,139	3,139	3,139	3,
		SADIS 2G	6,364	6,364	6,364	6,364	6
comms link SADIS Gateway & Met Office	b	SADIS 1G	3,340	3,340	3,340	3,340	
-		SADIS 2G	0	0	0	0	
ISDN back-up link			372	372	0	372	
Not procured principally for SADIS							
message switch (FROST/SADIS)	с	SADIS 1G	29,498	29,498	37,800	32,327	29
message switch (FROST/FTP)		SADIS FTP	9,141	9,141	12,000	16,837	9
message switch (FROST/2G)		SADIS 2G	9,556	9,556	21,840	8,081	9
internet bandwidth (FTP)		FTP	12,240	12,240	13,532	6,976	12
FTP equipment running costs		FTP	12,675	12,240	12,300	15,704	12
FIF equipment running costs			12,075	12,075	12,300	15,704	12
		sub total	86,325	86,325	110,315	93,140	82
2. Procured Services							
space segment annual lease	d	Satellite Segment	83,610	83,610	90,000	83,610	83
annual maintenance	е	SADIS 1G C&W	9,816	9,816	9,816	9,816	9
		1G Facilities Mgmt	6,300	6,300	6,300	6,300	6
		2G Maintenance	24,920	24,920	24,000	24,920	24
			,				
		2G Facilities Mgmt	3,150	3,150	3,150	3,150	3
		IT Halls	16,747	16,747	11,000	10,679	16
	f	ad hoc maintenance	7,844	5,000	5,000	8,000	5
		sub total	152,387	149,543	149,266	146,475	149
3. Annual Staff Requirements							
Help Desk	g	Help Desk	19,250	19,250	17,500	18,509	19
Additional Support	h						
Systems Integration Team		Network Comp Eng.	6,795	6,795	6,658	6,774	6
Administrator		Executive Officer	50,963	50,963	49,934	50,804	50
International Aviation Management		Aviation Manager	12,900	12,900	12,773	13,110	12
-		0			,	,	
Data Traffic		Communications Engineer	3,398	3,398	3,604	3,387	3
Contract Management		Senior Procurement Officer	3,398	3,398	3,604	3,387	3
UNIX Support		Computer Engineer	6,795	6,795	6,658	6,774	6
Web Team Support		Website Designer	6,795	6,795	6,658	6,774	6
Invoice Administration		Invoice Manager	10,193	10,193	15,000	10,161	10
enhancements to FTP service	i		0	20,000	32,000	5,000	17
Travel Costs	j	SADISOPSG & SCRAG	5,531	4,500	6,000	5,500	6
		sub total	126,018	144,987	160,389	130,180	143
		TOTAL	364,730	380,855	419,970	369,795	376
Cost of Depreciated Capital	k						
cost of Depresiated Capital	ĸ	SADIS 2G	17,485	17,485	17,485	17,488	17
		FTP enhancements	0	17,485	11,000	0	13
		sub total	382,215	398,340	448,455	387,283	406
	I	Cost of Capital	38,222	39,834	43,346	38,728	40

TABLE 1: 2007 and 2008 SADIS Costs

			2007 Actual	2007 FOO	2007 Estimate	2008 FOO	2008 Estimate
INVENTORY REF:	Note	DESCRIPTION	(Jan-Dec)	(SCRAG 8)		(SCRAG9)	(SCRAG8)
NATS Gateway Costs							
Staff Costs	m						
Operational Staff		Air Traffic Services Asst.	53,629	53,629	52,066	55,774	53,62
Engineering Staff		Systems Engineer	21,217	21,217	21,043	22,066	21,21
Administration Support		Administration Officer	14,791	14,791	14,178	15,383	14,79
Asset Engineering Support		Asset Management Activities	2,805	2,805	0	2,917	2,80
		sub total	92,442	92,442	87,287	96,140	92,44
Communications	n	IP Comms link to UKMO	3,010	3,010	0	0	12,04
		X.25 Comms link to UKMO	0	0	0	0	3,34
Maintenance		Systems Maintenance	6,264	6,264	6,264	6,264	6,26
Cost of Depreciated Capital	0	Depreciation	45,492	45,492	45,492	12,999	12,99
	р	Cost of Capital	2,770	2,770	2,770	504	50
SADIS Backup Enhancement q	q	Procurement & Installation	0	29,141	29,141	0	
		Annual support costs	0	0	0	0	1,25
Total NATS Gateway Costs			149,978	179,119	170,954	115,907	128,8
CAA Administration Costs	r		6,136	5,000	5,000	5,334	5,00
ICAO Administration Costs	S		31,334	33,579	33,579	35,000	37,4
TOTAL SADIS COSTS			607,885	655,872	701,334	582,252	618,45