SADIS COST RECOVERY & ADMINISTRATIVE GROUP (SCRAG)

ELEVENTH MEETING

(Paris, November 4 2010)

<u>2009 ACTUAL SADIS COSTS</u>

(Presented by the United Kingdom)

REFERENCES
SADIS Agreement
SCRAG Reports 1-10
SADISOPSG/15 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 2009 and forecast costs for 2010

a.   Communications between Whitehill and the Met Office
Terrestrial communications costs between Exeter and the SADIS Uplink site at Whitehill became effective from 1st October 2003. The cost in 2009 covers one circuit for SADIS 2G of £1569.75 and a further circuit at £4795 per annum billed from May 5 2004. The circuits for SADIS1G were ceased in early January 2009 following cessation of the SADIS 1G broadcast.

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 2010. It is expected to cease when the new backup arrangements are operational.

c.   Message Switch
In 2009, 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 in the 2009 cost base covering equipment charges for the service desk functions and support of serial communications equipment (i.e. x.25)

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.

f.   Annual Maintenance
Maintenance comprises:- (i) A Facilities Management charge for the SADIS 2G Equipment. (ii) A maintenance Contract for SADIS 2G with Vados Systems for £36,918 for the 12 months to 31 Dec 2009 and £31633 for the 12 months to 31 Dec 2010 (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 £5,000 be budgeted for ad-hoc maintenance activity in future years. In 2009, ad-hoc maintenance charges comprised £3,600 for 5-days VADOS consultancy, £2,745 for hardware and annual support for ISDN connection for SADIS2G data backup and £4,510 for SADIS 1G decommissioning. No ad-hoc maintenance had been incurred up to the end of September 2010.

h.   Help Desk and Other staff costs
The cost rates have been updated using the latest available figures. In 2009 a new method of calculation has been applied which more accurately reflects the effort from each of the service desk functions. The percentage attribution rates can be found in the SADIS Inventory.

i.   Additional support

2009 staff costs were similar to 2008 with the addition of costs for CIDA and Infrastructure engineer which included support for FTP enhancements in 2009. The audit of the Met Office cost of capital by the UK National Audit Office was charged at £2500. The cost of the SADIS2G hardware refresh was presented in SCRAG/10 WP/8. In 2010, revised staff costs have been utilised using updated resource usage figures that can be found in the SADIS Inventory.

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

l.   Cost of Capital

Cost of capital for 2009 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 1st 2009.

n.   Systems Maintenance

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

o.   Depreciation

The SADIS Gateway became fully depreciated during 2008.

p.   Cost of Capital

Nil.

q.   SADIS Backup Enhancement

The cost of implementing the SADIS backup enhancement in 2009 was £30,297. This had originally been budgeted for in the 2007 cost base at a figure of £29,141

2.3   Notes on CAA and ICAO Administration Costs

r.   CAA Administration Costs comprise the following:

Met Authority Regulatory oversight	£2,750
Travel costs	£2,341
Total	£5,091

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

3   ACTION

3.1   The SCRAG/11 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.

TABLE 1: 2009 and 2010 SADIS Costs

INVENTORY REF:	Note	DESCRIPTION	2009 Actual (Jan-Dec)	2009 FOO (SCRAG10)	2009 Estimate (SCRAG9)	2010 FOO (SCRAG11)	2010 Estimate (SCRAG10)
1 **UK MET OFFICE COSTS**							
1. Equipment							
Principally procured for SADIS							
comms between Whitehill & Met Office	a	SADIS 2G	6,364	6,364	6364	6364	6364
comms link SADIS Gateway & Met Office	b	SADIS 2G	3,340	3,340	0	3340	0
ISDN back-up link		ISDN Back-up	372	372	372	372	372
Not procured principally for SADIS							
message switch (FROST/FTP)	c	SADIS FTP	15,370	15370	24000	17442	24000
message switch (FROST/2G)		SADIS 2G	7,938	7938	8000	8772	12500
internet bandwidth (FTP)		FTP	6,120	6120	7000	11500	7000
FTP equipment running costs		FTP	18,766	16000	16000	16000	16000
Service Desk Equipment costs	d	Service Desk eqpt	15,855	15700	35000	15680	15700
Serial Comms Costs and maintenance		Serial Comms	11,830	13600	24000	10000	13600
		sub total	**85,955**	**84,804**	**120,736**	**89,470**	**95,536**
2. Procured Services							
space segment annual lease	e	Satellite Segment	91,197	91197	83610	91197	91197
annual maintenance	f	2G Maintenance	36,918	36918	31000	31633	31616
		2G Facilities Mgmt	4,275	4275	3150	4275	4275
		IT Halls	13,191	15578	11000	13504	15578
	g	ad hoc maintenance	3,600	3600	5000	1500	5000
		Sadis 1G decommissioning	4,510	4510	4510	0	0
		SADIS Backup equipment	2,745	2745	0	0	0
		sub total	**156,436**	**158,823**	**138,270**	**142,109**	**147,666**
3. Annual Staff Requirements							
Help Desk	h	Help Desk	5,328	5800	19250	5800	5800
		Technical Team Leader	11,066	11066	15000	11066	11066
		Network Systems Supervisor	22,134	22134	20000	22134	22134
Additional Support							
Systems Integration Team	i	Network Comp Eng.	7,390	7390	6795	4866	7,390
Administrator		Executive Officer	55,428	55428	50963	55612	55,428
International Aviation Management		Aviation Manager	13,616	13616	12900	12805	13,616
Data Traffic		Communications Engineer	3,695	3695	3398	1738	3,695
Contract Management		Senior Procurement Officer	3,695	3695	3398	1390	3,695
UNIX Support		Computer Engineer	7,390	7390	6795	0	7,390
Web Team Support		Website Designer	7,390	7390	6795	5214	7,390
Invoice Administration		Invoice Manager	11,086	11086	10193	12165	11,086
CIDA		CIDA & Infrastructure Engineer	12,500	12500	12500	5214	12,500
enhancements to FTP service		FTP enhancements	0	0	15000	67000	67000
GRIB2 data trial		GRIB2 over SADIS Trial	5,500	5500	30000	0	3000
Cost of capital audit		Audit	2,500	2500	0	0	0
SADIS 2G Hardware Refresh		Hardware refresh	7,600	7600	0	0	0
Travel Costs	j	SADISOPSG & SCRAG	4,690	6000	6000	2000	6000
		sub total	**181,008**	**182,790**	**218,987**	**207,004**	**237,190**
		TOTAL	**423,399**	**426,417**	**477,993**	**438,583**	**480,392**
Cost of Depreciated Capital							
	k	SADIS 2G	4,812	4,812	0	19996	19246
		FTP enhancements	0	0	0	0	0
		sub total	**428,211**	**431,229**	**477,993**	**458,579**	**499,638**
	l	Cost of Capital	18,741	26,000	47,799	20,000	26,000
		Total UKMO Costs	**446,952**	**457,229**	**525,792**	**478,579**	**525,638**

TABLE 1: 2008 and 2009 SADIS Costs

INVENTORY REF:	Note	DESCRIPTION	2009 Actual (Jan-Dec)	2009 FOO (SCRAG 10)	2009 Estimate (SCRAG9)	2010 FOO (SCRAG11)	2010 Estimate (SCRAG10)
2 NATS Gateway Costs							
Staff Costs	m						
Operational Staff		Air Traffic Services Asst.	255,275	255,275	255,275	268,039	255,275
Engineering Staff		Systems Engineer	11,915	11,915	11,915	12,511	11,915
Administration Support		Administration Officer	23,830	23,830	23,830	25,022	23,830
Asset Engineering Support		Asset Management Activities	6,851	6,851	6,851	7,194	6,851
		sub total	**297,871**	**297,871**	**297,871**	**312,765**	**297,871**
Communications	n	IP Comms link to UKMO	12,040	12,040	12,040	12,040	12,040
		X.25 Comms link to UKMO	0	0	0	0	0
Maintenance		Systems Maintenance	6,264	6,264	6,264	6,264	6,264
Cost of Depreciated Capital	o	Depreciation	0	0	0	0	0
	p	Cost of Capital	0	0	0	0	0
SADIS Backup Enhancement	q	Procurement & Installation	30,297	30,297	0	0	0
		Annual support costs	1,250	1,250	1,250	1,250	1,250
Total NATS Gateway Costs			**347,722**	**347,722**	**317,425**	**332,319**	**317,425**
CAA Administration Costs	r		**5,091**	4,959	6,000	5,000	5,000
ICAO Administration Costs	s		**42,370**	42,150	43,700	43,114	44,444
TOTAL SADIS COSTS			**842,135**	**852,060**	**892,917**	**859,012**	**892,507**