

Report on M&O Budgets

1 –M&O A Expenses in 2007

Table 1 presents a summary of 2002 - 2007 category A M&O invoices, income and amounts outstanding by Funding Agency.

It is noted that the 2007 invoices for Russia and for US-DOE have been reduced, by 51.2 kCHF and 18.1 kCHF respectively, with respect to the amounts presented to the Resources Review Board meeting in October 2006. Reason for this adjustment is a change in the number of ‘scientists’ taken into account.

A breakdown of the 2007 Maintenance & Operations budget and expenditure is given in table 2. In addition, during 2007 an amount of 291 kCHF has been paid on commitments from the previous year.

Table 3 gives a summary of income, expenditure and balance of the M&O A accounts for the period 2002 – 2007.

2 - Preliminary Estimate for M&O A Expenses in 2009

Based on presently available estimates of the 2009 M&O category A cost and the sharing as determined in September 2007, a preliminary estimate of the 2009 budget and sharing is presented in Table 4.

The budget and sharing will be updated during 2008 and presented to the Resources Review Board in November 2008 for approval.

3 – M&O A Estimates 2009 - 2011

The ALICE Maintenance and Operations category A budget 2008 and cost estimates for the period 2009 – 2011 are summarized in table 5.

4 - Category B Estimates

Table 6 shows estimates of Category B M&O budget requirements for the period 2009 – 2011. In a number of cases the data have been updated with respect to those presented to the Resources Review Board meeting on October 25, 2007. The data will be reviewed during 2008 before being presented to the meeting of the Resources Review Board in November 2008 for information.

Year	Country	2002 - 2006				2007			
		Invoiced	Received	In-kind	Due	Invoiced	Received	In-kind	Due
MS	CERN	890,326	890,326			478,300	478,300		
	Czech Republic	127,357	127,357			76,300	76,300		
	Denmark	51,944	51,894		50	41,600	42,000		-400
	Finland	64,755	64,755			48,500	48,500		
	France CEA	85,434	85,434			55,500	55,500		
	France IN2P3	605,395	605,395			374,300	374,300		
	Germany BMBF	403,455	403,455			221,800	221,800		
	Germany GSI	275,199	275,199			124,800	124,800		
	Greece	38,695	38,695			41,600	42,000		-400
	Hungary	38,442	38,442			20,800	20,800		
	Italy	1,527,628	1,527,628			811,000	811,000		
	Netherlands	104,587	104,587			76,300	76,300		
	Norway	126,058	126,058			104,000	104,000		
	Poland	234,843	234,843			110,900	110,900		-1
	Slovak Republic	165,165	165,165			110,900	110,900		
	Spain/Cuba					41,600	41,600		
	Sweden	66,135	66,135			34,700	34,700		
	United Kingdom	80,325	80,325			48,500	48,500		
	MS Total	4,885,743	4,885,693		50	2,821,400	2,822,201		-801
NMS	Armenia	34,243	34,243			27,400			27,400
	Brazil								
	China	44,400			44,400	73,100			73,100
	Croatia	47,163	47,163			18,300			18,300
	India	353,468	353,468			244,000	244,000		
	Japan					45,200	45,200		
	JINR	248,974	68,080		180,894	45,700		226,594	-180,894
	Mexico	91,603	71,303		20,300	54,800	54,800		
	Republic of Korea	25,400	25,400			54,800			54,800
	Romania	75,048	75,048			91,400	91,400		
	Russia	577,594	577,594			427,000	185,350		241,650
	South Africa	42,970	42,970			27,400			27,400
	Ukraine	68,492	40,820	28,000	-328	27,400	18,800		8,600
	USA DOE	17,504	17,509		-5	118,000			118,000
	USA NSF	65,507	65,609		-102	27,200	27,200		
	NMS Total	1,692,366	1,419,207	28,000	245,159	1,281,700	666,750	226,594	388,356
	Grand Total	6,578,109	6,304,900	28,000	245,209	4,103,100	3,488,951	226,594	387,555
	Percentage collected:		96.3		%		90.6		%

Table 1 – 2002 - 2007 Cat. A M&O Invoices and Income (CHF)

Budget M&O Category	Total Budget	Expenditure			Spent + committed	Ratio
		Spent	Committed	InKind		
Detector related costs	1,594.0	839.1	348.2	299.0	1,486	0.93
Secretariat	254.0	198.6			199	0.78
Communications	10.0	0.2			0	0.02
On-line computing	553.0	510.8	3.1		514	0.93
Off-line computing	383.0	371.6	49.7		421	1.10
Test beams & calibration facilities	195.0	125.8	10.1		136	0.70
Laboratory operations	260.0	252.2	49.1		301	1.16
General services	526.0	578.6			579	1.10
Consultancy	40.0	5.6			6	0.14
Outreach	60.0	43.2	15.1		58	0.97
Power	297.4	148.7			149	0.50
Grand Total	4,172.4	3,074.5	475.3	299.0	3,848.8	0.92

Table 2 – 2007 Cat. A M&O Budget and Expenditure (CHF)

Contributions	Year						
Budget year	2002	2003	2004	2005	2006	2007	Grand Total
2002	329,908	67,751	4,888	8,704	8,735	4,368	424,354
2003	12,460	564,616	72,880	23,860	15,463	6,460	695,739
2004			908,400	67,616	112,163	13,197	1,101,376
2005			12,660	1,213,160	123,337	153,473	1,502,630
2006				63,860	2,205,679	322,861	2,592,400
2007					274,300	3,214,651	3,488,951
2008						692,383	692,383
Grand Total	342,368	632,367	998,828	1,377,200	2,739,677	4,407,393	10,497,833

Expenditure	Year						
Budget year	2002	2003	2004	2005	2006	2007	Grand Total
2002	201,897	45,776					247,673
2003		502,184	75,484	20,000			597,668
2004			827,148	240,000			1,067,148
2005				1,134,088	273,692		1,407,780
2006					2,311,507	291,299	2,602,806
2007						3,074,525	3,074,525
Grand Total	201,897	547,960	902,632	1,394,088	2,585,200	3,365,824	8,997,599

Balance/year	140,471	84,407	96,196	-16,888	154,477	1,041,569	
End year balance	140,471	224,879	321,075	304,187	458,665	1,500,234	

Table 3 – Summary of M&O Cat. A 2002 - 2007 (CHF)

	Scientists	M&O Cat A without energy	Energy	Energy billed to FA	Bill in kCHF
CERN	64	549.4	292.6		549.4
Czech Republic	12	103.0	54.9		103.0
Denmark	5	42.9	22.9		42.9
Finland	6	51.5	27.4		51.5
France CEA	7	60.1	32.0		60.1
France IN2P3	56	480.7	256.0		480.7
Germany BMBF	32	274.7	146.3		274.7
Germany GSI	18	154.5	82.3		154.5
Greece	7	60.1	32.0		60.1
Hungary	3	25.8	13.7		25.8
Italy	118	1,012.9	539.4		1,012.9
Netherlands	11	94.4	50.3		94.4
Norway	18	154.5	82.3		154.5
Poland	14	120.2	64.0		120.2
Slovak Republic	13	111.6	59.4		111.6
Spain/Cuba	7	60.1	32.0		60.1
Sweden	6	51.5	27.4		51.5
United Kingdom	11	94.4	50.3		94.4
Armenia	2	17.2	9.1	9.1	26.3
Brazil	4	34.3	18.3	18.3	52.6
China	8	68.7	36.6	36.6	105.2
Croatia	4	34.3	18.3	18.3	52.6
India	26	223.2	118.9	113.4	336.5
Japan	6	51.5	27.4	26.3	77.8
JINR	6	51.5	27.4	27.4	78.9
Mexico	12	103.0	54.9	54.9	157.9
Republic of Korea	6	51.5	27.4	27.4	78.9
Romania	11	94.4	50.3	50.3	144.7
Russia	44	377.7	201.1	146.6	524.3
South Africa	3	25.8	13.7	13.7	39.5
Ukraine	3	25.8	13.7	13.7	39.5
USA DOE	20	171.7	91.4	88.8	260.4
USA NSF	4	34.3	18.3	17.8	52.1
Total	567	4,867.0	2,592.0	662.5	5,529.5

Table 4 – Preliminary Cat. A Budget and Sharing for 2009 (kCHF)

Category	2008	2009	2010	2011	2012
Detector related costs	1,959	1,967	1,967	1,967	1,967
Secretariat	269	278	288	288	288
Communications	10	10	10	10	10
On-line computing	797	1,154	1,230	2,024	2,024
Off-line computing	427	427	427	427	427
Test beams & calibration facil	147	107	107	107	107
Laboratory operations	360	310	310	310	310
General services	621	615	606	606	606
Power	2,592	2,592	2,592	2,592	2,592
Grand Total	7,183	7,459	7,537	8,330	8,330

Table 5 – Cat. A M&O Budget 2008 and Estimates 2009 – 2012 (kCHF)

Detector	Data			
	2009	2010	2011	2012
Pixel	172	155	104	104
Drift	200	200	200	200
Strip	194	194	194	194
IIS-CMA	56	56	56	56
TPC	65	65	65	65
TRD	67	67	67	67
TOF	206	206	206	206
HMPID	150	150	150	150
PHOS	100	100	100	100
FMD	20	20	20	20
PMD	70	70	70	70
T0	30	30	30	30
V0	20	20	20	20
ZDC	40	40	54	54
Muons	175	175	175	175
Trigger	30	30	30	30
<i>Grand Total</i>	1,595	1,578	1,541	1,541

Table 6 – Cat. B M&O Budget Estimates 2009 – 2012 (kCHF)