

Status of the ALICE Maintenance and Operation Budgets

C. Decosse

- Report on 2008 M&O Income and Expenses
- Preliminary estimates for 2010
- MoU Signatures

Report on 2008 M&O Income and Expenses

M&O cat. A income 2002-2008

Year	Country	2002 - 2007				2008				2002-2008 Due
		Invoiced	Received	In-kind	Due	Invoiced	Received	In-kind	Due	
MS	CERN	1,368.6	1,368.6			518.2	518.2			
	Czech Republic	203.7	203.7			97.2	97.2			
	Denmark	93.5	93.9		-0.35	40.5	40.5			-0.4
	Finland	113.3	113.3			48.6	48.6			
	France CEA	140.9	140.9			56.7	56.7			
	France IN2P3	979.7	979.7			453.4	453.4			
	Germany BMBF	625.3	625.3			259.1	259.1			
	Germany GSI	400.0	400.0			145.7	145.7			
	Greece	80.3	80.7		-0.40	56.7	56.7			-0.4
	Hungary	59.2	59.2			24.3	24.3			
	Italy	2,338.6	2,338.6			955.4	957.4		-2.0	-2.0
	Netherlands	180.9	180.9			89.1	89.1			
	Norway	230.1	230.1			145.7	145.7			
	Poland	345.7	345.7			113.4			113.4	113.4
	Slovak Republic	276.1	276.1			105.3	105.3			
	Spain/Cuba	41.6	41.6			56.7	56.7			
	Sweden	100.8	100.8			48.6	48.6			
	United Kingdom	128.8	128.8			89.1	89.1			
<i>MS Total</i>		7,707.1	7,707.9		-751.00	3,303.7	3,192.3		111.4	110.7
NMS	Armenia	61.6	61.6			25.3	25.3			
	Brazil					50.7			50.7	50.7
	China	117.6	19.5	84.8	13.40	101.3	43.5	21.1	36.7	50.1
	Croatia	65.5	65.5			50.7	50.7			
	India	597.5	597.5			323.9	323.9			
	Japan	45.2	45.2			87.4	87.4			
	JINR	294.7	68.1	299.0	-72.38	76.0		36.8	39.2	-33.1
	Mexico	146.4	146.4			152.0	152.0			
	Republic of Korea	80.2	80.2			76.0	76.0			
	Romania	166.4	166.4			139.4	63.4		76.0	76.0
	Russia	1,004.6	1,004.6			502.9	278.0		224.9	224.9
	South Africa	70.4	70.4			38.0	38.0			
	Ukraine	95.9	59.6	28.0	8.27	38.0	26.0		12.0	20.3
	USA DOE	135.5	135.5			250.7	250.7			
	USA NSF	92.7	92.8			50.1	50.1			
<i>NMS Total</i>		2,974.2	2,613.3	411.8	-50.81	1,962.4	1,465.1	57.9	439.5	388.8
<i>Grand Total</i>		10,681.3	10,321.2	411.8	-51.56	5,266.1	4,657.4	57.9	550.9	499.4
<i>Percentage collected:</i>			100.5				89.5 %			

Closing date
31 Dec. 08

Unit: kCHF

Received in 2009

for 2008:

76kCHF

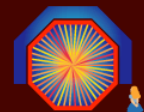
Romania NIPNE

For 2007:

8.3 kCHF Ukraine

Balance due

-415 kCHF



2008 M&O cat. A expenditure

Breakdown of 2008 expenditure (unit: kCHF)

Budget M&O Category	Total Budget	Expenditure			
		Spent	Committed	TOTAL	Ratio
Detector related costs	1,959.2	1,731.3	321.0	2,052.4	1.05
Secretariat	269.1	170.8		170.8	0.63
Communications	10.0	0.9		0.9	0.09
Off-line computing	427.2	551.9		551.9	1.29
On-line computing	797.3	508.0	108.7	616.7	0.77
Test beams & calibration facilities	147.2	126.7		126.7	0.86
Laboratory operations	360.0	352.4	91.8	444.1	1.23
General services	516.2	346.0	1.9	347.9	0.67
Consultancy	40.0	25.9	2.0	27.9	0.70
Outreach	65.0	60.6	16.3	76.9	1.18
Grand Total	4,591.2	3,874.4	541.7	4,416.1	0.96
Power*	2,592.0	341.1		341.1	0.13

* 2008 Unused power invoiced to MNS countries will be deducted from the 2010 M&O A invoices

M&O A summary 2002 – 2008 in kCHF

Category	Income							
Contributions	Year							
Budget year	2002	2003	2004	2005	2006	2007	2008	Grand Total
2002	330	68	5	9	9	4		424
2003	12	565	73	24	15	6		696
2004			936	68	112	13		1,129
2005			13	1,213	123	153		1,503
2006				64	2,242	323	25	2,653
2007					274	3,562	503	4,340
2008						692	4,023	4,715
2009							111	111
Grand Total	342	632	1,027	1,377	2,776	4,755	4,661	15,570

Category	(Show All)							
Expenditure	Year							
Budget year	2002	2003	2004	2005	2006	2007	2008	Grand Total
2002	202	46						248
2003		502	75	20				598
2004			855	240				1,095
2005				1,134	274			1,408
2006					2,347	291		2,639
2007						3,422	453	3,875
2008							4,040	4,040
Grand Total	202	548	931	1,394	2,621	3,714	4,493	13,903

Balance/year	140	84	96	-17	154	1,042	168	1,668
End year balance	140	225	321	304	459	1,500	1,668	

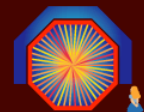
Status of 2009 M&O Budget

Year		2009			Due 2009	Total Due 2002-2009
	Country	Invoiced	Received	In-kind		
MS	CERN	488	488			
	Czech Republic	101	101			
	Denmark	51			51	50
	Finland	42	42			
	France CEA	51	51			
	France IN2P3	396			396	396
	Germany BMBF	295	131		163	163
	Germany GSI	177			177	177
	Greece	42	42			0
	Hungary	25			25	25
	Italy	900			900	898
	Netherlands	84	84			
	Norway	126	126			
	Poland	118			118	231
	Slovak Republic	109			109	109
	Spain/Cuba	59	59			
	Sweden	34	34			
	United Kingdom	84	84			
<i>MS Total</i>		3,181	1,242		1,939	2,049
NMS	Armenia	13			13	13
	Brazil	92			92	142
	China	92			92	142
	Croatia	52			52	52
	India	411			411	411
	Japan	116	45		71	71
	JINR	78			78	45
	Mexico	170			170	170
	Republic of Korea	78			78	78
	Korea Yonsei	26	26			
	Romania	131			131	131
	Russia	460			460	685
	South Africa	78			78	78
	Ukraine	65			65	77
	USA DOE	362			362	362
	USA NSF	52	13		39	39
<i>NMS Total</i>		2,277	84		2,193	2,497
<i>Grand Total</i>		5,458	1,326		4,132	4,547
<i>Percentage collected:</i>			24.3 %			

M&O A Invoices & Income for 2009

Closing date
28 April 09

Unit: kCHF



Preliminary Estimates for 2010 M&O Budget

M&O Cat. A Evolution 2010-2013

Preliminary budget for 2010 and present cost estimates for 2011-2013 in kCHF
(to be reviewed before final approval by the RRB in October)

	Data				
Category	2009	2010	2011	2012	2013
Detector related costs	1,828	1,846	1,796	1,796	1,796
Secretariat	278	288	288	288	288
Communications	0	0	0	0	0
Off-line computing	446	490	490	490	490
On-line computing	1,202	1,486	1,847	1,993	1,993
Test beams & calibration facilities	102	95	95	95	95
Laboratory operations	310	310	310	310	310
General services	520	511	511	511	511
<i>Total without power</i>	4,687	5,026	5,337	5,482	5,482
<i>Power</i>	2,592	2,231	2,231	2,231	2,231
<i>Grand Total</i>	7,279	7,257	7,567	7,713	7,713
Operational sub-items	2,594	2,647	2,647	2,647	2,647
Consumable sub-items	2,093	2,379	2,689	2,835	2,835
Power	2,592	2,231	2,231	2,231	2,231
<i>Grand Total</i>	7,279	7,257	7,567	7,713	7,713

2010 M&O A Budget no power	5,026.0 kCHF		
Power	2,230.6 kCHF	Total Budget	7,256.6
ALICE scientists	555.0		
M&O per scientist	9.1 kCHF		
Power per scientist	4.0 kCHF		

Preliminary 2010 M&O A Budget

	Scientists	M&O Cat A without energy	Energy	Energy billed to FA	Rebate from 2008 Energy	Bill in kCHF
CERN	58	525.2	233.1			525.2
Czech Republic	12	108.7	48.2			108.7
Denmark	6	54.3	24.1			54.3
Finland	5	45.3	20.1			45.3
France CEA	6	54.3	24.1			54.3
France IN2P3	47	425.6	188.9			425.6
Germany BMBF	35	317.0	140.7			317.0
Germany GSI	21	190.2	84.4			190.2
Greece	5	45.3	20.1			45.3
Hungary	3	27.2	12.1			27.2
Italy	107	969.0	430.0			969.0
Netherlands	10	90.6	40.2			90.6
Norway	15	135.8	60.3			135.8
Poland	14	126.8	56.3			126.8
Slovak Republic	13	117.7	52.2			117.7
Spain/Cuba	7	63.4	28.1			63.4
Sweden	4	36.2	16.1			36.2
United Kingdom	10	90.6	40.2			90.6
Armenia	1	9.1	4.0	4.0	-7.9	5.2
Brazil	7	63.4	28.1	28.1	-15.9	75.6
China	7	63.4	28.1	28.1	-31.8	59.7
Croatia	4	36.2	16.1	16.1	-15.9	36.4
India	32	289.8	128.6	122.7	-98.4	314.1
Japan	9	81.5	36.2	34.7	-22.9	93.3
JINR	6	54.3	24.1	24.1	-23.8	54.6
Mexico	13	117.7	52.2	52.2	-47.6	122.4
Republic of Korea KICOS	6	54.3	24.1	24.1	-23.8	54.6
Romania	10	90.6	40.2	40.2	-43.7	87.0
Russia	39	353.2	156.7	114.2	-127.3	340.1
South Africa	6	54.3	24.1	24.1	-11.9	66.5
Ukraine	5	45.3	20.1	20.1	-11.9	53.5
USA DOE	28	253.6	112.5	109.3	-77.1	285.7
USA NSF	4	36.2	16.1	15.6	-15.4	36.4
Total	555	5,026.0	2,230.6	657.7	-575.3	5,108.4

2010 Preliminary Budget and Sharing by Funding Agency

Preliminary estimates for 2010 M&O A based on:

- Sharing determined in September 2008.
- 2010 Number of scientists and 2010 budget estimates will be updated in 2009.

- 2010 rebates to NMS Funding Agencies for 2008 unused energy budget.

2008 Total energy budget 2.592 MCHF
2008 Energy expenses 341.1 kCHF (13.2%)

2008 Invoiced NMS 662.5 kCHF
2008 Corrected NMS 87.2 kCHF
2010 Rebate 575.3 kCHF

M&O budgets category B 2010-2013

M&O category B by system for 2010-2013

	Data			
System	2010	2011	2012	2013
Pixel	155	104	104	104
Drift	195	200	200	200
Strip	194	194	194	194
ITS-CMA	63	63	63	63
TPC	65	65	65	65
TRD	163	163	163	163
TOF	158	158	158	158
HMPID	150	150	150	150
PHOS	130	130	130	130
Muons	280	280	280	280
Trigger	20	20	20	20
ACORDE	20	10	10	10
FMD	30	30	30	30
PMD	70	70	70	70
T0	38	48	48	48
V0	20	20	20	20
ZDC	37	37	50	37
<i>Grand Total</i>	1,788	1,742	1,755	1,742

Preliminary M&O B
estimate (kCHF)

will be updated during
2009

M&O category B by Funding Agency for 2010

2010	System																		
F/A	Pixel	Drift	Strip	ITS-CMA	TPC	TRD	TOF	HMPID	PHOS	Muons	Trigger	ACORDE	FMD	PMD	TO	VO	ZDC	Grand Total	
CERN	77.7		24.1		10.4			45											157.12
Czech Republic		11.1							9.09										20.21
Denmark					2.08								30						32.08
Finland			10.1												38.1				48.19
France CEA										30									30.00
France IN2P3			39.2							130						10			179.19
Germany BMBF						153													153.00
Germany GSI					37.4														37.40
Italy	77.7	170	63.2	56.3			110	105		60								37	679.28
Netherlands			42.3																42.29
Norway									18.2										18.18
Poland					1.87				9.09										10.96
Slovak Republic					1.25														1.25
Sweden					11.6														11.65
United Kingdom											20								20.00
China									18.2										18.18
Croatia					0.35														0.35
India										30				70					100.00
Japan									9.09										9.09
JINR						7.1			9.09										16.19
Mexico												20				10			30.00
Republic of Korea							48												48.00
Romania NIPNE						3.3													3.30
Ukraine		11.1	13																24.11
United States OSU		0.55		2.82															3.36
Russia		2.15	1.94	3.38					57.3	30									94.74
<i>Grand Total</i>	155	195	194	62.5	65	163	158	150	130	280	20	20	30	70	38.1	20	37		1,788.11

Preliminary M&O B estimates (kCHF) will be updated during 2009

M&O

Memorandum of Understanding Addenda

M&O Memorandum of Understanding Addenda

MS Funding Agency	Date	NMS Funding Agency	Date
CERN	04.12.02	Armenia	02.09.02
Czech Republic	20.01.03	China	
Denmark	28.04.05	Croatia	08.10.02
Finland	19.09.02	India	16.09.02
France CEA	04.09.02	JINR	20.10.06
France IN2P3	25.09.02	Mexico	15.05.07
Germany BMBF	12.09.02	Romania	21.04.04
Germany GSI	30.09.02	Russia	26.03.06
Greece		Ukraine	03.09.02
Hungary	13.09.02	United States (OSU)	28.08.02
Italy	25.11.02		
Netherlands	14.11.02	Japan	08.01.07
			10/25/2006
Norway	04.09.02	Korea, Rep. of	new addenda signed
Poland	18.10.04	United States DOE	24.01.08
Slovak Republic	26.11.02		
Sweden	25.11.02	Brazil	discussions
United Kingdom	24.09.02	South Africa	addenda prepared
Spain/Cuba	05.12.06		

