

## Draft 2009 ALICE M&O Budget

### 1. Category A Budget

The 2009 ALICE Maintenance and Operations Cat. A draft budget and estimates for the period 2010 – 2012 are summarized in the following table (unit = kCHF):

<i>Category</i>	Data			
	2009	2010	2011	2012
Detector related costs	1,829	1,817	1,767	1,767
Secretariat	278	288	288	288
Communications				
On-line computing	1,202	1,300	2,074	2,074
Off-line computing	446	490	490	490
Test beams & calibration facilities	102	102	102	102
Laboratory operations	310	310	310	310
General services	520	511	511	511
<b><i>Total without Power</i></b>	<b>4,687</b>	<b>4,819</b>	<b>5,542</b>	<b>5,542</b>
Power	2,592	2,592	2,592	2,592
<b><i>Grand Total</i></b>	<b>7,279</b>	<b>7,410</b>	<b>8,133</b>	<b>8,133</b>
Operational sub-items	2,594	2,647	2,647	2,647
Consumables sub-items	2,093	2,171	2,894	2,894
Power	2,592	2,592	2,592	2,592
<b><i>Grand Total</i></b>	<b>7,279</b>	<b>7,410</b>	<b>8,133</b>	<b>8,133</b>

Table 1 – M&O A cost estimates 2009 - 2012

Comments:

1. The draft budget for 2009 and the estimates for the following years have been updated with respect to the data submitted to the meeting of the Resources Review Board in April 2008.
2. The data have been modified in particular also in discussion with the members of the RRB Scrutiny Group.

### Sharing

The following table indicates the sharing of the 2009 draft budget based on the number of 'Scientific staff holding PhD or equivalent qualifications' as defined in the Memorandum of Understanding on Maintenance and Operations (see overleaf):

Funding Agency	Scientists	M&O Cat A without energy	Energy	Energy billed to FA	Bill in kCHF
CERN	58	488.1	269.9		488.1
Czech Republic	12	101.0	55.8		101.0
Denmark	6	50.5	27.9		50.5
Finland	5	42.1	23.3		42.1
France CEA	6	50.5	27.9		50.5
France IN2P3	47	395.5	218.7		395.5
Germany BMBF	35	294.5	162.9		294.5
Germany GSI	21	176.7	97.7		176.7
Greece	5	42.1	23.3		42.1
Hungary	3	25.2	14.0		25.2
Italy	107	900.4	497.9		900.4
Netherlands	10	84.1	46.5		84.1
Norway	15	126.2	69.8		126.2
Poland	14	117.8	65.1		117.8
Slovak Republic	13	109.4	60.5		109.4
Spain/Cuba	7	58.9	32.6		58.9
Sweden	4	33.7	18.6		33.7
United Kingdom	10	84.1	46.5		84.1
Armenia	1	8.4	4.7	4.7	13.1
Brazil	7	58.9	32.6	32.6	91.5
China	7	58.9	32.6	32.6	91.5
Croatia	4	33.7	18.6	18.6	52.3
India	32	269.3	148.9	142.0	411.3
Japan	9	75.7	41.9	40.2	115.9
JINR	6	50.5	27.9	27.9	78.4
Mexico	13	109.4	60.5	60.5	169.9
Republic of Korea KICOS	6	50.5	27.9	27.9	78.4
Republic of Korea Yonsei	2	16.8	9.3	9.3	26.1
Romania	10	84.1	46.5	46.5	130.7
Russia	39	328.2	181.5	132.3	460.4
South Africa	6	50.5	27.9	27.9	78.4
Ukraine	5	42.1	23.3	23.3	65.3
USA DOE	28	235.6	130.3	126.5	362.1
USA NSF	4	33.7	18.6	18.1	51.7
Total	557	4,687.0	2,592.0	770.9	5,457.9

Table 2 - Sharing of 2009 M&amp;O A budget (kCHF)

## 2. Category B Budget

The following table summarizes the 2009 Cat. B M&O draft budget and estimates for the period 2010 – 2012 (unit = kCHF):

System	Data			
	2009	2010	2011	2012
Pixel	150	155	104	104
Drift	156	200	200	200
Strip	179	194	194	194
ITS-CMA	48	63	63	63
TPC	65	65	65	65
TRD	67	67	67	67
TOF	131	158	158	158
HMPID	124	150	150	150
PHOS	130	100	100	100
FMD	20	20	20	20
PMD	70	70	70	70
T0	30	30	30	30
V0	20	20	20	20
ZDC	30	40	54	40
Muons	164	175	175	175
Trigger	30	30	30	30
ACORDE	20	20	20	20
<i>Grand Total</i>	1,434	1,557	1,520	1,506

Table 3 – M&O B budget estimates 2009 - 2012

## Sharing

Table 4 shows the sharing of the 2009 M&O Cat. B draft budget between Funding Agencies. This sharing has been discussed with the Funding Agencies concerned (kCHF).

Sum of 2009	System															Grand Total		
F/A	Pixel	Drift	Strip	ITS-CMA	TPC	TRD	TOF	HMPID	PHOS	FMD	PMD	T0	V0	ZDC	Muons		Trigger	ACORDE
CERN	85.9		22.7		10.4			45.0										164.0
Czech Republic		11.4							9.1									20.5
Denmark					2.1					20.0								22.1
Finland			18.1									30.0						48.1
France CEA															15.0			15.0
France IN2P3			37.9										10.0		85.0			132.9
Germany BMBF						56.8												56.8
Germany GSI					37.4													37.4
Italy	64.4	130.8	45.6	42.2			82.5	78.8						30.0	33.8			508.1
Netherlands			40.7															40.7
Norway									18.2									18.2
Poland					1.9				9.1									11.0
Slovak Republic					1.2													1.2
Sweden				11.6														11.6
United Kingdom																30.0		30.0
China									18.2									18.2
Croatia					0.4													0.4
India											70.0				15.0			85.0
Japan									9.1									9.1
JINR						7.1			9.1									16.2
Mexico													10.0				20.0	30.0
Republic of Korea							48.0											48.0
Romania NIPNE						3.3												3.3
Russia		2.2	1.6	3.4					57.3						15.0			79.5
Ukraine		11.4	12.1															23.5
United States OSU		0.6		2.8														3.4
<i>Grand Total</i>	150.3	156.4	178.8	48.4	65.0	67.2	130.5	123.8	130.0	20.0	70.0	30.0	20.0	30.0	163.8	30.0	20.0	1,434.1

Table 4 – Sharing of 2009 M&O B Budget