



## Report on Maintenance & Operation Budgets

### 1 –M&O A incomes and expenses in 2012

Table 1 presents a summary of 2002 - 2013 category A M&O invoices, incomes and amounts outstanding by Funding Agency as December 31<sup>st</sup>, 2012.

A breakdown of the 2012 Maintenance & Operations budget and expenditure is given in table 2. Note that in 2012, an amount of 317 kCHF has been paid on commitments from 2011.

1,372 KCHF have been transferred to the Online hardware replacement account for the purchasing of online systems hardware and this is visible on Table 3 which gives a summary of incomes, payments and balance of the M&O A accounts for the period 2002 – 2012.

### 2 – M&O A Estimates 2014 - 2017

The ALICE Maintenance and Operations category A budget 2014 and cost estimates for the period 2015 – 2017 are summarized in table 4. Our current operating model is based on the LHC schedule, featuring a long shutdown in 2013-2014, followed by long period of runs with short technical stops during winter periods. This preliminary version of our M&O-A budget will soon be discussed with the Scrutiny Group, and presented to the Resources Review Board in October 2013 for approval.

### 3 - Preliminary Estimate for M&O A Sharing in 2014

Based on presently available estimates and on the sharing as determined in September 2012 for the 2013 budget, a preliminary estimate of the 2014 budget and sharing is presented in Table 5. The budget and the final sharing will be updated during 2013 and presented to the Resources Review Board in October 2013 for approval.

### 4 –M&O B Expenses in 2012

Table 6 shows the M&O-B expenditures in 2012. Expenditures are a mix of in-kind and cash contributions, done at CERN as well as in the various laboratories and institutions.

### 5 – M&O B Estimates 2014 - 2017

The ALICE Maintenance and Operations category B budget 2014 and cost estimates for the period 2015 – 2017 are summarized in table 7. This preliminary version will soon be discussed with the Scrutiny Group, and presented to the Resources Review Board in October 2013 for approval. Tables 8 and 9 shows the 2014 preliminary M&O B budget by systems and the sharing by funding agencies.

Year	2002-2012					2013			2013		total due
	Invoiced	Received	In-kind	Energy rebate	Due	Invoiced	Received	Energy rebate	Due		
MS											
	Country										2002-2013
	CERN	3'676'768	3'676'768			403'673			403'673		403'673 CERN
	Czech Republic	695'445	695'445			100'918			100'918		100'918 Czech Republic
	Denmark	352'802	353'152		-350	62'104			62'104		61'754 Denmark
	Finland	355'046	355'046			46'578			46'578		46'578 Finland
	France CEA	407'806	407'806			54'341			54'341		54'341 France CEA
	France IN2P3	3'037'386	3'037'377			372'621	9		372'621		372'630 France IN2P3
	Germany BMBF	2'160'493	2'161'361		-868	287'229			287'229		286'361 Germany BMBF
	Germany GSI	1'283'329	1'283'329			178'548			178'548		178'548 Germany GSI
	Greece	255'752	238'990		16'762	23'289			23'289		40'051 Greece
	Hungary	192'871	192'871			31'052			31'052		31'052 Hungary
	Italy Centro Fermi	109'136	109'136			54'341			54'341		54'341 Italy Centro Fermi
	Italy INFN	6'890'824	6'890'824			784'057	55'554		728'503		728'503 Italy INFN
	Netherlands	598'076	598'123		-47	85'392			85'392		85'345 Netherlands
	Norway	938'828	938'828			139'733			139'733		139'733 Norway
	Poland	1'030'233	1'031'531		-1'298	155'259			155'259		153'961 Poland
	Romania ISS	34'323	34'323			27'602			24'152		24'152 Romania ISS
	Romania NIPNE	60'066	60'066			48'311		6'030	42'281		42'281 Romania NIPNE
	Slovak Republic	767'958	767'958			77'629			77'629		77'629 Slovak Republic
	Spain/Cuba	325'930	283'026		42'904	38'815			38'815		81'719 Spain/Cuba
	Sweden	267'447	267'447			38'815			38'815		38'815 Sweden
	United Kingdom	494'906	494'906			69'866			69'866		69'866 United Kingdom
<b>MS Total</b>		<b>23'935'425</b>	<b>23'878'313</b>		<b>57'112</b>	<b>3'080'173</b>	<b>55'554</b>	<b>9'480</b>	<b>3'015'139</b>		<b>3'072'251 MS Total</b>
NMS											
	Armenia	150'922	139'290			11'632			17'068	865	16'203 Armenia
	Brazil	371'090	238'670			42'027	90'393		39'663	5'170	34'493 124'886 Brazil
	China Wuhan CCNU	314'327	217'030	60'080		38'537	-1'320		31'557	4'310	27'247 25'927 China Wuhan CCNU
	China Beijing	119'960	19'917	62'690		19'390	17'963				17'963 China Beijing
	Croatia	333'787	302'957			30'830			41'386	3'447	37'939 Croatia
	India	2'584'224	2'371'902			212'322			335'756	29'595	306'161 India
	Japan	662'361	607'220			55'142	-1		79'255	9'927	69'328 Japan
	JINR	716'150	270'961	399'172		46'195	-178		74'666	6'033	68'633 68'455 JINR
	Mexico	926'083	781'386			96'122	48'575		97'257	10'342	86'915 135'490 Mexico
	Republic of Korea NRF	629'491	575'831			53'660	0		72'080	8'619	63'461 Republic of Korea NRF
	Republic of Korea KISTI								26'900		26'900 Republic of Korea KISTI
	Pakistan								26'900		26'900 Pakistan
	Peru	25'456	25'347		109	8'105		862		7'243	7'352 Peru
	Romania ISS	253'952	219'158			34'794					Romania ISS
	Romania NIPNE	462'175	415'944			46'231					Romania NIPNE
	Russia	3'353'192	3'115'612	10'100		233'394	-5'914		320'483	25'126	295'357 289'443 Russia
	South Africa	441'082	406'787			34'295			57'596	5'171	52'425 South Africa
	Ukraine	313'637	218'125	28'000		30'562	36'950		24'314	2'586	21'728 58'678 Ukraine
	USA DOE	2'045'268	1'867'208			178'562	-502		336'906	29'285	307'621 307'119 USA DOE
	USA NSF	370'813	342'365			29'895	-1'447		49'404	16'469	4'185 28'750 USA NSF
<b>NMS Total</b>		<b>14'073'970</b>	<b>12'135'710</b>	<b>560'042</b>		<b>1'193'590</b>	<b>184'628</b>		<b>1'639'296</b>	<b>16'469</b>	<b>145'523 1'477'304 1'661'932 NMS Total</b>
<b>Grand Total</b>		<b>38'009'395</b>	<b>36'014'023</b>	<b>560'042</b>		<b>1'193'590</b>	<b>241'740</b>		<b>4'719'469</b>	<b>72'023</b>	<b>155'003 4'492'443 4'734'183 Grand Total</b>

Table 1 – 2002 – 2013 Cat. A M&amp;O Invoices and Income as 31/12/2012 (in kCHF)

Category	2012 Budget	Payments	Open commitments	Total expenditure	Balance Budget - Payments	Balance Budget - total expenditure
Detector related costs	1'253.0	1'487.2	26.3	1'513.5	-234.2	-260.5
Secretariat	208.0	194.7	9.9	204.6	13.3	3.4
Communications	40.0	17.0	0.0	17.0	23.0	23.0
Off-line computing	537.0	566.1	-1.6	564.5	-29.1	-27.5
On-line computing (Op&Licenses)	640.0	702.4	0.0	702.4	-62.4	-62.4
On-line computing (Hardware)	1'372.0	1'372.0		1'372.0	0.0	0.0
Test beams & calibration facilities	85.0	44.7		44.7	40.3	40.3
Laboratory operations	250.0	230.0	34.2	264.2	20.0	-14.2
General services	550.0	504.5	17.3	521.8	45.5	28.2
<b>sub-total</b>	<b>4'935.0</b>	<b>5'118.6</b>	<b>86.1</b>	<b>5'204.7</b>	<b>-183.6</b>	<b>-269.7</b>
Power (NSM only)	759.3	732.6	0.0	732.6	26.7	26.7
<b>Total</b>	<b>5'694.3</b>	<b>5'851.2</b>	<b>86.1</b>	<b>5'937.3</b>	<b>-156.9</b>	<b>-243.0</b>

Table 2 – 2012 Cat. A M&amp;O Budget and Expenditure (Payments and Commitments as 31/12/2012) (kCHF)

Contributions													
Income and in-kind	Budget year												
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Grand Total
2002	329.9	12.5											342.4
2003	67.8	564.6											632.4
2004	4.9	72.9	936.4	12.7									1'026.8
2005	8.7	23.9	67.6	1'213.2	63.9								1'377.2
2006	8.7	15.5	112.2	123.3	2'241.7	274.3							2'775.7
2007	4.4	6.5	13.2	153.5	322.9	3'562.4	692.4						4'755.2
2008					24.5	502.8	4'039.7	110.6					4'677.6
2009						8.3	181.5	4'951.3	124.0				5'265.1
2010					4.2	6.1	85.0	394.9	4'935.9	303.2			5'729.4
2011								37.4	110.6	4'197.7			4'345.7
2012									62.6	152.3	5'443.4	72.0	5'730.3
<b>Total Income per year</b>	<b>424.4</b>	<b>695.7</b>	<b>1'129.4</b>	<b>1'502.6</b>	<b>2'657.1</b>	<b>4'353.9</b>	<b>4'998.5</b>	<b>5'494.3</b>	<b>5'233.1</b>	<b>4'653.3</b>	<b>5'443.4</b>	<b>72.0</b>	<b>36'657.7</b>

  

Expenditure													
Payments only	Budget year												
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Grand Total
2002	201.9												201.9
2003	45.8	502.2											548.0
2004		75.5	855.1										930.6
2005		20.0	240.0	1'134.1									1'394.1
2006				273.7	2'347.5								2'621.2
2007					291.3	3'422.3							3'713.6
2008						453.1	4'052.9	4.0					4'510.0
2009							261.2	4'133.5					4'394.7
2010								513.0	4'639.5				5'152.5
2011									436.0	6'565.0			7'000.9
2012										317.5	5'533.7		5'851.2
<b>Total Expenditure per budget year</b>	<b>247.7</b>	<b>597.7</b>	<b>1'095.1</b>	<b>1'407.8</b>	<b>2'638.8</b>	<b>3'875.4</b>	<b>4'314.1</b>	<b>4'650.6</b>	<b>5'075.4</b>	<b>6'882.5</b>	<b>5'533.7</b>		<b>36'318.7</b>
Balance	176.7	98.1	34.2	94.9	18.4	478.5	684.5	843.7	157.6	-2'229.2	-90.3	72.0	339.0
<b>Cash Flow</b>	<b>176.7</b>	<b>274.8</b>	<b>309.0</b>	<b>403.8</b>	<b>422.2</b>	<b>900.7</b>	<b>1'585.1</b>	<b>2'428.9</b>	<b>2'586.5</b>	<b>357.3</b>	<b>267.0</b>	<b>339.0</b>	<b>339.0</b>

  

Online Computing Replacement Funds													
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Grand Total
Actual Accruals										1'000.0	1'372.0		2'372.0
Payments											233.0		233.0
<b>Cash Balance (End of CY)</b>										<b>1'000.0</b>	<b>1'139.0</b>		<b>2'139.0</b>
<b>Cash Flow</b>										<b>1'000.0</b>	<b>2'139.0</b>	<b>2'139.0</b>	<b>2'139.0</b>

Table 3 – Summary of M&O-A incomes and expenditure (only payments) including in-kind contributions for the period 2002 – 2013 as 31/12/2012 (in kCHF)

Category	2012	2013	Preliminary 2014	2015	2016	2017	Total 2014 to 2017
Detector related costs	1'253.1	1'733.4	1'447.4	1'200.0	1'230.0	1'230.0	5'107.4
Secretariat	207.5	207.5	207.5	208.0	208.0	208.0	831.5
Communications	40.0	0.0	0.0	0.0	0.0	0.0	0.0
CORE computing	537.0	537.0	537.0	537.0	537.0	537.0	2'148.0
On-line computing	2'012.0	1'033.0	1'452.6	1'958.5	1'831.5	1'831.5	7'074.0
Test beams & calibration facilities	85.0	30.0	85.0	85.0	85.0	85.0	340.0
Laboratory operations	250.0	280.0	255.0	245.0	245.0	245.0	990.0
General services	549.7	828.7	689.7	440.7	537.7	537.7	2'205.9
<b>Grand Total w/o Power</b>	<b>4'934.3</b>	<b>4'649.6</b>	<b>4'674.2</b>	<b>4'674.2</b>	<b>4'674.2</b>	<b>4'674.2</b>	<b>18'696.8</b>
Power	2'386.0	721.2	613.0	2'596.0	2'596.0	2'596.0	8'401.0
<b>Grand Total</b>	<b>7'320.3</b>	<b>5'370.8</b>	<b>5'287.2</b>	<b>7'270.2</b>	<b>7'270.2</b>	<b>7'270.2</b>	<b>27'097.8</b>

Table 4 – M&O-A preliminary budget for 2014 and Estimates 2015 – 2017(kCHF)

ALICE Experiment M&O-A 2014 Draft Budget	Snapshot number of scientists ACDB as Sept. 2012	M&O-A	Energy in CHF	Energy billed to NMS Funding Agencies in CHF	(Preliminary version of the budget) Invoice for 2014 in CHF
CERN	52	400'425	52'514		400'425
Czech Republic	13	100'106	13'129		100'106
Denmark	8	61'604	8'079		61'604
Finland	6	46'203	6'059		46'203
France CEA	7	53'903	7'069		53'903
France IN2P3	48	369'623	48'474		369'623
Germany BMBF	37	284'918	37'366		284'918
Germany GSI	23	177'111	23'227		177'111
Greece	3	23'101	3'030		23'101
Hungary	4	30'802	4'040		30'802
Italy Centro Fermi	7	53'903	7'069		53'903
Italy INFN	101	777'749	101'998		777'749
Netherlands	11	84'705	11'109		84'705
Norway	18	138'609	18'178		138'609
Poland	20	154'010	20'198		154'010
Romania ISS	4	30'802	4'040		30'802
Romania NIPNE	7	53'903	7'069		53'903
Slovak Republic	10	77'005	10'099		77'005
Spain/Cuba	5	38'502	5'049		38'502
Sweden	5	38'502	5'049		38'502
United Kingdom	9	69'304	9'089		69'304
Armenia	2	15'401	2'020	2'020	17'421
Brazil	5	38'502	5'049	5'049	43'552
China Wuhan CCNU	4	30'802	4'040	4'040	34'841
Croatia	5	38'502	5'049	5'049	43'552
India	41	315'720	41'405	39'492	355'212
Japan	10	77'005	10'099	9'693	86'698
JINR	9	69'304	9'089	9'089	78'393
Mexico	12	92'406	12'119	12'119	104'524
Republic of Korea NRF	11	84'705	11'109	11'109	95'814
Republic of Korea NRF - KISTI	3	23'101	3'030	3'030	26'131
Pakistan	3	23'101	3'030	3'030	26'131
Peru	1	7'700	1'010	1'010	8'710
Russia	40	308'020	40'395	29'441	337'461
South Africa	7	53'903	7'069	7'069	60'973
Thailand	4	30'802	4'040	4'040	34'841
Turkey	2	15'401	2'020	2'020	17'421
Ukraine Kiev	3	23'101	3'030	3'030	26'131
USA DOE	41	315'720	41'405	40'198	355'918
USA NSF	6	46'203	6'059	5'883	52'086
<b>Total</b>	<b>607</b>	<b>4'674'196</b>	<b>613'000</b>	<b>196'409</b>	<b>4'870'605</b>

Table 5 – Preliminary M&amp;O-A Budget and Sharing for 2014 (kCHF).

Row Labels	Values		
	2012 budget	2012 expenses	Balance
ITS Common	128.0	128.0	-
ITS-SPD	95.0	91.0	4.0
ITS-SDD	237.0	198.0	39.0
ITS-SSD	182.5	69.1	113.4
TPC	145.0	152.8	-7.8
TRD	163.5	188.8	-25.3
TOF	120.0	118.0	2.0
HMPID	144.5	137.0	7.5
PHOS	158.0	43.9	114.1
EMCAL	77.7	63.7	14.0
FMD	25.0	25.0	-
T0	48.4	35.2	13.1
V0A	14.0	12.0	2.0
V0C	11.0	7.1	3.9
PMD	29.0	26.0	3.0
ZDC	35.0	26.1	8.9
ACORDE	15.0	6.0	9.0
MUON TRACKING	87.0	124.2	-37.2
MUON TRIGGER	75.0	71.3	3.7
CENTRAL TRIGGER	20.0	10.0	10.0
<b>Grand Total</b>	<b>1'810.6</b>	<b>1'533.2</b>	<b>277.3</b>

Row Labels	Values	
	2012 budget in man-months	2012 expenses in man-months
<b>Technical Manpower @ CERN from</b>		
<b>Collaborating Institutes (in man-months)</b>	<b>118</b>	<b>103.6</b>
PHOS	67	42.6
EMCAL	36	46
PMD	15	15
<b>Grand Total</b>	<b>118</b>	<b>103.6</b>

Table 6 –M&amp;O-B 2012 Expenditure by Systems (kCHF and man-months)

Row Labels	Values				
	2013	2014	2015	2016	2017
ITS Common	88.0	98.0	128.0	128.0	128.0
ITS-SPD	75.0	75.0	75.0	75.0	75.0
ITS-SDD	180.0	130.0	130.0	130.0	130.0
ITS-SSD	152.5	86.5	72.5	72.5	72.5
TPC	160.0	160.0	133.0	73.0	73.0
TRD	133.5	133.5	133.5	133.5	133.5
TOF	94.0	92.0	88.0	88.0	88.0
HMPID	92.5	92.5	87.5	87.5	87.5
PHOS	93.0	142.0	66.0	66.0	66.0
EMCAL	49.0	69.0	67.0	67.0	67.0
FMD	25.0	25.0	25.0	25.0	25.0
T0	65.0	53.0	44.0	44.0	48.0
VOA	52.5	52.5	10.0	10.0	-
V0C	55.5	55.5	7.0	7.0	7.0
PMD	36.0	26.0	26.0	21.0	21.0
ZDC	26.0	30.0	35.0	35.0	35.0
ACORDE	15.0	10.0	10.0	10.0	13.0
MUON TRACKING	164.0	164.0	71.0	71.0	71.0
MUON TRIGGER	81.0	81.0	76.0	76.0	76.0
CENTRAL TRIGGER	20.0	20.0	20.0	20.0	20.0
<b>Grand Total</b>	<b>1'657.5</b>	<b>1'595.5</b>	<b>1'304.5</b>	<b>1'239.5</b>	<b>1'236.5</b>

Row Labels	Values				
	2013	2014	2015	2016	2017
A01 Mechanics	50.0	42.5	26.5	26.5	27.5
A02 Gas Systems	38.0	38.0	40.0	40.0	43.0
A03 Cooling Systems	151.0	133.0	76.0	76.0	76.0
A04 FEE spares	135.0	112.0	103.0	98.0	100.0
A05.1 Standard Electronics LV/HV PS	322.5	256.5	195.5	195.5	195.5
A05.2 Standard Electronics Crates	26.5	37.5	35.5	35.5	35.5
A05.3 Standard Electronics R/O modules	94.5	111.0	179.0	119.0	119.0
A06 Controls (DCS & DSS)	33.5	43.5	30.5	30.5	30.5
A07 Sub-Detector spares	143.0	125.0	32.0	32.0	22.0
A08 Areas	42.0	44.0	44.0	44.0	44.0
A09 Communications	91.0	97.0	94.0	94.0	95.0
A10 Store Items	97.5	87.5	82.5	82.5	86.5
A11.1 Technical Manpower @ CERN: Industrial Support	6.0	11.0	6.0	6.0	5.0
A11.3 Technical Manpower @ CERN from Collaborating Institutes	427.0	457.0	360.0	360.0	357.0
<b>Grand Total</b>	<b>1'657.5</b>	<b>1'595.5</b>	<b>1'304.5</b>	<b>1'239.5</b>	<b>1'236.5</b>

Row Labels	Values				
	2013	2014	2015	2016	2017
A11.2 Technical Manpower @ CERN from Collaborating Institutes (in man-months)	246	185	168	168	168
<b>Grand Total</b>	<b>246</b>	<b>185</b>	<b>168</b>	<b>168</b>	<b>168</b>

Table 7 –M&amp;O-B Preliminary Budget Estimates 2014 – 2017 by systems and budget items (in kCHF and man-months)

2014																					
Row Labels	ITS Common	ITS-SPD	ITS-SDD	ITS-SSD	TPC	TRD	TOF	HMPID	PHOS	EMCAL	FMD	T0	V0A	V0C	PMD	ZDC	ACORDE	MUON TRACKING	MUON TRIGGER	CENTRAL TRIGGER	Grand Total
A01 Mechanics	-	-	-	-	25.0	10.0					2.0		-		-	1.5			4.0	-	42.5
A02 Gas Systems	-	-	-	-	5.0	15.0	2.0	10.0					-		-	-			6.0	-	38.0
A03 Cooling Systems	8.0	15.0	20.0	-	10.0	10.0	2.0	4.0	60.0	4.0			-		-	-			-	-	133.0
A04 FEE spares	-	-	-	-	20.0	-		1.0	40.0	10.0	8.0	5.0	-		-	4.0	1.0		23.0	-	112.0
A05.1 Standard Electronics LV/HV PS	-	15.0	30.0	30.0	40.0	43.0	16.0	4.0	25.0	12.0	6.0	5.0	-	10.0	2.5	2.0	16.0	-	-	-	256.5
A05.2 Standard Electronics Crates	-	5.0	10.0	-	10.0	-		1.0				2.0	-		-	1.5	3.0		-	5.0	37.5
A05.3 Standard Electronics R/O modules	-	5.0	-	12.0	10.0	20.0	15.0		8.0	2.0	2.0	-	4.0	-	-	5.0		14.0	4.0	10.0	111.0
A06 Controls (DCS & DSS)	-	15.0	-	1.0	5.0	4.0	5.0	1.5	1.0	10.0		1.0	-		-	-			-	-	43.5
A07 Sub-Detector spares	-	-	-	4.0		-					5.0	5.0	52.5	47.5	-	2.0	1.0	3.0	5.0	-	125.0
A08 Areas	-	2.0	-	-		-		30.0				12.0	-		-	-			-	-	44.0
A09 Communications	-	8.0	10.0	0.5	5.0	19.5	10.0	8.0	8.0	2.0	2.0	1.0	-	1.0	6.0	1.0	1.0	6.0	3.0	5.0	97.0
A10 Store Items	-	2.0	-	3.0		12.0	18.0	8.0	8.0	8.0		5.0	-	1.0	10.0	2.5	1.0	3.0	6.0	-	87.5
A11.1 Technical Manpower @ CERN: Industrial Support	-	-	-	-		-		10.0	-				-		-	-	1.0		-	-	11.0
A11.3 Technical Manpower @ CERN from Collaborating Institutes	90.0	8.0	60.0	36.0	30.0		24.0	15.0		15.0		15.0	-	2.0	-	10.0		122.0	30.0	-	457.0
<b>Grand Total</b>	<b>98.0</b>	<b>75.0</b>	<b>130.0</b>	<b>86.5</b>	<b>160.0</b>	<b>133.5</b>	<b>92.0</b>	<b>92.5</b>	<b>142.0</b>	<b>69.0</b>	<b>25.0</b>	<b>53.0</b>	<b>52.5</b>	<b>55.5</b>	<b>26.0</b>	<b>30.0</b>	<b>10.0</b>	<b>164.0</b>	<b>81.0</b>	<b>20.0</b>	<b>1'595.5</b>

  

2014																					
Row Labels	ITS Common	ITS-SPD	ITS-SDD	ITS-SSD	TPC	TRD	TOF	HMPID	PHOS	EMCAL	FMD	T0	V0A	V0C	PMD	ZDC	ACORDE	MUON TRACKING	MUON TRIGGER	CENTRAL TRIGGER	Grand Total
A11.2 Technical Manpower @ CERN from Collaborating Institutes (in man-months)									84	86					15						185
<b>Grand Total</b>									<b>84</b>	<b>86</b>					<b>15</b>						<b>185</b>

Table 8 – 2014 M&O-B Preliminary Budget Estimates by systems and budget items (kCHF and man-months)

Sharing of the M&O-B 2014 budget in kCHF	ITS Common	ITS-SPD	ITS-SDD	ITS-SSD	TPC	TRD	TOF	HMPID	PHOS	EMCAL-DCAL	FMD	T0	V0 A	V0 C	PMD	ZDC	ACORDE	MUONS TRACKING	MUONS TRIGGER	CENTRAL TRIGGER	Grand Total in kCHF
<b>CERN</b>	19.5	33.8		11.2	25.6			27.8													<b>117.8</b>
<b>Czech Republic</b>	1.8		7.4						9.9												<b>19.2</b>
<b>Denmark</b>					5.1					25.0											<b>30.1</b>
<b>Finland</b>												53.0									<b>53.0</b>
<b>France CEA</b>																		20.0			<b>20.0</b>
<b>France IN2P3</b>	7.0			18.7						9.9				55.5				20.0	45.6		<b>196.7</b>
<b>Germany BMBF</b>						125.0															<b>125.0</b>
<b>Germany GSI</b>					92.1																<b>92.1</b>
<b>Italy INFN</b>	54.4	33.8	113.4	29.9			68.1	64.8		7.4						30.0		23.9	29.7		<b>455.2</b>
<b>Netherlands</b>	7.5			20.1																	<b>27.6</b>
<b>Norway</b>									19.9												<b>19.9</b>
<b>Poland</b>					4.6				9.9												<b>14.5</b>
<b>Slovakia</b>	3.4	7.5			3.1																<b>14.0</b>
<b>Sweden</b>					28.7																<b>28.7</b>
<b>United Kingdom</b>																				20.0	<b>20.0</b>
<b>China</b>									9.9	4.9											<b>14.8</b>
<b>Croatia</b>					0.8																<b>0.8</b>
<b>India</b>															26.0			20.0			<b>46.0</b>
<b>Japan</b>									9.9	7.4											<b>17.3</b>
<b>JINR</b>						5.8			9.9												<b>15.7</b>
<b>Mexico</b>													52.5				10.0				<b>62.5</b>
<b>Republic of Korea</b>							23.9												5.7		<b>29.6</b>
<b>Romania NIPNE</b>						2.7															<b>2.7</b>
<b>Russia</b>	0.4		1.4	0.8					72.4									20.0			<b>95.1</b>
<b>South Africa</b>																		20.0			<b>20.0</b>
<b>Ukraine</b>	4.0		7.4	5.8																	<b>17.2</b>
<b>United States DOE</b>										39.4											<b>39.4</b>
<b>United States NSF</b>	0.1		0.4																		<b>0.5</b>
<b>Total</b>	<b>98.0</b>	<b>75.0</b>	<b>130.0</b>	<b>86.5</b>	<b>160.0</b>	<b>133.5</b>	<b>92.0</b>	<b>92.5</b>	<b>142.0</b>	<b>69.0</b>	<b>25.0</b>	<b>53.0</b>	<b>52.5</b>	<b>55.5</b>	<b>26.0</b>	<b>30.0</b>	<b>10.0</b>	<b>164.0</b>	<b>81.0</b>	<b>20.0</b>	<b>1595.5</b>

Table 9 –Sharing of M&amp;O B 2014 preliminary budget between Funding Agencies by systems (kCHF) (in-kind manpower not included)