

Financial matters

CORE and Maintenance & Operation



ALICE

32nd meeting of the ALICE Resources Review Board

CERN-RRB-2012-049 and CERN-RRB-2012-051

CERN , 25 April 2012

C. Decosse

Overview of the presentation

- CORE Construction Budget
 - 2011 CORE expenses
 - Status of the Common Fund
 - 2013 CORE preliminary budget

- Maintenance and Operation
 - Category A
 - 2011 M&O-A contributions and expenditure
 - 2012 Current contributions and expenditure
 - M&O-A 2013 preliminary budget and sharing and estimates for the period 2014-2016
 - Category B
 - 2011 M&O-A contributions and expenditure
 - M&O-B 2013 preliminary budget and sharing and estimates for the period 2014-2016

- Memorandum of Understanding

2011 CORE Expenditure by system and by funding agency (no Common Fund, in kCHF)

| Payments | |
|--|----------------|
| System <input type="button" value="↓↑"/> | Total |
| TRD | 311.8 |
| DCal | 1'463.0 |
| PHOS | 757.0 |
| Grand Total | 2'531.8 |

| Payments | | |
|--|--|----------------|
| Funding Agency <input type="button" value="↓↑"/> | System <input type="button" value="↓↑"/> | Total |
| ▼ France IN2P3 | DCal | 265.0 |
| ▼ Germany BMBF | TRD | 311.8 |
| ▼ Italy INFN | DCal | 36.0 |
| ▼ China | DCal | 350.0 |
| ▼ Japan | DCal | 202.0 |
| ▼ JINR | PHOS | 757.0 |
| ▼ United States DOE | DCal | 610.0 |
| Grand Total | | 2'531.8 |

CORE Cumulative expenditure 1997-2011 incl. Common Fund in kCHF (as 31/12/2011)

| Sum of Payments | Year ↓ | | | | | | | | | | | | | | | |
|--------------------|------------|------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|----------------|
| Funding Agen ↓ | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Grand Total |
| CERN | 65 | 60 | 486 | 595 | 1'663 | 5'427 | 2'883 | 2'042 | 2'661 | 3'786 | 4'066 | 1'876 | 995 | 372 | | 26'976 |
| Czech Republic | 36 | 50 | 55 | 55 | 35 | 40 | 45 | 80 | 107 | 60 | | | | | | 563 |
| Denmark | | | 10 | 5 | 105 | 55 | 105 | 105 | 455 | 399 | 70 | 30 | 30 | | | 1'369 |
| Finland | | 5 | 5 | 5 | 7 | 5 | 284 | 238 | 200 | 259 | 19 | 19 | | | | 1'047 |
| France CEA | | 5 | 5 | 50 | 144 | 290 | 335 | 535 | 196 | 81 | | | | | | 1'641 |
| France IN2P3 | | 25 | 73 | 569 | 173 | 2'861 | 807 | 1'067 | 2'150 | 1'703 | 544 | 576 | 638 | 230 | 265 | 11'680 |
| Germany BMBF | | 20 | 30 | 10 | 1'298 | 1'357 | 2'218 | 2'985 | 2'373 | 5'258 | 1'675 | 225 | 190 | 880 | 312 | 18'831 |
| Germany GSI | | 5 | 5 | 235 | 904 | 427 | 905 | 1'034 | 1'814 | 889 | 1'259 | 1'092 | 935 | 1'120 | | 10'624 |
| Greece | | | 110 | 160 | 5 | 10 | | 19 | | 134 | 163 | | | | | 601 |
| Hungary | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 17 | 480 | -10 | | | | | 522 |
| Italy Centro Fermi | | | | | | | | | | | | | | 50 | | 50 |
| Italy INFN | | 100 | 622 | 334 | 1'471 | 2'285 | 3'350 | 4'200 | 5'921 | 8'740 | 4'818 | 1'632 | 273 | 232 | 36 | 34'015 |
| Netherlands | | 105 | 110 | 36 | 72 | 345 | 746 | 437 | 362 | 283 | | | | | | 2'496 |
| Norway | | 10 | 10 | 10 | 10 | 10 | 61 | 601 | 269 | 189 | 190 | 65 | | 110 | | 1'535 |
| Poland | | 5 | 10 | 25 | 5 | 166 | 196 | 140 | 133 | 226 | 13 | 114 | | | | 1'033 |
| Slovak Republic | | | 20 | 95 | 105 | 61 | 180 | 140 | 125 | 83 | | | | | | 809 |
| Spain/Cuba | | | | | | | | | | | 45 | | | | | 45 |
| Sweden | | 5 | 5 | 5 | 5 | 121 | 615 | 547 | 1'402 | 277 | | | | | | 2'982 |
| United Kingdom | | 5 | 5 | 52 | 34 | 5 | 225 | 340 | 845 | 201 | 17 | | | | | 1'729 |
| Armenia | | | 2 | | 5 | 5 | 8 | 8 | 5 | 5 | 5 | 8 | | | | 51 |
| Brazil | | | | | | | | | | | | | 50 | | | 50 |
| China | | 5 | | | | 160 | 185 | 188 | 256 | 337 | 278 | 130 | | 387 | 350 | 2'276 |
| Croatia | | | | 5 | 70 | 17 | 85 | 5 | 5 | | 5 | 10 | | | | 202 |
| India | | | | 30 | 15 | 228 | 822 | 1'067 | 562 | 505 | | | | | | 3'229 |
| Japan | | | | | | | | | | | 150 | 513 | 100 | 487 | 202 | 1'452 |
| JINR | | 50 | 85 | | 310 | 452 | 311 | 288 | 5 | 677 | 63 | 29 | 22 | | 757 | 3'049 |
| Mexico | | | | 5 | 5 | 15 | 5 | 30 | 100 | 384 | 52 | 30 | 40 | | | 666 |
| Peru | | | | | | | | | | | | | | 50 | | 50 |
| Republic of Korea | | | | | | | | | | | 67 | 50 | 33 | | | 150 |
| Romania ISS | | | | | | | | | | 45 | | 10 | | | | 55 |
| Romania NIPNE | | | | | | 15 | 100 | 15 | 168 | 115 | 104 | 50 | | | | 567 |
| Russia LHC-2 | 327 | 120 | 601 | 430 | 364 | 698 | 600 | 745 | 899 | 1'223 | 403 | 214 | | | | 6'624 |
| Russia Other | | | | | | 1'970 | 2'255 | 2'602 | 1'314 | 2'046 | 534 | 72 | 49 | | | 10'842 |
| South Africa | | | | | | 5 | 5 | | 5 | | 10 | 20 | | | | 45 |
| Switzerland | | | | 5 | | | | | | | | | | | | 5 |
| Ukraine | | 10 | 50 | 165 | 70 | 40 | 20 | 263 | 261 | 121 | | | 47 | | | 1'047 |
| United States DOE | | | | | | | 5 | 310 | 397 | 913 | 830 | 1'616 | 3'275 | 2'378 | 660 | 10'383 |
| United States NSF | | | 10 | 5 | 28 | 7 | 5 | 15 | 10 | 18 | 64 | | | 50 | | 212 |
| Grand Total | 427 | 590 | 2'314 | 2'891 | 6'908 | 17'083 | 17'366 | 20'048 | 23'018 | 29'434 | 15'435 | 8'381 | 6'677 | 6'346 | 2'582 | 159'500 |

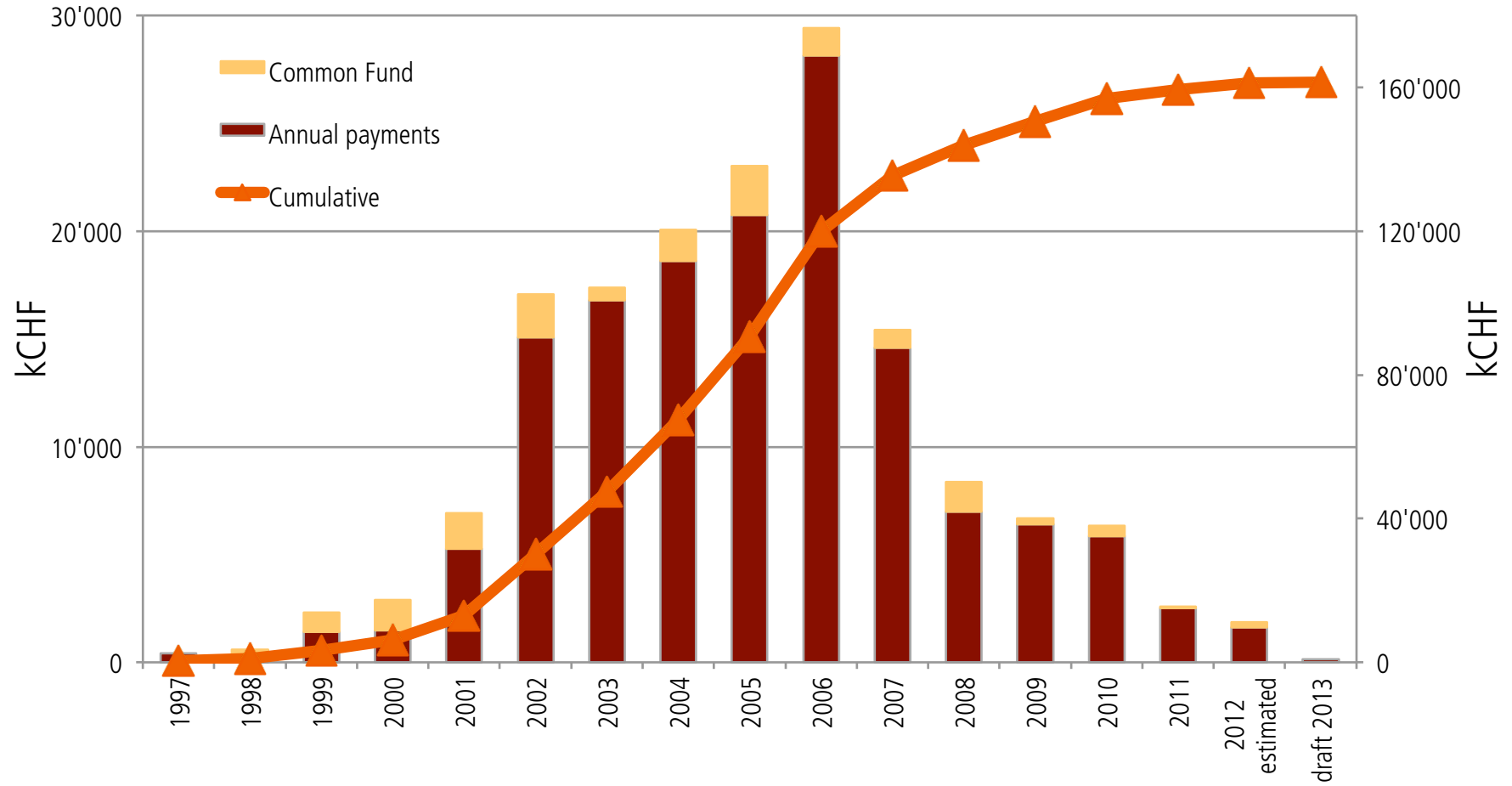


CORE Cumulative expenditure 1997-2011 incl. Common Fund by funding agencies and systems in kCHF (as 31/12/2011)

| Sum of Payments | System | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|--------------|--------------|---------------|------------|---------------|---------------|---------------|------------|---------------|--------------|--------------|---------------|------------|--------------|---------------|--------------|------------|--------------|--------------|--------------|---------------|--------------|----------------|---|
| Funding Agency | Pixel | Drift | Strip | ITS-CMA | TPC | TRD | TOF | Pestov/PPC | EMCAL | DCal | HMPID | PHOS | ACORDE | Forward | Muons | DAQ | Trigger | HLT | Infrastr. | ComPro | C/F Cash/C&I | C/F Fee | Grand Total | |
| CERN | 2'021 | | 1'748 | | 2'454 | | | | | | 886 | | | | 6'163 | 2'625 | | | 6'730 | 347 | 3'971 | 30 | 26'976 | |
| Czech Republic | | 314 | | | | | | | | | | 83 | | | | | | | | | 86 | 80 | 563 | |
| Denmark | | | | | 420 | | | | | | | | | 780 | | | | | | | 129 | 40 | 1'369 | |
| Finland | | | 642 | | | | | | | | | | | 263 | | | | | | | 102 | 40 | 1'047 | |
| France CEA | | | | | | | | | | | | | | | 1'420 | | | | | | 181 | 40 | 1'641 | |
| France IN2P3 | | | 2'148 | | | | | | 1'136 | 495 | | | | 402 | 6'004 | | | | | | 1'372 | 125 | 11'680 | |
| Germany BMBF | | | | | 2'307 | 14'027 | | | | | | | | | | | | 727 | | | 1'559 | 211 | 18'831 | |
| Germany GSI | | | | | 4'373 | 4'978 | | | | | | | | | | | | 275 | | | 958 | 40 | 10'624 | |
| Greece | | | | | 8 | 187 | | | | | | | | 276 | | | | | | | 95 | 35 | 601 | |
| Hungary | | | | | | | | | | | | | | | | 395 | | | | | 82 | 45 | 522 | |
| Italy Centro Fermi | | | | | | | | | | | | | | | | | | | | | 50 | | 50 | |
| Italy INFN | 1'608 | 5'849 | 2'559 | 26 | | | 17'041 | | 718 | 36 | 1'243 | | | 820 | 1'833 | | | 31 | | | 1'980 | 270 | 34'015 | |
| Netherlands | | | 2'189 | | | | | | | | | | | | | | | | | | 267 | 40 | 2'496 | |
| Norway | | | | | | | | | | | | 853 | | | | | | 476 | | | 121 | 85 | 1'535 | |
| Poland | | | | | 489 | | | | | | | 409 | | | | | | | | | 18 | 117 | 1'033 | |
| Slovak Republic | 313 | | | | 300 | | | | | | | | | | | | | 60 | | 16 | 30 | 90 | 809 | |
| Spain/Cuba | | | | | | | | | | | | | | | | | | | | | 45 | | 45 | |
| Sweden | | | | | 2'558 | | | | | | | | | | | | | | | | 379 | 45 | 2'982 | |
| United Kingdom | | | | | | | | | | | | | | | | 647 | 858 | | | | 179 | 45 | 1'729 | |
| Armenia | | | | | | | | | | | | | | | | | | | | 5 | 13 | 33 | 51 | |
| Brazil | | | | | | | | | | | | | | | | | | | | | 50 | | 50 | |
| China | | | | | | | | | 737 | | 700 | | | | | | | 816 | | | 18 | 5 | 2'276 | |
| Croatia | | | | | 85 | | | | | | | | | | | | | | | | 72 | 45 | 202 | |
| India | | | | | | | | | | | | | | 927 | 1'965 | | | | | 137 | 80 | 120 | 3'229 | |
| Japan | | | | | | | | | 392 | | 910 | | | | | | | | | | 150 | | 1'452 | |
| JINR | | | | | | 397 | | | | | 1'247 | | | | 1'161 | | | | | 200 | 5 | 40 | 3'049 | |
| Mexico | | | | | | | | | | | | | 134 | 422 | | | | | | | 70 | 40 | 666 | |
| Peru | | | | | | | | | | | | | | | | | | | | | 50 | | 50 | |
| Republic of Korea | | | | | | | | | | | | | | | | | | | | | 150 | | 150 | |
| Romania ISS | | | | | | | | | | | | | | | | | | | | | 15 | 40 | 55 | |
| Romania NIPNE | | | | | | 472 | | | | | | | | | | | | | | | 55 | 40 | 567 | |
| Russia LHC-2 | | | | 152 | | | 275 | 396 | | | 36 | 4'154 | | 181 | 1'106 | | | | | 251 | | 75 | 6'624 | |
| Russia Other | 9 | | | 18 | | | | | | | | 9'556 | | 34 | 240 | | | | | 975 | | 10 | 10'842 | |
| South Africa | | | | | | | | | | | | | | | | | | | | | 30 | 15 | 45 | |
| Switzerland | | | | | | | | | | | | | | | | | | | | | | 5 | | 5 |
| Ukraine | | 213 | 717 | | | | | | | | | | | | | | | | | 47 | | 70 | 1'047 | |
| United States DOE | | | | | | | | | 9'240 | 610 | | | | | | | | 78 | | | 440 | 15 | 10'383 | |
| United States NSF | | 63 | | | | | | | | | | | | | | | | | | | 109 | 40 | 212 | |
| Grand Total | 3'951 | 6'439 | 10'003 | 196 | 12'994 | 20'060 | 17'316 | 396 | 11'094 | 2'270 | 2'165 | 17'911 | 134 | 4'104 | 19'890 | 3'667 | 918 | 1'587 | 7'546 | 1'977 | 12'911 | 1'971 | 159'500 | |



CORE Cumulative expenditure 1997-2011 incl. Common Fund in kCHF (as 31/12/2011)



Common Fund 1998-2011 contributions and expenditure, cash balance as 31/12/2011 in kCHF

| Contributions: | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|--|------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Common Fund | 330 | 892 | 1'405 | 1'624 | 1'990 | 341 | 795 | 1'796 | 410 | 679 | 1'383 | 268 | 485 | 45 | 12'443 |
| In-kind contributions | 65 | 54 | 64 | 75 | 118 | 13 | 40 | 202 | 906 | 271 | 72 | 96 | | | 1'977 |
| Interest CF | | 7 | 47 | 107 | 100 | 83 | 73 | 33 | | | 5 | | | | 456 |
| C&I contributions | | | | | 17 | 242 | 620 | 481 | 876 | 153 | 24 | 5 | 15 | 5 | 2'438 |
| Interest C&I | | | | | | 2 | 4 | 5 | | | | | | | 11 |
| Total contributions, including interest and in-kind | 395 | 953 | 1'516 | 1'806 | 2'225 | 682 | 1'531 | 2'517 | 2'192 | 1'104 | 1'484 | 369 | 500 | 50 | 17'324 |
| Cumulative contributions (C/F and C&I) | 395 | 1'348 | 2'864 | 4'670 | 6'895 | 7'577 | 9'108 | 11'625 | 13'817 | 14'921 | 16'405 | 16'774 | 17'274 | 17'324 | |

| Expenditure: | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|----------------------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Payments | 85 | 127 | 171 | 782 | 769 | 1'372 | 923 | 1'960 | 4'601 | 3'085 | 380 | 321 | 163 | 63 | 14'803 |
| In-kind contributions | 65 | 54 | 64 | 75 | 118 | 13 | 40 | 202 | 906 | 271 | 72 | 96 | | | 1'977 |
| Total spending | 150 | 181 | 235 | 857 | 887 | 1'385 | 963 | 2'163 | 5'507 | 3'356 | 452 | 417 | 163 | 63 | 16'779 |
| Cumulative spending | 150 | 331 | 566 | 1'423 | 2'310 | 3'696 | 4'659 | 6'822 | 12'328 | 15'685 | 16'136 | 16'553 | 16'716 | 16'779 | |

| | | | | | | | | | | | | | | | |
|-------------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|------------|------------|------------|------------|--|
| End year balance | 245 | 1'017 | 2'298 | 3'247 | 4'585 | 3'881 | 4'449 | 4'804 | 1'489 | -764 | 268 | 221 | 558 | 545 | |
|-------------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|------------|------------|------------|------------|--|



Contributions to the Common Fund in kCHF

Payments received in 2011:
50 kCHF from University of
Texas at Austin

Outstanding:
China (Wuhan and Beijing
CIAE 112 kCHF)

30 kCHF contribution
pending KIPT Kharkov change
its status from full member to
associate member of the
Collaboration.

New MoUs pending

| | Total payments | | | | Total | Funds due MoU | Additional funds | (agreed) C&I | Balance |
|--------------------------|----------------|----------------|----------------|----------------|-----------------|------------------|---------------------|-----------------|---------------|
| | Fee | Cash | C&I | InKind | | | | | |
| CERN | 30.0 | 3'966.0 | 5.0 | 346.9 | 4'347.9 | 2'700.0 | 1'642.9 | 5.0 | |
| Czech Republic | 80.0 | 40.0 | 46.0 | | 166.0 | 120.0 | 14.0 | 32.0 | |
| Denmark | 40.0 | 80.0 | 49.0 | | 169.0 | 120.0 | | 49.0 | |
| Finland | 40.0 | 79.3 | 22.8 | | 142.0 | 100.0 | | 42.0 | |
| France CEA | 40.0 | 110.0 | 71.0 | | 221.0 | 150.0 | | 71.0 | |
| France IN2P3 | 125.0 | 1'024.7 | 347.0 | | 1'496.7 | 900.0 | 249.7 | 347.0 | |
| Germany BMBF | 210.7 | 1'069.3 | 490.0 | | 1'770.0 | 1'280.0 | | 490.0 | |
| Germany GSI | 40.0 | 680.0 | 278.0 | | 998.0 | 720.0 | | 278.0 | |
| Greece | 47.5 | 77.5 | 5.0 | | 130.0 | 125.0 | | 5.0 | |
| Hungary | 45.0 | 45.0 | 37.0 | | 127.0 | 100.0 | | 27.0 | |
| Italy Centro Fermi | 45.0 | | 5.0 | | 50.0 | 45.0 | | 5.0 | |
| Italy INFN | 445.0 | 1'155.0 | 649.7 | | 2'249.7 | 1'600.0 | 0.7 | 649.0 | |
| Netherlands | 40.0 | 180.0 | 87.0 | | 307.0 | 220.0 | | 87.0 | |
| Norway | 85.0 | 55.0 | 66.0 | | 206.0 | 140.0 | | 66.0 | |
| Poland | 122.0 | 13.0 | | | 135.0 | 120.0 | | 15.0 | |
| Slovak Republic | 90.0 | -6.4 | 36.0 | 16.4 | 136.0 | 100.0 | | 36.0 | |
| Spain/Cuba | | 45.0 | | | 45.0 | 45.0 | | | |
| Sweden | 45.0 | 255.0 | 124.0 | | 424.0 | 300.0 | 5.0 | 119.0 | |
| Switzerland | 5.0 | | | | 5.0 | 5.0 | | | |
| United Kingdom | 40.0 | 120.0 | 64.0 | | 224.0 | 160.0 | | 64.0 | |
| Subtotal MS | 1'615.2 | 8'988.3 | 2'382.4 | 363.3 | 13'349.2 | 9'050.0 | 1'912.2 | 2'387.0 | |
| Armenia | 38.0 | 8.3 | | 4.8 | 51.0 | 40.0 | | 11.0 | |
| Brazil | 45.0 | | 5.0 | | 50.0 | 45.0 | | 5.0 | |
| China | 23.0 | | | | 23.0 | 120.0 | | 15.0 | -112.0 |
| Croatia | 50.0 | 50.0 | 17.0 | | 117.0 | 100.0 | | 17.0 | |
| India | 120.0 | 80.0 | | 137.2 | 337.2 | 300.0 | 22.2 | 15.0 | |
| Japan | | 150.0 | | | 150.0 | 150.0 | | | |
| JINR | 40.0 | | 5.0 | 200.0 | 245.0 | 240.0 | | 5.0 | |
| Korea, Rep. of | | 150.0 | | | 150.0 | 150.0 | | | |
| Mexico | 110.0 | | | | 110.0 | 100.0 | | 10.0 | |
| Peru | 45.0 | | 5.0 | | 50.0 | 45.0 | | 5.0 | |
| Romania ISS | 40.0 | 5.0 | | | 45.0 | 40.0 | | 5.0 | |
| Romania NIPNE | 40.0 | 65.0 | | | 105.0 | 100.0 | | 5.0 | |
| Russia | 85.0 | | | 1'225.0 | 1'310.0 | 1'300.0 | | 10.0 | |
| Ukraine | 70.0 | | | 47.0 | 117.0 | 100.0 | | 47.0 | -30.0 |
| South Africa | 40.0 | | 5.0 | | 45.0 | 40.0 | | 5.0 | |
| USA DOE | 230.0 | 225.0 | | | 455.0 | 445.0 | | 10.0 | |
| USA NSF | 40.0 | 95.0 | 14.0 | | 149.0 | 135.0 | | 14.0 | |
| Subtotal NMS | 1'016.0 | 828.3 | 51.0 | 1'614.0 | 3'509.3 | 3'450.0 | | 179.0 | -142.0 |
| Subtotal MS + NMS | 2'631.2 | 9'816.6 | 2'433.4 | 1'977.3 | 16'858.5 | 12'500.0 | 1'912.2 | 2'566.0 | -142.0 |
| Interest | 455.5 | | 10.5 | | 466.0 | | | | |
| Totals | 3'086.7 | 9'816.6 | 2'443.9 | 1'977.3 | 17'324.5 | 12'500.0 | 1'912.2 | 2'566.0 | -142.0 |



M&O Cat. A contributions 2002-2011 as 31 Dec. 2011 in kCHF

| Year | Country | 2002-2010 | | | | | 2011 | | | | | 2002-2011 | | | |
|--------------------|-----------------------|---------------|---------------|------------|---------------|------------|--------------|--------------|--------------|---------------|------------|----------------------------------|-------------------|-----------------------|--------------------|
| | | Invoiced | Received | In-kind | Energy rebate | Due | Invoiced | Received | In-kind | Energy rebate | Due | Total received including in-kind | Total Outstanding | | |
| MS | CERN | 2'839 | 2'839 | | | | 400 | 400 | | | | 3'239 | | CERN | |
| | Czech Republic | 507 | 507 | | | | 94 | 94 | | | | 601 | | Czech Republic | |
| | Denmark | 237 | 237 | | | 0 | 47 | 47 | | | | 285 | 0 | Denmark | |
| | Finland | 257 | 257 | | | | 47 | 47 | | | | 304 | | Finland | |
| | France CEA | 301 | 301 | | | | 47 | 47 | | | | 348 | | France CEA | |
| | France IN2P3 | 2'249 | 2'249 | | | | 376 | 376 | | | 0 | 2'625 | 0 | France IN2P3 | |
| | Germany BMBF | 1'529 | 1'530 | | | -1 | 314 | 314 | | | | 1'844 | -1 | Germany BMBF | |
| | Germany GSI | 906 | 906 | | | | 188 | 188 | | | | 1'095 | | Germany GSI | |
| | Greece | 223 | 223 | | | 0 | 16 | 16 | | | | 239 | 0 | Greece | |
| | Hungary | 135 | 135 | | | | 24 | 24 | | | | 159 | | Hungary | |
| | Italy Centro Fermi | 26 | 26 | | | | 31 | 31 | | | | 58 | | Italy Centro Fermi | |
| | Italy INFN | 5'150 | 5'150 | | | | 823 | 823 | | | | 5'973 | | Italy INFN | |
| | Netherlands | 442 | 442 | | | 0 | 71 | 71 | | | | 512 | 0 | Netherlands | |
| | Norway | 660 | 660 | | | | 133 | 133 | | | | 793 | | Norway | |
| | Poland | 735 | 698 | | | 36 | 141 | 94 | | | 47 | 792 | 83 | Poland | |
| | Slovak Republic | 596 | 596 | | | | 86 | 86 | | | | 682 | | Slovak Republic | |
| | Spain/Cuba | 236 | 236 | | | | 47 | 16 | | | 31 | 252 | 31 | Spain/Cuba | |
| | Sweden | 218 | 218 | | | | 24 | 24 | | | | 242 | | Sweden | |
| | United Kingdom | 372 | 372 | | | | 63 | 63 | | | | 435 | | United Kingdom | |
| MS Total | | 17'618 | 17'584 | | | 35 | 2'970 | 2'892 | | | 78 | 20'476 | 113 | MS Total | |
| NMS | Armenia | 113 | 110 | | | 8 | -5 | 13 | | | 4 | -8 | -14 | Armenia | |
| | Brazil | 218 | 179 | | | 16 | 24 | 76 | | | 26 | 50 | 74 | Brazil | |
| | China Wuhan CCNU | 213 | 134 | 60 | | 20 | -1 | 51 | 32 | | 19 | 226 | -1 | China Wuhan CCNU | |
| | China Beijing CIAE | 107 | 20 | 63 | | 12 | 13 | 13 | | | 7 | 83 | 18 | China Beijing CIAE | |
| | Croatia | 219 | 203 | | | 16 | | 51 | 36 | | 15 | 239 | | Croatia | |
| | India | 1'746 | 1'647 | | | 98 | | 450 | 336 | | 114 | 1'983 | | India | |
| | Japan | 386 | 363 | | | 23 | | 150 | 118 | | 32 | 482 | 0 | Japan | |
| | JINR | 525 | 102 | 399 | | 24 | 0 | 89 | 67 | | 22 | 568 | 0 | JINR | |
| | Mexico | 621 | 573 | | | 48 | | 153 | 104 | | 49 | 677 | | Mexico | |
| | Republic of Korea NRF | 375 | 351 | | | 24 | | 127 | 89 | | 30 | 440 | 9 | Republic of Korea NRF | |
| | Peru | | | | | | | 13 | 13 | | | 13 | | Peru | |
| | Romania ISS | 203 | 183 | | | 20 | | 51 | 36 | | 15 | 219 | | Romania ISS | |
| | Romania NIPNE | 373 | 349 | | | 24 | | 89 | 67 | | 22 | 416 | | Romania NIPNE | |
| | Russia | 2'433 | 2'296 | 10 | | 127 | | 456 | 356 | | 106 | 2'662 | -6 | Russia | |
| | South Africa | 276 | 264 | | | 12 | | 76 | 54 | | 22 | 318 | | South Africa | |
| | Ukraine | 237 | 179 | 28 | | 12 | 19 | 38 | | | 19 | 207 | 38 | Ukraine | |
| | USA DOE | 1'100 | 1'100 | | | 77 | -77 | 440 | 263 | | 101 | 1'363 | -1 | USA DOE | |
| | USA NSF | 232 | 217 | | | 15 | 0 | 63 | 21 | | 14 | 238 | 28 | USA NSF | |
| NMS Total | | 9'377 | 8'271 | 560 | | 575 | -29 | 2'400 | 1'608 | | 618 | 173 | 10'439 | 144 | NMS Total |
| Grand Total | | 26'996 | 25'855 | 560 | | 575 | 6 | 5'370 | 4'500 | | 618 | 251 | 30'915 | 257 | Grand Total |

Note that payments have been received at the beginning of 2012 for the period 2009-2011:

Poland (Warsaw TU) paid 83 kCHF for 2009-2011, USA NSF (Ohio State Univ) paid 28 kCHF and Korea 9 kCHF.



Rules on outstanding contributions

- If on 1st of September the outstanding amount is less than, or equal to, the current year's contribution -> CERN finance department sends a standard reminder to the Funding Agency requesting the payment within one month.
- If on 1st of September the outstanding amount is larger than the current year's contribution -> The ALICE Management sends a letter to the Funding Agency announcing that, unless payment is made before the end of the year, the right to sign papers will be withdrawn as of December 31st.
- 1st case last year: CIAE Beijing, signature rights withdrawn waiting for payment.

M&O-A 2011 book closing in kCHF as 31/12/2011

| Category | Budget | Payments | Open commitments | Total expenditure | Balance budget - payments | Balance budget - total commitments |
|-------------------------------------|--------------|--------------|------------------|-------------------|---------------------------|------------------------------------|
| Detector related costs | 1'416 | 2'184 | 250 | 2'435 | -768 | -1'019 |
| Secretariat | 238 | 177 | 6 | 183 | 61 | 55 |
| Communications | 30 | 40 | 0 | 40 | -10 | -10 |
| Off-line computing | 537 | 533 | 7 | 540 | 4 | -3 |
| On-line computing | 1'269 | 2'338 | 12 | 2'350 | -1'069 | -1'081 |
| Test beams & calibration facilities | 95 | 72 | 0 | 72 | 23 | 23 |
| Laboratory operations | 270 | 271 | 9 | 280 | -1 | -10 |
| General services | 636 | 662 | 46 | 708 | -26 | -72 |
| sub-total | 4'491 | 6'277 | 331 | 6'608 | -1'786 | -2'117 |
| Power (NSM only) | 261 | 724 | 0 | 724 | -463 | -463 |
| Total | 4'752 | 7'001 | 331 | 7'332 | -2'249 | -2'580 |

In 2011, we paid 436 kCHF from 2010 open commitments from detector related costs (135 kCHF), secretariat (6 kCHF), online hardware (235 kCHF), laboratory operations (50 kCHF) and general services (10 kCHF).

As agreed last October, 1 MCHF has been transferred from the on-line computing hardware to a new account.

Intense installation works during the two end-of-year technical stops with the installation of 3 TRDs and 6 EMCAI modules (Dec 2010-March 2011) and during in December 2011 2 EMCAI and 3 more TRD supermodules have been installed.

A major work was the displacement of two ZDCs in the tunnel since several collimators were shadowing the ZDCs and lowering considerably the performance of the detector. We also used this shutdown to install the new ventilation unit for the central detectors and consolidate electrical infrastructure. The UPS units and the electrical infrastructure in the ALICE counting rooms date from LEP times and a major consolidation effort is necessary. In addition we want to increase to UPS power from 150kW to 400kW to limit the severe impact on the DAQ, DCS and HLT equipment from the frequent power glitches. This activity is spread over the years 2011 to 2013 and first investments on the new distribution panels have started.

The 2011 NMS energy budget was 879 kCHF. We gave a rebate to NMS of 618 kCHF for unspent power in 2009.

With two large warm magnets operating full time from mid-February to early-December, we used 49,903 MWhr in 2011.



M&O-A cash balance as 31/12/2011

| Contributions Income and in-kind | Budget year | | | | | | | | | | | |
|--|-------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|--|
| Year | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Grand Total | |
| 2002 | 330 | 12 | | | | | | | | | 342 | |
| 2003 | 68 | 565 | | | | | | | | | 632 | |
| 2004 | 5 | 73 | 936 | 13 | | | | | | | 1'027 | |
| 2005 | 9 | 24 | 68 | 1'213 | 64 | | | | | | 1'377 | |
| 2006 | 9 | 15 | 112 | 123 | 2'242 | 274 | | | | | 2'776 | |
| 2007 | 4 | 6 | 13 | 153 | 323 | 3'562 | 692 | | | | 4'755 | |
| 2008 | | | | | 25 | 503 | 4'040 | 111 | | | 4'678 | |
| 2009 | | | | | | 8 | 182 | 4'951 | 124 | | 5'265 | |
| 2010 | | | | | 4 | 6 | 85 | 395 | 4'936 | 303 | 5'729 | |
| 2011 | | | | | | | | 37 | 111 | 4'198 | 4'346 | |
| Total Income per year | 424 | 696 | 1'129 | 1'503 | 2'657 | 4'354 | 4'999 | 5'494 | 5'170 | 4'501 | 30'927 | |
| | | | | | | | | | | | | |
| Expenditure Payments only | Budget year | | | | | | | | | | | |
| Year | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Grand Total | |
| 2002 | 202 | | | | | | | | | | 202 | |
| 2003 | 46 | 502 | | | | | | | | | 548 | |
| 2004 | | 75 | 855 | | | | | | | | 931 | |
| 2005 | | 20 | 240 | 1'134 | | | | | | | 1'394 | |
| 2006 | | | | 274 | 2'347 | | | | | | 2'621 | |
| 2007 | | | | | 291 | 3'422 | | | | | 3'714 | |
| 2008 | | | | | | 453 | 4'053 | 4 | | | 4'510 | |
| 2009 | | | | | | | 261 | 4'134 | | | 4'395 | |
| 2010 | | | | | | | | 513 | 4'639 | | 5'152 | |
| 2011 | | | | | | | | | 436 | 6'565 | 7'001 | |
| Total Expenditure per budget | 248 | 598 | 1'095 | 1'408 | 2'639 | 3'875 | 4'314 | 4'651 | 5'075 | 6'565 | 30'467 | |
| Balance/Year | 177 | 98 | 34 | 95 | 18 | 478 | 684 | 844 | 95 | -2'064 | 460 | |
| End Year Balance | 177 | 275 | 309 | 404 | 422 | 901 | 1'585 | 2'429 | 2'524 | 460 | 460 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Special Account for online hardware Contribution | | | | | | | | | | | | |
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Grand Total | |
| Income | | | | | | | | | | 1'000 | 1'000 | |
| Expenditure Payments only | | | | | | | | | | | | |
| End of year balance | | | | | | | | | | 1'000 | 1'000 | |
| | | | | | | | | | | | | |
| Total end of year balance incl. special account | 177 | 275 | 309 | 404 | 422 | 901 | 1'585 | 2'429 | 2'524 | 1'460 | 1'460 | |



2012 M&O-A contributions in kCHF as 24/4/2012

| Year | Country | 2002-2011 | | | | | 2012 | | | | 2002-2012 | | Total Outstanding | |
|--------------------|-----------------------|---------------|---------------|------------|---------------|------------|--------------|--------------|---------|--------------|----------------------------------|--------------|-----------------------|--|
| | | Invoiced | Received | In-kind | Energy rebate | Due | Invoiced | Received | In-kind | Due | Total received including in-kind | | | |
| MS | CERN | 3'239 | 3'239 | | | | 429 | 429 | | | 3'668 | | CERN | |
| | Czech Republic | 601 | 601 | | | | 94 | | | 94 | 601 | 94 | Czech Republic | |
| | Denmark | 284 | 285 | | | 0 | 69 | | | 69 | 285 | 68 | Denmark | |
| | Finland | 304 | 304 | | | | 51 | 51 | | | 355 | | Finland | |
| | France CEA | 348 | 348 | | | | 60 | 60 | | | 408 | | France CEA | |
| | France IN2P3 | 2'626 | 2'625 | | | 0 | 412 | 412 | | | 3'037 | 0 | France IN2P3 | |
| | Germany BMBF | 1'843 | 1'844 | | | -1 | 317 | 199 | | 119 | 2'043 | 118 | Germany BMBF | |
| | Germany GSI | 1'095 | 1'095 | | | | 189 | 189 | | | 1'283 | | Germany GSI | |
| | Greece | 239 | 239 | | | 0 | 17 | | | 17 | 239 | 17 | Greece | |
| | Hungary | 159 | 159 | | | | 26 | | | 26 | 159 | 26 | Hungary | |
| | Italy Centro Fermi | 58 | 58 | | | | 51 | | | 51 | 58 | 51 | Italy Centro Fermi | |
| | Italy INFN | 5'973 | 5'973 | | | | 918 | | | 918 | 5'973 | 918 | Italy INFN | |
| | Netherlands | 512 | 512 | | | 0 | 86 | 86 | | | 598 | 0 | Netherlands | |
| | Norway | 793 | 793 | | | | 146 | 146 | | | 939 | | Norway | |
| | Poland | 876 | 876 | | | 0 | 154 | | | 154 | 876 | 154 | Poland | |
| | Slovak Republic | 682 | 682 | | | | 86 | 86 | | | 768 | | Slovak Republic | |
| | Spain/Cuba | 283 | 252 | | | 31 | 43 | | | 43 | 252 | 74 | Spain/Cuba | |
| | Sweden | 242 | 242 | | | | 26 | 26 | | | 267 | | Sweden | |
| | United Kingdom | 435 | 435 | | | | 60 | | | 60 | 435 | 60 | United Kingdom | |
| MS Total | | 20'589 | 20'559 | | | 30 | 3'235 | 1'683 | | 1'552 | 22'242 | 1'582 | MS Total | |
| NMS | Armenia | 125 | 128 | | 12 | -14 | 25 | | | 25 | 128 | 12 | Armenia | |
| | Brazil | 295 | 179 | | 42 | 74 | 76 | | | 76 | 179 | 150 | Brazil | |
| | China Wuhan CCNU | 263 | 166 | 60 | 39 | -1 | 51 | | | 51 | 226 | 50 | China Wuhan CCNU | |
| | China Beijing | 120 | 20 | 63 | 19 | 18 | 13 | | | 13 | 83 | 31 | China Beijing | |
| | Croatia | 270 | 239 | | 31 | | 64 | 64 | | | 303 | | Croatia | |
| | India | 2'196 | 1'983 | | 212 | | 389 | 389 | | | 2'372 | | India | |
| | Japan | 537 | 482 | | 55 | 0 | 126 | 19 | | 107 | 500 | 107 | Japan | |
| | JINR | 614 | 169 | 399 | 46 | 0 | 102 | | | 102 | 568 | 102 | JINR | |
| | Mexico | 773 | 677 | | 96 | | 153 | | | 153 | 677 | 153 | Mexico | |
| | Republic of Korea NRF | 502 | 449 | | 54 | 0 | 127 | | | 127 | 449 | 127 | Republic of Korea NRF | |
| | Peru | 13 | 13 | | | | 13 | 13 | | 0 | 25 | 0 | Peru | |
| | Romania ISS | 254 | 219 | | 35 | | 51 | | | 51 | 219 | 51 | Romania ISS | |
| | Romania NIPNE | 462 | 416 | | 46 | | 89 | 20 | | 69 | 436 | 69 | Romania NIPNE | |
| | Russia | 2'889 | 2'651 | 10 | 233 | -6 | 464 | | | 464 | 2'662 | 458 | Russia | |
| | South Africa | 352 | 318 | | 34 | | 89 | 89 | | | 407 | | South Africa | |
| | Ukraine | 275 | 179 | 28 | 31 | 38 | 38 | | | 38 | 207 | 76 | Ukraine | |
| | USA DOE | 1'541 | 1'363 | | 179 | -1 | 504 | 504 | | 1 | 1'867 | | USA DOE | |
| | USA NSF | 295 | 265 | | 30 | 0 | 76 | 52 | | 24 | 317 | 24 | USA NSF | |
| NMS Total | | 11'777 | 9'915 | 560 | 1'194 | 108 | 2'450 | 1'148 | | 1'301 | 11'624 | 1'409 | NMS Total | |
| Grand Total | | 32'366 | 30'475 | 560 | 1'194 | 138 | 5'685 | 2'832 | | 2'853 | 33'866 | 2'991 | Grand Total | |

2012 M&O-A current expenditure as 20/04/2012 in kCHF

| Category | 2012 Budget | Payments | Open commitments | Total expenditure | Balance Budget - Payments | Balance Budget - total expenditure |
|-------------------------------------|----------------|--------------|------------------|-------------------|------------------------------|---------------------------------------|
| Detector related costs | 1'253 | 665 | 432 | 1'097 | 588 | 156 |
| Secretariat | 208 | 40 | 122 | 161 | 168 | 47 |
| Communications | 40 | 17 | 0 | 17 | 23 | 23 |
| Off-line computing | 537 | 172 | 221 | 393 | 365 | 144 |
| On-line computing | 640 | 260 | 355 | 616 | 380 | 24 |
| On-line computing hardware | 1'372 | 83 | 9 | 92 | 1'289 | 1'280 |
| Test beams & calibration facilities | 85 | 4 | 0 | 4 | 81 | 81 |
| Laboratory operations | 250 | 19 | 75 | 94 | 231 | 156 |
| General services | 550 | 156 | 184 | 340 | 394 | 210 |
| sub-total | 4'935 | 1'417 | 1'398 | 2'815 | 3'518 | 2'120 |
| Power (NSM only) | 759 | 160 | 0 | 160 | 599 | 599 |
| Total | 5'694 | 1'578 | 1'398 | 2'975 | 4'117 | 2'719 |

Total cash balance = 1,834 KCHF

M&O-A preliminary budget for 2013 and estimates for 2014-2016 in kCHF

These numbers are based on a 22-month long shutdown in 2013 and 2014 (20 months of shutdown work + 2 months commissioning before beam). The schedule should be confirmed during this year.

The preliminary budget will be reviewed in detail over the summer with the Scrutiny Group, and presented for final approval at the October RRB meeting.

| Category | 2012 | 2013 | 2014 | 2015 | 2016 |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Detector related costs | 1'253 | 1'907 | 1'493 | 1'289 | 1'289 |
| Secretariat | 208 | 208 | 208 | 208 | 208 |
| Communications | 40 | 40 | 40 | 40 | 40 |
| CORE computing | 537 | 537 | 537 | 537 | 537 |
| On-line computing | 2'012 | 1'122 | 1'694 | 2'002 | 2'002 |
| Test beams & calibration facilities | 85 | 30 | 85 | 85 | 85 |
| Laboratory operations | 250 | 280 | 245 | 235 | 235 |
| General services | 550 | 810 | 632 | 538 | 538 |
| Grand Total | 4'934 | 4'934 | 4'934 | 4'934 | 4'934 |
| | | | | | |
| Power | 2'386 | 150 | 1'963 | 2'386 | 2'386 |
| | | | | | |
| GRAND TOTAL WITH POWER | 7'320 | 5'084 | 6'897 | 7'320 | 7'320 |

Plans are to open the detector, remove the PHOS detector and its cradle, modify the services under the space-frame rail, swap PHOS rails with new ones, install the new PHOS/Dcal cradle, install new services, install DCal modules (8) and PHOS modules (4), install top 4/5 TRDs modules, suspend mini-frame to allow installation of further 12/13/14 bottom TRDs modules, put back mini-frame.

In parallel we continue consolidation of electrical infrastructure and the installation of new UPS: new cables through PX24 shaft, CR4 HV and all cooling plants on UPS. Consolidation work on chilled water plants (flow issues) and pipes going to the cavern for cooling racks, plants and magnet Consolidation of LV cables on the back-frame and installation of a new ventilation on the L3 magnet

Sharing of the preliminary 2013 M&O-A budget

(based on the number of scientists on Sept. 2011, new institutes joined so sharing will be slightly different)

| | number of scientists ACDB as 1/9/2011 | M&O in CHF | Energy in CHF | Energy billed to Funding Agencies in CHF | Final Invoice for 2012 in CHF |
|-----------------------|---------------------------------------|------------|---------------|--|-------------------------------|
| CERN | 50 | 429'791 | 13'066 | | 429'791 |
| Czech Republic | 11 | 94'554 | 2'875 | | 94'554 |
| Denmark | 8 | 68'767 | 2'091 | | 68'767 |
| Finland | 6 | 51'575 | 1'568 | | 51'575 |
| France CEA | 7 | 60'171 | 1'829 | | 60'171 |
| France IN2P3 | 48 | 412'599 | 12'544 | | 412'599 |
| Germany BMBF | 37 | 318'045 | 9'669 | | 318'045 |
| Germany GSI | 22 | 189'108 | 5'749 | | 189'108 |
| Greece | 2 | 17'192 | 523 | | 17'192 |
| Hungary | 3 | 25'787 | 784 | | 25'787 |
| Italy Centro Fermi | 6 | 51'575 | 1'568 | | 51'575 |
| Italy INFN | 107 | 919'753 | 27'962 | | 919'753 |
| Netherlands | 10 | 85'958 | 2'613 | | 85'958 |
| Norway | 17 | 146'129 | 4'443 | | 146'129 |
| Poland | 18 | 154'725 | 4'704 | | 154'725 |
| Slovak Republic | 10 | 85'958 | 2'613 | | 85'958 |
| Spain/Cuba | 5 | 42'979 | 1'307 | | 42'979 |
| Sweden | 3 | 25'787 | 784 | | 25'787 |
| United Kingdom | 7 | 60'171 | 1'829 | | 60'171 |
| Armenia | 2 | 17'192 | 523 | 523 | 17'714 |
| Brazil | 6 | 51'575 | 1'568 | 1'568 | 53'143 |
| China Wuhan CCNU | 4 | 34'383 | 1'045 | 1'045 | 35'429 |
| China Beijing | 1 | 8'596 | 261 | 261 | 8'857 |
| Croatia | 5 | 42'979 | 1'307 | 1'307 | 44'286 |
| India | 31 | 266'470 | 8'101 | 7'727 | 274'197 |
| Japan | 10 | 85'958 | 2'613 | 2'508 | 88'466 |
| JINR | 8 | 68'767 | 2'091 | 2'091 | 70'857 |
| Mexico | 12 | 103'150 | 3'136 | 3'136 | 106'286 |
| Republic of Korea NRF | 10 | 85'958 | 2'613 | 2'613 | 88'571 |
| Peru | 1 | 8'596 | 261 | 261 | 8'857 |
| Romania ISS | 4 | 34'383 | 1'045 | 1'045 | 35'429 |
| Romania NIPNE | 7 | 60'171 | 1'829 | 1'829 | 62'000 |
| Russia | 40 | 343'833 | 10'453 | 7'618 | 351'451 |
| South Africa | 7 | 60'171 | 1'829 | 1'829 | 62'000 |
| Ukraine Kiev | 3 | 25'787 | 784 | 784 | 26'571 |
| USA DOE | 40 | 343'833 | 10'453 | 10'148 | 353'981 |
| USA NSF | 6 | 51'575 | 1'568 | 1'522 | 53'097 |
| Total | 574 | 4'934'000 | 150'000 | 47'816 | 4'981'816 |



Maintenance and Operation Category B (sub-systems specific) as 31/12/2011 in kCHF

| Systems | 2011 Budget | 2011 Expenditure | Balance |
|----------------|--------------|------------------|-----------|
| ITS Pixel | 128 | 182 | -54 |
| ITS Drift | 200 | 321 | -121 |
| ITS Strip | 194 | 62 | 132 |
| ITS-CMA | 63 | 63 | 0 |
| TPC | 150 | 142 | 8 |
| TRD | 163 | 169 | -6 |
| TOF | 118 | 120 | -2 |
| EMCAL | 20 | 0 | 20 |
| HMPID | 150 | 170 | -20 |
| PHOS | 130 | 268 | -138 |
| Muons Tracking | 210 | 56 | 154 |
| Muons Trigger | 70 | 54 | 16 |
| Acorde | 10 | 17 | -7 |
| FMD | 30 | 25 | 5 |
| PMD | 70 | 48 | 22 |
| T0 | 48 | 46 | 2 |
| V0A | 10 | 7 | 3 |
| V0C | 15 | 3 | 12 |
| ZDC | 33 | 19 | 14 |
| CTP | 20 | 49 | -29 |
| Total | 1'832 | 1'771 | 41 |

Mix of expenses done at CERN and in the various laboratories and universities (cash as well as in-kind contributions)

M&O-B preliminary budget for 2013 and estimates for 2014-2016 in kCHF

These numbers are based on a 22-month long shutdown in 2013 and 2014 (20 months of shutdown work + 2 months commissioning before beam). The schedule should be confirmed during this year.

The preliminary budget will be reviewed in detail over the summer with the Scrutiny Group, and presented for final approval at the October RRB meeting.

| | | Data | | | | |
|--------------------|---|--------------|--------------|--------------|--------------|--------------|
| ref | budget description | 2012 | 2013 | 2014 | 2015 | 2016 |
| ▼ A01 | Mechanics | 29 | 50 | 41 | 27 | 27 |
| ▼ A02 | Gas Systems | 82 | 38 | 38 | 38 | 38 |
| ▼ A03 | Cooling Systems | 110 | 151 | 101 | 94 | 94 |
| ▼ A04 | FEE spares | 101 | 115 | 119 | 105 | 105 |
| ▼ A05.1 | Standard Electronics LV/HV PS | 421 | 323 | 242 | 213 | 213 |
| ▼ A05.2 | Standard Electronics Crates | 64 | 27 | 28 | 18 | 18 |
| ▼ A05.3 | Standard Electronics R/O modules | 173 | 95 | 106 | 166 | 106 |
| ▼ A06 | Controls (DCS & DSS) | 33 | 34 | 30 | 30 | 30 |
| ▼ A07 | Sub-Detector spares | 82 | 58 | 55 | 41 | 41 |
| ▼ A08 | Areas | 57 | 42 | 42 | 42 | 42 |
| ▼ A09 | Communications | 93 | 91 | 91 | 88 | 88 |
| ▼ A10 | Store Items | 84 | 98 | 80 | 78 | 78 |
| ▼ A11.1 | Technical Manpower @ CERN: Industrial Support | 23 | 6 | 6 | 6 | 6 |
| ▼ A11.3 | Technical Manpower @ CERN: subsistence | 433 | 427 | 410 | 353 | 353 |
| Grand Total | | 1'782 | 1'553 | 1'387 | 1'297 | 1'237 |

| | | Data | | | | |
|--------------------|---|------------|------------|-----------|-----------|-----------|
| ref | budget description | 2012 | 2013 | 2014 | 2015 | 2016 |
| ▼ A11.2 | Technical Manpower @ CERN: From Collaborating Institutes in man-month | 180 | 135 | 86 | 86 | 86 |
| Grand Total | | 180 | 135 | 86 | 86 | 86 |

M&O-B 2013 preliminary budget by system in kCHF

| 2013 | | Proje | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|-------------|-------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------|----------------|---------------|-------------|-------------|----------------|
| ref | budget description | ITS Common | ITS-SPD | ITS-SDD | ITS-SSD | TPC | TRD | TOF | HMPID | PHOS | ACORDE | FMD | PMD | TO | ZDC | CENTRAL TRIGGER | EMCAL-DCAL | MUONS TRACKING | MUONS TRIGGER | V0 A | V0 C | Grand Total |
| ▼ A01 | Mechanics | | | | | 25.0 | 10.0 | | | | | 2.0 | | 7.0 | 4.0 | | | | 2.0 | | | 50.0 |
| ▼ A02 | Gas Systems | | | | | 5.0 | 15.0 | | 15.0 | | | | | | | | | | 3.0 | | | 38.0 |
| ▼ A03 | Cooling Systems | 8.0 | 15.0 | 90.0 | | 10.0 | 10.0 | 2.0 | 4.0 | 10.0 | | | | | | | 2.0 | | | | | 151.0 |
| ▼ A04 | FEE spares | | | 12.0 | | 20.0 | | | 1.0 | 40.0 | 1.0 | 8.0 | | 5.0 | 3.0 | | 7.0 | | 18.0 | | | 115.0 |
| ▼ A05.1 | Standard Electronics LV/HV PS | | 30.0 | 34.0 | 105.0 | 40.0 | 43.0 | 25.0 | 4.0 | | 2.0 | 6.0 | | 5.0 | 2.5 | | 10.0 | 16.0 | | | | 322.5 |
| ▼ A05.2 | Standard Electronics Crates | | | | | 10.0 | | | 1.0 | | 8.0 | | | 2.0 | 0.5 | 5.0 | | | | | | 26.5 |
| ▼ A05.3 | Standard Electronics R/O modules | | 5.0 | | 3.0 | 10.0 | 20.0 | 12.0 | | | | 2.0 | | 2.0 | 2.5 | 10.0 | 6.0 | 14.0 | 4.0 | | 4.0 | 94.5 |
| ▼ A06 | Controls (DCS & DSS) | | 3.0 | 2.0 | 1.0 | 5.0 | 4.0 | 3.0 | 1.5 | | | | 5.0 | 1.0 | | | 8.0 | | | | | 33.5 |
| ▼ A07 | Sub-Detector spares | | | | 4.0 | | | | | | 1.0 | 5.0 | 5.0 | 15.0 | | | | 3.0 | 10.0 | 10.0 | 5.0 | 58.0 |
| ▼ A08 | Areas | | 2.0 | | | | | | 35.0 | | | | | 5.0 | | | | | | | | 42.0 |
| ▼ A09 | Communications | | 10.0 | 2.0 | 0.5 | 5.0 | 19.5 | 10.0 | 8.0 | 8.0 | 1.0 | 2.0 | 6.0 | 1.0 | 1.0 | 5.0 | 2.0 | 6.0 | 3.0 | | 1.0 | 91.0 |
| ▼ A10 | Store Items | | 2.0 | | 3.0 | | 12.0 | 18.0 | 8.0 | 15.0 | 1.0 | | 20.0 | 5.0 | 2.5 | | 4.0 | 3.0 | 3.0 | | 1.0 | 97.5 |
| ▼ A11.1 | Technical Manpower @ CERN: Industrial Support | | | | | | | | 5.0 | | 1.0 | | | | | | | | | | | 6.0 |
| ▼ A11.3 | Technical Manpower @ CERN: subsistence | 80.0 | 8.0 | 40.0 | 36.0 | 30.0 | | 24.0 | 10.0 | | | | | 17.0 | 10.0 | | 10.0 | 122.0 | 38.0 | | 2.0 | 427.0 |
| Grand Total | | 88.0 | 75.0 | 180.0 | 152.5 | 160.0 | 133.5 | 94.0 | 92.5 | 73.0 | 15.0 | 25.0 | 36.0 | 65.0 | 26.0 | 20.0 | 49.0 | 164.0 | 81.0 | 10.0 | 13.0 | 1'552.5 |

| 2013 | | Proje | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|------------|---------|---------|---------|-----|-----|-----|-------|------|--------|-----|------|----|-----|-----------------|------------|----------------|---------------|------|------|-------------|
| ref | budget description | ITS Common | ITS-SPD | ITS-SDD | ITS-SSD | TPC | TRD | TOF | HMPID | PHOS | ACORDE | FMD | PMD | TO | ZDC | CENTRAL TRIGGER | EMCAL-DCAL | MUONS TRACKING | MUONS TRIGGER | V0 A | V0 C | Grand Total |
| ▼ A11.2 | Technical Manpower @ CERN: From Collaborating Institutes in man-month | | | | | | | | | 96.0 | | | 15.0 | | | 24.0 | | | | | | 135.0 |
| Grand Total | | | | | | | | | | 96.0 | | | 15.0 | | | 24.0 | | | | | | 135.0 |

Sharing of the Preliminary M&O-B 2013 budget in kCHF

| | ITS Common | ITS-SPD | ITS-SDD | ITS-SSD | TPC | TRD | TOF | HMPID | PHOS | ACORDE | FMD | PMD | T0 | ZDC | CENTRAL TRIGGER | EMCAL-DCAL | MUONS TRACKING | MUONS TRIGGER | V0 A | V0 C | Grand Total | |
|-------------------|-------------|-------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------|----------------|---------------|-------------|-------------|----------------|-------|
| CERN | 17.5 | 33.8 | | 19.7 | 25.6 | | | 27.8 | | | | | | | | | | | | | | 124.4 |
| Czech Republic | 1.7 | | 10.3 | | | | | | 6.6 | | | | | | | | | | | | | 18.5 |
| Denmark | | | | | 5.1 | | | | | | 25.0 | | | | | | | | | | | 30.1 |
| Finland | | | | | | | | | | | | | 65.0 | | | | | | | | | 65.0 |
| France CEA | | | | | | | | | | | | | | | | | 20.0 | | | | | 20.0 |
| France IN2P3 | 6.2 | | | 32.9 | | | | | | | | | | | | 5.3 | 60.0 | 45.5 | | 13.0 | | 163.0 |
| Germany BMBF | | | | | | 125.0 | | | | | | | | | | | | | | | | 125.0 |
| Germany GSI | | | | | 92.0 | | | | | | | | | | | | | | | | | 92.0 |
| Italy INFN | 48.8 | 33.8 | 157.0 | 52.6 | | | 70.0 | 64.8 | | | | | | 26.0 | | 11.6 | 24.0 | 30.4 | | | | 519.0 |
| Netherlands | 6.8 | | | 35.4 | | | | | | | | | | | | | | | | | | 42.2 |
| Norway | | | | | | | | | 13.1 | | | | | | | | | | | | | 13.1 |
| Poland | | | | | 4.6 | | | | 6.6 | | | | | | | | | | | | | 11.2 |
| Slovakia | 3.0 | 7.4 | | | 3.1 | | | | | | | | | | | | | | | | | 13.5 |
| Sweden | | | | | 28.7 | | | | | | | | | | | | | | | | | 28.7 |
| United Kingdom | | | | | | | | | | | | | | | 20.0 | | | | | | | 20.0 |
| China | | | | | | | | | 6.6 | | | | | | | 3.5 | | | | | | 10.1 |
| Croatia | | | | | 0.8 | | | | | | | | | | | | | | | | | 0.8 |
| India | | | | | | | | | | | | 36.0 | | | | | 20.0 | | | | | 56.0 |
| Japan | | | | | | | | | 6.6 | | | | | | | 5.3 | | | | | | 11.9 |
| JINR | | | | | | 5.9 | | | 6.6 | | | | | | | | | | | | | 12.4 |
| Mexico | | | | | | | | | | 15.0 | | | | | | | | | | 10.0 | | 25.0 |
| Republic of Korea | | | | | | | 24.0 | | | | | | | | | | | | 5.1 | | | 29.1 |
| Romania NIPNE | | | | | | 2.7 | | | | | | | | | | | | | | | | 2.7 |
| Russia | 0.4 | | 2.0 | 1.5 | | | | | 27.0 | | | | | | | | 20.0 | | | | | 50.9 |
| South Africa | | | | | | | | | | | | | | | | | 20.0 | | | | | 20.0 |
| Ukraine | 3.6 | | 10.3 | 10.2 | | | | | | | | | | | | | | | | | | 24.1 |
| United States DOE | | | | | | | | | | | | | | | | 23.3 | | | | | | 23.3 |
| United States NSF | 0.1 | | 0.5 | | | | | | | | | | | | | | | | | | | 0.6 |
| Total | 88.0 | 75.0 | 180.0 | 152.5 | 160.0 | 133.5 | 94.0 | 92.5 | 73.0 | 15.0 | 25.0 | 36.0 | 65.0 | 26.0 | 20.0 | 49.0 | 164.0 | 81.0 | 10.0 | 13.0 | 1'552.5 | |



Memorandum of Understanding

- Still pending: Brazil and China (MoU for M&O)
- Under preparation addendum for 3 Indian Institutes: Bose Institute in Kolkata, Gauhati University in Guwahati and IIT Indore
- A new group from the UK joined ALICE STFC Daresbury Laboratory (MoUs already signed by STFC).
- Two associate institutes recently became full members: COMSATS (PK), and KISTI-GSDC (KR). Addendum prepared.