



Report on CORE Construction Budgets

1 - CORE Expenses in 2011

The CORE Construction Budget for 2011, approved at the RRB meeting on 13 October 2010, amounts to 2,101 kCHF. The actual expenditure during 2011 amounts to 2,531.8 kCHF.

This is detailed in the following tables (unit = kCHF):

- Table 1A 2011 CORE Expenditure by System
- Table 1B 2011 CORE Expenditure by Funding Agency

The cumulative expenditure 1997 – 2011 is given in the following tables:

- Table 2A Cumulative CORE Expenditure 1997 – 2011 by System
- Table 2B Cumulative CORE Expenditure 1997 – 2011 by Funding Agency

Note that these tables include in-kind contributions but do not include contributions from the Funding Agencies to the Common Fund and to the Commissioning and Integration.

The total cumulative expenditure, including payments to the Common Fund and Commissioning and Integration, is given in the following tables:

- Table 3A CORE Expenditure 1997 – 2011: Totals by System
- Table 3B CORE Expenditure 1997 – 2011: Totals by Funding Agency

2 - Preliminary Estimate for CORE Expenses in 2012 and in 2013

The preliminary estimates of the CORE Construction expenses for this year and for the year 2013 add up to 1,773 kCHF (1,623 kCHF expected expenses in 2012 for the final production of the TRD and the DCal projects, and in 2013 150 kCHF for the final commissioning of the DCal).

The details are given in the following table (unit = kCHF):

- Table 4 Expected expenses in 2012 and 2013 preliminary budget by System and by Funding Agency in kCHF

The draft 2013 construction budget will be submitted for approval to the Resources Review Board meeting in October 2012.

Table 1A - (All) CORE Expenditure by System

Unit = kCHF

Year	(All)
Payments	
System	Total
TRD	311.8
PHOS	757.0
DCal	1'463.0
<i>Grand Total</i>	2'531.8

Table 1B - (All) CORE Expenditure by Funding Agency

Unit = kCHF

Year	(All)	
Payments		
Funding Agency	System	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
<i>Grand Total</i>		2'531.8

Table 3A: CORE Expenditure 1997 - 2011: Totals by System
(Unit = kCHF)

System	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Grand Total
Pixel					90.0	814.1	167.6	885.5	640.0	684.1	379.0	174.0	116.7			3'951.0
Drift	35.9	40.0	213.0	116.0	92.7	820.3	457.3	909.9	1'756.7	1'992.2	5.0					6'438.9
Strip			100.0	161.3	99.5	1'275.3	1'542.4	1'785.1	2'002.7	2'786.6	287.0	-37.0				10'002.9
ITS-CMA	21.5	11.9	45.0	31.0	40.3	14.8	22.0	9.0								195.5
TPC				320.9	2'496.2	2'408.5	2'266.4	1'866.4	2'199.9	1'121.7	190.5	123.6				12'994.0
TRD					68.0	560.0	2'196.9	3'091.7	1'974.6	5'119.6	2'966.3	1'051.9	956.5	1'763.0	311.8	20'060.3
TOF				29.4	5.6		1'370.1	1'515.2	2'759.2	5'457.9	4'827.2	1'351.7				17'316.3
HMPID		4.1	13.3	50.0	305.9	783.2	315.6	166.7	189.3	176.6	71.0	89.0				2'164.8
PHOS	113.8	40.5	120.0	292.0	161.1	2'571.5	2'725.2	3'435.8	2'175.7	3'259.6	940.0	922.0	100.0	297.0	757.0	17'911.2
Forward			304.0	154.0	16.7	280.3	194.1	361.5	1'197.6	1'266.1	233.3	66.7	30.0			4'104.3
Muons	48.8	120.1	371.5	231.6	1'246.8	5'138.4	4'570.9	2'980.9	3'214.2	1'643.9	245.0	78.4				19'890.3
DAQ								646.7	1'044.5	671.0	248.0		1'057.0			3'667.2
Trigger				46.9	29.0		200.0	200.0	233.3	192.0	17.0					918.2
HLT						10.0	3.2	340.8	51.0	136.0	70.9	329.0	190.0	456.0		1'586.9
Infrastr.					557.5	281.1	718.7	710.1	1'106.0	1'365.2	2'612.3	352.0	-178.6	21.5		7'545.9
ComPro	64.7		45.0	53.3	75.0	118.2	33.0	40.0	202.2	906.2	271.5	72.1	96.3			1'977.4
ACORDE								30.0		83.6		20.0				133.6
C/F Cash/C&I		100.0	640.0	1'135.0	1'399.0	1'752.0	342.3	1'237.0	2'046.7	1'195.6	832.4	1'407.5	273.0	500.0	50.0	12'910.5
C/F Fee		230.0	252.0	270.0	224.9	255.0	240.7	178.1	230.0	90.0						1'970.7
Dcal															807.0	2'270.0
EMCAL								304.5	391.9	912.8	815.2	2'132.2	4'036.0	2'501.0		11'093.6
Pestov/PPC	142.6	43.4	210.0													396.0
Grand Total	427.3	590.0	2'313.8	2'891.4	6'908.2	17'082.8	17'366.3	20'048.1	23'017.7	29'434.1	15'434.6	8'381.1	6'676.9	6'345.5	2'581.8	159'499.5

Table 3B: CORE Expenditure 1997 - 2011: Totals by Funding Agency
(Unit = kCHF)

Funding Agency	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

Note that these tables 3A and 3B include contributions from funding agencies to the Common Fund and to the Commissioning and Integration.

Table 4 - Expected expenses in 2012 and 2013 preliminary budget by System and by Funding Agency in kCHF

Funding Agencies	Expected expenses in 2012	Preliminary 2013	Grand Total
▼ TRD	1'145		1'145
Germany BMBF	542		542
Germany GSI	603		603
▼ DCal	478	150	628
Japan	127	37	164
China Wuhan	35	45	80
United States DOE*	316	68	384
Grand Total	1'623	150	1'773

* DOE has already delivered the full budget for the DCal detector: 1,100 kUSD. The numbers shown in table 4 are not an additional budget request but the expected expenses for the completion and commissioning of the DCal detector.