MEMORANDUM

Date 29 March 2010

To: Members of the LHCb RRB

From: C. D'Ambrosio

Subject: Status of M&O Category A.

Budget Closing Report for 2009

As indicated by LHCb at the last RRB, the general spending on M&O Category A closely followed the approved budget for 2009, with a reserve for Online Computing, due to the late LHC start. The closing result for 2009 is given in Table 1.

The main deviation is indeed for the budget line Online. The budget line Communication was overspent due to the payment of the EVO tool, which had not been foreseen before. The line CORE Computing has, as expected, gone a ~20% over the planned 100 kCHF, which confirms the choice agreed with the Scrutiny Group and the RRB to increase this amount to 150 kCHF as from the year 2010. As already reported, the person for Data Base Support has taken up service in 2009 and was charged to LHCb for the rest of the year as a full FTE. From February 2010 onwards, this person will be costing only half, as agreed recently with the IT Department. In Table 2, details on the 2009 main expenditure lines are given. We propose that the overall under spending of 121 kCHF for 2009 is kept as buffer in the M&O Cat.A budget. We will report back to RRB in October.

2009	Budget	Used	Difference	
detector related	914	921	-7	
secretariat	192	161	31	
communication	12	40	-28	
core comp	100	123	-23	
on line	850	740	110	
test beams	20	18	2	
laboratory	60	47	13	
general services	360	337	23	
Totals	2508	2387	121	

Table 1: M&O Category A in kCHF at book closing for 2009

Detector related costs		
	Magnet	44
	Gas	305
	Cooling	123
	Safety	33
	Tech. support	223
	Beam pipe	91
Secretariat		
	Secretarial aid	155
Communication		
	EVO	37
On-line computing		
	System Manag.	466
	Hardware	275
Test beams, calibration		
	Operation	15
Laboratory operations		
	Operation	41
General services		
	Cool., vent. etc	128
	Transport	147
	Survey	10

Table 2: Partial list of the main items paid from 2009 M&O Category A

Current status of the 2010 M&O Category A budget

In October 2009 the RRB approved the M&O Category A budget for 2010 for a total of 2,691 kCHF, including a power cost of 600 kCHF and a VELO Spare contribution of 100 kCHF. The power was reduced from 970 kCHF to take into account the changes of the LHC schedule in 2009. As in previous years, there are only minor expenditures on the M&O Category A budget by the end of March. However, we are confident that the expenditure this year will follow closely the budget forecast.

Forecast for the 2011 M&O Category A budget

The estimated budget for 2011 will be examined with the Scrutiny Group in the coming months and presented for ratification to the RRB in fall 2010. There are only minor changes from 2010 to 2011. They all reflect the discussions from last year, were agreed upon with the SG and are described and approved in CERN-RRB-2009-117. Any revisions are unlikely to make significant changes to the overall budget. The total budget currently stands at 2,787 kCHF including the extra power cost at 970 kCHF and the VELO Spare contribution of 100 kCHF (see Table 3).

The sharing between the different Funding Authorities is based on the number of PhD equivalent members at each institute. This number is normally agreed for the next year in September of the previous year. As usual, the power is shared by all Funding Authorities, but only charged to Non Member States. Provisionally, with the same numbers for PHD equivalents as for 2010, the sharing is given in Table 4.

Budget 2011	
Detector related costs	925
Secretariat	200
Communications	50
CORE Computing	150
On-line computing	775
Test beams, calibration facilities	40
Laboratory operations	60
General services	360
TOTAL without power	2560
Power	970

Table 3: Projected 2011 budget in kCHF for M&O Category A.

100

VELO Spare

			M&O A	VELO	Power	
2011	PhD eq.		kCHF	kCHF	kCHF	
	total/		2,560	100	970	Total
	funding auth.	%	CHF	CHF	CHF	CHF
BRAZIL	11	3.1	80,228	3,134	30,399	113,761
FRANCE	42	12.0	306,325	11,966	0	318,291
BMBF GERMANY	16	4.6	116,695	4,558	0	121,254
MPI, MPG, GERMANY	6	1.7	43,761	1,709	0	45,470
IRELAND	2	0.6	14,587	570	5,527	20,684
INFN ITALY	47	13.4	342,792	13,390	0	356,182
NETHERLANDS	16	4.6	116,695	4,558	0	121,254
P. R. CHINA	3	0.9	21,880	855	8,291	31,026
POLAND	10	2.8	72,934	2,849	0	75,783
HHNIPNE ROMANIA	5	1.4	36,467	1,425	13,818	51,709
RUSSIA	32	9.1	233,390	9,117	37,469	279,976
SPAIN	16	4.6	116,695	4,558	0	121,254
SWITZERLAND	21	6.0	153,162	5,983	0	159,145
UKRAINE	3	0.9	21,880	855	8,291	31,026
UK	65	18.5	474,074	18,519	0	492,593
USA	9	2.6	65,641	2,564	23,554	91,759
CERN	47	13.4	342,792	13,390	0	356,182
TOTAL	351	100.0	2,560,000	100,000	127,347	2,787,347

Table 4: Sharing of the estimated 2011 budget in CHF for M&O Category A.

M&O Category B

There are no changes since the November 2009 RRB.