

**TOTEM M&O 2008**

**&**

**BUDGET REQUEST 2009**

## TOTEM M&O 2008 BUDGET BY FUNDING AGENCIES

**Table 1: Cat. A cost by Funding Agencies (ref. Appendix 1 formula)**

<b>CERN</b>	<b>INFN</b>	<b>Finland</b>	<b>Estonia</b>	<b>Prague</b>	<b>US NSF</b>	<b>TOT</b>
130	208	51	23	14	37	463

**The amounts in Table 1 have been invoiced to the Funding Agencies and were in most cases already fully allocated. Payments are expected soon.**

**Table 2: Cat. B cost by Funding Agencies (ref. Appendix 2 formula)**

<b>CERN</b>	<b>INFN</b>	<b>Finland</b>	<b>Estonia</b>	<b>Prague</b>	<b>US NSF</b>	<b>TOT</b>
77	100	18	1	5	16	217

**Table 3: Cat. A+B cost by Funding Agencies**

<b>CERN</b>	<b>INFN</b>	<b>Finland</b>	<b>Estonia</b>	<b>Prague</b>	<b>US NSF</b>	<b>TOT</b>
207	308	69	24	19	53	680

**“The Scrutiny Group now recommends approval by the RRB of the TOTEM request for a total M&O Cat A budget of CHF 463k for the 2008 calendar year.”**

**Appendix 1.**

**Category A:** M&O expenses that are shared by the entire collaboration.

**Detector Operation:**

The sharing is based on the proportion of scientific staff in the collaboration holding PhD or equivalent qualifications who are entitled to be named as authors of scientific publications of the collaboration.

<b>CERN</b>	<b>INFN</b>	<b>Finland</b>	<b>Estonia</b>	<b>Prague</b>	<b>US NSF</b>
17 / 62	28 / 62	7 / 62	3 / 62	2 / 62	5 / 62
<b>28%</b>	<b>45%</b>	<b>11%</b>	<b>5%</b>	<b>3%</b>	<b>8%</b>

## Appendix 2.

**Category B:** M&O expenses that are borne by part of the collaboration, i.e. by single institutes or groups of institutes, and their Funding Agencies. The headings in this category are defined with reference to the distribution of responsibilities amongst the various institutes for the construction of the detector.

### Detector maintenance and repairs:

The sharing is based on the proportions of the original investment.

SUB-DETECTOR	Responsibilities					
	CERN	INFN	Helsinki	Estonia	Prague	NSF
<b>Roman Pots</b>						
Mechanics + Installation	85% = 25k				15% = 5k	
Si Detectors	73% = 12k					27% = 4k
Electronics	50% = 11k			5% = 1k		45% = 10k
<b>T1 Detector</b>						
CSC Detectors		100% = 12k				
Electronics		90% = 18k				10% = 2k
Supports + Services	90% = 23k	10% = 2k				
<b>T2 Detector</b>						
GEM Detectors			100% = 12k			
Electronics		100% = 18k				
Supports + Services	50% = 6k		50% = 6k			
<b>DAQ</b>						
Read-out Column		100% = 50k				

## **M&O budget request for 2009 :**

A total M&O budget envelope similar to 2008 is expected for the year 2009.

The number of authors is being revised for the Cat.A request 2009, in consultation with the RRB Scrutiny Group and the Funding Agencies.

The new KFKI collaborating institute is sufficiently funded for participating to the M&O costs for 3 years.

The sharing of Cat.B costs for Roman Pots will be reviewed including KFKI contributions.

# TOTEM M&O TOTAL BUDGET 2009

(preliminary)

<b>A: TOT DETECTORS RELATED COSTS =</b>	<b>135K</b>
<b>A: TOT SECRETARIAT =</b>	<b>31K</b>
<b>A: TOT COMMUNICATIONS =</b>	<b>4K</b>
<b>A: TOT CORE COMPUTING =</b>	<b>98K</b>
<b>A: TOT ONLINE COMPUTING =</b>	<b>96K</b>
<b>A: TOT TESTBEAMS, CALIBRATION =</b>	<b>40K</b>
<b>A: TOT LABORATORY OPERATIONS =</b>	<b>13K</b>
<b>A: TOT GENERAL SERVICES =</b>	<b>25K</b>

**A: TOTAL =** **442K**

<b>B: TOT DETECTORS RELATED COSTS =</b>	<b>195K</b>
<b>B: TOT ONLINE COMPUTING =</b>	<b>50K</b>
<b>B: TOT GENERAL SERVICES =</b>	<b>2K</b>

**B: TOTAL =** **247K**

**TOTEM M&O TOTAL = 689K**

**TOTEM collaborators are preparing the detailed items list and related justifications for the budget request 2009.**

**The RRB Scrutiny Group will be provided with the related tables in the standard template well in advance in view of the Scrutiny Group review on 5-6 May 2008.**