

# CMS

## Expenditure for Construction 1995-2007

Compact Muon Solenoid

**CERN-RRB-2008-053**

Cf. CERN-RRB-2008-027

A. Petrilli, RRB-26, April 14, 2008



## Introduction

- This report gives the detailed and accrued CMS construction cost up to the end of 2007
- Only items present in the breakdown of items of the CMS Construction MoU and its *All-Silicon Tracker* amendment are included
- For comparison with the MoU, all commitments and payments are given to the detail of Level 3
- All expenditure is reported in current prices whilst the original MoU cost estimate was in 1995 prices (for the Tracker in 2000 prices)



## Introduction

- For the purpose of this report, "commitment" gives the amounts for which a legally binding document has been signed
- The expenditure compiled in this report was, however, gathered from a large number of institutions which follow their own policy of making commitments
- Some institutes prefer to report on "payments" only. Their "payments" are shown here as "commitments"
- The total level of "commitments" is therefore likely to be higher than reported here



## Comments

1. This document uses in all tables, including the comparisons of expenditures vs. costs
  - the currently available Funding under MoU and CtC and
  - the Cost Estimates figures as reported in the Status Report (cf. CERN-RRB-2008-025).Available funding will be reviewed in time for the October 2008 RRB
2. The Commitments and Payments yearly plots present the foreseen profiles as detailed in the Financial Plan
3. The DAQ staging of 1 slice towards the Tracker Integration Facility is explicitly shown in the DAQ and Tracker tables



## Overview of Annex 3 (MCHF)

	1995 - 2006		2007		1995 - 2007			
	Comm	Paid	Comm	Paid	Comm	Paid	Comm	Paid
<b>Totals</b>	<b>520.3</b>	<b>485.5</b>	<b>27.0</b>	<b>41.5</b>	<b>547.3</b>	<b>527.0</b>	<b>100%</b>	<b>96%</b>

Percentages with respect to the Financial Plan revised Cost Estimates

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## Funding Agencies Commitments 1995-2007

- Most of the Funding Agencies had committed all of their funding under MoU and CtC by the end of 2007
- For the remaining ones, commitments can only take place during 2008
- There are no foreseen problems with the MoU and CtC funding
- Step 1, 2 and 3 funding is detailed in the CMS Status Report (cf. CERN-RRB-2008-025)

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## Yearly Commitments



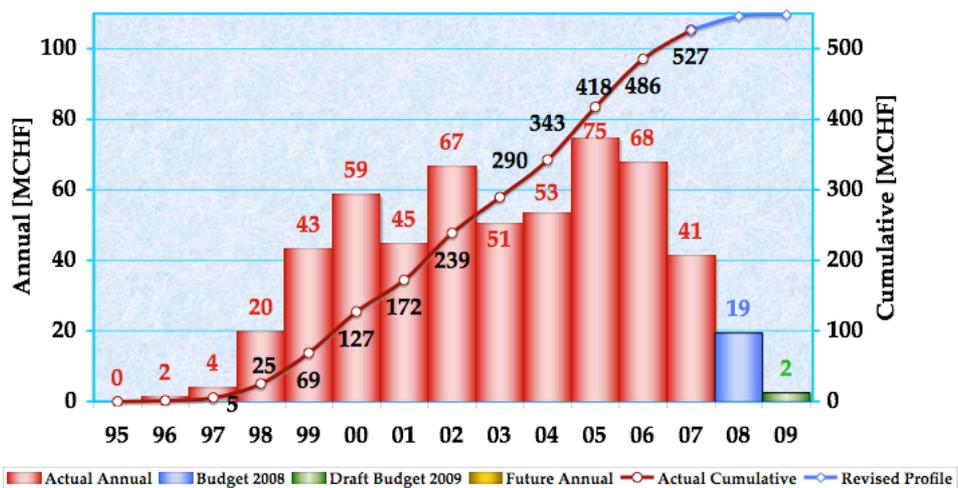
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## Yearly Payments



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# CMS

## Preliminary Draft Budget for Construction 2009

Compact Muon Solenoid

Cf. CERN-RRB-2008-028

A. Petrilli, RRB-26, April 14, 2008



## Introduction

- This document summarizes the preliminary funding requirements for all the payments planned in 2009 to follow the CMS construction schedule
- In 2009, all subdetectors will be in the data taking phase
  - only the DAQ will continue with installation and commissioning of DAQ slices and
  - ECAL will be finalizing the Preshower



## Introduction

- **This document covers requests for all subsystems for funds available under the CMS MoU, Cost to Completion and Step 1 and 2 (cf. Status Report, CERN-RRB-2008-025)**
- **This preliminary draft budget for the year 2009 is based on the overall planning as presented in the CMS Status Report (cf. CERN-RRB-2008-025)**



## Comments

- **The present estimates for all payments in 2009 add up to 2.4 MCHF**
- **Together with the payments made by the end of 2007 (527 MCHF) and the 2008 budget planned payments for existing and new commitments (19 MCHF), the total estimated payments by the end of 2008 would total some 549 MCHF**
- **This is 100% of the funding requested under MoU, CtC, Step 1 and 2**



## Comments

- This Preliminary Draft Budget is based on the breakdown of items in the CMS Construction MoU and its *All-Silicon Tracker* amendment
- As for the past, all figures shown as *Payments expected in 2009* are to be considered as best estimates at this time because the actual expenditure will depend, case by case, on commercial tenders received, contract negotiations, currency fluctuations and actual payments during 2008



## Overview of 2009 Construction Budget (MCHF)

All figures in MCHF

All data extracted from Annex 3

Income Expected - Planned Payments	Common Funds	Tracker	Electromagnetic Calorimeter	Hadron Calorimeter	Muon Detector	Trigger and Data Acquisition	Infrastructure	Commissioning & Integration	TOTALS
Planned payments			0.2			2.2			2.4
Income expected in 2009 plus funds from 2008			0.2			2.2			2.4
Funds expected to be carried forward from 2008									



## Comments

- **The present Preliminary Draft Budget is balanced provided ALL Step 1 and Step 2 requested funds are pledged**
- **Step 1 funds will be completely paid by the end of 2008**
- **Step 2 funds must be committed in 2008 and are needed for payment in 2009 to maintain the construction schedule**



## Summary

- **Annex 3 of CERN-RRB-2008-028 summarizes the Preliminary Draft Budget for 2009 by Funding Agency and by subsystem**
- **The exact request for 2009 will be presented at the October RRB meeting**

**The RRB is invited to take note of this preliminary budget request**