

#### **TOTEM**

7th April 2010

# Minutes of the 5th LHC Resource Review Board Meeting (CERN, Geneva, 13th October 2009)

## **Present**

- J. Ridky (Institute of Physics, Czech Republic)
- D. Riska (Helsinki Institute of Physics, Finland)
- T. Csorgo (MTA KFKI RMKI, Hungary)
- F. Ferroni (INFN, Italy)
- S. Lami (INFN, Italy)
- A. Scribano (INFN, Italy)
- M. Turala (IFJ PAN, Poland)
- M. Pripstein (NSF, United States of America)

#### **CERN**

S. Bertolucci (Chairman), P. Bloch, J. De Groot, T. Lagrange, S. Lettow, R. McLaren (Secretary), J. Salicio Diez, S. Schmeling, E. Van Hove

## **TOTEM**

- K. Eggert
- S. Giani
- E. Radermacher

## Scrutiny Group

B. Loehr (Chairman)

# **Apologies**

U. Dosselli (INFN, Italy)

Documents can be found in the RRB indico pages; accessible via the LHC-RRB home page <a href="http://committees.web.cern.ch/Committees/WelcomeLHCRRB.html">http://committees.web.cern.ch/Committees/WelcomeLHCRRB.html</a>

- 1. Introduction. S. Bertolucci, Director of Research and Scientific Computing.
- S. Bertolucci welcomed delegates to the 5th meeting of the TOTEM LHC Resource Review Board.
- **2. Approval of the minutes of the last meeting.** S. Bertolucci, Director of Research and Scientific Computing.

The minutes of the last RRB CERN-RRB-2009-075 were approved with no comments.

**3. Status of the experiment.** K. Eggert, Spokesperson

## CERN-RRB-2009-120 (report)

K. Eggert's presentation focussed on eight main areas:

The Roman Pots
The T1 Telescope
The T2 Telescope
Electronics
DAQ
Software
Early Physics
Roman Pot alignment strategy

## He concluded that:

Roman Pot at 220m and T2 are completely installed

Commissioning is well advanced with the final DAQ

T1 telescope for one side is under test in H8 and additional spark protection for the VFAT will be installed

Telescope for the other side will be assembled now

Installation of T1 in coordination with CMS

Offline software is prepared for simulations and data taking

First alignment and calibration procedures, as well as the Physics program are defined.

TOTEM is ready for data taking at the start of the LHC

- D. Riska asked when the installation of T1 would take place, K. Eggert replied that TOTEM would have to wait for CMS to open one of the forward parts.
- M. Pripstein congratulated the TOTEM collaboration on the impressive progress and asked what connection with CMS was foreseen for the DAQ and data analysis. K. Eggert answered that effort was at present concentrated on TOTEM.s DAQ and data stream; combined runs will be performed when there is a better understanding of the detector operation. He estimated this would not take place until the shutdown at the beginning 2011.
- **4. LHCC Deliberations (paper only).** S. Bertolucci, Director of Research and Scientific Computing.

CERN-RRB-2009-122

- S. Bertolucci reported, on behalf of the chairman of the LHCC, that the presentation was in line with the LHCC report. The committee recognised the substantial progress in the installation and commissioning.
- **5. Financial matters.** T. Lagrange, Head, CERN Finance Dept. CERN-RRB-2009-097 (report)
- T. Lagrange presented the changes with respect to the report on the 31st August 2009.

He reported that Italy (Pisa) had paid 207 kCH. Outstanding payments were due from Estonia 6 kCHF and USA 53 kCHF. The share of contribution from Estonia was revised by the TOTEM collaboration board from 22 kCHF to 6 kCHF.

There were no questions or comments arising from this presentation.

**6. Construction and M&O Budgets.** S. Giani, Resource Coordinator. CERN-RRB-2009-123 (report), CERN-RRB-2009-124 (presentation)

S. Giani presented the Cat.A breakdown by funding agencies and operation & maintenance activities. The balance was 56 kCHF. He made some remarks concerning Cat. A:-

In the first months of 2009 TOTEM completed the expenditures related to the 2008 budget (since the 2008 fundings were allocated and received starting from mid-2008).

The Cat.A data show a consistent balance with the figures reported by FI dpt. (within 1k precision as usual), also taking into account the open commitments in the CET system.

With the expenditures in September the budget was practically exhausted, but it was replenished by the INFN contribution (about 200k).

Commitments up to the end of the year include about 120k of manpower and over 50k of cooling, in addition to regular monthly expenditures.

Projections indicate TOTEM will be on budget for 2009 Cat.A.

Turning to Cat. B, S. Giani presented the breakdown by operation & maintenance activities. The balance was 64 kCHF. He made several remarks concerning on Cat.B:

The data show that the 2009 Cat.B expenditures are in line with the requested contributions.

Significant extra-contributions have been allocated by Czech Rep. for 2009 Cat.B maintenance and operation (including for cooling).

This grants to the collaboration the contingency to cope with additional issues for the next critical months.

Projections indicate TOTEM will be on budget for 2009 Cat.B.

He continued with some notes on the construction budget:-

The construction budget expenditures progress according to the projections and figures presented to the RRB in November 2008 and April 2009.

The commitments to complete the construction "project" expenditures are being paid via the general "Transit" account and via the CERN group budget for the items related to the remaining CERN commitments.

TOTEM is grateful to CERN for its decisive contribution after the April RRB to fulfill the needs and requests formalized in the memoranda of November 2008.

We are grateful to the Czech Republic funding agency for their additional contribution granted for the Roman Pots construction and electronics in 2009.

TOTEM is now approaching the completion of the experiment construction expenditures. The final figures will then be produced and presented to the RRB.

On request of the Scrutiny Group, TOTEM had prepared and updated an Operational Model paper to document its transition from the construction and commissioning phase to the Operation and Maintenance mode.

Moving on to the M&O budget request for 2010: S. Giani remarked that:-

The 2010 budget request could benefit from the experience of the expenditures profile of 2008 (and partly 2009) and is derived from extremely fruitful iterations with the Scrutiny Group and its referees.

For Cat. A, TOTEM has reviewed and updated the relevant list of authors with the management of the participating institutes.

For Cat. B, TOTEM has kept unchanged the matrix approved for 2009.

A total M&O budget envelope similar to 2008 and 2009 is requested for the year 2010. Savings have been optimized wherever possible.

He then presented the M&O budget request for 2010; for Cat. A, a total of 448 kCHF, for Cat. B a total of 247 kCHF and concluded with a reminder of the method of calculation for the sharing of both Categories of M&O.

M&O Scrutiny Group Report. B. Loehr, Scrutiny Group Chairman CERN-RRB-2009-078 (report)

- B. Loehr reported that the Scrutiny Group had no comments of the 2010 budget request. However, concerning 2009 expenditures, he remarked that only half the budget had been spent by the end of August and questioned if the remaining funds could be exhausted by the end of the year. S. Giani replied affirmatively.
- B. Loehr also asked for an explanation of the "Balance contributions '09" on slide 6. S. Giani explained that this was a result of book closing operations.

The budget for 2010 was approved.

**7. Summary.** S. Bertolucci, Director of Research and Scientific Computing.

S. Bertolucci summarised that TOTEM is progressing well and the finances are in order.