



TOTEM

29<sup>th</sup> June 2010

**Minutes of the 6th LHC Resource Review Board Meeting  
(CERN, Geneva, 20 April 2010)**

Present:

CERN

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

TOTEM

K. Eggert, S. Giani, S. Lami (EVO), E. Radermacher.

Scrutiny Group

B. Loehr (Chairman)

EVO

D.-O. Riska (Helsinki Institute of Physics, Finland)

T. Csorgo (KFKI, Hungary)

U. Dosselli (INFN, Italy)

F. Ferroni (Universita' Sapienza e INFN Roma, Italy)

Documents can be found in the RRB indicio pages; accessible via the LHC-RRB home page <http://cern.ch/committees/all/welcomeLHCRRB.html>

**1. Introduction.** S. Bertolucci, Director of Research and Scientific Computing.  
S. Bertolucci welcomed delegates to the meeting. Many delegates were unable to attend in person due to the eruption of the Eyjafjallajökull volcano in Iceland.

**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-2010-004 were approved with no comments.

**3. Status of the TOTEM experiment.** E. Radermacher, Technical Coordinator  
CERN-RRB-2010-046 (report), CERN-RRB-2010-047 (presentation)

E. Radermacher's presentation focussed on six main areas:

- Introduction
- Results from the 2009 run
- Shutdown work

- Results from the 2010 run
- Completion work in 2010
- Conclusion

He concluded that:

- We gained useful experience with the data taking in December 2009.
- The Roman Pots (220 m) and the T2 detector are now fully operational.
- For both detectors the trigger scenario is still under study for efficient data taking. First Minimum Bias data was taken with T2.
- Once sufficient statistics has been accumulated with  $\beta^* = 2$  m TOTEM will ask for special runs at  $\beta^* = 90$  m.
- Half a T1 detector is ready now, the second will be ready in summer. Both should be installed in the next technical stop.

*There were no questions or comments arising from this presentation.*

**4. LHCC Deliberations (paper only).** E. Tsesmelis, LHCC Scientific Secretary.  
CERN-RRB-2010-048

E. Tsesmelis reported that the LHCC considers that good progress was made on the completion of the TOTEM experiment. The LHCC congratulates the TOTEM Collaboration for promptly identifying the nature of the hardware problems that appeared before the LHC run in 2009, and for correcting them completely during the Christmas technical stop.

**5. Financial matters.** T. Lagrange, Head, CERN Finance Dept.  
CERN-RRB-2010-049 (report)

T. Lagrange presented the changes with respect to the report on the 28th February. He reported that CERN contribution had been paid and that 27 kCHF had been received from the Czech Republic.

*There were no questions or comments arising from this presentation.*

**6. Construction and M&O Budgets.** S. Giani, Resource Coordinator.  
CERN-RRB-2010-050(report).

S. Giani presented the Cat. A and Cat. B contributions by Funding Agencies for the book-closing on 31 Dec 09. About 58 kCHF is outstanding for Cat. A, however Cat. B is +60k. He listed the expenditures and the balance for both categories.

Turning to the M&O status for 2010, the Resource Coordinator reported that:

- TOTEM figures fit the data presented by FI Dpt. within 1kCHF precision.
- CERN has paid the 2010 contribution.
- Finland is transferring the 2010 contribution.
- Invoices have been sent to all the collaborating institutes.
- NSF/CWRU should be transferring soon the money to cover the agreed shares of 2008, 2009 contributions.

However he warned that Expenditures in 2010 were proceeding to a higher rate than foreseen. This is due to the cost of preparing TOTEM for the LHC start-up and the current operation, including repairs, improvements/ deviations of connections, additional manpower required on the site, replacement of components, etc.

*K. Eggert announced that NSF will not finance the plan for the next three years. Penn. State will leave the collaboration but Case Western may continue to provide funds, perhaps in the form of donations. The ramifications are important; there is 63 kCHF outstanding for construction and 200 kCHF that pays one PH staff member and one fellow for one year. K. Eggert reassured P. Bloch that TOTEM would meet their commitments. S. Bertolucci suggested that this could be a transient situation and advised TOTEM against reacting hastily.*

Reporting on the Construction S. Giani commented that:

- The construction budget expenditures have progressed according to the projections and figures presented to the RRB in April 2009, as anticipated at the RRB October 2009 meeting.
- The commitments to complete the construction “project” expenditures have been paid and are being paid via the general “Transit” account and via the CERN group budget for the items related to the remaining CERN commitments.
- It is notable that the US CWRU construction contribution has progressed getting close to the MoU and projected figures.
- The additional contributions 2009 of CERN and Czech. Rep. have also been taken into account where relevant in the Financial Matrix.
- TOTEM will continue to finalize the construction figures and to give the necessary updates to the RRB.

And showed the end 2009 book-closing of the Financial Matrix which gives a breakdown by system.

Looking ahead to 2011, he presented the preliminary TOTEM M&O budget request noting that the total M&O budget envelope is similar to 2010 , in line with the table of projections done with the SG during the previous year(s).

Savings on Cat. A have been optimized wherever possible based on last years’ experience. Detailed issues will be iterated with the Scrutiny Group as usual. The total preliminary request for Cat. A in 2011 is 440 kCHF. Cat. B will remain constant at 247 kCHF.

*B. Loehr requested that the report presented to the Scrutiny Group includes a comparison between the October request of the previous year and the full list 2 items. In addition he asked that safety items be included in list 2.*

*T. Csorgo reported that he was discussing the funding situation with C. Taylor of Case Western Research University; together they were looking into bilateral fund raising and strengthening their positions in TOTEM. He also endorsed S. Bertolucci’s remarks, recommending a careful approach.*

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

S. Bertolucci summarised that TOTEM is progressing well in a difficult environment with changing schedules. There are some difficult items and CERN management is ready to help. He encouraged TOTEM to continue to look for new collaborators.