



TOTEM

11 March 2013

**Minutes of the 11th LHC Resource Review Board Meeting
(CERN, Geneva, 30th October 2012)**

Present:

N. Fejksová (Ministry of Education, Youth and Sports, Prague, Czech Republic)
J. Aysto (Helsinki Institute of Physics, University of Helsinki, Finland)
T. Csorgó (Wigner RCP, RMKI, Budapest, Hungary)
A. Zoccoli (INFN, Sezione di Roma, Italy)
F. Cervelli (INFN, Italy)
K. Eggert (CWRU, United States of America)

TOTEM

S. Giani, J. Baechler, E. Radicioni

CERN

S. Bertolucci, R. McLaren, C. Saitta, J. Salicio Diez, E. Tsesmelis, E. Van Hove

Scrutiny Group

B. Loehr, S. Schmeling

Excused

S. Foffano, R. Heuer, S. Lettow (CERN)

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 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-2012-064 were approved with no comments.

3. Status of the experiment. S. Giani, Spokesperson
CERN-RRB-2012-093 (slides)

S. Giani presented:

- The Experimental Setup
- Recent and Upcoming Publications

- Physics results
- Joint Data Taking with CMS
- The upgrade of RP detector system at 220 m

The concluded by expressing the collaboration's thanks to:

- The many people involved in the preparation of the 1km optics and the realisation of the run, in particular
- Helmut with his optics team,
- Stefano with the collimation group,
- The operations group,
- The funding agencies for making TOTEM possible and for their future support

J. Aysto stated that Finland needed to know the content of the Upgrade plan as soon as possible in order to prepare the funding; is there a schedule? S. Giani replied that TOTEM was collaborating with CMS and working towards a Letter of Intent to be presented to the LHCC around the end of the year.

A. Zoccoli requested clarification of the physics programme. S. Giani replied that, after LS1, TOTEM will continue its own approved physics programme at 14 TeV. In addition the experiment will collaborate with CMS to install additional silicon detectors based on pixel strip detectors.

4. LHCC Deliberations (paper only). E. Tsesmelis, LHCC Scientific Secretary.
CERN-RRB-2012-097

On behalf of the LHCC, E. Tsesmelis congratulated TOTEM for their successful physics runs and for the experiment's physics results.

5. Financial matters. C. Saitta, CERN Finance Dept.
CERN-RRB-2012-095 (report). The presentation is available via the RRB agenda page.

C. Saitta presented the changes with respect to the above mentioned report.

C. Saitta reported that additional contributions to M&O had been received from Hungary. M&O-A outstanding contributions now stood at 18 kCHF for the Member States and 26 kCHF for the non-Member States.

There were no questions or comments arising from this presentation.

6. Construction and M&O Budgets. S. Giani, Resource Coordinator.
CERN-RRB-2012-094 (presentation)

S. Giani presented the M&O Cat.A and Cat.B contributions by funding agency and gave a summary of expenditures and the balance for both categories. He summarized the status as:

- TOTEM figures are consistent with the data presented by FI Dpt. within 1kCHF precision.
- Projections to the end of the year indicate no major overspending to be expected.
- Likely significant HR-related commitment will be managed by December (although possible that actual transaction will partially shift into next year).

Turning to the M&O budget request of 413 kCHF, S. Giani listed the principle cost drivers. He proposed to maintain constant Cat.B contributions of 247 kCHF, as foreseen in the projections.

He then listed the contribution of each Funding Agency for both categories.

S. Giani concluded that:

- TOTEM has measured and has published / is publishing the pp elastic, inelastic and total cross-sections (with 2-3% precision) at $\sqrt{s} = 7$ & 8 TeV with luminosity-independent or ρ -independent methods.
- TOTEM published the charged particle pseudo-rapidity density distribution for $5.3 < \eta < 6.5$ at $\sqrt{s} = 7$ TeV.
- TOTEM has taken data in special runs with $\beta^* = 1\text{km}$, reaching the range of $|t| \sim 6 \cdot 10^{-4} \text{ GeV}^2$ to study the Coulomb-nuclear interference region.
- TOTEM and CMS have taken joint data in special runs with $\beta^* = 90\text{m}$ exchanging triggers on di-jets and on RPs protons' coincidences. Common mini-DSTs and analysis tools have been developed and are operational.

And expressed his gratitude to:

- The relevant LHC teams, to the CMS collaboration, and to the LPC coordination for their continuous support.
- The RRB, LHCC, Funding Agencies and Scrutiny Group, which helped the collaboration to produce these physics results, and is looking forward to their reiterated support to continue its physics programme at the LHC.

The RRB approved the proposal

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

Formal Agreement on Implementation of the New Operating Arrangements.

Sergio Bertolucci. CERN-DRC-2012-043 (letter)

S. Bertolucci asked the delegates to approve the Implementation of the New Operating Arrangements as communicated in the above letter. Several Funding Agencies had requested signed letters and these would be sent. No objections were raised and the proposal was accepted.

There being no further business, he thanked the delegates and closed the meeting. The proposed dates for the next RRB are 15th - 17th April 2013.