

LHCb 01 March 2012

Minutes of the 27th LHC Resource Review Board Meeting (CERN, Geneva, 19th October 2011)

Present:

- E. Aslanides (CNRS-IN2P3/CPPM Marseille, France)
- L. Serin (CNRS/IN2P3, France)
- K. Ehret (BMBF, Germany)
- U. Marconi (INFN Sezione di Bologna, Italy)
- F. Cervelli (INFN, Italy)
- A. Van Rijn (NIKHEF, Netherlands)
- F. Linde (NIKHEF, Netherlands)
- G. Polok (HNIN, Polish Academy of Sciences, Poland)
- J. Królikowski (Ministry of Science and Higher Education/ University of Warsaw, Poland)
- F.D. Buzatu (Institute of Atomic Physics, Romania)
- D. Filatov (Ministry of Education and Science, Russia)
- V.Savrin (Moscow State University, Russia)
- V. Arbuzov (NN, Russia)
- A. Golutvin (NN, Russia)
- F. del Aguila (Universidad de Granada, Spain)
- T. Nakada (CHIPP, Switzerland)
- G. Zinovjev (Bogolyubov Institute for Theoretical Physics, Ukraine)
- F. Muheim (Edinburgh, United Kingdom)
- A. Medland (STFC, United Kingdom)
- R. Ruchti (National Science Foundation, United Stated of America)

LHCb

C. D'Ambrosio, R. Forty, R. Lindner, M. Pepe-Altarelli, P. Campana, B. Schmidt, G. Wilkinson

CERN

S. Bertolucci, J. de Groot, R. McLaren, J. Salicio Diez, C. Saitta, S. Lettow, E. van Hove

Scrutiny Group

S. Schmeling, B. Loehr

Excused

- P. Bloch
- R. D. Heuer
- E. Tsesmelis
- T. Lagrange
- U. Straumann
- Y. Zhang (National Natural Science Foundation, China)
- Q. Meng (National Natural Science Foundation, China)
- Q. Chang (National Natural Science Foundation, China)

Documents can be found in the RRB indico 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 LHCb 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-2011-064 were approved without comment.

- **3. Status of the LHCb experiment.** P. Campana, spokesperson CERN-RRB-2011-103 (report), CERN-RRB-2011-104 (presentation)
- P. Campana's presentation focussed on eight main areas:
 - Data and physics results; highlights of summer conferences
 - Limitations and milestones achieved
 - Results, rates and efficiency
 - Sub detector status
 - Plans
 - Physics results
 - Status of the upgrade
 - Collaboration matters

He concluded that:

- LHCb is performing very well. Thanks to LHC Team (and to luminosity leveling technique) has collected over 1 fb-1 in the 2011 run
- Analyses in core physics channels are already well advanced, with 3 areas of "world record" measurements: $B_s \rightarrow J/\psi \ \phi$, $B_s \rightarrow \mu\mu$, $B_d \rightarrow K^* \mu\mu$
- Standard Model still "uncracked" but large room for New Physics LHCb is complementing ATLAS & CMS limits for Supersymmetry
- A lot of activities and very good perspectives for "world record" measurements with 1 fb-1 in CPV in b and c decays, CKM angle γ , radiative and rare decays + a very large spectrum of physics items
- Looking forward to increase (x 2 and even more) the statistics in 2012
- Working hard to prepare LHCb future (Upgrade)

There were no questions arising from this presentation.

- **4. LHCC Deliberations** (paper only). S. Bertolucci, Director of Research and Scientific Computing (replacing E. Tsesmelis, LHCC Scientific Secretary). CERN-RRB-2011-094 (report)
- S. Bertolucci reported that the LHCC considers that LHCb has made excellent progress in all aspects of the experiment and congratulates the Collaboration on its achievements.

5. Financial matters. C. Saitta, CERN Finance and Procurement Department CERN-RRB-2011-074(report), CERN-RRB-2011-101 (presentation)

C. Saitta presented the updates to the above report.

Outstanding contributions for the Common fund are 13.7 kCHF.

Additional contributions for M&O-A amounting to 284 kCHF had been received from France.

Outstanding contributions for M&O-A stand at 388 kCHF from member states and 418 kCHF from non-member states.

There were no questions arising from this presentation.

6. Budgets. C. D'Ambrosio, Resource Coordinator. CERN-RRB-2011-088 (report), CERN-RRB-2011-089 (report) CERN-RRB-2011-090 (presentation)

D'Ambrosio reported that most of the Core spending came to an end in 2006. Purchasing for DAQ and data storage continued throughout 2010 with the DAQ – FARM completion. No additional requests for funds were presented to the RRB.

He presented the Common Funds situation at end of August 2011, with details of the individual detectors systems and commented that spending from Common Funds is limited now essentially to Infrastructure.

The amount seen for "VELO NON CORE" is the result of the VELO-spare programme. This programme is financed using the M&O Cat.A framework and will end in 2013; a total amount of 500 kCHF. RICH-HPD programme is also expected to show a consistent outflow in the coming months (late billing).

~300 kCHF is still uncommitted (August 2011).

Turning to M&O-A received funds for 2011, C. D'Ambrosio reported that about 80% of the expected contributions for M&O Cat.A in 2011 has been received at present. That is a total of ~2.2 MCHF (including Velo spare and Power). Together with the carryover of funds and a few late payments from 2010, these contributions have ensured that there has been no cash flow problem. The status of M&O-A (end August 2011) showed a budget of 2.5 MCHF and expenses of 1.2 MCHF.

He presented the proposed evolution of M&O-A, for the main lines, for the years 2009-2015, demonstrating a relatively constant budget, and a graph of the actual versus budgeted expenditures.

Looking ahead to 2012, C. D'Ambrosio revealed the budget for each Funding Agency, for M&O-A, VELO and Power. He explained the special account for Comp./Proc./Lan sub-line, the Carry-over from 2010 and the proposed modification of Romania status.

For M&O-B, C. D'Ambrosio gave the budget for 2010 and announced that only minor adjustments are anticipated for 2012. The total is ~1100 kCHF, a bit less than half of the M&O Cat.A total. Category B M&O funds are constant over time inside ~10%. He presented the main budget lines with their associated Funding Agencies and the sub-line splitting.

B. Loehr reminded LHCb that the special account is not a savings account; the money should be used to purchase hardware. He also added that the collaboration has made no provision in their budgets for replacement of ageing equipment. Finally the chairman of the Scrutiny group requested that LHCb formalise their M&O-B reports.

The budget request was approved.

- 8. Summary. S. Bertolucci, Director of Research and Scientific Computing.
- S. Bertolucci announced that T. Nakada was leaving LHCb after 15 years sitting on both sides of the RRB table. T. Nakada thanked the RRB for its support and helpful attitude. R. Schneider would take over and T. Nakada will continue to be involved in the upgrade.

There being no further business, S. Bertolucci thanked the delegates and closed the meeting. The proposed dates for the next RRB are 23rd – 25th April 2012