

LHCb

06 November 2013

## Minutes of the 31<sup>st</sup> LHC Resource Review Board Meeting (CERN, Geneva, 30<sup>th</sup> October 2013)

## Present

- A. K. Maciel (RENAFAE, Brazil)
- Y. Zhang (National Natural Science Foundation of China, China)
- L. Serin (CNRS/IN2P3, France)
- R. Le Gac (CNRS-IN2P3, France)
- N. Alamanos (CEA/IRFU, France)
- K. Ehret (Federal Ministry of Education and Research, BMBF, Germany)
- H. Prasse (Federal Ministry of Education and Research, BMBF, Germany)
- R. Feldmann (Federal Ministry of Education and Research, BMBF, Germany)
- U. Uwer (University of Heidelberg, Germany)
- A. Zoccoli (INFN, Roma, Italy)
- F. Bedeschi (INFN Sezione di Pisa, Italy)
- G. Passaleva (INFN Sezione di Firenze, Italy)
- A. van Rijn (NIKHEF, The Netherlands)
- J. Królikowski (University of Warsaw, Poland)
- F.D. Buzatu (Institute of Atomic Physics, Bucharest, Romania)
- F. Maciuc (IFIN-HH National Institute of Physics and Nuclear Engineering, Romania)
- V. Savrin (Moscow State University, Russia)
- V. Shevchenko (Kurchatov Insitute, Russia)
- F. del Aguila ((Ministry of Economy and Competitiveness, Spain)
- P. Fischer (Swiss National Science Foundation, Switzerland)
- O. Schneider (EPFL Lausanne, Switzerland)
- G. Zinovjev ((Bogolyubov Institute for Theoretical Physics, Ukraine)
- G. Blair (STFC, United Kingdom)
- A. Medland (STFC, United Kingdom)
- C. Parkes (University of Manchester, United Kingdom)
- S. Gonzalez (National Science Foundation, United Stated of America)

## LHCb

P. Campana, C. D'Ambrosio, R. Forty, T. Gershon, M. Pepe-Altarelli, B. Schmidt, A. Schopper

## CERN

S. Bertolucci, S. Foffano, T. Lagrange, J. Salicio Diez, E. van Herwijnen (Scientific Secretary), E. van Hove

Scrutiny Group

C. Touramanis, E. Iacopini, S. Schmeling, D. Vilanova

Excused

F. Linde (NIKHEF, The Netherlands), E. Tsesmelis (CERN)

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 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-2013-063) were approved without comment.

**3. Status of the experiment and of the LHCb Upgrade.** P. Campana, spokesperson CERN-RRB-2013-104 (report), CERN-RRB-2013-122 (upgrade, report), Status report on LHCb (presentation).

A. Zoccoli appreciated the progress of the upgrade with respect to the funding. Despite the current economic situation Italy has made a big effort and INFN will be able to support a major part of the upgrade and is discussing the budget profile. The original requests have been cut slightly and a proposal has been submitted to a Tecnical Committee that will decide the support by early next year. The original request will be slightly reduced (around 70%) but this reduction should not affect the project. He wondered how committed the other FA's are to the upgrade. The information should be available next year to discuss the full picture.

P.L. Campana replied there are continuous discussions with the FA's and that there is a threshold below which the upgrade cannot happen. The bulk (80%) of the funding should be available before the installation. Some margin can be created by tuning the common fund, the bulk of which is for the purchase of computers that will be bought 'just in time'. However, money is required to put a fully operational detector in the pit. Any missing piece will prevent LHCb from running at 40MHz.

A. Medland remarked that the UK are at a similar stage in their approval process. He welcomed the effort that has been done to optimize performance, cost and the schedule. The LHC schedule will be important input for the FA's to decide how best to use the constrained resources. Setting the time scale for decisions is difficult. STFC are working hard to give the decision as soon as possible, but meeting the current timescales will be difficult.

P.L. Campana replied that the FA's should, even informally, communicate which responsibilities they can support. Even if the decision making processes in all countries are not yet ready, the TDRs will give the timescale that the countries should adhere to. We should at all costs avoid missing the deadline for installation.

*A. van Rijn mentioned that the NL will not be able to say anything definite by April. He asked whether the April deadline is affected by the LHC schedule.* 

*S.* Bertolucci replied that while waiting for the outcome of the RLIUP workshop, there are strong indications that the schedule will be shifted: LHCb & ALICE need a 6month longer LS2, a new machine will startup in 2015, and other things can be done during LS2 such as radiation mitigation. This needs to be harmonized between the LHC and the experiments.

H. Prasse said that in Germany there is priority for the Phase 1 upgrade, but that nothing concrete can be said before next year. Due to a change of government the budgets will be late. If there are no changes things should be ok but no promises can be made at this moment.

*S.* Bertolucci remarked that the decisions will be made next year, after the submission of the TDRs that will take some time to scrutinize.

P.L. Campana concluded that while each FA has its own system, the train must leave early next year otherwise the detector cannot be built. However, the speed of the train should allow all FA's to jump on when they are ready. In April the cost division will be there to enable LHCb to start collecting contributions.

**4. LHCC Deliberations (paper only**). S. Bertolucci, Director of Research and Scientific Computing (replacing E. Tsesmelis, LHCC Scientific Secretary). CERN-RRB-2013-106 (report)

The LHCC considers that LHCb has made excellent progress in all aspects of the experiment and the Committee congratulates the LHCb Collaboration on its achievements.

**5. Financial matters.** T. Lagrange, Head of CERN Finance and Procurement Department CERN-RRB-2013-107 (report), CERN-RRB-2013-108 (presentation)

T. Lagrange presented the updates to the Financial Report.

Outstanding contributions for the Construction Common fund are 13.7 kCHF from Ukraine.

The M&O-A account had received additional contributions from Poland, Romania, Ukraine and the USA totalling 109 kCHF. The outstanding M&O-A contributions from member states for 2013 stands at 248 kCHF. For non-Member States, an amount of 268 kCHF is outstanding for 2013 and 223 kCHF for previous years. The total outstanding contributions are 740 kCHF which amounts to 18% of the total. This is the highest of all LHC experiments.

**6. Budgets.** C. D'Ambrosio Resource Coordinator. CERN-RRB-2013-109 (report), CERN-RRB-2013-110 (report), CERN-RRB-2013-111 (presentation)

For M&O A spending, LHCb expects to use the buffered funds from previous years in case of overspending while leaving the budget constant through LS1.

As anticipated in the previous RRB (CERN-RRB-2013-040), and including the 300 kCHF transferred in the Online Account in agreement with the SG (CERN-RRB-2012-114) he asked the RRB to keep the 13.9 kCHF surplus for the year 2012.

**M&O Scrutiny Group Report.** C. Touramanis, Chair CERN-RRB-2013-120 (report)

The scrutiny group is positive, keeping the budget flat works very well and recommends the approval of the LHCb 2012 closing report and the 2014 M&O A&B budget requests.

The RRB subsequently:

- Approved keeping the 13.9 kCH surplus for the year 2012
- Approved the 2012 closing report (CERN-RRB-2013-040) and the 2014 M&O A&B budget requests (CERN-RRB-2013-109 and CERN-RRB-2013-110)

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

*There being no further business, S. Bertolucci thanked the delegates and closed the meeting. The proposed dates for the next RRB are 28-30<sup>th</sup> April 2014.*