LHCb 01 August 2011

Minutes of the 26th LHC Resource Review Board Meeting
(CERN, Geneva, 13th April 2011)

Present:

Y. Zhang (National Natural Science Foundation, China)
C. Jiang (National Natural Science Foundation, China)
E. Aslanides (CPPM, France)
E. Auge (CNRS/IN2P3, France)
K. Ehret (PT-DESY/BMBF, Germany)
M. Nagel (BMBF, Germany)
U. Uwer (University of Heidelberg, Germany)
F. Ferroni (INFN, Italy)
F. Linde (NIKHEF, Netherlands)
J. Królikowski (Univ. of Warsaw and Ministry of Science and Higher Education, Poland)
G. Polok (Polish Academy of Sciences, Poland)
F. Buzatu (Institute of Atomic Physics, Romania)
Y. Kozlov (Federal Agency of Science and Innovations, Russia)
D. Filatov (Ministry of Education and Science, Russia)
V. Savrin (Institute of Nuclear Physics, Moscow State University, Russia)
A. Petrov (Mission, Russia)
V. Egorychev (ITEP, Russia)
G. de Cordoba (Ministry of Science and Innovation, Spain)
F. Del Aguila (National Contact Physicist, Spain)
T. Nakada (CHIPP (Switzerland), Switzerland)
A. Medland (STFC, United Kingdom)
F. Muheim (University of Edinburg, United Kingdom)

CERN
S. Bertolucci, J. De Groot, T. Lagrange, R. Mclaren, J. Salicio Diez, E. Van Hove

LHCb
C. D'Ambrosio, P. Campana, A. Golutvin, R. Lindner, M. Pepe Altarelli, A. Schopper, U. Straumann

Scrutiny Group
B. Loehr (chairman), S. Schmeling

Apologies
M. Goldberg (National Science Foundation, United States of America)
M. Pripstein (National Science Foundation, United States of America)

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-2011-004 were approved without comment.

3. Status of the LHCb experiment. A. Golutvin, spokesperson
CERN-RRB-2011-036 (report). Slides of this presentation can be consulted on the RRB Agenda page.

A. Golutvin's presentation focussed on six main areas:

- Subsystems
- LHCb operations
  - At the Pit
  - Data processing & Computing
- Detector performance
- Physics results from 2010
- Preparation of the LHCb upgrade
- Financial and collaboration matters

He concluded that:

- LHCb has demonstrated excellent performance
  - A concept of the forward spectrometer at the LHC has been proven with data
- Heavy flavour resonances and mesons have been reconstructed (Z & W candidates as well); cross-sections measured
- First measurements of the core LHCb physics programme have reached TEVATRON sensitivity
- LHCb data sample should be increased by a factor of 25-30 by the end of 2011
- Very interesting sensitivity reach in the nearest future is guaranteed!
  - $B_s \rightarrow \mu\mu$
  - Φ_s *in* $B_s \rightarrow J/\psi\varphi$
  - A_{FB} *in* $B_d \rightarrow K^*\mu\mu$
- Long term future of LHCb looks healthy (if you help !!!)
- The LOI is being approved by LHCC

There were no questions or comments arising from this presentation

4. LHCC Deliberations (paper only). S. Bertolucci, Director of Research and Scientific Computing (reporting on behalf of E. Tsesmelis, LHCC Scientific Secretary).
CERN-RRB-2011-45

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.

As this was the last RRB for A. Golutvin, S. Bertolucci expressed his personal gratitude for A. Golutvin's fruitful interactions with the RRB and invited the delegates to join him in a round of applause.

5. Financial matters. T. Lagrange, Head of CERN Finance and Procurement Department
CERN-RRB-2011-048 (report).

T. Lagrange presented the changes with respect to the report on the 28th February.

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

The M&O-A account had received additional contributions from China, the Netherlands and Russia totalling 271 kCHF. The outstanding contributions for M&O-A for 2011 stands at 1.58 MCHF from member states, with 118 kCHF outstanding from previous years. An amount of 395 kCHF is outstanding from non-member states for 2011, and 240 kCHF for previous years.

There were no questions or comments arising from this presentation

6. Construction Budgets. C. D'Ambrosio Resource Coordinator.
CERN-RRB-2011-038 (report). The slides of this presentation are on the RRB Agenda page.

C. D'Ambrosio reported that expenditure of the Common Funds in February 2010 stood at 105 KCHF with 417 kCHF uncommitted in February 2011.

Concerning the Core Funds, most of the Core spending came to an end in 2006. Purchasing for DAQ and data storage continued throughout 2010 with the 3rd "tranche" of the FARM expenditure funded by Core and non-Core resources.

7. M&O Budgets. C. D'Ambrosio Resource Coordinator.
CERN-RRB-2011-040 (report). The slides of this presentation are on the RRB Agenda page.

Turning to M&O A, D'Ambrosio gave a summary and forecast for M&O A spending, by sub-system, for the years 2009 – 2014. He then highlighted the main cost drivers in 2010 and gave details of the expenses. The book closing at the end of 2010 showed a budget of 2512 kCHF, 2493 CHF of which had been spent. He proposed to keep the difference as a buffer.

Continuing his presentation on M&O A the Resource Coordinator gave a breakdown, by Funding Agency, for the 2011 budget and for the projected budget for 2012.

D'Ambrosio concluded that the M&O Cat A budget had been shown to be well balanced over the recent years. For the near future, he did not expect large fluctuations of the main

expenditure lines inside an essentially constant total budget. Thanks to NON-CORE extra-contributions, Online Computing was being consolidated.

He finished his presentation with the Cat. B budgets and the Funding Agencies for each detector. The total is ~1.1 MCHF.

There were no questions or comments arising from this presentation

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

S. Bertolucci summarized that LHCb was in very good shape and they were reacting well to the different running conditions; six times the number of interactions than the initial design. Their finances are stable and there are good reasons for upgrades.

S. Bertolucci received the approval of the RBB for the proposal to extend the current construction MoU for five years and to add Upgrade projects to the general MoU through dedicated Addenda.