CMS **November 2014**

Minutes of the 39th LHC Resource Review Board Meeting (CERN, Geneva, 14th October 2014)

Present:

C. –E. Wulz (Institut fuer Hochenergiephysik /HEPHY, Austria)
C. De Clerq (FWO, Belgium)
P. Marage (FNRS, Belgium)
Y. Zhang, G. Chen (National Natural Science Foundation of China, China)
J. Äystö (Helsinki Institute of Physics, Finland)
P. Eerola (University of Helsinki, Finland)
A.-I. Etienvre, M. Besancon, D. Vilanova (CEA/IRFU, France)
U. Bassler, Y. Sirois (CNRS/IN2P3, France)
H. Prasse, M. Nagel (Federal Ministry of Education and Research, BMBF, Germany)
M. Fleischer (DESY, Germany)
H. Mahlke, M. Groll (BMBF/DESY-PT, Germany)
A. Stahl (RWTH Aachen, Germany)
C. Fountas (University of Ioannina, Greece)
G. Vesztergombi (Wigner RCP-RMKI, Hungary)
P. Boddapati (Department of Atomic Energy, DAE, India)
A. Zoccoli, F. Bedeschi, N. Pastrone (INFN, Italy)
S. Noh (Ministry of Science, ICT and Future Planning, Korea)
S. Choi (University of Seoul, Korea)
A. Bernotas (Lithuanian Academy of Sciences, Lithuania)
D. Drewniak (Minsitry of Science and Higher Education, Poland)
G. Barreira (LIP, Portugal)
S. Salikhov (Ministry of Education and Science, Russia)
V. Perelygin, representing V. Matveev (JINR Dubna, Russia)
V. Savrin (Moscow State University, Russia)
F. del Aguila (Ministry Economy and Competitiveness - U. Granada, Spain)
J. Alcaraz Maestre (CIEMAT, Madrid, Spain)
P. Vonlanthen (Swiss National Science Foundation, Switzerland)
K. Clausen, Q. Ingram (Paul Scherrer Institut, PSI, Switzerland)
R. Wallny (IPP, ETH Zurich, Switzerland)
B. Kilminster (University of Zurich, Switzerland)
G. W-S. Hou (National Taiwan University /NTU, Taiwan)
G. Blair (STFC, United Kingdom)
A. Medland (STFC, United Kingdom)
G. Hall (Imperial College London, United Kingdom)
J. Stone, A. Patwa, M. Procario (Department of Energy, United States of America)

M. Coles (National Science Foundation, United States of America)
F. Durdle (Permanent Mission of the United States of America to the UN in Geneva)
P. McBride, S. Nahn (Fermilab, United States of America)

CMS: A. Ball, K. Borras, T. Camporesi, A. Charkiewicz, D. Contardo, J. D'Hondt, A. Petrilli, P. Sphicas
CERN: S. Bertolucci, C. Decosse, S. Foffano, T. Lagrange, S. Lettow, E. Tsesmelis, E. van Herwijnen (Scientific Secretary), E. van Hove

Scrutiny Group: C. Touramanis, E. Iacopini

Excused
A. K. Maciel (RENAFAE, Brazil), S. Novaes (UNESP, Sao Paulo, Brazil), M. Awang Bulgiba (University of Malaya, Malaysia), S. Gonzalez (National Science Foundation, United States of America)

Documents can be found in the RRB indico pages; accessible via the LHC-RRB home page
http://committees.web.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 CMS LHC Resource Review Board.

2. Approval of the minutes of the last meeting. S. Bertolucci, Director of Research and Scientific Computing.
CERN-RRB-2014-059
The minutes of the last RRB were approved without comments.

3. Status of the experiment. T. Camporesi, Spokesperson
CERN-RRB-2014-085, CERN-RRB-2014-086 (slides)

In summary:

- CMS has exploited the Run1 data: the legacy for the Higgs results is published, the majority of analyses are published or being published, top physics results are beyond expectations, B rare decays are an evidence of the global performance of CMS from trigger to reconstruction.
- CMS is now concentrating on the preparation for the 2015 run: again new frontiers will be explored.
- CMS notes that the progress and success of the phase 1 upgrade relies on the timely contributions of the Funding agencies and thanks them for their support.
- The common items and common fund are a fundamental part of the CMS upgrade effort: CMS thanks all the funding agencies who have already contributed to the upgrade common fund.

Phase-2 upgrade

- CMS has defined the Technical Proposal for the High Lumi Detector, which will be submitted formally at the March 2015 session of the LHCC. The next step will be the choice of the forward calorimeter and the preparation of the TDRs. A global,

improved assessment of available and required resources will be available by October 2015.

H. Prasse remarked that there will be discussions concerning the process of dealing with the funding agencies.

T. Camporesi replied that CMS will adhere to whatever process will be decided upon.

C. Touramanis remarked that the Upgrade Cost Group will review the TDRs for resources, but he did not think that they would be involved at the level of the Technical Proposals.

S. Bertolucci said a judgment at the level of the Technical Proposal will also be requested. The TDRs represent a large amount of work which should not be started unless a global funding picture is available.

T. Camporesi welcomes the assessment from an independent body (the UCG) that has the overall vision.

C. Touramanis replied that S. Bertolucci's clarification is a welcome input that he will take back to the chair of the UCG. However he mentioned that this group has nothing to do with overall levels of funding. It makes a technical assessment of the project, whether it is deliverable, whether the resources described are adequate.

T. Camporesi concluded that by October next year CMS will present its understanding of the available resources for the collaboration (which is composed of some 50 funding agencies).

4. LHCC deliberations (paper only). E. Tsesmelis, LHCC Scientific Secretary
CERN-RRB-2014-087
The LHCC report focuses on the physics aspects, the status of LS1 and the preparations for Run 2 of the LHC, as reported by the spokesperson. It also reports on the upgrades. It concurs with T. Camporesi's presentation.
The Committee considers that CMS has made excellent progress in all aspects of the experiment and congratulates the Collaboration on its various achievements.
The phase 1 TDRs are being implemented. The first version of the phase 2 Technical Proposal is being looked at, with the second version expected in Spring 2015. There is close contact with the UCG regarding the resources.

5. Financial matters. T. Lagrange, Head of CERN Finance and Procurement Department
CERN-RRB-2014-088 and slides
Outstanding 2014 contributions for M&O A for non-member states: 612 kCHF and for member states: 1M CHF which corresponds to 11% of the total.

6. M&O Budgets. A. Charkiewicz, Resources Manager
CERN-RRB-2014-090 (slides), CERN-RRB-2014-089, CERN-RRB-2014-0106
In summary, the RRB is invited to

- Approve the Draft Budget for M&O Cat. A for the year 2015
- Approve the Draft Budget for M&O Cat. B for the year 2015
- Approve the sharing among the CMS Funding Agencies of the M&O budgets

There were no questions arising from this presentation.

6.3 M&O Scrutiny Group Report Christos Touramanis, Chair, Scrutiny Group. CERN-RRB-2014-074

- The Scrutiny Group went through the CMS reports in detail. A. Charkiewicz has given a detailed and accurate description, in particular concerning the remaining gas leaks.
- A new dry air system is required. The 300k not covered for this will come from a corresponding increase in the M&O-A budget in 2015.
- The core computing effort has been included in the M&O B without increasing the budget.
- The Scrutiny Group recommends the approval of the CMS 2013 M&O closing report.
- The Scrutiny Group recommends approval of the CMS 2015 M&O A&B budget requests.

M. Fleischer enquired whether there would be an Addendum for BRIL. Normally all detector projects have an Addendum, but not in this case.

A. Charkiewicz replied the Addenda are for the upgrade projects only.

M. Fleischer enquired whether the sharing of the M&O costs in table in Annex B.2 is calculated each year or whether it is fixed?

A. Charkiewicz replied that the sharing is decided each year for each institute of each subsystem. The PhD count is used as a guideline and also the responsibility of each of the funding agencies. It is finalized by the institute board of the subsystem.

M. Fleischer thanked A. Charkiewicz for the table on pages 9-11 (of the slides, CERN-RRB-2014-090), which contains the past as well as the present situation. This table should replace the table in Annex I.A (of the report, CERN-RRB-2014-089) which only gives the future, whilst he would like also at least 2 years of the past. This request also goes to the other experiments.

S. Bertolucci requested the RRB to approve the 2015 budget requests.

H. Prasse requested that the papers be delivered to the funding agencies 14 days before the RRB meetings.

S. Bertolucci replied that he would ensure this would be the case for future RRB meetings. The final papers should be sent to him by the experiments 3 weeks before the RRB.

A. Charkiewicz replied that he would try to do this but pointed out that there is a Finance Board every month with link persons to each funding agency. Any communication from concerning dues should be transmitted to the funding agencies so that these issues can be addressed earlier.

7. 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 27-29 April 2015.