



Minutes of the 21st Resources Review Board Meeting Held at CERN on 25th October 2006

Present:

Europe

J. Niederle (Academy of Sciences, Prague, Czech Republic), M. Sumbera
J.D. Hansen (Niels Bohr Institute, Denmark)
D-O. Riska (University of Helsinki, Helsinki, Finland)
C. Cavata (CEA-Saclay, France), H. Borel
B. Erazmus (IN2P3, Paris, France)
P. Braun-Munzinger (GSI, Darmstadt, Germany), J. Richter (BMBF, Bonn),
R. Santo (Institut für Kernphysik, Münster)
G. Vesztergombi (KFKI-RMKI, Budapest, Hungary), K. Galbats (Nat. Office for Research and
Technology)
A. Bracco, G. Fortuna, E. Nappi, L. Ricatti (INFN, Italy)
A. van Rijn (NIKHEF, Amsterdam, Netherlands)
B. Jacobsen (Research Council of Norway)
J. Królikowski (Ministry of Science and Higher Education), J. Bartke (Inst. of Nuclear Physics,
Cracow)
L. Puscaragiu (Permanent Mission of Romania, Geneva)
V. Savrin (Ministry of Education and Science, Moscow, Russia), A. Petrov (Mission of Russian
Federation, Geneva)
R. Lednicky (JINR, Dubna, Russia), A.S. Vodopianov
A. Sitarova (Ministry of Education of the Slovak Republic, Bratislava), L. Sandor (SAS)
A.C. Lagerkvist (Swedish Research Council, Stockholm, Sweden)
G. Zinovjev (Bogolyubov Inst. for Theoretical Physics, Kiev, Ukraine)
R. Wade (PPARC, Swindon, United Kingdom), J. Seed, D. Evans (Univ. Birmingham)

Asia

P. Ji (National Science Funding Agency of China)
C.V. Ananda Bose (DAE, Mumbai, India)
J-H. Kim (Ministry of Science and Technology, Republic of Korea), C.Y. Choi, Y.W. Baek,
J.S. Kim

CERN

J.J. Blaising, J. Engelen (chairman), D. Jacobs, C. Jones (secretary), S. Lettow, A. Naudi,
C. Saitta, J. Salicio-Diez, S. Schmeling, E. Tsesmelis, P. Geeraert

ALICE

C. Decosse, H. de Groot, C. Fabjan, H.A. Gustafsson, J. Schukraft, Y. Schutz

M. Morandin (INFN Padova, Scrutiny Group Chairman)

21st Meeting of the ALICE Resources Review Board RRB, 25th October 2006

1. Introduction

J. Engelen, Chief Scientific Officer

J. Engelen welcomed RRB delegates to this 21st session of the ALICE RRB. He introduced the CFO designate as of the 1st January 2007, S. Lettow, who would replace the retiring A. Naudi.

2. Approval of the Minutes of the 20th Meeting (CERN-RRB-2005-066)

The minutes of the 20th meeting were **approved** without comment. J. Engelen thanked C. Jones for having taken these minutes.

3. Status of the Experiment

J. Schukraft, Spokesperson

Paper CERN-RRB-2006-085

Presentation CERN-RRB-2006-086

J. Schukraft welcomed the members to the 21st in the series of ALICE RRBs. He presented the status report of the ALICE experiment.

3.1 Collaboration Funding

J. Schukraft reported on developments in funding. The discussions concerning the EMCAL for Jet Physics had advanced substantially on both sides of the Atlantic. They had submitted an LHCC Technical Proposal which was recommended for approval in September 2006. The corresponding DOE Project Review (Sept. 2006) had recommended CD1 approval. The scope of the project had now advanced from its initial size of around 5 MCHF to the full project, now foreseen to be 13-16 M\$, 40-50 PhD, ~10 new Institutes (~ 10 MCHF CORE value). This full project needed European participation and activities in France and Italy had started. The aim was to complete the project before the 2010 Pb run, and for this the cash flow might be problematic. The EMCAL support structure was already in production, funded by DOE and this would be installed in April 2007.

There was also news on the Japanese participation. The funding proposal for the PHOS had been approved, whereas the TRD funding had not been approved. They were working on an MoU with Japan, which would contribute about 1.1 MCHF for APD's/preamps and 150 kCHF for the Common Fund. The PHOS status was that 3 modules were funded, and 2 modules were partially funded (FEE + APD). The crystals and the mechanics for the final 2 modules are requested from Russia for 2007 – 2010.

Again on the subject of funding there was a very positive discussion in Germany. The TRD completion funds (5 M €) had been approved. Funding and construction for the staged TRD part had started already in 2006. The end of construction was foreseen by 2009.

It was intended that Korea would sign the MoU that very day. This had a total value of 300 kCHF and would go into the TOF, Computing and Common Fund.

CERN had asked all the experiments to give a one page summary of the complete funding situation in the period 2007 to 2010.

TRD 60% -> 100% coverage	Germany	agreed: 5 M €
EMCAL	US Italy France	CD1 approved: 13-16 M \$ initial discussions : ~1 M € initial discussions : ~1 M €
PHOS crystals & mechanics modules 4/5	Russia	requested: 'deliverable'

For the Common Fund it was currently estimated that there would be a deficit at the end of construction of around 0.8 MCHF. This would be mostly offset by additional income from new institutes (0.5 to 0.7 MCHF).

Two other cost issues or funding requests related to CERN responsibilities were under discussion.

3.2 Collaboration news

ALICE had admitted five new Institutes:

- In the US: 3 National Labs plus 2 Universities EMCAL, GRID
 - LBNL (Berkeley), LLNL (Livermore), ORNL (Oak Ridge)
 - Yale (New Haven), Wayne State (Detroit)
- In Japan: change from 'associate' to 'full' member PHOS (+TRD), GRID
 - Hiroshima, Tokyo, Tsukuba
- In Brazil: single team from 2 Institutes offline
 - Univ. São Paulo (USP), Univ. Estadual de Campinas (UNICAMP)
- In Spain: single team from 2 Institutes: offline, GRID
 - CIEMAT Madrid, Univ. Santiago de Compostela
- In Romania: ISS Bucharest: GRID

Several Institutes were applying to join, including 6 US Universities, PUCP in Peru and Yonsei in Korea.

This brought the ALICE collaboration for the first time to more than 1000 members, namely: 1015 members, 97 Institutes and 30 countries. A celebration and prize had been held for the 1000th member, who came from Japan.

3.3 ALICE Detector

J. Schukraft then reported in detail on the status of the ALICE detector, including a number of the latest photographs. This interesting and important information can be found in both the paper and the presentation referenced above and is not further summarized in these minutes.

3.4 Summary

J. Schukraft summarized his talk in two points. As major milestones achieved:

- ITS assembly, significant progress for all 3 systems
- Detector installation started (Muon chambers, HMPID, ACORDE, TOF, TRD)
- Reduced computing deficit
- Significant strengthening of Collaboration (US, Japan, ...)

The remaining Biggest Concerns were:

- The very tight schedule for ITS
- Services and cabling: enormous amount of work & logistics challenge
- Computing resources: still some way to go

Discussion

J. Engelen thanked the spokesperson for this excellent overview of the progress that had been made. He invited comments both on this presentation and equally points raised in the paper on LHCC Deliberations (CERN-RRB-2006-094) below.

There being no questions J. Schukraft commented that he took this as a good sign.

4. LHCC Deliberations (paper only)

Paper CERN-RRB-2006-094

LHCC Scientific Secretary, E. Tsemelis

Delegates had no further comments to make and the RRB **took note** of the report of E. Tsemelis

5. Financial matters

Paper CERN-RRB-2006-076

Head, CERN Finance Dept., P. Geeraert

Presentation CERN-RRB-2006-081

P. Geeraert presented a financial update on the situation as reported in his paper referenced above and covering the period from the end of August 2006.

5.1 Status of Common Fund and C&I accounts

In the Common Fund ALICE had received additional income of 70 kCHF from Norway and made new payments of 0.924 MCHF, which left a balance for the Common Fund account of 1.07 MCHF with 1.4 MCHF of outstanding commitments.

There were outstanding membership fees totaling 125 kCHF, of which 8 kCHF was attributable to Poland. The non-Member States Armenia, Croatia, Mexico, JINR Dubna, South Africa, Ukraine and USA together owed 117 kCHF.

Slide 5 showed the money due according to the MoUs, in membership fees and cash contributions. The outstanding amounts until the end of completion of the project amounted to 36 kCHF for the Member States and to 1.56 MCHF for the non Member States, (as detailed on slide 5 of the presentation). The remaining part would have to be settled before the end of the Project. He pointed out that Greece had now paid all outstanding invoices.

5.2 Status of M&O accounts

Recent income and expenditure for M&O-A amounted to 2 kCHF and 25 kCHF respectively, leaving a positive balance of 1.4 MCHF and outstanding commitments of 174 kCHF.

Total outstanding contributions at this point of the year amounted to 0.922 MCHF. Contributions were owed by Poland as a Member States, and by non-Member States Armenia, China, Mexico, Romania, Russia, JINR Dubna and Ukraine.

Discussion

J. Engelen thanked P. Geeraert for this presentation of the financial facts.

J. Królikowski announced that Poland would be able to pay the membership fees and M&O-A by the end of the year. J. Engelen thanked him for this positive news.

J. Engelen noted that ALICE also had a procedure for following up non-payment of M&O fees and trusted that they would not be obliged to use this.

The RRB **took note** of the Financial Update.

6. Construction Budgets

Paper CERN-RRB-2006-099

Resources Co-ordinator, J. De Groot

Presentation CERN-RRB-2006-100

6.1 ALICE CORE Construction Budgets

J. De Groot presented an update of the 2006 budget. This added up to around 15 MCHF. He would not be surprised if some of it would spill over into the next year.

He then presented the preliminary 2007 Construction budget shown at the April RRB, amounting to 9.7 MCHF. He showed the final 2007 budget proposal adding up to 10.4 MCHF (for details see slide 6).

The CORE expenditure over the years 1997 to 2007 showed the yearly and the integrated expenditure.

Slide 9 showed the Common Fund Income 1996 to 2006 by Funding Agency. The table indicated 2.36 MCHF of outstanding amounts. He added that France IN2P3 had agreed to pay 174 kCHF next year. The German BMBF sum of 490 kCHF would be paid this year. Greece had paid all outstanding bills and had been recently invoiced for the remaining 17.5 kCHF. He wished to acknowledge the efforts made by the Greek Delegation to pay all their outstanding commitments. Dubna would make a significant in-kind contribution to the cabling. Russia would also cover a major part of their commitment with in-kind contributions.

He showed the planned expenditure 2006 to 2008 for the sub-detectors. The Common Fund projection showed a negative balance of 0.76 MCHF. This should be largely compensated by income from new members of the Collaboration. The range of these contributions was predicted to be between 0.5 and 0.75 MCHF. He pointed out that the Common Fund had shown a positive balance for many years but this was coming to an end.

6.2 MoU Addenda

J. De Groot showed that MoU addenda were in preparation covering the contributions of Japan, Korea and Spain/Cuba). With Brazil there was no draft as yet: this was still being discussed.

Discussion

J. Engelen thanked J. De Groot for his clear presentation and asked the RRB if there were any questions.

D. Evans noted that the UK had been accidentally omitted from slide 3.

The RRB **approved** the construction budget for 2007.

7. M&O Budgets

Paper CERN-RRB-2006-101

J. De Groot

Presentation CERN-RRB-2006-102

7.1 Update on 2006 M&O, income and expenditure

J. De Groot presented the approved 2006 Budget. He showed in tables and in graphical form the evolution of the M&O-A income for the years 2002 until 2006, as well as a summary table of which Funding Agencies still had unpaid M&O bills, in agreement with the table presented earlier in the meeting by P. Geeraert. The total outstanding M&O-A amounted to 922 kCHF and J. De Groot reminded the RRB of the procedures now in place within ALICE for dealing with such situations. Reminders had been sent to the Funding Agencies concerned.

J. De Groot presented an update of the actual state of the 2006 expenditure. It was still difficult to judge the state at the end of the year. He expected to spend about 87% of the budget as foreseen.

7.2 Budget 2007 and estimates 2008-2010

J. De Groot showed the yearly evolution of the M&O budget estimates up to 2010. He showed the breakdown into consumables, operations and power. In 2010 these were approximately equal.

7.3 M&O-A Sharing

According to ALICE Internal note ALICE-INT-2006-005:

- The sharing of the M&O-A budget is based on the number of ‘Scientists with PhD or equivalent qualifications’ as specified in the Memorandum of Understanding for Maintenance and Operation of the ALICE Detector (CERN-RRB-2002-034).
- The list of authors qualified to sign ALICE scientific publications is the same as the list of scientists established each year for the sharing of M&O-A budget.

A significant effort had recently been made inside the Collaboration to update the table of scientists per Funding Agency. J. De Groot showed this table and the changes with respect to the previous version. His presentation also showed some changes with respect to the distributed RRB document for UK and USA. There were now 559 scientists in the ALICE Collaboration.

J. De Groot showed the resultant table of the sharing of the 2007 M&O-A by Funding Agency. This added up to an income next year of 4.17 MCHF. He also presented the sharing of the M&O-B budget.

7.4 M&O MoU signatures

Finally J. de Groot showed the list of signatures on the MoU for M&O. Signatures were outstanding from Greece, China and Mexico.

7.5 M&O Scrutiny Group Report on ALICE M. Morandin Paper CERN-RRB-2006-101

The Chairman of the Scrutiny Group reported that, over and above the general remarks that he had presented at the Plenary Session, there were no major issues arising from the detailed examination of the ALICE budget. Therefore the recommendation of the Scrutiny Group was that this budget be approved. J. Engelen thanked him for this report.

Discussion

J.D. Hansen asked how the M&O-B budget was shared. J. De Groot replied that this was left to the detector collaborations, and he believed this was done by investment.

A. Petrov questioned the number of participants from Russia. He believed this had been agreed at around 40 scientists whereas in the table there were 56. He needed to verify this number and hence he would like to take a reservation on the line concerning the Russian Federation.

With this reservation recorded, the budget was **approved**. There were no further comments or questions.

8. Scrutiny Group Composition in 2007

J. Engelen used this opportunity to thank M. Morandin for his hard and serious work as retiring Chairman of the Scrutiny Group. INFN had proposed G. Batignani as a new member of the Scrutiny Group and this was agreed.

The normal maximum term in office in the Scrutiny Group was three years. However exceptions could be made if approved by the RRB. V. Luth was proposed by DoE and NSF to continue as their representative for a fourth year and this was agreed. Similarly E. Tsesmelis was proposed to continue as CERN member acting as linkman to the Technical Services for a fifth year in view of his very special position, and this was also agreed. CERN was seeking for another name to replace R. Landau who had served three years.

B. Stugu had represented the smaller Member States for three years and a replacement was needed. J. Engelen invited the RRB to send him suggestions for candidates.

He concluded that the procedure was such that the Scrutiny Group would elect the new Chairman from the members

9. Summary, Future Activities & A. O. B. J. Engelen

J. Engelen noted the good progress of ALICE, with a tight schedule in some areas. The progress was nonetheless consistent with start up by the end of next year. There were no major issues in the resources, and for the minor issues there were solutions on the horizon. The newly proposed EMCAL was a major development and the situation regarding its construction was simple: if the necessary additional funding was not found then it could not be built. He believed that ALICE was technically and financially in fairly good health.

<p>The next RRB meetings in 2007 will take place at CERN on Monday 23rd, Tuesday 24th and Wednesday 25th April 2007</p>

There being no questions and no further business, the Chairman thanked the participants and closed the meeting.

C. Jones
March 2007