

Minutes

1st Meeting of the CERN-KEK Committee

held on 8th December 2006 at CERN

Present: CERN members: J. Ellis (Chairman), M. Nordberg (Secretary), L. Rossi,
KEK members: T. Kondo, A. Yamamoto, K. Oide,

Invited: N. Ellis, D. Froidevaux, R. Garoby, T. Kohno, M. Kataoka, M. Aiba, T. Nakamoto, S. Iwami (for Point 2).

John Ellis welcomed everyone to the meeting and introduced the new members of the Committee. He noted that all related material could be found on the web in the following address: <http://indico.cern.ch/conferenceDisplay.py?confId=9682>

1. Brief Presentations by the Current CERN-Japan Fellows

T. Kohno presented his work on using algorithms for track recognition in ATLAS Muon chambers using the LVL2 trigger (Annex 1).

M. Kataoka summarized her work on photon conversion studies using combined test beams (Annex 2).

M. Aiba presented his work on LHC commissioning (optics correction) and injector upgrades (space charge compensation using electron lens, Annex 3).

The Committee thanked the Fellows for their presentations and encouraged them to continue their excellent work. These sentiments were also strongly shared by the supervisors present.

2. Status of the LHC beam interaction region quadrupoles (MQXA) toward commissioning

T. Nakamoto gave an overview of his work on LHC beam interaction region quadrupoles (Annex 4).

3. Role/function of the CERN-KEK Committee (J. Ellis, T. Kondo)

The new Chairperson, J. Ellis summarized the mandate of the Committee. He considered the work of this CERN-KEK Committee as being very important, in particular now for the LHC upgrade and new R&D initiatives.

T. Kondo summarized the history and evolution of the Committee (Annex 5) noting that the previous Committee had completed the commitments up to March 2006 and that the present Committee, with its new members, is to have a fresh start for future collaboration. He also proposed that the present Committee should be responsible for monitoring the use of the accounts that have inherited the interests of the three Japanese Funds-in-Trust for LHC

construction. In addition, he proposed that information on the status of these interest accounts should be given in timely manner to the organizations involved, including MEXT. The Committee agreed with his proposal and recommended to propose it to the Directors-General of CERN and KEK and to consult with MEXT.

A. Yamamoto added that for the Phase 1 of the superconducting magnet development work for LHC luminosity upgrade, MEXT is involved in any case.

It was agreed that the present Committee meets once a year at a given, fixed date, remaining meanwhile in email contact concerning practical program execution matters (related to the responsibilities of M. Nordberg for the Fellows Programme and L. Rossi for the LHC upgrade collaboration). All Committee members will be contacted before individual payments exceeding 50 kCHF are authorized.

4. Development of Advanced Superconducting Magnets for the LHC Luminosity Upgrade (A. Yamamoto)

A. Yamamoto presented the status of work related to Phase 1 of the project as well as plans for the future (Annex 6). The Committee was impressed by the work using Nb₃Al alloys, as well as by the plans to exceed 1.5 kA/mm² critical current density at 15 Tesla. The Committee agreed with A. Yamamoto that a review should be made by 2008 for Phase 2 of the project, actively looking also into other conductor materials such as Nb₃Sn (NbTi) in close collaboration with CERN and the US.

In the discussion that followed, the Committee supported the path proposed by A. Yamamoto. L. Rossi promised to find out more about CERN's plans in this respect.

5. Collaboration on LHC accelerator commissioning (K. Oide)

K. Oide reported that KEK plans to allocate six persons between 2007-2009 for LHC machine commissioning and upgrade work (Annex 7). The first person will be sent to CERN mid-2007 (A. Morita). K Oide noted that the funding was still open.

The funding of this program was then discussed. L. Rossi and T. Kondo agreed to investigate funding possibilities on the CERN and KEK sides for A. Morita. As a fallback solution, it was agreed that LHC upgrade money could be used.

6. Japanese Fund-in-Trust for LHC, status and actions (T. Kondo)

T. Kondo summarized the history of the Japanese-Fund (JFiT) since 1995 and the closure of capital funds of 165 MCHF in 2006 (Annex 8). He explained that 7.9 MCHF of gained capital interest were moved to new, dedicated accounts that the present Committee should monitor. M. Nordberg confirmed that the signature rights for these new accounts resided with J. Ellis, L. Rossi, P. Geeraert and himself.

The question of gained interest on the interest was raised. T. Kondo agreed to check the matter with the CERN Finance Department, as well as the total amount transferred to the new accounts.

7. KEK office at CERN for LHC collaboration (T. Kondo)

T. Kondo noted that the increase of KEK visitors at CERN has resulted in increasing need for office space and asked help from the Committee to resolve this problem. L. Rossi agreed to

investigate availability of space in Building 30 for LHC upgrade related activities and M. Nordberg agreed to contact PH Department concerning the Fellows programme.

8. Any Other Business

The date of the next meeting was fixed for December 7, 2007 (3 hours).

T. Kondo informed the Committee members that he will retire in early 2008 and that his successor should be invited to the next meeting.

J. Ellis closed the meeting by thanking all who had attended. He said that the minutes would be distributed within the coming weeks and asked T. Kondo to ensure MEXT would get a copy of them with minimum delay.

M. Nordberg