# Minutes of the MICE Collaboration Board held on 9<sup>th</sup> June 2006 at FNAL

#### **Present**

CB Chair – D. Kaplan Spokesman – A. Blondel Deputy –M Zisman

**Technical Coordinator** – P. Drumm

Argonne – J. Norem

Cockcroft Institute – R Seviour

FNAL - S. Geer

Illinois Inst. Tech. -Y. Torun

Imperial College London -K. Long

INFN Napoli – V. Palladino

KEK - S. Ishimoto

LBNL - D. Li

Liverpool – R. Gamet

Northern Illinois – M. Cummings

Osaka – Y. Kuno Oxford – J. Cobb

Sheffield - C. Booth

# 1) Approval of Minutes of 2<sup>nd</sup> March 2006

The minutes of the previous meeting were approved.

### 2) Spokesman's Remarks (Alain Blondel)

Alain gave a summary of funding news. The Japanese bid had not been approved for 2006, so contribution to the tracker will be limited. Other sources of money should allow light guide construction. Lack of funding through the US-Japan Programme means no support for liquid hydrogen absorber R&D. University of Osaka will continue supporting salaries and a PhD student, and the application will be resubmitted. Geneva has small amounts of funding, including a student. CERN has offered to support the refurbishing and commissioning of high power RF amplifiers subject to certain conditions. The US DoE has agreed an additional \$300K for the MuCool coupling coil, and a response is still awaited to the NSF request.

Phase I starts data taking in 464 days, on 15<sup>th</sup> September 2007. Step II will start only a few months after Step I. Phase II preparation is in progress, with liquid H<sub>2</sub> R&D at RAL and MuCool RF cavity R&D in the US (LBNL, Fermilab, ANL and ITT). We can also consider a possible "Phase III" – MICE + MANX, though matching has not been demonstrated and different measures of cooling are suggested. However, MICE, unlike MANX, is an approved experiment, and must be completed as approved.

A proposal for the common fund was distributed. Costs will be reviewed at the October Collaboration Board. Minor changes to the wording were suggested, but no major objections were expressed. Comments were requested by 15<sup>th</sup> July.

#### 3) Technical Coordinator's Report (Paul Drumm)

The importance of the mid-September start-up date was stressed. There is a lot or work to do before that time. Reviews of the liquid hydrogen system and the tracker had been performed, and reviews of the beam-line and target would be conducted immediately after this meeting. A drawing management system is to be set up – it is important to check the interfaces with hall infrastructure.

# 4) Applications to Join MICE

#### a) Cockcroft Institute/Lancaster University (Rebecca Seviour)

A description of the Cockcroft Institute's programme of accelerator science and technology was presented, with information on current research projects. The proposal was to perform a detailed study of surface treatments of RF cavities, of relevance to MICE. This should complement the US cavity programme, and produce at least 1 cavity for MICE. It would also develop infrastructure for UK hardware participation in

a Neutrino Factory. The manpower contribution to MICE would be half of two academics plus half an RA, with two other RAs and 2 PhD students in support, together with the Cockcroft lab. infrastructure.

## b) ICST, Harbin (Prof. L. Jia)

A description was provided of the Harbin Institute of Cryogenics and Superconducting Technology, with an overview of the facilities available and past projects. After several days' discussion with M. Green, it is proposed to provide the design & fabrication of two complete magnets including cryostats, assuming the superconductor and power supply would be provided by the collaboration. An application has been made to the Chinese government for funding to participate in MICE.

#### c) University of New Hampshire (Ulisse Bravar)

Ulisse informed us that he intends to change institute within a couple of months, so his application was postponed to the next Collaboration Meeting. He has no funding at present, but has a proposal to the NSF jointly with Riverside, and should be able to take with him \$30-40K per year for 3 years if successful. He would propose to resume his beam optics studies.

After a brief discussion, Cockcroft/Lancaster and ICST Harbin were welcomed to the collaboration *nem. con*.

# 5) Matters Arising from the Plenary Meeting

A change request has been submitted to the Technical Board to remove Cherenkov 2. Studies indicate that MICE can do the required physics without this detector.

# 7) Date & Location of Future Meetings

The next Collaboration Meeting is scheduled for 8<sup>th</sup>-12<sup>th</sup> October at RAL. The following meeting is proposed for 22<sup>nd</sup>-25<sup>th</sup> February '07, at CERN. Subsequent meetings might be June '07, autumn '07, and early '08, with locations to be decided but probably at RAL during or close to running periods.

CNB 30<sup>th</sup> August 2006