

Minutes of the meeting CLIC Civil Engineering and Services (CES)

No.1 - 14 May 2008

Present: H.Braun (AB/ABP), C.Hauviller (TS/HDO), J.Inigo-Golfin (TS/CV), K.Kahle (TS/EL), K.Kershaw (TS/HE), H. Mainaud Durand (TS/SU), C.Martel (TS/CV), J.Osborne (TS/CE), T. Pettersson (TS/ASE), I.Ruehl (TS/HE), R.Trant (SC/GS)

1. MANDATE CLIC CES WORKING GROUP

J.Osborne presented the mandate for this working group and the new structure of the CLIC Organigram. The primary objective of this group is to develop the existing design from a civil engineering and services point of view, and work with the various actors towards a realistic design for the Conceptual Design Report (CDR) in 2010.

Part of the mandate is to work together with the International Linear Collider Project (ILC) on areas of synergy. Funds have been granted from the EU via FP7, as such, persons working on ILC need to be highlighted and time sheets submitted. (*Action J.Osborne, B.Jenssen*)

R.Trant requested a 'Safety File' for the entire project in order that SC can give constructive comments. This safety file should highlight the main risks and hazards that exist and what mitigation measures have been foreseen. C. Hauviller stated that he thought at this stage of the project, safety considerations should be included in the CDR and the full safety file only completed during the engineering phase.

2. PROJECT BREAKDOWN STRUCTURE

The draft PBS was presented. It is intended that this PBS will be used as :

- Structure for the CDR
- Costing
- Data Management eg EDMS

It has been agreed that the PBS should follow, as much as possible, the one that exists for the ILC, in order to facilitate comparison.

It was requested that all CES members comment on this draft structure with the objective that it can be frozen at the next meeting in June. It was requested to keep this as simple as possible.

3. ANTICIPATED WORK FOR 2008

J.Osborne gave a brief presentation of the fundamental aspects of the CLIC machine and its proposed layout in the CERN region.

It was agreed that the following key areas are the priorities for 2008 :

- Tunnel cross section, including :
 - Cooling pipes
 - Ventilation system (bearing in mind floor stability)
 - Potential introduction of a transport 'monorail'
- Integration of machine and services in the 'Turnaround' Loops

Any drawings should be produced using CATIA and take into account all relevant safety legislation.

K.Kahle asked if the electrical network should be designed assuming that all other existing CERN machines would no longer be operating. H.Braun confirmed that this is the case.

K.Kershaw asked if a budget code existed for a draughtsman. J.Osborne stated that in principle A.Kosmicki, from TS-CE, is available on a part-time basis for preparing drawings such as cross section layouts.

C.Hauviller stated that this year is intended to be a 'brainstorming' stage for the project. All members are invited to study the documents that already exist, and to bring any new ideas to these meetings for discussion. Existing documentation can be found on the AB web site, for example, the study by C.Wyss on the tunnel cross section :

http://clic-study.web.cern.ch/CLIC-Study/CLIC_Technical_Notes/CLIC-Tech-Note-003.pdf

And fire safety recommendations made by SC :

<https://edms.cern.ch/document/827669/1>

C.Hauviller reminded that the resources available for the CLIC study are scarce and they should be used efficiently. This means in particular not to start or update any study without consulting/informing firstly the CES WG for advice.

4. NEXT MEETINGS

The next meeting of the CES is scheduled on **Wednesday 11 June at 14:30** in conference room **54-2-033**. The draft agenda is :

- PBS
- Cross Section studies : Monorail...
- Electrical Network studies
- AOB

The regular meetings of the CES WG in 2008 are foreseen on 09/07, 13/08, 10/09, 08/10, 12/11 and 10/12.