

# MDI Common Task Group Phone Meeting

May 5th 2011, 15:00 – 16:00 UTC

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## Present

P. Burrows, A. Hervé, T. Markiewicz, M. Oriunno, A. Seryi, T. Tauchi, K. Buesser

## SID Platform Requirements

M. Oriunno presents a draft of the SID functional requirements for the platform of the detector motion system. The requirements comprise numbers for the geometry of the platform, position tolerances, limits on static deformations and seismic stabilities, vibration transfer functions, wall clearances, surface requirements and expected life time as well as limits on accelerations.

While most of the requirements are straight forward, some need more work as for example the definition of the vibrational behaviour or the beam height.

The CTG agrees that a common set of requirements should be agreed upon between both detector concepts to be submitted to the CFS group. The work for the design of the push-pull system is expected to be collaborative between the concepts and the ILC-CFS and ILC-BDS groups as well as external contractors. The requirements should be re-visited as the results from the studies on all sides (civil facilities, vibrational analysis, etc.) are pushed further.

## Communication with the ILC-CFS Group

The ILC-CFS group has started an effort to bring in external expertise from the civil contractor ARUP. A joint ILC/CLIC study is to be launched where ARUP has been asked to tender for four distinct tasks where three are of relevance for ILC: the design of the platforms, a detailed study of the behaviour of the rock mass surrounding the excavated experimental hall and a review of the underground experimental area. J. Osborne has presented this study at the ALCPG workshop in March 2011 in Oregon. He has presented a set of questions to be answered by the detector concepts to allow for a more useful study.

The CFS group (J. Osborne, T. Lackowski, V. Kuchler) will join the ILD workshop that takes place on May 23-25 in Paris; M. Oriunno will join the meeting from SID. A parallel session together with the CFS group and representatives from ARUP is planned for the afternoon of May 24<sup>th</sup>. A discussion of the set of questions and the plans for the study will take place then.

## IR Engineering Specifications

T. Tauchi will present the MDI talk to the ILC PAC that meets next week in Taipeh. In preparation for this, he has started to assemble the IR engineering specifications as it was foreseen for spring 2011 in the push-pull design study work plan. He assembled the list of specifications from the existing information of the IR requirements document, the RDR numbers, and the new SID platform requirements. While many numbers still need

to be revisited and will change during the on-going studies with the CFS group, the assembly of the list is a first step in this process.

T. Markiewicz reports that SID has started to assemble preliminary numbers for SID in various environments (underground assembly, overground assembly, etc.). ILD will start to review the numbers as well.

## **AOB**

The next Webex meeting should take place early in June and will contain a report from the meeting with ARUP and the CFS group in Paris.