

Minutes of Meeting #12

WebEx, Wednesday, 16 May 2007

Attending: Susanna Guiducci, Mark Palmer, Mauro Pivi, Junji Urakawa, Andy Wolski.

1. Comments on Minutes of Meeting #11 (WebEx, 18 April 2007).

With regard to the proposed studies of electron cloud at the test facilities, Mauro has been asked whether it would be possible to distinguish between emittance blow-up from electron cloud and emittance blow-up from other effects (e.g. space-charge, intrabeam scattering etc.) In the case of CsrTA, the flexibility in operating parameters will provide some means for making this distinction. For example, the ability to vary the operating energy over some range should allow the separation of intrabeam scattering (which scales inversely with the fourth power of the energy – more strongly than other effects) from other effects. For KEKB, the situation is less clear, given that a detailed proposal has not been written.

2. LCWS (DESY, 30 May – 2 June): plans for damping rings parallel sessions.

There will be two days of parallel sessions at LCWS07, Thursday 31 May and Friday 1 June.

Susanna has put together a schedule for the damping rings parallel sessions on Thursday 31 May. The latest version includes 13 presentations, each of half an hour, on R&D progress with beam dynamics and technical systems.

The parallel sessions on Friday 1 June are intended to include a review of the R&D plan, and planning for the EDR. It will be useful to have an overview presentation on the current status regarding activities and resources, the critical issues, and needs for the engineering design phase.

It is expected that there will be a joint session with the EDR Task Force at some point during the Thursday or Friday. The latest schedule for the workshop has this joint session for one hour starting at 2 PM on Thursday, though this may change.

Action: Andy to prepare a schedule for the damping rings parallel session on Friday 1 June.

3. Damping Rings R&D Resources

Andy is making progress updating the database with the present status of damping rings activities and resources. More information is needed to ensure there is an accurate picture of the approved funding for FY07 in the US.

Action: Mark to provide Andy with data on US funding for damping rings activities in FY07. This should be done in the next few days.

Action: Andy to complete updating the database, and distribute information from the database to support discussions at LCWS07.

There was some discussion as to how more effective communication and monitoring could be achieved regarding progress with the various activities. There have been two phone meetings on electron cloud and impedance issues; however, the intended series of regular meetings covering different R&D topics have not been established. More systematic monitoring of progress will be essential during the engineering design phase: the meeting returned to this issue under agenda items 4 and 5. One possibility is to start with the list of present damping rings R&D activities, and hold WebEx meetings every two weeks (out of phase with the S3 meetings) in which the investigators on those activities make short reports of progress and plans.

4. EDR Task Force.

The GDE Executive Committee has convened an “EDR Task Force” under the chairmanship of Marc Ross to consider possible models for organisation of the GDE during the engineering design phase and management of the R&D and design activities for the EDR. Some of the initial thinking of the Task Force has been summarised in a discussion document, which has been widely circulated.

Action: All are invited to respond to the discussion document with comments, questions and suggestions.

S3 should initiate discussions on how the work for the damping rings should be organised during the engineering design phase. The work will include the R&D outlined in the damping rings R&D Plan, but must go beyond it. Planning the work for the engineering design phase will include:

- defining deliverables (particularly for the EDR);
- identifying tasks;
- developing a schedule matched to resources;
- identifying potential work packages and work package “teams”.

It seems clear that organisation of the GDE in the engineering design phase will include formal mechanisms for assigning responsibilities, and monitoring and reporting progress. For example, the responsibility for a particular deliverable could be established by a Memorandum of Understanding between the GDE and a particular laboratory. We have to prepare for this by identifying the deliverables and discussing possible roles and responsibilities among those involved in damping rings activities.

It will be a challenge to produce a realistic schedule for the work, given the expected funding profiles.

5. Electronic Data Management System.

An Electronic Data Management System (EDMS) will be set up to support communication and monitoring of all ILC machine activities during the engineering design phase. S3, along with several other groups, will be asked to start testing a possible system in the next few weeks. This will be a system with a web interface, which can be accessed (with a user name and password) by registered users. Training in the use of the EDMS will be provided, possibly starting at LCWS07.

Within the EDMS, users will be organised into teams, with a team defined as those users working on some specific task. S3 is one possible team, given that we are working on the development of the damping rings R&D plan, and on the coordination of damping rings R&D activities. The EDMS will provide areas for teams to store documents and data files that represent “work in progress”; in general, only team members can access these areas to check-out, modify, and then check-in documents and data files. The EDMS will also provide “project” areas where completed documents and data files can be posted, for more general access. While teams can be created on an ad hoc basis, the structure of the project areas should reflect the organisation of the GDE. Users will generally locate documents within the EDMS using a search engine; for this to work effectively, documents that are posted to the EDMS must be carefully classified and described.

A basic setup for the EDMS, including some number of teams and projects, should be ready for use in the next few weeks, at which point S3, as well as some other groups, should start to use it.

Action: All to send comments, questions and suggestions on the EDMS to Andy (who will pass them on to Nick Walker), or to contact Nick directly.

6. Any other business.

There will not be an S3 meeting in two weeks, because of LCWS07.