

Minutes of Meeting #6

WebEx, Wednesday, 22 November

Present: Eckhard Elsen, Susanna Guiducci, Tom Mattison, Mark Palmer, Mauro Pivi, Marco Venturini, Andy Wolski.

1. Comments on Minutes of Meeting #5 (Valencia).

Some clarification was requested regarding the identification of coordinators for specific objectives in the R&D plan as it is developed. In general, it will be helpful to have a named coordinator for each objective (in addition to the overall coordinator for the Work Package), though this may not be appropriate in every case, for example where the objective involves only a small number of investigators. As the R&D plan is developed, some objectives may have an obvious candidate for coordinator, in which case (with general agreement) that coordinator can be named at an early stage. However, it is not essential that every objective have a named coordinator at this stage, while we are preparing first drafts of the Work Packages; coordinators can be identified at a later stage, once we have a clearer picture of the R&D plan.

There are some potential issues regarding the relationships between the “global” R&D plan, and the regional organization of the R&D activities. The global R&D plan has no regional structure, so individual objectives list investigators from all regions without distinguishing regional roles. However, different regions will have separate coordination and reporting requirements (connected, for example, with the funding process). Some care will be needed to ensure compatibility between the structure of the global R&D plan and the regional structures required by funding and reporting procedures. At this stage, it should be possible (and sufficient) to note in the R&D plan particular regional responsibilities amongst the investigators.

2. Discussion of Damping Rings R&D Plan Work Package 2.2.3 – Electron Cloud.

Thanks to Mauro for rapidly producing a very complete first draft of Work Package 2.2.3. This already seems in very good shape.

Some of the objectives have quite long lists of investigators involved in the various tasks. It would be helpful to have some words of explanation addressing any potential duplication of effort; for example, some justification if there is some necessary duplication on specific tasks, or some description of how the different investigators are distributed across different tasks.

The table of resources near the start of the Work Package description lists resources that are already approved, or have been applied for (proposed resources). The necessary resources for completing the tasks are distributed through the rest of the Work Package description. It would be useful to collect the required resources in a similar table to that listing the approved and proposed resources, so an easy comparison can be made, and any mismatch identified. It

should be understood that the resources required to complete any given task can be difficult to estimate, and that the figures given for required resources will be approximate.

The lists of investigators seem to include predominantly those leading investigation at various laboratories, and some attention should be given to including supporting staff who also play an essential role.

There was some discussion as to how to indicate the level of effort from particular investigators or institutions on any given task. Information on the resources provided by or through different institutions for particular activities is available from the R&D database. It was agreed that to keep preparation of the R&D plan manageable, as well as to respect certain sensitivities, the level of detail on the sources of effort or funding should be limited. The summaries included in the Work Package template and in the present version of Work Package 2.2.3, are at an appropriate level of detail.

Action: Mauro to update the present version of WP 2.2.3:

- Include some brief description of how investigators listed for each objective are involved in the work, addressing the issue of potential duplication of effort.
- Include a summary table of required resources, to allow comparison with the existing table of approved and proposed resources.

3. Progress with R&D Plan Work Packages.

- Lattice design (Mike Zisman): no report
- Low emittance tuning (Mike Zisman): no report
- Single bunch impedance (Marco Venturini): draft should be available for discussion at the next meeting.
- Electron cloud (Mauro Pivi): draft already available and discussed (agenda item 2 at this meeting). Some updates suggested.
- Ion effects (Marco Venturini/Mauro Pivi): will require some work, and expected to take a little longer than preparation of the WP on single bunch impedance.
- Injection/Extraction Kickers (Tom Mattison): the Cornell damping rings meeting in September provided an outline for this Work Package, but some work is needed to get it written down. Some telephone meetings are needed to coordinate the effort.

Action: Those designated should continue preparation of the Work Packages.

4. Meeting at Daresbury in January (EuroTeV and ILC MAC).

Few of the members of RDB-S3 have plans to travel to Daresbury in January for the EuroTeV and/or ILC MAC meetings. We can try to arrange a meeting amongst those who do attend, with WebEx connection for others.

5. Next Damping Rings Mini-Workshop.

We should aim for a Damping Rings Mini-Workshop in March 2007; Frascati have kindly agreed to host the meeting. Arranging a meeting for March fits

between the next ILC GDE meeting (Beijing, 4-7 February) and the E-Cloud Workshop (Daegu, Korea, 9-13 April). There is a mini-workshop on Electron Cloud Clearing at the beginning of March (Geneva, 1-2 March); the damping rings mini-workshop could be arranged to follow this.

The next damping rings mini-workshop should focus on:

- Lattice design and dynamic aperture.
- Low-emittance tuning.
- Ion effects.

Action: Andy to circulate possible dates, and reach consensus amongst RDB-S3.

6. Next meeting.

WebEx, Wednesday, 6 December, 14:00 GMT.

Agenda (to be distributed) should focus on discussion of Work Packages, and preliminary arrangements for the next damping rings mini-workshop. Please forward any other agenda items to Andy.