Draft: Minutes of ML-SCRF Technology Meeting (081126)

Date & Time:

14:00-15:08 GMT, November 26, 2008, using WebEx.

Participants:

H. Hayano, N. Ohuchi, T. Peterson, A. Yamamoto, N. Walker, M. Ross, J. Carwardine, J. Kerby, N. Toge, S. Prat, R. Kephart, R. Rimmer, T. Shidara

Presentation files are available at the following Indico site; http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=3162

1) PM report (M. Ross, A. Yamamoto)

- There are documents to be issued; R&D Plan (reviewed by FALC, January, 2009), Minimum Machine Design, Plug-compatibility, S1-Global. PMs need inputs from GLs.
- PMs are planning to visit laboratories; KEK, China (IHEP, PU, C. U), INFN, Spain, DESY and also industries (cavity fabricators: ACCEL, ZANON, AES, MHI, HITACHI,).
- Preparation for AAP review is under discussion.

2) Plug-compatibility document (PMs/A. Yamamoto)

• Explained and discussed in the LCWS08 SCRF WG session. Document was placed in the Indico page: <u>http://ilcagenda.linearcollider.org/getFile.py/access?contribId=382&sessionId=12&resId=0&materialId=paper&confId=2628</u>

• Next step; Waiting for comments from EC and others. Update the draft and it will be more publically distributed, including AAP and PAC.

3) S1 Global program and necessary agreements (A. Yamamoto)

• Discussed in EC and advised to revise the title to be "Agreement" instead of "MOU", as a more practical level of the document. Presented in the ILC08 SCRF session. There are various spectra and it may not be settled within a few months.

http://ilcagenda.linearcollider.org/getFile.py/access?contribId=380&sessionId=12&resId=0&materialId=paper&c onfId=2628

• Further plan; Proposed to issue this document as a PM document/guideline and ask KEK to make bilateral agreements.

4) Summary of the LCWS08 SCRF discussion (H. Hayano)

• Presentations and discussions at the LCWS08 SCRF sessions were summarized. See the presentation file: http://ilcagenda.linearcollider.org/materialDisplay.py?contribId=26&sessionId=3&materialId=slides&confId=262

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- Major discussions were on (1) Field Gradient limitation by Pits and Bumps; more data points (inspection picture & T-map), good correlation between T-map & optical inspection and development of repair tools, (2) Plug compatibilities; discussions on tuner, vessel support position and input coupler port diameter.

5) Technical Discussions

- S1-global program (A. Yamamoto)
- The Cryomodule-C design for the S1-Global program, established between INFN and KEK by the end of September, shall be kept (revised again from collaboration because of the practical level of program).
- Cavity envelope and the plug-compatible interface to be confirmed (J. Kerby/ A. Yamamoto)
- Cavity envelope and interface issues were discussed using drawings prepared by J. Kerby and D. Mitchell. Z-directions for cavity and cryomodule coordinate systems are different with each other. Need specific meetings to settle these issues (tuner and cavity support location, coupler distance, sealing, coordinate systems, coupler flange interfaces).

http://ilcagenda.linearcollider.org/getFile.py/access?contribId=2&resId=0&materialId=0&confId=3162 http://ilcagenda.linearcollider.org/materialDisplay.py?contribId=2&materialId=slides&confId=3162

- Input-coupler cold-end flange (40 or 60 mm?)

• Pros and Cons for 40/60 mm input-coupler cold-end flanges were discussed. Need homework to prepare comparison tables from each region (Asia; H. Hayano, N. Ohuchi, Europe; S. Prat, America; J. Kerby, C.

Adolphsen). Microwave design for end cavities will be affected by this choice. And also need specific meetings to settle this issue.

6) SCRF meeting schedule

- Next SCRF WebEx meeting: Jan. 21, 14:00- GMT. There will be no SCRF WebEx meeting in December because of the holyday season.
- GDE meeting and AAP (interim) review in Tsukuba: April 17 21, 2009.