

TEB Webex meeting, 6th August 2012

Attendees

Brian Foster, John Carwardine (chair), Nick Walker, Marc Ross, Akira Yamamoto, Nobu Toge, Benno List, Phil Burrows, Hitoshi Hayano, Maura Barone, Mike Harrison, Kaoru Yokoya, Nan Phinney

Slides are on ilcagenda, here:

<http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=5738>

Meeting Notes

The 'final' draft of the updated TDR2/CFS chapter was received on Friday and is ready for editing. Marc: a lot of work has gone into trying to make tables comparing flat and mountain sites have similar look and comparable content.

Eckhard distributed his draft edited TDR1/SCRF chapter for comment. Akira will review. A pdf download is linked from the forge file links page, or directly using this link:

http://www.desy.de/~elsen/tdr1-chapter_scrf.pdf

Scope of TDR1/Beam Test Facilities chapter

- With the re-scoping of the NML chapter to not discuss beam operation, the content of the chapter is now rather disparate, covering ring beam tests, and linac beam and non-beam tests. Mike: path of least resistance is to simply change the title to Test Facilities. Marc: Overview for the chapter was submitted last week, and attempts to bring together this broad scope.

Scope of Global Technical Systems chapter

- Based on the fact that the accelerator chapters do cover instrumentation, magnets/ps, etc, Nan had suggested that we might not need a separate chapter that addresses these topics. Marc: lot of changes were made to the DR magnet power supply design since RDR (distributed raw DC buss configuration), and it's important that this be somehow recognised. The Global Systems chapter was included in part to reflect this.

Scope of Commissioning, Operations, Availability chapter

- Not yet defined. It's on Marc's list to address.

Maura will be generating and posting pdf files for all the chapters, downloadable from the forge file links page. The pdfs will be posted once the first round of editing is done or if requested by the primary Editor.

A new Tables browser is in preparation (format currently being finalized) and will be available on the tdr portal (<http://forge.linearcollider.org>) or under the

'Reports' tab. A direct link is here:

<https://forge.linearcollider.org/embedded/tdr/Tables/index.html>

Marc: the Tables browser will be very useful for comparing tables intended to have similar content. Maura: note that it only automatically extracts tables from source in TeX. It doesn't pull out tables from Word documents.

Editors should begin reading the TDR text from the start if there are no specific editing tasks in their queue. Send any comments to ilc-tdr-teb@desy.de

As you go through the editing, please review figures in the image browser and identify those that will be included in the chapters – needed to help prioritise fixing the figures with poor quality.

Editorial topics for upcoming meetings

13th August

- TDR2 CFS revisited (Phil)
- Technical Editing (Maura, Benno)

20th August

- TDR2 SCRF Main Linac (Akira)

EC Feedback on the TDR snapshot of 9th July (Brian)

Comments were summarised by Brian. (Specific detailed written comments were distributed via the ilc-tdr-teb mailing list over the weekend.)

[See Brian's notes at the end of this document]

Brian: EC has asked to remain in the loop as the editing proceeds. Perhaps compile another snapshot in a month's time...

Comments from Nick:

- Some of these warrant some high-level discussion, eg organization of the site-dependent material, and where to write up the changes in design from the RDR
- Perhaps TDR1/Chapter 2 (Evolution of the Design) is in the wrong place – move to later in the volume, so it can follow on from the R&D results and put them into context for the TDR2 design.
- The TDR2 chapters are generally missing links back to the R&D

All: please review the detailed comments and Brian's digest of the comments (at the end of this document) so we can consider how to respond to the comments.

Editors' reports

Benno

Nobu

- Comment on TDR2/Chapter 1: it would be helpful to have a short summary of the design changes since the RDR. This would be in addition to the more complete Evolution of the Design write-in in TDR1 Chapter 2
- What should he do next? Please go through the revised TDR1/SCRF chapter. It has significantly changed since the EC snapshot.

Akira

Brian

- Has finished editing TDR1/Chapter 7 (Post-TDR R&D) and has sent the edited version to Marc for comment

Phil

- Will start work on the revised TDR2/CFS chapter received from Vic on Friday. It is still almost a factor 2 too long (97 pages).
- Karsten has submitted an IR/MDI section draft for TDR2 BDS chapter. Phil has sent this to Nan for editing. Revisions are expected.
- Phil will follow up on the MDI R&D section for TDR1.

Hitoshi

Maura

Mike

- Beam Test Facilities section on NML has been rewritten and edited to include only the CM1 module tests

Kaoru

Feedback from EC on the TDR snapshot from 9th July (Brian)

General comments

TDR1-1 (Barish & Foster)

Reads fine but not obviously fit for purpose.

“TDR-1 needs a narrative introduction on the primary R&D that is required to demonstrate the technologies of an ILC and then to be ready to move forward with a construction program. I think this should be done, beginning from when the GDE began, so we can take credit for our accomplishments (e.g. gradient, e-cloud, etc), and can set-up discussion for Ch7 of what is the future R&D program.” (BB)

“Overall I wonder about these 4 chapters – I don't get the impression that they are much different from each other particularly the Volume 1 – Volume 2 comparison. There is a lot of repetition of general description of the accelerator. I don't really have a solution but maybe if one thought about what specifically these two chapters should do that are NOT done in the other volume then we could somehow make them more distinctive....”

TDR1-2 (Barish & Foster)

“In particular, Ch 2 seems more like it belongs in TDR-2, not TDR-1.” (BB)

TDR1-3 (Harrison & Yokoya)

“hard to review these sections since so much is still missing” (MH)

“left with the impression that it seemed too open ended. By this I mean there was nice descriptions of the R&D topics and results but there was no overall narrative which said "and this was why we picked this for the baseline design" (MH)

“Overlapping description of many items - Editor's comment sometimes say eliminate them, but this not simple. Should give unified description at one place and refer it elsewhere.” (KY)

TDR1-4 (Walker & Tauchi)

“Overview must describe roles and characteristics of FLASH, NMU and STF (Quantum Beam) with respect to ILC. Also, XFEL should be mentioned as a test facility scaled 10% of ILC, and relation of TESLA type and ILC type modules and cavities.” (TT)

TDR1-5 (Yamamoto & Stapnes)

“hard to understand to what degree the specifications are fulfilled and demonstrated. When the future work is described it is therefore also hard to

understand if this is a part of a demonstration of performance parameters, or steps towards a larger technical system.” (SS)

“draft has well summarized the R&D objectives and progress with an appropriate level of the depth for TDR.” (ATF2 – AY)

TRD1-6 (Paterson & Dugan)

Title of 6.1 needs changing. “The text is a series of paragraphs with no subheadings. Each paragraph is clear by itself but the connections between them are not well defined. It would benefit greatly in terms of readability if the paragraphs were grouped into subsections with appropriate titles. “ (GD)

References. “Very complete and already has been edited” (EP)

TDR1-7 (Barish & Walker)

“This chapter is very important to motivate the continuing R&D program following the TDR. It needs some explanation that key R&D complete to move forward quickly with a construction project, yet the benefits of continuing R&D, especially systems tests, small beam spots, industrialization, etc.” (BB)

BF comments subsequent to editing this chapter– all the information required is here but it needs much better organisation and motivation. It has very substantial reporting sections on achievements that should be omitted or shortened where possible. Needs to be more focussed on motivating the future R&D.

TRD1-8 (Barish & Foster)

Not yet available.

TDR2

TDR2-1 (Barish & Foster)

See comments on TDR1-1.

TDR2-2 (Barish & Foster)

See comments on TDR1-2. BF comments subsequent to editing: “basically it is fine and my edits with one or two small questions to be resolved were at the grammar and typo correction level.”

TDR2-3 (Harrison & Yokoya)

“We should avoid repetition and reference TDR1 rather than repeat the content from TDR1. This is not a stand alone document and should be no longer than necessary to enhance readability.” (MH)

“we need a narrative as to why the baseline design as described was chosen. Generally either cost or technical performance as influenced by the site.” (MH)

TDR2-4 (Harrison & Yokoya)

“Better to create one chapter, starting with the motivation of having two different layouts. Then, split into two sections. (This chaptering would also help to avoid “flat” and “mountain” to appear in the top-level titles.)” (KY)

“We need a narrative as to why the baseline design as described was chosen. Generally either cost or technical performance as influenced by the site.” (MH)

TDR2-5 (Harrison & Yokoya)

“Far from the state to start editing. Too many undefined words (LPB, Kamaboko, FBL, MBK)” (KY)

TDR2-6 (Yamamoto & Tauchi)

Reference the R&D that led to changes between RDR & TDR. (TT)

TDR2-7 (Yamamoto & Tauchi)

Both AY & TT comment on the necessity to update/rationalise the figures. Cross-reference to Ch. 3. (AY) Lots of important detailed questions. (TT)

TDR2-8 (Yamamoto & Tauchi)

Well done, could be shortened? (AY) Emphasise role of ATF2 DR as prototype. (TT) Delete DRFS. Lots of important detailed questions. (TT)

TDR2-9 (Yamamoto & Tauchi)

Well done (AY). Add big table with relevant emittance budgets; another with collimators BL elements etc. Lots of important detailed questions. (TT)

TDR2-10 (Yamamoto & Tauchi)

Doesn't exist.

TRD2-11, 12

Don't exist

TDR2-13 (Paterson & Dugan)

“important to emphasize that this is one common multinational project which is flexible and can be optimized for different possible sites” (EP&GD)

Figures should be retained and made bigger/more legible. (EP)
Generally OK – sections need proper numbering. Lots of valuable detailed comments (GD).

TDR2-14 (Stapnes & Paterson)

Doesn't exist

TDR2-15 (Barish & Walker)

Doesn't exist

TRD2-16

Complete – but needs proper cross-referencing/integration (BF)

TRD2-17 (Foster & Ross)

Doesn't exist

TRD2-17 (Barish & Foster)

Doesn't exist

General comments in EC discussion

General feeling that things were in good shape for this point in process and comments not intended to be criticisms.

EC keen to keep involvement – what could they usefully do next?

BF
6/8/12