

ML-SCRF: Monthly WebEx Meeting

July 25, 2012

1. Reports from PMs

- GDE activity and meeting plan
- KEK-LC Acc. R&D Review, at KEK, July 31- Aug. 2

2. Reports from TA Group Leaders (very briefly, if any?)

- Cavity, Cavity Integration, Cryomodule, Cryogenics, HLRF, ML

3. Special Discussions on

- Progress in TDR-Part 2 Drafting
 - General status: John Carwardine
 - Each section status: each writer

ML & SCRF Action/Meeting Plan (2012)

Month	Day	Place	Meeting
June	26		ML-SCRF Monthly Meeting
July	4-11 12-13 25		36 th ICHEP (Melbourne) GDE-EC face-to-face Meeting (TDR draft discussed) ML-SCRF Meeting
Aug.	22		ML-SCRF Meeting
Sept.	10-14 19	Telaviv	Linac-2012 ML-SCRF meeting
Oct.	22-26 29-30	Texas Anaheim	LCWS (TDR draft to be finalized) IEEE-NS (LC event)
Nov.	5-6 15	JLab	TTC Final Draft of TDR
Dec.	13-14	KEK	ILC-PAC (@ KEK)



A Review on Research and Development at KEK for Accelerator Technologies toward ILC

- Dates and Place: July 31 – Aug. 2, at KEK
- What will be reviewed?
 - Technical progress in the research and development for ILC
 - R&D program coordination/management to matures the required technologies for ILC
 - Preparation for input to the KEK road-map updates to be realized in 2012.
- General agenda for reports to be presented :
 - 7/31 (full day): STF including tours for experimental facilities
 - 8/1 (full day): CFS and ATF
 - 8/2 (a half day): Report writing and review summary (close-out)
- Review committee members
 - Ross (GDE/SLAC, Chair), K. Akai (KEK), chikahisa (CE Ass., Japan), J. Flanagan, T. Furuya (KEK), H. Hanaki (Spring-8), Y. Kobayashi (KEK), F. Naito (KEK), Y. Ohnishi (Kyoto-U), K. Oide (KEK), T. Raubenheimer (SLAC), R. G. Tomas (CERN),

Charges to the Review

to be held at KEK, on July 31 ~ Aug. 2, 2012

To review and advise on:

- Technologies progressed at KEK to prepare for the ILC accelerator to be built
 - Are they adequate in the direction and priorities, and reasonably progressed?
 - What is missing and what shall be further demonstrated
- Scope and strategy at KEK with global cooperation
 - Are the KEK's efforts well organized in view of global cooperation?
 - How the KEK roles may be improved in order to maximize the global efforts to realize ILC?
- Scope and strategy in relation to other programs expected at KEK.
 - How are they adequately planned in balance with other existing programs at KEK?
 - How the ILC R&D program may be better progressed in common or complementary efforts with other programs along the KEK road map updates?

The Review Agenda: July 31

July 31, 9:00 ~ 18:00:

9:00 {Closed session for the review committee}

9:20 *Opening Remark and Introduction :* A. Suzuki

9:40 Review program A. Yamamoto

9:45 Reports from SCRF and STF

9:45 General progress at STF H. Hayano

10:15 SCRF cavity development Y. Yamamoto

10:45 *-- Coffee/Tea Break --*

11:15 In-house cavity surface process M. Sawabe

11:45 In-house cavity fabrication T. Saeki

12:15 *-- Lunch break --*

(13:00) *-- Tour of ATF, STF, and CFF --*

15:00 RF and PDS T. Matsumoto

15:30 S1-Global E. Kako

16:00 Quantum Beam K. Watanabe

16:30 *-- Coffee/Tea Break --*

16:45 STF-2 Cryomodule and cryogenics H. Nakai

17:15 Plan for STF-2 and future A. Yamamoto

17:45 {Closed session, if necessary}

18:15 *-- Reception and discussions --* *Everybody*

Agenda: Aug 1 -2

August 1, 9:00 ~ 18:00:

9:00 {Closed session}

9:15 Reports from CFS

9:15 Progress in CE design work

A. Enomoto

10:00 Progress in Geological survey in Japan

M. Miyahara

10:45 -- coffee/tea break --

11:00 Reports from ATF

11:00 General progress and recovery from East-Japan Earthquake

N. Terunuma

11:30 Low emittance beam study

K. Kubo

12:15 -- Lunch break --

13:30 DR operational experience

S. Kuroda

14:15 Beam Extraction for DR to ATF2

T. Naito

15:00 Nano-beam study with AT2

T. Okugi

15:45 -- Coffee break --

16:00 International contribution (tentative title)

P. Burrows

16:30 Plan for ATF future

N. Terunuma

17:00 Comments – Cooperative efforts for the future of ATF and STF

A. Yamamoto

17:15 {Closed session}

August 2, 9:00 ~ 12:00

9:00 {Closed session, questions and answers, and writing}

11:30 Closeout and review summary

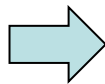
12:00 End



TDR Publication and Review

First-draft sections	* 23 April *
Complete edited draft	22 October (LCWS 12)
Final draft (for PAC)	15 November
PAC review	15-16 December

Formal publication at
Lepton Photon Conf.
(SF, June 2013)



Expect international
reviews:
Both technical and cost
(Q1-22 2013)

ILC TDR public

<https://forge.linearcollider.org/tdr>

TDR - ILC TDR public - ILC Forge

12/06/26 20:09

Portal for Authors and Editors of the ILC Technical Design Report

TDR Editorial Team

Chair: *John Carwardine (Argonne)*

Editors, Part-I: *Eckhard Elsen (DESY), Hitoshi Hayano (KEK)*

Editors, Part-II: *Phil Burrows (OXON), Nan Phinney (SLAC), Kaoru Yokoya (KEK), Nobu Toge (KEK)*

Project Managers: *Marc Ross (Fermilab), Nick Walker (DESY), Akira Yamamoto (KEK)*

Technical Editors: *Maura Barone (Fermilab), Benno List (DESY)*

Reference material for the TDR Baseline Design

- [Top-Level ILC Parameter Tables \(EDMS\)](#)
- [Technical Design Documentation Portal \(linearcollider.org\)](#)

File uploader

Select the 'Upload files' button below to start uploading your content (text and/or images). Please remind that figures should be uploaded as separate files from the text, possibly in original.

A pop-up window will open, from there:

- Enter your email address and the common password (ilctdr) - note: that's a common password for all the TDR authors, valid for the file upload only, it's not your Forge password!
- Select the chapter using the drop-down menu
- Add the files to upload using the 'Add files' button - you can add up to 20 files at a time
- Hit 'Start upload' (IMPORTANT: files will not be uploaded to the server until you hit 'start')
- The figures will be submitted to a staging area for printing quality check. You will be contacted if the image quality is unsatisfactory for printing.

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Status of TDR Part-1: Chap-3, SCRF

Chap.	Subject	Draft provided by	Status/Plan
3	SCRF R&D		
	Development of Infrastructure	J. Kerby	Received
	R&D toward mass production	J. Kerby	Received
	Overview	A. Yamamoto	Received
	High gradient cavity R&D	R. Geng	Received
	Cavity Integration	H. Hayano	Received
	S1-Global experiment	H. Hayano	Received
	CM, thermal balance / SCQ	P. Pierini, / J. Kerby	Received
	RF-power and PDS	S. Fukuda, C. Nantista	Received
4	Beam Test Facility (SCRF related)		
	FLASH	J. Carwardine	progressed
	Quantum Beam	H. Hayano	progressed

Status of TDR Part-2: Chap-3,4,5, ML Technology

Chap.	Subject	Draft provided by	Status/Plan
3	ML Technology (common)		
	ML Top-level parameters and general layout	C. Adolphsen	
	Cavity performance and production requirements	A. Yamamoto	Received
	Cavity Integration (couplers, tuners, mag. shield)	H. Hayano	Received
	CM design, SCQ, Cryog.	P. Pierini, J.K., T. Peterson	Received
	RF-power source	S. Fukuda. C. Nantista	Received
	Low-level RF control	J. Carwardine	Received
	Cavity and CM tests	H. Hayano	Received
4	ML for <u>flat-topography</u> layout		
	... Layout: Klystron Cluster RF Scheme (KCS)	C. Adolphsen	By middle August
	... Low-level RF for KCS	J. Cawardine	progressed
	... Power distribution system	C. Nantista	Received
5	ML for <u>mountainous-topography</u> layout		
	... Layout: Distributed Klystron RF Scheme (DKS)	C. Adolphsen	By middle August
	... Low-level RF for DKS	S. Michizono	Received
	... Power distribution system	S. Fukuda	Received

ADI Action Items remaining: Works still to be done w/ML-SCRF

	#	Subjects	Prepared by	Status
SRF	36	Review local PDS design and cost estimate	S.F., C.N., A. Y,	done
	48	Review/update He gas or liquid storage requirements	T. P, A.Y.,	
	50	Update CFS requirements to reflect Marx modulator	S.F., C.N.	done
MLI	64	Mechanical: Insulation for cavity RF loads		
	65	Documentation: Main linac layout for mountain topography.	A.E., A.Y.,	done
	66	Updated ML lattice file for Mountainous Topography site		
	74	RF power requirement accounting documentation (parameters) for EDMS KCS	M.R.	done
	75	RF power requirement accounting documentation (parameters) for EDMS DKS	M.R.	reported