

# ML-SCRF: Monthly WebEx Meeting

## August 22, 2012

### 1. Reports from PMs

- GDE activity and meeting plan
- LCWS2012: Arlington Texas
- TTC-2012, Jlab

### 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 1, 2 Drafting
  - General status: John Carwardine
  - Each section status: Editors/PMs/Writer

# ML & SCRF Action/Meeting Plan (2012)

Month	Day	Place	Meeting
July	4-11 12-13 25		36 <sup>th</sup> ICHEP (Melbourne) GDE-EC face-to-face Meeting (TDR draft discussed) <b>ML-SCRF Meeting</b>
 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)

# LCWS 2012

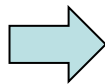
- Dates: Oct. 22 ~ 26
- Held at: Arlinton, Texas
- Registration and Accommodation Reservation
  - LCWS12 (Int. Workshop on Future Linear Colliders 2012)
  - <http://www.uta.edu/physics/lcws12/>
- Program
  - 22(Mon): Joint plenary, Accelerator plenary
  - 23(Tue): ILC-CLIC Common issues
    - a.m. Emittance preservation, Power consumption
    - p.m. System tests, Cost&schedule
    - P.m. 2:00. : Higgs Factory session
  - 24(Wed): Accelerator: CLIC & ILC separate programs, **TDR Discussion**
  - 25(Thu): Ordinal Working Groups
  - 26(Fri): Accelerator plenary, Joint plenary (S13:00)



# TDR Publication and Review

First-draft sections	<b>* 23 April *</b>
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

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### 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

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

### File uploader

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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.

Upload files

# General Status of TDR1, Chapt. 3.

- E. Elsen has worked hard to manage his editing work, and the result/status is given below:
  - [www.desy.de/~elsen/tdr1-chapter\\_scrf.pdf](http://www.desy.de/~elsen/tdr1-chapter_scrf.pdf)

# General Status of TDR2, Chapt. 3 , 4, 5.

- Nobu has worked hard to manage his editing work, and the result/status is given below:

Now, the above files uploaded to Forge (by J.C and M.

# General Status of TDR2, Chapt. 3 ~ 5.

- Nobu has worked hard to manage his editing work, and the result/status is given below:

Ch 3: <http://ilc.kek.jp/~toge/Tdr2Chap3/>  
<http://ilc.kek.jp/~toge/Tdr2Chap3/mltech20120819.pdf> <-- PDF  
<http://ilc.kek.jp/~toge/Tdr2Chap3NKT20120819.tar.gz> <-- tar.gz

Ch 4: <http://ilc.kek.jp/~toge/Tdr2Chap4/>  
<http://ilc.kek.jp/~toge/Tdr2Chap4/mltflat20120818.pdf> <-- PDF  
<http://ilc.kek.jp/~toge/Tdr2Chap4NKT20120819.tar.gz> <-- tar.gz

Ch 5: <http://ilc.kek.jp/~toge/Tdr2Chap5/>  
<http://ilc.kek.jp/~toge/Tdr2Chap5/mlmtn20120818.pdf> <-- PDF  
<http://ilc.kek.jp/~toge/Tdr2Chap5NKT20120819.tar.gz> <-- tar.gz

[Now, the above files uploaded to Forge \(by J.C and M.\)](#)



# My Comments

- It might be easier for readers to merge Chapter 3, 4, and 5, to one chapter
- Cryogenics system description may be a little more added specially in view of two KCS and DKS configuration: 6 plants v.s. 5 plants,
  - Done by Tom's effort, and appreciated
- Power distribution system with DKS might be more described in (currently) Chapter 5.

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

*Many thanks for Editing by E. Elsen!*

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

*Many thanks for Editing by N. Toge !*

Chap.	Subject	Draft provided by	Status/Plan
<b>3</b>	<b>ML Technology (common)</b>		
	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
<b>4</b>	<b>ML for <u>flat-topography</u> layout</b>		
	... Layout: Klystron Cluster RF Scheme (KCS)	C. Adolphsen	Received
	... Low-level RF for KCS	J. Cawardine	progressed
	... Power distribution system	C. Nantista	Received
<b>5</b>	<b>ML for <u>mountainous-topography</u> layout</b>		
	... Layout: Distributed Klystron RF Scheme (DKS)	C. Adolphsen	Received
	... 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

