



PM Report – AS WebEx

- **PAC review – 18-19 May Taiwan**
- **Baseline Technical Reviews (BTRs)**
- **AD&I Meetings**
- **TeV Upgrade ‘homework’ (August 17 AD&I meeting)**
- **TDR Outline (update)**
- **Calendar / AOB**



May ILC PAC Review

- Reason why we missed an AS TAG meeting 😊
- All talks publically posted:
 - <http://ilcagenda.linearcollider.org/conferenceDisplay.py?confld=5084>
- Machine themes:
 - SCRF R&D (incl. S1 global)
 - Beam Test Facilities (ATF/ATF2, CESRTA, FLASH)
 - TDR cost estimate (incl. SCRF mass-production)
 - TDR baseline (incl. plans for TeV upgrade studies)
 - results of TLCC
 - plans for further baseline consolidation (BTRs)
 - Collaboration with CLIC



Key PAC Findings

- **Importance of coherent concept beyond 2012**
 - maintaining ‘core team’ for post GDE era
 - (comment aimed at ILCSC)
- **GDE primary goal should be to keep costs under control**
- **Endorse ‘build-to-print’ concept for SCRF**
 - labs take and manage risk
 - strong support for KEK ‘pilot plant’ concept
 - “Never ask industry to do what you can’t do yourself”
- **Encouraged by R&D results**
 - gradient / scrf
 - BTF progress/successes ‘impressive’

Final report should be available in coming weeks



Baseline Technical Reviews

- **Important part of our design process**

- Establishing the baseline design for the TDR
 - next level of detail beyond TLCC
- Consolidation of **Technical Design Documentation** (TDD → ILC-EDMS)
- Cost estimate
- Final **Technical Design Report(s)**

- **Schedule**

1.	Damping Rings	7-8.07.11	INFN Frascati
2.	RTML e+ e- sources BDS/MDI	24-28.10.11	DESY
3.	Linac (SCRF)	19-20.01.12	KEK
4.	CFS/Global	1 st -Qtr 2012	FNAL or CERN



BTRs (Accelerator Systems)

- **System design (for TDR*)**
 - Parameters
 - Baseline lattice (→ see register later)
 - component descriptions (lists!)
 - magnets / power supplies / RF / vacuum / diagnostics /..
 - CFS requirements
- **Cost estimate**
 - based on above
 - expected to be mostly scaled from RDR data
- **For BTR**
 - important to identify ‘what has changed’ from RDR
 - → Prepare decisions / documentation in advance ←
 - BTR is ‘final review’ of these issues
 - goal: post BTR decisions to a minimum



BTR – AS – Design Register

- **Lattice design is basis for everything**
- **‘Design Register’ first iteration to be released next week**
 - 22.06 AD&I meeting – presentation from Benno List
- **Attempting to pull together and document current lattice status**
 - provide interface for CFS and costing
- **Remaining work to be identified and prioritised**
 - and potentially lived with (for TDR)



BTR – AS – Documentation

- **WBS structure in ILC-EDMS**
- **Top-level description of system (layout)**
- **Parameter tables**
- **Beamline overview**
- **Lattice files**
- **Component lists**
- **Component specifications**
 - spec. sheets
- **CFS criteria**
- **(Cost information)**

More detailed information coming soon.

Should begin to prepare for each AS in advance of the TBRs

(DR beware 😊)



AD&I monthly meetings

- **Important part of the BTR process**
- **Next week (22.06)**
 - Preparation for DR TBR (spec. CFS)
 - Release of 1st iteration of Design Register
- **July 20 (tbc)**
 - Post review from DR BTR
 - Proposed agenda for DESY October review
 - Design register and documentation update/status
- **August 17 1 TeV upgrade**
 - Reports on TeV upgrade homework (see next)
- **September / October → DESY meeting**



TeV Homework (AS)

- **Email request sent 10th June**
 - summary of 27.05 AD&I meeting
- **TeV machine parameter set for high-beamstrahlung (10%) and low beam power [Kaoru (Toshiaki, Andrei)]**
 - This was proposed as a possible scenario parameter set for the physics and detector communities to study (in addition to a more conservative beamstrahlung parameter set). **300MW AC power limit**
- **Range of possible linac beam parameters at 1TeV - Chris A., Chris N, Shigeki.**
- **Main linac lattice for 1 TeV upgrade (assuming existing quadrupole arrangement and limits) - Kiyoshi and Nikolay**
- **Possible parameter sets for two and three-stage bunch compressor - Nikolay**
- **Proposal for undulator source parameters at 1 TeV (Wei, update from Accel. Systems meeting 20.05)**
- **BDS relevant issues for TeV operation (collimation system, main beam dump) – Andrei**
- **DR and e- source will need to comment on any possible parameter sets**



TDR Outline

- **Part 1: R&D Summary**
 - Interim Report Chapters 1-3
- **Part 2: Reference Design**
 - organized per Accelerator System
 - includes TeV
 - includes Cost and Schedule
- **Part 3: Risk Analysis and post 2012 work**
 - R & D, Project Engineering and Risk Analysis
- **Part 4: Project Implementation Plan**
 - Harrison and ILC-EC



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Final outline
(including next-level
sections by mid-
summer)
Begin work at LCWS



Schedule – 2011/12

- **DR BTR workshop** **7-8 July**
- **EC face-to-face** **19-20 July**
- **TDR Costing** **20-21 July**
- **SRF11 satellite meeting - industrial** **24 July**
- **IPAC11** **4-9 Sept**
- **LCWS11 (ILC-CLIC workshop)** **26-30 Sept**
- **RTML/Sources/BDS BTR workshop DESY** **24-28 Oct**
- **ILC PAC Review** **14-15 Nov**
- **TTC / S1 Global** **5-9 Dec**
- **Linac BTR workshop** **19-20 Jan**