



2009 Linear Collider Workshop of the Americas – WG Convener Meeting

Agenda:

1. Goals
2. Format: Plenary and Parallel Sessions
3. Parallel Sessions (Conveners)
 1. Goals
 2. Joint Sessions
4. After the workshop: preparing the 'SB2009' Proposal



Goals – R & D:

- **Progress on risk mitigating R&D,**
 - primarily the global high-gradient SCRF programme;
 - electron cloud suppression and ultra-small emittance generation in the damping rings (CESR-TA, ATF, DANE, etc.);
 - ATF2 programme for demonstration of the final focus optics and beam stabilisation.
 - Review of TTF/FLASH 9mA experimental run.



Goals - Engineering:

- **Technical progress on engineering design work,**
 - specifically the SCRF linac (cryomodules) and
 - development of „plug compatibility“ interface specifications.
 - Global 31.5 MV/m cryomodule test (“Global S1”);
 - development of world-wide infrastructure and SCRF test facilities;
 - development of cost effective high-level RF power sources (including HLRF solutions associated with a single-tunnel option).
- **Machine Detector Interface**
 - (jointly with ALCPG), including CFS for collider hall.



Goals - Design:

- **Accelerator Design & Integration (AD&I):**
 - review of the “Straw-man Baseline 2009” (SB2009) elements,
 - including reports on on-going studies and plans towards a baseline proposal.
 - Assessment of associated cost increments and risk (via the development of the Risk Register).
 - This workshop will also provide an **open forum** for discussion of the proposed design modifications with the **physics and detector** community.
 - **Tuesday 16:45 – 17:45**



Goals - Design:

THIS IS OUR HIGHLIGHT THIS TIME

Revision -
Mcr/NKT

- **Accelerator Design & Integration (AD&I)**
 - We will complete our rebaselining proposal by the end of this year, and we now must move forward. So, let us -
 - Review of the “Straw-man Baseline 2009” (SB2009) elements, → Please check these.
 - Complete our first cut at the cost increment analysis and the risk register analysis.
 - Sort out the homework items to do within this year, toward writing the proposal doc.
 - Identify the key design issues to remain in TDP2. Outline our rough plans of attack, in particular if some related R&D plans are already in place.
 - This workshop will also provide an **open forum** for discussion of the proposed design modifications with the **physics and detector** community.
 - Tuesday 16:45 – 17:45



ALCPG09 GDE Strawman agenda

	Tuesday	Wednesday	Thursday	Friday	Saturday
8.30 - 10.00	Joint Plenary	GDE Plenary Accelerator Design & Integration	WG's parallel Peter G - sources	WG's parallel Peter G - Main Linac	GDE Plenary WG summaries
10.00 - 10.30	Break	Break	Break	Break	Break
10.30 - 12.00	Joint Plenary	WG's parallel	WG's parallel EC Gov & PIP	WG's parallel EC Gov & PIP	Joint Plenary GDE summary LCWS summary
12.00 - 13.30	EC lunch	EC lunch	EC lunch	EC lunch	
13.30 - 15.00	GDE plenary CLIC, SRF, XFEL etc... Special Det. Session - machine parameters	WG's parallel Peter G - damping ring	WG's parallel Peter G - BDS	WG's parallel Peter G - CFS	
15.30 - 16.00	Break	Break	Break	Break	
16.00 - 17.30	GDE Plenary PM's & TAGL's goals, organisation etc ...	WG's parallel Panel discussion (in early evening)	WG's parallel	GDE Plenary Accelerator Design & Integration	

WG's: Sources, BDS, Damping Rings, Main Linac, CFS, Beam Dynamics (?)

October 1 Parallel session

October 1, 2009							
Session Time	WG1 - Sources	WG2 - DR	WG3 - ML	WG4 - BDS	WG5 - Beam Dynam	WG6 - CFS	Cost Management
08:30 - 10:00	with CMG		Main Linac Integration	ATF2	reference network	regional tunnel configs	with Sources
10:00 - 10:30	Break						
10:30 - 12:00	target		Main Linac Integration	BDS systems	RTML	Life safety	
12:00 - 13:30	Lunch						
13:30 - 15:30	300 Hz and Compton		Cavity gradient			regional tunnel costs	
15:30 - 16:00	Break						
16:00 - 17:30			Cavity gradient	with Instrumentation		2D and 3D drawing devl.	

October 2 Parallel session

October 2, 2009							
Session Time	WG1 - Sources	WG2 - DR	WG3 - ML	WG4 - BDS	WG5 - Beam Dynam	WG6 - CFS	Cost Management
08:30 - 10:00			with CMG	gamma gamma		EDMS	with ML
10:00 - 10:30	Break						
10:30 - 12:00			HLRF	with IR		Cost estimate	
12:00 - 13:30	Lunch						
13:30 - 15:30			with CFS	summary prep		with CMG	with CFS
15:30 - 16:00	Break						
16:00 - 17:30	AD&I w/ E. Paterson						



Workshop Conclusions:

- **Goals for the next GDE workshop:
LCWS10 Beijing, March 26-30, 2010**
 - R & D, Engineering, Test Facilities
- **‘SB2009 Proposal’ :**
 - Conveners and Group Leaders:
 - Develop the contents outline → skeleton exists
 - Develop the writing plan
 - Assign the authors
 - And report to PMs, before the end of this ALCPG mtg.
 - **Note: AD & I meeting: DESY December 2 – 3, 2009**
 - M. Ross, A. Yamamoto, N. Toge
- **Also note,**
 - AAP Review, January 2010
 - GDE workshop: LCWS10 Beijing, March 26-30, 2010



Timeline

- **3-4 September ADI/CFS Meeting (Daresbury)**
 - Finalise CFS SB2009 layout drawings
 - Review CRI layouts / solutions / CAD3D
- **29.09-03.10 ALCPG (Albuquerque)**
 - Review results of May Action Items
 - Reports from AvTF and tunnel safety (CFS)
 - Review cost increment estimates
 - Identify and resolve outstanding SB2009 issues
 - Achieve agreement on what goes into Proposal Document
 - Agree on Proposal Document outline, scope and writing assignments
 - Communication with Phys & Detector community
- **2-3.12 2nd AD&I meeting @ DESY**
 - Final review / editing of Proposal Document
 - Resolution of remaining issues from ALCPG
 - Final action items towards producing final Proposal Document.
- **Mid/End Dec. Proposal Report to EC/AAP**
 - Need to set a drop-dead date which takes into account the Christmas Holiday period.
 - Friday December 18 would be two-weeks after 2nd ADI meeting
- **6-8.01.10 2nd AAP review**
- **26-30.03.2010 LCWS (Beijing)**
 - Consensus agreement on TD Phase 2 baseline for TDR cost estimation
 - Including feedback from AAP and larger community.

Done

We are here



SB2009 Proposal Document Outline

1 Introduction

2 Overview of Proposed Modifications with respect to the RDR Baseline

3 SB2009 Proposal

3.1 Parameters

3.2 Injectors

3.3 Bunch Compressor

3.4 Main Linac

3.4.1 Single tunnel

3.4.2 DRFS

3.4.3 KCS

3.5 BDS / MDI

3.6 CFS solution

4 Cost increment

5 Risk

6 Remaining Issues

7 Appendices

7.1 AvTF report (white paper?)

7.2 Tunnel Safety

SB2009 Development at ALCPG:

- **System description**
 - Check the summary descriptions and confirm within the group, and with other groups. Identify open issues
- **Layout description**
 - Check the outline drawings and confirm within the group, and with other groups, in particular, CF/S. Identify open issues
- **Cost implications**
 - Check the preliminary component counts and unit costs for new components. Check within the group, and communicate with Costing G. Identify open issues.
- **TDP2 activities**
 - Check the table for key technical issues. Confirm within the group, and with other groups. Identify open issues
- **By the end of ALCPG**
 - Report the outcome of discussion. Sort out the established agreement and/or outstanding issues.
 - Assign the responsible chief author for each section.
 - Update the outline for the Proposal Document. Fill in a few sentences for each of these bullets if possible. Create a list of open issues as part of it. Share. This is our v.0.1 draft.