

PM report Aug 20, 2008:

Reviews

- PAC
- AAP

Meetings

- ILC08
- CLIC

• FALC

Collaborative activities

- CLIC
- XFEL

Initiatives

- HLRF distribution
- Min Machine
- Plug Compatibility

Schedule



Reviews:

Project Advisory Committee

- Oct 19 20, Paris
- hosted by the chair, Jean-Eudes Augustin.
- Many will remember him from the ltrp 2004

PAC reports to ILCSC and is our primary external review committee.

- We hope PAC complements the AAP, about which more below.
- It is a pretty traditionally 'structured' review.



PAC

- The review will be 'high level'
- with our part lasting ~60% of the total (rest detectors) and our presentations mainly given by Barry, PM, regional directors, etc.
- The detailed agenda is now in process, but key topics will include the following:
 - Organization (many committee members are new to GDE)
 - R&D Plan (this should be the basis for the technical part of the review)
 - Minimum machine design (our approach to project-wide value engineering)
 - Collaborations (including GDE institutional relations and CLIC, XFEL, etc)
 - Project Implentation (includes technical procurement, governance, siting work,...)
 - AAP (our internal review process)
 - Resources (as indicated in the R&D plan, with regional focus)
 - Oversight (FALC, ILCSC this is necessarily connected to the PAC itself so will be in exec session...)



PAC Agenda

- The actual agenda is in final stages of preparation and should be released soon.. Although the final agenda has not been completed, we can assume:
 - Barry overview
 - Marc organization and r&d / design overview (this is where CFS / global are)
 - Akira srf
 - Nick / Ewan machine design and minimum machine
 - Test facility & MDI talks
 - Project Implementation talk
- The meeting is open.
 - The closeout is to be completed Monday mid-afternoon Oct 20, two months from today.

AAP



- This will be completely different.
- It is not 'traditionally structured' and is a full-fledged attempt to bring a stronger panel into the process.
- As an internal review, we hope for the strongest practical feedback, with meaningful recommendations etc.
- (Reminder: for backup info see Barry's directors corners).
- The stronger panel arises from 'embedding' the members into our routine management process as observers.
 - So that, for example, Katsunobu Oide is an observer at the monthly AS webex and attends thematic workshops.
 - Nominally, Eckhard Elsen fulfils this role for CFS / Gbl.
 - As you know, Jonathan also observes the cfs process.



AAP Planning

- This review is to be held April 17 to 21(?) 2009, 5 days, at kek.
- It will be the 'LCWS' meeting, so will include opening and closing plenary sessions.
- The 'review' part of the meeting is also expected to be plenary, so that the full panel will see presentations that cover the breadth of our work.
- In addition to the 9 AAP members, we expect a few (7?) external members.
 - AAP is chaired by Bill Willis (Eckhard Elsen helps in this role).



Your part in AAP review

- We will need strong participation by the Technical Groups at the review.
- We call it the 'Technical Design Phase 1 Interim Review'.
- It is broadly based on the R&D plan and emphasis should reflect the goals, schedules, resource commitments, management / technical strategies, issues, etc... listed there.
- Foremost among these is the goal to have an updated baseline by the end of TDP-1 in July 2010.
 - There will be a second TDP-1 review in spring 2010 leading up to that point.
- This AAP review is really the first comprehensive ILC review and is therefore quite important.



ILC08

- We will use ILC08 to prepare for the AAP review.
- When reading the ILC08 goals, distributed this week, focus on what is to be completed and presented at the review.
- In summary, these goals are:
 - 1) review status and plans,
 - 2) esp for the test facilities,
 - 3) develop goals (milestones) for r&d and
 - 4) discuss collaborative efforts.
- During ILC08, there will be meetings with PM's to underline goals, deliverables and strategy for the AAP review.
- The agenda should be posted soon and parallel session plans should be reported at the next cfs/global webex meeting,



ILC08 Organization

- As usual for such large, gde-wide meetings, ILC08 is not thematic and is therefore structured along the lines of our technical groups, with a few important exceptions.
- Because of this, special care must be applied by the working group conveners to arrange joint sessions that cover various critical cross-group activities.
- For logistical and for practical reasons, there are only 6 working groups.
- We intend to be able to accommodate meetings outside of the nominal wg's, and should start discussing these soon.

FALC



- FALC is one of our two oversight bodies and is comprised of funding agency representatives from most of our supporting governments.
- We look to FALC, perhaps, to be the seed of the funding agency council who will manage the construction of the ILC, eventually.
- The group meets twice a year and a report from the ILC is always on the agenda.
 - The January 2008 meeting was dominated by news of funding cuts in the US and UK.
- The meeting last month, July 14, was really the first one since the formation of the 'PM team' which could focus on what we are trying to do.
- As such, it is the first time where we can find real feedback as to what this group feels it might be able to do.
 - The situation is somewhat tenuous since there is little precedent, on a global basis, for collaboration at this level.



FALC July 14, 2008 meeting

- There were three discussions at the meeting that are of interest to us:
- 1) The group was quite interested in our intention to develop a 'project implementation plan' pip.
- This should be part of the tdr, to be delivered in 2012.
- The pip will include
 - srf (other high tech) procurement strategies,
 - a funding model and
 - a project schedule,
 - a governance plan, etc).
- It is quite clear to me and to some (all?) members of FALC, that the pip works best if it is based on a consensus developed between the project (us) and themselves.
 - How should this be done?
- It is also clear that we should begin work on it now and that there are links between the pip and present r&d activities.
 - Our attempt to institute a high-tech plug compatibility is an example if we can have a degree of flexibility in the assembly of srf components, then it may be possible for these sub-components to be supplied from relatively small-scale partners from across the world.
- Of course, FALC will be interested in the funding program etc items beyond the direct interest of the project managers.



- 2) There is a sub-group, I believe, who would like to look closely at the r&d plan especially the resource tables and lists of participating institutions.
 - Ultimately, their scrutiny may help bolster us by lending validity to our plan.
- In both the US and UK we are faced with funding program officials who are skeptical about contributions from those outside their country.
- The linkage with the implementation plan is also clear; namely that the same funding agency groups will need to develop ties to partner agencies and the project itself.
- FALC is the only place where funding agencies can speak directly to one another.
 - Until this last meeting it was chaired by Roberto Petronzio, from the next meeting forward, the group will be chaired by Pierre Coulombe of Canada.



- 3) This meeting included a presentation on CLIC, given by Jean Pierre Delahaye.
 - Between the Cern director and Jean-Pierre, the CLIC group made a strong 'sell' of their project.
- Issues include
 - the relative maturity of the design effort,
 - the nature of the demonstration and systems test to be provided by the test facility and
 - the relative cost vs energy.
- Because of the tendency of funding groups to react somewhat ambivalently when technical experts disagree, I feel we should work together, internally, to develop common agreed-upon statements on issues such as those listed above.
- In this way they can make fair decisions without requiring heavy decision making procedures.
- We have always tried, in the ILC FALC presentations, to provide genuine, simple summaries of our status.
- The PM and Jean-Pierre have agreed to try to make such common statements which would then, hopefully, be used in our fall workshops.



CLIC

- The Cern-based CLIC project will host their annual workshop in mid-October. The charge to the conveners and working group plans have been formulated and distributed. Of special interest to us are the activities to be reported through the CLIC-ILC collaboration working groups.
 - For us, today, the most important of these are the cfs and cost/schedule groups.
- We would like to have
 - 1) consistent reporting of working group efforts during the opening and closing plenaries,
 - 2) consistent (reciprocal is perhaps to rigorous) attendance to the workshop and
 - 3) consistent inclusion in the respective agendas CLIC workshop and ILC08. There will be no CLIC plenary at ILC08 and no ILC plenary at the CLIC workshop.
- This should not be too difficult.
- I remain concerned about the work done by the collaboration working groups goals, as listed in closing plenaries at the Dubna meeting.
- To this end, to counter this concern, we will hold a short 'update-only' teleconference September 19.
- Please prepare a presentation for that meeting and circulate it in advance.



- In mid-July, the slac group proposed the development of overmoded waveguides for the distribution of rf to the cryomodules as a technical solution that would allow the abandonment of the linac support tunnel.
- This should provide substantial flexibility to our design because it makes single tunnel-deep and shallow enclosure systems practically equal.
 - Using technical advances to level the comparison between sites of very different topographies is one of the primary goals of the Dubna workshop and this proposal could do just that.
- The executive committee will meet at KEK in early September to consider the impact that diversion of R&D funds would have and try to listen to the pros/cons of the proposal and associated r&d.
- It is no surprise that the technology referred to in the SLAC proposal is very similar to that developed for the xband distribution in the nlc.
- We will proceed to make a recommendation on the r&d for this proposal.
- In addition, we will adopt it as acd and put forth a decision process for adopting it as baseline, as part of tdp1.



waveguide HLRF distribution

- Chris Adolphsen July 21, 2008
 - hoped-for response from Dubna CF/S strategy
- Design and Impact presentation for EC Sept 5
 - Technical (Chris Adolphsen via telecon)
 - RD Plan (Akira)
 - Value Estimate update (Marc/Peter via telecon)
 - Aug 11 teleconference (Vic, Mike H, Chris, Marc, Peter)
- 1 M\$ / year total for 2 years (US / Japan) R & D needed for re-baselining process
 - resonant line powered by one or two MBK's
 - support to be requested from regional directors
 - PM request: EC provide comment on this scheme at KEK meeting
- XFEL cable-based design?



Plug Compatibility

• R&D:

- Goal: prove baseline performance
- Restrict / promote specific R&D actions
 - Establish unified interface conditions
- Develop specification and supporting documentation
 - Draft release 2008

Project Planning:

- Develop guidelines as a basis for PIP preparation
 - Goal: PIP delivered in 2012
- Suggestions (from PM):
 - <u>Define subcomponents</u> broadly based on interfaces established during R&D
 - Multiple vendors, multiple designs
 - Initial SRF-related PIP preparation guidelines due in 2009



Plug Compatibility

Costing based on a single design

- Assumption: design differences do not result in substantial cost differences
- RDR: single vendor with multiple sets of tooling
- Multiple vendors roughly equivalent
- Cost engineers (WB, PG, TS) and Kerby to be asked to develop model
 - PM will specify AAP review goal at KEK EC
- 'Industrialization' based on test facilities during TDP
 - And XFEL



KEK face to face EC meeting

- September 5 and 6 (1/2 day)
- (September 4 ATF/STF reports and tour)
- (meet with DG morning September 5 per Yokoya May 15)
- September 8, 9 Nick Marc and Akira meet with KEK staff

Agenda – KEK EC PM report:

- CFS / Main Linac Integration: waveguide HLRF distribution
- Project Implementation Plan preparation process
- Minimum Machine parameter plane and approach to options
- FALC 'RG'
- response to the CERN / CLIC team
- Plans for PAC, Chicago and AAP



PM Schedule – through 02/2009

(new items)

- Applied Superconductivity Conference Chicago August 19, 20 (Akira, Marc)
- Fermilab August 21 (Akira, Marc)
- SLAC / LBL August 22 (Marc)
- XFEL CF DESY August 25-27 (Marc, Nick)
- KEK Sept 4-10 (PM)
- JLab Sept 11 and 12 (Akira, Marc)
- JINR / GSPI Telecon Sept 17
- CLIC / ILC Telecon Sept 19
- SLAC / LBL Sept 26 (Marc)
- Linac08 (Victoria-will meet with JINR team), CCAST / ATF2 (Daegu) Sept 29-Oct 3
- CLIC / PAC / TTC Oct 14 Oct 23
- BARC Oct 24 (Akira, Marc)
- Positron workshop Oct 29-31 (Nick, Marc)
- LCWS/ILC08 Nov 16-20; Project X Nov 21 22 ?
- DESY XFEL technical and CF early December
- KEK ATF project (also BDS?) mid December
- China December 9 10, or Dec. 16, 17
- INFN / Spain Jan 2009 ?