HLRF Options WA

- Variants: Klystron Cluster, DRFS
- Issues:
  - Klystron Cluster
    - R&D on proof of principle
    - Beam control issues
  - DRFS
    - Primary issue 'Design for Manufacture' (aggressive cost reduction)
    - Single-tunnel integration
- Action item:
  - All three sample sites to evaluate/compare impact of *both* options (at least superficially)
- Action Item:
  - DRFS – better tunnel integration design
  - Klyst. Cluster –
- Action Item:
  - Identify (maximise) common design features (if possible)

Positron Source SB-2009 WA

- Undulator Source system @250 GeV with QWT (1/2 RDR power)
  - Integrated (mature) solution exists
  - Action items: re-evaluate parameter sets (spec. target load) for
    - QWT vs FC/LL
    - Yield at 150GeV = 1.0 or 1.5
    - Note: parameters also for RDR beam power (margin)
    - Yield vs Ebeam (100-250 GeV)
  - Action item: target shielding curves – size of 'shielding box' for CFS
  - Action item: compile comprehensive review of beam dynamics
  - Action item: discuss materials test at FLASH

- Alternative '300Hz' solution R&D to continue
  - R&D on windows, li-targets etc applicable to any source
  - Discuss scope for integrated system design (including cost-guestimate)

Other AS WA

- E- source
  - No change from RDR in lattice layout
  - Action item: evaluate integration in BDS tunnel
    - spin manipulation
  - Action item: consider possibility of better integration with DR infrastructure.
    - Independent operation
- BDS
  - WA take lattice supplied this meeting for integration studies
  - Action item: Evaluate complete geometry options for e+ and e- sides
- DR
  - Action item: for 3.2km ring, what are the bunch parameter limits?
    - (e-cloud)
  - Comment: ~1.5 km ring looks attractive!
- BC
  - Single stage as presented.
  - Action-item: review / re-evaluate stray field tolerances (beam dynamics)
  - Action-item: evaluate BC phase/amplitude specs (compare to RDR)

RDR vs TDR Baseline(s)

- RDR remains a valid and workable solution for the ILC

- TDR baseline (subject of this meeting) will be a second option
  - Single-tunnel variant, taken to same level of maturity as RDR

- Propose both baselines will be cost updated by 2012
  - Expect some feedback from TDP-2 activities on RDR design -> RDR'
  - Need to understand resource implications.

Risk Register

- Update not realistic to achieve this meeting

- PM action item: take information supplied today and review.

- Produce updated version by ALCPG for review/discussion
  - Interaction with TAG leaders will be needed

CFS Interaction

- Required for cost impact evaluation
- Information on RDR to SB2009 differences should be supplied
  - WBS-like line items (excel)
- Staged (integration) meetings (every week)
  - Walk through each system (5 weeks)
    - RTML
    - ML
    - DR
    - BDS/MDI
    - Central Region Integration (including sources)

- CFS/PHG to evaluate information and begin analysis

- Time to iterate as needed before ALCPG
  - Face-to-face? May be difficult.

Availability Studies (single tunnel)

- Task force:
  - Himel, Carwardine, Elsen, Walker, (KEK?)
- Review:
  - AVAILSIM "philosophy"
  - Input numbers!!
- Studies
  - Define 'operations philosophies'
    - Scheduled downtime, recover time, "opportunistic" machine studies…
  - Identify specific reports for ALCPG
    - E.g. graph of availability versus Ecm.

Comments/Issues

- Lattice and layout (design work)
  - Who in the world can do this?

- Documentation
  - ILC-EDMS will be our primary 'working space'
  - (keeping it all in one place!)

- Comparison table (SB-2009 vs RDR)
  - PM to prepare top-level chart based on input from this meeting
  - (linked to RIsk Register)
  - Will need discussion and iteration.

- …