Accelerator Systems
EDR Kick-Off Meetings
Preparation

Nick Walker

Quick Intro

- When are the meetings

- Review the charge

- What this (25/7) meeting is for

- Tentative agendas:
  - **E- source**   **John Sheppard (for Brachmann)**
  - **E+ souce**   **John Sheppard (himself and Clarke)**
  - **DR**   **Nick Walker (for Andy Wolski)**
  - **RTML**   **none**
  - **BDS**   **Andrei Seryi**

- Discussion of who does what over next weeks
  - **Organisation issues**

When/Where are the AS meetings?

- RTML   27-29.08   FNAL   Tenenbaum   Solyak
- e- src   24-26.08   SLAC   Brachmann
- e+ src   8-10.09   Daresbury   Clarke   Sheppard
- BDS   11-13.10   SLAC   Seryi
- GDE   22-26.10   FNAL
- DR   5-7.11   Daresbury   Wolski

(Formal) Charge

- The EDR, to be completed in 2010, will contain an updated ILC value estimate and a project execution plan. Prioritization of Engineering Design Activities to be done in support of the EDR will be based on risk mitigation, cost reduction and project preparation. The EDR will be based on an assessment of the RDR technical content and its value estimate.

- We believe that the RDR vale estimate has sufficient detail to
    - **Permit trend analysis for the cost reduction/optimization and**
    - **Give guidance for the R&D and industrialisation that must accompany the engineering design process of the EDR.**

- The primary focus of the EDR kick-off meeting is to consider the planned EDR design and industrialisation effort.

Global Design Effort

"Plain English" Goal #1

- Review the design
  - **Does it work? (better: *is the performance acceptable*)**
  - **Are there still concerns on performance?**
    - (this will touch of risk assessment and R&D plans)
- Review the cost estimate
  - **Examine each element in Cost Engineers Value Matrix (Tech./Global Group versus Area System)**
    - Check for inconsistencies (numerology, unit prices)
    - Identify cost items that are 'questionable'
      - Cost metrics from existing machines
- Quantify the "Engineering Value" (= worth/cost)
  - **Identify CFS drivers (requirements)**
  - **Attempt to evaluate performance/cost derivatives**
  - **Critically review each design decision wrt to its cost impact (derivative)**
- *Are the cost increments / performance gains justified*

"Plain English" Goal #2

- Make a plan for the next three years that includes the known 'alternative designs'
  - **Clearly define achievable (realistic) scope**
  - **Identify resources problems (many!)**
  - **Identify ACD issues**
    - Why do we have them? (lower cost? Better performance?)
    - What needs to be done to see if they are truly beneficial (selection criteria)

"Plain English" Goal #3

- Work package definitions.
  - This links up with goal #2 via planning.
  - Developing a WBS (rows in a Gantt chart) should yield Work Packages

- Develop (for example: BDS,DR) lists
  - Into a structured plan or WBS
  - Need to massage these into the correct structure to deliver our goals for the EDR
  - In addition, complexity of WPs must reflect available resources.

- These meetings can only be the start of this activity
  - An additional iteration will likely be required once key well-defined milestones/deliverables are identified.

What is this (informal) meeting for

- Begin to prepare the meetings
  - **Eckhard Elsen (with Max) are responsible with 'hosts'**
- Agendas – do they cover the charges?
- Logistics:
  - **Who must physically attend**
  - **Who must attend but can do so via WebEx?**
  - **Time shift (two region bias)**
  - **Action items for next weeks**
    - Running up to meetings themselves.
- Good opportunity to raise questions!
  - **Don't expect to answer them all today, however.**