

US CMS Level II Telecon

Dan Green &

Ed Temple

November 7, 1997

12:20 PM CDST

Introductions (1)

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- Each Level II Manager & Participant
 - Say a few things about background
 - Describe self, as perceived by self and as perceived by others
 - State aspirations wrt CMS

Introductions (2)

- Temple led ER Reviews; hardnosed but fair
- Described by others, particularly at the Advanced Photon Source as
 - Expecting a lot from the team
 - But very fair, and
 - A “People Person”
- Perceive self as highly “task oriented”

Purpose of Telecon

- Discuss need to “baseline” CMS Detector.
- Means Self-Consistent Technical, Schedule, and Cost Baseline including “believable” contingency, in present US HEP context.
- Discuss a couple of approaches.
- Hope to reach consensus on approach.

Background

Ken believes we need to have a CREDIBLE SCOPE, SCHEDULE, AND COST (INCLUDING CONTINGENCY) for the USCMS before we can really know how much we need to descope. That is a baseline for the current scope that you, Ken and I each and all personally buy into. You may be near that point with regard to a base estimate. It seems that Ken views the Fermilab assignment of responsibility as coming so near the Lehman review that there was not really time for Fermilab management (detailed) review of the scope, cost, and schedule. And, I wasn't here at all. So, we'll need to talk about these views.

Approach Step 1

- Conduct Project Management Group reviews of each Level II System aimed at establishing a credible estimate (including contingency) for the present technical scope.
- Once this is done for all systems, we'll know how much we need to descope the overall US CMS effort

Approach(1) Step 1

- Level II Managers prepare and present their systems to the PMG including contingency.
- If US CMS PMG agree with estimate for present scope as presented, this step is complete.

Approach(2) Step 1

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- If TD and CPM do not agree with the estimate, they propose their own.
- Or if US CMS PMG does not agree with estimate for present scope as presented, this matter is discussed and negotiated until there is agreement.

Approach Step 2

- US CMS develop appropriate (\$ amount) descope while maintaining
 - optimal physics capability, and
 - to the extent possible, capability to regain scope if future cost performance is quite good
- US CMS discuss / negotiate the proposed descope with the International CMS Collaboration / Management

NEXT STEPS

- Continue PMGs by Level II
 - TriDAS - Trigger portion 10/23
 - Part of Common Support 11/17-20
 - ECAL 12/12?
 - EMU Week of 12/18,19
 - HCAL Sooner than Week of 12/15
 - DAQ Week of 12/15
 - Tracker Late December
- See Dan's e-mail "let's get moving."

Preparation Discussion

- “Bottoms Up” Estimate. Listing and Cost Estimating elements required for your system from the bottom up, rather than working down from a cost ceiling.
- Contingency application. Detector workshop concluded that 50% reasonable at the outset. Whatever we do must be generally consistent with this.

Contingency Guidance (1)

- Dan Green's One Page Contingency Guidance.
 - Design Maturity Factors: Range 1.5 - 1.0
 - Judgement: Range 0.6 - 1.4, “but usually not less than 1.0.”

Contingency Considerations Guidance (2)

- Design Maturity
- Judgement
 - Technical Risk
 - Difficulty
 - Omissions
 - Schedule Risk
 - Escalation, Commodity & Current Fluctuations