NASA Lessons-Learned Workshop-2 Cost & Schedule

Showing the Schedule: Do the Answers Match the Questions?

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Why Show Schedules in Proposals?

- Project schedule is a framework for explaining how the project will work: start, middle, end
- Goal is to tell the project story and facilitate a fair evaluation
 - AO should require details that advance that goal, not require details that don't
- Recent AOs have not been too specific about what level of detail is helpful to reviewers – Does that mean we are doing the right thing?



Step 1 Proposal Schedules

- Show the start-to-finish project schedule at a high level
 - "High level" is in the eye of the beholder
- Add detail where it helps to tell the story, omit everything else
 - Many different opinions about more vs. less detail at Step 1
- Schedule is the framework for the budget (they had better match)
- Schedule is a picture of the management plan



Key Features 1

- Probable start date, feasible development times, identified launch date all must make sense together
- Constraints on the launch date should be discussed in the text
 - Schedule can add credibility to team's ability to make the date
- Identification of mandatory milestones and decision points proves that you can read 7120.5 and other program docs
 - SMEX General Project Plan, for instance
- Personal bias: the more details a Step 1 schedule shows, the more it's wrong



Key Features 2

- Show funded reserve periods
 - Placement and duration lend credibility (or not) to the overall plan
- Will AOs continue to consider funded schedule reserve to be a part of the overall cost reserve?
 - This is a mixed blessing it's not clear (to me) that combining funded schedule reserve with other cost reserves is less complicated than keeping them separate



I&T Planning

- Schedule in proposal can show I&T at a high level but the important things to reviewers should be a good plan and experienced people
- I&T schedules are highly dynamic at the day-today and hour-to-hour level; flow diagram is probably more useful than schedule dates
- At the proposal level just need to show:
 - Adequate total time
 - Key milestones
 - Generous planned reserve periods



Critical Path

- In Step 1 (and Step 2) proposals the critical path comes from the team's analysis; it's not an output of the scheduling software
- Describe the critical path, then show a schedule that will let you control it



Conveying Information (or not)

- From the reviewers' point of view, what style of schedule picture is the most helpful?
- Are some of us (proposers) doing things that are counterproductive for the reviewers?
 - E.g. far to much or far too little detail, or overly complicated pictures of the schedule
- "Margins, reserves, resiliency": how are these best shown, and how are they evaluated?

