

Questions and Answers about CSR Guidelines

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1. Page 13 of the draft CSR Guidelines states “The mission design should also describe the interface requirements for the Deep Space Network (DSN) or other communications network to be used, along with potential impacts or conflicts with other users of the selected communications resources.” What level of detail is required for potential conflicts? Is this even knowable by the proposers?

You may become aware of conflicts from the DSN Point of Contact or other network provider that you work with during the Phase A study. Of particular interest to be noted would be critical events of the Discovery mission coincident with critical events of other missions. If there are conflicts, the proposer should discuss how it might impact the return of the science data.

2. Page 18 of the draft CSR Guidelines states "Facilities. Provide a description of any new, or modifications to existing, facilities, laboratory equipment..." Does this include the presumed Preliminary Examination Team (PET) who are not co-Is? Are we to extrapolate to the facilities to be present in Phase E?

This section of the CSR must include a description of any facilities needed for the proper curation and preliminary examination of returned samples, including any modifications that must be made to existing facilities. Regardless of their source, these facilities will be needed. Facilities to be present in Phase E must be addressed.

3. Page 21 of the draft CSR Guidelines states "3. NEPA Compliance and Approval. If an RHU is proposed..." Does this apply to all radioactive sources or only those intended to provide heat? If not where are other sources to be discussed?

The AO in section 5.3.2 titled “Use of Radioactive Materials” limits the type of radioactive materials may be used under this AO:

Radioisotope-based sources of electrical power requiring a substantial quantity of nuclear material, such as Multi-Mission Radioisotope Thermoelectric Generators (MMRTGs), are not permitted for missions proposed in response to this AO. The use of smaller radioactive sources, such as radioisotope heater units (RHUs), or radioactive material sources for science instruments is permitted.

The NEPA Compliance and Approval section of your Concept Study Report should address all proposed and allowed radioactive material.

The process for approval for launch of all radioactive sources is contained in NPR 8715.3A NASA General Safety Program Requirements (Sep12, 2006).

Chapter 6 deals with Nuclear Safety for Launching of Radioactive Materials. Following the process outlined there (See Paragraph 6.3) should allow for routine signoff of small radioactive sources by the Nuclear Flight Safety Assurance Manager.

4. Page 22 of the draft CSR Guidelines states "6. Government Furnished Property, Services, Facilities, etc...." Is this only services provided at no cost, or all operations (and Phase E analyses) to be performed at a NASA center? What of the value of Smithsonian square footage for E/PO displays? What of costs proposed to be paid by the ROSES SRLIDAP and DDAP programs? (A similar question comes from the Phase E cost section on page 29)

In this section discuss all Government Furnished Property, Services, Facilities, etc. through Phase E, whether funded or not funded through this proposal. Identify the source of funding for these items.

5. The last sentence on page 21 under "#4. Schedules" states "Schedules are to be provided in MS Project Format." Does this mean that the schedules are to be included on the CD in MS Project format in addition to PDF?

Yes. On the CD schedules should be included in MS Project format for ease of review. They also need to be in the PDF-formatted version of the complete CSR.

6. The second paragraph of page 25 of the Draft CSR Guidelines references Figure 1, and says that Figure 1 "presents all costs for the project on 1 page by project phase, by participating organization and by fiscal year." However, on page 31, Figure 1 does not show how the participating organization would be incorporated into the figure nor does it appear that adding the organization to the figure, would allow it to fit on one page.

The CSR Guidelines have been amended to remove the phrase "by participating organization."

7. The fourth paragraph on page 25 refers to Figure 6. The CSR guidelines state the following "The purpose of this data is twofold: 1) to determine those (civil servant) costs that are included in the NASA SMD cost but are not funded out of the Discovery program, 2) to determine civil servant contributions that are not included in the SMD cost." The question here is: what civil servant costs would not come out of the Discovery budget based on the way full cost works now? When salaries were funded separately, the first purpose was clear, but not now. There's value in the chart, but the purpose isn't obvious.

Under so-called "simplified full-cost accounting," some civil servant costs have been removed from program budgets and moved to a separate "Center Management and Operations" account. Nevertheless, for the purposes of fair evaluation, these costs, as well as salaries and benefits, need to be included in the SMD costs.

8. The title of Figure 3 on page 33 is “Fiscal Year Costs in Fiscal Year 2006 Dollars” with the parenthetical “Totals in Real Year and Fiscal Year 2006 Dollars.” Do you really want each FY year cost in FY06 dollars?

Yes because the cost cap is stated in FY06 dollars.

9. Section E on page 12 states that “If there are no changes, to the science investigation section must be repeated identically from the proposal with a statement that there are no changes.” Besides what appears to be a “cut'n'paste” problem, can you explain what you mean by “repeated identically?” Do you mean format and content, or just content?

Just content needs to be reproduced if the science has not changed. Note that this section must still follow the readability guidelines of the rest of the CSR.

10. The guidelines (page 42) for Section K - PSP, DAP, and/or GO Plan state: “Complete a summary of costs according to the format shown in Figure 7.” There is no Figure 7 in the November 20, 2006 guidelines.

The CSR Guidelines have been amended by the deletion of the last five sentences of Section K.

11. Clarify which version of 7120.5 to use (version “c” or “d”)

Since the D version of 7120.5 has not yet been formally adopted, CSRs must comply with the requirements of 71205.C. Any changes to project documentation required for compliance with 7120.5D after its adoption by NASA will be made during Phase B.

12. Page Limits — clarify that the 5 pages for SC are in addition to the 4 pages for E/PO (and not a 5-page total).

As stated on pp. 22-23 of the draft Concept Study Report Guidelines, “The SC may have a separate 5 pages allocated to it to discuss its approach and implementation.”

13. Can the page limitation for the Table of Contents be increased from 2 to 5 pages?

If more than two pages are truly needed for the Table of Contents, then up to five may be used.

14. Can the following cost requirement be clarified: “The uncertainties in the baseline cost estimate must be discussed. A confidence level and high and low cost values around the baseline proposed cost estimate appropriate to the level of uncertainty must be discussed. A discussion justifying the confidence level and the high and low values must be provided.”

This requirement may be summarized as “use probabilistic cost estimation procedures and include an explanation of the assumptions used and the results produced.”

15. The rows in the required cost table, Figure 1, does not follow the NASA standard WBS from 7120.5C. May the rows (cost element labels) in Figure 1 be changed to the Project’s proposed WBS cost elements?

Yes.

16. Does the 7 foldout page limit only apply to that portion of the CSR that is page limited? In other words, can we include additional foldouts in the cost appendices, as that page format may facilitate easier comprehension?

Yes.

17. Instructions for the Cover Page and Investigation Summary state the Guidelines in Appendix B of the AO apply. Appendix B of the AO instructs to submit through NSPIRES, is there a link in NSPIRES for the CSR reports?

No, the Guidelines have been amended to state that a cover page does not need to be submitted through NSPIRES. Mail the CSR to the address stated in the Guidelines.

18. Is it permissible to submit the required files (proposal, cost files, Quicktime movies, etc.) on DVD if the files don't fit on a single CD or are multiple CD's preferred?

If CSR files do not fit on a single CD, please use appropriately labeled, multiple CDs.

19. Should grammatical changes or typos in the science section be highlighted and included in the Science Change Matrix?

No. Only substantive changes need to be highlighted.

20. At the kickoff meeting you mentioned that the E/PO effort may exceed the 0.25% guidelines; we wish to have this confirmed if possible.

Indeed, the 0.25% is the minimum required E/PO effort, not the maximum.

21. The CSR directions quote a 2004 EPO guideline as the benchmark against which the EPO plan will be judged. However, the detailed EPO debrief appears to have elements such as STEM which we believe is not in the 2004 EPO guidelines. We would like to clarification on what HQ standards the submitted EPO plan will be judged against.

The evaluation factors to be used will be those contained in “Explanatory Guide To The Office Of Space Science Education & Public Outreach Evaluation Criteria Version 3.0 (March 2004).” Criteria 6 (Pipeline) and 7 (Diversity) explicitly discuss STEM issues.

22. We would like confirmation or further clarification that the Step 2 teams are not responsible for launch vehicle cost increases over the costs provided in the AO and proposed in Step 1 (assuming the same performance, *etc.*, is proposed in Step 2 as in Step1).

The Step 2 teams are not responsible for cost increases in launch vehicles that may occur after submission of the Step 1 proposal. If a different performance class launch vehicle is required by the Step 2 proposal, then use the Launch Services Annex found on the Program Library (provided for the Step 1 competition) for launch vehicle costs.

23. Please define “logistic support” as used in Section F.4 of the CSR Guidelines (page 15 of CSR guidelines document).

The CSR Guidelines have been amended by the deletion of the phrase “logistic support” from Section F.4.

24. Section F.5 of the CSR guidelines asks for: “The draft Level 1 science requirements of the investigation, as agreed to by the PI, PM, and other key personnel, must be clearly identified in this section.” Since there is also an appendix devoted to Level 1 requirements, can we point to the appendix instead of duplicating them as asked for here?

No, the science requirements must be included in the body of the proposal. The appendix devoted to all of the Level 1 requirements is a draft of the requirements appendix to be added to the Discovery Program Plan upon selection and is therefore a distinct entity.

25. Are the following wordings equivalent, and, if not, how do they differ: “key personnel”, “key individual”, “key position”?

“Key personnel” are defined in Section G.1b. A “key individual” is a person listed as “key personnel.” “Key positions” refers to major roles in the organizational structure, which may include positions that are not held by key personnel. For example, a subsystem lead is a key position but the person occupying that position is not a key individual.

26. The SOW appendix (L.5) requires a schedule. Is this schedule different than that already provided for in the management section of the CSR?

Section L.5 requires two types of schedules, one for each contract option and one for the entire mission. The latter schedule could be identical to the schedule

requested for the management section. The other schedule set is for each contract option alone.

27. The answer to question P-31 in the Step 1 Q&A document stated that for NASA Centers/contractors “Cost and Pricing Data” is not required. Given this, does appendix L.14 not apply for NASA Centers/contractors for the CSR?

Q&A P-21 dealt with cost and pricing certification. L.14 deals solely with cost and price data. Therefore, cost data is required for NASA centers/contractors.

28. The AO references NPD 8730.4A and says it is in the DPL. It is no longer in the DPL. Does this NPD still apply?

This NPD has been cancelled and replaced by NPD 2820.1C, NASA Software Policy.

29. What full cost accounting rules are to be used for phase A and beyond?

See section 5 of the CSR Guidelines and question 7 of this document.

30. Do résumés need to include cost contribution information and signature from Institution’s authorizing official, if a letter of endorsement is included that already contains this same information?

If a letter of endorsement contains the cost contribution information and is signed by an institution’s authorizing official, then the corresponding résumé may omit this information.

31. Can Letters of Commitment from the Step 1 proposal be reused without getting new signatures, when there has been no change in proposed effort from between the Step 1 and Step 2 proposals?

Yes, you may re-use Letters of Commitment when there has been no change of effort between the Step 1 and Step 2 proposals.

32. Can we assume that all MOs selected will proceed into Phase E and so CSR requirements related to Phase B, C, and D activities do not need to be provided as part of the CSR?

If the MO proposal includes significant development of flight software or other items, then those items need to go through a development process, to be described in the CSR. This process is expected to include all necessary and prudent reviews. If the MO requires the development of Flight Software modifications, or new data analysis and processing tools, or a new ground system or modifications to an existing ground system, these items should be discussed and costed in sections describing Phase B and/or C/D as appropriate.

33. Can an Atlas V, Delta IV, or Delta II trajectory vary over a launch window on a given day?

No, the trajectory is not variable for a given software load for Delta II or IV. The Atlas V has the capability to adjust the vehicle's trajectory continuously in order to hit the same inertial targets across a finite window limited by vehicle performance.

34. Do mobile tracking assets have X-band capability?

No, but this capability can be added with proper funding and additional schedule.

35. Is it possible to obtain an error covariance matrix for a given vehicle trajectory at this point in time?

No, NASA Launch Services (NLS) contract values for launch vehicle dispersions should be used.

36. Is it possible to use covariance matrix data from a previous mission that flew to a similar C3 on the same vehicle?

The LSP recommends against using previous mission data due primarily to potential differences in the mass properties between the two spacecraft. The mass distribution of the spacecraft can have significant effects on the errors that are produced, especially if a solid motor (i.e., Delta II with a STAR-48B) is used to inject the spacecraft into its final orbit.

37. Prior to the Announcement of Opportunity being released, LSP has performed some in-house trajectory studies. Is it possible for LSP to perform similar work at this point?

No. The LSP can only supply general information on launch services. The LSP cannot provide any special consulting services to competitors.