



SMEX

Concept Study & Downselect

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SMEX CSR Guideline Overview

- All program constraints, guidelines, definitions, and requirements in the AO are still valid unless noted.
- The CSR is to be a self-contained document.
 - Do not assume that evaluators have read or have access to the original proposal.
- New Launch Dates
 - Mission launch dates must be no later than December 2005 with one launch anticipated by December 2004
- Those proposing the Space Shuttle as the launch service must contact J. J. Conwell at JSC, (281) 483-1178, to determine whether any appropriate opportunities exist and to identify the required opportunity(s) on the Shuttle manifest.
- The one-day review of the Concept Study approximately two thirds of the way through the Phase A study, mentioned in section 7.4.3 of the AO, will not occur.
- Since Phase A studies are being funded with grants rather than contracts, the priced option for a bridge phase, mentioned in section 7.4.2 of the AO, can not be implemented.
- Funding cap is still \$ 75M for total mission cost to OSS but with two exceptions
 - Additional funds for NIAT
 - ELV cost increases

SMEX CSR Guideline Overview

- NASA Integrated Action Team (NIAT)
 - Recommendations of the NAIT were finalized at the time of AO release.
 - To accommodate the cost of these new requirements in the concept study, up to \$ 5M (FY00) may be identified to meet these requirements and not be counted toward the AO cost cap.
 - Incorporate additional costs of up to \$ 5 M (FY00) in the total mission cost to OSS
 - Justify in Appendix and it will not be counted toward cost cap.
 - See the instructions for Appendices in the CSR Guidelines, Part II Section M 12.
 - One of the NIAT requirements is to have adequate cost reserves.
 - At B/C confirmation review, Explorer projects will be required to demonstrate a minimum cost reserve of 20%, or to justify a cost reserve of less than 20 %, (not including the launch vehicle or MO&DA).

SMEX CSR Guideline Overview

- Launch Services - ELVs
 - ELV costs may have increased since the cost used by proposers in the original proposal.
 - Contact Darrell Foster of KSC for updated ELV costs.
 - Any increase in cost for the same launch services as originally proposed will not be assessed against the cost cap as long as you have not changed your requirements (no special services).
 - Budget estimates and charts should show both the original ELV cost and the real updated true cost to NASA.
 - Those proposing launches where there is known risk of launch delays beyond the project's control (e.g. Space Shuttle launch, shared ELV launch) should address how they will manage that risk within the proposed cost and schedule.
 - If the proposed launch opportunity is a secondary or co-manifested payload on an ELV, the proposer must identify the opportunity and provide evidence that the launch service provider agrees to manifest the investigation.

SMEX CSR Guideline Overview

- Budget is constrained in FY02
 - CSR should include a mission profile that allows the mission to be accomplished within the above constraint.
 - If your required funding exceeds the available funding in any of these years this should be justified in the CSR.
- Freedom of Choice for Space Operations
 - Proposers are free to use services from sources other than NASA Space Operations Management Office (SOMO).
 - SOMO services include communications, tracking mission operations, flight dynamics, and data processing.
 - Costs for these services whether provided by SOMO or other sources must be included in cost estimate.
 - Project should conduct trade studies on use of SOMO versus any alternative.
 - Trade study may be in Phase A or no later than Phase B
 - Must use SOMO services if they meet mission objectives at a life-cycle cost to the project or to the OSS that is less than or equal to any proposed alternatives.
 - If OSS and SOMO agree that the proposed approach does not result in the lowest life cycle cost, OSS may direct the Explorer project to modify its approach.
 - See “Freedom of Choice for Space Operations” in the SMEX Library

SMEX CSR Guideline Overview

- In Phase 1, Science was prioritized; in Phase 2 implementation details and commitments will be emphasized. Definitized, final planning will be expected in the Report
- If Project is chosen at Downselection, the proposed costs submitted with the Concept Study Report are final unless NASA elects to renegotiate them during the Project Kickoff.
- No cost growth after selection is allowed, therefore, best possible cost estimates with margins should be proposed.
- For government provided services (launch services, Mission ops, comm., etc) get latest revised estimates and letters of commitment. Contact POC's in reference documents.
- Full cost accounting.
- If obligation authority in excess of identified costs is required, indicate the authority needed by year.
- Detailed cost proposal with cost or pricing data as defined in FAR 15.401 is required for Phase B through E.

SMEX CSR Guideline Overview

- *Guidelines and Criteria for the Concept Study Report*, defines the preparation and submission requirements.
- Reports are single volumes to be organized as outlined in the Guidelines document.
- Page formats and limitations are defined: note foldout = 1 page, no more than 7 foldout pages.
- No reference to proposals; evaluation only of material from (1) Concept Study Report; and (2) Briefing materials from Site Visits.
- Letters of endorsement must be provided from all organizations participating in and critical to the investigation. This includes contributions and all E/PO partners. See Part II Section M 1 of the CSR
- Technical Approach and Management plan should be finalized. A draft Mission Definition and Requirements Agreement (MDRA) is a required Appendix. See Part II Section M 5.
- Definitized planning for E/PO, New Technology, and SDB
- Appendices other than specified are NOT allowed.

SMEX CSR Guideline Overview

- Technical, Management, Cost and Other (TMCO) factors
 - TMCO evaluation defined in *Guidelines and Criteria for Concept Study Report* document in SMEX library <http://explorer.larc.nasa.gov/explorer/sel.html>
 - In Phase 1, TMC Risk was evaluated in only 3 degrees each: Likely, Possible, or Unlikely.
 - In Phase 2/Downselect, we expect 9 degrees for TMCO will be used for evaluation.
 - Cost Realism will be an important risk consideration.
 - Proposals at or near the cost caps and/or with insufficient cost margins will likely be considered High Risk.
 - New technology will add risk unless flight qualified (TRL 8) or have flight qualified/demonstrated backups.
 - All pertinent criteria for Other factors (E/PO, SDB, and New Technology) should be addressed.

SMEX CSR Guideline Overview

- Oral Briefings/Site Visits
 - Oral briefings/site visits to be scheduled in the period of approximately TBD
 - Location of the Briefings/Sites to be determined by the PI/proposal team and coordinated with LaRC/Cindy Daniels
 - Briefing at each site will be limited to 8 hours; an additional 1 hour for a site tour is allowed. (Suggest days of 8-5:30)
 - Visiting evaluation team will be constrained, therefore all briefings should be in plenary. (Avoid splinters please)
 - Written mission specific questions will be submitted to the PI/proposal team about 72 hours before visit regardless of order or schedule date. All team will get the same lead time.
 - Unless specifically requested by NASA otherwise, only data and material presented during the briefings will be considered.
 - Preferred Site selections and dates are due to LaRC nlt TBD
 - Confirmation of Site Visit Schedule will be given nlt TBD