#### **AO SIMPLIFICATION**

#### **Study Team**

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### Objectives:

- Simplify the proposal process to the extent possible to eliminate any unnecessary rules/requirements in the AO, and streamline the way that scientific and technical information is provided to NASA.
- Reduce or eliminate the amount of work that the proposing team has to do over and above what they would have to do anyway to have a credible response.
- Revise the AO/evaluation/selection process, as required, to reduce overall burden to the proposing community, the reviewing community, and NASA while maintaining or improving the present quality.

#### Contents

- Quicklist: Changes that the AO Simplification Study Team believes will remove considerable burden from the proposing community with little to no reduction in proposal quality or significantly impact risk evaluation needs.
- Potential AO Changes: Changes that potentially could remove proposal submission burden from the community, but might well affect the quality of the proposals and/or significantly affect evaluation needs. These changes require additional study before implementing them.
- Potential Process Changes: Changes far beyond the charter of the AO Simplification Study Team that require significant study to understand their advantages vs impact.

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## Quicklist of Changes for Mission Announcements of Opportunities (AO's)\* 2/14/08

\*Note: These changes are things that the AO Simplification Study Team believes will remove considerable burden from the proposing community with little to no reduction in proposal quality or significantly impact risk evaluation needs.

- Consolidate and Number all Requirements: Realign AO's such that all requirements are clearly separated into 2 categories: (1) those that require specific responses/discussion for Step 1 proposal submits, and (2) those that must be included in planning the mission implementation, but need no discussion and demonstration until Step 2 Concept Study Reports or Phase B. ALL requirements, however, must be considered and included in the Step 1 proposal's overall planning (schedule, budget, organization, etc.).
- Clarify Evaluation Factors: The factors by which each proposal will be evaluated will be placed in one and only one section in the AO. This section will include very specific definitions of each criterion and factor to clarify what is being evaluated. No other instructions or requirements will be included in this section.
- Standardize the Format of all AO's: This means that for each given set of requirements, instructions, rules, and etc., the specific <u>location</u> of that set within the AO will be the same for all AO's regardless of program. But, depending on the program, the specific requirements, instructions, rules, etc., could vary. However specific programs will not have the authority to modify the standard AO arbitrarily (AO will be under configuration control by SMD).
- Remove Missions of Opportunity (MOs): Solicit only missions or instruments with each AO and solicit MOs via SALMON or other solicitations aimed at specific needs. Mixing the requirements for Missions or Instruments with MOs in a single AO provides considerable confusion for both the proposing community and for NASA.
- Treat Launch Services as GFE outside the AO cost cap: Remove ELV and Launch Services from the AO cost cap and hold this funding separately at HQ. Proposers would "select" their ELV and Launch Services from the data provided in an AO appendix that would indicate available standard services and capabilities at the AO cost cap. Proposers would, however, need to identify and budget for needs beyond those provided within the AO cost cap.
- Reduced requirements for the Letters of Commitment and Letters of Endorsement for co-investigators: The purpose of this requirement is to assure that people would not be named in a proposal without their knowledge, however, currently the AO requires both individual and institutional letters of commitment. Simplified LOC requirements can be implemented for Step 1, full LOC's can be delayed until the Step 2 CSR.
- Remove Education and Public Outreach (EPO) and Small Disadvantaged Business (SDB) Requirements: No discussion of these areas would be required in Step 1

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proposals, only a statement of commitment (one sentence) would be required. These areas, however, must be considered in the overall planning (schedule, budget, organization, etc.) of the mission and will require specific detailed plans with Step 2 Concept Study Reports for evaluation.

- **Remove Orbital Debris Requirement:** Only an acknowledgement of the requirement would be required in the Step 1 proposal. Overall planning would still need to consider and include this requirement, but no discussion of specific plans to meet the compliance of this requirement would be expected until Step 2 CSR's are submitted.
- Remove the Compliance Checklist Requirement: The Compliance Checklist would still be shown in the AO, but NASA would complete this checklist and not require it of the proposer.

## Potential Announcement of Opportunity Changes\* 2/14/08

\*Note: These are changes that potentially could remove proposal submission burden from the community, but might well affect the quality of the proposals and/or significantly affect evaluation needs. These changes require additional study before implementing them.

- Remove Phase A Statements of Work (SOW's) Requirements: The proposer would still be required to clearly define their organizational plans for managing the mission and to discuss their plans for contracting and flow of funding, however, no SOW would be expected unless the proposal is selected for a Phase A concept study. A detailed Phase A SOW is required before a Phase A contract can be awarded. Submission and evaluation of Phase A SOWs after selection will delay the award of Phase A contracts.
- Accept Wider Error Bars for TMC Evaluation: Present TMC evaluations for cost are on the order of plus/minus 20% and give some benefit of doubt to proposers. With wider error bars for TMC evaluations, NASA must be willing to accept more risk that initial selections cannot be realized as proposed within the cost cap. This risk could be offset by holding additional reserves, making additional Phase A selections, or other options. This would allow a significant relaxation of implementation detail requirements in Step 1 proposals without an incremental increase in risk for downselected missions.
- Over-Selection: If NASA were to deliberately over select (multiple mission proposals funded for additional study with the intention of keeping promising concepts funded into early Phase B) in Step 1, a significant amount of implementation detail requirements in the Step 1 proposal might be relaxed. The increased risk (that missions conducting Phase A studies cannot be realized within the cost cap) would be somewhat off set by having multiple selection options. On the other hand, a lower downselection rate migt make investment in Step 2 studies unattractive to mission partners.
- **Real Year (RY) Dollars:** The AO cost caps will be in RY dollars only. Proposals will therefore be submitted in RY dollars. This might have unintended impacts on mission proposals if a range of start dates or launch dates is contemplated in the AO.
- **Delete Funding Profile Requirement:** Presently some AO's provide a "not to exceed" dollar funding by FY profile, and require that proposals must fit within that profile. Most often, however, the profile in the AO is a best guess at the time, and is not the budget that is eventually implemented. Removing the profile, would allow proposers to submit their TRUE funding needs, however, these funding needs would then have to be negotiated if selected to fit within NASA's available funding profile. Also, this negotiation could be initiated in Step 2 if NASA's funding abilities are better known at that time.
- Remove Planetary Protection Requirement: Only an acknowledgement of the requirement and an outline of the approach would be required in the Step 1 proposal. Overall planning would still need to consider and include this requirement, but no

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- discussion of specific plans to meet the compliance of this requirement would be expected until Step 2 CSR's are submitted.
- Reduce Communications and Tracking Requirements: While the viability of a mission is critically linked to these requirements in the concept for most missions, these are often also associated with significant mission trade studies (trajectories, attitudes, antenna selections and mounting, etc.) that might be more suitable for Phase A Study. Only an outline of the approach would be required in the Step 1 proposal.
- Standardize and Clarify Requirements for Foreign Contributions: Comments from the community indicate that the current requirements are extensive and often not clear. Organize and clarify these requirements to simplify understanding and facilitate proposal response. This change needs discussion with the community and with the responsible offices at Headquarters before being accommodated.
- Disallow Export Controlled Information in Step 1 Proposals: The goal of this change is to facilitate the use of foreign nationals in the evaluation process. Since omission of this kind of information could affect the quality of proposals and or impact the evaluation of risk, this recommendation is under study. In any event this information would be necessary for Step 2 Concept Study Reports. Discussion with the community is required as it is not clear that a legitimate response can be made for full missions without including export controlled information.
- Standardize the Expected Format of All Proposals: The goal of this recommendation is to make it clear where in the proposal each aspect of a given mission should be properly addressed. Clearly this would simplify the evaluation of all proposals and it may simplify the preparation of proposals, however, imposing this format could impact the flexibility that the community now has to provide the required information in the manner they think best fits their proposal.
- **Terminate Submission of Paper Proposals:** Allow proposals to be submitted as PDF files either by NSPIRES uploads or by submitting mutiple copies of a CD containing the proposal. Submission via NSPIRES upload would require file size limits and would require reviewers to download all proposals. Lack of paper copies could be unpopular with reviewers.
- Simplify/Clarify/Standardize the NSPIRES Interface: (1) The program specific questions used for AOs can be improved so that they provide NASA with useful information and the community with clear instructions. (2) Many comments from the community indicate a need for continuing the improvement of the NSPIRES proposal submission capability. While some of the comments may be driven by necessary requirements that cannot be changed, some may well be incorporated to improve the NSPIRES interface and needs to be studied.

# Potential Announcement of Opportunity Process Changes\* 2/14/08

\*Note: These changes are far beyond the charter of the AO Simplification team and require significant study to understand their advantages vs impact.

- **Process Change from 2 Step:** There have been many recommendations from the community in the past and present to use other than a 2 Step process. These recommendations are motivated not by AO simplification, but by desire to reduce overall burden on the proposing community by reducing the number of competing teams as soon as possible. On the table at the present is a recommendation for 1-Step (includes NASA/Proposer interface in Step 1) and a 3-Step with a new Step Zero which would be to determine Science interest only (Step 1 and 2 would remain as present). Some of these proposals have legal ramifications and all seem to NOT make the AO simpler, but could be studied.
- Increase Lead Time for Proposing: A number of comments from the community suggest that one thing that would really help is provide the maximum possible lead time to prepare to propose. Most often the recommendation is for NASA to broadcast clearly their intentions to solicit as far in advance of the actual AO release as possible. All of these recommendations are well intentioned and may or may not have solutions, however, they all seem well outside boundary of the present AO Simplification Team effort.
- Extended Phase A: A number of comments from the community and many past studies have recommended a longer, better funded concept development period before entering the preliminary design phase (Phase B). Meanwhile, there is also a competing mandate to try to shorten the complete competition to launch cycle, thus this matter will require significant study.