



Earth Venture Instrument-6 SALMON-3 AO Program Element Appendix Pre-Proposal Conference

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Pre-Proposal Conference Agenda

Title	Presenter	Time Allotted
Welcome and Objective	Charles Webb, ESD Flight Programs, NASA HQ	5 minutes
Introduction to EVI-6 and EVI-6 Evaluation Process for Science	Hank Margolis, EVI-6 Program Scientist, NASA HQ	20 minutes
EVI-6 Evaluation Process for Technical, Management, and Cost (TMC)	Waldo Rodriguez, EVI-6 Acquisition Manager, NASA LaRC	20 minutes
ESSP Program Management	Diane Hope, Earth System Science Program Office (ESSP) Program Office, NASA LaRC	15 minutes
International Participation	Kim Hurst, Office of Interagency and International Relations, NASA HQ	15 minutes
Export Control	Juan Santos, Office of Interagency and International Relations, NASA HQ	15 minutes
NASA Launch Services Program	Garrett Skrobot, Launch Services Program, NASA KSC	20 minutes
ISS Payloads	Steven Huning, International Space Station, NASA JSC	20 minutes
Question and Answer Period		50 minutes

3 hours



Introduction to EVI-6 and to the EVI-6 Science Evaluation Process

Hank Margolis
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- EVI-6 is solicited through a *Program Element Appendix (PEA)*.
- The *EVI-6 PEA* is an Appendix of the *Third Stand Alone Missions of Opportunity Notice (SALMON-3) Announcement of Opportunity (AO)*.
- All proposers must read both the *EVI-6 PEA* and the *SALMON-3 AO* carefully and must comply with the requirements and constraints contained within the two documents.
- The *EVI-6 PEA* complements and clarifies specific information in the *SALMON-3 AO*. Not all of the information required to propose is contained in the PEA and therefore both documents must be carefully reviewed.

Science Scope

- EVI-6 solicitation is an open call to address science from any of the thirty-five 2017 Earth Science Decadal Survey science questions.

Partnerships

- Enabling partnerships are encouraged, however programmatic merit and risk of any proposed partnerships will be considered in the selection process.

Complete investigations using space-based Instrument(s) or SmallSat(s) (including CubeSats) are permitted.

A Notice of Intent (NOI) is mandatory (June 2, 2022)

Proposals are due September 1, 2022

EVI-6 PEA Highlights

EVI - 6 Pre-Proposal Conference

- Only Class D Instruments and SmallSat (including CubeSats) proposals.
- PI-Managed Mission Cost Cap (PIMMC) set at \$37M with an optional Science Enhancement Option (SEO) of \$5.3M in FY24 \$.
- CubeSats can be up to 12U in size.
- Added an optional NOAA Operational Enhancement Opportunity (OEO).
- Simplified proposal requirements to reduce the workload on proposers.
- Added requirement to follow the NASA Earth Science Division (ESD) Open-Source Science Policy.
- Added requirements for a Project Protection Plan and for a Diversity and Inclusion Plan.

Single-Step Evaluation & Selection Process

Life Cycle Schedule

- Delivery of Class D Instrument (end of Phase C) by ~ Q1 FY28.
- Delivery of SmallSat(s) (within Phase D) by ~ Q1 FY28.

Significant Changes from Draft to Final EVI-6 PEA

- Proposers can assume that the ISS will be operational through 2030.
- All types of SmallSats (including CubeSats) are permitted to be proposed.
- NASA expects to launch any selected SmallSat investigation through the Venture-Class Acquisition of Dedicated and Rideshare (VADR) Launch Services or on other NASA-selected launch services as a rideshare.

(continued)

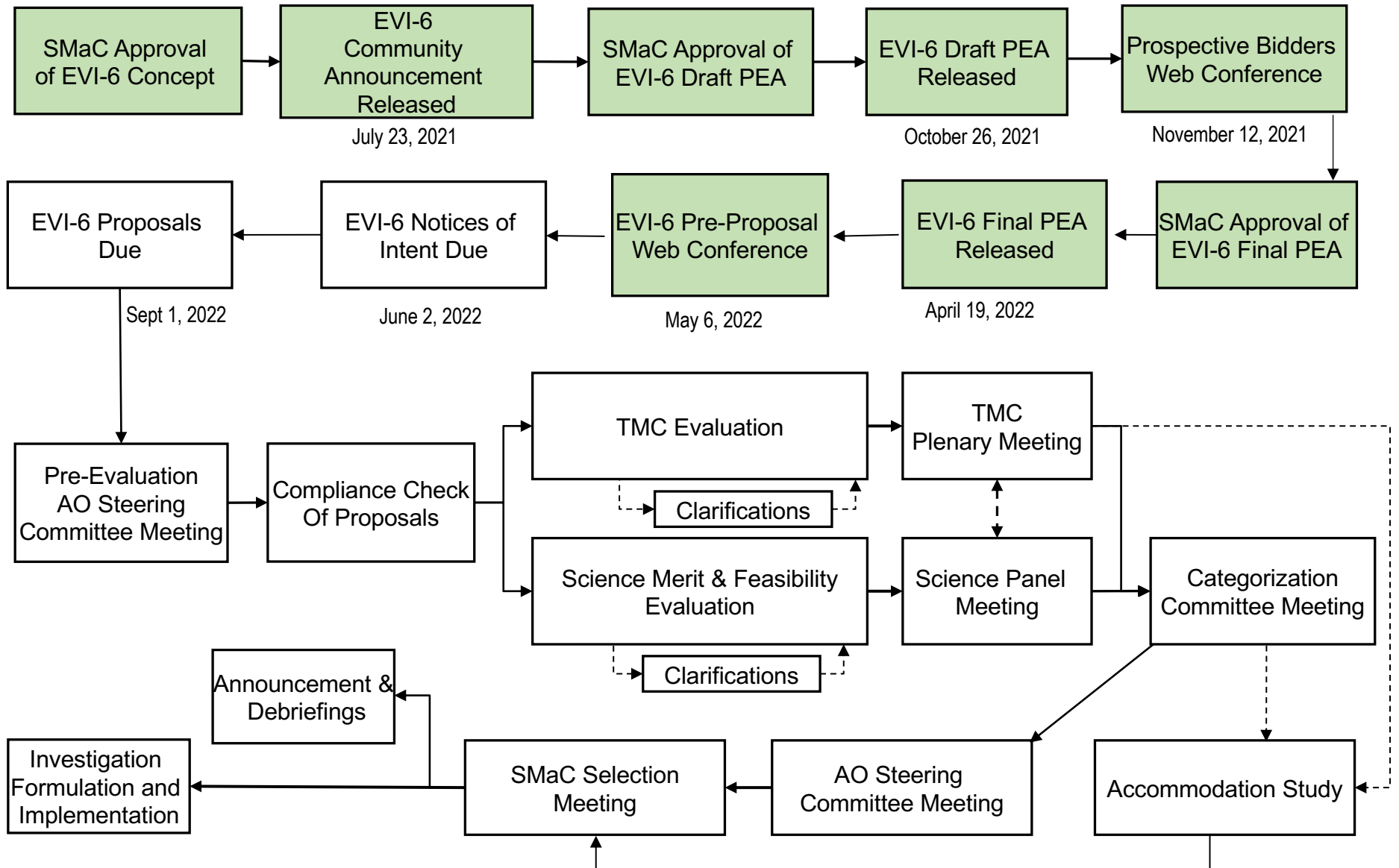
Significant Changes from Draft to Final EVI-6 PEA

- Clarified that OEO does not include changes or additions to hardware.
- Clarified that the Open-Source Science (OSS) Policy applies only to science data products and **not** to spacecraft operations, to engineering data, or to information designated as ITAR or EAR.
- Removed requirement to include a Microsoft Project file for the schedule foldout.
- Added an example anonymized EVI contract to the EVI-6 Library.
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- Clarified that Student Collaboration is optional.

Comments and Questions on the **EVI-6 PEA**

- Posted 19 Q&A to the Community Announcement;
- Received five comments over 1-month comment period on the Draft PEA.
- Posted 25 Q&A on the Draft PEA;
- Posted (so far) 4 Q&A on the Final PEA.

EVI-6 Flow Chart for Solicitation, Evaluation, and Selection



Evaluation criteria reminder from 7.2 of SALMON-3 AO

- (A) Intrinsic Science Merit of the Proposed Investigation ~ 40%
- (B) Science Implementation Merit and Feasibility of the Investigation ~30%
- (C) Technical, Management, and Cost (TMC) Feasibility of the Investigation Implementation ~ 30%.

Clarifications reminder from 7.1 of SALMON-3 AO

- Proposers should be aware that, during the evaluation and selection process, NASA may request clarification of specific points in a proposal, i.e., Potential Major Weaknesses (PMW).

Science Panel Factor A

Factors A-1 to A-5. Intrinsic Science Merit of the Proposed Investigation: Please refer to Section 7.2.2 of the SALMON-3 AO for details.

- Factor A-1. Compelling nature and priority of the proposed investigation's science, goals and objectives.
- Factor A-2. Programmatic value of the proposed investigation.
- Factor A-3. Likelihood of science success.
- Factor A-4. Science value of the Threshold Investigation.
- Factor A-5. Merit of any Science Enhancement Options (SEOs), if proposed.

SALMON-3 Update to Factor A Evaluation:

The Intrinsic Science Merit of the Proposed Investigation also includes the following addition to Factor A-2:

Factor A-2, Programmatic Value of the Proposed Investigation, also includes the extent to which the proposed science investigation addresses unique science areas that are not being addressed by other missions (both NASA and non-NASA missions) expected to be in operation five to ten years from the start of the proposed investigation.

An applications component was added to the evaluation criteria (A1 & A2).

Science Panel Factor B Evaluation

Factors B-1 to B6. Science Implementation Merit and Feasibility of the Proposed Investigation: Please refer to Section 7.2.3 of the SALMON-3 AO for details.

- Factor B-1. Merit of the instruments and investigation design for addressing the science goals and objectives.
- Factor B-2. Probability of technical success.
- Factor B-3. Merit of the data analysis, data availability, and data archiving plan and/or sample analysis plan.
- Factor B-4. Science resiliency.
- Factor B-5. Probability of investigation team success.
- Factor B-6. Merit of Science Enhancement Option (SEO), if proposed.

Update to Factor B Evaluation:

The Experiment Science Implementation Merit and Feasibility of the Proposed Investigation also includes the following additions to Factor B-3:

Factor B-3, Merit of the Data and/or Sample Analysis Plan, also includes the quality of the plans for calibration and data archiving, including development of a data pipeline.

Factor B-3, an applications component has been added to the evaluation criteria.

Factor B-5, also includes the quality of the Diversity and Inclusion Plan.

- **Major Strength:** A facet of the implementation response that is judged to be of superior merit and can substantially contribute to the ability of the project to meet its scientific objectives.
- **Major Weakness:** A deficiency or set of deficiencies taken together that are judged to substantially weaken the project's ability to meet its scientific objectives.
- **Minor Strength:** A strength that is worthy of note and can be brought to the attention of Proposers during debriefings, but is not a discriminator in the assessment of merit.
- **Minor Weakness:** A weakness that is sufficiently worrisome to note and can be brought to the attention of Proposers during debriefings, but is not a discriminator in the assessment of merit.

- **Excellent:** A comprehensive, thorough, and compelling proposal of exceptional merit that fully responds to the objectives of the AO as documented by numerous and/or significant strengths and having no major weaknesses.
- **Very Good:** A fully competent proposal of very high merit that fully responds to the objectives of the AO, whose strengths fully outbalance any weaknesses.
- **Good:** A competent proposal that represents a credible response to the AO, having neither significant strengths nor weakness and/or whose strengths and weaknesses essentially balance.
- **Fair:** A proposal that provides a nominal response to the AO, but whose weaknesses outweigh any perceived strengths.
- **Poor:** A seriously flawed proposal having one or more major weaknesses (e.g., an inadequate or flawed plan of research or lack of focus on the objectives of the AO).

Note: Only Major Findings are considered in the rating.

Evaluation Process -- Clarifications

During the evaluation process, NASA will request written clarification on Potential Major Weaknesses (PMWs) associated with the *Intrinsic Science Merit of the Proposed Investigation (A Factors)*, the *Experiment Science Implementation Merit and Feasibility of the Proposed Investigation (B Factors)* and the *TMC Feasibility of the Proposed Investigation Implementation (C Factors)* criteria.

- Proposers will be allowed up to eight combined pages in total (with some restrictions) for clarification of the PMWs associated with the A Factors and the B Factors.
- Proposers will be allowed up to six pages in total (with some restrictions) for clarifications of the C Factors evaluation criteria.
- These clarifications may include text, tables, and figures to address the PMWs and to provide additional information.

All questions regarding the EVI-6 solicitation **MUST** be addressed to:

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By email at:
hank.a.margolis@nasa.gov
Subject line to read "EVI-6 PEA"