

**EVI Related Questions and Answers**  
**Updated March 29, 2012 (Q&A 29-45)**  
**Updated April 7 (Q &A 46)**  
**Updated April 23, 2012 (Q&A 47-51)**

1. Can you confirm that there will be Potential Major Weaknesses sent out after the TMC has had enough time to digest the proposals submitted?

Answer: Yes. This is clearly spelled out in the SALMON-2 AO, section 7.1.1, which says “Proposers should be aware that, during the evaluation and selection process, NASA may request clarification of specific points in a proposal; if so, such a request from NASA and the proposer’s response must be in writing. In particular, before finalizing the evaluation of the feasibility of the investigation implementation (see Section 7.2.4), NASA will request clarification on specific, potential major weaknesses in the feasibility of investigation implementation that have been identified in the proposal. NASA will request clarification in a uniform manner from all proposers. The ability of proposers to provide clarification to NASA is extremely limited, as NASA does not intend to enter into discussions with proposers. A typical limited response is to direct NASA’s attention to pertinent parts of the proposal without providing further elaboration.”

2. Are there *any* limitations on contributions other than they can't come from SMD or China?

Answer: There are no additional limitations on contributions, except for those that are prohibited by law.

3. Can you confirm that *oversight* will not be required for contributed aspects of proposals?

Answer: The word “oversight” is not defined crisply enough to answer either “yes” or “no” to this question without additional details.

Section 4.1.1 of the SALMON-2 states that “Proposals selected in response to this AO will be implemented in accordance with NASA space flight project management processes. NASA space flight project management processes, as defined by NPR 7120.5D NID3, *NASA Space Flight Program and Project Management Requirements*, are Formulation, Approval, Implementation, and Evaluation. “ Section 4.1.2 of the SALMON-2 AO states that “Owing to the significant expenditure of government funds on these spaceflight investigations, as well as to their expected complexity, NASA intends to maintain an essential degree of insight into the project. NASA will exercise essential oversight to ensure that the implementation is responsive to NASA requirements and constraints. NASA requirements and constraints are defined in NPR 7120.5D NID and other NASA requirements documents that are available in NODIS.” Any contribution to a selected investigation that is critical to the selected investigation’s ability to meet the measurement or mission requirements will be

subject to the normal oversight processes of NASA.

4. Can you address how proposers should account for the potential 4 month gap between selection and receipt of funding? Will the five year clock start upon receipt of funding?

Answer: There is no "official" 5 year clock. Section 4.4.2 and requirement J-12 of the EVI-1 PEA states that "Each selected investigation under the EVI solicitation will be expected to deliver an instrument that can be integrated onto a selected platform by September 30, 2017." Each proposal will need to demonstrate they can meet this requirement.

5. Given the emphasis placed on the discussion of the data management plan (requirement J-20) and the limited page count for sections D/E (20 pages), can a separate, page unlimited appendix be added for the DMP?

Answer: The data management plan should not be affected by the enhanced description of the Earth Science data policy described in the PEA. It should be described within the page limits as described in the SALMON-2 AO. The Data Management Plan is not required to be submitted at the time of proposal submission.

6. Can you provide additional guidance addressing how you would like Table B-3 submitted in light of the requirement that proposal costs be provided in FY14\$ and RY\$?

Answer: The EVI Program Library has a revised Table B-3 template with total column on the right that has a total in \$FY14. Requirement B-53 in the SALMON-2 AO explains how to fill out Table B-3 in regard to FY\$ and RY\$.

7. Bottom of page 6 of the SALMON-2 AO: As EVI-1 is a single step proposal, isn't KDP-A the selection of a proposal for entry into Phase A?

Answer: Selection of the EVI-1 proposal, followed by agreement to the Award administration as described in section 6.3.1 is equivalent to KDP-A and entry into Phase A. NPR 7120.5D NID states that Phase A is for concept study and technology development.

8. Given the single step nature of the proposal and the stated proposal cost estimate-related requirements, can an appendix be added to allow for "Additional Cost Data" that would support the page limited discussion in section H?

Answer: No additional appendices will be allowed beyond what is clearly stated within the SALMON-2 AO, which allows 8 pages plus table B3.

9. The PEA states:

“By NASA policy, all science data returned from NASA missions are made available immediately in the public domain. Following a **postflight** checkout period, all data will be made available to the user community. There shall be no period of exclusive access. The principal investigator will propose the data product latency period for standard products listed in the proposal, and a justification for it must be demonstrated. Barring exceptional circumstances, data product latency may not exceed six months.”

- Is my interpretation of the first sentence, that the timeframe that defines the start of making data publicly available ‘immediately’ is within 6 months of the launch, correct?

Answer: The initial release for public use on a NASA DAAC of higher level products (beyond the Level 0 data) should be made as fast as reasonably possible, no longer than 6 months after post launch instrument checkout. The time to initial release is driven by how long it takes to validate the procedures and data quality as outlined in the science plan within the proposal. For some data products, the latency to the initial release could be much less than 6 months.

- In the second sentence, do you mean postflight or post launch? Postflight would indicate that all data will be made available to the public after the flight was completed, maybe years after launch. This also contradicts the first sentence, that I interpret to mean that data is to be made public immediately (not after flight is over).

Answer: Your definition of “post Launch” more accurately captures our intent within this section. We consider the launch process to include the time through the initial instrument on orbit checkout as well, since most on orbit checkout procedures are not the same as the nominal science operation procedures.

10. I am coordinating proposals in response to the Earth Venture Instruments PEA, and we have two questions at this time about the PEA for inclusion in the formal FAQ cycle:

Requirements J-8 and J-10 instruct proposals to assume that Phase D has a duration of two years. Can we propose a shorter Phase D if it is justified in the proposal?

Answer: No, it must be for 2 years. NASA set this as a hard requirement because w/o a NASA assigned platform for any selected instrument, it is difficult estimate the time this phase will take. We chose 2 years as a somewhat conservative value. Even though we allow proposers to show any research they have done on their own regarding potential platforms, and may be able to show that it will take less than 2 years if one of those are chosen, there is a non-negligible chance that such platform may not be available in the future.

11. Requirement J-8 instructs proposals to include “key management and engineering staff activity in Phase D” within the PI-managed cost cap. What is the definition of “key staff?” Table 1 identifies this as “Project manager, instrument manager, systems

engineer, etc.,” but can we have a clearer definition?

Answer: We leave that to the proposer to make the case as to which staff is and is not key to the successful implementation of the investigation. Appropriate staffing for each component of the investigation is one of many factors that will be assessed by the Technical, Management, and Cost review panel.

12. Page 40, second paragraph of the final AO states, “Institutional Letters of Commitment for contributed Co-Investigator support are not required.” But then requirement 78, page 41, states, in part, “Proposals ... from U.S. entities that include non-U.S. participation shall be formally endorsed, through Letters of Commitment, by the responsible funding agency in the country of origin.” If we read “non-U.S. participation” to include Co-I activity, then this sounds potentially conflicting. Are institutional letters of commitment required for a non-US Co-I’s working on a proposal from a US entity?

Answer: No. Institutional Letters of Commitment are not required for contributed Co-Investigator support regardless of whether the Co-Investigator is from a U.S. or non-U.S. institution.

13. Page 47 of the final AO states that a Notice of Intent to Propose must identify “the name of the Lead Representative from each organization (industrial, academic, not-for-profit, and/or Government) included in the proposing team as may be known by the NOI due date,” and then this person would be included in the final NSPIRES submission in the role of a “Lead Representative.” We are unclear what a “Lead Representative” is: If we have one Co-I from a university, would the Lead Representative be that Co-I, or someone in the university’s management chain? Similarly, if we have Co-I’s from a non-US entity, funded by their national space agency, would the Lead Representative be the most senior of those Co-I’s, or someone in their management chain? Finally, if we have an industrial contractor providing a significant component under contract, do we identify a Lead Representative from that organization? If so, would that be our technical contact, a financial officer, the organization’s counsel, or another party? (While “organizational leads” have been solicited for NOI’s in the past, they have not been required to be registered with NSPIRES and included in the final proposal submission, so we want to make sure we get this right.)

Answer: A “Lead Representative” is not intended to define a management role. Rather it is intended to be a POC with whom NASA can make contact regarding that organization’s role, should it be necessary. NASA has absolutely no requirements on whom the PI chooses to designate as the “Lead Representative.”

14. A question has come up regarding how to interpret the following language in the PEA: 6.3.2 International Agreements  
Should a non-U.S. proposal, or a U.S. proposal with non-U.S. participation, be selected by NASA, NASA’s Office of International and Interagency Relations, Science Division, will arrange with the non-U.S. sponsoring agency for the proposed participation to go

ahead on a no-exchange-of-funds basis, in which NASA and the non-U.S. sponsoring agency will each bear the cost of discharging their respective responsibilities. Depending on the nature and extent of the proposed cooperation, these arrangements may entail a letter of notification by NASA with a subsequent exchange of letters between NASA and the sponsoring governmental agency or a formal Agency-to-Agency MOU.

Should this language be interpreted as prohibiting any funding of non-U.S. CO-Is??  
Specific case here is funding members of your science team that are based outside of the U.S.

Answer: Your interpretation is correct. It is against NASA policy to pay for time for scientists at non-US institutions. They need to provide their own source of funding for their time related to the proposed investigation.

15. This is a follow-up to question 3 regarding oversight vs insight. Can you provide an example of how ESD would expect a PI to demonstrate exercising oversight over a major instrument subsystem (say, the telescope or detectors) that is 100% contributed?

Oversight is defined here from a typical procurement perspective - if the subsystem is found to be deficient in meeting stated capabilities, then the PI can force the partner providing it to correct the deficiency at the partner's expense.

Answer: In SALMON-2, "oversight" is not used from the procurement prospective. Oversight means ensuring that the implementation is responsive to requirements and constraints (see SALMON-2 AO, Sections 4.1.2 and 4.2.4). If a major instrument subsystem is 100% contributed, then the proposal should demonstrate that the PI has the ability to ensure that the contributed hardware will meet all requirements and constraints including technical and schedule. This is the case for all subsystems within an instrument, whether or not they are contributed.

16. This is a follow-up to question 5 regarding limited page count and the tailored requirement associated with the data management plan. The page allocation in the SALMON-2 AO does not take into account the additional detail that requirement J-20 in the PEA requires. The implicit, if not explicit implication of not adding additional page count associated with J-20 is that ESD is willing to accept a reduced level of detail on the balance of sections D/E. Is this correct?

Answer: Correct.

17. This is a follow-up to question 8 regarding adding an appendix to allow for "Additional Cost Data". Based on "Potential Major Weakness" feedback provided on EV-2 proposals, the TMC is expecting a level of cost information that the current 8 page + table B3 cannot physically support. Will ESD be providing assurance to potential EVI proposers that the TMC for EVI-1 will be fully educated on the limitations imposed by the AO's page count?

Answer: The TMC panel will be well aware of the level of detail that can and cannot be provided within the allocated space of each section of a proposal.

18. The PEA (NNH12ZDA0006O-EVI1) states "The objective of this solicitation is to select an investigation(s) where an instrument(s) is built and deployed on an existing planned spacecraft... These investigations/instruments will be proposed without a firm identification of the spacecraft to accommodate these instruments." Due to the proposed instrument's very unique bus accommodation requirements, would proposing an overall investigation/instrument/bus combination that is below the AO PI Managed Mission Cost Cap be acceptable or would this automatically eliminate the proposal from consideration?

Answer: Section 4.5.4 of the EVI-1 PEA states: "Proposals may include information on any research the proposing team has done relative to potential payload accommodations for their proposed instrument. This is not a requirement for any proposal. However, such information can serve to demonstrate to NASA the potential of finding one or more opportunities for accommodating the proposed instrument. If a proposal includes such information, effort should be made to address all known integration criteria and make clear which integration criteria have not been completely researched. Failure to include such research will not be counted against a proposal in review. Inclusion of such information has the potential to support the arguments within a proposal that the instrument has an acceptable chance of being integrated on a platform within an appropriate time frame."

If this bus is one that will exist and will be deployed in the appropriate time frame, then one could include this information as part of the proposal. The bus itself would be considered outside the PI-managed costs. If the bus was not scheduled to be deployed already, then the proposer should clearly demonstrate that a path to get this bus to space exists without significant cost to NASA. In general, this approach is noncompliant with this particular solicitation. It is more appropriate for the type of solicitation similar to EV-2. The next opportunity for that type of solicitation is planned for 3-4 years from now.

19. Question: Why does the Common Instrument Interface Hosted Payload Opportunity Database document in the EVI Program Library have a "Draft" marking? Does this mean that there will be an updated version provided?

Answer: No. The January 3, 2012 is the final version for EVI-1. We have removed the "Draft" markings and reposted the document but no other changes have been made.

20. Question: Given that CII Guidelines for GEO are not yet available in the EVI Program Library, how will GEO instruments of opportunity be evaluated, and what criteria will be used to determine the relative probability of finding a suitable opportunity platform for them?

Answer: There are 2 CII guideline documents in the EVI Program Library, one with the status of the general guidelines at the time of the EVI-1 PEA release, and one with a list

of known payloads that had been documented at that time. There is little information at that time on data from potential GEO platforms. Remember, these are ONLY guidelines, and not requirements that proposers must meet. Anyone proposing an instrument that is most ideally implemented on a GEO platform will need to state the case that it can be deployed just like instruments best suited for any other platform. The guideline documents exist to assist NASA and the community in discussing what is possible.

21. Question: Can planning budgets be included as tables in appendix? If not, where should the planning budgets be included?

Answer: The planning budget should be entered in table B3. Use the Template for B3 in the EVI program library. It now provides line items to enter costs outside the PI managed costs.

22. Question: Can proposers include Letters of Interest from potential spacecraft owners or manufacturers, as indicated in Draft AO FAQ #42? Should those Letters be included in Section J.2 of the proposal?

Answer: Yes, letters of Interest from those who oversee potential spacecraft are allowable. Letters of commitment from spacecraft providers are not allowable as NASA will be responsible for obtaining such commitments, not the proposing PI. Section J.2 is an appropriate place to include them.

23. Question: In what section of the proposal should we include international letters of interest in the proposed instrument as an element of an international constellation?

Answer: There is no appropriate appendix for such letters of interest. The proposer may include any discussion of how the data returned from the proposed instrument fits within other complimentary observations being made by any other Earth observing agency within the science justification of the investigation. The proposal may include appropriate co-Is and collaborators from other observations occurring 5-10 years from now as they see fit. That is equivalent to a letter of interest.

24. Question: The EVI-1 PEA cites 24-months as the appropriate duration to assume for Phase D activities (Section 4.4.1). Per NID 7120-27, Phase D extends through on-orbit checkout. Please confirm that the 24-month Phase D would begin with readiness for Instrument Integration to the Host Spacecraft, and end with completion of on-orbit instrument checkout (i.e., readiness for Phase E Science Operations)?

Answer: This interpretation of the extent of Phase D is correct.

25. Question: Since NASA is providing the spacecraft should we plan for NASA to provide for the data transmission from the spacecraft to the ground and then distribute data on the ground as needed, e.g., to the Instrument Operations Center?

Answer: Yes.

26. Question: The EVI-1 mission of opportunity instrument is delivered at the conclusion of Mission Phase C as defined in the AO and PEA. Accordingly, the PI-Managed Mission Cost cap content in Phase D is dominated by Science team (i.e., Level of Effort) activities. As such, it does not seem reasonable to apply the 25% reserves requirement against the Mission Phase D activities that are to be included within the PI-Managed Mission Cost cap. Is it necessary to do so?

Answer: Yes.

27. Question: Given that the Education and Public Outreach budget is specified at 1% (i.e., \$900K in constant year FY14 dollars), should teams hold reserves against the EPO budget? If not, is this cost divorced from overall requirements on percentage reserves?

Answer: Yes.

28. Question: Requirement 30 in the SALMON-2 AO references schedule foldout(s) with accompanying narrative. This seems to indicate the schedule foldout can be multiple pages that do not count against a page count. Is this true and does the schedule narrative count in one of the section page counts?

Answer: Requirement B-30 of the SALMON-2 AO states:

“A project schedule foldout(s) covering all phases of the investigation shall be provided. This foldout will not be counted against the page limits. “. The foldout(s) do not count against the page limits. But the narrative does count against the page limits.

#### Additional Q & A from Pre-Bidders Workshop

29. In regard to Factor A-4 (Factor A-4. Science, exploration, or technology value of the Threshold Investigation. This factor includes the intrinsic value of the Threshold Investigation using the standards in the first factor of this section and whether that value is sufficient to justify the proposed cost of the investigation.), will this factor only used for information or could it affect your overall score?

Answer: As stated in section 6.1 of the EVI-1 PEA “Proposals will be evaluated according to the evaluation criteria set forth in Section 7.2 of the SALMON-2 AO.” Factor A-4 will be considered as a factor in the overall evaluation as this factor is important when considering the relevance of the investigation and whether the threshold mission is worth the proposed effort and cost.

30. Is there a possibility of outside funding for competed science investigation related to the selected EVI investigation?

Answer: Section 5.2 of SALMON-2 states, “PEAs sponsored by SMD do not permit contributions of funding from SMD programs other than the funding offered through the



applicable PEA.” This means that contributions from ESD R&A programs are not allowed as part of the proposal.

31. Can potential funding for phase E activities be included in a proposal?

Answer: Optional Phase E activities are called (in SALMON-2 vernacular) Science Enhancement Options (SEOs). The EVI-1 PEA Section 4.7 says “Proposals shall not include a plan or a budget for science-exploration-technology enhancement options (SEOs); this supersedes Section 5.2.5 of the SALMON-2 AO.” All proposed activities must be budgeted in the PI-managed cost cap.

32. In paragraph 2 of section 4.4.2 of the EVI-1 PEA, it states that “Appropriate schedule margin should be planned to account for such changes.” Where minor changes are needed after the platform is selected by NASA. When do we need to account for budget and schedule margin for modifying instruments prior to delivery to NASA for placement in payload? It seems like a Catch 22 [because it is up to NASA to choose the platform]. What exactly is NASA expecting here?

Answer: As stated in paragraph 2 of section 4.4.2 of the PEA, the desire is for NASA to determine the appropriate platform “preferably before the Preliminary Design Review”. As such, the schedule and design should be ready before entering Phase C, and all margins for the changes to the instrument design should be held before Phase C.

33. Question: For cost methodology, will you want to see full costing justification of each organization whose budget is part of the PI managed cost cap, each arriving at their estimates using their own methodology?

Answer: You are going to have to make choices, based on the proposer’s assessment of risk, to provide sufficient information and to stay within the page limit. For contributions from partners that are outside the PI managed costs, section 5.8 of the SALMON-2 states “Where a resource is being contributed... all of information required might not be available to the proposers...Nevertheless, the proposal must provide sufficient information on the availability of that resource for NASA to assess whether the mission’s resource requirements can be met and how the PI will assure the mission’s success.”

34. Is there a dollar amount cut-off in order to show the full costing model of each partner whose costs are within the PI managed costs?

Answer: when you are making choices about how much detail to include, you should consider risk as a significant criterion.

35. Will you also be evaluating our subcontractor’s pricing?

Answer: We will evaluate all information provided in the proposal. We will also evaluate the adequacy of basis of estimate of the proposal’s cost estimates.

36. Please clarify whether you are evaluating our methodology for evaluating a sub contractor's bid, or the subcontractor's methodology for estimating their bid?

Answer: We will evaluate the proposers entire proposal, including direct elements provided by the PI and all support information contributed by the PI's team. NASA will evaluate the basis for the budget allocated for subcontractors.

37. Will there be interim Geostationary Earth Orbit (GEO) guideline document?

Answer: The two documents contained in the EVI-1 Library (CII Guidelines and Hosted Payload Opportunities Database) are frozen and will not be updated and publicly available until after the EVI-1 selection. Note that in the last paragraph of section 6.1 it states, "After the evaluation, but prior to the selection decision, NASA will perform an accommodation study of selectable proposals to assess the extent to which the proposed instrument is compatible with potential satellite platform interfaces and operations." Also in section 6.2, of the PEA Selection Process, it states, "the Selection Official may take into account a wide range of programmatic factors... For this EVI selection, these factors also include the likelihood that the proposed instrument can be accommodated on a NASA-selected platform in the near future."

The "potential satellite platform" discussed in section 6.1 of the PEA and the "NASA-selected platform" discussed in section 6.2 is not restricted to the platforms identified in the two documents in the EVI-1 Library.

38. Does NASA have review and approval authority over the PI's mission assurance plan?

Answer: In accordance with NID 7120-97 NASA Space Flight Program and Project Management Requirements, NASA has review and approval authority over the PI's Mission Assurance Plan as part of the review and approval of the Project Plan.

39. Can you direct us where to find guidelines?

Answer: The requirements are levied in accordance with NID 7120-97 and further described in ESSP's Program Plan in Section 3.2. In addition for EVI-1, the payload risk classification is Class C. In Appendix B of NPR 8705.4, there are further details on the recommended SMA requirements by payload risk classification.

40. What about China?

Answer: Recent laws (Both the 2011 and 2012 appropriation bills for NASA) prohibit NASA from any bilateral collaboration between NASA and any Chinese entity.

41. What about Chinese students and Chinese universities?

Answer: it is on a case-by-case basis. Proposers should err on the side of caution. Generally speaking, bilateral collaboration with Chinese universities is not permitted in a NASA project. However Chinese students who are at a US university and have no affiliation with a Chinese institution are not restricted (the restrictions are regarding Chinese institutions, not Chinese nationals).

42. How will NASA handle a potential instrument that could be launched on an international vehicle?

Answer: NASA chooses the space platform. If NASA finds that it can logistically and legally use a platform launched with an international launch vehicle, it may choose to do so.

43. TMC accommodation section 6.1: in a case where there are large number of potential hosts, how will our proposal be evaluated, ability to be hosted or the cost associated with hosting?

Answer: It is NASA's responsibility to determine the best host for the selected investigation (and to pay for it). Requirement J-13 of the PEA says "Proposals shall clearly state the proposed instrument mass, volume dimensions, power requirements, platform stabilization requirements, thermal requirements, observational geometry requirements, launch vibration constraints, electromagnetic interference/electromagnetic compatibility (EMI/EMC) requirements, data rate requirements, and all other requirements (or constraints, preferences, etc.) that the instrument places on the platform for accommodation, launch, deployment, operations, etc." and Section 4.5.4 says "Proposals may include information on any research the proposing team has done relative to potential payload accommodations for their proposed instrument. This is not a requirement for any proposal. However, such information can serve to demonstrate to NASA the potential of finding one or more opportunities for accommodating the proposed instrument. If a proposal includes such information, effort should be made to address all known integration criteria and make clear which integration criteria have not been completely researched. Failure to include such research will not be counted against a proposal in review. Inclusion of such information has the potential to support the arguments within a proposal that the instrument has an acceptable chance of being integrated on a platform within an appropriate time frame." NASA will use these data from the proposal both in the review and accommodation studies.

44. So we need to provide the requirements for the instrument?

Answer: Yes. Requirement J-13 of the PEA says "Proposals shall clearly state the proposed instrument mass, volume dimensions, power requirements, platform stabilization requirements, thermal requirements, observational geometry requirements, launch vibration constraints, electromagnetic interference/electromagnetic compatibility (EMI/EMC) requirements, data rate requirements, and all other requirements (or constraints, preferences, etc.) that the instrument places on the platform for accommodation, launch, deployment, operations, etc."

45. NSPIRES requires that I provide a proposal start and end date, but the latest end date available is December 31, 2020. What do I do if my investigation will last longer than that?

Answer: Please enter an end date that is one day after your start date to indicate that the true end date is within the body of your proposal.

46. We are considering an EVI proposal that if selected and placed on the space station would require a hexapod mount like SAGE III. Does NASA consider the hexapod a part of the instrument or part of the bus (in this case ISS)? The reason for this question is that there would be a cost delta to consider adding the hexapod to the instrument. Can you clarify this situation?

Answer: The hexapod supplied to SAGE III existed and was supplied to that project as Government Furnished Equipment (GFE). Only one existed. If a potential EVI proposal requires a mount for pointing on the ISS, or any other potential platform, that is not existing GFE, then the investigation will need to include the cost for it within the proposal under the PI managed costs.

Furthermore, section 5.8 of the SALMON-2 AO states that "If Government Furnished Equipment (GFE) is being contributed, then permission must be obtained from the appropriate Agency or Program; the permission must be included in the Letter of Commitment."

47. We are unable to access the document referred to in Requirement J-20 which states "The plan shall identify the formats and standards to be used, selected from the published list of approved NASA Earth Science Data System Standards

<http://www.esdswg.org/spg/docindexfolder/>)."

The link says that domain expired on 4/4/12 and the document is not in the Program Library. Where can we access this document?

Answer: The document in question is in a new location:

<http://earthdata.nasa.gov/our-community/esdswg/standards-process-spg/rfc>

48. In the EVI PEA, section 4.5.4 Instrument to Platform Interfaces, it states: "Any proposed instrument that is appropriate for the ISS should plan on completing its primary mission by 2020 as NASA has current plans to support the ISS only up to that time."

For clarification, does that mean that our mission must be completed by December 31st 2019?

Answer: Yes. All NASA planning documents for the ISS show NASA support "through" 2020. Hence, the date is 12/31/2020.

See for example <http://www.gao.gov/highrisk/agency/nasa/completing-and-sustaining-the-international-space-station.php>

49. Page 29 of the SALMON-2 AO states, in part, “Launch approval processes generally carry an estimated cost of \$100K for routine NASA payload environmental assessment and \$500K for non-routine NASA payload environmental assessment.

“Requirement 36. For NASA launches, the costs of environmental review and launch approval shall be included in the PI-Managed Mission Cost. The key milestones for environmental review and launch approval shall be accounted for in the proposed schedule.”

Does Requirement 36 apply to EVI/PEA-J, and thus should we include \$100K for “routine NASA payload environmental assessment” (assuming we have a “routine” payload) in the PI-managed cost cap of \$90M?

Answer: The proposer is not required to set aside the full funding for the complete NEPA analysis but is expected to support the NASA program office as it completes the required NEPA analyses.

50. SALMON-2 Requirement 54 states “No more than 25% of the proposed costs may be incurred prior to KDP-C (Confirmation).” This requirement seems consistent with the EV-2 announcement where a large amount of the costs are expended in Phase D to cover access to space. Typically the cost of procuring the spacecraft (WBS 6) and the Launch Vehicle (WBS 8) are included in the mission cost profile. The absence of significant costs in these WBS categories for EVI-1 biases the profile to be front heavy. For EVI-1 the majority of the cost is incurred in instrument development (e.g., ensuring all components are at TRL 6 by PDR) driving a significant portion of the costs to occur prior to PDR. Consequently, requirement 54 seems to imply that the PEA strongly favors instruments that have no technology development requirements. Is that a correct assumption? If not, would the program be willing to consider a different mission funding profile more compatible with achieving TRL 6 by PDR?

Answer: NASA will not require instruments to be TRL 6 at proposal submission. They need to reach TRL 6 by PDR. All proposals will need to show the path to reaching TRL 6 within all the budget constraints listed within the SALMON-2 AO and the EVI-1 PEA. We recognize that achieving this will be difficult for instrument concepts that require significant technology enhancement during Phase A and B.

Note that in section 5.3.4 of the SALMON-2 AO, Requirements 30 states “Unless otherwise specified in the applicable PEA, proposals that use technologies currently at less than TRL 6 shall include a plan for technology maturation to TRL 6 no later than KDP-C and a backup plan in the event that the technologies cannot be matured as planned.

See Appendix B, Section F, for additional details.”

51. We have a question regarding to whom the “Letters of Commitment for Major Partners” should be addressed. Since these letters are a requirement of NASA’s AO, is it preferred that the letters of commitment be addressed to NASA or to the Proposing Institution (the PI)?

Answer: NASA does not have either a preference or a requirement for specifying the addressee of a Letter of Commitment. The PI and the proposing organization must include the required Letters of Commitment in the proposal regardless of addressee.

NASA did not state anything about who the addressee should be in the SALMON AO or EVI PEA.