

Astrophysics Explorers Program 2021 Medium Explorer (MIDEX) AO Q&A

Change Log		
Revision	Date	Description of Changes
01	03/02/2021	Posted Q&A 1 – 7

Q-1 Where technologies are proposed that are not yet mature to TRL 6, is the proposed backup plan evaluated against the baseline science?

A-1 Yes. TMC only considers the Baseline Science Mission (see Section 5.1.4 of the Draft 2021 Medium Explorers Program AO) when evaluating the proposals. Backup plans are required for technology not yet at TRL 6, and TMC evaluates those plans against the Baseline Science Mission. Proposals generally include less-mature technologies to enable more ambitious baseline science. A team proposing less-mature technology should make its best case for the approach to maturing that technology, and its best argument that the backup technology will produce science that will also meet the baseline, or will produce science only slightly degraded from the baseline. Factor B-4 of the Science Implementation review considers the backup plans in the context of the threshold mission.

Q-2 How is the threshold science mission assessed?

A-2 Requirement B-18 of the Draft MIDEX AO defines the threshold science mission as the "minimum acceptable data and scientific return for the mission, below which the mission would not be worth pursuing". The scientific value of the Threshold Mission is considered in the Form A review. In the Science Implementation review, factor B-4 assesses "the approach to descopeing the Baseline Science Mission to the Threshold Science Mission" if development problems force a reduction in scope, while the maturity of both baseline and threshold Level 1 science requirements are evaluated in Step 2.

Q-3 Part of Requirement B-4 of the AO states "Two extra pages are allotted for each additional separate, non-identical science instrument in the Science Section (Sections D and E); two extra pages are allotted for each additional separate, non-identical flight element (e.g., additional non-identical spacecraft) in the Mission Implementation and Management Sections (Sections F and G)". Does the "additional separate, non-identical science instrument or flight element" count start from zero or one?

A-3 The word "additional" means that no extra pages are allotted where only a single instrument and a single flight element is proposed, or where all instruments and all flight elements are identical. For example, a proposed investigation with two separate, non-identical science instruments would be allotted two extra pages in the Science Section (Sections D and E).

- Q-4 Can supplies and services be purchased from non-U.S. sources using NASA funds?**
- A-4 The NASA FAR Supplement (NFS) under 1835.016-70, "Foreign participation under broad agency announcements (BAAs)" item 1835.016-70(a)(3) states "NASA funding may not be used for subcontracted foreign research efforts. The direct purchase of supplies and/or services, which do not constitute research, from non-U.S. sources by U.S. award recipients is permitted."
- Q-5 Are unencumbered cost reserves required to be budgeted under the PI-Managed Mission Cost (PIMMC) for AO-provided access to space?**
- A-5 Missions are not required to hold cost reserves against the cost of AO-provided launch services (whether standard or mission-unique), or against the impact to the mission of any launch delay caused by AO-provided access to space. Proposers are responsible for potential launch delay costs as a result of spacecraft or payload delays.
- Q-6 May respondents propose Commercial Ground Station services in place of SCaN provided data services?**
- A-6 Yes. Requirement 26 in Section 5.2.5 of the draft AO states "Proposals shall include mission requirements for telecommunications, tracking, and navigation; proposals shall also include a plan for meeting those requirements. If non-NASA networks are used, a cost plan for the use of services shall also be included in the PIMMC." Please also note that this section also states "NASA funds may not be used for the construction of new facilities for non-NASA communications services."
- Q-7 Will Requirement 99 be revised to allow for submission via NASA's Large File Transfer (LFT)?**
- A-7 The final AO will specify how electronic files must be submitted.