NASA Announcement – Release of the DRAFT Mission of Opportunity Solicitation for GDC Science Investigations

NASA's Science Mission Directorate (SMD) is releasing a Draft Mission of Opportunity solicitation for Geospace Dynamics Constellation (GDC) science investigations. This solicitation is intended to be released as a Program Element Appendix (PEA) under the Third Stand Alone Missions of Opportunity (SALMON-3) Announcement of Opportunity (AO), using the Focused Mission of Opportunity (FMO) option.

NASA intends to solicit science investigations that will deliver flight instruments for integration on the GDC observatories and furnish investigation team members that will join the GDC science team for Phases A through F.

GDC is being formulated as a spacecraft constellation of at least six observatories with homogenous science payloads. The mission will focus on high-priority science identified by the GDC Science and Technology Definition Team and refined as part of NASA's pre-Phase A activities.

Submitters are responsible for fully adhering to the draft PEA's requirements and restrictions. However, NASA highlights the following (non-exhaustive) list of differences between GDC and previous FMOs (all Section numbers are references to the draft PEA):

- Science
  - Investigation objectives are restricted to a NASA-identified subset of the GDC Science Objectives [Section 2.4].
  - Investigations are restricted to instruments that provide the capability to measure at least one GDC Physical Parameter [Section 2.4].
  - Investigations may not propose to deliver instrument suites [Section 1.1].
- Technology
  - Investigations must deliver identical instrument flight units for accommodation on each GDC observatory.
    - Note: Through an earlier RFI, NASA solicited teaming interest from organizations with expertise in the production of identical flight units in a cost-effective and resource-effective manner.
- Proposal Submission
  - Investigations must provide an instrument accommodation worksheet that will be used by NASA both inside and outside of the evaluation process [Section 5.3.1].
- Proposal Evaluation and Selection
  - Evaluation of an investigation-provided conflict of interest avoidance and mitigation plan [Section 4.2.1].
    - Note: The GDC Program Library contains a document listing the NASA contracts and cooperative agreement that contributed to developing the requirements in the GDC draft PEA.
  - Evaluation of the following aspects of investigations in GDC-specific criteria [Section 7.1]:
    - Inter- and cross-calibration plans; and
    - Instrument manufacturing plan.
  - Prioritization in selection for investigations that:
    - Provide cost-effective, resource-efficient instruments with minimal accommodation issues [Sections 2.6, 7.2.1]; and

- Provide the capability to measure the primary GDC Physical Parameters [Section 2.4].

The draft PEA text can be found on NSPIRES via this link, or by directing a browser to https://nspires.nasaprs.com and searching Solicitations for “Draft Geospace Dynamics Constellation” or “NNH21ZDA009J”. Proposers are encouraged to read the Draft GDC PEA and provide feedback for NASA’s consideration as the PEA is finalized. The comment period for the Draft GDC PEA ends on March 26, 2021.

NASA has not approved the issuance of the GDC PEA and this notification does not obligate NASA to issue the PEA and solicit proposals. Any costs incurred by prospective investigators in preparing submissions in response to this Draft GDC PEA are incurred completely at the submitter's own risk.

The time frame for the solicitation is intended to be:

Release of community announcement	January 12, 2021
Release of draft PEA	March 5, 2021
Comment period closes	March 26, 2021
Release of final PEA	Mid-April 2021 (target)
Notice of Intent deadline (11:59 p.m. Eastern Time)	~3 weeks after final PEA release
Proposal deadline (11:59 p.m. Eastern Time)	~3 months after final PEA release

Further information will be posted on the GDC Acquisition Homepage at http://lws.larc.nasa.gov/gdc as it becomes available. Questions will be answered on the *Questions & Answers* tab of the Acquisition Homepage. Individuals are strongly encouraged to consult that FAQ document in case desired clarification has already been provided.

Questions not yet addressed and other comments on the draft PEA may be addressed to Dr. Jared Leisner, GDC Program Scientist, at jared.s.leisner@nasa.gov with the subject line “GDC draft PEA”.