APPENDIX G

Additional Information and Requirements

1. CONTRACT SUMMARY

When proposed investigations are selected for primary* definition studies, cost-reimbursable contracts will be implemented covering four phases. The basic contract will be for Phase I, which will cover either the 10-month or 22-month definition activity. Phase II will be a priced option and will provide a bridge from the end of the definition phase until Phases III and IV of the contract are negotiated. Phase II will cover a 3-month period of initial design and development of the investigation for flight. Phase III will cover the rest of the design, development, and mission operations effort through 30 days after launch. Phase IV will cover mission operations beginning 31 days after launch, data analysis, and the transition of data to public archives. Phases III and IV will be added to the contract during Phase II. If a proposed investigation is selected as an alternate*, a contract will be awarded for minimal effort to conduct preparatory definition studies and to maintain a nucleus of the investigation team.

2. DEFINITION STUDY (Basic, Phase I)

The following tasks should be accomplished during the definition study:

- Refine the science requirements and the mission requirements.
- Develop the system concept and the operating plan.
- Develop instrument support requirements and interface agreements between the instrument and the spacecraft.
- Identify high risk items and potential alternatives.
- Develop a plan for prioritized descoping of mission capability from the Baseline Mission to the Minimum Science Mission in the event of cost or schedule growth.

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* See Section I.B of this AO regarding primary and alternate investigations

- Assist the Project in developing the mission implementation plan.
- Prepare the Instrument Development Plan (Mission Development Plan for PI-Mode) for design, development, launch, mission operations, and data analysis.
- Develop the instrument (mission for PI-Mode) performance assurance program.
- Demonstrate technology and build breadboards as required.
- Develop a plan for education and public outreach.

In the case of the NASA-provided spacecraft, the GSFC Explorers Project will examine the performance of the spacecraft, launch vehicle, and communications networks needed to achieve the science requirements. The Project will assist the Principal Investigator in developing and analyzing the concept for the mission, including the configuration of the instrument and spacecraft subsystems, and the interface agreements among the major components. In the PI-Mode, the Principal Investigator will perform these tasks.

The schedule of planned activities and deliverables through the nominal 10-month definition phase is listed below. For the nominal 22-month definition phase, this schedule represents the final 10 months. Contract award is expected within one month after the mission is selected.

Activity	Time (months)
Contract award (Authorization to Proceed)	0
Definition of Level 1 requirements	1
Mission definition and requirements review	3
Preliminary development plan update due	4
Systems concepts and operating plan review	7
Final development plan due	8
Revised Phase III and IV proposal due	8
Preliminary Design Review/Non-Advocate Review	9
Confirmation Review	9
Confirmation of mission	9
Interface control document	9
Definition phase final report	10

Authorization to Proceed - Phase II	10
Authorization to Proceed - Phases III and IV	13

Any modifications to the proposed work for Phases III and IV that come up during definition will be incorporated in a revised proposal that will include up-to-date pricing information and be submitted 8 months after contract award. In the same time frame, the investigation team will present definition study results to a NASA Headquarters review team. This team will examine the scientific and technical merit and relevance, technical feasibility and maturity, cost, management and other factors, and investigation team performance during definition. The review team will make a recommendation on the mission to the Associate Administrator for Space Science who will decide if it will be confirmed for development. Missions not confirmed for development will conclude their contracts with a final report due 10 months after contract award.

3. MISSION DEVELOPMENT (Phases II and III) and MO&DA (Phase IV)

For missions which are confirmed, the priced option will be exercised to implement Phase II by increasing the funding limit and initiating design and development. This modification is expected to be in place before the end of the 10-month basic period and permit a seamless transition from definition to development. A final report on the defined mission is also required for confirmed missions.

Audits of the up-to-date pricing information will also be initiated at confirmation. NASA expects that the 4 months of post-confirmation activity covered under Phases I and II will be sufficient to modify the contract to add Phases III and IV.

4. CONTRACT TERMS AND CONDITIONS

In order to expedite contract award after selection, the GSFC Explorers Project Library contains a sample contract schedule reflecting the basic contract terms and conditions for any cost-reimbursement Phase B instrument definition contract resulting from this AO. A cost-reimbursement instrument Phase C/D contract schedule is also available for review in the Library. Proposers should consider this information when preparing their proposals. No specific response is required unless exceptions are taken.

For those proposers proposing in the "PI-Mode," the Library contains sample contract schedules for cost-reimbursement Phase B and Phase C/D mission contracts. Also included is a firm-fixed price (FFP) spacecraft contract schedule to be considered when FFP subcontracting is appropriate. Proposers are encouraged to consider this information when preparing their proposals.