

## Task Order Statement of Work (SOW)

Date: 8/27/2020

Task Name: ESM/RP PROGRAM SYSTEMS ENGINEERING

Task No. / Mod: 9 / 9.

Task Monitor (TM): Dennis Dillman

Contract number: NNG15CR66C

Contract SOW Reference:

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Mod 9 extends end date from October 14, 2020 to April 14, 2021. No change in scope.

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*FUNCTION 1- FORMULATION PHASE SERVICES*

*FUNCTION 2- IMPLEMENTATION PHASE SERVICES*

### I. Scope

- a. Background – This task is in support of two program offices that are located within the GSFC Earth Science Projects Division, Code 420. The two programs are the Earth Systematic Missions Program (ESMP), which is subsidiary to the Earth Science Division of the Science Mission Directorate of NASA, and the Reimbursable Projects Program, which is subsidiary to the Joint Agency Science Division of the Science Mission Directorate of NASA. The ESMP and RPP are responsible for execution of several missions at various points in the life cycle. Systems engineering involves monitoring of missions and projects, as well as cross-cutting activities.
- b. Summary of work
  - i. Monitor projects that are in any stage of development and operations. This includes pre-formulation and formulation [Function 1] and implementation [Function 2]. Activities may include attending project reviews and meetings, reviewing documents and status reports, providing summary reports and analyses of project activities.
  - ii. Subject Matter Expert support. Provide subject matter expert support on an ad hoc basis for individual projects. This may include (for example) participating in tiger teams, attending design reviews, or participating in failure review boards. [Function 1 and 2]
  - iii. Support cross cutting technical program activities, as requested by program management.

- iv. Track programmatic and technical issues across all projects. Maintain awareness and provide summaries weekly of top program issues. Identify new issues and potential cross cutting issues.
  - v. Act as risk manager, including tracking program office risks, mitigation activities, and actions. Attends program office and ESD risk management meetings and provides summaries and resulting actions. Ensures all actions are completed prior to assigned dates.
- c. Required skills/knowledge – All items require experienced systems engineers with knowledge of flight projects throughout their lifecycle. Understanding and experience in a program office is beneficial.

II. Period of Performance

Modification 9 extends the period of performance for the task order through April 30, 2021.

III. Subtask Description

**Not applicable**

IV. Deliverables/Schedules/Milestones

*EXAMPLE: At a minimum, the contractor shall deliver the items specified below:*

<i>Ref#</i>	<i>Deliverables</i>	<i>Due Date</i>
1	Status Reports	Weekly
2	Performance Reports	Monthly
3	Trip Reports	Due three working days after trip completion
4	Assessments and recommendations	As requested

V. Management Approach

- a. Staff Allocation, Expertise, and Skill Mix

The contractor shall staff this work item with the appropriate skill mix and staffing level for the work.

b. Configuration Management

Systems and documents will be covered under the Program/Division Configuration Management Plan.

c. Facilities

Appropriate IT devices to support the analyses and report development are provided by the government. It shall be the contractor's responsibility to support telework, if necessary.

d. Risk Management and Best Practices

The contractor shall follow the ESMP/RPP Risk Management Plans

e. Performance Metrics

1. Actual vs Planned Costs
2. Quality of Technical Performance
3. Contractor Communication
4. Personnel Management

f. Government Furnished Facilities, Equipment, Software and Other Resources

The Government will provide account and passwords to government-furnished workstations where existing versions of various relevant software packages shall be maintained. It shall be the contractor's responsibility to complete any GSFC required security-related training courses.

g. Quality Assurance Requirements

Not applicable

VI. ODC (Travel and Procurement)

- a. Travel for mod 9 is estimated below

<u>Location</u>	<u>Duration</u>	<u>Dates</u>	<u># of People</u>
Boulder, CO, for CLARREO-PF and OMPS-L	3 days	4 times, dates TBD	1
LaRC, Hampton, VA for CLARREO-PF	3 days	8 times, dates TBD	1
Northrop-Grumman, Gilbert, AZ, for LandSat 9	3 days	3 times, dates TBD	1

VII. Work Location

This work shall be performed primarily at the Goddard Space Flight Center (On-site), or telework.

VIII. Reporting Requirements

a. Weekly status report

The contractor shall generate status reports every week. The report shall include, as a minimum, a summary of the week's highlights/accomplishments, milestones/schedule/deliverables, risks and customer meetings.

b. Monthly performance report

The contractor shall provide monthly technical and schedule progress reporting to adequately describe the activities of the contractor team to the TM. The contractor shall provide monthly cost reporting in accordance with the WBS. The contractor, including subcontractors, shall be available to attend monthly status meetings.

c. Trip Reports

The contractor shall provide trip reports after completing each trip, due no later than three working days after the completion of the trip.

d. Study Reports

The contractor shall provide study reports for special studies for which the contractor is study lead (if any).

IX. Security Requirements

The contractor shall comply with Information Technology Security procedures and requirements as defined by NPG 2810.1A in the performance of this task. In addition, the contractor shall comply with all applicable federal rules and regulations and agency directives.

X. Applicable Documents

Applicable requirements include, but not limited to:

1. NPR 7120.5E      NASA Space Flight Program and Project Management Requirements
2. NPR 7123.1C      NASA Systems Engineering Processes and Requirements
3. GPR 7123.1B      Systems Engineering
4. GSFC 420-01-03      ESMP Systems Engineering Management Plan
5. GSFC 420-01-02      ESMP/RPP Risk Management Plan

XI. References

Not applicable