

Earth Science Data and Information System Project

Earth Observing System Data and Information System (EOSDIS) Evolution and Development 2

(EED2) Statement of Work for SAFe for EOSDIS

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Section 1. Introduction

1.1 Task Summary

This task provides the support necessary to continue the SAFe development methodology currently in use on the EED-2 contract utilizing three value streams (mapped to 3 SAFe release trains). Each train includes both the relevant EED-2 tasks and any external development entities that have dependencies with the EED-2 tasks or develop capabilities in the release train functional area. The three trains will be divided by functional areas which include: Ingest and Archive, Data Use, and Platform capabilities.

In addition to the running of the three release trains, support will be provided at the epic level to coordinate the activities across the three trains to match the priorities set by the Government via the Earthdata Cloud Program Management Board, and Government task leads and any issues relating to the execution of the work within the release trains will be elevated to the board for resolution. .

Section 2 describes the work to be performed under this task.

1.2 Applicable and Reference Documents

1.2.1 Applicable Documents

Applicable documents are those specification, standards, criteria, etc. used to define the requirements of this Statement of Work (SOW). In the event of a conflict between an applicable document and this SOW this SOW takes precedence. Should a conflict occur among applicable documents, the contractor shall request resolution from the Contracting Officer.

- Earthdata Cloud: 2021 Project Management Plan (.pptx 10/2017, draft)
- SAFe 4.5 framework
- 423-CDRD-EED2 Contract Data Requirements Document for EED2
- NPD 2820.1, NASA Software Policies
- NPR 2810.1A Security of Information Technology
- NPR 7150.2 NASA Software Engineering Requirements
- NASA-STD-8719.13B, NASA Software Safety Standard
- NASA-STD-8739.8, Software Assurance Standard
- IEEE Standard 730, Software Quality Assurance Plans
- Section 508 Standards – see <http://www.section508.gov/index.cfm?FuseAction=Content&ID=12>, particularly

Subpart B – Technical Standards 1194.22 Web-based intranet and internet information and applications.

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1.2.2 Reference Documents

Reference documents are those documents included for information purposes; they provide insight into the operation, characteristics, and interfaces, as well as relevant background information. The contractor is bound by these documents to the extent specified in this specification or in its applicable documents.

- NPR 4200.1F, NASA Equipment Management Procedural Requirements
- NPR 7120.5D, NASA Space Flight Program and Project Management Requirements

1.3 Period of Performance

The period of performance of this task is 10/01/2019 through 8/31/2020.

1.4 Place of Performance

The place of performance is the GSFC, Greenbelt, MD and the contractor's facility in Riverdale Maryland.

Section 2. Work to be performed

2.1 Scope of Work

2.1.1 Assumptions and Definitions

Collaborating with External Entities

Elements of this work involve coordination by the contractor with various external entities: JPL, University of Alabama Huntsville, Development Seed, SES II, DAACs etc. It is assumed that the EED-2 contractor is responsible for the work outlined below and is supportive of (but not responsible for) efforts of these external entities as stated. It is anticipated that each of the three release trains will contain 10-20 development entities (this range includes the EED-2 teams) doing concurrent planning.

2.1.2 Program Control and Communication

The contractor shall provide a management organization with the necessary capability and authority to ensure that task, technical, schedule, and cost requirements are met.

The contractor's primary government interface is with the Goddard Space Flight Center's ESDIS Project. Contract/task direction and modification can be provided only by the government Contracting Officer (CO).

The contractor shall supply all the necessary resources, materials, facilities, travel and support tools needed in addition to the government furnished property to manage this task.

Planning, Reporting, and Reviews

The contractor shall be responsible for all planning necessary to accomplish the work defined by this task.

The contractor shall meet with ESDIS Project technical monitors on a weekly (or other mutually agreed to) basis to communicate status and priorities.

The contractor shall meet with the release train participants on a mutually agreed to schedule (nominally weekly) to discuss status and priorities.

The contractor shall provide 533M, 533Q, accrual, and variance reports (DID EED2-533-11). The contractor shall track and report separately SAFe effort across all trains for ESDIS costs.

The contractor will provide progress reviews at the request of the task monitor or COR. The reviews shall include status of the individual trains and traceability to the

Government requirements as provided by the Earthdata Cloud Program Management Board or individual ESDIS task leads.

2.1.3 Release Train Configuration

The contractor shall, in consultation with the Government when non-EED-2 personnel are involved, define the development team membership of three development release trains organized by the functional areas: Ingest and Archive, Data Use, and Platform Capabilities.

The contractor shall, in consultation with the Government when non-EED-2 personnel are involved, provide staffing for any or all of the key release train functions for each release train: Release train engineer, Product Manager, and System Architect.

The contractor shall, in consultation with the Government when non-EED-2 personnel are involved, provide staffing for any or all of the Epic level functions of Release train engineer, Product Manager, and System Architect. The Epic level team will support coordination of the activities across the three release trains to match the prioritization of requirements given by the Government via the Earthdata Cloud Program Management Board and the Government Task Leads.

The contractor shall provide the effort for coordination of all three release trains and all the necessary tools and processes to operate the trains, to include any procurement.

The contractor shall provide all the necessary tools and processes to coordinate the activities of the three release trains at the Epic level, to include any procurement.

The contractor shall staff according to the hours required to perform the functions, not assuming each train related slot is a fulltime position.

2.1.4 Release Train Program Increments

The contractor shall perform Program Increment Planning nominally every 12 weeks for an execution period of 5 development sprints and 1 Innovation & Planning sprint.

The contractor shall hold Program Increment planning sessions for all three trains on the same nominal 12-week cadence so that planning occurs simultaneously.

The Contractor shall schedule the Program Increment Planning sessions on the dates specified in the deliverables table.

The contractor shall coordinate with external entities as required to ensure that the release trains function as designed, with contributions and actions similar for both the internal

EED-2 teams and the external development teams and that all development teams meet the schedules and deliverables established within each train.

The contractor shall coordinate with ESDIS as required to ensure that the release trains function as designed and Government input is solicited as needed for prioritization of work or the development of mitigation strategies, and that the development teams meet the schedules and deliverables established within each train.

The Contractor shall provide a Summary of the results of each Program Increment (for each train) and each Epic (12-week period across three trains) as specified in the deliverables table. A record of attendance for the PI planning sessions shall also be provided to the task lead.

2.2 Project Deliverables

See TPR for deliverables and due dates.