

Attachment 2

Ares Project Office (APO) Ares I Project Management Systems Analysis Statement of Work (SOW)

1.0 OBJECTIVE:

As part of the Vision for Space Exploration (VSE), NASA is developing the Ares I Crew Launch Vehicle (CLV) with a first human launch no later than 2014. Marshall Space Flight Center (MSFC) provides overall management for the design, development, test, evaluation, and integration of the Ares I launch vehicle.

The Exploration Launch Office (ELO) Program Planning & Control (PP&C) Office is responsible for integrating budget, schedule, and earned value data from the Ares I component in support of the VSE. A key element of this effort is to provide program management system analysis of the budget, schedule, and earned value analysis and assessment of the data in order to develop and maintain various reporting metrics.

The objective of this statement of work (SOW) is to collect, analyze, assess, and maintain the budget, schedule, and Earned Value Management (EVM) data to formulate reporting metrics utilizing the web-based Program Control System (PCS) II for the ELO PP&C Office.

The Contractor may handle Sensitive but Unclassified (SBU) data generated by the Government in support of the Ares I (CLV) Project. The SBU data may include, but is not limited to, Government information such as plans, policies, drawing, reports, studies, financial plans, electronic devices (disks and/or CDs), or data that has not been made public (Government Information). The Contractor shall not handle any SBU data generated by another contractor, nor shall the contractor access any database or other electronic media that contains SBU data generated by another contractor. If for any reason the Contractor is requested to handle/access SBU data generated by another contractor, the Contractor shall notify the requestor that it is not authorized to handle such data and shall immediately notify the Contracting Officer.

2.0 TASK DESCRIPTION:

The contractor shall be responsible for consolidating, uploading, maintaining and updating the schedule, budget, and EVM data, provided by the Ares I Project Office and associated elements. Using the Ares I Project Office provided data, the contractor will develop project management reports on a weekly basis utilizing the web-based Program Control System (PCS) II tool. The purpose of this effort is to establish a monthly reporting mechanism to equip the ELO project management team with information that will enable them to make informed management decisions that affect the management and direction of the Ares I Project.

Using the Government Furnished PCS II tool, the contractor shall provide for the initial configuration of the data in the area of Project Controls. The contractor shall develop initial inputs and submit to the Ares I Project Office for review and concurrence. Typical inputs will include:

- 1) Schedule structure, data fields, custom code fields, resources, financial, and performance information;
- 2) EVM data that includes Budget Cost of Scheduled (BCWS), Actual Cost of Work Performed (ACWP), Budgeted Cost of Work Performed (BCWP), Estimates to Complete (ETC) and Estimate at Complete (EAC) and Variance at Complete (VAC);
- 3) Risk items, risk mitigation steps, and monitoring;
- 4) Headcount / Staffing; and
- 5) Budget and funding.

The contractor shall develop and/or recommend output formats and submit to Ares I Project Office for review and concurrence. The output formats may include, but are not limited to: reports, dashboard gauges, and e-mail notifications. Typical cost, schedule, and technical outputs will include:

- 1) Performance reporting;
- 2) Trending Analysis;
- 3) Risk Assessments;
- 4) Staffing Requirements Assessment;
- 5) Schedule Performance Status; and
- 6) Schedule, budget, and EVM Forecasting.

The contractor shall work directly with each of the Ares I Project Element Offices (Vehicle Integration Office, First Stage Office, Upper Stage, Office, Core Stage Office, Upper Stage Engine Office, and Flight Integration Test Office) to ensure that all inputs and outputs meet project requirements. The contractor shall re-evaluate the requirements on a monthly basis and make recommended changes.

The contractor shall serve as PCS II data management support. These duties include, but are not limited to:

- 1) Facilitate uploading of updated project element data;
- 2) Facilitate requests for user accounts;
- 3) Answer technical questions from the user community;
- 4) Collect and facilitate recommendations for upgrades and enhancements;
- 5) Develop new reports and views as requested by Ares I Project Office; and
- 6) Conduct consumer and user training.

The contractor shall be responsible for information and information technology (IT) security when physical or electronic access to NASA's computer systems, networks, or IT infrastructure is required or when information systems are used to store, generate, process or exchange information with NASA or on behalf of NASA, regardless of whether the information resides on NASA's or a contractor's information system. At the completion of the contract, the contractor shall return all NASA information and IT resources provided to the contractor during the performance of the contract and certify that all NASA information has been purged from contractor-owned systems used in the performance of the contract. The contractor shall submit a Contractor Information Technology Security Program Plan (CITSPP) in accordance with DRD 1164CD-001

2.1 Deliverables:

2.1.1 Weekly

The contractor shall update PCS II with budget, schedule, and technical data provided by each of the Ares I Project Element Offices. The contractor shall perform verification and validation of data to ensure horizontal and vertical integration of all Ares I Project Office Element data. The contractor shall analyze the data, develop trends, forecasts, variances, funding projections, staffing / headcount plans and impacts to develop briefings from the analysis for the Ares I Project Office and associated elements.

The contractor shall support the coordination of meetings between Ares I Project Office and associated element, which includes documenting issues, tracking action items, and reporting status.

2.1.2 Monthly

The contractor shall update PCS II with cost, schedule, and technical accomplishments. The contractor shall perform verification and validation of data. The contractor shall analyze the data, develop trends, forecasts, variances, funding projections, staffing / headcount plans and impacts to develop briefings from the analysis for the Ares I Project Office and associated elements. These briefings will provide data for the Constellation monthly program reviews.

The contractor shall interface directly with each Element Office to resolve performance issues and develop corrective actions and workaround plans. The contractor shall resolve schedule software interface anomalies and data integrity issues as required.

The contractor shall support the coordination of meetings between the Ares I Project Office and associated elements, which includes documenting issues, tracking action items, and reporting status.

2.2 The contractor shall report and document this work and fulfill the requirements of associated Data Requirement Descriptions (DRD's) as outlined in Data Procurement Document (DPD) 1164 (Attachment 3). The contractor shall determine the data restriction that applies to each data deliverable and mark or

transmit the data restriction in accordance with section 2.3.3 of the Data Procurement Document.

The contractor shall prepare and deliver Badged Employee and Remote IT User Listings in accordance with DRD 11648MA-001.

The contractor shall prepare and deliver Contractor Employee Clearance Documents in accordance with DRD 1164MA-002.

The contractor shall prepare and submit a Monthly Status Report in accordance with DRD 1164MA-003.

The contractor shall prepare and deliver Position Risk Designation for Non-NASA Employee in accordance with DRD 1164MA-004.

The contractor shall establish and implement an industrial safety, occupational health, and environmental program and provide a signed Safety, Health, and Environmental (SHE) Work Agreement in accordance with DRD 1164SA-001.

2.3 Travel Estimate

Base Period: Two 3-day trips (2 people per trip) per year to Johnson Space Center in Houston, TX

Option Period One:

- One 12-day trip (5 people) to Kennedy Space Center to support the Defense Contracts Management Agency (DCMA) earned value management system validation review of United Space Alliance planned for October 20 – 31, 2008
- One 5-day trip (4 people) to Nashville, TN to support the annual Ares Project Office Scheduling Summit/Technical Interchange meeting planned for October 2008
- One 5-day trip (3 people) to Ogden, Utah supporting the ATK delta Integrated Baseline Review planned for November 2008
- One 5-day trip (1 person) to Ogden, Utah supporting the DCMA led Progress Assist Visit at ATK planned for November 2008
- One 5-day trip (3 people) to NASA Kennedy Space Center (KSC), Cape Canaveral, Florida to support the Constellation Scheduling Summit planned for December 2008
- One 5-day trip (2 people) to NASA Johnson Space Center (JSC), Houston, TX to support Constellation Integrated Monthly Schedule status meeting planned for January 2009

- One 5-day trip (3 people) to Canoga Park, California supporting the Pratt-Whitney Rocketdyne annual Integrated Baseline Review planned for February 2009
- One 5-day trip (2 people) to Johnson Space Center (JSC), Houston, TX to support Constellation Integrated Monthly Schedule status meeting planned for March 2009
- One 5-day trip (2 people) to Michoud Assembly Facility (MAF), New Orleans, LA to support a technical interchange and scheduling review of the Upper Stage Assembly facility planned for April 2009
- One 5-day trip (2 people) to NASA Stennis Space Center (SSC), Bay St. Louis, MS to support a technical interchange and scheduling review of the A-3 J2-X engine test stand facility planned for May 2009
- Four 5-day trips (once per quarter) (1 person per trip) to NASA Headquarters, Washington, D.C. to support the quarterly ESMD review of the Ares project (5-days) planned for August - September 2008, November – December 2008, February – March 2009 and May – June 2009

Option Period Two: Two 3-day trips (2 people per trip) per year to Johnson Space Center in Houston, TX

Option Period Three: Two 3-day trips (2 people per trip) per year to Johnson Space Center in Houston, TX

3.0 GOVERNMENT FURNISHED ITEMS:

The Ares I Project Office will provide access to the application server and a SQL Server database server hosting the PCS II software, as well as associated licensing. NASA will provide the coordination and sponsorships for interfacing with the NASA Information Technology department.

The Ares I Project Office will make available all documentation that is currently available in support of this SOW to ensure that the information developed by the contractor is based on the most current NASA assessments available to date.

4.0 PERFORMANCE REQUIREMENTS SUMMARY (PRS):

The following columnar section defines the PRS for the tasks detailed above. Not all efforts under this order are included in the PRS. Lack of inclusion in the PRS in no way relieves the contractor of the obligation to perform all delineated tasks.

Level of Acceptable Performance: The Level of Acceptable Performance is the measure used by the Government to evaluate the contractor's quality control on a monthly basis. Performance below this level indicates the contractor's quality

control is unsatisfactory. The Level of Acceptable Performance for each work environment is specified in the PRS below.

Deduction Methodology: The deduction taken for unsatisfactory performance of individual tasks is measured per incident. Each incident shall reduce the value of the invoice associated with the evaluation period in which the incident was observed by the Government. The amounts to be deducted per incident are shown in the PRS below:

PERFORMANCE REQUIREMENTS SUMMARY

REQUIRED SERVICE/SUPPORT	PERFORMANCE STANDARD	LEVEL OF ACCEPTABLE PERFORMANCE	METHOD OF SURVEILLANCE
Submission of Reports and Data	The contractor shall assure the timely and accurate submission of required reports and deliverables	0 Incidents Incidents are limited to each late submission of reports required and each error discovered in reports Dollar deduct for Incident Per incident=\$100	Review of delivered data
Provision of Qualified Personnel	Adherence to Quoted and Accepted Staffing Approach	0 Incidents Incidents are limited to any lack of adherence to quoted and accepted Staffing Approach. Dollar deduct for Incident Per incident=\$1,000	Quarterly (more frequently is required) review of staffing issues that are identified by either the contractor or customer.