1.0 Contract Overview

This Performance Work Statement (PWS), and the documents attached or referenced herein define the Government's requirements for the Contractor to provide integrated services primarily in support of the National Aeronautics and Space Administration (NASA), Launch Services Program (LSP), and other Government or commercial launch activities under the Expendable Launch Vehicle Integrated Support 2 (ELVIS 2) contract.

1.1 Baseline Requirements

The Contractor shall provide the NASA LSP with Program Management Support, NASA LSP Programmatic Safety, Reliability and Quality Support, Launch Site Support Engineering, Technical Integration Services, Communications and Telemetry, VAFB Unique Support, Vehicle Engineering and Analysis, Special Studies, and Information Technology (IT) Support. Support shall be provided to the NASA LSP and NASA LSP supported missions, activities and strategic initiatives including but not limited to multiple NASA programs, the Department of Defense (DoD), and other Government agencies and commercial launch activities. The Contractor shall provide services at the Kennedy Space Center (KSC), Cape Canaveral Air Force Station (CCAFS), Vandenberg Air Force Base (VAFB), and other launch sites as well as resident offices, and as required at commercial launch provider facilities. Facility Upgrade/Modification/Repair/Design and Construction may be required at VAFB and will be ordered under Indefinite-Delivery/ Indefinite-Quantity task orders.

The Contractor shall provide the management, integration, technical, business, and administrative functions required for balanced and sustained accomplishment of the contract requirements set forth herein. The Contractor shall institute and maintain an effective, efficient, and responsive organization responsible for management and oversight of Contractor personnel, other contract resources, contract performance, deliverables, and cost. The Contractor shall meet the reporting requirements of this contract specified in Attachment J-02, (Data Requirements Documents List/Data Requirements Description (DRL/DRD)).

1.2 Objectives

This Performance Work Statement (PWS) describes the tasks to be performed by the Contractor in terms of Government required outcomes and/or results that support the NASA LSP mission.

The NASA LSP mission is to provide leadership and expertise in providing on-orbit, on-time, and on-cost launch services. This mission includes successful delivery of spacecraft to space, assuring launch services for customers, promoting the evolution of a competitive space market, and continually enhancing NASA LSP core capabilities.

2.5.4 Records and Data Management

The Contractor shall ensure accurate and complete records of Government business are maintained in accordance with the current version of NPR 1441.1, NASA Records Retention Schedules. This includes legacy Federal records (data created for Government use and delivered to, or falling under the legal control of the Government) inherited from previous contracts, Government-owned, Contractor-held electronic and vital records. Records of Government business shall be segregated from company-owned records and from non-record materials. The Contractor shall provide NASA or authorized representative's access to Government records in accordance with FAR Subpart 4.7. The Contractor shall transfer Government-owned data to the Government at the completion or termination of this contract.

The Contractor shall develop, maintain and implement a Records Management Plan and Annual Summary of Record Holdings (DRD-2.14).

2.5.5 Emergency Management

The Contractor shall define actions to respond to significant loss of capability due to accident or incident, equipment or infrastructure failures, attacks against computer systems and networks, loss of capability due to natural disaster, and other emergency situations, and include plans to conduct timely recovery. The Contractor's approach shall include specific protective and preventative measures for the Contractor's assigned facilities, systems, equipment, and operations as well as assumptions concerning required Government involvement. Mission specific requirements shall be addressed where applicable.

The Contractor shall designate a Contractor Emergency Coordinator responsible for supporting emergency preparedness planning and implementation, and interface with the NASA LSP Emergency Preparedness Officer.

The Contractor shall plan for and participate in emergency management exercises and drills.

The Contractor shall support hurricane preparation and recovery activities in compliance with the current version of KDP-KSC-P-3006, Tropical Storm and Hurricane Preparation, Response, and Recovery.

2.6 Security Management

2.6.1 Physical Security

The Contractor shall develop, update, and implement a Security Management Plan (DRD-2.15), in accordance with the current versions of NPD 1600.2, NASA Security Policy, NPR 1600.1, NASA Security Program Procedural Requirements,

3.0 NASA LSP Program Management Support

The Contractor is responsible for performing and integrating the Programmatic NASA LSP business and administrative functions as specified below.

3.1 NASA LSP Program Planning Support

The Contractor shall implement, maintain, and disseminate an NASA LSP Program Schedule using Contractor-provided licenses for the LSP approved scheduling tool, (currently Milestones Professional software).

The Contractor shall maintain an integrated master schedule of key meetings, reviews, schedules, projects and processes in accordance with the NASA LSP Program Schedule (DRD-3.1). The Contractor shall identify and present conflicts on the schedule to NASA LSP Program Management each week.

3.2 NASA LSP Program Monthly Review

The Contractor shall collect inputs for the NASA LSP Monthly Program Review from the various NASA, NASA LSP and support contractors, integrate the data, reproduce and distribute the presentation to the NASA LSP Program Manager as described in the NASA LSP Monthly Program Review Presentation (DRD-3.2). The Contractor shall record, track and status action items resulting from this review.

3.3 NASA LSP Program Evaluation, Measurement, and Performance Data

The Contractor shall provide data to support and update NASA LSP performance indicators to evaluate the overall progress and work content (excluding cost) of the NASA LSP pertinent to the current version of KDP-B-1028, John F. Kennedy Space Center Business Objectives and Agreement for the Launch Services Program, in Section 3.0 Mission Objectives – Performance Indicator Column. The data shall be submitted as described in the NASA LSP Measurements and Performance Indicators (DRD-3.3).

3.4 NASA LSP Program Configuration Action Request Support

The Contractor shall organize and maintain comprehensive NASA LSP data on Configuration Action Requests (CARs) including data collection, tracking, and reporting. The Contractor shall control access to sensitive and proprietary financial data.

3.5 NASA LSP PRCB and Risk Management Coordination and Support Functions

The Contractor shall perform coordination and support functions such as: scheduling intergovernmental meetings and facilities, providing status reports and documenting official decisions and actions assigned, and maintaining charter documents and records

and databases to include but not limited to the Risk Management Database and the Configuration Change Request Database for the following activities:

- Launch Services Program Program Requirements Control Board (PRCB) Plan (LSP-PLN-351.01)
- Launch Services Program Risk Management Plan (LSP-PLN-353.01)

3.6 NASA LSP Program Information and Documentation Maintenance

3.6.1 NASA LSP Information Management

Using inputs from the NASA LSP, the Contractor shall identify, control, and manage Program information and documentation in a manner that ensures that information is readily accessible, easily retrievable, and preserved. Program information includes documents, data and electronic systems, and associated metadata. Documents include, but are not limited to NASA LSP administrative files, policies, processes, forms, technical instructions, agreements, metrics, and other structured or unstructured documents in support of the Program. The Contractor shall support the NASA LSP Records Liaison Officer and Records Technical Representative with the maintenance and management of Program records.

The Contractor shall support the development, implementation, and maintenance of LSP-PD-120.01, Launch Services Program (LSP) Information Management Policy, LSP-PLN-352.01, Launch Services Program (LSP) Information Management Plan, LSP-D-120.1, LSP Program Data Management System/Process Map, and Information Management Process Map, and LSP-R-358.01, Launch Services Program Records File Plan, in accordance with the procedures and instructions in the current versions of KNPR 1470.1, KSC Business Management System Documentation (BMSD), and KNPR 1440.6, KSC Records Management.

3.6.2 Document Management

The Contractor shall provide support services to include but not limited to:

- Identify, control, and manage NASA LSP documentation, including performing status accounting, and audit functions.
- Review, load, associate metadata, and perform the release of electronic copies of NASA LSP documentation into the Tech Doc System, or other identified systems for the NASA LSP.
- Assist the Document Points of Contact in the creation of Program documentation; coordinate with the KSC Business Management System Documentation Manager on issues involving management system documentation.
- Perform Application Administration support for Tier 1 and 2 Technical Documentation (TechDoc) System, or other Program documentation systems.

- Maintain SharePoint web pages, lists, and libraries, and other web pages in support of Information Management activities.
- Ensure structured document labeling for retrieval.
- Provide familiarization training for NASA LSP employees with information-related practices and tools.
- Develop data input, nomenclature and filing processes that are consistent with NASA documentation guidelines and archive records per NASA Records Retention Schedules, NPR 1441.1, and KSC requirements.
- Scan and/or retrieve and store library contributions into identified NASA libraries, KSC archives, or Federal archives.
- Distribute deliverables and documents to parties identified on distribution lists.
- Provide hard copies of library items upon request.
- Support Program internal/external audits.
- Develop metrics to track problem areas, high-priority actions, strategic initiatives, and other operations as required.

3.6.3 Export Control Support Services for NASA LSP

The Contractor shall ensure export control is addressed for NASA LSP supported missions. The Contractor shall identify required agreements and export control licenses, their status, and potential impacts to the relevant mission. The Contractor shall identify required export licenses and support the application submittal within 30 days of a mission approval for the NASA LSP manifest. The Contractor shall provide current status of existing export licenses and license applications. The Contractor shall track export control issues, actions, and closures in electronic form.

The Contractor shall coordinate issues with the Government POC and the Mission Manager (MM) for each mission. The Contractor shall provide export control mission briefings to customer personnel and NASA Mission Integration Team (MIT) members and management. The Contractor shall review NASA LSP websites to ensure compliance with export control regulations. The Contractor shall classify Export Control shipments.

3.7 Technical Writing, Reports, and Documentation

The Contractor shall provide technical writing, editing, and technical illustration of various programmatic, engineering, science and technology documents, reports, strategic plans and presentations related to NASA LSP activities. Support shall include researching, writing, reviewing, editing, typing, and proofreading to ensure production of a complete document ready for approval.

The Contractor shall support the development and maintenance of engineering requirements, processes, standards and specifications.

The Contractor shall develop and maintain engineering, science and business processes, procedures and documentation.

to the following: voice communications, video, timing, satellite up-links and down-links, Launch Site Support Trailer (LSST), administrative support, and press conference rooms. The Contractor shall participate in planning meetings and teleconferences. The Contractor shall develop a KSC/LSP Public Affairs Office Mission Support Plan (PMSP) (DRD-3.4), based on PAO requirements. The Contractor shall submit the PMSP to the NASA LSP Public Affairs Liaison for review and approval no later than 30 calendar days before launch. The Contractor shall implement the PMSP requirements that are not implemented by other NASA KSC contractors (e.g. IMCS) to ensure successful PAO launch coverage.

For VAFB missions, the Contractor shall provide mobile satellite uplink services for NASA LSP sponsored missions to support mission-direct activities including launch and an end-to-end communications test prior to launch day and/or a launch attempt.

For VAFB missions, the Contractor shall provide launch site viewing services for 50 guests (and additional guests in units of 25 guests) to NASA for the initial launch attempt for each mission. These services shall include processing of requests, setup of a guest check-in area, arrange for tent/canopy, restroom facilities, chairs, drinking water and dispensers, TV monitors, public address system, traffic control, emergency medical service at the viewing area, transportation of guests, and conducting tours of the NASA facilities at VAFB.

4.0 NASA LSP Programmatic Safety, Reliability and Quality Support

The Contractor shall gather data and provide the program and process insight to enable the NASA Safety and Mission Assurance (SMA) Launch Services (LS) Division to perform independent assessment for flight readiness. The SMA LS Division utilizes this data and insight to provide the independent oversight and assessment needed to certify flight readiness for NASA LSP sponsored missions and activities.

The Contractor shall provide support for the collection and analysis of commercial launch provider program and process data, including but not limited to: daily status notes, non-conformances, audits, manufacturing and production processes and integration, hardware reviews, design reviews, failure effects analysis, reliability analysis, and overall program risk management and mitigation efforts.

Primary locations of performance shall be at KSC, the launch sites, and are extended to include commercial launch providers' locations or other locations as new commercial launch providers are identified.

The Contractor shall participate in reviews, meetings, pertinent tests and site visits. The Contractor shall produce products in support of the Division's Certificate of Flight Readiness as defined in the applicable sections of the current version of KTI-3643, Safety and Mission Assurance Launch Services Division Operating Plan.

- Develop and maintain insight into the commercial launch provider engineering and production through daily contact with peers throughout the commercial launch provider organization.
- Coordinate and perform technical interchange with NASA LSP counterparts on Engineering Review items, risk items and incoming commercial launch provider documents.
- Participate in reviews and meetings at the commercial launch provider location.
- Participate in selected reviews and activities at other locations (e.g., MIWG, Spacecraft-to-Vehicle Fit Check, commercial launch provider supplier product reviews).
- Participate in the NASA-led Launch Campaigns by participating in the engineering launch team or providing support to the engineering launch team from the resident office.
- Provide technical assessments of the test activity at the commercial launch provider and supplier locations. Participate in Test Readiness Reviews, observe testing and report issues and/or results.
- Perform independent investigations to identify and report risks to the NASA LSP resident office. Investigations shall include but not be limited to manufacturing and/or design trend studies, facility walk downs, and hardware walk downs.
- Provide technical interchange with NASA LSP and counterparts at other locations.
- Participate in ICD development and perform verification. Provide technical assessment of mission unique requirements, implementation and verifications.

11.0 Special Studies

The Contractor shall perform special studies, projects, and analyses upon authority to proceed by the Government including but not limited to:

- Advanced planning and feasibility studies in support of future missions
- Analyses in support of change requirements to authorized missions
- Development, fabrication, and test of hardware/software to support planning studies or special tests
- Mission unique studies
- Technology applications
- Process improvement, hazard control and/or risk reduction
- Processing and launch of nuclear spacecraft
- Enhancement of the quality of NASA LSP services and capabilities
- Feasibility studies and advanced planning in support of Agency partnerships (e.g., National Reconnaissance Office, Department of Defense, etc.)
- Feasibility studies and advanced planning in support of future NASA programs (e.g., Commercial Crew, Commercial Cargo, Robotic Precursor, and Technology Demonstration, etc.) and special projects for other NASA LSP customers