DRAFT

APPENDIX A

ACRONYMS AND GLOSSARY

Acronyms

21CSLC	21st Century Space Launch Complex
ACES	Agency Consolidated End-user Services
ACO	Architecture and Concept of Operations
ADP	Acceptance Data Package
AIT	Analysis and Integration Team
ARM	Active Risk Management
ASCS	Agency Security Configuration Standards
ASUS	Agency Security Update Services
CCB	Configuration Control Board
CDR	Critical Design Review
CEMP	Comprehensive Emergency Management Plan
CFD	Computational Fluid Dynamics
CIO	Chief Information Officer
CM	Configuration Management
CO	Contracting Officer
CoF	Construction of Facilities
COFR	Certification of Flight Readiness
ConOps	Concept of Operations
COR	Contracting Officer's Representative
CPIT	Cross-Program Integration Team
CR	Change Request
Cradle	Trade name for requirements database tool
CSI	Cross-Program Systems Integration

DCR	Design Certification Review
DDMS	Document and Data Management System
DES	Discrete Event Simulation
DM	Data Management
DoD	Department of Defense
DRD	Data Requirements Descriptions
ECP	Export Control Plan
EIT	Element Integration Teams
EOM	Element Operations Manager
ESC	Engineering Support Contract
ESD	Exploration Systems Development
EVM	Earned Value Management
EVMS	Earned Value Management System
FAA	Federal Aviation Administration
FISMA	Federal Information Security Management Act
FRR	Flight Readiness Review
FS&OI	Flight Systems and Operations Integration
FY	Fiscal Year
GOPDb	Ground Operations Planning Database
GSDO	Ground Systems Development and Operations
GSE	Ground Support Equipment
HEO	Human Exploration and Operations
IAT	Independent Assessment Team
ICD	Interface Control Documents

ICE	Integrated Collaborative Environment
ICM	Information and Configuration Management
IOM	Integration Operations Manager
iPIT	Integrated Programmatic and Program Control Integrated Team
IPT	Integrated Product Teams
IRD	Interface Requirements Document
IT	Information Technology
ITSEC-EDW	IT Security Enterprise Data Warehouse
ITV&V	Integrated Test Verification and Validation
KLXS-II	Kennedy LX Support II
KNPR	Kennedy NASA Procedural Requirements
KSC	Kennedy Space Center
LAS	Launch Abort System
LCC	Launch Commit Criteria
LSA	Logistics Support Analysis
LX	Ground Systems Development and Operations Program Office
MD	Mission Directorate
MSFC	Marshall Space Flight Center
MVVP	Master Verification and Validation Plan
NASA	National Aeronautics and Space Administration
NPD	NASA Policy Directive
NPR	NASA Procedural Requirement
NSAAR	NASA Security Accreditation and Authorizations System
O&M	Operations and Maintenance

OCI	Organizational Conflict of Interest
OCSO	Organizational Computer Security Officer
OCSR	Organizational Computer Security Representative
OMB	Office of Management and Budget
OMRS	Operations and Maintenance Requirements and Specifications
ORR	Operations Readiness Review
PDR	Preliminary Design Review
PHS&T	Packaging, Handling, Storage and Transportation
POC	Point of Contact
PPBE	Planning, Programming, Budgeting and Execution
PSI	Programmatic Strategic Integration
PWS	Performance Work Statement
QRA	Quantitative Risk Analyses
REEB	Resource Environment for Enhanced Budgeting
RFA	Request for Action
RID	Review Item Discrepancy
RMA	Reliability, Maintainability and Availability
S&MA	Safety and Mission Assurance
SAR	System Acceptance Reviews
SDLC	System Development Life Cycle
SEMP	System Engineering Management Plan
SIR	Systems Integrated Review
SLS	Space Launch System
SOP	Standard Operating Procedures

STEM	Science, Technology, Engineering and Math
TIM	Technical Interchange Meeting
US	United States
V&V	Verification and Validation
VAB	Vehicle Assembly Building
WBS	Work Breakdown Structure

Glossary

21st Century Ground Systems Program (21CGSP)	Officially established in June 2011 to advance NASA's broader mission of furthering human exploration of our solar system. Program renamed to Ground Systems Development and Operations (GSDO) in December 2011.
21st Century Space Launch Complex (21CSLC)	One of the two appropriation line items that GSDO manages. 21CSLC manages investments focused on modernizing infrastructure to enable government and commercial users of launch and ground processing. 21CSLC is not governed by NPR 7120.5.
acceptance	The act of an authorized representative of the Government by which the Government, for itself or as an agent of another, assumes ownership of existing identified supplies tendered or approves specific services rendered as partial or complete performance of the contract.
Acceptance Data Package (ADP)	The specific data in a single package which contains information pertinent to acceptance, and provides a verified status, including the as-built configuration (software or hardware) to the using organization. The ADP is prepared as part of the hardware or software acceptance/delivery criteria and maintained throughout the hardware or software life cycle after Government acceptance, including processing; testing; launch on-orbit and post-landing processing; and maintenance, modification, and refurbishment activities.
access control	Limiting access to hardware, equipment, information or operations for the purposes of maintaining one or more of the following: safety, quality, configuration and item integrity.
accreditation	The official management decision given by a senior Agency official to authorize operation of an information system and to explicitly accept the risk to Agency operations (including mission, functions, image, or reputation), Agency assets, or individuals, based on the implementation of an agreed-upon set of criteria.
Agency (uppercase 'A')	National Aeronautics and Space Administration (NASA)

Analysis and Integration Team (AIT)	The GSDO Program leadership team responsible for managing and implementing GSDO policy, products, and activities developed by the line organizations, and integration efforts across Program Integrated Product Teams (IPTs). Refer to the GSDO-PLN-1000, *GSDO Program Plan* for additional information.
appropriation	A provision of law authorizing the expenditure of funds for a given purpose, usually, but not always, in an appropriations act. It is designated by the Treasury Appropriation Fund Symbol (TAFS).
availability	The probability that an item is in an operable and committable state when called for at an unknown time.
baseline	The defined and approved end-item configuration that is documented by drawings, specifications, and/or other technical documents. A reference for program and project planning and a point of departure for change control.
Center (uppercase 'C')	John F. Kennedy Space Center (KSC)
certification	The formal written act whereby a responsible official attests to the satisfactory accomplishment of specified activities and authorizes the affected hardware/ software, procedures, facilities, and/or personnel for specified usage.
closeout	The process of inspecting and securing hardware, usually flight hardware, to ensure no foreign material, damage or out-of-configuration condition exists prior to covering an area in preparation for testing or flight.
compliance	The act or process of satisfying requirements.
configuration control	A systematic change process for proposing, justifying, evaluating, coordinating, disposing, and implementing proposed baseline changes.
configuration management	A process that establishes and maintains consistency of a product's attributes with its requirements and product configuration information throughout the product's life cycle.
“consistent with”	The contractor has flexibility to develop and apply an approach, but the approach must meet the intent of the reference document.

constraint	Any technical or operational limiting factor that would prohibit performance of an activity, invalidate a portion of a work authorization document (sequence or step), or could cause personal injury or equipment damage if not resolved satisfactorily before the start of the work sequence or step.
Construction of Facilities (CoF)	NASA's capital investment program for facility projects with estimated cost of greater than $1,000,000 per project. CoF projects are approved by NASA Headquarters and require Congressional approval.
contingency	A potential off-nominal operational condition that requires action.
contract	A mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them. In addition to bilateral instruments, contracts include, but are not limited to, awards and notices of awards; job orders or task letters initiated under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications.
Contractor	The term “Contractor” as used herein refers to both the prime Kennedy LX Support-II (KLXS-II) Contractor and any KLXS-II subcontractors.
contractor (lower case “c”)	Any person or company that undertakes a NASA contract to provide materials or labor to perform a service or do a job.
Contracting Officer (CO)	The individual appointed by the contracting activity for procuring and/or administering a contract. The CO is the only person authorized to direct contractor performance, execute amendments to the contract, and contractually obligate the Government.

Contracting Officer's Representative (COR) (formerly Contracting Officer's Technical Representative - COTR)	A Government official who has been appointed by the CO who has the responsibility in managing the technical aspects of the contract and monitor the contractor's technical performance and delivery of the final products and/or services. Pursuant to NFS 1842.270, the COR is not authorized to initiate procurement actions or in any way cause a change to the contract or increase the Government's financial obligations. The CO is the only Government official authorized to direct contractor performance, execute modifications to the contract, and contractually obligate the Government.
critical	The categorization based on the worst case potential effect of failure (loss of function or inadvertent operation), that could result in loss of life, loss of vehicle, or damage to a vehicle systems.
critical path	The minimum series of tasks within a schedule that define the overall duration of the project or Program. A change in the duration of a task within the critical path will cause a corresponding delay or acceleration of the entire project or Program.
critical skills	A specific ability that is required for the safe and effective execution or performance of a unique task, requiring specialized training and certification.
cross-cutting	Functions or tasks that span across all aspects of the GSDO Program to achieve its technical baseline.
cross-Program	Refers specifically to the Space Launch Systems (SLS), Orion, and/or GSDO Program(s).
Cross-Program Systems Integration (CSI)	One of the two entities that has authority, accountability and responsibility for cross-Program integration. CSI maintains cognizance of the technical performance of the integrated system and consists of members from Exploration Systems Development (ESD) and the three (SLS, Orion, and GSDO) Programs through multiple Integrated Technical Teams and Working Groups.
Data Requirements Description (DRD)	A detailed description of a required data item including purpose, content, format, references, maintenance requirements, submittal requirements, and other pertinent information.

documentation	Information and its supporting medium; e.g., records, specifications, drawings, reports, standards and work documents. The medium may be paper, photography, digital files, optical discs, magnetic, electronic storage or a combination.
Earned Value Management (EVM)	A project and program management technique for measuring project and program performance and progress in an objective manner.
Eastern Range	The Eastern Range is an area in and over which rockets are fired for testing and tracking. Cape Canaveral serves as the range's space processing and launch area, and the Air Force controls the range for all eastern-bound launches. The range starts at the launch pads at Cape Canaveral Air Force Station and Kennedy Space Center (KSC) and extends eastward over the Atlantic Ocean and into the Indian Ocean.
Element	Major functional components of a Program's IPT structure.
Element Integration Teams (EIT)	Each IPT consists of multiple EITs. Membership consists of representatives from KSC organizations and the GSDO divisions assigned to develop required cost, technical, and schedule products for their respective EIT. The EITs report to an IPT manager.
Element Operations Manager (EOM)	The Operations Manager for each of the EITs. The EOMs bring operational expertise to the team and co-leads each EIT along with the EPM.
Element Project Manager (EPM)	The development Project Manager for each of the EITs. The EPMs bring developmental project expertise to the team and co-leads each EIT along with the EOM.
equipment	A tangible asset that is functionally complete for its intended purpose, durable, nonexpendable. Equipment is not intended for sale, and does not ordinarily lose its identity or become a component part of another article when put into use.
Exploration Ground Systems (EGS)	One of the two appropriation line items that GSDO manages. EGS Program will develop the necessary ground systems and infrastructure to support the assembly, test, launch, and recovery of the associated SLS and Orion elements. EGS is within the oversight and governance of NPR 7120.5.

Exploration Systems Development (ESD)	A Division within Human Exploration and Operations (HEO) Mission Directorate (MD) - HEOMD that integrates a portfolio of programs comprising incrementally developed exploration capabilities. ESD manages the SLS, the Orion, and the GSDO Programs as well as cross-Program integration in order to successfully deliver the capabilities required for human spaceflight beyond low Earth orbit.
Exploration Systems Integration (ESI)	The ESD's integration approach for ensuring that cross-Program integration is executed effectively, efficiently, and affordably across the programs. ESI functions have been allocated to the Cross-Program Systems Integration (CSI) Office and the Programmatic Strategic Integration (PSI) Office.
external customer	An outside organization or individual that receives a product or service.
Fiscal Year (FY)	The US Government accounting year for appropriations which is the 12-month period starting October 1st and ending September 30th.
flight element	Major flight functional components of a Program such as payload, spacecraft or booster. Flight elements may contain a subset of flight systems projects.
Government (uppercase 'G')	Any Federal Government entity including NASA.
Government-Furnished Property (GFP)	Property owned by the Government and provided to a contractor for use in performance of a contract.
Government property	All property owned or leased by the Government. Government property includes both GFP and contractor-acquired property. This includes installation-accountable and contractor-accountable property as pursuant to NFS 1852.245-71 and FAR 52.245-1, respectively.
ground element	Major non-flight functional components of a Program. Ground elements may contain a subset of ground systems projects. The GSDO ground elements are depicted in the GSDO-PLN-1000, GSDO Program Plan.
Ground Support Equipment (GSE)	Non-flight equipment, systems, or devices specifically designed and developed for a direct physical or functional interface with flight hardware.

Ground Support Systems (GSS)	Infrastructure and equipment (portable or fixed) that provide functional and/or physical support to GSE. GSS does not directly interface with flight hardware, although GSS may supply commodities, power, or data that eventually reaches the flight hardware after being conditioned or controlled by GSE.
ground systems	Systems used to process or test flight hardware during ground processing, including unique facility systems, GSS, GSE, and flight hardware special test equipment.
Ground Systems Development and Operations (GSDO) Program	The GSDO Program Office, assigned to the Kennedy Space Center (KSC), manages two Appropriation line items; the EGS Program and the 21CSLC initiative. The EGS is focused on developing the necessary ground systems infrastructure to support the assembly, test, launch, and recovery of the associated SLS and Orion elements. In coordination with Center architecture development, the Program's 21CSLC initiative will work to modernize launch facilities, enabling Government and commercial users to launch using ground processing infrastructure at designated locations. GSDO is responsible for the cost, schedule, and technical content of the ground systems development and launch vehicle and spacecraft processing for Orion (including spacecraft landing and recovery), SLS, and where practical, future HEOMD payloads or spacecraft using the SLS.
Human Exploration and Operations (HEO) Mission Directorate (MD) - HEOMD	At NASA HQs, the HEO Associate Administrator (AA) is responsible for managing commercial crew and cargo developmental programs; construction of the Orion (a spacecraft designed to travel beyond Low Earth Orbit [LEO]); development of a new heavy-lift rocket (SLS); development of flight and ground infrastructure and systems and other programs with the directorates.
Indefinite-Delivery/Indefinite-Quantity (IDIQ)	An indefinite-delivery contract type, also known as a task-order contract, is used to acquire services/supplies when the exact times and/or exact quantities of future requirements/deliveries are unknown at the time of contract award. The indefinite-quantity mechanism permits ordering of supplies or services after requirements materialize via the issuance of delivery or task orders.

“in accordance with”	The contractor shall comply with all aspects (requirements, guidelines, specifications, etc) of the associated compliance document.
institutional	KSC organizations providing direct support to the GSDO Program such as Ground Processing, Engineering, Safety and Mission Assurance (S&MA), Information Technology, Center Operations, Center Planning and Development.
Integrated Product Team (IPT)	The GSDO Program uses an IPT structure to provide integrated products and perform day-to-day tasks, with participation from the Program and KSC institutional organizations. Each IPT is responsible for their cost, technical, and schedule baseline delegated from the Program Manager and each IPT lead is responsible for developing the capabilities assigned to each project within the Program. Refer to GSDO-PLN-1000, *GSDO Program Plan* for additional information.
life cycle	The term “life cycle” as used herein refers to Program and project life cycles as defined in NPR 7120.5, *NASA Space Flight Program and Project Management Requirements.*
LX	The NASA KSC mail code for the GSDO Program Office.
maintain (documentation)	The process of ensuring that a document is configuration-controlled and current.
mission	The performance of a coherent set of operations to achieve Program goals.
mission assurance	Activities or the performance of activities which provide increased confidence that the requirements, processes, and standards for a mission are being fulfilled.
Mission Directorate (MD)	A primary implementer of a NASA mission area. Each MD is led by an Associate Administrator who leads their respective mission area.
NASA-managed project	Any project where the Government has the overall management responsibility.

Orion/Orion Program (Formerly Multi-Purpose Crew Vehicle – MPCV)	The spacecraft being designed and developed by the Orion Program. The Orion Program, assigned to the Johnson Space Center (JSC), is responsible for developing a spacecraft, including the crew capsule that supports long-range human exploration needs. The Program is charged with the design and development of the crew vehicle and associated elements such as extra vehicular activities (EVA) systems, flight crew equipment, and mission operations.
payload customer	The organization responsible for overall design, fabrication, integration, and operation of the payload. Assumed to include such people as program managers, payload developers, and principal investigators.
“per”	See "In Accordance With"
Performance Work Statement (PWS)	The description of tasks or services to be performed and end products to be delivered by the Contractor. The PWS also defines facilities, property, and support to be provided to the Contractor by the Government.
Program	A strategic investment by a Mission Directorate (MD) or Mission Support Office that has a defined architecture, technical approach, requirements, funding level, and a management structure that initiates and directs one or more projects. A Program defines a strategic direction that the Agency has identified as critical.
Programmatic and Strategic Integration (PSI)	One of the two entities that has authority, accountability and responsibility for cross-Program integration. PSI provides programmatic integration, which includes integrated budget/schedule/content/risk management and assessment. PSI consists of members from ESD and the three (SLS, Orion, and GSDO) Programs through multiple working groups.
Program milestone	A designated point in flight or ground hardware development and processing, uniquely defined by each NASA Program, in which a set of critical objectives has is planned or has been completed.
Program Plan	The document that establishes the Program’s baseline for implementation, signed by the MD Associate Administrator, Center Director(s), and Program Manager.

project	A specific investment that has defined requirements, a life cycle cost, a beginning, and an end. A project yields new or revised products, services, or results in support of an IPT or EIT. Each EIT may include multiple projects.
reach back	The capability to identify, acquire, and deliver a resource (skill set) from within the corporation's workforce in order to accomplish a short or long-term support service for the GSDO Program.
real property	Land, buildings, structures, utilities, systems, improvements, and appurtenances thereto permanently annexed to land. Includes the collateral equipment or systems.
records	All books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal Law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them. The Government reserves the right to inspect, audit, and copy record holdings.
recovery	Post-landing activities associated with returning spacecraft.
reference	Provided for background or information.
reliability	The probability that an item, system, subsystem, component, or part will perform the intended and required function under specified conditions at a designated time for a specified interval.
risk	The combination of the probability that a program or project will experience an undesired event (some examples include a cost overrun, schedule slippage, malicious activities, environmental impact, failure to achieve a needed technological breakthrough or project success criteria) and the consequences, impact, or severity of the undesired event, were it to occur. Both the probability and consequences may have associated uncertainties.

risk assessment	An evaluation of a risk item that determines (1) what can go wrong, (2) how likely is it to occur, and (3) what the consequences are.
risk management	An organized, systematic decision-making process that efficiently identifies, analyzes, plans, tracks, controls, communicates, and documents risk to increase the likelihood of achieving program/project goals.
risk review	A team that reviews issues with potential safety, technical, schedule, and cost risk, whose lead makes recommendations to the appropriate authority
services	Unless otherwise indicated, both professional or technical services and services performed under a service contract.
Space Launch System (SLS) Program	The SLS Program, assigned to the Marshall Space Flight Center (MSFC), is responsible for developing a heavy-lift launch vehicle with sufficient capability to enable exploration beyond LEO and alternate means of transportation for crew and payload to the International Space Station (ISS) in case the primary mode of transportation is not available.
system	The combination of elements that function together to produce the capability required to meet a need. The elements include all hardware, software, equipment, facilities, personnel, processes, and procedures needed for this purpose.
teaming arrangement	See FAR 9.601. Two or more companies form a partnership or joint venture to act as a prime contractor (offeror) and/or a prime contractor (offeror) agrees with one or more other companies to have them act as its subcontractors.
validation	The process of providing the objective evidence that a subsystem, system, or end item satisfies its intended use when placed in its intended environment.
verification	The process of providing the objective evidence that a subsystem, system, or end item satisfies the design requirements and specifications.

Work Breakdown Structure (WBS)	A product-oriented hierarchical division of the hardware, software, services, and data required to produce the Program/project's end product(s), structured according to the way the work will be performed, and reflective of the way in which Program/project costs, schedule, technical, and risk data are to be accumulated, summarized, and reported.
Work Year Equivalent (WYE)	The total productive labor hours in a year that a full time contractor employee could be expected to be available for work, excluding non-productive time (e.g., holidays and leave).