



Welcome to the Johnson Space Center

United States Deorbit Vehicle (USDV) Pre-Solicitation Conference

Submit Questions
through the QR code

May 9, 2023



Agenda



Speaker	Subject
Gary Johnson, Requirements Development Team (RDT) Board Chair	Welcome to Pre-Solicitation Conference
Dana Weigel, ISS Deputy Program Manager	Welcome
Rebekah Anchondo, RDT Member	USDV Overview
Ashley Chaves, Contracting Officer	Draft RFP Walkthrough
Robert Watts, Small Business Specialist	Office of Small Business Programs
Ashley Chaves, Contracting Officer	Industry Feedback Requested
Ashley Chaves, Contracting Officer	Procurement Schedule and Question & Answer

Purpose of Pre-Solicitation Conference



- The purpose of this Pre-Solicitation Conference is to help Industry understand the Government's requirements.
- It's also an opportunity to highlight some of the key areas for which the Government is requesting Industry feedback for the final solicitation.

Questions

- A question and answer period will be hosted at the end of the presentation.
- Official responses to written questions received by the Contracting Officer will be posted to the USDV Special Notice on Sam.gov.

Submit Questions
through the QR code



Pre-Solicitation Conference Logistics



- A copy of this presentation has been posted on the U.S. Deorbit Vehicle (USDV) website at: <https://www.nasa.gov/jsc/procurement/usdv>
- Please ensure microphones are muted during the presentation.
- Please use the Microsoft Teams chat feature for audio and video connection issues only.
- Clarifications and questions on Pre-Solicitation Conference content will be answered in the Question-and-Answer period.
- Please submit all questions via the Q&A application link provided:
<https://johnson.cnf.io/sessions/j6my/#!/dashboard> (QR code below)

Submit Questions
through the QR code





Welcome

Dana Weigel, Deputy Manager
International Space Station Program

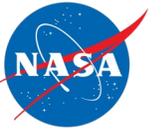


Concept of Operations



- ISS planned end of life is 2030
- Upon completion of the ISS mission, ISS will be deorbited in a controlled manner into an unpopulated region
 - Due to its size, the ISS represents a significant risk to the public if it is allowed to deorbit in an uncontrolled manner
- Given the risk to public safety associated with deorbit of the ISS, the USDV must continue to function after suffering two failures and complete the reentry burn
 - Two failure tolerance is required
 - Reliability is key and use of flight proven systems or robust testing is critical
 - High fidelity hardware/software integrated test and verification campaign is required
- No major changes to the driving functional requirements or USDV concept of operations since RFI #3 in November 2022

Major Highlights



- Hybrid contract structure with Cost Plus through CDR followed by Firm Fixed Price
- NASA will procure the USDV as a supply
 - Acceptance following completion of CLIN 2 prior to Launch Vehicle integration
 - Tailored DD250 with Certificate of Compliance
 - Targeted insight/oversight throughout project life-cycle
- NASA will perform the USDV flight control through the entire USDV mission
 - Provide engineering support in the ISS Mission Evaluation Room (MER)
 - Provides input to flight preparation activities
- NASA will procure the USDV Launch Vehicle through the NASA Launch Services Program (LSP)
 - Supports Launch Vehicle integration preparation and execution activities
 - Performs USDV ground processing and USDV pre-launch preparation activities

Statement of Work (SOW)



(1.0) Introduction

(2.0) Overall General Requirements

(3.0) DDT&E Through CDR (CLIN 1)

(4.0) Production, Assembly, Integration and Test (CLIN 2)

(5.0) Dwell (CLIN 3)

(6.0) Launch Vehicle Integration and Sustaining (CLIN 4)

(7.0) Special Tasks and Studies (CLIN 5)

Statement of Work (SOW)



(2.0) Overall General Mission Requirements

- 2.1 Program Management
- 2.2 Business Management
- 2.3 Configuration Management
- 2.4 Information Technology
- 2.5 Export Control Management
- 2.6 NASA Insight and Approval
- 2.7 Project Life-Cycle Reviews
- 2.8 Technical and Program Integration Meetings
- 2.9 Design, Development, Test, and Evaluation (DDT&E)
- 2.10 Software Management
- 2.11 Safety, Reliability, Quality and Mission Assurance
- 2.12 Risk Management
- 2.13 Launch Vehicle Integration
- 2.14 ISS Integration
- 2.15 Flight Operations

(3.0) Design, Development, Test and Evaluation (DDT&E) Through Critical Design Review (CDR) (CLIN 1) (CPIF)

- 3.1 Resource Management
- 3.2 Launch Vehicle Integration
- 3.3 Flight Operations Preparation
- 3.4 Avionics & Software Simulation and Test Preparation
- 3.5 Contract Kick-Off
- 3.6 Mission Concept Review (MCR)
- 3.7 System Requirements Review (SRR)
- 3.8 System Definition Review (SDR)
- 3.9 Preliminary Design Review (PDR)
- 3.10 Critical Design Review (CDR)

Statement of Work (SOW)



(4.0) Production, Assembly, Integration and Test (CLIN 2) (FFP)

- 4.1 General Requirements
- 4.2 Milestone C2-2 Systems Integration
- 4.3 Milestone C2-3 AI&T Progress
- 4.4 Milestone C2-4 System Acceptance
- 4.5 Milestone C2-5 Shipment to Launch Site

(5.0) Dwell (CLIN 3)

(6.0) Launch Vehicle Integration and Sustaining (CLIN 4)

- 6.1 General Requirements
- 6.2 Pre-Launch
- 6.3 Launch and Flight Operations
- 6.4 Parts

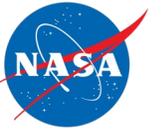
(7.0) Special Tasks and Studies (CLIN 5)

- 7.1 Special Studies (SUB-CLIN 5A)
- 7.2 Pre-Priced Evaluation of NASA Mission Requirements (SUB-CLIN 5B)

Statement of Work (SOW)



- Hybrid Contract beginning with Cost Plus (CLIN 1) followed by Firm Fixed Price (CLIN 2 & beyond)
 - CLIN 1 (Cost Plus) concludes when RID/RFAs from CDR are jointly dispositioned and forward actions are identified and agreed to
 - Forward actions identified at CDR are completed in CLIN 2 (FFP)
 - Acceptance of USDV (DD250) occurs after the following:
 - Completion of System Acceptance Review (SAR)
 - Completion of Dwell and Dwell Release Review (DRR), if required
 - Shipment to the Launch Site Payload Processing Facility (LS PPF)
 - Completion of corrective actions and mitigations to address issues identified during shipment to LS PPF
- Page on CDR and Acceptance



CUI//SP-EXPT

United States Deorbit Vehicle Systems Requirements Document

International Space Station Program

Baseline
TBD 2023

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National Aeronautics and Space Administration
International Space Station Program
Johnson Space Center
Houston, Texas Contract No.: 80JSC020C0017



- Transit and dock to ISS at Node 2 Forward
- Perform ISS translational maneuvers (57 m/s)
- Perform attitude control of ISS integrated stack
- Command and Control from MCC-H
- Two-failure tolerant to catastrophic hazard, where failure to perform the orbit shaping burn(s) and reentry burn is catastrophic
- Function with defined constraints (e.g. 1 year mated to ISS, Operate independent of ISS for 4 days)
- Meet design, construction and testing standards

Section J: Data Requirements Descriptions (J-01)



Required for all CLINS		Required for all CLINS	
Item	Document	Item	Document
DRD USDV-1	Program Management Plan (PMP)	DRD USDV-26	Verification and Validation (V&V) Plan
DRD USDV-2	Program Management Review (PMR)	DRD USDV-27	System Engineering Management Plan (SEMP)
DRD USDV-3	Project Life-Cycle Review Plan and Data Packages	DRD USDV-28	Imagery Plan
DRD USDV-4	Concept of Operations (ConOps)	DRD USDV-29	US Deorbit Vehicle (USDV) Transportation and Logistics Requirements Plan
DRD USDV-5	Insight Management Plan	DRD USDV-30	USDV Spacecraft Readiness Plan
DRD USDV-6	Work Breakdown Structure (WBS) and WBS Dictionary	DRD USDV-31	Data Input for NASA Integration and Independent Verification and Validation (IV&V)
DRD USDV-7	Integrated Program Management Report (IPMR)	DRD USDV-32	Assembly, Integration, and Test (AI&T) Plan
DRD USDV-8	Contractor Financial Management Report (NF533)	DRD USDV-33	NASA Standards and Specifications Compliance and Tailoring
DRD USDV-9	RESERVED	DRD USDV-34	Mass Properties Report
DRD USDV-10	Organizational Conflicts of Interest (OCI) Plan	DRD USDV-35	Engineering Computer-Aided Design (CAD) Models
DRD USDV-11	Small Business Subcontracting Plan and Reports	DRD USDV-36	USDV Acceptance Data
DRD USDV-12	Diversity, Equity, Inclusion, and Accessibility (DEIA) Plan	DRD USDV-37	Command and Telemetry Dictionary
DRD USDV-13	Configuration Management Plan	DRD USDV-38	Operations Data Book
DRD USDV-14	Information Technology Security Management Plan (ITSMP)	DRD USDV-39	Models and Simulation Plan
DRD USDV-15	Export Control Plan	DRD USDV-40	USDV Launch Site Integration Plan (LSIP)
DRD USDV-16	Government Property Management Plan	DRD USDV-41	Launch Site Integration & Test Procedures
DRD USDV-17	Financial Reporting Contractor-Held Property	DRD USDV-42	USDV Launch Commit Criteria (LCC)
DRD USDV-18	Safety and Health Plan	DRD USDV-43	Post Dock Assessment
DRD USDV-19	Risk Management Plan (RMP)	DRD USDV-44	Qualification and Acceptance Plan
DRD USDV-20	Safety and Mission Assurance (S&MA) Plan	DRD USDV-45	Guidance, Navigation and Control (GNC) Controller Model
DRD USDV-21	Safety Data Package (SDP)	DRD USDV-46	Specification for USDV Hardware In The Loop (HITL) Test Bed
DRD USDV-22	Mishap Preparedness and Contingency Plan	DRD USDV-47	Specification for USDV Simulator for ISS Integration Testing
DRD USDV-23	Technology Readiness Level (TRL) and Technology Maturity Assessment	DRD USDV-48	Flight Operations Review Data Package
DRD USDV-24	Software Management Plan (SMP)		
DRD USDV-25	Design, Development, Test, and Evaluation (DDT&E) Plan		

General Information



- The USDV contract is a single-award Hybrid Cost-Plus-Incentive Fee and Firm Fixed Price core with Indefinite Delivery Indefinite Quantity (IDIQ) Firm Fixed Price (FFP) task orders
- FAR 15 Contracting by Negotiation
- Full and Open Competition
- NAICS Code 336414, Guided Missile and Space Vehicle Manufacturing and Size Standard 1,250 employees
- Period of Performance:
 - Base: Contract Award- 03/31/2031
 - Option 1 04/01/2031- 09/30/2031
 - Option 2 10/01/2031- 09/30/2032
 - Option 2 10/01/2032- 09/30/2033
 - Option 3 10/01/2033- 09/30/2034
 - Option 4 10/01/2034- 09/30/2035



- **Contract Line Item Number (CLIN) Structure**
 - CLIN 1: DDT&E Through Critical Design Review (Core) (CPIF)
 - CLIN 2: Production, Assembly, Integration and Test (Core) (FFP)
 - CLIN 3: Dwell (IDIQ) (FFP)
 - CLIN 4: Launch Vehicle Integration and Sustaining (IDIQ) (FFP)
 - CLINs 5: Special Tasks and Studies (IDIQ) (FFP)

Section B – I: USDV Pricing Schedules



- CLIN 1 DDT&E THROUGH CDR ESTIMATED COST AND INCENTIVE FEE (CORE)
 - Offerors will propose the Target Cost, Target, Minimum, and Maximum fee
 - The Government has outlined the cost sharing for cost *underruns* and *overruns* as follows:
 - Government 60 percent; Contractor 40 percent
 - 100% Cost incentive
 - Industry input requested on technical performance metric for NASA to consider
- CLIN 2 PRODUCTION, ASSEMBLY, INTEGRATION AND TEST (CORE)
 - The CLIN 2 Core firm fixed price of this contract is \$OFI*.
 - Price for CLIN 2 Core is valid for up to one year beyond the proposed CLIN 2 Core Authority to Proceed (ATP) date
 - The CLIN 2A Critical Spares firm fixed price of this contract is \$OFI.

Section B – I: USDV Pricing Schedules



- CLIN 3 DWELL (IDIQ)

- Includes storing the USDV in the Dwell facility prior to shipment to the Launch Site Payload Processing Facility (PPF) and reporting on the Dwell status at the quarterly Program Management Review
- Pricing is outlined on a Firm Fixed Price per Quarter

Pricing Element	GFY 2028	GFY 2029	GFY 2030	GFY 2031	GFY 2031 Option Period 1	GFY 2032 Option Period 2	GFY 2033 Option Period 3	GFY2034 Option Period 4	GFY 2035 Option Period 5
	10/1/2027- 9/30/2028	10/1/2028- 9/30/2029	10/1/2029- 9/30/2030	10/1/2030- 3/31/2031	4/1/2031- 9/30/2031	10/1/2031- 9/30/2032	10/1/2032- 9/30/2033	10/1/2033- 9/30/2034	10/1/2034- 9/30/2035
Dwelling Price Per Quarter	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI

Section B – I: USDV Pricing Schedules



- CLIN 4 LAUNCH VEHICLE (LV) INTEGRATION AND SUSTAINING (IDIQ)
 - LV integration and sustaining engineering and operations including final LV integration and testing, pre-launch preparation, flight execution preparation, launch and flight operations, and procurement of hardware

Pricing Elements	GFY 2024	GFY 2025	GFY 2026	GFY 2027	GFY 2028	GFY 2029	GFY 2030	GFY 2031	GFY 2031 Option Period 1	GFY 2032 Option Period 2	GFY 2033 Option Period 3	GFY 2034 Option Period 4	GFY 2035 Option Period 5
	10/1/2023-9/30/2024	10/1/2024-9/30/2025	10/1/2025-9/30/2026	10/1/2026-9/30/2027	10/1/2027-9/30/2028	10/1/2028-9/30/2029	10/1/2029-9/30/2030	10/1/2030-3/31/2031	4/1/2031-9/30/2031	10/1/2031-9/30/2032	10/1/2032-9/30/2033	10/1/2033-9/30/2034	10/1/2034-9/30/2035
Program Manager	OFI	OFI	OFI	OFI	OFI								
Engineer	OFI	OFI	OFI	OFI	OFI								
Technician	OFI	OFI	OFI	OFI	OFI								
Business	OFI	OFI	OFI	OFI	OFI								
Administrative	OFI	OFI	OFI	OFI	OFI								
Non-Labor Resources (%) Maximum percentage	OFI	OFI	OFI	OFI	OFI								

Section B – I: USDV Pricing Schedules



- CLIN 5 SPECIAL TASKS AND STUDIES (IDIQ) (FFP)
 - Special studies and analyses, risk reduction activities, provide materials, and/or fabricate incidental hardware in support of this contract
 - Sub-CLIN 5A Special Studies (FFP) IDIQ by GFY
 - Sub-CLIN 5B Evaluation Requirements (FFP) IDIQ by GFY

Section B – I: USDV Pricing Schedules



- CLIN 5 SPECIAL TASKS AND STUDIES (IDIQ) (FFP)

- Sub-CLIN 5A Special Studies (FFP) IDIQ by GFY

	SPECIAL TASK AND STUDIES												
Pricing Elements Technical/ Admin	GFY 2024	GFY 2025	GFY 2026	GFY 2027	GFY 2028	GFY 2029	GFY 2030	GFY 2031	GFY 2031 Option Period 1	GFY 2032 Option Period 2	GFY 2033 Option Period 3	GFY 2034 Option Period 4	GFY 2034 Option Period 5
	10/1/2023- 9/30/2024	10/1/2024- 9/30/2025	10/1/2025- 9/30/2026	10/1/2026- 9/30/2027	10/1/2027- 9/30/2028	10/1/2028- 9/30/2029	10/1/2029- 9/30/2030	10/1/2030- 3/31/2031	4/1/2031- 9/30/2031	10/1/2031- 9/30/2032	10/1/2032- 9/30/2033	10/1/2033- 9/30/2034	10/1/2034- 9/30/2035
Level 1 (90/10)	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI
Level 2 (75/25)	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI
Level 3 (50/50)	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI
Level 4 (25/75)	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI

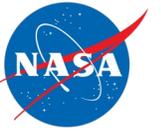
Section B – I: USDV Pricing Schedules



- CLIN 5 SPECIAL TASKS AND STUDIES (IDIQ) (FFP)
 - Sub-CLIN 5B Evaluation Requirements (FFP) IDIQ by GFY

Pricing Elements	GFY 2024	GFY 2025	GFY 2026	GFY 2027	GFY 2028	GFY 2029	GFY 2030	GFY 2031	GFY 2031 Option Period 1	GFY 2032 Option Period 2	GFY 2033 Option Period 3	GFY 2034 Option Period 4	GFY 2034 Option Period 5
	10/1/2023-9/30/2024	10/1/2024-9/30/2025	10/1/2025-9/30/2026	10/1/2026-9/30/2027	10/1/2027-9/30/2028	10/1/2028-9/30/2029	10/1/2029-9/30/2030	10/1/2030-3/31/2031	4/1/2031-9/30/2031	10/1/2032-9/30/2033	10/1/2032-9/30/2033	10/1/2033-9/30/2034	10/1/2034-9/30/2035
Tier I (125 hrs.)	OFI	OFI	OFI	OFI	OFI								
Tier II (250 hrs.)	OFI	OFI	OFI	OFI	OFI								
Tier III (500 hrs.)	OFI	OFI	OFI	OFI	OFI								
Tier IV (750 hrs.)	OFI	OFI	OFI	OFI	OFI								
Tier V (1000 hrs.)	OFI	OFI	OFI	OFI	OFI								

Section B – I: USDV Pricing Schedules



- JSC PROCUREMENT INSTRUCTION (JPI) 52.216-90 IDIQ MINIMUM AND MAXIMUM ORDERING LIMITS (NOV 2018)
 - Applies to
 - CLIN 3: Dwell
 - CLIN 4: Launch Vehicle Integration and Sustaining
 - CLIN 5: Special Tasks and Studies
 - Minimum ordering value \$100,000
 - Total IDIQ ceiling: \$302 million



- FAR 52.246-15 CERTIFICATE OF CONFORMANCE
- PRELIMINARY INSPECTION AT SOURCE AND FINAL INSPECTION AND ACCEPTANCE AT DESTINATION
 - DD250 Acceptance will occur after successful completion Milestone C2-5 Shipment to Launch Site
- FAR 52.211-8 TIME OF DELIVERY (JUN 1997)
 - Completion of Milestone C2-5 Shipment to Launch Site: September 1, 2027
 - Assumes required to launch January 1, 2028
- OPTION TO EXTEND
- NFS 1852.245-76 LIST OF GOVERNMENT PROPERTY FURNISHED PURSUANT TO FAR 52.245-1. (JAN 2011)
 - Attachment J-33, *Government Furnished Property, Facilities, and Data/Information*



- CROSS-WAIVER OF LIABILITY EXTENDED FOR ISS ACTIVITIES
- NASA intends to pursue approval of such requests for indemnification under Public Law 85-804 for unusually hazardous risks identified in fulfilling the requirements of the USDV contract
- FAR 52.232-32 PERFORMANCE-BASED PAYMENTS
- GOVERNMENT’S RIGHT TO REMOTELY SENSED DATA
- CONTRACTOR ACQUIRED PROPERTY TRANSITION TO FIRM FIXED PRICE
- SPECIAL TOOLING, SPECIAL TEST EQUIPMENT, AND MANUFACTURING AIDS FOR USDV
- CONTRACTOR OBJECTIVES ON USDV
 - USDV will not include any payloads for commercial use purposes



- FAR 52.217-7 OPTION FOR INCREASED QUANTITY - SEPARATELY PRICED LINE ITEM (CLIN 2A CRITICAL SPARES) (MAR 1989)
- FAR 52.227-14 RIGHTS IN DATA—GENERAL (MAY 2014) ALTERNATE II (DEC 2007) [(MODIFIED BY NFS 1852.227-14 (APR 2015))] ALTERNATE III (DEC 2007) ALTERNATE V (DEC 2007)

Section J: List of Documents, Exhibits, And Other Attachments



Attachment	Title
J-01	Data Requirements Description (DRD)
J-02	DRD Submission Matrix
J-03	Acronyms and Abbreviations
J-04	Definitions
J-05	Applicable and Reference Documents List
J-06	Program Management Plan
J-07	Project Life-Cycle Review Plan
J-08	USDV System Architecture and Concept of Operations
J-09	Insight Management Plan
J-10	Organizational Conflicts of Interest (OCI) Plan
J-11	Small Business Subcontracting Plan
J-12	Diversity, Equity, Inclusion, and Accessibility (DEIA) Plan
J-13	Configuration Management Plan
J-14	Information Technology Security Management Plan (ITSMP)
J-15	Export Control Plan
J-16	Government Property Management Plan
J-17	Safety and Health Plan
J-18	Risk Management Plan (RMP)
J-19	Safety & Mission Assurance (S&MA) Plan
J-20	Mishap Preparedness and Contingency Plan
J-21	TRL and Technology Maturity Assessment Plan
J-22	Software Management Plan
J-23	Design, Development, Test, & Evaluation (DDT&E) Plan
J-24	Verification and Validation (V&V) Plan

Attachment	Title
J-25	System Engineering Management Plan (SEMP)
J-26	Assembly, Integration, and Test (AI&T) Plan
J-27	NASA Standards and Specifications Compliance and Tailoring Approach
J-28	Qualification and Acceptance Plan
J-29	Integrated Master Schedule
J-30	Work Plans
J-31	Government Task Agreements
J-32	Standard Labor Categories
J-33	Government-Furnished Property, Facilities, and Data/Information
J-34	Installation Accountable Government Property
J-35	Launch Vehicle Compatibility
J-36	Authorized Limited Rights in Data and Restricted Computer Software
J-37	Incentive Fee Plan
J-38	DD Form 254 Department of Defense Contract Security Classification Specification
J-39	Propulsion System Development Approach
J-40	Deliverable Items List (DIL)

Bold/Italic = With Offeror Proposal

Section J: Work Plans & Milestone Payment Schedule



CLIN2 (FFP) Work Plan (Attachment J-30, Part B)

Milestone Number	Contractual Due Date	Program Event	Payment Percentage for Milestone	Payment Percentage for Milestone (cumulative CLIN 2 value)	Payment Amount
C2-1	CLIN 2 ATP plus OFI months	Long Lead Parts	OFI %	OFI % (NTE 10%)	\$ OFI
C2-2	Milestone C2-4 SAR minus OFI months	System Integration Review (SIR)	OFI %	OFI % (NTE 40%)	\$ OFI
C2-3	Milestone C2-4 SAR minus 12 months	Assembly Test and Integration Progress Review (APR)	OFI %	OFI % (NTE 60%)	\$ OFI
C2-4	OFI	System Acceptance Review (SAR)	25%	OFI % (NTE 90%)	\$ OFI
C2-5	Launch minus 3 months	Shipment to Launch Site	OFI % (Not less than 10%)	100%	\$ OFI

Offerors may propose up to 4 additional interim milestones which are performance based and lead to completion of the NASA mandatory milestone, as long as the % value does not exceed the Payment % for Milestone (cumulative and per milestone (if specified)).

Offeror proposed Interim milestone content (equivalent to SOW for NASA mandatory milestones), must be added to the Work Plan, Part C.

ATP – Authority to proceed

OFI – Offeror Fill In NTE – Not to Exceed

Section L & M: Representations and Instructions



- The System for Award Management (SAM) is a Federal Government owned and operated free web site that collects data from suppliers, validates and stores this data, and disseminates it to various government acquisition agencies.
- The SAM website is located at: <https://sam.gov/SAM/>
- You are required to create an account in SAM.
 - Verify that your information in this database is current.

Section L & M: Representations and Instructions



- ELECTRONIC SUBMISSION OF PROPOSALS – PROPOSAL MARKING AND DELIVERY THROUGH NASA'S EFSS BOX
- Period for acceptance of offers: Proposals shall be valid for 365 calendar days from the date specified for receipt of offers
- Government to evaluate the proposed approach based on the following proposal volumes required to be submitted:
 - Volume I: Cost and Price
 - Volume II: Mission Suitability
 - Volume III: Past Performance
 - Volume IV: Responsibility and Additional Requirements
 - Volume V: Model Contract

Section L: Government Furnished Property and Facilities



- How to request:
 - Notify the Government as part of proposal of intention to use or not use the property/facilities
 - Fill in the applicable "OFIs" in Attachment J-33, Government-Furnished Property, Facilities, and Data/Information
 - Provided on a no-charge-for-use basis in accordance with FAR 52.245-1
- Government Furnished Property (GFP):
 - NASA Docking System (NDS) Block 1
 - NASA Standard Initiators (NSIs)
 - ISS Emulator
 - C2V2 Test Assets
- Available Government Furnished Facilities:
 - KSC Space Station Processing Facility (SSPF) – availability NET GFY25
 - Footprint and standard services 45'x 90', 4, 050 sq. ft.
 - Transfer aisle, airlock, hardware inspection area, etc, 2,900 sq. ft.
 - SSPF Administrative Space (maximum 1,500 sq. ft.) – availability NET GFY25

Government Task Agreements – Early Engagement



- Understand Industry is well into establishing their approach for development and delivery of their service/product when the acquisition process is formally initiated.
- JSC wants to engage industry as early as possible in this process to provide timely solutions to Industry needs.
- Use GTAs (Government Task Agreement) to start process (RSAAs dropped from process).
- Our objective is to listen to industry needs/risks and provide awareness into JSC's capabilities that could meet their needs.
- Offerors have time to balance the capabilities of their Industry team and NASA to create their proposal.
- NASA does not want to be in the critical path of system development or delivery of subsystems but to provide guidance and support.

GTA Engagement Process



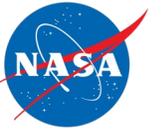
- Offerors contact Kristi Duplichen/JSC POC to understand JSC competencies (people, processes, tools and facilities) and request an estimated cost using the GTA form.
 - kristi.m.duplichen@nasa.gov
- The JSC POC will coordinate the request with the Contracting Officer and Program Management to assure the request is appropriate.
- The JSC POC will coordinate the GTA requests with program and performing organizations.
 - Refine GTA form inputs as needed to meet Offeror's needs and JSC's commitments.
- Return costed GTAs to Offerors as early as possible for consideration.

*Price is approximately **equal** to the **combined** importance of the **Mission Suitability** and **Past Performance***



*As Individual Factors, **Mission Suitability** is **more important** than **Past Performance**.*

Section L & M: Evaluation Criteria



- Total Evaluated Price will be the summation of:
 1. CLIN 1 - DDT&E through CDR (CPIF) Core Contract by GFY
 2. CLIN 2 - Production, Assembly, Integration, and Test (FFP) Core Contract by GFY
 3. CLIN 2A - Option (FFP) Core Contract by GFY
 4. CLIN 3 - Dwell (FFP) IDIQ, Average GFY 2028-2035 x 2yrs
 5. CLIN 4 – Launch Vehicle Integration and Sustaining (FFP) IDIQ by GFY
Pre-Priced Task Order Based on CLIN 4 IDIQ by GFY
 6. CLIN 5 - Special Task & Studies
Sub-CLIN 5A Special Studies (FFP) IDIQ by GFY
Sub-CLIN 5B Evaluation Requirements (FFP) IDIQ by GFY
 7. Government Task Agreements (GTA)
 8. Government Provided (Furnished Property, Facilities, & Data/Information)

Section L & M: Evaluation Criteria – Mission Suitability



- Volume II – Mission Suitability (MS) Factors

- Management Approach – Subfactor 1
- Technical Approach – Subfactor 2
- Small Business Utilization – Subfactor 3

- Mission Suitability Subfactor Weighting

Management Approach 200 points

Technical Approach 650 points

Small Business Utilization 150 points

TOTAL 1000 points



- Management Approach Mission Suitability Subfactor 1
 - **Program Management Plan**
 - Program Management Plan (**DRD USDV-1**) (paragraphs a-o)
 - **NASA Insight Approach**
 - Insight Management Plan (**DRD USDV-5**)
 - **Work Plans**
 - Attachment J-30 Work Plans, with Offeror’s proposed “OFI”
 - Project Life-Cycle and Milestone Review Plan and Data Packages (**DRD USDV-3**) (paragraph a)

Evaluated for overall demonstrated understanding, reasonableness, feasibility, completeness, and effectiveness and any ensuing impacts and risk to the Government.



- **Technical Approach Mission Suitability Subfactor 2**

- **Specific Technical Understanding and Resources**

- Labor resources needed to perform requirements
- Narrative for CLIN2A option, Option For Increased Quantity
- Narrative for Fixed Price IDIQ Task Order, CLIN 4 Launch Site Integration and Sustaining Representative Task Order
- Basis of Estimates (BOEs)
- Technical Resources Template (TRT)
- Integrated Master Schedule Format 6 and Format 5 of the Integrated Program Management Report (**DRD USDV-7**)
- Attachment J-32 Offeror's Standard Labor Categories

- **USDV System Architecture**

- USDV System architecture, system description, and subsystem design concepts
- Performance Capabilities
- Flight-proven designs used in relevant environments, and effort to incorporate them into the USDV System architecture
- Approach to integration of the USDV with the Launch Vehicle, Mission Control Center Houston, and ISS
- Concept of Operations (**DRD USDV-4**)
- Approach to the Dwell and Sustaining phases to maintain readiness of the USDV
- Technical, schedule, and safety-related risks

Evaluated for overall demonstrated understanding, reasonableness, feasibility, completeness, and effectiveness and any ensuing impacts and risk to the Government.



- Technical Approach Mission Suitability Subfactor 2 cont.
 - **DDT&E Approach & TRL and Technology Maturation Assessment**
 - Design, Development, Test and Evaluation (DDT&E) Plan (**DRD USDV-25**) (paragraph a-j)
 - TRL and Technology Maturity Assessment (**DRD USDV-23**)
 - Qualification and Acceptance Plan (**DRD USDV-44**) (part a)
 - Approach to avionics and software development and sustaining
 - Approach to the qual and acceptance of flight-proven systems/components
 - Approach to propulsion system development, including the testing and qualification approach
 - **NASA Standards and Specifications Compliance and Tailoring Approach**
 - NASA Standards and Specifications Compliance and Tailoring (**USDV DRD-33**) (items a-e)
 - Encourage the proposed use of flight-proven alternate standards that have proven successful and reliable
 - **Launch Vehicle Compatibility**
 - Attachment J-35, Launch Vehicle Compatibility – compatibility of USDV with a Medium Performance Launch Vehicle



- Technical Approach Mission Suitability Subfactor 2 cont.
 - **Safety and Mission Assurance (S&MA) Plan**
 - Safety & Mission Assurance (S&MA) Plan (**DRD USDV-20**) (Volume 1)
 - Safety critical systems/components required to complete the mission, including associated plan for complying with the failure tolerance requirement
 - Approach for addressing common cause failures, mitigations, and when similar/dissimilar redundancies are necessary
 - Safety critical systems/components that do not meet fault tolerate requirements and the proposed mitigation strategy
 - Heritage systems/components planned for use within the USDV design that do not meet two fault tolerance (2FT)/design for minimum risk (DFMR) and any redesigns/tests/analyses that would be necessary to meet 2FT/DFMR

Section L & M: Evaluation Criteria – Mission Suitability



- Small Business Utilization - Mission Suitability Subfactor 3

- Small Business Subcontracting Plan

- Unique Small Business Subcontracting Goaling approach
 - NASA Agency Small Business Subcontracting goals are provided for consideration in the development of individual Offeror Small Business Participation goals

Small Business Category	Goal
Small Businesses (SB)	15.7%
Small Disadvantaged Business Concerns (SDB)	5.0%
Women Owned Small Business Concerns (WOSB)	5.0%
Historically Black Colleges and Universities and Other Minority Institutions (HBCU/MI)	1.0%
HUBZone Small Business Concerns (HBZ)	3.0%
Veteran Owned Small Business Concerns (VOSB)	3.5-4.0%
Service-Disabled Veteran-Owned Small Business Concerns (SDVOSB)	3.0%

- Small Business Subcontracting Plan and Reports (DRD USDV-11)

- Commitment to the Small Business Program

Section L & M: Evaluation Criteria – Mission Suitability



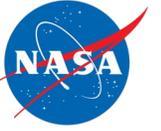
Mission Suitability subfactors and the total Mission Suitability factor shall be evaluated using the following adjectival ratings and definitions.

ADJECTIVAL RATING PERCENTILE	DEFINITIONS
Excellent	A comprehensive and thorough proposal of exceptional merit with one or more significant strengths. No deficiency or significant weakness exists.
Very Good	A proposal having no deficiency and which demonstrates over-all competence. One or more significant strengths have been found, and strengths outbalance any weaknesses that exist.
Good	A proposal having no deficiency and which shows a reasonably sound response. There may be strengths or weaknesses, or both. As a whole, weaknesses not off-set by strengths do not significantly detract from the Offeror's response.
Fair	A proposal having no deficiency and which has one or more weaknesses. Weaknesses outbalance any strengths.
Poor	A proposal that has one or more deficiencies or significant weaknesses that demonstrate a lack of overall competence or would require a major proposal revision to correct.



- **Volume III: Past Performance**

- Assessment will only consider recent and relevant work efforts
 - **Recent:** Offeror's will submit 3 past performance citations going back 10 years.
 - **Relevant:** Government will evaluate the past performance efforts size, content, and complexity.
 - Considers requirements similar to USDV and performance related to management, development, production, and operations of a flight proven vehicle in a similar operating environment as the USDV
 - **Performance:**
 - Quality, Schedule, Cost control, Small Business Subcontracting, and Utilization, and Safety
- Past Performance evaluated for each Offeror using the following confidence ratings:
 - Very High Level of Confidence
 - High Level of Confidence
 - Moderate Level of Confidence
 - Low Level of Confidence
 - Very Low Level of Confidence
 - Neutral



- Key Technical Library Contents:
 - SSP 51101 USDV Systems Requirements Document
 - SSP 51105 USDV Integration Plan
 - Launch Vehicle Summary
 - ISS Deorbit Concept of Operations
- Technical Library can be accessed via Sam.gov



Robert Watts, Small Business Specialist

JSC Office of Small Business Programs



Office of Small Business Programs – Johnson Space Center



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Industry Feedback Requested



- SOW requirements
 - Requirements that are overly restrictive/prescriptive, cost drivers, or limiters to viable technologies or flight proven capabilities.
 - Understanding of exit criteria associated with Hybrid contract (Cost plus to Fixed Price) and final USDV acceptance
 - Feasibility to fit on Medium Class Launch Vehicle
 - Understanding of Dwell (CLIN 3) and Launch Site Integration & Sustaining (CLIN 4) scope
- Ability to support required delivery date of September 1, 2027 (to support “contingency” January 2028 launch date)
- Wants/needs for Government Furnished Property, Facilities, or Government Task Agreements for USDV, including use of
 - NASA Docking System (NDS)
 - Space Station Processing Facility (SSPF)
- Understanding of Option for Increased Quantity (CLIN 2A Critical Spares)
- Understanding of pricing requirements

Milestones for the Acquisition



Milestone	Dates*
Draft Request for Proposal (RFP) Release	May 4, 2023
Pre-solicitation Conference	May 9, 2023
Industry Draft RFP Inputs Due	May 31, 2023
Presolicitation Synopsis	June 26, 2023
Final RFP Release	July 12, 2023
Preproposal Conference	July 18, 2023
Proposals Due	August 28, 2023
Presentation to Source Selection Official	December 13, 2023
Contract Award	January 9, 2024

* Dates are tentative

Question & Answer

Submit Questions
through the QR code



3 Minute Break for Industry to Submit Questions

Submit Questions
through the QR code





15 Minute Break

Q&A Site Closed for
New Questions





Question and Answer Period





Thank You

DRFP feedback is requested by May, 31, 2023

