TO: All Prospective Offerors

FROM: Contracting Officer - Commercial Crew Transportation Capability (CCtCap) Contract

SUBJECT: Draft Request for Proposal, NNK14467515R, CCtCap

The National Aeronautics and Space Administration (NASA) is issuing the Draft Request for Proposal (dRFP) for the CCtCap contract for public review and comment.

The dRFP is issued in accordance with NASA Federal Acquisition Regulation Supplement (NFS) 1815.201, Exchanges with Industry Before Receipt of Proposals, with the purpose of assisting the Government in developing the highest quality Request for Proposal. Accordingly, prospective offerors are invited to comment on all aspects of the dRFP including requirements, schedules, clauses, deliverables, proposal preparation instructions and evaluation criteria. Comments are also requested on safety, technical or programmatic risks associated with performance of the work. Prospective offerors are highly encouraged to identify areas in the dRFP that are unclear, ambiguous or otherwise warrant additional information or clarification in the final Request for Proposal. An Executive Summary is attached to provide an overview of the CCtCap approach and to identify those areas NASA has highlighted for the prospective Offeror’s attention.

The following information should be considered when reviewing and commenting to this dRFP.

Performance-based payments:
Performance-based payments are planned to be used in this competitive negotiated acquisition, therefore, the dRFP requests potential offerors to suggest terms, including performance events or payment criteria to support this approach. These suggestions may be utilized to establish a common set of performance-based payment parameters in the final RFP.

Deviations and Waivers:
The dRFP contains proposed deviation language to specific FAR and NFS clauses and identifies proposed clauses to be waived. These deviations and waivers have not yet been approved; therefore, changes to the final RFP may occur. The following list highlights clauses proposed to be deviated or waived in the RFP:
a) To deviate FAR clause 52.232-32, *Performance-Based Payments*, to remove the language in paragraph (f) to enable contractors to maintain control and title of the property acquired per the conditions defined in the clause.

b) To deviate NFS clause 1852.228-76, *Cross-Waiver of Liability for International Space Station Activities*, to add reciprocal waiver of claims between NASA and contractor (and related entities).

c) To deviate FAR clause 52.227-14, *Rights in Data — General (alt I, alt II, alt III, modified per 1852.227-14 Rights in data — general)*, to allow CCtCap contractors greater rights in data and software under certain circumstances.

d) To waive the FAR requirement for Certified Cost and Pricing Data, prescribed per 15.403-4(a)(1)(iii), which requires certified cost or pricing for any modification expected to exceed the current threshold.

**Submital of Comments and Questions:**
Comments and questions related to the dRFP must be submitted in writing on or before August 15, 2013 at 12:00 Noon Eastern Time to be considered by the Government. Submitted comments and questions should not contain proprietary markings and must be submitted via email to: ksc-cp2@mail.nasa.gov. Comments and questions can be submitted incrementally and should be provided using the attached “dRFP CCtCap questions-comments” template while referencing applicable sections and paragraphs. Current CCtCap acquisition information can be obtained via the Internet at the following address: http://commercialcrew.nasa.gov.

The Government may not respond to comments however, all comments received prior to the due date and time will be considered and, as appropriate, resulting revisions may be incorporated into the final RFP. If questions are received, the Government will post questions along with the Government responses, on a non-attributable basis, to the NASA/KSC Business Opportunities page at http://prod.nais.nasa.gov/cgi-bin/eps/bizops.cgi?gr=D&pin=76.

Potential offerors are advised that the dRFP is not a solicitation and NASA is not requesting proposals at this time. Therefore, it shall not be construed as a commitment on the part of the Government to award a contract nor does it obligate the Government for costs incurred in the preparation and submittal of proposals in anticipation of a contract. Any subsequent final solicitation (RFP) will be synopsized prior to its release and published on the Federal Business Opportunities (FedBizOpps) website (www.fbo.gov) and on the NASA Acquisition Internet Service (NAIS) (http://prod.nais.nasa.gov). It is the responsibility of prospective offerors to monitor the Internet site for the release of the final RFP and amendments (if any).

**Pre-solicitation Conference:**
NASA’s Commercial Crew Program (CCP) plans to host a Pre-solicitation Conference and One-on-One sessions on August 1 and 2, 2013, respectively, at the Kennedy Space Center, Florida. The purpose is to present key aspects of the dRFP and solicit feedback from prospective offerors to support NASA’s development of the Final RFP. Your comments, thoughts, and questions are critical to improving the Final RFP and ultimately acquiring a crew transportation capability.
Additional information regarding the Pre-solicitation Conference will be posted in FedBizOpps and the NAIS websites within the next week.

Thank you for your interest and participation in this draft solicitation,

[Signature]
Rogelio Curiel
Contracting Officer

Attachment, CCtCap Executive Summary
Commercial Crew Transportation Capability Contract
Executive Summary

The Commercial Crew Transportation Capability (CCtCap) contract is the second phase of a 2-phased procurement strategy to develop a U.S. commercial crew space transportation capability to achieve safe, reliable and cost effective access to and from the International Space Station (ISS) with a goal of no later than 2017. Phase 1 of the acquisition is the Certification Products Contract (CPC), with the primary objective being the delivery, technical interchange, and NASA disposition of early lifecycle products that address CTS compliance with NASA’s standards and requirements for an ISS Design Reference Mission (DRM). In Phase 2 (CCtCap), the final Design, Development, Test, and Evaluation (DDTE) activities necessary to achieve NASA’s certification of a CTS for the ISS DRM will be conducted, along with execution of Post Certification Missions (PCM) to the ISS. NASA’s CTS certification under CCtCap means that the Contractor’s CTS has met NASA’s safety requirements for transporting NASA’s crew to the ISS.

The draft Request for Proposal (dRFP) was developed based on NASA guidance, Commercial Crew Program (CCP) and International Space Station Program (ISSP) goals and requirements, Federal Acquisition Regulations (FAR), and inputs from industry. The Firm Fixed Price (FFP) FAR Part 15 contract will include four (4) separate Contract Line Items (CLINs):

- **CLIN 001 – DDTE/Certification (core contract):** The purpose of this CLIN is to complete DDTE activities and certify the Contractor’s CTS to NASA’s requirements for safely transporting NASA crew to the ISS.
- **CLIN 002 – Post Certification Missions (IDIQ):** The purpose of this CLIN is to perform PCMs to the ISS.
- **CLIN 003 – Special Studies (IDIQ):** The purpose of this CLIN is to perform special studies, tests and analyses, as needed by NASA to perform risk reduction-type activities. These tasks do not include any work necessary to accomplish the requirements under CLIN 001, CLIN 002, and CLIN 004.
- **CLIN 004 – Cargo in Excess of Requirements (if proposed):** The purpose of this CLIN is to allow the Contractor to provide cargo in addition to the minimum requirements in CCT-REQ-1130 to meet NASA needs. These may be ordered in conjunction with Post Certification Missions, CLIN 002 or flight tests in CLIN 001. This is not intended to be a replacement for existing cargo services, but permits NASA to establish an understanding of the full capacity of proposed CTSs and associated pricing.

NASA desires industry inputs on all aspects of the dRFP, particularly those that affect the safety, reliability, and cost effectiveness of the CTS. In addition, the following narrative provides highlights of several key aspects of the draft RFP. These are particular areas where NASA is seeking industry feedback. NASA has pursued a balance between commercial industry practices and Government requirements in an attempt to provide an acceptable and flexible solution to all parties. Your inputs, concerns and questions will enhance our efforts to meet this goal.
Certification Products Contract Performance

CCtCap is the second phase of a 2-phased procurement. The Government will review Offeror’s participation in or equivalency to the requirements of Phase 1, Certification Products Contract. *(See dRFP Provisions L.20-1-TA02; L.20-7, M.1, and M.2-TA02)*


The Statement of Objectives (SOO) conveys the top-level objectives related to the CCtCap procurement. These objectives are placed in two categories that support the major elements of CCtCap, including Core DDTE/Certification (CLIN 001) and Post Certification Mission (CLIN 002) objectives.

For CLIN 001, the Contractor shall:

- Obtain NASA certification of a CTS that complies with CCT-REQ-1130 and SSP 50808.
- Define, manage, and implement technical management plans and processes associated with achieving and maintaining NASA certification throughout the CTS life cycle in accordance with CCT-PLN-1120 and the contents defined within the RFP.
- Demonstrate long term operational plans to produce and operate a CTS such that flight and ground articles are manufactured, assembled, and integrated, in a repeatable manner that satisfies both Contractor and NASA requirements.

For CLIN 002, the Contractor shall:

- Conduct PCMs, including all activities from mission planning through post flight assessment including unplanned events and in-flight anomalies.
- Manage and implement technical management plans and processes associated with executing PCMs in accordance with CCT-PLN-1120 and the contents defined within the RFP.
- Maintain NASA certification of the CTS for all post certification missions. Design, production, or operational changes from the NASA certification baseline will not compromise compliance to the requirements of CCT-REQ-1130 and SSP 50808.

The combination of a SOO and draft PWS allows the Offerors flexibility to develop cost effective solutions and propose innovative approaches in an Offeror-proposed Contract Performance Work Statement (PWS). *(See dRFP Provision L.20-4 and Attachments L-01, L-02, and J-03)*

Task Ordering

Post Certification Mission (PCM) execution in CLIN 002 and Special Studies work in CLIN 003 will be executed via Firm Fixed Price Indefinite Delivery / Indefinite Quantity (IDIQ) task ordering; however, there are different expectations for each CLIN during contract execution.

- PCM Task Orders: Each request for a task order proposal will be based on specific mission requirements, and will be subject to the Contractor proposed and Government approved Authority to Proceed (ATP) criteria.
Based on successfully meeting ATP criteria, there will be a minimum of 2 PCMs awarded per contract with the potential for up to a maximum of six (6). If multiple awards are made, the maximum number of all PCMs that may be awarded under all contracts when combined will not exceed six (6). (See RFP Clauses B.4, F.2, H.2, H.8, H.19, H.20, I.5, I.6, I.7 and Provisions L.20-1-TA03 and M.2-TA03)

**Special Studies Task Orders:** The Contractor shall use fully burdened labor rates to respond to a request for Special Studies Task Order Proposal. (See dRFP Clauses B.5, F.2, H.2, H.7, I.5, I.6 and I.7)

### CLIN 001 and CLIN 002 Structure

CLIN 001 and CLIN 002 contain two distinct milestone and payment structures. CLIN 001 (DDTE/Certification) contains five (5) Certification Milestones identified as sub-CLINs 001A – 001G for the Certification Baseline Review (CBR), Design Certification Review (DCR), Flight Test Readiness Review (FTRR) (for each flight test proposed), Operational Readiness Review (ORR), and Certification Review. Each milestone is considered a delivery item, with pre-defined milestone readiness and acceptance criteria (Appendix A to Attachment J-03), along with a deliverable data package (Attachment J-02). The following constraints are currently identified for the Certification Milestone payments as a percentage of the Government total payment for CLIN 001:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>CBR</th>
<th>DCR</th>
<th>FTRR</th>
<th>ORR</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Individual % of CLIN 001</td>
<td>10%</td>
<td>40%</td>
<td>N/A</td>
<td>20%</td>
<td>Must equal at least 10%</td>
</tr>
</tbody>
</table>

In addition to the Certification Milestones for CLIN 001, proposals should include interim financing milestones (performance-based milestones) that clearly represent significant certification efforts including completion of design and development, key testing and analysis, or closure of high risk performance requirements.

The Government highly encourages an interim milestone that represents a significant design review that ensures: the detailed design will satisfy the requirements with adequate margins; the design is sufficiently mature to proceed with fabrication, assembly, integration and test; and the product verification and product validation plans are complete. (See RFP Clauses B.3, H.31, and Provisions L.20-1-TA01, L.21, and M.2-TA01)

The work under CLIN 002 (PCMs) also contains five (5) Mission Milestones which are financing milestones defined as the Vehicle Baseline Review (VBR), Mission Integration Review (MIR), Mission Certification Review (MCR), Flight Readiness Review (FRR) and Post Flight Review. The content of all milestones, including additional milestones such as Stage Operation Readiness Review (SORR) and Offeror-proposed interim milestones, should be incorporated into the Offeror’s proposed Contract PWS. All PCM milestone payments are performance-based financing payments.
After CCtCap award and after the minimum ATP criteria are satisfied, NASA may request a proposal for a PCM. Since some PCMs are expected to be awarded prior to certification, the ATP criteria should be clearly linked to the DDTE effort. This will ensure the development activity is progressing as expected. Because of the critical nature of maintaining the certification schedule while beginning work on a post certification mission, the following constraints apply to the CLIN 002 Mission Milestone payments (as a percentage of the Government total payment for an awarded mission) made prior to (and including) completion of:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>DCR (CLIN 001)</th>
<th>VBR</th>
<th>MIR</th>
<th>Certification Review (CLIN 001)</th>
<th>MCR</th>
<th>FRR</th>
<th>Post Flight Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Cumulative % at each PCM</td>
<td>20%</td>
<td>30%</td>
<td>50%</td>
<td>60%</td>
<td>N/A</td>
<td>80%</td>
<td>Must equal at least 20%</td>
</tr>
</tbody>
</table>

The mission success criteria and associated final payment for the PCMs will be defined on a per mission basis and agreed to by NASA and the Contractor. In the event of a failed mission determination, the Post Flight Review milestone payment will be forfeited and an additional 20% of the PCM price shall be applied as a credit to another PCM, other in-kind considerations, or be returned to the Government. (See RFP Clauses B.4, H.19, H.20, H.21 and Provisions L.20-1-TA03, and M.2-TA03)

**Licensing and Liability**

FAA licensing is not required for CLIN 001 (Flight Test(s)), but is required for contract launch and reentry operations performed under CLIN 002 (Post Certification Missions) of this contract.

The Contractor’s liability associated with activities related to launch and reentry operations under CLIN 002 will be governed by the FAA license and associated statutes and regulations. During CLIN 002 contract activities that are not covered by the FAA license, the Contract establishes a cross-waiver between the Contractor and its Related Entities (or contractors and customers) and the ISS International Partners and their Related Entities.

For all other contract activities not subject to an FAA license, including all activities performed under CLIN 001, the RFP includes:

- A cross-waiver between the Contractor and its Related Entities (or contractors and customers) and the ISS International Partners and their Related Entities; and
- A reciprocal waiver of claims between the Contractor and its Related Entities and NASA and its contractors performing work related to this effort

For all contract activities not subject to an FAA license, the RFP also includes a clause on third-party liability that requires the Contractor to obtain the maximum amount of available insurance not to exceed $500M to cover third-party claims. This clause also permits the Contractor to
submit third-party claims above insured amounts, up to $1.5 billion, to the Government for payment, subject to availability of funds and the usual tests for allowability. \(\text{(See RFP Clauses H.5, H.18 and H.22)}\)

**Data Rights**

A deviation to the standard data rights clause is anticipated, granting the Government limited rights, instead of unlimited rights, for data first produced under the contract partially or exclusively at private expense. In event of Termination for Default, the Agency receives additional right to manufacture for Government’s benefit/use, but not unlimited rights. \(\text{(See RFP Clause I.9)}\)

**Insight**

Clause H.15 of the dRFP is an Insight Clause emphasizing the importance of the Government’s ability to gain an understanding of the Contractor’s activities to assess the status, critical paths, and risk associated with successfully completing contract requirements, achieving final certification, and successfully completing PCMs.

Also described is the concept of a Contractor-led Joint Test Team (JTT) approach for the operations certification effort. The JTT would integrate commercial and NASA personnel in order to leverage the joint knowledge and experience that we share. The focus would be on operational interfaces with the vehicle in order to validate the system in the operational environment.

Additionally, Government Quality Assurance (GQA) functions are documented, in which the Government will perform product examination, process witnessing, and record review. These functions will be performed for safety-critical items/processes/products and those areas identified by a risk based analysis (RBA).

Evaluation of your proposed Insight Implementation Plan is an element of the Mission Suitability factor. The Insight Implementation Plan documents your approach to establishing a cooperative environment to ensure an effective technical interchange between NASA and the Contractor. \(\text{(See RFP Clause H.15, L.20, Provision M.2, and Attachment J-02)}\)

**Government Property**

The Government will make available a total of 4 NASA Docking System Block 1 units on a no charge-for-use basis for performance of work under this contract. If there are multiple contract awards, the available units will be equitably distributed, if necessary. The first flight unit will be available February, 2016. Within the proposal, the Offeror shall describe their approach to enable docking with the ISS. The options include the following:

1. Government will provide NDS flight hardware units (limited to the noted four) as Government Furnished Property.
2. Government will provide NDS Engineering as Government Furnished Data for Industry to build NDS. The preliminary build-to-print package available in November, 2014 and final build-to-print package available by June, 2016.
3. Contractor designs and builds unique docking system that is compatible with SSP 50808 requirements. The Government furnishes no hardware, data, or services. *(See dRFP Clauses G.4, G.5, G.6, G.7, H.14; Provisions L.20-1-TA01, and M.2-TA01)*

**Commercial Passenger(s) and Cargo Requests**
Clause H.23 of the dRFP enables the Contractor to propose to manifest Commercial Passengers, cargo or payloads on PCMs for contract price adjustment(s) or other contract consideration. The timing and NASA approval process are provided. *(See RFP Clause H.23)*

**New Entrant**
Clause H.16 of the dRFP provides notification to the Contractor that NASA may conduct a subsequent competition due to the loss of an existing CTS provider or if there are additional future NASA requirements for certified crew transportation. *(See dRFP Clause H.16)*

**Source Selection and Evaluation**
The Government intends to award contracts to one or more Offerors. The award selection will be based on the RFP evaluation criteria and the proposal(s) that provide the best value to the Government. To facilitate this evaluation, the Offerors are requested to submit a high level Basis of Estimate(s) (BOEs) in any structure or format. This is intended to provide support for the Government’s assessment of the Offeror’s understanding of contract requirements, the reasonableness of the proposed approach, and a depiction of required resources being proposed. Additionally, the Offeror’s approach to Lifecycle Cost Management, from the beginning of CCtCap through the end of the use of the CTS, will be evaluated as part of the Mission Suitability Factor. This evaluation will include a review of the Offeror’s proposed corporate commitments or proposed investment to meet contract requirements within the Offeror’s proposed schedule, as well as a summary level business plan that describes the investments made and the anticipated time of investment recovery. *(See dRFP Provisions L.20-2-MA03, L.20-4, M.2, and Attachment L-05)*