REQUEST FOR PROPOSAL
FOR
END-TO-END ASSEMBLY, INTEGRATION AND
DEPLOYMENT TEST OF SOLAR ARRAYS
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1. INTRODUCTION:

Solar array deployment mechanism is used for keeping the solar array in stowed condition during launch and deploys the solar array in orbit (Refer figure-1). The solar array deployment mechanism is very critical as non-function / failure of deployment mechanism in orbit can jeopardize the mission.

Solar arrays consist of solar panels, yoke, deployment mechanism along with electrical harness etc. The number and size of elements vary based on spacecraft configuration. However, the basic principle of integration and deployment tests remains similar for all types of solar arrays.

The purpose of this RFP is to invite proposals from the potential vendors to carry out Solar Array integration and deployment tests at U.R. Rao Satellite center. At present Solar Array integration and deployment tests are carried out in-house by Spacecraft Mechanism Group (SMG) of U R Rao Satellite Centre (URSC).

The Statement of Work (SOW) elaborates scope of work, quantum of work, resources required to execute the work and execute the activity, responsibilities of the vendor and acceptance criteria etc.

Figure-1: Typical Spacecraft with appendages in stowed and deployed condition
The RFP framework consists of:

- RFP Evaluation Process
- Scope & Tenure of Contract
- Vendor company profile & Resources required and responsibility
- Modalities of Contract Execution
- Terms & Conditions
- RFP Response Format

Vendor has to assimilate all these RFP details and furnish suitable proposal in the stipulated format for consideration by URSC.

2. RFP EVALUATION PROCESS

a) This RFP document has been issued to the Vendors to seek their Techno-Commercial and Price Bid, as per stipulated Terms and Conditions and procedural guidelines of URSC/ISRO through e-procurement mode only.

b) RFP offers in the form of Two-Part Tender Viz; Part-1 [Technical and Commercial Bid] and Part-2 [Price Bid] Vendors shall be received through the e-procurement mode only.

c) Being a Two Part Tender (Technical and Commercial Bid), Part-1 (Technical) shall be scrutinised first and only the techno-commercially Qualified Vendors shall be eligible to compete for the Part-2 [Price Bid].

d) As part of Technical & Managerial competence Audit, URSC team shall have the right to visit Vendor’s premises to verify and assess the capabilities in terms of Technical Competency, Infrastructure Capacity, Quality Management Systems, Human Resource Management, and Financial Strength etc., as stated in their RFP responses.

e) URSC reserves the right to reject the quotation submitted by Vendor[s] in case information provided is found to be misleading or not satisfactory during the facility visit and the Audit process. Under such circumstances, the Vendor shall be disqualified and shall not be considered for evaluating both the Offers i.e. Part-1 [Technical Bid] and Part-2 [Price Bid].
f) On completion of Technical Bid evaluation, Price Bids of techno-commercially suitable Vendors shall be opened.

g) The lowest Price Bid will be selected from among qualified techno-commercial Bids.

h) In this RFP, Contract is defined as the agreement between URSC and Vendor for taking up Solar Array assembly & Testing activities. The Contract signing date/ Purchase order release date will be taken as commencement of contract period.

i) The decision of URSC/ISRO with regard to the short-listing of Bidders through this RFP shall be final and URSC reserves the right to reject any or all the Bids without assigning any reason. Schematic representation of RFP evaluation process is as follows:

RFP Evaluation Process Flow Chart

1. Release of Request For Proposal (RFP)
2. Pre-Bid Meeting
3. RFP-Response submission
4. Technical & Managerial competence Audit at Vendor premises
5. Vendor Technical Evaluation
6. Opening of Price Bid
7. Selection of Technically suitable & L1 Vendor
8. Placing work order as per URSC Procedure
j) **Pre-Bid Meeting:** In order to enable the Contractors to understand the scope of order, a common pre-bid meeting will be arranged at URSC, Bengaluru to Industries desirous of participating in such meet. Contractors may obtain needed technical and commercial clarifications before submitting their offer. The date of such pre-bid meeting shall be intimated after the issue of RFP.

### 3.0 Scope & Tenure of Contract:

#### a) Scope of Contract:

Assembly, Integration, Deployment test, Stowing of solar arrays and delivery to SMG/URSC as per supplied hardware, drawings & assembly procedure logbook at URSC/ISITE facility by the vendor using vendor’s human resources, tools and instruments.

Under the Solicited RFP, it is proposed to carry out the assembly, Integration and deployment testing activities of different types of ISRO Standard bus satellites with the participation of the prospective vendors. The entire activity is planned to be carried out in three phases as follows:

- **Phase-1:** Orientation Programme about the activities involved and work practices to be followed at URSC by vendor’s team.
- **Phase-2:** On-the-job training for selected solar array by URSC team to the Vendor
- **Phase-3:** Execution of activity by Vendor for the subsequent solar arrays under the supervision of ISRO/URSC on further work order.

The details of the above three phases is given below.

**Phase-1 - Orientation Programme**

- Orientation Programme aims at providing initial exposure and awareness for activities.
- Basically a theoretical training programme conducted by URSC at URSC-campus, covers primary theoretical aspects of solar array activities
- **Note:** Vendor is permitted to depute more than 5 persons for training and execution of the work with prior approval from URSC.
**Phase-2 - On-the-Job Training**

- Phase-2 is defined as On-the-Job Training Phase which will be initiated on releasing purchase order for taking up activities.

- The first solar array assembly, integration, deployment test and stowing will be carried by vendor’s team along with URSC team.

- Vendor’s team is responsible to get trained and learn from URSC team during the course of execution of first solar array wing activity.

- During this phase, the Vendor team would be provided with hands on experience/on-the-job training on activities by URSC team. On-the-job training is expected to be covered in 30 to 45 days.

- In this phase the vendor has to extensively build his documentation of each and every activity that he is involved as per the guidelines provided by URSC. This documentation will help to take in Phase-3. (Exhaustive documentation is available at present. However, Vendor’s team is advised to add the additional information’s so as Vendors team will be able to execute the future solar array activities without depending much on URSC team)

- For the subsequent solar array wing (from 2nd wing), vendors team is responsible to execute the activities on end to end basis. However, identified engineer will be available for any clarifications and assistance from URSC.

- Phase-2 also follows an evaluation process/competence assessment by URSC, for needed alteration(s).

- Typically, on the successful completion of Phase-2 On-the-Job Training Phase, Phase-3 Activities starts which are detailed below. The responsibility of URSC & vendor during the contract period (Phase-2 &3) for test facilities, hardware availability is summarized below.
Responsibilities of URSC and the vendor are listed below to execute the order

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>DESCRIPTION</th>
<th>RESPONSIBILITY</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>supply of required Hardware &amp; Drawings as per configuration</td>
<td>URSC</td>
<td>No vendor activity</td>
</tr>
<tr>
<td>2</td>
<td>Tools and instruments availability</td>
<td>Vendor to buy and maintain</td>
<td>Periodic calibration once in a year by the vendor</td>
</tr>
<tr>
<td>3</td>
<td>Test facilities and fixtures availability</td>
<td>URSC</td>
<td>No vendor activity</td>
</tr>
<tr>
<td>4</td>
<td>Assembly procedure log books preparation and entry of activities during assembly and testing</td>
<td>For the first spacecraft activity, URSC shall supply. For the subsequent solar array vendor is responsible. At end of the project vendor to handover the logbooks to SMG/URSC and they will be property of URSC</td>
<td>Vendor not to take Xerox/photography of any part of the drawings / document. The information of drawings and documents should not be shared / communicated to any other third party.</td>
</tr>
<tr>
<td>5</td>
<td>Documents</td>
<td>Vendor</td>
<td>URSC will provide. It will be provided only at workplace.</td>
</tr>
<tr>
<td>6</td>
<td>Environmental testing of Dampers</td>
<td>Vendor</td>
<td>URSC will provide Test fixtures and test facility</td>
</tr>
<tr>
<td>7</td>
<td>Readiness of Test fixtures, zero-g set up alignment etc</td>
<td>Vendor</td>
<td>-do-</td>
</tr>
<tr>
<td>8</td>
<td>Assembly, integration of solar array, deployment tests and stowing and deliver</td>
<td>Vendor</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Operation of crane / man lift aerial work platform</td>
<td>Vendor</td>
<td>Necessary training by URSC team at URSC/ISITE</td>
</tr>
<tr>
<td>10</td>
<td>Safety aspects</td>
<td>Vendor</td>
<td>-</td>
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</tbody>
</table>
Phase-3 - Execution of activity by Vendor

- Phase 3 is defined as all the activities involved in Integration and deployment activities to be carried out by the Vendor and during this phase, the vendor team has to independently carry out the execution of activities as per the terms and condition of the purchase order under the supervision of SMG/URSC.
- Vendor has to complete activities within the stipulated time period as defined in the order.
- Parallelly, the Vendor is also responsible for generation of Documentation during Phase-3 as per the guidelines provided by URSC. The responsibilities are given below.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Activities</th>
<th>URSC</th>
<th>Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Solar array Subsystem Readiness for Integration and Testing</td>
<td>Prime responsibility</td>
<td>• Deliverable check-list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• AIT preparation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Documentation</td>
</tr>
<tr>
<td>2.</td>
<td>Assembly and integration activities</td>
<td>Supervision</td>
<td>• Prime responsibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Documentation</td>
</tr>
<tr>
<td>3.</td>
<td>Testing - Facilities</td>
<td>Operation and supervision</td>
<td>• Utilization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Documentation</td>
</tr>
<tr>
<td>4.</td>
<td>Project Management</td>
<td>Prime responsibility</td>
<td>• Participation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Documentation</td>
</tr>
<tr>
<td>5.</td>
<td>Quality Management</td>
<td>Final Certification QA</td>
<td>• Documentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• QA activities performed under URSC Supervision</td>
</tr>
</tbody>
</table>

b) Instructions, Terms & conditions regarding human resources of the vendor:
- All the deputed human resources should have at least one-year industrial work experience of mechanical assembly / testing / fabrication.
- Acceptance of all the deputed persons to execute the works mentioned is subjected to clearance from the competent authority at URSC.
All the 5 persons are to be on vendor’s company payrolls and vendor is not permitted to outsource/sub-contract/assign this work either wholly or partly to any other Company, Agencies, Persons, etc.

The activity involves physical works on ground and at elevated heights (approximately 10 meters) besides precision assembly. Vendors need to note this and deploy human resources accordingly.

Change of any personnel of the team to be intimated to URSC 30 days in advance. Due to unforeseen/ un-eventual incidents, the intimation of 30 days in advance to URSC will be relaxed by URSC based on the situation.

As the value addition of the hardware/ solar array is very high, the vendors to instruct the teams to work with utmost care and integrity.

To meet the project schedules, the team may require stretching the working hours and on Holidays also.

Since URSC is providing the training for the person’s deputed to carry out the activities, Vendor may ensure that the same are available for the activities throughout the tenure of the contract.

During the course of contract if URSC/SMG finds any of the team members is not competitive/not sincere/ not attentive in delivering the duties, URSC/SMG has the right to ask the vendor to change such personnel and vendor to oblige the same.

Note: During integration and execution phase of activities if any doubt/lack of clarity on any of the activity arises, vendor’s team to stop the activity and discuss with identified personnel and upon clarification they need to proceed. Deviations in the procedure given by URSC not permitted unless it is approved by URSC team.
c) List of Deliverables

<table>
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<tr>
<th>Sl.No</th>
<th>Deliverables</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Generation of Test plans, procedure documents for assembly, integration including plans documents for environmental tests and special tests, covering all the phases. (For the first solar array wing URSC will provide the documents. However Vendors team to update and use for the sub-sequent solar array wings)</td>
</tr>
<tr>
<td>2.</td>
<td>Checklist document for execution of various activities of including environmental tests, special tests etc.,</td>
</tr>
<tr>
<td>3.</td>
<td>Test results compilation, performance report generation</td>
</tr>
<tr>
<td>4.</td>
<td>Compilation document of observations and anomalies during different phases of activity.</td>
</tr>
<tr>
<td>5.</td>
<td>Presentation material preparation and documentation, covering test results and test observations</td>
</tr>
</tbody>
</table>

- Most of the deliverables from vendor relates to documentation and record build
- Required details to be assimilated during training stages by the vendor team and all the documents as listed have to be systematically generated
- During independent execution of the activity by the vendor under Phase-3, generation of all the documents for plans/procedures/records of non-conformances and close outs etc are mandatory.
- Success of the system-build heavily depends on this requirement and serves as a measure for the work output by the vendor
- URSC reserves the right to scrutinize the deliverables by the vendor team under this category
- The deliverables by the vendor team under this category will be proprietary of URSC with no commitments from the vendor team
Note:

- There shall be two Project Coordinators one each from URSC and Vendor suitably identified for executing the contract.
- URSC Project Coordinator will be the single focal point, for dealing with the activities to be executed under the respective work orders.
- URSC Project Coordinator is responsible to identify/decide:
  - work force/team member strength nominally required for each of the activities under different phases
  - Extended hours requirement of job execution including round the clock activity requirement
  - identified requirement of work force and working-day(s) duration pattern will be communicated by URSC Project Coordinator to Project Coordinator from vendor side
- Project Coordinator from vendor side to be the focal point in all respects to ensure that all the contractual obligations are fulfilled satisfactorily.
- Project Coordinators (from vendor side as well as URSC side) individually/solely are responsible to interact with their respective team, as needed, and take required managerial/technical / executive decisions, within the scope of stipulated terms and conditions
- Decisions so taken by the respective coordinators to be percolated among the team members, down the line
- Both the Project Coordinators (from vendor side as well as URSC side) are jointly responsible to assess the performance of vendor team member(s), as and when required and identify suitable suggestions for change in allotted task assignments or seek replacement
- Final decision on warranted replacement of vendor team member(s) will be prerogative of URSC, as discussed in ‘clearance & disciplinary committee’
d) Tenure of Contract:

i. The proposal is for 5 years Firm Fixed Price [FFP] Contract assuming completion of 50 Solar Arrays. However, the Contract is extendable for Two more years upon mutual consent of the Parties. The factors like Labour Cost Index, Administrative Cost Escalation, Inflation, any other Incidentals, etc., may be kept in mind while offering Firm and Fixed Price for 7 years Contract.

ii. 10 solar array wings per year to be realized as a nominal plan.

iii. Based on the requirement, number of solar array wings may vary from 8 to 12 per year. However, total number of 40 solar array wings activity in 5 years' period shall be assured by URSC (against nominal plan of 50 wings in 5 years) and same to be executed by the vendor.

iv. On completion of 5 years or 50 wings realization (whichever is earlier), the purchase order may be extended for a period up to 2 years or up to 16 to 20 more wings on mutual consent.
4. ACTIVITY FLOW CHART

The flow chart gives the details of activities and sequence. However, some of the activities like supporting for Damper vibration and thermo-vacuum tests etc., are not written as all these activities are part of Assembly procedure logbook and not feasible to write all the activities in Flow chart.
5. **RESOURCES REQUIRED & RESPONSIBILITIES**

Resources required for realizing Solar Array and conduct of deployment tests are categorized into five categories. They are

- a) Flight Hardware
- b) Test systems and facilities
- c) Documents and drawings
- d) Tools and instruments
- e) Human resources.

The details are given below

**a) Flight hardware**

I. Composite elements (Solar panels, yoke etc)

II. SADM (Solar Array Deployment Mechanism)

- a) Panel hold down assembly
- b) Hold down Release Mechanism (HDRM)
- c) Hinge assemblies
- d) CCL assembly
- e) Damper and Damper loop assembly
- f) Harness assembly
- g) Snubber assembly.

**Responsibility:** All the above mentioned hardware shall be supplied by URSC.

**b) Test systems and facilities**

- a) Clean room for assembly and testing of solar array
- b) Zero-g fixture and zero-g alignment set-up
- c) Spacecraft simulator fixture
- d) L-Angle fixture along with X-Y sliders to support the spacecraft simulator fixture for integration and deployment tests
- e) Solar Array handling fixture with slings
- f) Zero-g trolleys, slings, proof loading setup and associated fixtures
- h) Hold down alignment gauge bars, SADA simulator
- i) Plumb bobs
- j) Swaging dies and swaging press
k) Thermo-vacuum and vibration test facility for sub-assemblies testing

**Responsibility:** All the above mentioned shall be supplied by URSC.

c) **Documents and drawings**

a) Assembly procedure log books

b) Test procedure documents
c) Drawings

**Responsibility:** All the above mentioned shall be supplied by URSC at workplace for the first solar array wing. For the subsequent wings drawings will be provided by URSC and documents to be prepared by the Vendors team.

d) **Tools, instruments & supporting elements (refer annexure-5)**

I. Strain Indicator (2 No’s)

II. Digital/dial vernier caliper 2 No’s (0 to 150mm) with Least count 0.02mm

III. Steel rules 100 mm, 300 mm, 1000mm and 1500mm long each 2 numbers

IV. Torque screw drivers for providing the following torque on the assemblies

[For each of the torque value mentioned below, separate tool is to be used. No single tool is to be used for multiple torque values]

1) 1.7 kgf-cm
2) 8 kgf-cm
3) 12 kgf-cm
4) 18 kgf-cm
5) 27 kgf-cm
6) 48 kgf-cm
7) 65 kgf-cm
8) 75 kgf-cm

V. Torque wrenches for providing the following torque on the assemblies

[For each of the torque value mentioned below, separate tool is to be used. No single tool is to be used for multiple torque values]

1) 8 kgf-cm
2) 12 kgf-cm
3) 18 kgf-cm
4) 27 kgf-cm
5) 48 kgf-cm
6) 65 kgf-cm
7) 75 kgf-cm

VI. Load cells - 500 kg capacity 1 No
VII. Load cells - 50 Kg capacity 2 No’s
VIII. Facomm tool kit along with double end ratchet - 1 No
IX. Spanner set, Allen bits for M2 to M10 nuts & screws to handle
X. Spirit level 2 No’s
XI. Force gauge - 1 No < 1 Kg capacity
XII. Stop watch with 1 second accuracy or better
XIII. Lint free hand gloves 25 sets per solar array wing

**Responsibility:** All the above mentioned shall be procured and maintained by the vendor. Also calibration of the above at 1-year regular interval from NABL accredited labs and maintaining the records to be done by the vendors. The tools/instruments required are not limited to the above. Based on the real time requirements vendor may need to procure and provide additional tools to realize the activity. However, by and large all the required tools and instruments are listed.

**Human resources**

In order to complete one solar array assembly approximately in 45 days, it is estimated that the following human resources with required qualification/skills will be required with industry experience.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Description</th>
<th>No. of personal</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Engineer</td>
<td>02</td>
<td>B.E/B.Tech-Mechanical Engineering with first class or equivalent CGPA</td>
</tr>
<tr>
<td>2.</td>
<td>Technical Assistant</td>
<td>01</td>
<td>Diploma in Mechanical Engineering with first class or equivalent CGPA</td>
</tr>
<tr>
<td>3.</td>
<td>Fitter</td>
<td>02</td>
<td>ITI Fitter with first class or equivalent CGPA</td>
</tr>
</tbody>
</table>
Responsibility: Vendor to provide the above mentioned human resources

All the deputed human resources should have at least one-year industrial work experience of mechanical assembly / testing / fabrication
6. MODALITIES OF CONTRACT EXECUTION

The activity carried out by the Vendor is assessed through Mandatory Inspection Points (MIPs)/Milestones

**MIPs:** The total activity of each solar array wing realization is divided into 4 stages and at each stage Mandatory Inspection shall be carried out by URSC team which is known as MIP. Clearance of MIP from URSC team is required to carry out the subsequent activities listed against further MIPs

a) Preparations for start of activity and MIP-1 clearance from URSC team. Collect the hardware from URSC team.

b) Readiness of sub-assemblies (Hinges, damper, snubbers, harness etc.). Swaging and proof loading of hold down release loops, readiness of CCL, damper, test systems characterization and readiness. MIP-2 clearance from URSC team.

c) Assembly of hardware on yoke and solar panels and positioning on to zero-g system. Assembly of CCL, damper assembly, harness loops, snubber bonding on panel. Co-ordination with power systems, electrical integration, Systems engineering group and thermal systems for harness and thermal works on solar array. MIP-3 clearance from URSC team.

d) Solar array stowing, measurements for snubber, damper loop, yoke deflection etc., and clearance from URSC. Conduct of deployment test in presence of URSC team. Post deployment check. MIP-4 clearance from URSC team.

e) Solar array stowing and handing over to URSC team along with documents.

The activities covered against each MIP is listed below

**MIP-1:** Tools readiness and calibration validity, availability of drawings & documents: After MIP-1 flight hardware will be issued to the Vendor by URSC team. **Approximately 5 days of activity is involved.**

**MIP-2:** Hold down release loop characterization and positioning of spacecraft simulator fixture with respect to Zero-g set up; Zero-g readiness. Clearance will be given by URSC team. **Approximately 16 days of activity is involved.**
**MIP-3:** Assembly & integration of solar panels with mechanism elements and before conduct of deployment test (before stowing of solar panels for deployment test). Clearance will be given by URSC team. **Approximately 14 days of activity is involved.**

**MIP-4:** Deployment tests and Post deployment checks. Before final stowing of the solar array, clearance will be given by URSC team. **Approximately 10 days of activity is involved.**

7. **PAYMENT TERMS & CONDITIONS**

a) **Advance payments:** No Advance payments shall be made by URSC to the Vendor

b) Payment will be released on Quarterly (once in 3 months) on pro-rata basis after successful completion of activities backed on a certificate issued by URSC focal point/program co-ordinator duly approved by competent authority (Head MATD/Group Director SMG).

Procedure for calculating payment quarterly (once in 3 months):

- If the Purchase order value = “A “ Lakhs
- Total number of wings to be realized as per P. O = 50 No’s
- Cost per wing = (A/50) Lakhs
- Activities to be completed in each wing (MIPs) = MIP-1 to MIP-4
- Weightage factor for each of the MIP
  - MIP-1 : 10% of each wing activity
  - MIP-2 : 35% of each wing activity
  - MIP-3 : 30% of each wing activity
  - MIP-4 : 25% of each wing activity

c) At the end of each quarter, Assessment will be made by the SMG focal point / Indenter to work out the quantum of work completed and certified by the Division Head, MATD towards payment.

d) In a given quarter, if the vendor has completed one full wing of solar array delivery (ie. MIP-1, MIP-2, MIP-3 and MIP-4 are completed) and MIP-1 & MIP-2 are
completed for the second wing, the payment will be \([1.45 \times A/50]\) Lakhs i.e. \([(A/50) + 0.1(A/50) + 0.35(A/50)]\).

e) Based on the project requirements and readiness of other sub-systems, the vendor may be asked to work on 2 or more number of solar array wings simultaneously. In that case, the calculation of activities for the payment will be made based on number of MIPs completed in each wing, example: After completion of MIP-1, MIP-2 & MIP-3 of wing-1 if vendor is asked to take up wing-2 activity and vendor completes MIP-1 & MIP-2 of wing-2 in a given quarter, for payment purposes 1.2 wings (10%+35% =45% of wing-2 and 10%+35%+30% =75% of wing-) cost will be paid to the vendor. i.e. 1.2x(A/50) lakhs.

f) **Payment at end of the contract period:** If URSC asks the vendor to execute more than 40 wings of solar array activities within the contract period of 5 years, the payment will be made on prorate basis. To meet the project requirements, if vendor is asked to complete 50 wings activity in less than 5 years period payment will be made accordingly for all the 50 wings.

- **Vendor Performance Evaluation Committee** shall be constituted by Group Director, SMG, URSC with members from SMG/URSC and representatives from Vendor side to monitor the performance of the Vendor on a continuous basis during the execution of the Contract. Committee shall review and certify the completion of the performance milestone and accordingly, Payments shall be released to Vendor as per the Terms and Conditions agreed upon. The authorization of milestone payments by the Committee is subject to the Vendor's satisfactory performance and submission of supporting documents as mentioned in Vendor’s Deliverables List.

- Vendor Performance Evaluation Committee shall meet periodically to review the performance of the vendor during the execution of the Contract. The committee shall address the issues/delays, if any, that are encountered during the execution of the Contract such as technical complexities, non-conformance, non-availabilities of systems, management perspectives etc. In
case of any deviation in compliance with timelines, the causes of delay such as technical troubleshooting, non-conformance, waiting for deliberation from review committee etc., shall be addressed by the committee.

Security Deposit:

- URSC shall be at liberty to withhold/deduct any part or full amount from Security Deposit in case of any failure on the part of the Vendor to duly execute the Contract. The decision of URSC on this shall be final and binding on the Vendor.

- Within 20 days from the date of issue of the Corresponding Purchase Order or within such extended time as may be granted by URSC in writing, the Vendor shall execute an irrevocable interest free Security Deposit for 10% of the value of the Purchase Order/Contract Value to ensure due Performance of the Contract. The proceeds of the Security Deposit shall be payable to the URSC as compensation for any loss resulting from the Vendor failure to complete his obligations under the Contract/Work Order. The Service Receiver (URSC) shall discharge the Security Deposit bond after completion of Vendors performance obligations.

- The Security Deposit may be furnished in the form of Bank Guarantee issued by a Nationalized Bank, or Bank Guarantee from a Nationalized Bank in favor of Accounts Officer, U.R. Rao Satellite Centre [URSC], Bengaluru. The Bank Guarantee must be valid for the entire contract period and an additional period of 60 days beyond the date of completion of all contractual obligations of the Vendor. In the event the work is not completed within the stipulated period, the Vendor shall get the Security Deposit extended. The Bank Guarantee shall be executed on a Non-judicial stamp paper of appropriate value as per our Specimen template. The Security Deposit will not carry any interest and shall be returned after completion of all the obligations of the Contract with a “NO CLAIM CERTIFICATE” issued by Vendor as per our
Specimen template enclosed. Adherence to this clause is compulsory or otherwise, the Tender will be rejected.

- In the event the Vendor fails to furnish the Security Deposit within 20 Days as stipulated hereinabove, i.e. after the receipt of Work Order/Contract or on signing of the Contract or any extension thereof, the Work Order/Contract shall be cancelled and terminated at the Vendor’s risk, cost and liability and appropriate penal and legal action shall be initiated.

- MSMEs Policy provides benefits to Supply Tender Set Free of Cost and Exemption from payment of Earnest Money Deposit etc. However, policy does not provide benefits for Exemption from Security Deposit. The benefit will be extended to MSEs up to the monetary ceiling fixed by MSME.

- **Taxes and other charges:** Vendor must submit their Price Bid (quote) in terms of *Single Unit Rate only*. GST applicable for single unit rate shall be specified separately.

- **Delay in completion/Liquidated Damages (LD):**

  - It is of relevance to mention here that the SMG activity is jointly carried out by URSC and Vendor and also depends upon the deliverables and inputs provided by URSC. The Vendor Performance Evaluation Committee shall overall supervise and account for the delay attributable to URSC or Vendor for the purpose of calculating the LD.

  - The time and date stipulated in the Contract/Purchase Order for completion of the work shall be deemed to be the essence of the Contract. If the Vendor fails to deliver the Goods/Services within the time specified in the Contract/Purchase Order or any extension thereof or if the Vendor fails to maintain the required progress or comply with the relevant provisions of the general conditions of Contract or special conditions of Contract, the Service Receiver shall, without prejudice to any other right or remedy available under the law to obtain Service on account of such breach, recover from the Vendor as Liquidated Damages a sum one-half of one percent [0.5 percent] of the
contract Price of the undelivered Stores/Services for each calendar Week of delay. The total Liquidated Damages shall not exceed Ten percent [10 percent] of the Contract Price of the Unit/Units so delayed. **Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected.**
8. GENERAL TERMS & CONDITIONS AND COMMERCIAL ASPECTS

I. General Conduct of Vendor Workforce in Workplace

☐ The credentials including security credentials verification shall be submitted to URSC. URSC will assess the suitability of the Workforce for the work proposed to be assigned and give its clearance.

☐ The Vendor shall also verify / certify the conduct of the Workforce at frequent intervals. If any of the Workforce misbehaves or commits any misconduct, URSC reserves the right to refuse permission to such persons to enter its premises, and such Workforce shall be withdrawn by the Vendor immediately.

☐ All Vendor Workforce should attend duty neatly dressed and maintain decorum of dress code.

☐ Electronic gadgets Viz. mobiles, CDs, pen drives, laptops, cameras etc. are not permitted inside URSC Premises.

☐ Consumption of Tobacco Products and Alcohol is strictly prohibited.

☐ Vendor’s Buses and Vans are allowed inside the URSC/ISITE campus based on the approval from URSC. Individual vehicles by the Vendor Workforce have to be parked in the allotted site location.

☐ It shall be the responsibility of the Vendor Workforce to use the facility, equipment, consumables, tools, Instruments etc., provided by URSC safely and properly and any misuse/abuse in this regard will be viewed seriously and such Workforce shall be removed immediately and replacement is provided.

☐ The Vendor Workforce shall display the Identity Cards as long as they are inside the URSC.

☐ In the event of the Workforce deployed by the Vendor commits any act of Omission/Commission that amounts to misconduct/indiscipline/incompetence, the Vendor shall forthwith remove the Workforce in addition shall take appropriate disciplinary action against such persons under intimation to the Focal Point at URSC. The Vendor shall replace immediately any of its Workforce who is/are found unacceptable because of
security risks, incompetence, conflict of interest, improper conduct, etc., upon receiving written notice from URSC.

II. **Safety Precautions**

Vendor is responsible to ensure the safe handling of the sub-assemblies/equipment/all other Tools/accessories etc., being used during the SMG of the Satellite. The Vendor shall strictly conform to the safety and security procedures laid by URSC. The Vendor while executing the Work Order/Contract shall take all precautions to see that no damage is caused to the property of URSC. The Vendor shall make good/replace in case of damage/loss of property of URSC, including the satellite. In this regard, the Vendor shall submit an affidavit on non-judicial stamp paper of *appropriate value* stating therein that he will bear the loss.

The loss of URSC’s property on account of negligence/dereliction of duties by the Vendor Workforce will be investigated by a Joint Inquiry Committee comprising of representatives of URSC and Vendor, and URSC reserves the right to make it good at Vendor’s cost.

- The Vendor shall assess the hazards associated with various activities and establish safe working practices/procedure/environment in consultation with URSC.

- The Project Coordinator from the Vendor shall report immediately to URSC in case of any accidents/incidents/near-miss accidents and maintain records.

- The Project Coordinator from Vendor shall submit safety compliance report periodically to the URSC’s Project Coordinator.

- The Vendor shall engage capable and medically fit Workforce who are Indian Nationals only, who has completed 18 Years of age and are sound both physically and mentally.

- All the Vendor Workforce will be issued smart cards after submission of police antecedent verification and shall necessarily use Access Control System of URSC for entering the operational premises.
Vendor shall ensure information security on different communication channels available.

c) Intellectual Property Rights

Secrecy And Non-Disclosure Agreement

All documents prepared for Fabrication, Assembly, Integration, Test Procedures, Log Books, Drawings, Schematics and any other Communication, Codes revealed during the Satellite realization will be exclusive property of URSC and Vendor shall have no right whatsoever on them. These documents are to be strictly confidential and should not be reproduced, copied/transmitted to any media without explicit permission of URSC. Further, the Vendor must not quote any of these works in any publications or to any of their customers without explicit prior written permission from URSC and adhere to strict confidentiality.

The technical information, drawings, specifications and other related documents provided by the Purchaser and forming part of the Contract are the property of Purchaser and shall not be used or disclosed for any other purpose, except for execution of the Contract. All rights, including rights in the event of grant of patent and registration of designs are reserved in favour of the Purchaser. The technical information, drawings, specifications, records and other documents provided by the Purchaser shall not be copied, transcribed, traced or reproduced in any other form or otherwise in whole and/or duplicated, modified, divulged and/or disclosed to a third party nor misused in any other form whatsoever without Purchaser’s consent in writing except to the extent required for the execution of this Contract. These technical information, drawings, specifications and other related documents which were originally provided by the Purchaser shall be returned to the Purchaser with all approved copies and duplicates, if any, immediately after they have been used for the agreed purpose, and shall be accompanied with a certificate of the Vendor signed by an authorised signatory that such technical information, drawings, etc. have been returned to the Purchaser and that the Vendor has not retained any copy/ies thereof with him.
On behalf of the deployed Workforce, Vendor has to sign a Secrecy/Non-Disclosure Agreement [NDA] in URSC standard template, which will be applicable during tenure of the Contract, so that neither through the deployed Workforce nor through the Industry Management, the Secrecy/NDA clause is violated. Vendor shall ensure that it has similar back-to-back NDAs with its Workforce who shall undertake to adhere to maintain secrecy and confidentiality of matters contained herein. Vendor shall not divulge the information relating to the Satellite Sub-System and system design, fabrication details, drawings and components, quality control methods etc that are not in public domain and exclusively provided by URSC for its own requirements, to any third party and shall not use for the Vendors own commercial purposes, without prior written consent from URSC. However, Vendor can use such methods/procedures for works assigned by any of the ISRO/DOS Centres/Units with prior written consent of URSC.

The Solar array system realized by the Vendor for URSC shall fall under the ambit of this contract. Vendor shall maintain absolute secrecy and security of the drawings, process, procedures, methods, documentation etc. provided by URSC for activities relating to system assembly, integration and testing of satellites under the scope of this contract and the Vendor shall return the same to URSC after completion of the work.

Public Announcements

The Vendor agrees that the contents of Contract are confidential and that Vendor shall not make any publicity and public announcements of this contract without prior written consent of URSC. The Vendor is not supposed to use this Contract as his marketing promotion and financial borrowing from any Financial Market without the permission of URSC management. Any violation in this regard shall result in the termination of Contract without any notice besides initiating legal action.

Patents And Copyrights

I. The Intellectual Property Rights such as Patents, Copyrights, Design Rights on Engineering Drawings, Documentations relating to various Satellite Sub-Systems
and Satellite Systems Design, Fabrication Process, Testing and QA details/any other details related to this activity that are provided by URSC and the end products that are realized under this Contract shall remain the property of URSC.

II. However, if any special methods or procedure or processes on Satellite Systems Assembly, Integration and Testing are evolved on mutual interactions, the same may be owned jointly by both URSC and Vendor.

III. Violations under the clause of dual use technology or restrictive technology will attract penal action besides termination of Contract. ISRO/URSC will have an unconditional access to all the records generated during the Contract.

d) Liabilities, control etc..., of the human resource deployed

I. The Vendors team shall reach the work spot making their own transportation. URSC shall not provide any logistics (transportation, accommodation etc.,) support and not liable for any of the facilities other than providing necessary hardware and documents for executing the order as mentioned against.

II. The Character and Antecedents of human resources deployed by the vendor shall get verified through record check by the vendor from the concerned Police authorities and submit the Original Police Report to URSC.

III. Being a high security area, the vendor representative and human resources will be required to follow the security requirements such as possessing a valid pass/ID card while entering the campus and discharge of duties inside the premises, maintaining high order of discipline while in campus. Not carrying mobile phone, CD, Pen drives and any other electronic media.
e) **Termination and Short Closing of Contract**

Under the normal circumstances, Termination/Short Closing of the Contract are not foreseen. However, URSC reserves the right to terminate the Contract in whole or in part by giving 30 Days prior notice in the following circumstances:

- Due to repeated non-performance/delay in the execution of Contract.
- If the Vendor fails to deliver/meet the requirements of SMG Services within the stipulated delivery schedule or any extension thereof, granted by URSC.
- If the Vendor fails to perform any other obligations under this Contract.
- If the Contractor becomes bankrupt or otherwise insolvent or any petition seeking its insolvency is admitted by a Court/Tribunal of competent jurisdiction or if the Contractor applies for voluntary insolvency or enters into any arrangement for deferred payment to its creditors.
- Owing to deficiency of service and/or breach of Contract.
- For inefficiency, indiscipline, irregularity, insincerity, indifference in work, indulges in corrupt practices, disobedience, doubtful credentials/integrity, etc., noticed at any point of time during the Contract period.
- If the Vendor fails to honour the whole or any part of the Contract including failure to deliver/meet the requirements of contract services within the time stipulated in the Contract.
- If the Vendor is found to have made any false or fraudulent declaration or statement to obtain the Contract or he is found to be indulging in unethical or unfair trade practices.
- When both the parties agree mutually for termination.
- Any special circumstances, which must be recorded to justify the termination of Contract.
- Without assigning any reasons.
During the tenure of the Contract, Vendor shall not alter and/or otherwise change the ownership pattern or its shareholding, without the prior written consent of URSC. Within 30 days’ of the ending of every financial year, during the tenure of the Contract, the Vendor shall submit an authenticated document indicating the current shareholding pattern, including all details of the shareholders/owners/beneficial owners. It is made clear that no transfer or assignment of any share/s or shareholding or ownership interest in the Vendor to any foreign entity or foreign person, irrespective of origin, will be permitted during the tenure of the Contract. The Vendor shall not enter into a partnership or consortium agreement or sub-contract or any shareholders’ agreement or arrangements of the like with a foreign company/entity/agency for the execution of this Contract or to alter the ownership pattern of the Vendor. If the selected vendor enters into a consortium or partnership or sub-contract or shareholders’ agreement, etc. with foreign company/agency for the execution of this contract or if there is any change in the ownership in violation of this provision, the contract shall be terminated without any notice, at the Vendor’s risk, Cost and liability.

In case, the termination of Contract is due to any lapse on the part of the Vendor, the Vendor shall compensate 10% of the total Purchase order/Contract value to URSC for all the expenses/loss incurred which will be reviewed by Vendor Performance Evaluation Committee. The compensation for the loss sustained by the URSC will be adjusted against the Security Deposit and any amount due. The decision of URSC shall be final and not open to Legal relief.

Immediately upon termination of the Contract, either parties will return all confidential information obtained from the other party or will dispose of the same in accordance with the directions of the other party. This obligation is to maintain confidentiality and will continue for a period of 3 years from the date of termination of the Contract.

If the Stores repeatedly fails in the Inspection and does not pass Inspection and Quality requirements of Purchase Order/Contract and/or the Contractor is not in
a position to either rectify the defects or offer the Stores conforming to the contracted Quality Standards.
f) Predatory Pricing
The Predatory Pricing shall be arrived at by applying workable Cost as deemed fit by URSC. URSC reserves the right to apply Predatory Pricing principle in rejecting Bids of the Vendor. Vendors quoting unreasonably low Prices to obtain the Contract are liable to be rejected in order to ensure Quality Services. The assessment/decision of URSC on Predatory Pricing shall be final and binding on the Vendor.

g) Negotiations
URSC reserves the right to hold Techno-Commercial and Price Negotiation with Vendor as deemed fit and appropriate.

h) Sub-contracting of the Contract
- The Vendor shall not sub-contract, transfer or assign the Contract either in whole or in part thereof.
- In the event of change of ownership or management on account of merger, demerger, takeover or amalgamation, then the Vendor shall ensure that in the scheme or contract of such re-corporate re-structuring, the new entity shall be bound by all the terms and conditions of this RFP and the contract that may be signed in pursuance hereof.

i) Statutory Regulations
The Vendor shall comply the following statutory regulations applicable with this Contract:
- All the liabilities and other statutory requirements like EPF, ESI, Bonus, Medical Insurance/Comprehensive All Risk Policy, etc. will be the sole responsibility of the Vendor.
- The Vendor shall be fully responsible for timely compliance of all statutory requirements in respect of his Workforce. URSC shall not be responsible
for such payments or any amount to his Workforce/Statutory authorities on account of non-compliance of statutory provisions applicable to them.

- The Vendor shall also abide by Companies Act, Employee State Insurance (ESI), PF, Insurance, all labour laws, welfare measures of its employees and all other obligations that enjoin in such cases and are not essentially enumerated and defined herein, though any such onus shall be on the Vendor and it shall not involve URSC in any way whatsoever, compliance of these provisions shall be ensured at the time of making monthly payments.

- The Vendor shall ensure that any dispute between Vendor and its Workforce is to be settled outside URSC premises, and they shall not utilize URSC Premises for this purpose.

- The Vendor shall work as per the safety practices and regulations imposed by URSC.


- The Vendor shall also be liable for depositing all Statutory Taxes, Levies, Cess, etc., in time, on account of Service rendered to URSC to the concerned authorities from time to time as per the extant rules and regulations.

- The Vendor shall maintain all Statutory Registers under the applicable Law and produce the same, on demand to the concerned authorities of URSC or any other authority under the Law.

- The Income Tax at Source [TDS] as per the provisions of Income Tax Act and TDS as per GST Act shall be deducted.

- In case the Vendor fails to comply with any Statutory/Taxation Liability under appropriate Law and as a result thereof, if URSC is put into any
Loss/Obligation, monetary or otherwise, URSC shall have the right to recover such sums from the Vendor.

- The Vendor shall be solely responsible for redressal of grievances/resolution of disputes relating to the Workforce deployed for SMG Services. URSC shall in no way, be responsible for settlement of such disputes whatsoever.
- For all intents and purposes, the Vendor shall be “Employer” within the meaning of different Labour Legislations in respect of the Workforce deployed by the Vendor at URSC. The Workforce deployed by the Vendor in URSC shall not have any claim whatsoever of “Master” and “Servant” relationship nor have any “Principal” and “Agent” relationship with or against URSC.
- The Workforce deployed by the Vendor shall not claim nor shall be entitled to pay, perks and other facilities admissible to adhoc, regular/confirmed employees of URSC during the currency or after expiry of the Work Order/Contract.
- The Workforce shall neither be entitled for any Canteen/Medical/Conveyance/Quarters Facilities from URSC nor have any claim for employment in URSC/ISRO Units. URSC will not issue any service/experience certificate or any other certificates to the Workforce.
- The Workforce deployed shall reach the works spot well in time and strictly follow the rules and regulations regarding Safety, Security and Discipline of URSC.
- The Workforce deployed is not authorized to communicate any information they come across during their work at URSC.
- The Vendor shall execute an Indemnity Bond in favour of URSC on Rs. appropriate value of Non Judicial Stamp Paper against any action, claims or proceedings relating to infringement of all or any of the prevailing laws like Employees Compensation Act [Workmen Compensation Act] 1923, Contract Labour Regulation and Abolition Act, 1970 and Central Rules 1971, EPF Act, ESI Act, Industrial Dispute and any other Acts specifically not mentioned during the currency of the Contract. The Indemnity Bond has to be executed as per our specimen.
j) **Jurisdiction**

The Courts within Bengaluru will have the Jurisdiction to deal with and deciding any matter arising out of this Contract, to the extent permissible in law.

k) **Applicable Law**

The Contract shall be interpreted, construed and governed by the Laws of India.

l) **Arbitration**

- In the event of any disputes or differences or claims arising out of or relating to the interpretation, implementation, execution, performance and application of the Contract, such disputes or differences or claims shall be first settled amicably by mutual consultations of the good offices of the respective parties and recognizing their mutual interests, attempt to reach a solution satisfactory to both the parties.

- If such a resolution is not possible within 30 days from the date of receipt of written notice of the existence of such disputes, then the unresolved dispute or difference shall be referred to arbitration in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 or any modification thereof. The Parties further agree to arbitration as per the rules of the Karnataka Arbitration Centre, Kaniha Bhavan, Race Course Road, Bangalore.

- The decision of the Arbitrator/s shall be final and binding on both the parties. The expenses for the Arbitration shall be paid as may be determined by the Arbitrator/s.

- The Arbitration shall be conducted in Bengaluru, Karnataka State in English language.

j) **Force Majeure**

Neither party shall bear responsibility complete or partial non-performance of any of his obligations [except for failure to pay any sum which has become due on
account of receipt of goods under the provisions of the Work Order/Contract if the non-performance results from such force majeure circumstances such as, but not restricted to, flood, fire, earthquake, civil commotion, sabotage, explosion, epidemic, quarantine restriction, strike, lock out, freight embargo, acts of the Government either in its sovereign or its contractual capacity, hostility, acts of public enemy and other acts of God as well as war or revolution, military operation, blockade, acts or actions of state authorities or any other circumstances beyond the control of the parties that have arisen after the conclusion of Work Order/Contract. In such circumstances, the time stipulated for the performance of an obligation under the Work Order/Contract may be proportionately extended.

The party, for whom it has become impossible to meet the obligation under this contract due to force majeure condition, will notify the other party in writing not later than 21 days from the date of commencement of unforeseeable event. Unless agreed by both the parties, in writing, the Vendor shall continue to perform his obligations under the Work Order/Contract as far as is practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event. Any Certificate issued by the Chamber of Commerce or any other competent authority or organization in India shall be sufficient proof of commencement and cessation of the above circumstances. In case of failure to carryout complete or partial performance of an obligation for more than 60 days, either party shall reserve the right to terminate the contract totally or partially. A prior written notice of 30 days to the other party will be given informing of the intention to terminate without any liability.

l) No Contractual Obligation

This RFP shall not be interpreted as an Offer for a Contract or any type of guarantee by URSC/ISRO. It is URSC/ISRO’s sole discretion whether or not to allow the award of Work Order/Contract to any Vendor. This solicitation for the Proposal shall neither be construed to create an obligation on URSC/ISRO to enter into a contractual instrument, nor shall it serve as a basis for any claim for
reimbursement of costs for the effort to prepare, submit, amend, revise or supplement the Proposal, and other related documents expended by the Vendor regardless of whether or not the Vendor is successful in receiving an award as a result of the solicitation. The Vendor[s] shall bear all Costs towards preparation of Tender.

m) Transparency

Vendor is free to seek clarifications from URSC regarding Bidding conditions, Process and/or rejection of Bids during the tendering processes. All queries are to be sought for in writing only.

n) Language and Measures:

All documents pertaining to the Work Order/Contract including specifications, schedule notices, correspondence, operating and maintenance instruction drawings or any other writing shall be written in English Language only. The metric system of measurement shall be used exclusively in the Work Order/Contract.

o) Implementation of Government Purchase and Price Preference Policy for MSEs:

In order to avail of the benefits extended by Government of India to the Micro and Small Enterprises [MSEs], please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by General Manager, District Industries Center or National Small Industries Corporation [NSIC] Registration Certificate along with your offer. The facilities/ benefits will be extended as per orders issued by Ministry of MSME, Government of India, New Delhi or any instructions issued from time to time. The successful MSEs shall execute Security Deposit for the satisfactory execution of the Work Order/Contract.

p) Clarification regarding contents of the Bids:

During evaluation and comparison of bids, the Purchaser may, at its discretion, ask the Tenderer for clarification of his bid. The request for clarification will be given in
writing and no change in prices or substance of the bid will be sought, offered or permitted.

q) **Rejection of Bids:**

Canvassing by the Tenderer in any form, unsolicited letter and post-tender correction may invoke summary rejection of Bids. Conditional Tenders will be rejected. The Tenderer shall not impose any conditions on the bid i.e. the bid must be unconditional.

i. The authority of the person signing the Tender, if called for shall be produced.

ii. It is expressly agreed that acceptance of the Services Contracted for is subject to final approval in writing by URSC.

iii. U. R. Rao Satellite Centre has implemented e-tender system to obtain quotations through ONLINE. URSC invites offer[s] through e-tender portal https://www.eprocure.isro.gov.in for the supply of Stores/Services. The Suppliers need to get enrolled in the e-tender portal to access tender and submit their offer online. Tenderers need to have Digital Signature Certificate as detailed on URSC e-portal and corporate e-mail ID to register on the above portal. Only online tenders will be accepted. MANUAL/ POSTAL/COURIER/ E-MAIL/FAX OFFERS WILL NOT BE CONSIDERED. FURTHER, IT MAY BE NOTED THAT NO MANUAL TENDER DOCUMENT WILL BE ISSUED BY URSC.

iv. Interested Tenderers may login to https://www.eprocure.isro.gov.in and submit their offers via Online/internet submission only through the aforesaid website.

v. No Tender fee shall be payable for submission of Tender through e-procurement.

vi. The Quotation should be valid for 180 days from the date of opening of the Tender.

vii. In the case of Two Part Tender, Price details should NOT be disclosed in the Part-1 [Technical and Commercial Bid] and in any other attachments enclosed in the Technical Bid. In case, Price details are mentioned, the Offer will be
rejected. The Technical documents need to be attached online as a single PDF file without any price information.

viii. GST or Other Duties/Levies where leviable and intended to be claimed should be distinctly shown separately in the Tender otherwise the Offer will not be considered.

ix. For the Procurement/providing of Services, the Tenderer[s] are requested to quote the correct percentage of GST.

x. The Tenderers are requested to submit the Bids online at least two days prior to closing date to avoid last minute computer network related problems. Request for the extension of the due date will not be considered.

xi. The Part-1 [Technical Bid and Commercial Bid] opening date and time indicated is tentative. There may be changes/delay due to Network/Computer Server related problems and the tender opening may get delayed by one or two days under such circumstances, the exact date and time of opening will be intimated later in case of Public or Open Tender.

xii. The Suppliers have to provide the Open Authorization as per Tender Schedule defined. The Open Authorization will not be extended under any circumstances. In case Open Authorization as per Tender schedule is not provided such Bids will not be considered and it will be treated as invalid.

r) **Conditional Discount Offer**

Conditional Discounts Offers will not be considered.

Details of Financial capacity of the Firm Viz., details of Audited Balance Sheet including Profit and Loss account for the last 03 years certified by Chartered Accountant along with comments of Auditors has to be submitted by the Vendor along with the Quotation.

The Vendor shall propose a viable Financial Plan/Model for successful execution of the Project, explaining Liquidity and Solvency capacity of the Firm which is equivalent to 100% of the Contract Value. The same shall be supported with documentary proof obtained from the Bankers.
s) Provision for short closure of purchase order / contract

Under the following conditions URSC has the right to cancel / short close the purchase order/ contract

a) Performance of the Vendors team is not satisfactory i.e. making more number of repeated mistakes, not following the procedures at workplace etc.,

b) The Character and Antecedents of human resources deployed by the vendor is not satisfactory

c) Frequent change of team members of the vendor, unable to meet the delivery schedules without valid reason etc...

However, URSC will intimate/ send a notice to the vendor through mail or post regarding the above points / concerns and ask their explanation for the same and correct the same. If the explanation from the vendor is not satisfactory or the vendor’s team is not trying to improve upon, URSC have the right to short close the purchase order/ contract with 1-month notice period.

t) Compensation to Workforce:

a. ISRO/URSC have adopted the guidelines to grant compensation in case of death/permanent incapacitation of persons engaged by the Service Provider/Bidder (Private Companies, firms & Contractors) due to unintended/ unforeseen occurrences during maintenance, operation and provisioning of Public Services.

b. The extent of liability, on the occurrence of any ‘accident’ as defined under these Guidelines, Department shall whether or not there has been any wrongful act, neglect or default on its part and notwithstanding anything contained in any other law, be liable to pay compensation to such extent as prescribed below:
i. In the event of death or permanent disability resulting from loss of limbs - Rs.10 Lakh

ii. the event of other permanent disability - Rs.7 Lakhs

c. Any compensation paid under these Guidelines shall be recoverable from such Service Provider/Bidder concerned.

d. The Service Provider/Bidder concerned shall have to furnish originals along with premium receipts and other papers related thereto to the concerned Contract Manager/Focal point within 15 days from the date of commencement of the Contract.

u) Vendor company profile

- Eligibility criteria to participate / submit the quote for this RFP.
  1. ISO 9000 certified company
  2. Minimum number of regular employs (in company payrolls) 50 or more
  3. The vendor should have executed a single order worth Rs. 1 Crores or more in the field of fabrication/ assembly/ testing etc.

i. Profile of the Vendors

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<tr>
<th>Name of the Vendor</th>
<th>Status (Proprietor /firm/LLP/Company, etc.)</th>
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<td>Registered Office address</td>
<td></td>
</tr>
<tr>
<td>Website URL and Email of (Authorised Person)</td>
<td></td>
</tr>
<tr>
<td>Office/Factory/Facility address(es] and Office hours (Required for URSC)</td>
<td></td>
</tr>
</tbody>
</table>
representative visit for Technical Competence audit)

| In case of consortium, authenticated copy of the registered consortium agreement including Quality certifications, financial statements, workforce details, and purchase orders, etc. to be furnished at Lead Bidder’s Office during Technical Competence audit by URSC Team. |
| Concerned Executives/Authorized Persons of consortium partners should be present during Technical Competence audit by URSC Team at Lead Bidder Office |
ii. **Quality Management**

Describe the quality Management system (not more than 500 words) specifically addressing the following points:

1. Quality Policy
2. Mechanism for handling defects/non conformity/rejection, etc including review.
3. Quality Management documentation

iii. **Audited Financial Details:**

1. **Financial Information of Vendor / Lead Vendor in case of consortium**

<table>
<thead>
<tr>
<th>Heads</th>
<th>FY 2015-16</th>
<th>FY 2016-17</th>
<th>FY 2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue from Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in INR Crores)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBTD [Earnings Before Tax and Depreciation](in INR Crores)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Revenue from Aerospace Segment/Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net worth (in INR Crores)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Capital (in INR Crores)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of shareholding by Indian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of shareholding by Foreign</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. **Copies of Financial Statements along with Auditor’s report to be enclosed.**
   *(Annexure-1)*

<table>
<thead>
<tr>
<th>Financial Statement Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Sheet</td>
<td>for the Financial Years specified in the above Table.</td>
</tr>
<tr>
<td>Profit and Loss Statement</td>
<td>for the Financial Year specified in the above Table</td>
</tr>
<tr>
<td>Cash Flow Statement</td>
<td>for the Financial Years specified in the above Table (for Companies only).</td>
</tr>
<tr>
<td>Certified Auditor’s Report Order [CARO]</td>
<td>for the Financial Years specified in the above Table. <em>(For Companies only).</em></td>
</tr>
<tr>
<td>Certificate from Chartered Accountant</td>
<td>indicating the % of revenue from aerospace business in comparison to total revenue.</td>
</tr>
<tr>
<td>Income Tax Returns</td>
<td>for the AY 2016-17, AY 2017-18 and AY 2018-19 along with tax audit report.</td>
</tr>
</tbody>
</table>
### 3. Chartered Accountant’s Certified Documents to be enclosed. (Annexure-2)

<table>
<thead>
<tr>
<th>Document Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment Registration Certificate</td>
</tr>
<tr>
<td>PAN/GIR card</td>
</tr>
<tr>
<td>GST Registration Certificate</td>
</tr>
<tr>
<td>E.P.F Registration Letter/Certificate</td>
</tr>
<tr>
<td>E.S.I Registration Letter/Certificate</td>
</tr>
<tr>
<td>Director’s Identification Number of all Directors</td>
</tr>
</tbody>
</table>
DECLARATION

(On the letterheads of Vendor Executing the Contracts)

1. I,_____________________________________________Son/Daughter/Wife of Shri.______________________________________________as the Proprietor/Director/Authorized signatory of the Agency/Firm/Consortium, I am competent to sign this declaration and execute this tender documents.

2. I have carefully read and understood all the terms and conditions of the RFP document for providing Satellite SMG Services to URSC and undertake to abide by them.

3. The information/documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I/we, am/are well aware of the fact that furnishing of any false information/fabricated document would lead to rejection of my/our tender at any stage besides liabilities towards prosecution under appropriate law.

4. I agree to abide by the provisions of Contract Labour Regulation and Abolition Act 1970 and Central Rules, 1971 and promptly remit the statutory payments to the concerned authorities, from time to time.

5. I also agree to abide by all the statutory requirements as prevailing from time to time.

6. I will also agree to depute the RFP mandated workforce to URSC whose character and antecedes are verified through record check.

[Authorised Signatory with Seal]

Full Name:
Date:
Place:
UNDERTAKING

(On the letterheads of Vendor Executing the Contracts)

I/We hereby undertake that our Company/Firm/Concern/Consortium does not have any suits/criminal cases, etc. pending against me/Partners/proprietor or any of our Directors (in the case of Company). I am also not aware of any circumstances that any such case/s is/are being contemplated. I further declare that myself/Partners/proprietor or any of our Directors (in the case of Company) have not been earlier convicted on the grounds of moral turpitude or for violation of laws in force.

[Authorised Signatory with Seal]

Full Name:

Date

Place:
Annexure-5
Pictures, Tools and Instruments
1. Pictures
Figure 2: Typical solar array in stowed condition

- Zero-g fixture for conduct of solar array
- Zero-g slings connecting solar panel to zero-g
- Solar panels & yoke
- Zero-g trolleys
Figure-3: Typical solar array in deploying condition
Figure 4: Typical solar array in deployed condition
2. **Tools and Instruments required for execution.**

Vendor to procure the below mentioned tools and instruments along with a tool trolley to store the tools. Though all the tools mentioned below meets the requirement by and large, vendor may be required to procure additional tools if work demands.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Make</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Steel rule (scale)</td>
<td>150mm, 300mm, 2 m each 2 No’s</td>
</tr>
<tr>
<td>2</td>
<td>Vernier caliper</td>
<td>Mitutoyo - 2 No’s</td>
</tr>
<tr>
<td>3</td>
<td>Micro meter</td>
<td>Mitutoyo</td>
</tr>
<tr>
<td>4</td>
<td>Torque wrenches</td>
<td>Torque leader, Mountz</td>
</tr>
<tr>
<td>5</td>
<td>Torque screw rivers</td>
<td>Torque leader, Mountz</td>
</tr>
<tr>
<td>6</td>
<td>Force gauge</td>
<td>Ametek or equivalent</td>
</tr>
<tr>
<td>7</td>
<td>Stop watch</td>
<td>Mitutoyo or equivalent</td>
</tr>
<tr>
<td>8</td>
<td>Load cells</td>
<td>Load master or equivalent</td>
</tr>
<tr>
<td>9</td>
<td>Strain Indicator</td>
<td>P3 Strain Indicator - 2 Nos Make-Vishay Instruments</td>
</tr>
<tr>
<td>10</td>
<td>Hold down base alignment gauges</td>
<td>Fabricated Aluminium alloy gauge bars. Quantity 12 Nos. The length vary from 350 mm to 1150 mm L= 350 to 1150 (Tolerance ±0.1mm) b= 25mm t= 12mm</td>
</tr>
</tbody>
</table>