

Work Contract for Fabrication

Indent no 2016002291

WORK CONTRACT FOR FM RF & DC HARNESS FABRICATION

WORK IN CSL AND BOPAL AIT CAMPUS

SAC, AHMEDABAD

SPACE APPLICATIONS CENTRE

INDIAN SPACE RESEARCH ORGANISATION

AHMEDABAD-380 015

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IN CSL AND BOPAL AIT CAMPUS, SAC

TECHNICAL SERVICES CONTRACT

1. INTRODUCTION :

The Communication Systems Laboratory (CSL) of, Space Applications Centre, Ahmedabad is involved in the Assembly, Integration and Testing (AIT) of communication payloads for series of satellites.

For these satellites, a large number of flight model (FM) High Reliability RF and DC interfaces are to be fabricated as per the laid QA certified fabrication processes. Apart from this, dedicated payload test harness are to be fabricated for the testing of the communication payloads using Automated Test Equipment's (ATE) for the payload testing in the clean room conditions and for the satellite level thermo-vacuum testing.

SCOPE OF WORK :

The flight model high reliability RF and DC interface fabrication activity will be carried out in the clean room environment in Communications System Laboratory (CSL) in SAC campus and Bopal AIT Campus, using SAC supplied materials & SAC QA certified fabrication processes. The fabrication activity will be carried out by the qualified and trained technical personnel, to be provided by the vendor, who are qualified for the electronic fabrication of high reliability RF and DC interfaces.

2. QUALIFICATION & EXPERIENCE OF THE PERSONNEL:

The vendor shall deploy qualified and trained personnel for electronic fabrication activity in SAC campus or in Bopal AIT campus. The vendor shall also deploy qualified and trained personals for the QA/QC inspection of the fabricated RF and DC interfaces.

Mandatory condition is that vendor should supply trained, experienced and ISRO certified personnel in the technical work area mentioned in Annexure and should be in practice since last three months without any substantial break, either in ISRO centers or any other

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organization/labs where ISRO type of quality standards are followed and in practice. Vendor is required to provide sufficient documental proof in support of mandatory condition with number of such type of qualified personnel available with them with experience specifying technical work area, name of the organization/ labs and duration.

The minimum qualifications (**Minimum 60 % marks**) for the personals shall be **ITI** in Electronics / Electronics fabrication. The detailed electronic fabrication activity and quantum of work to be carried out is as given in the Annexure of this RFP.

For the quantum of work to be carried out as given in RFP, the vendor shall deploy a total of **FOUR** personnel (**THREE** fabricators and **ONE** QC inspector, qualified and trained personnel, for the above mentioned works in the CSL.

The ITI technicians should be certified for Hi-Rel electronic fabrications by SAC Hi-Rel certificates committee.

3. WORKING HOURS :

The ITI Technical personnel are required to work in the SAC campus and Bopal AIT Campus during SAC office hours from Monday to Friday. However, in case of exigencies, and whenever required, the deployed ITI technicians personnel will also be required to work in shift duties including night shift, work beyond office hours, and also work on Saturdays and Sundays.

4. GENERAL REQUIREMENTS : The general requirements for the vendor are as follows :

- 4.1** The vendor must have a minimum existing ITI technical staff of at least 10 (Ten) personnel and has to provide the list of these regular technical employees with their qualifications, experience etc.
- 4.2** The contractor shall submit the list of ITI Technician to be deployed in the CSL, Bldg No 35A, along with their bio-data and other personal details like residential address, contact phone/mobile Nos. etc. The ITI technicians shall be **Indian Nationals only**.
- 4.3** All the technical personnel deployed by the vendor shall be working under the overall guidance and supervision of contract manager/Division Head, PAID/SNSICG.
- 4.4** Minimum qualification / experience required for the ITI Technician is already specified in section 3 of this RFP. SAC reserves the right to examine, interview and select the ITI Technician prior to their deployment. The contractor will deploy the ITI technicians to carry out the work from the SAC approved list only.

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- 4.5** The contractor shall ensure that all the persons deployed in SAC are bonafide employees of the contractor. The contractor cannot subcontract this work to any other entity or agency.
- 4.6** The contractor is required to obtain the security clearance/Police verification of the deployed for technical personnel and submit the same to the SAC authorities.
- 4.7** The contractor shall deploy the ITI Technician to carry out the work within 15 days of the award of contract after fulfilling other terms and conditions like security clearance / police verification etc.
- 4.8** The contractor shall maintain a register for the work carried out by the contractor's personnel for each completed month. The contract manager/Division Head, PAID/SNSICG from SAC will verify and certify it.
- 4.9** The contractor must employ ITI Technicians in sufficient numbers to take care of the additional or extra workload that may arise from time to time, during the contract duration.
- 4.10** The contractor shall ensure that the personnel employed and deployed by him at SAC are available for the respective project work for the total duration of the contract and frequent changes of the personnel is avoided.
- 4.11** There should not be any break in technical services provided due to absence of any personnel for a prolonged period. The contractor has to ensure suitable replacement at the earliest and within 7 days for the same.
- 4.12** The contractor shall be responsible for the good conduct of the personnel employed by him. The contractor shall be responsible for, and liable to pay compensation for any damage or loss to the property of SAC as a result of negligence / carelessness of any of his employees. This amount may be recovered from the payment due to the contractor.
- 4.13** SAC shall not be responsible for any contingency arising out of the deployment of the contractor's personnel in SAC premises. The contractor shall be responsible for the safety of the deployed technical personals. SAC shall not be responsible for any loss of life of contractor's personnel due to natural calamities, accidents etc.
- 4.14** SAC/ISRO is not liable to provide any logistic support to contractor's personnel.
- 4.15** SAC reserves right to disqualify any of the contractor's personnel deployed for various reasons like technical incompetence, indiscipline, irregularity, insincerity, disobedience, doubtful credentials/ integrity etc.
- 4.16** The contractor is required to replace immediately or within 7 days, the technical personnel found unfit or unsuitable for the work assigned, during the tenure of the contract.

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- 4.17** The contractor and his employees shall abide by the security guidelines and rules followed in SAC from time to time. Whenever the contractor or his employees have to enter SAC, they should carry entry passes, issued by SAC; and should produce the same as and when demanded. Their movement shall be restricted to only those places / laboratories where they are authorized to enter and work by SAC contract manager/Division Head, PAID/SNSICG, SAC.
- 4.18** The contractor will be required to adhere by the law of the land, in writing, with respect to protection of employee's rights and benefits while servicing this contract.
- 4.19** The contractor will also be required to adhere by the rules/laws laid down by Government of India and Gujarat regarding the wages, benefits and rights for employment of these technical employees.
- 4.20** The contractor's company/firm should not have been banned or black-listed by any Government Department / Central Government Unit / Public Sector Unit/ Financial Institutions / Court.

5. GENERAL TERMS AND CONDITIONS

5.1 INTELLECTUAL PROPERTY RIGHTS (IPR): Work carried out by the contractor through his personnel will remain the sole property of SAC. Neither the contractor nor his personnel, carrying out the fabrication work will claim any intellectual property rights on such works. The intellectual property rights relating to the fabrication, fabrication processes and other realization details shall remain the exclusive property of SAC.

5.2 NON-DISCLOSURE AGREEMENT (NDA): Contractor shall maintain absolute secrecy and security to the fabrication, fabrication process methods / documentation etc., provided by SAC for the purpose of fabrication and contractor shall return the original and copies of the same to SAC after completion of the work. The technical information / papers / drawings provided by SAC from time to time, are for the execution of this contract only, and should not be used / copied / reproduced / published in any form by the contractor or his personnel.

5.3 CONFIDENTIALITY AGREEMENT: Contractor shall not divulge the information relating to the fabrication processes, fabrication procedures, product, quality control methods etc., that are exclusively provided by SAC for its (SAC's) own requirements, to any third party. Contractor shall not, without prior written consent from SAC, use such information for any purpose other than for fulfilling obligations under the contract to be placed. Contractor undertakes to restrict the access of non-contractor personnel and other customers/ visitors to their establishment, to any of the details of the job being performed under this contract.

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5.4 Under no circumstances shall the personnel employed and deployed by the contractor claim any right of employment in SAC during and after the end of the contract period.

5.5 All other standard commercial terms and conditions of SAC/ISRO, Government of India for a tender of similar nature, shall also be applicable.

6. DIFFERENCE OF OPINION

Any difference of opinions that arise between the contract manager/Division Head, PAID/SNSICG and the contractor will be mutually discussed, and settled between the Group Director of SNSICG/SNPA, SAC, and the contractor. Any dispute that remains unresolved thereafter, will be referred to Director, SAC; and the decision of Director, SAC will be final and binding on the contractor on all such matters.

7. DURATION OF CONTRACT

8.1 The typical period of the contract will be **THREE (03) YEARS** from the **date of award of the contract**. SAC reserves the right to decide the minimum period of the contract at the time of award of contract.

8.2 The contract period of **THREE (03) YEARS** and the projected fabrication quantity as specified in annexure may be extended or increased based on mutual consent, depending on the need and exigencies subject to the agreed quality of technical services and other applicable terms and conditions.

8. MONITORING OF CONTRACT

The contract manager/Division Head, PAID/SNSICG from SAC and SAC management will be reviewing the progress of the work at various stages during the contract duration. The contractor is required to provide all necessary information on this matter, as and when solicited by SAC.

9. TERMINATION OF CONTRACT :

10.1 SAC reserves the right to terminate the contract or reduce the scope and number of deployed personnel any time within the contract duration at

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short notice, if the contractor fails to provide satisfactory quality technical services or fails to comply with any of the clauses mentioned above and laid down in the contract. This will not have any financial implications on either side.

- 10.2 SAC reserves the right to enter in to contract, with one or more contractors, at any time during the period of this contract.

10. PAYMENT TERMS AND CONDITIONS :

- 10.1** The contractor will submit bills on a **monthly basis** along with the attendance sheets, to the Head, PAID Space Applications Centre, Ahmedabad, through focal person.
- 10.2** Payment with respect to the contract, against the bills submitted, will be made at the end of each month, based on the actual work carried out and the certificate/s issued by the In-charges for having satisfactorily carried out the assigned works.
- The payment will be made as per the rates given in the annexure given below.
- 10.3** The deduction of income tax at source will be done as per Income Tax act.

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ANNEXURE : RF & DC FABRICATION ACTIVITIES IN CSL SAC & BOPAL AIT CAMPUS

SR No	Nature of Fabrication work	Approx. fabrication Qty (per year)	Price per Unit (Rs)
1	RF Cable Fabrication work :	1500	
	The cable fabrication activities include :		
	Template bending (Ave. 5 bends per cable)		
	Rework in template (10 %)		
	RF cable inspection by QA		
	RF cable bending		
	Stripping and Pin preparation		
	QA Inspection		
	Rework in RF cables (10 %)		
	Connector fabrication		
	(Pin & Jacket soldering for solder connector)		
	Compatibility of cable on the S/C panel		
	QA inspection for compatibility		
	Final torque of cables on panel		
2.	DC Connector fabrication work :	1500	
	The DC connector fabrication activities include :		
	DC wire cutting, bunching & tagging		
	Pin contacts crimping		
	Pin insertion in the DC connector		
	Shield wire soldering for shielded wires		
3	DC Harness fabrication per mtr on S/C (3x3 mtr) panel	20000 wires	
	The DC harness fabrication activities includes :		

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	DC wire cutting		
	DC harness routing on panel		
	Lacing of harness		
	Pin contacts crimping		
	QA inspection		
	Pin insertion in the DC connector		
	QA Inspection of the harness		
4	Screw lock assembly per connector	2000	
5	Saddle mounting with Araldite on S/C panel	2000	
6	Thermal grease application per package	500	

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