

Request for Proposal (RFP)

On-Site Comprehensive Annual Maintenance Contract for Traveling Wave Tube Amplifiers (TWTAs)



**DES/CTAG/SSAA
SPACE APPLICATIONS CENTER
AHMEDABAD**

Contents

1.	Introduction.....	3
2.	Scope of Work	3
3.	Period of Contract	3
4.	Technical Details of TWTAs	3
5.	Terms and Conditions – Technical.....	4
6.	Payment Terms.....	5
7.	Bid Format	6
8.	Down time Compensation / LD Clause	6
9.	Arbitration	6
10.	Termination of Contract	7
11.	Annexure -1: Site Addresses.....	8
12.	Annexure-2: Representative compliance format	9

1. Introduction

All earth stations of SAC/ISRO, Ahmedabad use Traveling Wave Tube Amplifiers (TWTAs) for satellite transmissions for various Satcom project activities, R&D experiments and interference analysis. All TWTAs are in good working conditions and from the same OEM supplier viz Communications & Power Industries (CPI). The current usage of these TWTA products necessitates having on-site Comprehensive Annual Maintenance Contract (CAMC) for the specified period.

2. Scope of Work

Techno-commercial proposal from the authorized CPI vendors'/service providers are invited to provide on-site CAMC services for the TWTAs of (1) Ahmedabad Earth Station (AES), SAC/ISRO, Ahmedabad, (2) Bopal Earth Station (BES), SAC-Bopal campus, SAC/ISRO, Ahmedabad and (3) Delhi Earth Station (DES), Delhi. Vendor has to carry out following activities:

1. On-site CAMC services for the total 13 nos of TWTAs for three years
2. Visit to the site for preventive maintenance every six months
3. Visit to the site in case of any complaint from user, regarding breakdown/fault in the TWTAs under the contract for any number of time as when required.
4. Corrective maintenance services for all other 07 numbers of TWTAs as mentioned in table-2, on per call basis, in case if it is required.

The on-site CAMC excludes Traveling Wave Tubes (TWT) of the TWTAs. The detailed terms and conditions are given in the section no. 5 of this RFP for 13 nos of TWTAs (Table no. 1) for regular PM services and 07 nos of TWTAs (Table no. 2) for corrective maintenance on per call basis.

The site addresses are given in the Annexure-1.

3. Period of Contract

The contract is valid for three years from the date of awarding the contract.

4. Technical Details of TWTAs

The details of total 13 numbers of TWTAs for preventive maintenance (PM) services covered under the CAMC contract are as follows:

Table no.:1 – List of Traveling Wave Tube Amplifiers (TWTAs) for PM services

Sr.No.	Type	Make	Model	Serial No	Frequency Band (MHz)	Maximum Rated Output Power (Watts)	Location
1	Indoor	CPI	VZC6964AA	222	5850 – 7080	400	AES-SAC
2	Indoor	CPI	VZC6964AA	SB4375E5	5850 – 7080	400	AES-SAC
3	Indoor	CPI	VZC6964A4	B17129L2	5850 – 6650	400	AES-SAC
4	Outdoor	CPI	TOIKOBE-OSJOOBDOO	SH9789H8	Ka-band	100	AES-SAC
5	Outdoor	CPI	TOIKOBE-OSJOOBDOO	SH9790H8	Ka-band	100	AES-SAC
6	Indoor	CPI	VZC6964AA	224	5850 – 7080	400	DES
7	Indoor	CPI	VZC6964AA	SB3212G4	5850 – 7080	400	DES

8	Indoor	CPI	VZC6964AA	SB6502K6	5850 – 7080	400	DES
9	Indoor	CPI	VZC6964AA	SB4380F5	5850 – 7080	400	DES
10	Indoor	CPI	VZC6964AA	SB2785B4	5850 – 7080	400	DES
11	Indoor	CPI	VZC6964A4	B10540B9	5850 – 6650	400	DES
12	Outdoor	CPI	TO4UOA- OHBOOOFOO	SH5752D6	Ku-band	400	DES
13	Indoor	CPI	VZU69994AD	B10518B9	Ku-band	400	DES

In addition to the above-listed 13 numbers of TWTAs, there are total 07 numbers of TWTAs available in the earth stations that are in “cold redundancy” state and their usage is intermittent depending upon the operational requirements.

The details of these total 07 numbers of TWTAs are as follows:

Table no.: 2 – List of TWTAs for maintenance on “per call” basis

Sr.No.	Type	Make	Model	Serial No	Frequency Band (MHz)	Maximum Rated Output Power (Watts)	Location
1	Indoor	CPI	VZC6964AA	1394	5850 – 7080	400	AES-SAC
2	Indoor	CPI	VZC6964AA	SB2786B4	5850 – 7080	400	AES-SAC
3	Indoor	CPI	VZC6964AA	SB1967F3	5850 – 7080	400	AES-SAC
4	Indoor	CPI	VZC6964AA	SB5435B6	5850 – 7080	400	AES-SAC
5	Indoor	CPI	VZC6964AA	SB5436B6	5850 – 7080	400	AES-SAC
6	Outdoor	CPI	TO4UOA- OHBOOOFOO	SH5549C6	Ku-band	400	BES- SAC/Bopal
7	Outdoor	CPI	TO4UOA- OHBOOOFOO	SH5550C6	Ku-band	400	BES- SAC/Bopal

These above listed TWTAs (total 07 nos in table no. 2) are also required to be maintained on “PER CALL” basis and the associated terms and conditions are explicitly given in section 5.

5. Terms and Conditions – Technical

For all 13 TWTAs listed in Table no. 1 in section 4 of this RFP.

1. Vendor may visit the site(s) at their own during pre-bid meeting.
2. Vendor shall provide the official contact (Name, Email, Mobile no., Telephone no., Fax no. etc), number of the person(s) responsible for contract services in the event of fault reporting by SAC. The fault reporting by Email/SMS, whichever is earlier, shall be taken as final reporting from SAC.
3. SAC shall nominate coordinator(s) for this contract and his/her contact details shall be provided in PO annexure.
4. Only authorized service providers of M/s CPI Inc products in India shall bid against this inquiry and submit point by point compliance statement with detailed description, comments, documentations, authorization certificates etc in the format given in section-12 of this RFP document. Vendor has to submit valid authorization certificate from OEM (i.e. M/s CPI Inc, USA). Bids received without OEM authorization will be rejected. Validity of OEM authorization must be more than 3 years.

5. All the TWTAs as listed in table no. 1 in this RFP are to be covered under the Comprehensive Annual Maintenance Contract for 3 years. The term “comprehensive” means that the Vendor will diagnose and repair/replace the faulty component/system/peripherals/software (everything excluding TWTs) installed in TWTAs using their own resources and equipment within the given time frame and make system (TWTA) operational. All expenditures related to CAMC have to be borne by vendor.
6. All logistics such as transportation, lodging/boarding required for maintenance personnel(s) will be the responsibility of vendor
7. In the event of the damages to the user’s property or personal injury to user/vendor personnel due to the negligence of employee of vendor, the responsibility will solely rest with vendor. ISRO will not be responsible for the loss of life of the employee of vendor at the time of execution of contract at ISRO’s premises due to the natural calamities/accident explosion etc.
8. Persons engaged by vendor for carrying out the maintenance work will not have any right or claim regular employment in any of the ISRO/DOS establishments.
9. For any problem reported by the user, the problem shall be attended by vendor on-site within 24 hours and should be repaired/resolved within three days after reaching the site. Parts/cards and sub-systems replaced should be of the same OEM. Vendor must take pro-active approach while attending for contractual services (both, preventive & corrective).
10. In case of non-availability of identical replacement, suitable new equivalent parts/sub-systems with similar or better specification recommended by OEM should be replaced with approval from SAC.
11. The faulty part replaced can be taken by vendor. Vendor should prepare maintenance report for each maintenance activity carried out and duly signed by the engineer in-charge and sent to the SAC coordinator.
12. As maintenance is comprehensive in nature, vendor must stock spares of essentials in nature or as recommended by manufacturer of the item under CAMC.
13. Vendor shall provide test reports of all 13 TWTAs after completion of every preventive maintenance on-site in addition to the breakdown maintenance.

For all 07 numbers of TWTAs listed in Table no. 2 in section 4 of this RFP.

1. All 07 numbers of TWTAs as listed in table no. 2 (section 4) are in working condition. Vendor has also to submit quote for labour only service charges (including all type of expenses) for each unit.
2. If any part/component/subsystem is required for replacement, first availability of spare with SAC will be checked. If required spare is not available with SAC, then vendor has to give quote for that particular part including replacement charge to make the faulty unit fully operational.
3. SAC will approve quote given by vendor (through SAC purchase) and approval will be sent to vendor to complete the repairs.
4. Vendor has to attend CM service call for above seven units within four working days of fault reporting. Downtime compensation / LD clause as detailed section 8 of this RFP is only applicable after availability of required spare(s) with SAC.
5. Vendor has to note that labour charge for the Items mentioned in table number 2 will be need based only and applicable on per call basis. If no call reported from SAC, no payment shall be made.

6. Payment Terms

1. Payment will be made on half yearly basis at the end of each half year on submission of preventive service report along with invoice (For all 13 nos. of TWTAs listed in the table no. 1).
2. For all 07 TWTAs listed in the table no. 2 (categorized under “PER CALL” basis), vendor shall carry out repair or corrective maintenance as required & reported by the SAC coordinator(s) for any of the 07 TWTAs as per the T&C given in the section 5 of this RFP and payment shall be made on submission of service report.

3. The bill duly certified by the Coordinator of SAC/ISRO shall be submitted to Accounts section (Bill), SAC, Ahmedabad for payment.

7. Bid Format

Vendor shall submit quote only in the following format:

For PM services of TWTAs listed in Table no. 1

Sr.No.	Type	Make & Model	Frequency Band (MHz)	Maximum Rated Output Power (Watts)	Qty	CAMC Charge (in INR) per year
1	Indoor	CPI VZC6964AA	5850 – 7080	400	7	
2	Indoor	CPI VZC6964A4	5850 – 6650	400	2	
3	Outdoor	CPI TO4UOA-OHBOOFOO	Ku-band	400	1	
4	Indoor	CPI VZU69994AD	Ku-band	400	1	
5		CPI TOIKOBE-OSJOOBDOO	Ka-band	100	2	
Total CAMC Charge (INR) per year					13	
Total CAMC Charge (INR) for 3 years					13	
Applicable GST @						
Total Cost (INR)					13	

For CM services of TWTAs listed in Table no. 2

Sr.No.	Type	Make & Model	Frequency Band (MHz)	Maximum Rated Output Power (Watts)	Service Charge (Labour only) for each unit in INR
1	Indoor	CPI VZC6964AA	5850 – 7080	400	
2	Outdoor	CPI TO4UOA-OHBOOFOO	Ku-band	400	

8. Down time Compensation / LD Clause

The down time is 3 (Three) working days. The faults reported/lodged from the user must be attended within one day and repaired within 3 (Three) working days from the date of report of complaint. For each subsequent day of delay after 3 (Three) working days from the date of attending the complaint, 0.5% of annual CAMC value per day will be recovered from the bill with ceiling of 10%.

9. Arbitration

As per general terms and conditions of tender.

10. Termination of Contract

ISRO reserves the right to terminate the contract if the performance of the Vendor is found to be unsatisfactory during the current period of the contract by giving one month's notice in writing without any financial implications on either side.

11. Annexure -1: Site Addresses

Site addresses and contact details:

1. Delhi Earth Station, Space Applications Centre (ISRO)
Sardar Patel road,
(Opp) Malcha Marg,
New Delhi.
Phone: 011-24152024
2. Ahmedabad Earth Station, Space Applications Centre (ISRO)
Jodhpur Tekra,
Opp. Bhavnirzar Mandir,
Satellite Road
Ambavadi Vistar
Ahmedabad, 380015 (Gujarat)
Phone: 079-26912455
3. Bopal Earth Station, Space Applications Centre (ISRO)
Opp. Delhi Public School
Bopal-Shilaj Road, Bopal
Ahmedabad
Phone: 079-26913603

12. Annexure-2: Representative compliance format

The format of the vendor's compliance table is as given below. The vendor shall specify their compliance only in the given format.

Section/ para no of RFP	Detailed RFP Specifications & Requirements	Vendor's Compliance (C/NC)	Vendor remarks, if any
1	Introduction		
2	<p>Techno-commercial proposal from the authorized CPI vendors'/service providers are invited to provide on-site CAMC services for the TWTAs of (1) Ahmedabad Earth Station (AES), SAC/ISRO, Ahmedabad, (2) Bopal Earth Station (BES), SAC-Bopal campus, SAC/ISRO, Ahmedabad and (3) Delhi Earth Station (DES), Delhi. Vendor has to carry out following activities:</p> <ol style="list-style-type: none"> 5. On-site CAMC services for the total 13 nos of TWTAs for three years 6. Visit to the site for preventive maintenance every six months 7. Visit to the site in case of any complaint from user, regarding breakdown/fault in the TWTAs under the contract for any number of time as when required. 8. Corrective maintenance services for all other 07 numbers of TWTAs as mentioned in table-2, on per call basis, in case if it is required. <p>The on-site CAMC excludes Traveling Wave Tubes (TWT) of the TWTAs. The detailed terms and conditions are given in the section no. 5 of this RFP for 13 nos of TWTAs (Table no. 1) for regular PM services and 07 nos of TWTAs (Table no. 2) for corrective maintenance on per call basis. The site addresses are given in the Annexure-1.</p>		
3	<p>Period of Contract</p> <p>The contract is valid for three years from the date of awarding the contract. The contract may be extendable by one more year with the same terms and conditions with mutual agreement.</p>		
4	<p>Technical Details of TWTAs</p> <p>As per the Table no. 1 of this RFP</p>		
5	<p>Terms and Conditions – Technical</p> <p>For all 13 TWTAs listed in Table no. 1 in section 4 of this RFP.</p> <ol style="list-style-type: none"> 1. Vendor may visit the site(s) on their own during pre-bid meeting. 2. Vendor shall provide the official contact (Name, Email, Mobile no., Telephone no., Fax no. etc), number of the person(s) responsible for contract services in the event of fault reporting by SAC. The fault reporting by Email/SMS, whichever is earlier, shall be taken as final reporting from SAC. 3. SAC shall nominate coordinator(s) for this contract and his/her contact details shall be provided in PO annexure. 4. Only authorized service providers of CPI products in India shall bid against this inquiry and submit point by point compliance statement with detailed description, comments, documentations, authorization certificates etc in 		

the format given in section-12 of this RFP document. Vendor has to submit valid authorization certificate from OEM (i.e. M/s CPI Inc, USA). Bids received without OEM authorization will be rejected. Validity of OEM authorization must be more than 3 years.

5. All the TWTAs as listed in table no. 1 in section 4 of this RFP are to be covered under the Comprehensive Annual Maintenance Contract for 3 years. The term "comprehensive" means that the Vendor will diagnose and repair/replace the faulty component/system/peripherals/software (everything excluding TWTs) installed in TWTAs using their own resources and equipment within the given time frame and make system (TWTA) operational. All expenditures related to CAMC have to be borne by vendor.
6. All logistics such as transportation, lodging/boarding required for maintenance personnel(s) will be the responsibility of vendor.
7. In the event of the damages to the user's property or personal injury to user/vendor personnel due to the negligence of employee of vendor, the responsibility will solely rest with vendor. ISRO will not be responsible for the loss of life of the employee of vendor at the time of execution of contract at ISRO's premises due to the natural calamities/accident explosion etc.
8. The persons engaged by vendor for carrying out the maintenance work will not have any right or claim regular employment in any of the ISRO/DOS establishments.
9. For any problem reported by the user, the problem shall be attended by vendor on-site within 24 hours and should be repaired/resolved within three days. Parts/cards and sub-systems replaced should be of the same OEM. Vendor must take pro-active approach while attending for contractual services (both, preventive & corrective).
10. In case of non-availability of identical replacement, suitable new equivalent parts/sub-systems with similar or better specification recommended by OEM should be replaced with approval from SAC.
11. The faulty part replaced can be taken by vendor. Vendor should prepare maintenance report for each maintenance activity carried out and duly signed by the engineer in-charge and sent to the SAC coordinator.
12. As maintenance is comprehensive in nature, vendor must stock spares of essentials in nature or as recommended by manufacturer of the item under CAMC.
13. Vendor will visit the place where the TWTA is not working as reported by the ISRO engineer and make the system operational by replacing the faulty component(s) & resolving the problem in the unit.
14. Vendor shall provide test reports of all 13 TWTAs after completion of every preventive maintenance on-site in addition to the breakdown maintenance.

For all 07 numbers of TWTAs listed in Table no. 2 in section 4 of this RFP.

15. All 07 numbers of TWTAs as listed in table no. 2 (section 4) are in working condition. Vendor has also to submit quote for labour only service charges (including all type of expenses) for each unit.
16. If any part/component/subsystem is required for replacement, first availability of spare with SAC will be checked. If required spare is not

	<p>available with SAC, then vendor has to give quote for that particular part including replacement charge to make the faulty unit fully operational.</p> <p>17. SAC will approve quote given by vendor (through SAC purchase) and approval will be sent to vendor to complete the repairs.</p> <p>18. Vendor has to attend CM service call for above seven units within four working days of fault reporting. Downtime compensation / LD clause as detailed section 8 of this RFP is only applicable after availability of required spare(s) with SAC.</p> <p>19. Vendor has to note that labour charge for table number 2 will be need based only and applicable on per call basis. If no call reported from SAC, no payment shall be made.</p>		
6	<p>Payment Terms</p> <p>1. Payment will be made on half yearly basis at the end of each half year on submission of preventive service report along with invoice (For all 13 nos. of TWTAs listed in the table no. 1).</p> <p>2. For all 07 TWTAs listed in the table no. 2 (categorized under “PER CALL” basis), vendor shall carry out repair or corrective maintenance as required & reported by the SAC coordinator(s) for any of the 07 TWTAs as per the T&C given in the section 5 of this RFP and payment shall be made on submission of service report.</p> <p>3. The bill duly certified by the Coordinator of SAC/ISRO shall be submitted to Accounts section (Bill), SAC, Ahmedabad for payment.</p>		
7	<p>Bid Format</p> <p>For PM services of TWTAs listed in Table no. 1 in section 4 of RFP For CM services of TWTAs listed in Table no. 2 in section 4 of RFP</p>		
8	<p>Down Time Compensation / LD clause</p> <p>The down time is 3 (Three) working days. The faults reported/lodged from the user must be attended within 24 hours and repaired within 3 (Three) working days from the date of report of complaint. For each subsequent day of delay after 3 (Three) working days from the date of attending the complaint, 0.5% of annual CAMC value per day will be recovered from the bill with ceiling of 10%.</p>		
9	<p>Arbitration (as per general terms and conditions of tender)</p>		
10	<p>Termination of Contract</p> <p>ISRO reserves the right to terminate the contract if the performance of the Vendor is found to be unsatisfactory during the current period of the contract by giving one month’s notice in writing without any financial implications on either side.</p>		