

(Cover Page)



REQUEST FOR PROPOSAL

BY

MINISTRY OF DEFENCE

GOVERNMENT OF INDIA

**CORRIGENDUM NO 1 FOR PROCUREMENT OF
QUANTITY 7,000 BODY WORN CAMERA SYSTEM (1920 x
1080 Pixel) UNDER EMERGENCY PROCUREMENT
THROUGH
FAST TRACK PROCEDURE (FTP)**

CATEGORY : BUY (INDIAN)

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must be used only for the purpose of submission of Bids.

This document contains 31 pages including cover page and Appendices.

Tele & Fax: 011-23012243

File No: C/31117/BWCS/Inf-8(FINSAS)

E-mail:suresh1234@nic.in

Directorate General of Infantry
Infantry - 8 (FINSAS)
Room No, 403, D-1 Wing
4th Floor, Sena Bhawan
Integrated Head Quarters of MoD (Army)
New Delhi-110011

27 Dec 2022

To

**CORRIGENDUM NO 1 OF REQUEST FOR TECHNICAL AND COMMERCIAL
PROPOSAL FOR PROCUREMENT OF QUANTITY 7,000 BODY WORN CAMERA
SYSTEM (1920 x 1080 PIXEL) UNDER EMERGENCY PROCUREMENT
THROUGH FAST TRACK PROCEDURE (FTP)**

CATEGORY: BUY (INDIAN)

Dear Sir/Madam,

1. xxxxxxxx.

Synopsis

2. **Broad Description of Equipment/System.** As per Appendix 'A'.

3. The salient aspects and timelines of the acquisition are tabulated below. In case of any variation in the details furnished below or in any Annexures(s) with that mentioned in the RFP, information furnished in the main body of the RFP at referred Paragraph is to be followed.

Ser No	Description	Details	Reference Para of the RFP
(a)	Equipment/ System required	Body Worn Camera System (1920 x 1080 Pixel)	
(b)	Quantity Required	7,000	
(c)	Categorisation of Procurement	Buy (Indian)	
(d)	Minimum IC Content required	60% and if, Indigenous design ≥50%	Para 7 of RFP
(e)	Place(s) of Delivery	COD, Agra	
(f)	Warranty Period	24 Months of Warranty	

(g)	CMC Period	04 Years post Warranty	
(h)	Last date for submission of Pre-bid queries	03 Jan 2023	Para 20 of RFP
(j)	Date and time for Pre-bid meeting	09 Jan 2023 at 1500hrs	Para 21 of RFP
(k)	Last date and time for Bid Submission	17 Jan 2023 at 1500hrs	Para 22 of RFP

4. XXXXX

5. XXXXXXXX

6. XXXXX

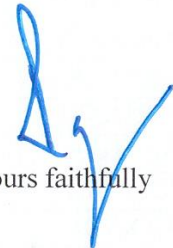
7. XXXXX.

8. XXXXX.

9. XXXX.

10. XXXX.

.



Yours faithfully

(Rajiv Chhibber)
Major General
Chairman
Empowered Committee.

INDEX

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Disclaimer

XXXXXXXXXX

PART I – GENERAL REQUIREMENTS

1. XXXXX

Non-Disclosure

2. XXXXX

3. XXXXX

4. **Confidentiality of Information.** XXXXX

Business Eligibility

5(a). **Undertaking by Bidders.** XXXXX

5(b). XXXXX

6. **Pre-Qualification Criteria {for multi-vendor cases in Buy (Indian) case}.** XXXXX

7. **Indigenous Content.** XXXXX

8. **Year of Production.** XXXXX

9. **Delivery Schedule.** XXXXX

10. XXXXX.

11. **Warranty.** XXXXX.

12. **In Service Life.** XXXXX

13. **Codification.** XXXXX

14. **Technical Literature.** XXXXX.

15. **Government Regulations.** XXXXX.

16. XXXXX

17. **Patent Rights.** XXXXX

18. **Integrity Pact.** XXXXX x

19. **Fall Clause.** XXXXX.

Bid Timelines

20. XXXXX

21. **Pre-Bid Meeting.** A pre-bid meeting will be organised by SHQ at 1500 hrs on 09 Jan 2023 at Room No 407, Infantry Directorate Conference Hall to answer any queries or clarify doubts regarding submission of proposals. The Bidder or his authorised representative is requested to attend. Necessary details may **be sent a week in advance to Directorate General of Infantry (Inf-8), (Address as per Para 21 of RFP)** to facilitate obtaining of security clearance.

22. **Submission of Bids.** The Technical and Commercial Proposals along with IP should be sealed separately in three separate envelopes clearly indicating Commercial/ Technical/ IP and any other Bank Guarantee, as applicable, and then put in one envelope and sealed (**all the envelopes should clearly state the letter No of RFP and the name of equipment and Bidder name**) and submitted to the undersigned at the following address by **1500 hours on 17 Jan 2023:-**

**Directorate General of Infantry, (Inf-8)
General Staff Branch
Integrated HQ of MoD (Army)
Room No 403; D-1 Wing, Sena Bhawan,
Rajaji Marg, DHQ PO, New Delhi - 110011
Tele – 011-23012243
Fax No – 011-23918412**

23. Offer opening by a Offer opening committee will be held at **1500 hrs on 18 Jan 2023** at the same venue as indicated at Para 21 above. The Bidder or his authorised representative is welcome to be present at the opening of the proposals. Necessary details may be sent atleast one week in advance (two weeks in case of foreign Bidders) to facilitate obtaining of security clearance.

PART II – TECHNICAL REQUIREMENTS

24. XXXXXX

26. XXXXXX

27. XXXXXX

28. XXXXXX

29. XXXXX

29a **Malicious Code Certificate.** The Bidder is required to submit a ‘**Malicious Code Certificate**’ (*only for Electronic items and Software*) along with the Technical Proposal. The format is placed at **Appendix M** to this RFP.

30. XXXXX

30a **Product Support (CMC).** After induction, the equipment/system would be repaired and maintained as per the repair and maintenance philosophy at **Appendix N** to this RFP. The details of CMC proposals, must be submitted separately by the Bidder with technical aspects being included in the technical offer and commercial aspects being included in the commercial offer.

31. XXXXX

32. XXXXX

33. XXXXX

34. XXXXX

35. XXXXX.

36. XXXXX

37. XXXXX

PART III - COMMERCIAL REQUIREMENTS

XXXXXXX

PART IV: BID EVALUATION AND ACCEPTANCE CRITERIA

XXXXXXX

Appendix A

(Refers to Para 24, 25, 26, 28(a), 29, 31 & 48(a) of RFP)

OPERATIONAL CHARACTERISTICS AND FEATURES

<u>Ser No</u>	<u>OR PARAMETERS</u>	
<u>PART - I GENERAL INFORMATION</u>		
<u>Gen.</u> The Body Worn Camera (BWC) should be a light weight, compact, unobtrusive and easy to handle device which is to be used to record events both during the day as well as during pitch dark night. The device to be rugged and be able to operate under extreme low temperature, fog and rain.		
<u>PART - II PHYSICAL CHARACTERISTICS</u>		
1.	Compact in size with maximum volume 189000 cubic mm and maximum weight of 200 gms.	
2.	Easy to wear and have secured latching/strapping facility for attaching with body/uniform of the user.	
<u>PART - III TECHNICAL SPECIFICATION</u>		
3.	Sensor	1/2.5" to 1" CMOS colour Sensor with min 12 MP.
4.	OS	Linux, Android or better.
5.	Booting time	Not more than 20 secs (From "Power ON" to "Recording")
6.	Lens (HOV)	120°± 10° or better
7.	Video output	2 inch Full HD LCD Screen on the reverse side of the body worn camera.
8.	Recording Resolution	1920x1080P or better
9.	Frame rate	Support recording at 1080p@30fps & 720p@30fps
10.	Record mode	Video & audio synchronised
11.	Compression	H.264/H.265/MP4/TVI
12.	Audio input	One or more built in mic for audio recording
13.	Image Resolution	1920 x 1080 or better

<u>Ser No</u>	<u>OR PARAMETERS</u>	
14.	Snapshot	Should support snapping during video recording
15.	Storage	In build 64 GB SSD integrated with the device with no option to handle/remove by user.
16.	IR	At 10m, detect activities under starlight clear moonless night sky excluding airglow (0.0002 lux) and starlight clear moonless night sky including air glow (0.002 lux).
17.	Laser	Switch based laser lock for precise positioning and recording
18.	Data transfer/communication with external PC	Docked station based secured communication with external PC
19.	Protocol	Protocols to be provided to ensure: (a) Security of data within the device (b) while transferring through the docking station and (c) while storing in external device
<u>PART - IV OTHER SPECIFICATIONS</u>		
20.	Other Features	(a) Indicators. Recording, Standby, charging under progress, charging completed, battery power percentage indicator, data usage percentage. (b) Electro optical Image stabilization
21.	OSD Burn In	Burn in date, time, device ID, officer ID, location.
22.	Playback	Support local playback of video on the BWC and search video files by time event.
23.	Pre/post-recording of Video	Minimum 30 seconds pre- and post-recording.
24.	Record encryption	Support AES 256-bit encryption technology or better and in camera should not be editable. Encrypted video transfer through secured protocol restricting any leakage of data. Storage to be completely secured.
25.	Log	Record key operation, setting change, events, alarms.
26.	Player	Play back video files on the PC and analyze data information in the field.

<u>Ser No</u>	<u>OR PARAMETERS</u>	
27.	Time	Synchronize date and time with GPS or PC.
28.	Charging	90% or more battery to get charged within 3-4 hours.
29.	Operating Conditions	Temperature: Minus 20°C to plus 45°C, Humidity- Upto 80% Humidity.
30.	Battery capacity	One full charge to support 12 hrs continuous recording at 720p@30fps.
31.	Weatherproof	IP67 or latest standards.
32.	Certification	As per Class LI 1 of JSS 5855-11:2019 or latest and BIS certification for Body worn camera and accessories.
33.	Password Protection	Device to be administrator Password protected.
34.	Shock & damage resistance during use	As per Class LI 1 of JSS 5855-11:2019 or latest.
35.	Mounting System	Clip/ Belt/ Harness.
36.	Charger/Charging System	Compatible.
37.	Colour of Camera	Black/Olive Green.
38.	Service Life & Maintenance	6 Yrs. 2 yrs of warranty and CMC for maintenance through its balance life.
39.	Provision of on board GPS and facility to upgrade to NAVIC one it is launched.	
40.	Unique ID for each system to be provided which should be registered in the name of the OEM.	
41.	The body worn camera OEM should be a genuine manufacturer and should be an official valid H.264/H.265 HEVC Certificate and should be listed on HEVC website at the time of submitting bid. They should be paying the license fee for using the genuine HVEC Compression, legally. The same will be verified.	
42.	The MAC Address of the Body Worn Camera should be registered in the name of OEM supplying the cameras.	
43.	Accessories: Charger/docking station, body harness/Camera mounting frame, data transferring cord.	

Appendix B
(Refers to Para 24, 28(b) & 29 of RFP)

COMPLIANCE TABLE

XXXXXXXXXX

Appendix C to Schedule I to Chapter II
(Refers to Para 11 of RFP)

WARRANTY CLAUSE

1. XXXXXXXX.
2. XXXXXXXX.
3. XXXXXXXX
4. **SELLER** hereby warrants that necessary service and repair backup during the warranty & CMC period, including routine maintenance beyond Unit Level shall be provided by the **SELLER** and he will ensure that the **cumulative downtime period for the equipment does not exceed 10% of the warranty & CMC period.**
5. XXXXXXXX.
6. XXXXXXXX.
7. XXXXXXXX
8. XXXXXXXX.
9. XXXXXXXX

DEMONSTRATION METHODOLOGY
BODY WORN CAMERA SYSTEM 1920 X 1080 PIXEL

1. XXXXXX.
2. **Number of Trial Equipment and Other Associated Items.** XXXXXX
3. **Crew.** XXXXXX
4. **Timeframe for Demonstration.** XXXXXX
5. **Retention of Trial Equipment.** XXXXXX
6. **Transportation of Equipment.** XXXXXX

Demonstration cum Evaluation by Empowered Committee

7. XXXXXX.
8. **Change of Equipment.** XXXXXX
9. **Location of Demonstration.** XXXXXX
10. **Vendor Certification (Certificate of Conformance).** XXXXXX.
11. **Testing Charges.** XXXXXX

Broad Demo Plan

12. Broad Demo plan is attached as Annexure.

Pre - Demonstration Meeting

13. XXXXXX.

Representations / Requests

14. XXXXXX.

Schedule of Demonstration

15. XXXXXX.

Miscellaneous

16. XXXXXX
17. XXXXXX

DEMO PLAN

1. **Introduction.** XXXXXX
2. XXXXXX
3. **Legend.** XXXXX
4. **Demo Plan.** The demo plan is as given below. Wherever mentioned the vendor to submit CoC/ Certificate from NABL accredited lab as applicable.

DEMO PLAN : BODY WORN CAMERA SYSTEM 1920 X 1080 PIXEL

<u>Ser No</u>	<u>OR PARAMETERS</u>		<u>METHOD OF EVAL</u>
<u>PART -I GENERAL INFORMATION</u>			
1.	<u>Gen.</u> The Body Worn Camera (BWC) should be a light weight, compact, unobtrusive and easy to handle device which is to be used to record events both during the day as well as during pitch dark night. The device to be rugged and be able to operate under extreme low temperature, fog and rain.		D
<u>PART – II PHYSICAL CHARACTERISTICS</u>			
2.	Compact in size with maximum volume 189000 cubic mm and maximum weight of 200 gms.		D
3.	Easy to wear and have secured latching/strapping facility for attaching with body/uniform of the user.		D
<u>PART – III TECHNICAL SPECIFICATION</u>			
4.	Sensor	1/2.5” to 1” CMOS colour Sensor with min 12 MP.	CA
5.	OS	Linux, Android or better.	D
6.	Booting time	Not more than 20 secs (From “Power ON” to “Recording”)	D
7.	Lens (HOV)	120°± 10° or better	C
8.	Video output	2 inch Full HD LCD Screen on the reverse side of the body worn camera.	D
9.	Recording Resolution	1920x1080P or better	C

<u>Ser No</u>	<u>OR PARAMETERS</u>		<u>METHOD OF EVAL</u>
10.	Frame rate	Support recording at 1080p@30fps & 720p@30fps	C
11.	Record mode	Video & audio synchronised	C
12.	Compression	H.264/H.265/MP4/TVI	CA
13.	Audio input	One or more built in mic for audio recording	D
14.	Image Resolution	1920 x 1080 or better	C
15.	Snapshot	Should support snapping during video recording	D
16.	Storage	In build 64 GB SSD integrated with the device with no option to handle/remove by user.	D&C
17.	IR	At 10m, detect activities under starlight clear moonless night sky excluding airglow (0.0002 lux) and starlight clear moonless night sky including air glow (0.002 lux).	CA
18.	Laser	Switch based laser lock for precise positioning and recording	D
19.	Data transfer/communication with external PC	Docked station based secured communication with external PC	C
20.	Protocol	Protocols to be provided to ensure: (a) Security of data within the device (b) while transferring through the docking station and (c) while storing in external device	C
<u>PART – IV OTHER SPECIFICATIONS</u>			
21.	Other Features	(a) <u>Indicators.</u> Recording, Standby, charging under progress, charging completed, battery power percentage indicator, data usage percentage.	D
		(b) Electro optical Image stabilization	C

<u>Ser No</u>	<u>OR PARAMETERS</u>		<u>METHOD OF EVAL</u>
22.	OSD Burn In	Burn in date, time, device ID, officer ID, location	D
23.	Playback	Support local playback of video on the BWC and search video files by time event.	D
24.	Pre/post-recording of Video	Minimum 30 seconds pre- and post-recording	D
25.	Record encryption	Support AES 256-bit encryption technology or better and in camera should not be editable. Encrypted video transfer through secured protocol restricting any leakage of data. Storage to be completely secured.	C
26.	Log	Record key operation, setting change, events, alarms.	D
27.	Player	Play back video files on the PC and analyze data information in the field.	D
28.	Time	Synchronize date and time with GPS or PC	C & D
29.	Charging	90% or more battery to get charged within 3-4 hours.	C & D
30.	Operating Conditions	<u>Temperature:</u> Minus 20°C to plus 45°C, <u>Humidity-</u> Upto 80% Humidity.	C
31.	Battery capacity	One full charge to support 12 hrs continuous recording at 720p@30fps	C & D
32.	Weatherproof	IP67 or latest standards	CA
33.	Certification	As per Class LI 1 of JSS 5855-11:2019 or latest and BIS certification for Body worn camera and accessories.	CA
34.	Password Protection	Device to be administrator Password protected	D
35.	Shock & damage resistance during use	As per Class LI 1 of JSS 5855-11:2019 or latest.	CA
36.	Mounting System	Clip/ Belt/ Harness	D
37.	Charger/Charging System	Compatible	D
38.	Colour of Camera	Black/Olive Green	D

<u>Ser No</u>	<u>OR PARAMETERS</u>	<u>METHOD OF EVAL</u>
39.	Service Life & 6 Yrs.	V
	2 yrs of warranty and CMC for maintenance through its balance life.	V
40.	Provision of on board GPS and facility to upgrade to NAVIC one it is launched.	V
41.	Unique ID for each system to be provided which should be registered in the name of the OEM.	V
42.	The body worn camera OEM should be a genuine manufacturer and should be an official valid H. 264/H.265 HEVC Certificate and should be listed on HEVC website at the time of submitting bid. They should be paying the license fee for using the genuine HVEC Compression, legally. The same will be verified.	CA
43.	The MAC Address of the Body Worn Camera should be registered in the name of OEM supplying the cameras.	C
44.	<u>Accessories:</u> Charger/docking station, body harness/Camera mounting frame, data transferring cord	D

Note: XXXXX

Appendix E
(Refers to Para 39 of RFP)

COMMERCIAL CLAUSES

1. XXXXXXXX.
- 1.2. XXXXXXXX.
- 1.3 **Contract Price and Requirement of Bank Guarantees**
 - 1.3.1 **Total Contract Price.** XXXXXXXX.
 - 1.3.2 **Base Contract Price.** The Base Contract Price will be considered as Total Contract Price excluding taxes and duties applicable at the time of signing of Contract and excluding the Total Price of CMC.
 - 1.3.3 **Bank Guarantee(s).** XXXXXXXX.
 - 1.3.4 XXXXXXXX.
 - 1.3.4.1 **Indian Bidder.** XXXXXX.
 - 1.3.5 For orders with CMC, an additional Performance Bank Guarantee (PBG) is to be submitted by the Bidder for which the Total Price of CMC for contracted duration will be considered
- 1.4 **Payment to Indian Bidders.** XXXXXX.
 - 1.4.1 **Advance Payment.** XXXXXX
 - 1.4.2 **On Dispatch.** XXXXXX
 - 1.4.3 XXXXXX
 - 1.4.4 **On Final Acceptance and Installation/Commissioning** XXXXXX
 - 1.4.5 **Part-Dispatch/Part-Shipment.** XXXXXX
 - 1.4.6 **Payment of Taxes and Duties.** XXXXXX
 - 1.4.7 **Exchange Rate Variation.** XXXXXX
 - 1.4.8 **CMC Payments.** Annually payments will be made by PCDA/CDA on submission of user clearance certificate through issue of cheque/ECS.
2. XXXXXX

3. XXXXX
4. XXXXX
5. XXXXX

6. **Performance Bank Guarantee for CMC.** The Bidder will be required to furnish a Performance Guarantee by the way of a Bank Guarantee of a sum equal to 3% of the Total Price of CMC for contracted duration prior to expiry/return of the PWBG of the Main Contract. Performance Bank Guarantee should be valid for 03 months beyond the period of the CMC. The format of the performance Bank Guarantee is to be as per **Annexure III to this Appendix.**

7. **Payment Deductions and Damages for Shortfalls in CMC Services.** In case the cumulative downtime exceeds **30 (working days) in a year**, payment will be deducted. The total downtime will be calculated **at the end of the year and payments will be deducted.** The total payments to be deducted will be calculated as follows:-

(a) Payments would be deducted on pro-rate basis for the duration, by which cumulative downtime exceeds 30 (working days), as follows:-

(i) Per year CMC = 'X₁'

(ii) Period by which cumulative downtime exceeds the specified cumulative downtime, in days = 'Y₁'

(iii) Payment Deduction = 'Z₁',
Where $Z_1 = [(X_1/\text{Number of days in the year}) * Y_1]$

(b) In addition, damages would be deducted to the sum of 0.1% of the per annum CMC cost per day, for the duration, by which cumulative downtime exceeds the maximum permissible cumulative downtime per year, subject to the maximum value of this damages not being higher than 5% of the annual CMC cost.

Appendix F

(Refers to Para 39 and 48 (b) of RFP)

EVALUATION CRITERIA AND PRICE BID FORMAT

1. XXXXX

2. **Price Bid Format.** The Price Bid Format is given below and Bidders are required to fill this correctly with full details. No column of the Bid format has to be left blank. The clubbing of serials/sub serials to indicate a consolidated cost is not acceptable. Columns of 'quantity', 'unit cost', 'total cost (including all taxes and duties)', 'GST/IGST (%) and Custom Duty (%) are to be filled up with '0', 'positive numerical values' or 'Not Applicable' at every row as applicable. If any column is not applicable and intentionally left blank, the reason for the same has to be clearly indicated in the remarks column.

Ser	Items	Qty	Unit Cost	Total Cost (iii) x (iv)	Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable)		Total Cost (including all taxes & duties) (v) + (vi) + (vii)	Remarks
					GST/IGST (%)	Custom Duty (%)		
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A.	Cost of Basic Equipment . Full break-up details should be given.							
B.	Cost of Warranty for additional 12 Months							
C.	CMC Cost giving year-wise break-up.							
D.	Any other cost (to be specified).							
E.	Freight and Transit Insurance Cost (where applicable).							
F.	Total Cost (Total of Serial A to F)						#	# This will be used in determining L1 vendor (duly applying provisions of Para 1 above).
G.	Foreign Exchange component of the proposal.							
H.	CDEC (if applicable), its authority and amount for which required.							

Note: Taxes and Duties. XXXXXXXX

Appendix G
(Refers to Para 44 of RFP)

STANDARD CONDITIONS OF RFP

LAW

~~XXXXXXXXXX~~

Appendix H
(Refers to Para 6 of RFP)

CRITERIA FOR VENDOR SELECTION / PRE-QUALIFICATION

xxxxxxx

GUIDELINES FOR FORMULATION OF DRAFT ATP

XXXXXX

Appendix K
(Refers to Para 45 of RFP)

DOCUMENTS TO BE SUBMITTED BY THE BIDDER ALONG WITH THEIR TECHNO-COMMERCIAL PROPOSALS

XXXXXXXX

GLOSSARY

XXXXXXXXXX

CERTIFICATE : MALICIOUS CODE

(TO BE RENDERED ON THE COMPANY LETTER HEAD)

1. This is to certify that the Hardware and the Software being offered, as part of the Contract, does not contain embedded malicious code that would activate procedures to:-

- (a) Inhibit the desired and designed function of the equipment.
- (b) Cause physical damage to the user or equipment during the exploitation.
- (c) Tap information resident or transient in the equipment/networks.

2. The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringement related to copyright and Intellectual Property Rights (IPRs) are caused due to activation of any such malicious code in embedded software.

(Signed)

(Designation/Name/Address of firm)

Date :

Place :

PRODUCT SUPPORT

Maintenance Contracts

1. Maintenance of the equipment would be carried out by Comprehensive Maintenance Contracts (CMCs) for a period of at least **four years beyond the warranty period**. The CMCs would be provided by the OEM / licensed entity / OEM authorised representative and would commence on completion of warranty period.

2. **Comprehensive Maintenance Contracts (CMC)**. Comprehensive Maintenance Contracts are concluded for a **period of four years**, in multiples of Annum. The scope of CMC, in addition to services of the Specialists as mentioned for AMC, include provisioning of spares, tools and equipment as required for Maintenance and Repair of the equipment. In this arrangement, the OEM will ensure that the down time of the equipment does not exceed the minimum period stipulated in the CMC. In such cases, Engineering Support Package may be reduced proportionately based on the operational requirements and functional sensitivities such as geographical spread, remote location, poor connectivity, intense threat environment precluding employment of civil support, etc. CMC will include all corrective and preventive maintenance of the systems, equipment and machinery in satisfactory working order and 'Planned Preventive Maintenance' (PPM), repairs, servicing, calibration, replacement of defective parts, sub-assemblies, equipment, preservation /de-preservation as applicable. All equipment supplied under the proposed contract will be maintained on site by the Seller. CMC will ensure performance of the equipment in the range and accuracies as set in equipment Technical Manual. The equipment proposed to be under CMC would be listed along with their locations. An equipment repair Log book will be maintained to keep a record of the equipment down time during defect rectification. The scope of work would also involve the following:-

(a) **Preventive Maintenance**. The maintenance of the equipment is to be carried out by the Bidder at the Buyer premises. The equipment will be maintained as per the OEM specified maintenance schedules and equipment manuals. However, the number of visits by the Bidder to the customer premises should be at least **once a quarter** or as agreed to in the contract. The preventive maintenance team visiting the unit should be composite and possess sufficient expertise and spares to carry out preventive maintenance activities and resolve any pending unserviceability issues of the equipment.

(b) **Breakdown Maintenance**. In addition to preventive maintenance, the Bidder will also be responsible to undertake breakdown maintenance of the equipment. Defects on the equipment as and when observed, will be intimated to the Bidder by telephone/ fax. The Bidder will depute a team for undertaking repairs of the equipment within **two working days** from the reporting of the defect, in order to make the equipment operational within **seven (07) days** of the reporting of defect. The Bidder will need to diagnose, test, adjust, calibrate and repair / replace the goods/equipment during the CMC period. However, defective hard disks, strong devices, if any, of the equipment, will not be returned to the Bidder and would be retained for destruction / safe custody. The downtime of the equipment will commence from the time a defect is reported by the user and the log of the same would be maintained by both **Buyer and Bidder**.

(c) **Calibration.** Periodic inspection and calibration services as set forth in the equipment manual shall be provided by the Bidder, to ensure operational availability of the equipment. Requisite certificates may be rendered whenever major repairs/maintenance on equipment is undertaken.

(d) **Spares.** Supply of all parts (spares sourced from the OEM/OEM authorised vendor), including consumables, if any and material required for the optimal performance of the equipment as per the designed specifications mentioned in the equipment manual would be the responsibility of the Bidder.

(e) **Software.** The Bidder will provide support for maintenance of the software(s) during the period of CMC and would include the following:-

(i) Upgrades, patches, fixes to the OS and the Application software.

(ii) Back-up and restoration of software, as and when required.

(iii) No malware certificate.

(iv) Version of the software and IV & V (Independent verification and validation) certificate as per the applicable CMM Level, depending on the criticality of the equipment.

(v) Method of checking the health of the software and debugging methods.

(f) **Obsolescence Management.** The obsolescence management for the equipment delivered under the scope of contract would form part of CMC Services. The obsolescence management will include providing “Form, Fit and Function” replacement of any system/sub system rendered obsolete during the period of CMC.

Active Technology Obsolescence Management (where applicable)

3. Bidder is to indicate the methodology on how the Bidder intends to undertake Active Obsolescence Management through life cycle of equipment which would include upgradation of systems/ subsystems/ units on completion of its fair service life. The Bidder/OEM (as applicable) shall also intimate the Buyer on likely technology obsolescence of various sub-assemblies/units/modules of equipment through an Annual Bulletin. In case of impending obsolescence of components, bulletin should specify either alternate item or option for life-time buy as under:-

(a) The Bidder/OEM (as applicable) will notify the Buyer not less than three years before the closure of its production line about the intention to close production of equipment for provision of purchasing spare parts, before closure of the said production line.

(b) Three years prior to completion of design/service life of equipment, the Bidder/OEM (as applicable) will submit techno-commercial proposal for upgradation of equipment, wherever applicable, to mitigate technology obsolescence and for ensuring product support for next 15 years.