

Invitation of Online Bids

RCI, Hyderabad

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For E-Procurement Query:-

support@procuretiger.com (+ 91 07940016879)

Tender EnquiryNo :RCI/DCMM/LP2/OT/2000001128

Government of India

Ministry of Defence

Defence Research & Development Organisation

RCI Vignayana Kancha (P.O), HYDERABAD-500069

Date : 09.04.2015

INVITATION OF ONLINE BIDS FOR SUPPLY OF Multi I/O Data Link , QTY 1 SET Specifications (if any) attached as Appx.

1. The Director, RCI on behalf of the President of India hereby invites e-tenders from eligible bidders through e-procurement portal for supply of items listed in Part I of this RFP as per **Two Bid System.Last Date and Time for uploading of the Bids: On 05.05.2015 (dd/mm/yy) at 10:30 Hrs.**

For participating in the above tender through e-tendering process, the bidders shall have to get themselves registered at **<https://rci.procuretiger.com>** and get user ID, password. Class 3 digital signature is mandatory to participate in the e-tendering. The Bidders are required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities as detailed in the website. **For any clarification/difficulty regarding e-tendering process flow, please contact on + 91 7940016852/891.**

Bidders/Contractors have to submit online bids on tender documents available on the website **<https://rci.procuretiger.com>**. Bidders shall also attach scanned copies of all the requisite documents i.e Earnest Money and other certificates/documents specified in the tender document .

2. The address and contact numbers for online submission of Bids or seeking clarifications regarding this RFP are given below:

- | | |
|--|---|
| a)Bids/queries to be addressed to | : The Director,RCI |
| b)Postal address | : RCI Vignayana Kancha(P.O),
HYDERABAD-500069. |
| c)Name & designation of the contact Officer | : B.N.Gajbhiye, DCMM |
| d)Telephone number(s) of the contact Officer | : 040-24306230 / 22 |
| e)Fax number(s) | : 040-24306013 |
| f)e-mail ID of contact Officer | : rci.dcmml@rcilab.in |
| g)e-mail ID for E-Procurement support | : support@procuretiger.com |

3. This RFP is divided into 7 parts as follows:

- i)Part I contains Details of the Store(s)/Service(s) Required e.g. Technical Specifications, Delivery Period, Mode of Delivery, Consignee details etc.
- ii)Part II contains General Information and Instructions for the Bidders about the RFP such as the time, place of submission and opening of tenders, Validity period of tenders, etc.
- iii)Part III contains Standard Terms and Conditions of RFP, which will form part of the Contract/Supply Order (herein after referred as the Contract) with the successful Bidder(s).

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iv)Part IV contains Special Terms and Conditions applicable to this RFP and which will also form part of the Contract with the successful Bidder(s).

v)Part V contains Vendor Qualification Criteria.

vi)Part VI contains Evaluation Criteria of Bids.

vii)Part VII contains Format of Price Bid. Price bid needs to be printed on one side of paper only.

4. This RFP is being issued with no financial commitment and the Buyer reserves the right to change or vary any part thereof or foreclose the procurement case at any stage. The Buyer also reserves the right to disqualify any vendor, should it be necessary, at any stage on grounds of National Security

5. You may contact The Director (RCI), (RCI Vignayana Kancha(P.O), PIN-500069.HYDERABAD.) for any grievance related to bidding condition, bidding process and/or rejection of bid. With regard to bidding condition, this shall be done in writing at least seven days in advance of the stipulated date of submission of bid.

RESERVED

Part I- Essential Details of Items/Services Required

1. Schedule of Requirements: List of items / services required are as follows -

2. Technical Details :

- i) Specifications/Drawings : As Per Annexure I.
- ii) Technical details with technical parameters - As Per Annexure I.
- iii) Requirement of training/on-the-job training - As Per Annexure I.
- iv) Requirement of installation/commissioning - As Per Annexure I.
- v) Full Inspection details - As Per Annexure I.
- vi) Requirement of Technical Documentation - As Per Annexure I.
- vii) As Per Annexure I.
- viii) Requirement of pre-site inspection - As Per Annexure I.
- ix) Any other details, as considered necessary - As Per Annexure I.

3. Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. Bidders are advised to submit compliance statement for the technical parameters separately in the following format along with the Techno-Commercial Bid:

Name/Description of item(s)/Service(s)		A/U	Qty required
Multi I/O Data Link		SET	1
Para of RFP specifications (item-wise)	Specifications of item offered	Compliance to RFP specifications - whether Yes / No	Remarks (In case of non-compliance, deviation from RFP to be specified in unambiguous terms. In case of compliance, catalogue/brochure reference, if available, to be indicated)

For Commercially-Off-The-Shelf (COTS) items, it is mandatory to enclose catalogue/technical brochure to support the claims of compliance.

4. **Delivery Period:** Expected Delivery Period for supply of items/rendering services would be from the Effective Date of the Contract. Please note that the Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period with/without LD clause will be at the sole discretion of the Buyer.

5. **Consignee details:**

- 1. Name : **The Director , RCI**
- 2. Address : **Research Center Imarat, Vignayanakancha(P.O)**
Hyderabad-500069
- 3. Contact details : **Phone:040-24306222**
Fax:040-24306013

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6. Important Note to Bidders

- a. Pre-Integrity Pact Clause Amt : NA
 - b. Tolerance Clause Percentage : NA
 - c. Advance Payment : 0
 - d. Part Supply and Pro-rata Pymnt : NA
 - e. Buy-Back-Timings for Inspn : All working days between the time of NA to NA
 - f. Buy-Back-Handling over Period : Within NA days of NA (No. of days and condition to be specified by the lab).
 - g. Technical Capabilities
 - i. Expertise available in the critical areas to complete the task (NA)
 - h. Manufacturing Facilities
 - i. Availability of Infrastructure required to carry out the activity (NA)
 - i. Financial Capabilities
 - i. Should have minimum financial resources to execute the order (NA)
 - ii. Numbers of such type of contracts executed in past.
 - j. Management Capabilities
 - i. Availability of Quality Management System, Quality Control System etc.
 - ii. Compliance of delivery schedule NA
7. For Detailed Specifications / Other Information, Please Logon to <http://rcilab.in/> to see remaining pages of this tender enquiry .

Part II- General Information and Instructions

8. **Pre-bid Conference:** A pre-bid meeting will be held at NIL , (date) at NIL (venue) to answer any queries or to clarify doubts regarding submission of proposals. Bidders or their authorized representatives (duly authorised in writing) are invited to attend. This event will not be postponed due to non-presence of your representative.

9. **Last Date and Time for Depositing the Bids:** On **05.05.2015** (dd/mm/yy) at 10:30 Hrs. The online Bid (both Techno-Commercial and Price bid, in case two bids are called for) should be filled and uploaded by the due date and time. The responsibility to ensure this lies with the Bidder.

10. **Manner of Depositing the Bids:** Bids (both Techno-Commercial and Price bid, in case two bids are called for) is required to be submitted online on the above mentioned website. Bids sent by FAX or e-mail will not be considered.

11. **Time and Date for Opening of Bids:** On **05.05.2015** (dd/mm/yy) at 11:00 Hrs. If due to any exigency, the due date for opening of the bids is declared a closed holiday, the bids will be opened on the next working day at the same time or on any other day/time, as intimated by the Buyer.

12. **Place of Opening of the Bids: Office of the DCMM**

The Bidders may depute their representatives, duly authorized in writing, to attend the opening of Bids on the due date and time. Relevant parts and important commercial/ technical clauses quoted by all Bidders will be read out in the presence of the representatives of the participating Bidders. This event will not be postponed due to non-presence of your representative.

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13. Procedure for Submission of Bid:

a) **Two Bid System:** Online Bids shall be submitted in two parts i. e. Part I - Techno-Commercial bid and Part II - Price bid. Only the Techno-Commercial bids would be opened on the time and date mentioned above. Date of opening of the Price bids will be intimated after acceptance of the Techno-Commercial bids. The Price bid of the other Bidders, whose Techno-Commercial bid are found non-compliant, will not be considered for opening.

14. **Clarification Regarding Contents of the RFP:** A prospective bidder who requires clarification regarding the contents of online bidding documents shall notify to the Buyer through mail/in writing about the clarifications sought not later than 14 (fourteen) days prior to the date of opening of the Bids. Any clarification would be posted on the website.

15. **Indian firms need to quote only in Indian Rupees.**

16. **Validity of Bids:** The Bids should remain valid for 120 days from the last date of submission of Online Bids.

17. **Modification and Withdrawal of Bids:** A bidder may modify or withdraw his Bid after online submission provided that the written notice of modification or withdrawal is received by the Buyer prior to deadline prescribed for submission of Online bids. A withdrawal notice may be sent by Mail/fax, however, it should be followed by a signed confirmation copy to be sent by post and such signed confirmation should reach the purchaser not later than the deadline for online submission of bids. No bid shall be modified after the deadline for submission of online bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the specified period of bid validity.

18. **Earnest Money Deposit:** Bidders are required to upload the scanned copy of Demand Draft towards the Earnest Money Deposit (EMD) in favour of The Director RCI, Hyderabad in the currency of their quote for amount of Rs. 90,000/- or equivalent along with their online bids. Original Demand Draft be submitted by Regd Post to RCI. The EMD may be submitted by Indigenous bidder in the form of an Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee. In case of foreign bidder, EMD is to be submitted in the form of appropriate Bank Guarantee from a first class bank of international repute. EMD is to remain valid for a period of forty-five days beyond the final bid validity period. EMD of the unsuccessful bidders will be returned to them, without any interest whatsoever, at the earliest after expiry of the final bid validity and latest on or before the thirtieth day after the award of the Contract. EMD of the successful bidder would be returned without any interest whatsoever after the receipt of Security Deposit from them as called for in the Contract. EMD is not required to be submitted by those Bidders who are registered with the Central Purchase Organizations (e. g. DGS&D), National Small Industries Corporation (NSIC), Departments of MoD, other DRDO labs and as per the policy of Government of India in vogue. Such bidders would be required to upload the relevant documents in their Techno-Commercial bid in support of the claim. The EMD will be forfeited if the Bidder withdraws, amends, impairs or derogates from the tender in any respect within the validity period of their tender.

19. Security Deposit

The Seller may be required to furnish a Security Deposit by way of Cheque/Demand Draft (DD)/Bank Guarantee (BG), in favour of The Director, RCI, Hyderabad, for a sum equal upto 10% of the Contract value. The BG should be valid upto 60 days beyond the scheduled date of delivery. The specimen of BG can be provided on request.

The Security Deposit will be forfeited by the Buyer, in case the conditions regarding adherence to delivery schedule and/or other provisions of the contract are not fulfilled by the Seller.

20. **Clarification Regarding Contents of the Bids:** During evaluation of bids, the Buyer may, at his discretion, ask the bidder for clarification on his Bid. The request for clarification will be given in writing. No clarification on the initiative of the bidder will be entertained after opening of bid.

21. **Rejection of Bids:** Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected. Non-compliance of

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applicable General Information will disqualify your Bid.

22. **Unwillingness to Quote:** Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be de-registered for the range of items in this RFP, as per the policy in vogue.

23. Bids of debarred/blacklisted firms will not be considered for evaluation.

25. **Mode of Payment:** It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details to facilitate payments through ECS/EFT mechanism instead of payment through cheque, wherever feasible.

26. **Liquidated Damages:** The Buyer may deduct from the Seller, as agreed, liquidated damages at the rate of 0.5% per week/part thereof, of value of stores that could not be put to use due to late delivery subject to a maximum of 5% of the total order value (inclusive of taxes and duty) of the Contract.

27. **Process of Transportation trade by road:** The carriage by road Act 2007 was enacted on 01 Jan 2007 and came into effect on 01 Mar 2011. The details of Act/Rules are available on Ministry of Road Transport & Highways website www.morth.nic.in. It is incumbent on the part of all suppliers to transport the contracted material/supplies only through registered common carriers

Yours sincerely,

(_____)

For Director

For & on behalf of President of India

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(Annexure-I)
Detailed Specifications

Tender Enquiry No : RCI / DCMM / ZOT 2000001128

Date : 01.04.2015

SL.No	Item Description and Spec		Qty	Units of Measure
1	Material : 0403-6650-30003146 Description : Multi I/O Data Link		1.000	SET
Item Number	Specification	Specification in detail		
10	1.### MOTORIZED DISPLAY UNIT WITH REMOTE CONTROL FACILITY.	Motorized Video Projection Screen		
10	PRODUCTS SPECIFICATIONS:	120# Screen Size		
10		Matte White Screen Surface		
10		Image Width: 203 cm		
10		Image Height: 152 cm		
10		Aspect Ratio: 4 : 3		
10		Viewing Angle: 60 Degrees		
10		Features: Mildew Resistant, Fire Resistant, Wall Mountable, Ceiling Mountable		
10		Power Requirements: 220V		
10	2.DIGITAL PROJECTION UNIT	LCD Panel: 0.76" (1.9cm) P-Si TFT x3		
10	PRODUCT SPECIFICATIONS:	Resolution: WUXGA (1920 x 1200)		
10		Brightness: 6000 ANSI Lumens		
10		Contrast Ratio: 3000:1		
10		Lens: Powered Zoom x 2.0, Powered Focus		
10		Lamp Wattage: 365W UHP		
10		Focus Distance: 1.0m~ 19.3m (Wide) / 1.9m~ 38.3m (Tele)		
10		Distance to Width Ratio (:1): 1.5 (Wide), 3.0 (Tele)		

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Item Number	Specification	Specification in detail
10		Number Of Colours: 8 Bit/Colour, 16.7M Colours
10		Diagonal Display Size: 30"~ 600" (76cm~ 1,524cm)
10		Keystone Vertical: 10:-1 Shift, Normal at + 14.6°~ 7.4° Projection angle
10		Digital Input: 2 x HDMI (HDCP Compliant)
10		Computer Input: 1 x 15-pin Mini D-sub, 1 x BNC
10		Monitor Output: 15-pin Mini-D-sub x 1
10		Video Input: 1 x S-Video, 1 x RCA Composite Video, 3 x RCA Component Video
10		Audio Input: 2 x Stereo Mini Jack, 2 x RCA Jack(L/R)
10		Audio Output: 2 x RCA Jack (L/R)
10		USB: 2 x USB type A (PC-Less Presentation or Wireless Adaptor)
10		1 x USB type B (USB Mouse Control or USB Display)
10		Wired Network: 1 x RJ-45 (10BASE-T/100BASE-TX)
10		Wireless Network: IEEE802.11b/g/n
10	3.HIGH RESOLUTION DISPLAY MONITOR	Screen Size: 55"
10	PRODUCTSPECIFICATIONS:	Panel Technology: Slim Direct-LED Backlight
10		Bezel Width: 9.5mm (Top/Side), 15.0mm (Bottom)
10		Resolution: 1920 x 1080
10		Brightness: 350 Nits
10		Aspect Ratio: 16:9
10		Contrast Ratio (Typical): 5000:1
10		Response Time: 8ms
10		Smart Signage Platform: Yes
10		Built-In Tuner: Yes
10		Wi-Fi: Yes

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Item Number	Specification	Specification in detail
10		Input: Video: VGA, DVI-D, Component/Composite, HDMI, Audio: Stereo Mini Jack
10		Output: Audio: Stereo Mini Jack
10		External Control: Rs232C (In/Out) Thru Stereo Jack, RJ45
10		Sensor: IR, Ambient Light
10		Power Supply: Ac 100 - 240 V~ (+ /- 10 %), 50/60 Hz
10		Power Consumption (Typical/Max): 86W / 176W
10		Power Consumption (Standby): < 0.5W
10		Hardware: Super Clear Coating, Temperature Sensor, Pivot Display, Button Lock, Clock Battery (80hrs Clock Keeping), Built In Speaker, SD Card Slot Software: Magic Clone (To USB), Auto Source Switching & Recovery, RS232C/RJ45 MDC, Plug and Play (DDC2B), PIP/PBP, Image Rotation, Smart F/W Update, Built In Magic info Player S2, Firmware Update by Network, LFD New Home Screen, Predefined Template for Vertical Usage, Multi Channel, Mobile Control, Event Schedule, Backup Player, PC-Less Touch
10		Media Player Type: Cortex-A9 1Ghz Quad Core, 1.5GB DDR3, 4GB FDM, USB 2.0, Linux OS.
10		Without Stand (W X H X D): 48.4" X 27.8" X 2.0"
10	4.INTEGRATED INTERACTIVE PANEL WITH DATA STORAGE	Screen size: 15.6-inch
10	PRODUCTSPECIFIC ATIONS:	Screen resolution: 1366 x 768 (WXGA)
10		Pixel pitch: 0.252 x 0.252 mm
10		Colour depth: 16.77 million colours
10		Contrast ratio: 400:1
10		Maximum Brightness (cd/m2): 255 cd/m2
10		Response Time: 8 ms
10		Viewing angle (horizontal / vertical): 90°/ 65°

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Item Number	Specification	Specification in detail
10		Backlight lifetime: 50,000 hours
10		Video Cables: DVI-I to VGA (analog RGB) cable DVI to DVI cable
10		Video Interface: DVI-I video in/out
10		Battery-free & cordless pen: Yes
10		Pen pressure levels: 512 levels
10		Customizable pen buttons: 2 side switches
10		Tablet resolution: 2540 lpi
10		Coordinate accuracy: $\pm 0.5\text{mm}$ (center)
10		Tablet reading height: 5 mm
10		Report rate: 133 points/sec
10		Data interface: USB
10		Data cables: USB cable
10		Operating system: Windows®7 Professional 32
10		Processor: Intel Core 2 Quad Processor Q9550s
10		Memory: 8 GB 1066 MHz DDR3 SDRAM
10		Memory slots: 2 DIMM
10		Internal drive bays: One 3.5"
10		Internal drive: 250 GB up to 1 TB SATA (7200 rpm)
10		Optical Drive: SATA Super Multi DVD Writer
10		Integrated Intel Graphics Media: Accelerator 4500
10		Main unit dimensions (W x D x H): 420 x 283 x 49 mm (excluding stand)
10		Weight (including stand): 4.3 kg
10		Adjustable stand (incline from vertical): 19° to 72°
10		USB 2.0 hubs: 2 (1 on each side of the display)

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Item Number	Specification	Specification in detail
10		Operating temperature: 5# to 35#
10		Operating humidity: 20% to 80% RH
10		Windows OS compatibility: 7 / Vista / XP / 2000
10		Macintosh OS compatibility: OS X 10.4 or later
10		Power supply input: AC 100-240V, 50-60Hz
10		Maximum power consumption: 29W
10	5.DIGITAL VIDEO SWITCHER.	Input: 8 VGA on 15#Pin HD Connectors
10	PRODUCT SPECIFICATIONS	Outputs: 8 VGA on 15#Pin HD connectors
10		Max. Output Level: 1.5Vpp
10		Bandwidth (-3DB): 400MHz
10		Diff. Gain: 0.04%
10		Diff. Phase: 0.04Deg
10		K-Factor: < 0.05%
10		S/N Ratio: 75dB
10		Crosstalk (All Hostile): #53dB
10		Coupling: DC
10		Controls: 22 Front Panel Buttons, RS#232, RS#485, Ethernet
10		Indicators: 8#Character Display on the Front Panel
10		Power Consumption: 100#240V AC, 50/60Hz; 23VA.
10		Dimensions: 19" x 7" x 1U (W, D, H) Rack Mountable.
10		Weight: 2.7kg (6lbs) approx.
10	6.FACE PLATE MULTI I/O	Flush Mountable Table
10	PRODUCT SPECIFICATIONS	Access to Cable Connections
10		Color Black
10		Large cable hole: #0.63" (1.60 cm)

Continued...

Item Number	Specification	Specification in detail
10		Large grommet: #0.45" (1.14 cm)
10		Medium cable hole: #0.56" (1.42 cm)
10		Medium grommet: #0.39" (0.99 cm)
10		Small cable hole: #0.50" (1.27 cm)
10		Small grommet: #0.31" (0.79 cm)
10		Product weight: #2.5 lbs (1.1 kg)
10	7. TABLE EMBEDDED BOUNDARY LAYER INPUT MODULE	Transducer: Condenser
10	PRODUCT SPECIFICATIONS	Polar Pattern: Omnidirectional
10		Frequency Response: 50 Hz to 17 kHz
10		Dynamic Range (Typical): 94 dB
10		Signal-to-Noise Ratio: 76.5 dB
10		Maximum Input Sound Level: 111.5 dB, (1 kHz at 1% Total Harmonic Distortion, 1 kW Load)
10		Power Requirements: 11 to 52v DC Phantom
10		Output Impedance: 150 Ohms (180 Ohms Actual)
10		Output Connectors: Unterminated (Bare Wire)
10		Pad: None
10		Low Frequency Roll-Off: None
10		Dimensions: 4.263 x 3 x 1.621" (108.3 x 76.3 x 41.2mm) LxWxH
10		Weight: 4.16 oz. (117.9 g)
10	8. WIRELESS LAPEL INPUT MODULE	Receiver Frequency: 660 to 865 MHz, 3 selectable frequencies
10	PRODUCT SPECIFICATIONS	Audio Bandwidth: 35 Hz to 20 kHz
10		THD at 1KHz: typ. 0, 8 %
10		Signal Noise Ratio: typ. 110 dB(A)

Continued....

Item Number	Specification	Specification in detail
10		Power: 230 V AC
10		Audio Outputs: bal. XLR and unbal. 1/4" jack, output level adjustable at rated deviation: 500 mV rms.
10		Dimensions: 200 x 190 x 44 mm
10		Weight: 665g
10		Transmitter Frequency: 660 to 865 MHz, 3 selectable frequencies
10		Audio Bandwidth: 65 Hz to 20 kHz
10		THD at 1kHz: typ. 0, 8 %
10		Signal Noise Ratio: typ. 110 dB(A)
10		RF Output: typ. 10 mW (ERP)
10		Power: 1 AA size battery
10		Battery Life: typ. 30 h (for 2200 mAh)
10		Dimensions: 229 x 53 dia. mm
10		Weight: 195 g
10	9. WIRELESS HANDHELD INPUT MODULE	Receiver Frequency: 660 to 865 MHz, 3 selectable frequencies
10	PRODUCT SPECIFICATIONS	Audio Bandwidth: 35 Hz to 20 kHz
10		THD at 1KHz: typ. 0, 8 %
10		Signal Noise Ratio: typ. 110 dB(A)
10		Power: 230 V AC
10		Audio Outputs: bal. XLR and unbal. 1/4" jack, output level adjustable at rated deviation: 500 mV rms.
10		Dimensions: 200 x 190 x 44 mm
10		Weight: 665g
10		Transmitter Frequency: 660 to 865 MHz, 3 selectable frequencies
10		Audio Bandwidth: 65 Hz to 20 kHz

Continued....

Item Number	Specification	Specification in detail
10		THD ay 1kHz: typ. 0, 8 %
10		Signal Noise Ratio: typ. 110 dB(A)
10		RF Output: typ. 10 mW (ERP)
10		Power: 1 AA size battery
10		Battery Life: typ. 30 h (for 2200 mAh)
10	10.DIGITAL AUDIO POWER AMPLIFIER	Minimum Guaranteed Power: 1 kHz per channel, both channels Driven
10	PRODUCT SPECIFICATIONS	Stereo, 2 ohms (per ch.): 3000W
10		Stereo, 4 ohms (per ch.): 2100W
10		Stereo, 8 ohms (per ch.): 1200W
10		Bridge-Mono, 8 ohms: 4200W
10		Bridge-Mono, 4 ohms: 6000W
10		Integrated Processing
10		Input EQ: 6 parametric filters per channel with Adjustable Q, ± 15 dB boost/cut.
10		Crossover Filters: Highpass and Lowpass per channel.
10		Output EQ: 8 parametric filters per channel with Adjustable Q, ± 15 dB boost/cut.
10		Delay: Signal alignment of driver; 50 mS of Total delay
10		Sensitivity (for full rated power at 4 ohms): 1.4 VRMS
10		Frequency Response (at 1 watt, 20 Hz - 20 kHz): + 0 dB, #1 dB
10		Signal-to-Noise Ratio (below rated 1kHz power at 8 ohms): 103 dB (A weighted)
10		Total Harmonic Distortion (THD): < 0.5%
10		Damping Factor 20 Hz to 1 kHz: > 500
10		Crosstalk (below rated power): 20 kHz - 1 kHz: > 70 db
10		Input Impedance (nominal): 20k ohms balanced, 10k ohms unbalanced

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Item Number	Specification	Specification in detail
10		Maximum Input Signal: + 22 dBu typical
10		AC Line Voltage and Frequency: 220-240 VAC 50/60 Hz
10		Operating Temperature: 0°C to 40°C at 95% relative humidity
10		Controls Level: Two front-panel rotary level controls, One for each channel
10		Power Switch: On/Off switch applies AC power to the Amplifier
10		Sel/Prev/Next Buttons: Three buttons near the LCD screen that are used to access menu items and front panel lockout
10		LCD Screen: Backlit liquid crystal display that Shows preset and processing status#20
10		Input / Output Connectors
10		Input Connectors: XLR, one per channel
10		Link/Out Connector: Loop-thru signal from input connector for linking another amplifier, one per Channel
10		Output Connectors: Two Neutrik Speak on output connectors Channel-1 Speak on is wired with Ch. 1 & Ch. 2 outputs
10		Construction: Steel
10		Front Panel: Cast-aluminum
10		Cooling: Proportional speed fan with front-to-Rear airflow
10		Dimensions: 19" (W) x 3.5" (H) x 16.2" (D)
10		Net Weight: 24.0 lb. (10.9kg)
10	11.CEILING MOUNT SPEAKERS	Freq. Range (-10 dB): 80 Hz - 20 kHz
10	PRODUCT SPECIFICATIONS	Power Capacity: 80 Watts Continuous Program Power40 Watts Continuous Pink Noise
10		Nominal Sensitivity: 86 dB SPL @ 1 m (3.3 ft)
10		Nominal Coverage Angle: 130° conical coverage
10		Directivity Factor (Q): 2.4 averaged 500 Hz to 4 kHz

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Item Number	Specification	Specification in detail
10		Directivity Index (DI): 3.8 averaged 500 Hz to 4 kHz
10		Rated Maximum SPL: 102 dB @ 1 m (3.3 ft)
10		Nominal Impedance: 16 ohms (Min Z 16.1 # @ 320 Hz)
10		Transformer Taps: 70V: 30W, 15W, 7.5W & 3.7W taps, 100V: 30W, 15W, & 7.5W taps
10		Low-Frequency: 100 mm (4.0 in) Polypropylene-coated, 1" coil on aluminum former
10		High-Frequency: 19 mm (0.75 in) Titanium coated polyester
10		Dimensions: 200 x 195 mm x 184 mm
10		Cutout Size: 168 mm (6.6 in)
10		Net Weight: 2.7 kg
10	12.DIGITAL MULTI CHANNEL MIXER.	Mic /Line Input to any Output: + /-1dB, 20Hz # 20kHz
10	PRODUCT SPECIFICATIONS	T.H.D. Mic Sensitivity -30dBu, + 14dBu @ Mix output: < 0.09% @ 1kHz
10		Noise: Mic Input E.I.N. (maximum gain): -127dBu (150# source)
10		Aux, Mix and Masters (@ 0dB, faders down): < -84dBu
10		Crosstalk (@ 1kHz): Channel Mute: > 96dB
10		Aux Send Pots Offness: > 86dB
10		EQ (Mono inputs): HF: 12kHz, + /-15dB
10		MF (swept): 150Hz # 3.5kHz, + /-15dB, LF: 80Hz, + /-15dB, Q: 1.5
10		Power Consumption: Less than 40W
10		Temperature Range: 5°C to + 40°C
10		Input & Output Levels: Mic Input: + 15dBu max., Line Input: + 30dBu max.
10		Stereo Input: + 30dBu max., Mix Output: + 20dBu max.
10		Headphones (@150#): 300mW
10		Input & Output Impedances

Continued....

Item Number	Specification	Specification in detail
10		Mic Input: 2k#, Line Input: 10k#
10		Stereo Input: 65k# (stereo), 35k# (mono)
10		Outputs: 150# (balanced), 75# (unbalanced)
10	13.DIGITAL AUDIO PROCESSOR.	Input: (2) line inputs. (1) RTA Mic input
10	PRODUCT SPECIFICATIONS	Input Connectors: (2) Female XLR line inputs. XLR RTA Mic input
10		Input Type: Electronically balanced/RF filtered
10		Input Impedance: > 40k ohm
10		Max Input: + 30dBu with input jumpers in + 30 position
10		CMRR: 45dB
10		Mic Preamp Phantom Power: + 15VDC (RTA)
10		Mic Preamp Equivalent Input Noise (EIN): < -110dB, 22Hz-22kHz, 150 ohm (RTA)
10		Output: 6 total
10		Output Connectors: Male XLR
10		Output Type: Electronically balanced, RF filtered
10		Output Impedance: 120ohm
10		Max Output: + 22dBu
10		A/D Converter: Conversion System
10		A/D Dynamic Range: (line) > 113 dB, A-weighted, > 110 dB unweighted
10		Type IV Dynamic Range: > 119 dB, A-weighted, 22kHz BW; > 117 dB, A-weighted, 22kHz BW
10		Sample Rate: 48kHz
10		D/A Dynamic Range: 112 dB A-weighted, 109dB unweighted
10		Dynamic Range: > 110 dB A-weighted, > 107dB unweighted
10		THD + Noise: 0.003% typical at + 4dBu, 1kHz, 0dB gain

Continued....

Item Number	Specification	Specification in detail
10		Frequency Response: 20Hz # 20kHz, + /- 0.5dB
10		Interchannel Crosstalk: > 110dB, 120dB typical, (input-to-output: > 100dB)
10	14.DIGITAL AUDIO DEVICE.	RJ45 10/100 Ethernet
10	PRODUCT SPECIFICATIONS	Connectors two DVI-I (DVI single link + analog), one S-Video connector
10		One Ethernet connector RJ45 with PoE, two USB 2.0 ports
10		Two 3.5mm stereo audio connectors (in and pass through out)
10		Video Codec H.264, MPEG-4, MOV, MJPEG
10		Streaming Protocols HTTP, RTP over RTSP, UDP, HTTP
10		Video Bit Rates 100 # 9000 kbit/sec; Key Frames Interval: programmable
10		Supported Video Modes Up to 1920× 1200. Custom VGA/DVI Modes
10		HD Video Format Options R, G, B plus separate H-Sync and V-Sync signals;
10		R, G, B with Sync-on-Green synchronization;
10		R, G, B plus CSYNC signal; DVI single link;
10		SD Video Format Options NTSC, PAL
10		Typical frame rates under different conditions:
10		Resolution FPS Resolution FPS: 640× 480 30 1280× 1024 30
10		800× 600 30 1920× 1080 30, 1024× 768 30 1920× 1200 25
10		Video Filters Frame Time stamping, labeling, free form text, copyright notices.
10		Dimensions: 202× 105× 35 mm
10	15.ELECTRONIC COPY BOARD WITH DATA RECORDER.	Installation Method: Wall Mount or Floor Stand
10	PRODUCT SPECIFICATIONS	External Dimensions: W58.3 × D3.5 × H39.4 inches
10		Weight: 15 kg
10		Panel Size: W51.2 × H35.8 inches (W1300mm × H910mm)

Continued....

Item Number	Specification	Specification in detail
10		Effective Reading Area: W50.4 × H35.4inches (W1280mm × H900mm)
10		Number of Panels: 2
10		Grid: 2 inch (50mm) Grid
10		Scrolling: Endless in one direction (Horizontal scrolling)
10		Drive Method: Motorized / Manual
10		Reading Method: CIS (Contact Image Sensor)
10		Reading Illumination: Light Source
10		RGB LED
10		Reading Resolution: Main scanning direction (vertical sheet surface) 50 dpi (1.92 dots/mm), Sub scanning direction (horizontal sheet surface) 50 dpi (1.82 dots/mm)
10		Reading Time: Approx. 15 s
10		USB Ports: 3 Ports: Type B for PC and Type A for Printer and for USB Flash Memory
10		File Format: PDF
10		Resolution: 2458 × 1728 dots (fixed)
10		USB Flash Memory
10		InkJet Printers: HP PCL3e & PCL3 gui compatible
10		Printing Resolution: 300 dpi or equivalent
10		No. Print Colors: 2 (grayscale)
10		Printer Interface: USB 2.0 standards
10		Power Input: AC100#240V/50#60 Hz, Max 0.75 A
10		Power Output: DC 12 V, 3.0 A
10		PC Consumption: In standby: 3W, During operation: 12W
10		Temperature: 10°C ~ 35°C
10		Humidity: 30 ~ 85% (with no condensation)

Continued....

Item Number	Specification	Specification in detail
10		Microsoft Windows 2000 Professional (Service Pack 4 or Later) /#
10		Windows XP (Home Edition/Professional Edition (Service Pack 2 or Later) /#
10		Vista (32 bit) / Windows7 (32 bit / 64 bit) / Mac OS X 10.5 or later
10		Web Browser
10		Windows: Internet Explorer 6.0 or Later, Macintosh: Safari 4 or Later
10		Accessories: Markers (Black, Red), Eraser, AC Power Adaptor, USB Cable, User's Manual, Assembly Set-up Manual, Wall Mounting Brackets.
10	16.17U PROFESSIONAL AUDIO EQUIPMENT RACK.	AV Rack for all rack-compatible 19 inches devices
10	PRODUCT SPECIFICATIONS	Space for two additional devices without rack compatibility
10		Solid metal construction
10	SCOPE OF WORK	1.Installation & Commissioning should be done by the supplier within one month from the supply of the item.
10		2.Warranty for a period of at least 12 months. The Software/Hardware updates if any within the warranty period have to be supplied free of cost.Spares to be supplied throughout the useful life of the equipments.
10		3.After sales, service to be provided by OEM trained and competent service engineers in case of any breakdown to be declared by the vendor at the time of supply itself.
10		4.User manuals of all the items to be submitted with do and don'ts.
10		5.Required cables for the installation of equipment's has to be provided by the vendor.
10		6.The total demand is to be treated as one entity. No part supply is accepted. All the items in the list of deliverables (1 to 17) should be complied. No part compliance will be accepted. Non compliance of any one item from the list of deliverables. The total tender of the respective vendor will be rejected.
10		7. Cost of the complete system as one unit (includes all the items in the list of deliverables) will be considered at the time of price negotiations. Cost of the

Continued....

Item Number	Specification	Specification in detail
		individual items will not be compared for declaring the lowest quote.
10		8.Data manuals and technical data sheets of all the items in the list of deliverables should be provided at the time of tendering. Non submission of these documents at the time of tendering, the tender will be rejected.
10		9.Compliance sheet mentioning the reference of the technical data provided along with the tender is to be enclosed.
10		10.Any required carpentry and civil work has to be done by vendor to achieve standard integration procedure.
10		11.Vendor has to utilize the existing infra-structure provided and required any additional has to be borne by vendor
10		12.Audio system control has to be provided with zone controls by vendor
10		13.Wireless facility to be provided for projector connectivity.
10		14.Training and Demonstrations has to be provided on site by vendor#s trained engineer (third party or subcontractor engineers will not be considered)
10	LIST OF DELIVERABLES	1.MOTORIZED DISPLAY UNIT WITH REMOTE CONTROL FACILITY # 01No.
10		2. DIGITAL PROJECTION UNIT # 01No.
10		3.#HIGH RESOLUTION DISPLAY MONITOR # 02Nos
10		4.INTEGRATED INTERACTIVE PANEL WITH DATA STORAGE # 01No.
10		5.DIGITAL VIDEO SWITCHER # 01No.
10		6.FACE PLATES FOR MULTI I/O # 02Nos
10		7.TABLE EMBEDDED BOUNDARY LAYER INPUT MODULE # 24Nos
10		8. WIRELESS LAPEL INPUT MODULE # 02Nos
10		9.WIRELESS HANDHELD INPUT MODULE # 01No.
10		10.DIGITAL AUDIO POWER AMPLIFIER # 01No.
10		11.CEILING MOUNT OUTPUT MODULE # 10Nos

Continued....

Item Number	Specification	Specification in detail
10		12.DIGITAL MULTI CHANNEL MIXER # 02No.
10		13.DIGITAL AUDIO PROCESSOR # 01No.
10		14.DIGITAL AUDIO DEVICE # 01No.
10		15.ELECTRONIC COPY BOARD WITH DATA RECORDER # 01No.
10		16.17U PROFESSIONAL AUDIO EQUIPMENT RACK # 01No.
10		17.CABLES AND CONNECTORS # 01Lot

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Part III - Standard Terms and Conditions

The Bidder is required to give confirmation of their acceptance of the Standard Terms and Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder as selected by the Buyer. Failure to do so may result in rejection of the Bid submitted by the Bidder.

1. Effective Date of the Contract: In case of placement of a supply order, the date of the Supply Order would be deemed as effective date. In case a contract is to be signed by both the parties, the Contract shall come into effect on the date of signatures of both the parties on the Contract (Effective Date) or as agreed during negotiations. The deliveries and supplies and performance of the services shall commence from the effective date of the Contract.

2. Law: The Contract shall be considered and made in accordance with the laws of the Republic of India and shall be governed by and interpreted in accordance with the laws of the Republic of India.

3. Arbitration: All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to product or performance, which cannot be settled amicably, shall be resolved by arbitration in accordance with either of the following provisions:

The case of arbitration may be referred to CC R&D or a person appointed by him who will be sole arbitrator and the proceedings shall be conducted in accordance with procedure of Indian Arbitration and Conciliation Act, 1996.

4. Penalty for Use of Undue influence: The Seller undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contract or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the Contract or any other contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other contract with the Government of India. Any breach of the aforesaid undertaking by the Seller or anyone employed by him or acting on his behalf (whether with or without the knowledge of the Seller) or the commission of any offers by the Seller or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or any other contracts with the Seller and recover from the Seller the amount of any loss arising from such cancellation. A decision of the Buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Seller. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Seller towards any officer/ employee of the Buyer or to any other person in a position to influence any officer/ employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability/ penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Buyer.

5. Agents / Agency Commission: The Seller confirms and declares to the Buyer that the Seller has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries, whether officially or unofficially, to the award of the contract to the Seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Seller has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Seller will be liable to refund that amount to the Buyer. The Seller will also be debarred from entering into any contract with the Government of India for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such an event be liable to refund all payments made by the Buyer in terms of the Contract along with interest at the rate of 2% per annum above (i) Prime Lending Rate of State Bank of India for Indian bidders, and (ii) London Inter Bank Offered Rate (LIBOR) for the foreign bidders. The applicable rates on the date of opening of tender shall be considered for this. The Buyer will also have the right to recover any such amount from any contracts in vogue with the Government of India.

6. Access to Books of Accounts: In case it is found to the satisfaction of the Buyer that the Bidder/Seller has violated the provisions of Para 4 and/or Para 5 above to obtain the Contract, the Bidder/Seller, on a specific request of the Buyer, shall provide necessary information/ inspection of the relevant financial documents/information/Books of Accounts.

7. Non-disclosure of Contract Documents: Except with the written consent of the Buyer/Seller, other party shall not disclose the Contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8. Withholding of Payment: In the event of the Seller's failure to submit the Bonds, Guarantees and Documents, supply the stores/goods and conduct trials, installation of equipment, training, etc. as specified in the Contract, the Buyer may, at his discretion, withhold any payment until the completion of the Contract.

9. Liquidated Damages: The Buyer may deduct from the Seller, as agreed, liquidated damages at the rate of 0.5% per week/part thereof, of value of stores that could not be put to use due to late delivery subject to a maximum of 5% of the total order value (inclusive of taxes and duty) of the Contract.

10. Termination of Contract: The Buyer shall have the right to terminate the Contract in part or in full in any of the following cases :-

i) The store/service is not received/rendered as per the contracted schedule(s) and the same has not been extended by the Buyer.

Or

The delivery of the store/service is delayed for causes not attributable to Force Majeure for more than ___ months after the scheduled date of delivery and the delivery period has not been extended by the Buyer.

ii) The delivery of store/service is delayed due to causes of Force Majeure by more than NA months provided Force Majeure clause is included in the contract and the delivery period has not been extended by the Buyer.

iii) The Seller is declared bankrupt or becomes insolvent.

iv) The Buyer has noticed that the Seller has violated the provisions of Para 4 and/or Para 5 above to obtain the Contract.

v) As per decision of the Arbitration Tribunal.

11. Notices: Any notice required or permitted by the Contract shall be written in English language and may be delivered personally or may be sent by FAX or registered pre-paid mail/ airmail, addressed to the last known address of the party to whom it is sent.

12. Transfer and Sub-letting: The Seller has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the Contract or any part thereof without written consent of the Buyer.

13. Use of Patents and other Industrial Property Rights: The prices stated in the Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other Industrial Property Rights. The Seller shall indemnify the Buyer against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies or any or all the rights mentioned above.

14. Amendments: No provision of the Contract shall be changed or modified in any way (including this provision) either in whole or in part except when both the parties are in written agreement for amending the Contract.

15. Taxes and Duties

a) General

1. If the quoted prices exclude Excise Duty or Central Sales Tax / VAT / Service Tax or any other Statutory Duties/Taxes, the same must be specifically stated with applicable rates. In the absence of same, it will be presumed that the prices include all such charges and no claim for the same will be entertained.
2. If reimbursement of any Duty/Tax is intended as extra over the quoted prices, the Bidder must specifically say so. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duty/tax will be entreated after the opening of tenders.
3. If a Bidder chooses to quote a price inclusive of any duty/tax and does not confirm that duty/tax so included is firm and final, he should clearly indicate the rate of such duty/tax and quantum of such duty/tax included in the price. Failure to do so may result in ignoring any request for change of duty/tax at a later date due to any reason whatsoever.
4. Any addition to duty/tax and change in any duty/tax upward/downward as a result of any statutory variation in duty/tax taking place within contract terms shall be allowed to the extent of actual quantum of such variation of duty/tax paid by the supplier. Similarly, in case of downward revision in any duty/tax, the actual quantum of reduction of such duty/tax shall be reimbursed to the Buyer by the Seller. All such adjustments shall include all reliefs, exemptions, rebates, concession etc., if any, obtained by the Seller.
5. TDS as per Income Tax Rules will be deducted and a certificate to that effect will be issued by the Buyer.

b) Customs Duty

1. DRDO is a public funded research institution and has been exempted from the payment of Customs Duty, as per the description of stores and conditions thereon, under Customs Notification No. 39/96 as amended.
2. The successful bidder would be issued a Customs Duty Exemption Certificate (CDEC) under the said notification at the time of import clearance for the goods being imported against the Contract. Bidder would be required to submit a copy of their order to principal along with principal's acceptance and proforma invoice at least four weeks in advance from the expected date of arrival of goods to this office for issuance of CDEC.
3. Bidders may note that CDEC would be issued ONLY in favour of beneficiary of the Contract.

c) Excise Duty

1. DRDO is a public funded research institution and has been exempted from the payment of Excise Duty, as per the description of stores and conditions thereon, under Notification No. 64/95 as amended and 10/97 as amended.
2. The successful bidder would be issued Excise Duty Exemption Certificate (EDEC) by this office under the said notification at the time of dispatch of finished material from the factory for goods manufactured against the Contract.
3. Bidders may note that EDEC would be issued ONLY in favour of beneficiary of the Contract.
4. Unless otherwise specifically agreed to in terms of the Contract, the Buyer shall not be liable for any claim on account of fresh imposition and/or increase of Excise Duty on raw materials and/or components used directly in the manufacture of the contracted stores taking place during the pendency of the contract.
5. **CENVAT Excise Duty:** Bidders are advised to specifically mention the rate of Excise Duty payable in spite of issuance of EDEC to facilitate correct evaluation of quotes. In the absence of such explicit declaration, it would be deemed that quoted prices include applicable CENVAT Excise Duty.

d) Octroi Duty & Local Taxes

1. Normally, materials to be supplied to Government Departments against Government Contracts are exempted from levy of Town Duty, Octroi Duty, Terminal Tax and other levies of local bodies. The local

Town/Municipal Body regulations at times, however, provide for such exemption only on production of such exemption certificate from any authorised officer. Seller should ensure that stores ordered against contracts placed by this office are exempted from levy of Town Duty/Octroi Duty, Terminal Tax or other local taxes and duties. Wherever required, they should obtain the exemption certificate from the Buyer, to avoid payment of such local taxes or duties.

2. In case where the Municipality or other local body insists upon payment of these duties or taxes, the same should be paid by the Seller to avoid delay in supplies and possible demurrage charges. After the issue of exemption certificate by the Buyer, the Seller may get the reimbursement from the local authority. In case of any difficulty, the receipt obtained for such payment should be forwarded to the Buyer without delay together with a copy of the relevant act or by-laws/notifications of the Municipality of the local body concerned to enable this office to take up the case for refund with the concerned bodies if admissible under the said acts or rules.

16. Pre-Integrity Pact Clause: An "Integrity Pact" would be signed between the Ministry of Defence/Buyer and the Bidder and the Bidder shall be asked to deposit as Earnest Money Deposit (EMD), in favour of The Director (RCI), (Hyderabad), in the form of appropriate Bank Guarantee (from a first class bank of international repute confirmed by the State Bank of India in case of foreign seller). This EMD would be submitted by the Bidder along with Integrity Pact (IP) (as per format at Annexure 'A') at the time of submission of bid in a separate envelope clearly marked as 'IP and EMD' put together in an envelope containing the bid. This is a binding agreement between the Buyer and Bidders for specific contracts in which the Buyer promises not to accept bribes during the procurement process and Bidders promise that they will not offer bribes. Under this Pact, the Bidders for specific services or contracts agree with the Buyer to carry out the procurement in a specified manner. The essential elements of the Pact are as follows:

i) A pact (contract) between the Government of India (Ministry of Defence) (the authority or the "principal") and companies submitting a tender for this specific activity (the "Bidder");

ii) An undertaking by the Principal that its officials will not demand or accept any bribes, gifts etc., with appropriate disciplinary or criminal proceedings in case of violation;

iii) A statement by each Bidder that they have not paid, and will not pay, any bribes;

iv) An undertaking by each Bidder to disclose all payments made in connection with the Contract in question to anybody (including agents and other middlemen as well as family members, etc., of officials); the disclosure would be made either at the time of submission of Bids or upon demand of the Principal, especially when suspicion of a violation by that Bidder emerges;

v) The explicit acceptance by each Bidder that the no-bribery commitment and the disclosure obligation as well as the attendant sanctions remain in force for the winning Bidder until the contract has been fully executed.

vi) Undertaking on behalf of a Bidding company will be made "in the name and on behalf of the company's Chief Executive Officer".

vii) Any or all of the following set of sanctions could be enforced for any violation by a Bidder of its commitments or undertakings:

a) Denial or loss of contracts;

b) Forfeiture of the EMD, Bid security and performance bond;

c) Liability for damages to the Principal and the competing Bidders; and

d) Debarment of the violator by the Principal for an appropriate period of time.

viii) Bidders are also advised to have a company code of conduct clearly rejecting the use of bribes and other unethical behavior and compliance program for the implementation of the code of conduct throughout the company.

ix) The draft Pre-Contract Integrity Pact is attached as Annexure "A". The Bidders are required to sign the pact

and submit it separately along with the Techno-Commercial and Price bid.

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Part IV - Special Terms and Conditions

The Bidder is required to give confirmation of their acceptance of Special Terms and Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder as selected by the Buyer. Failure to do so may result in rejection of Bid submitted by the Bidder.

1. **Apportionment of Quantity:** The Buyer reserves the right to apportion the quantity among Quoted bidders in the ratio of **NIL** starting from Lowest Bidder (L1) and proceeding to Next Higher Bidder and so on subject to their consent to meet the L1's rates as well as terms and conditions, as negotiated. The bidders are requested to submit the price bid catering the need of apportioned quantity as well as total quantity, else the unit cost of the store(s) for total quantity will be considered for the apportioned quantity while evaluating the bid. (Splitting of the quantity should be in favour of L1).

2. **Option Clause:** The Contract will have an Option Clause, wherein the Buyer can exercise an option to procure an additional 50% of the original contracted quantity in accordance with the same terms and conditions of the Contract. This will be applicable within the currency of the Contract. It will be entirely the discretion of the Buyer to exercise this option or not.

3. **Repeat Order Clause:** The Contract will have a Repeat Order Clause, wherein the Buyer can order up to 50% quantity of the original contracted quantity under the Contract within six months from the date of supply/successful completion of this contract. The Repeat Order will have rates on not exceeding basis while the terms and conditions will remain unchanged. It will be entirely the discretion of the Buyer to exercise the Repeat order or not.

4. **Tolerance Clause:** To take care of any change in the requirement during the period starting from issue of RFP till placement of the Contract, Buyer reserves the right to of the tendered quantity of the required goods without any change in the terms and conditions and rates quoted by the Seller. While awarding the Contract, the quantity ordered can be increased or decreased by the Buyer within this tolerance limit.

5. **Purchase Preference Clause:** Purchase preference will be granted to the nominated agencies for the specified quantity as per the policy of Govt. of India in vogue.

6. **Transfer of Technology (ToT):** Buyer is desirous of license production of (generic name of store(s)) under ToT. Buyer reserves the right to negotiate ToT terms subsequently but the availability of ToT would be a pre-condition for any further procurements. If negotiations for ToT are not held as a part of the negotiations for store(s), then subsequent and separate ToT negotiations would continue from the stage where the store(s) has been selected. (In such cases, Labs/Estts. would spell out the requirements and scope of ToT depending upon the depth of the technology which is required).

7. **Permissible Time Frame for Submission of Bills:** To claim payment (part or full), the Seller shall submit the bill(s) along with the relevant documents within **1095** days from the completion of the activity/supply (Lab should mention the no. of days and the activity from which the counting will start).

9. **Advance Payments:**

NA.

10. **Part Supply and Pro rata Payment**

Part supply will not be acceptable.

11. **Mode of Payment**

It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details to facilitate payments through ECS/EFT mechanism instead of payment through cheque, wherever feasible.

12. **Documents to be Furnished for Claiming Payment**

i) **Indigenous Sellers:** The payment of bills will be made on submission of the following documents by the

Seller to the Buyer:

- a) Ink-signed copy of Contingent Bill.
- b) Ink-signed copy of Commercial Invoice / Seller's Bill.
- c) Bank Guarantee for Advance, if applicable.
- d) Guarantee/ Warranty Certificate.
- e) Performance Bank Guarantee/ Indemnity Bond, if applicable.
- f) Details for electronic payment viz. Bank name, Branch name and address, Account Number, IFS Code, MICR Number (if these details are not already incorporated in the Contract).
- g) Original copy of the Contract and amendments thereon, if any.
- h) Any other document/ certificate that may be provided for in the Contract.

13. Exchange Rate Variation (ERV) Clause: This clause will be applicable only for Defence PSUs of Govt. of India in case the delivery period exceeds 12 Months from the Effective Date of the Contract which involves import content (foreign exchange).

i) Detailed time schedule for procurement of imported material and their value at the FE rates adopted for the Contract is to be furnished by the Bidder as per the format given below.

Year Wise and Major Currency Wise Import Content Break up

Year		Total cost of material		FE content outflow(Equivalent in crores)	
		\$	€	£	Others

ii) ERV will be payable/refundable depending upon movement of exchange rate with reference to exchange rate adopted for the valuation of the Contract. Base Exchange rate of each major currency used for calculating FE content of the Contract will be the SBI selling rate of the foreign exchange element on the date of the opening of Price Bids.

iii) The base date for ERV would be the Date of opening of Price Bid and variation on the base date will be given upto the midpoint of manufacture unless the Bidder indicates the time schedule within which material will be imported by them. Based on information given above, the cut-off date/dates within the Delivery schedule for the imported material will be fixed for admissibility of ERV.

iv) ERV clause will not be applicable under following circumstances:

- a) Cases where delivery periods for imported content are subsequently to be refixed /extended except for reasons solely attributable to the Buyer or Force Majeure.
- b) Cases where movement of exchange rate falls within the limit of $\pm 2\%$ of the reference exchange rate adopted for the valuation of the Contract
- v) The impact of notified ERV shall be computed on a yearly basis for the outflow as mentioned by the Bidder in their tender and shall be paid / refunded before the end of the financial year based on certification by the Buyer.

14. Force Majeure Clause:

i) Neither party shall bear responsibility for the complete or partial non-performance of any of its obligations, if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earth Quake and other acts of God as well as War, Military operations, blockade, Acts or Actions of State Authorities or any other

circumstances beyond the parties control that have arisen after the conclusion of the present contract.

ii) In such circumstances the time stipulated for the performance of an obligation under the Contract is extended correspondingly for the period of time commensurate with actions or circumstances and their consequences.

iii) The party for which it becomes impossible to meet obligations under the Contract due to Force Majeure conditions, is to notify in written form to the other party of the beginning and cessation of the above circumstances immediately, but in any case not later than 10 (Ten) days from their commencement.

iv) Certificate of a Chamber of Commerce (Commerce and Industry) or other competent authority or organization of the respective country shall be considered as sufficient proof of commencement and cessation of the above circumstances.

v) If the impossibility of complete or partial performance of an obligation lasts for more than 6 (six) months, either party hereto reserves the right to terminate the Contract totally or partially upon giving prior written notice of 30 (thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.

15. Buy-Back: The Buyer is interested to trade the existing old goods while purchasing the new ones. Bidders may formulate and submit their tenders accordingly. Interested Bidders can inspect the old goods to be traded through this transaction. The Buyer reserves the right to trade or not to trade the old goods while purchasing the new ones and the Bidders are to frame their bids accordingly covering both the options. Details for buy-back offer are as under -

i) Details of Items for Buy-Back Scheme - Make/Model, Specs, Year of Production/ Purchase, Period of Warranty/AMC etc.

ii) Place for Inspection of Old Items - Address, Telephone, Fax, e-mail, Contact personnel, etc.

iii) Timings for Inspection - All working days between the time of _ to _.

iv) Last Date for Inspection - 1 day before the last date of submission of bids.

v) Period of Handing Over of Old Items to Successful Bidder - Within _ days of

(No. of days and condition to be specified by the lab).

vi) Handling charges and transportation expenses to take out the old items will be on account of the successful Bidder.

16. Export License: The Bidder is required to furnish full details and formats of End Use Certificate required for obtaining export clearance from the country of origin. This information will be submitted along with Techno-Commercial bid. In the absence of such information, it would be deemed that no document is required from the Buyer for export clearance from the country of origin.

17. Free Issue of Material (FIM):

No Free Issue of Material is required to be issued

18. Terms of Delivery

The delivery of goods shall be on FOR (RCI , Hyderabad) basis.

19. Packing and Marking Instructions:

a) The Seller shall provide packing and preservation of the equipment and spares/goods contracted so as to ensure their safety against damage in the conditions of land, sea and air transportation, transshipment, storage and weather hazards during transportation, subject to proper cargo handling. The Seller shall ensure that the

stores are packed in containers, which are made sufficiently strong. The packing cases should have provisions for lifting by crane/fork lift truck. Tags with proper marking shall be fastened to the special equipment, which cannot be packed.

b) The packing of the equipment and spares/goods shall conform to the requirements of specifications and standards in force in the territory of the Seller's country.

c) A label in English shall be pasted on the carton indicating the under mentioned details of the item contained in the carton. The cartons shall then be packed in packing cases as required.

i)Part Number :

ii)Nomenclature :

iii)Contract annex number :

iv)Annex serial number :

v)Quantity contracted :

d)One copy of the packing list in English shall be inserted in each cargo package, and the full set of the packing lists shall be placed in Case No.1 painted in a yellow colour.

e)The Seller shall mark each package with indelible paint in English language as follows:-

i)Contract No. _____

ii)Consignee _____

iii)Port / airport of destination _____

iv)Ultimate consignee _____

v)Package No. _____

vi)Gross/net weight _____

vii)Overall dimensions/volume _____

viii)The Seller's marking _____

f)If necessary, each package shall be marked with warning inscriptions: < Top> , < Do not turn over> , category of cargo etc.

g)Should any special equipment be returned to the Seller by the Buyer, the latter shall provide normal packing, which protects the equipment and spares/goods from damage or deterioration during transportation by land, air or sea. In such case the Buyer shall finalize the marking with the Seller.

20. Inspection Instructions:

Inspection will be carried out at RCI.

21. Franking Clause:

i)In Case of Acceptance of Store(s): "The fact that the goods have been inspected after the delivery period and passed by the Inspecting Officer will not have the effect of keeping the contract alive. The goods are being passed without prejudice to the rights of the Buyer under the terms and conditions of the Contract".

ii)In Case of Rejection of Store(s): "The fact that the goods have been inspected after the delivery period and rejected by the Inspecting Officer will not bind the Buyer in any manner. The goods are being rejected

without prejudice to the rights of the Buyer under the terms and conditions of the contract."

22. Claims:

i)The quantity claims for deficiency of quantity and/ or the quality claims for defects or deficiencies in quality noticed during the inspection shall be presented within 45 days of completion of inspection.

ii)The Seller shall collect the defective or rejected goods from the location nominated by the Buyer and deliver the repaired or replaced goods at the same location, within mutually agreed period, under Seller's arrangement without any financial implication on the Buyer.

23. Warranty: The Seller will declare that the goods, stores articles sold/supplied shall be of the best quality and workmanship and new in all respects and shall be strictly in accordance with the specifications and particulars contained/mentioned in the contract. The Seller will guarantee that the said goods/stores/articles would continue to conform to the description and quality for a period of, _____ months from the date of acceptance/installation of the said goods stores/articles. If during the aforesaid period of _____ months, the said goods/stores are discovered not to conform to the description and quality aforesaid, not giving satisfactory performance or have deteriorated, the Buyer shall be entitled to call upon the Seller to rectify the goods/stores/articles or such portion thereof as is found to be defective by the Buyer within a reasonable period without any financial implication on the Buyer.

24. Product Support:

i)The Seller agrees to provide Product Support for the stores, assemblies/sub-assemblies, fitment items, Spares and consumables, Special Maintenance Tools (SMT)/Special Test Equipments (STE) for a minimum period of _____ years including _____ years of warranty period after the delivery.

ii)The Seller agrees to undertake a Maintenance Contract for a minimum period of _____ years/months. The seller is required to quote the price for both comprehensive and non-comprehensive maintenance of the equipment after the expiry of warranty period in the price bid.

25. Price Variation (PV) Clause: (applicable only if DP is more than 18 Months) -DGS&D Manual provides Standardised Price Variation Clauses. Any of those clauses could be considered for inclusion. A sample clause is indicated below) -

i)The formula for Price Variation should ordinarily include a fixed element, a material element and a labour element. The figures representing the material element and the labour element should reflect the corresponding proportion of input costs, while the fixed element may range from 10 to 25%. That portion of the price represented by the fixed element will not be subject to variation. The portions of the price represented by the material element and labour element will attract Price Variation. The formula for Price Variation will thus be :

$$P_1 = P_0 \left\{ F + a \left(\frac{M_1}{M_0} \right) + b \left(\frac{L_1}{L_0} \right) + \dots \right\} - P_0$$

Where

P_1 : Adjustment amount payable to the Seller (a minus figure will indicate a reduction in the Contract Price)

P_0 : Contract Price at the base level

F : Fixed element not subject to Price Variation

a : Assigned percentage to the material element in the Contract Price

b : Assigned percentage to the labour element in the Contract Price

L_0 : Wage indices at the base month and year

L_1 : Wage indices at the month and year of calculation

M_0 : Material indices at the base month and year

M_1 : Material indices at the month and year of calculation

Where

P_1 : Adjustment amount payable to the Seller (a minus figure will indicate a reduction in the Contract Price)

P_0 : Contract Price at the base level

F : Fixed element not subject to Price Variation

a : Assigned percentage to the material element in the Contract Price

b : Assigned percentage to the labour element in the Contract Price

L_0 : Wage indices at the base month and year

L_1 : Wage indices at the month and year of calculation

M_0 : Material indices at the base month and year

M_1 : Material indices at the month and year of calculation

If more than one major item of material is involved, the material element can be broken up into two or three components such as M_x , M_y , M_z . Where price variation clause has to be provided for services (with insignificant inputs of materials) as for example, in getting Technical Assistance normally paid in the form of per diem rate, the price variation formula should have only two elements, viz. a high fixed element and a labour element. The fixed element can in such cases be 50% or more, depending on the mark-up by the supplier of the per diem rate vis-à-vis the wage rates.

ii) Following conditions would be applicable to Price Adjustment -

a) Base date shall be due date of opening of price bids.

b) Date of adjustment shall be midpoint of manufacture.

c) No price increase is allowed beyond original Delivery Period unless the delay is attributable to the Buyer or Force Majeure.

d) Total adjustment will be subject to maximum ceiling of ____%.

e) No price adjustment shall be payable on the portion of the payment made as an advance payment made in the Contract to the Seller

27. Intellectual Property Rights (IPR): The rights of Intellectual Property, developed under the Contract, will be either the property of Govt. of India or jointly owned by the Govt. of India and the Development Partner. The holding of rights of intellectual property will be decided by the Buyer based on the merits of the case. Even where IPR is jointly held, Govt. of India will have the marching rights on IPR, i.e., the Development Partner will have to give technical know-how/design data for production of the item to the designated Production Agency nominated by Govt. of India. The Development Partner will, however, be entitled to license fee / royalty from

designated agency as per agreed terms and conditions. The Development Partner will also be entitled to use these intellectual properties for their own purposes, which specifically excludes sale or licensing to any third party.

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PART V- Vendor Qualification Criteria
(To be filled only by vendors who are not registered with RCI/any DRDO Lab)

The broad criteria for qualifications of bidders should be in the following terms:

i) Technical Capabilities

1. Expertise available in the critical areas to complete the task ()

ii) Manufacturing Facilities

1. Availability of Infrastructure required to carry out the activity ()

iii) Financial Capabilities

1. Should have minimum financial resources to execute the order ()
2. Numbers of such type of contracts executed in past.

iv) Management Capabilities

1. Availability of Quality Management System, Quality Control System etc.
2. Compliance of delivery schedule.

Note - For Turnover related yardstick, guidelines issued by CVC on pre-qualification criteria vide OM No. 12-02-1-CTE-6 of 17.12.2002 as amended should be referred.

Part VI - Evaluation Criteria of Bids

1. Evaluation and Acceptance Process: The bid will be considered and selected based on instructions contained in Part I of the RFP for further evaluation of bids as per sequence given below:

i) **Techno-Commercial Bid Evaluation:** Bids will be evaluated based on vendor qualification requirement as per Part IV of RFP, if applicable, and bids of the qualified bidders will be considered for further evaluation as mentioned in Part V of the RFP.

ii) **Price Bid Evaluation:** The Price bid of those bidders whose Techno-Commercial bid (if applicable) has been accepted will be opened and comparative statement will be prepared. The best acceptable bid will be decided upon the lowest price quoted by the particular Bidder as per the Price Format given at Part VII of the RFP. (The Lab should mention the basis for evaluation of commercial bid i.e. whether line wise or lot wise).

2. Procedure for Cost Comparison: The basis for comparison of cost in different situations would be as follows:

a) If competition is only among Indian bidders, the financial implication should be considered on the basis of FOR prices at destination, i.e., all inclusive cost viz. basic price plus taxes, freight, insurance etc. payable by the DRDO Lab/Estt after availing various benefits of exemptions from taxes/duties as applicable to DRDO.

b) In import cases, all the foreign quotes will be brought to a common denomination in Indian Rupees by adopting the exchange rate as BC selling rate of the State Bank of India on the date of the opening of Price Bids.

c) If competition is among foreign bidders, the basis for comparison should be the landed price at the destination (designated port) in accordance with Para 19 of Part-III of the RFP.

d) If competition is amongst Indian and foreign bidders, the CIP/CIF cost quoted by the foreign bidders would be the basis for comparison with the basic cost (FOR) offered by Indian bidders, after off loading the Excise Duty, Custom Duty, Central Sales Tax (CST) / Value Added Tax (VAT) and other local taxes and levies. The term Indian bidders would also include DPSUs and Indian Ordnance Factories.

e) The Buyer reserves the right to evaluate the offers received by adopting Discounted Cash Flow (DCF) method with a discounting rate in consonance with the existing Government borrowing rate. DCF method would be used for evaluation of bids in the following cases:

i) To compare different payment terms, including advance payments and progressive stage payments so as to bring them to a common denomination for determining lowest bidder.

ii) To deal with cases where entering into AMC for period in excess of one year is a part of the contract for evaluation of the bid.

f) **Net Present Value (NPV):** NPV method is a variant of DCF method which may be used for evaluation of tenders. The NPV of a contract is equal to the sum of the present values of all the cash flows associated with it. When choosing among the various bids, the bid with the lowest NPV will be selected. The following formula may be used for calculating NPV of a bid :

$$NPV = \sum_{t=0}^N \frac{A_t}{(1+i)^t}$$

Where

- A_t : Expected cash flow at time t
 t : Time of expected cash flow
 N : Total period
 i : Discount rate

Where

- A_t : Expected cash flow at time t
 t : Time of expected cash flow
 N : Total period
 i : Discount rate

g) Discount rate to be used under the method is to be the Prime Lending Rate of State Bank of India on the Date of Opening of Price Bids.

h) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected accordingly.

i) If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

3. The best acceptable bid will be considered further for placement of the Contract after price negotiation as decided by the Buyer.

Part VII - Price Bid Format

1. Price Bid Format: The Price Bid Format as given below is required to be filled by Bidders:

i) Basic cost of the item/items:

Sl. No	Description of Item	Qty.	Unit Cost (In Rs.)	Tax Rate (In %)	Tax (Description)	Total Tax	Total Unit Cost (In	Total Cost (In Rs.)	Remarks
		0	0	0		0	0	0	
Grand Total		0							

ii) Accessories

iii) NRE

iv) Installation / Commissioning charges

v) Training

vi) Technical literature/Documentation

vii) Tools

viii) Any other item

ix) Quantum of discount, if offered

x) Is Excise Duty (ED) extra? If yes, then mention following -

a) Total value of items on which Excise Duty is leviable:

b) Rate of Excise duty (item-wise, if different ED is applicable):

c) Surcharge on Excise duty, if applicable?

d) Total value of excise duty payable:

xi) Is Excise Duty Exemption (EDE) required:

xii) Is VAT extra? If yes, then mention following:

a) Total value on which VAT is leviable:

b) Rate of VAT:

c) Total value of VAT leviable:

xiii) Is Service Tax extra? If yes, then mention following:

a) Total value of Services on which Service Tax is leviable:

b) Rate of Service Tax leviable:

c) Total value of Service Tax leviable:

xiv) Is Custom Duty Exemption (CDE) required: If yes, then mention following:

- a)CIF value of stores to be imported:
- b)Rate of Customs Duty payable:
- c)Total amount of Customs Duty payable:
- xv)Octroi / Entry taxes:
- xvi)Any other Taxes / Duties / Overheads / Other costs:
- xvii)Grand Total:
- xviii)Comprehensive AMC cost
- xix)Non- Comprehensive AMC cost
- xx)ToT Cost

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