

**RESTRICTED**

**BROAD AoN DETAILS FOR PROCUREMENT OF QUANTITY 90 REMOTELY CONTROLLED WEAPON STATION (RCWS) 12.7 MM NSVT FOR ARMoured REGIMENTS ALONG NORTHERN BORDERS UNDER BUY (INDIAN) CATEGORY AS PER THE PROVISIONS OF CHAPTER V OF DAP 2020 (FAST TRACK PROCEDURE)**

1. **AoN Date.** 31 Oct 2022.
2. **Item Description (Weapon / Equipment / Platform).** Remotely Controlled Weapon Station (RCWS) 12.7 mm NSVT
3. **Quantity.** Quantities 90 numbers Remotely Controlled Weapon Stations (RCWS) 12.7 mm NSVT with associated accessories.
4. **Categorisation.** Buy (Indian) as per provisions of Chapter V of DAP 2020 Fast track procedure .
5. **ORs of the Item.** Broad ORs of the item is as given below :-

S No	Aspect	ORs
1.	Weight	Should be less than 185 Kgs without weapon
2.	Weapon Cradle	Should support 12.7 mm NSVT
3.	Mounting Type	2 Axes Stabilised system
4.	Sensor Suite	Should include single LRU Optronics sensor package featuring a cooled thermal imager, day imager, laser range finder and a video target tracker as a single LRU unit.
5.	Multi Function Display Unit	Should have a MFDU consisting of a LCD monitor with keys capable of all initialisations, operational settings, calibrations and diagnostics and operating various menu. It should be capable of up gradation due to technological advancement.
<b><u>RCWS</u></b>		
6.	Type of Platform	Independent Pan and tilt
7.	Drive	RCWS drive to be in traverse and elevation
8.	Elevation	- 7 <sup>0</sup> to + 75 <sup>0</sup> or better
9.	Motion Velocity	Max - ≤1 rad/sec Min - between 0.5 rad/sec to 0.25 rad/sec
10.	Rotation	N x 360 <sup>0</sup> angle in Azimuth
11.	Stabilisation accuracy	Less than 0.3 m Rad or better
<b><u>Electro Optical Sighting System (Thermal Camera)</u></b>		
12.	Spectral Range	3 - 5 μ m
13.	Detector Resolution	640 x 512 pixels or better
14.	Pixel Pitch	15 μ m or less
15.	WFOV	Min 14 <sup>0</sup> (H) X 11 <sup>0</sup> (V) or better

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<b>S No</b>	<b>Aspect</b>	<b>ORs</b>
16.	NFOV	Min 1.7 <sup>0</sup> (H) X 1.3 <sup>0</sup> (V) or better
17.	Zoom	Continuous optical zoom of 20x or more
18.	MTBF of Cooler of TI sight	8,000 hrs or more
<b><u>LRF</u></b>		
19.	Type	Eye Safe Class I
	Spectral range	1550 nm
20.	Distance	Min - ≤50 mtr Max - 5 km Veh target (in clear visibility)
<b><u>Day Sight</u></b>		
21.	Zoom	Continuous Optical Zoom of X 27 or better
22.	WFOV	Min 14 <sup>0</sup> (H) X 11 <sup>0</sup> (V) ± 5% or better
23.	NFOV	Min 1.7 <sup>0</sup> (H) X 1.3 <sup>0</sup> (V) ± 10% or better
24.	Sensor Type	2 mega pixel CMOS sensor or better
<b><u>Ranges (Day Camera and Thermal Imager)</u></b>		
25.	Detection (Human)	Min 2.5 Km
26.	Recognition (Human)	1.5 to 2 km mtr
27.	Identification (Human)	800 to 1000 mtr
28.	Auto Video Target Tracker	The system should have a video tracker capable of auto tracking targets.
<b><u>Misc</u></b>		
29.	Test Facility	Built in Test Equipment
30.	Mil Std	Compliance to Mil std 810, 461,464,482
31.	EMI/EMC	Mil Std – 461 E/F/G
32.	Tracking	Should incorporate a automatic video target tracker to follow a selected moving target
33.	Operating Temperature	Max 40 <sup>0</sup> C to 45 <sup>0</sup> C Min (-)10 <sup>0</sup> C to (-) 20 <sup>0</sup> C
34.	Display	Mil grade ruggedized commander Display
<b><u>Safety Requirements</u></b>		
35.	Physical Safety	Mechanical and software controlled supporters to limit the arcs of fire
36.	Safety Switch	The system should have a remotely located safety switch to enable/ disable firing of the gun

<b><u>System Control Panel</u></b>		
37.	SCP consisting of joystick/knobs	This should enable following (a) Selection of modes of operation (b) Gun control including firing (c) Complete control of the system during engagement (d) Inputting of range and bearing automatically and manually (e) Sight selection (Day/ Night) and control
38.	Accuracy	The accuracy of the in-service wpns should remain the same
39.	Zeroing	Zeroing procedure of the sight should be specified by the vendor.

6. **Service Life of Equipment.** 15 years

7. **Special Instructions on Field Demonstration.**

(a) Field demonstration will be conducted post issue of RFP at locations decided by Empowered Committee through BOO for evaluation of operational requirements at No Cost No Commitment Basis. Contract will be signed only after successful evaluation of field demonstration.

(b) EMI/EMC compliance will be on certificates from either NABL /IABL accredited labs.

8. **Special Instructions .** RFP will be uploaded as per the provisions of Chapter V of DAP 2020.

Station : New Delhi

Date : Nov 2022

(Jai Singh)

Col

Col AC (AC-2)

For DG Armd Corps