HIGH POWER RADAR (HPR)

Electronics and Radar Development Establishment (LRDE), a premier lab under DRDO has developed state-of-art Radar systems and associated Technologies. LRDE is seeking Expression of Interest (EOI) from prospective bidders/recipient for Transfer of Technology in the area of Radars.

Presently, LRDE is ready for ToT for the "**High Power Radar (HPR)**". Prospective bidders for EOI are advised to refer the Transfer of Technology link on the DRDO website, <u>www.drdo.gov.in</u> for further details/description of the system.

The terms and conditions to be complied by the bidders for receipt of technology are available in the document, "Guidelines for Transfer of Technology" published in the Transfer of Technology link on the website, <u>www.drdo.gov.in</u>.

1 Description of Technology:

The HPR is an Active Aperture Phased Array Radar based on Solid State Transmit-Receive

Modules. The Active Phased Array technology allows electronic scanning in azimuth as well as elevation. These radars have non-rotating design with multiple planar arrays to provide 360[°] coverage without the requirement of mechanical rotation. The Radar provides seamless transition of target tracks from one planar array to the adjacent planar array. The Radar will have capability



to detect targets in excess of 400 Km in range. The radar is required to classify targets automatically and have advanced ECCM features. The Radar will be capable of resolving target in four dimensions (4D) namely Range, Azimuth, Height and Doppler Velocity. The Radar will have the capability to interface with IFF system and correlate with the target data.

2 Physical Configuration

The illustrative picture of static four-wall physical configuration of HPR is shown as below:



The exploded view of the radar sub-assemblies inside the four walls are shown as below



3 Realization Approach

The Radar will be realized based on the building blocks from proven technologies available with LRDE.

4 Installation and Maintenance aspect

The Radar will be installed, integrated and made operational at the deployment site identified by IAF. It will be qualified for deployment up to an altitude of 3000m Above Mean Sea Level and withstand severe environment conditions existing at these deployment sites. The Radar will be operational on a 24x7 basis with low maintenance requirements and will be integrated in the IACCS Network of IAF. Complete post deployment maintenance will be carried out by identified Production Agency (PA).

5 Performance evaluation

The Field trials of the radar in integrated mode will be carried out at deployed location, to meet all parameters of the Radar Specifications during acceptance.

6 Application Areas

The Radar will be used in the Air Defence role.

Interested Industries may submit their company profile, financial &technical Capabilities etc. as per the EOI terms (Refer Appendix-G in 'Guidelines for ToT' document) to Director, LRDE, Bangalore and copy to Director DI²TM on the following addresses within 45 days of this advertisement.

Director, LRDE	Director, DIITM
DRDO, Min. of Defence,	Room No 446 DRDO Bhawan
C V Raman Nagar	DRDO HQrs Ministry of Defence
Bengaluru-560093	Rajaji Marg New Delhi – 110011
Contact No : 080 - 25025415	Contact No : (011) 23016216 / 23007446
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