GOVERNMENT OF INDIA
(Ministry of Home Affairs)
DIRECTORATE GENERAL
CENTRAL RESERVE POLICE FORCE
EAST BLOCK-7, SEC-1, R.K. PURAM, NEW DELHI-110066
(Tele/Fax No-011-26107493, Email-Id: comncell@crpf.gov.in)

No. B.V-7-C/2020-21-C (HWBR) Dated, the 04th March’2021

Subject:- REQUEST FOR COMMENTS OF STAKEHOLDERS/OEM/FIRMS ON QRS (QUALITY REQUIREMENT) & TDS (TRIAL DIRECTIVES) OF “DIGITAL HAND HELD WIDE BAND RECEIVER”

1. The proposed QRs/TDs of “Digital Hand Held Wide Band Receiver” is attached as Appendix ‘A’. The OEMs/Vendors are requested to forward information of the product which they can offer and also forward correct specifications of their system against each parameter. Complied or not complied remarks will not be accepted.

2. The required information/details may please be forwarded at the following addresses by 19th March’2021.

DIG(Equipment)
Directorate General CRPF
Level-4, East Block-7, Sec-1, R.K. Puram
New Delhi-110066
Email: comncell@crpf.gov.in

3. An early response is requested.

(P.R. Jha, DC(Comn))
For DIG (Equipment)
Directorate General, C R P F
<table>
<thead>
<tr>
<th>S. N.</th>
<th>Parameters</th>
<th>Specifications</th>
<th>Trial Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Role</td>
<td>Hand Held</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>a)</td>
<td>Operational Mode</td>
<td>Memory scan, Programme scan</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>b)</td>
<td>Frequency range</td>
<td>100 KHz to 1300MHz or better</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>c)</td>
<td>No. of memory channel</td>
<td>Minimum 2000 memory channel</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>d)</td>
<td>Memory bank</td>
<td>40 or more</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>e)</td>
<td>Search bank</td>
<td>40 or more</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>f)</td>
<td>Tuning steps/frequency resolution</td>
<td>Minimum step size 10 Hz</td>
<td>Board will check practically</td>
</tr>
<tr>
<td>g)</td>
<td>Receive mode</td>
<td>Intercept both digital and analog modes:</td>
<td>Board will check practically with available radio set and firm will also submit OEM certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Digital mode – DMR(4FSK), DPMR, NXDN, P25  (APCO25), TETRA, D-STAR, ALINCO EJ-47U, YAESU, DIGITAL-CR etc</td>
<td></td>
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<td></td>
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<td>b) Analog mode – AM, USB, LSB, CW, NFM etc</td>
<td></td>
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<tr>
<td>h)</td>
<td>Antenna Impedance</td>
<td>50 Ω</td>
<td>Firm will submit OEM certificate</td>
</tr>
<tr>
<td>i)</td>
<td>Selectivity</td>
<td>CW 0.2 / 0.5 KHz (-3dB)</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SSB 1.8 / 2.6 KHz (-3dB)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AM 3.8 / 5.5 / 8 / 15 KHz (-3dB)</td>
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<td></td>
<td></td>
<td>FM 6 / 15 / 30 KHz (-3dB)</td>
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<td></td>
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<td>WFM 100 KHz (-3dB)</td>
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<td></td>
<td></td>
<td>Digital Mode 6 / 15 / 30 KHz (-3dB)</td>
<td></td>
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<tr>
<td>j)</td>
<td>Sensitivity</td>
<td>530 KHz – 17.99999 MHz: 0.75 µv (12 dB SINAD, 18 MHz-1300 MHz: 0.35 µv (12 dB SINAD)</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>i)</td>
<td>VFO</td>
<td>Minimum 3 Nos (0.5-1300 MHz)</td>
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<tr>
<td>l)</td>
<td>Frequency stability</td>
<td>≤ ± 5 PPM or better</td>
<td></td>
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<tr>
<td>m)</td>
<td>AF Power output</td>
<td>400mw or better</td>
<td></td>
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<tr>
<td>n)</td>
<td>Weight &amp; dimensions</td>
<td>Less than 600 gms and 80 mm (W) x 150 mm (H) x 50 mm (D)</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>S. N</td>
<td>Parameters</td>
<td>Specifications</td>
<td>Trial Directive</td>
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<tr>
<td>2.</td>
<td><strong>Power Supply</strong></td>
<td></td>
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<tr>
<td></td>
<td>a) Battery rating</td>
<td>Maximum 7.5V, 2000 mAh(min)</td>
<td>BOO will check practically</td>
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<tr>
<td></td>
<td>b) Charger</td>
<td>Charging of rechargeable batteries</td>
<td></td>
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<td></td>
<td>c) Battery working hours</td>
<td>Not less than 8 hours</td>
<td></td>
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<td></td>
<td>d) Current consumption</td>
<td>500 mA (Max)</td>
<td></td>
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<td>3.</td>
<td><strong>Environmental Parameters</strong></td>
<td></td>
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<tr>
<td></td>
<td>a) Operating temperature</td>
<td>-10° C to + 50° C</td>
<td>Firm will submit certificate of any Govt. Lab or NABL OR ILAC accredited laboratory</td>
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<tr>
<td></td>
<td>b) Water protection</td>
<td>IPX5 or superior</td>
<td>Firm will submit certificate of any Govt. Lab or NABL OR ILAC accredited laboratory</td>
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<tr>
<td>4.</td>
<td>Antenna</td>
<td>Suitable antenna for all receiving mode</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>5.</td>
<td>Connector Jack for External speaker/Headphone</td>
<td>Earphone jack for headphone</td>
<td>BOO will check practically</td>
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<tr>
<td>6.</td>
<td><strong>Receiver Feature</strong></td>
<td></td>
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<tr>
<td></td>
<td>Display</td>
<td>Alphanumeric LCD/LED display</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td></td>
<td>a) Keypad back-lit</td>
<td>Should be available</td>
<td>BOO will check practically</td>
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<tr>
<td></td>
<td>b) Priority scanning</td>
<td>Should be available</td>
<td>BOO will check practically</td>
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<tr>
<td></td>
<td>c) Auto store of frequencies</td>
<td>Should be available, (2000 channel or more)</td>
<td>BOO will check practically</td>
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<tr>
<td></td>
<td>d) AFC(Automatic frequency control)</td>
<td>Frequency control function for spot on tuning</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td></td>
<td>e) Squelch</td>
<td>NSQ, LSQ</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td></td>
<td>f) Squelch and Volume control</td>
<td>Should be available</td>
<td>BOO will check practically</td>
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<td></td>
<td>g) Pass frequency mode</td>
<td>Should be available</td>
<td>BOO will check practically</td>
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<tr>
<td></td>
<td>h) Audio recording facility</td>
<td>Not less than 50 Hrs</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td></td>
<td>i) Data clone Lead</td>
<td>To interface with computer software</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>S. N</td>
<td>Parameters</td>
<td>Specifications</td>
<td>Trial Directive</td>
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<tr>
<td>j)</td>
<td>Data backup &amp; Restore data facility via SD/SDHC card</td>
<td>Backup &amp; Restore data (Memory channel/search bank/configuration) facility should be available</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>k)</td>
<td>Real time clock</td>
<td>Should be available</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>l)</td>
<td>Auto sleep, alarm, record timer</td>
<td>Should be available</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>m)</td>
<td>Optional System</td>
<td>Life time online firmware update support for newly added features.</td>
<td>Firm will submit OEM certificate</td>
</tr>
<tr>
<td>m)</td>
<td>Optional System</td>
<td>Receiver should have facility to operate by window-based PC.</td>
<td>BOO will check practically</td>
</tr>
<tr>
<td>m)</td>
<td>Optional System</td>
<td>Audio Analyser software</td>
<td></td>
</tr>
<tr>
<td>m)</td>
<td>Optional System</td>
<td>GPS</td>
<td></td>
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<tr>
<td>n)</td>
<td>Dual Band operation</td>
<td>Should be available</td>
<td>BOO will check practically</td>
</tr>
</tbody>
</table>

7. **Receiver Accessories**

| a)   | Carrying Case | Should be available | BOO will check physically |
| b)   | Belt Clip | Swivel belt clip or alligator type | |

8. **Literature**

| a)   | User Handbook | As per requirement | BOO will check physically |
| b)   | Technical Manual for receiver(optional) | Should give out full technical descriptions of equipment and circuit layout etc. | BOO will check physically |