

संख्या. पी-63013/62/02/2023/मोड-1/सीओसुबल/610-13

भारत सरकार, गृह मंत्रालय
महानिदेशालय सीमा सुरक्षा बल
(रसद निदेशालय: आधुनिकीकरण सैल)
(Email-comdtord@bsf.nic.in)
(Fax: 011-24367683)

ब्लाक संख्या . 10,
सीजीओ काम्पलैक्स,
लोधी रोड, नई दिल्ली-03
दिनांक 18 फरवरी 2025

वरिष्ठ तकनीकी निदेशक

The Senior Technical Director

राष्ट्रीय सूचना-विज्ञान केन्द्र, नोर्थ ब्लाक,
गृह मंत्रालय, नई दिल्ली
NIC, North Block, MHA
New Delhi

(द्वारा ई-मेल)

(ई-मेल पता : mpsugandhi@nic.in)

Sub: Request for comments of stakeholders/OEM on draft QRs & TDs

कृपया गृह मंत्रालय के पत्र संख्या IV-24011/12/2011-Prov-I(part)(CFN 3300890)-1710 दिनांक 31st Aug 2015 के सन्दर्भ में।

2. उपरोक्त विषयान्तर्गत सूचित किया जाता है कि तकनीकी विशेषज्ञों के उप समूह द्वारा “**Hand Held Laser Range Finder (HHLRF)- Revision**” के गुणात्मक आवश्यकता/परीक्षण निर्देशों के मसौदे का प्रारूप दिनांक 10 फरवरी 2025 को आयोजित सभा के दौरान तैयार किया गया, जिसको इस आशय से प्रेषित किया जा रहा है कि उक्त उपकरण के गुणात्मक आवश्यकता/परीक्षण निर्देश को गृह मंत्रालय की वैबसाइट पर 15 दिन के लिए अपलोड करने का श्रम करें।

संलग्न: उपरोक्तनुसार

(दिगेन्द्र सिंह पेंवार)
उप कमाण्डेंट (मोड)

प्रतिलिपि :-

1. SO (IT), North Block, MHA : उपरोक्त उपकरण के गुणात्मक आवश्यकता /परीक्षण निर्देशों के मसौदा को आपके सूचनार्थ एवं अग्रिम कार्यवाही हेतु प्रेषित किया जाता है।
(Through E-mail)
(E-mail address: soit@nic.in)
2. IT Wing, FHQ BSF : उपरोक्त उपकरण के गुणात्मक आवश्यकता /परीक्षण निर्देशों के मसौदे को सीमा सुरक्षा बल की वैबसाइट पर 15 दिन के लिए अपलोड करने का श्रम करें। आपसे अनुरोध है कि उक्त मसौदे को गृह मंत्रालय की वैबसाइट पर भी अपलोड करने हेतु निम्नलिखित पता पर ई-मेल करने का श्रम करें:-
(a) Technical Director, NIC, North Block, MHA
(E-mail : mpsugandhi@nic.in)
(b) SO (IT), North Block, MHA
(E-mail : soit@nic.in)
3. Prov Dte (Ord Sec), BSF : For information w.r.t your UO No.186 dated 22 Jan 2025.
4. File.

भारत सरकार, गृह मंत्रालय
महानिदेशालय सीमा सुरक्षा बल
(रसद निदेशालय: आधुनिकीकरण सैल)
ब्लाक संख्या . 10, सीजीओ काम्पलैक्स, लोधी रोड, नई दिल्ली-03
(Email-comdtord@bsf.nic.in)
(Fax: 011-24367683)

संख्या. पी-63013/62/02/2023/मोड-1/सीसुबल/61013 दिनांक 18 फरवरी 2025

विषय : "Hand Held Laser Range Finder (HHLRF)" के गुणात्मक आवश्यकता/परीक्षण निर्देशों पर हितधारकों/निर्माताओं/विक्रेताओं की टिप्पणी के लिए अनुरोध।

"Hand Held Laser Range Finder (HHLRF)" के गुणात्मक आवश्यकता और परीक्षण निर्देशों को परिशिष्ट 'ए' के रूप में संलग्न किया गया है। हितधारकों/निर्माताओं/विक्रेताओं से अनुरोध किया जाता है कि वे उस उत्पाद की विस्तृत एवं स्टीक जानकारी दें। साथ ही प्रत्येक पैरामीटर के अनुरूप अपने उत्पाद के सही विवरणों को प्रस्तुत करें। सिर्फ 'अनुपालना' या 'अनुपालना नहीं' वाली टिप्पणी स्वीकार नहीं की जाएगी।

- क्या आप मूल उपकरण निर्माता/विक्रेता हैं?
- यदि विक्रेता मूल उपकरण निर्माता का विवरण देता है।
- मूल उपकरण निर्माता से प्राधिकरण प्रमाण पत्र।
- उत्पाद की मूल सूची।
- उत्पाद ब्रोशर एवं साहित्य रचना का ब्यौरा

1. आवश्यक जानकारी/विवरण 04 मार्च 2025 तक निम्नलिखित पते पर भेजे जा सकते हैं।

रसद निदेशालय, सीमा सुरक्षा बल
लेवल-8, ब्लाक-10,
केन्द्रीय कार्यालय परिसर, लोधी रोड,
नई दिल्ली-110003
ईमेल:- comdtord@bsf.nic.in

2. शीघ्र प्रतिक्रिया का अनुरोध किया जाता है।


(दिगेन्द्र सिंह पॅवार)
उप कमाण्डेंट (आधुनिकीकरण)

Government of India
Ministry of Home Affairs
Directorate General Border Security Force
(Prov Dte: Mod Cell)
Block No.10, CGO Complex, Lodhi Road, New Delhi-03
(Fax: 011-24367683, Email-comdtord@bsf.nic.in)

No. P-63013/62/02/2023/Mod-I/BSF/610-13

Dated, the 18 Feb 2025

Subject : Request for comments of stakeholders/OEM/Firms on QRs (Qualitative Requirements) & TDs (Trial Directives) of "Hand Held Laser Range Finder (HHLRF)"

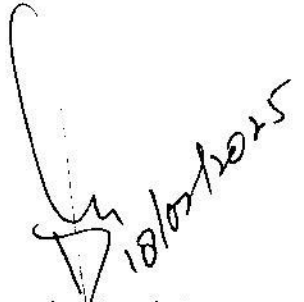
The draft QRs/TDs "Hand Held Laser Range Finder (HHLRF)" is attached as Appendix-'A'. The OEMs/Vendors are requested to forward information of the product, which they can offer and also forward correct specifications of their system against each parameter. Only complied or not complied remarks will not be accepted. The firms are also requested to furnish the following details:-

- Whether you are OEM/Vendor?
- If vendor details of OEM.
- Authorization certificate from OEM.
- Original catalogue of the product
- Brochure/Literature of the product

2. The required information/details may please be forwarded at the following addresses by 04.03.2025.

Directorate General BSF,
Level-8, Block No. 10,
CGO Complex, Lodhi Road,
New Delhi-110003
Email: comdtord@bsf.nic.in

3. An early response is requested.


(Digendra Singh Panwar)
Dy. Commandant (Mod)

QRs & TDs OF HAND HELD LASER RANGE FINDER (HHLRF)-REVISION

S/No	QRs/ Specification	Trail Directives	Remarks
1.	The instrument should be Binocular, compact, Hand held, easy to carry and user friendly.	Check the system for Binocular version, compact, hand held and easy to carry & operate.	
2.	The system should have the following sub-units integrated in a single housing: i. LASER Range Finder ii. Thermal Imager for night time iii. Color Camera for day time iv. Global Positioning System (GPS) v. Digital Magnetic Compass (DMC)	Check the system for Sub-units mentioned at QRs Para 2 and integrated in a single housing.	
3.	It should have <ul style="list-style-type: none"> • Standard connectors for analog (CCIR-PAL System) • HDMI , C2 external video Out-put (Optional) 	Check the video out-put (CCIR- PAL system) for analog ➤ HDMI C2 external video Out-put. (optional)	
4.	It should be light weight (Not more than 3 Kg with battery).	Measure the weight of the system including battery with the help of weighing machine. It should not be more than 3Kgs.	
5.	a) Diopter adjustment: Minus 4 to Plus 4 Diopter or better. b) It should have arrangement to adjust Inter-Pupillary Distance (IPD) i.e 55- mm to 70 mm. The mechanism should be easy to operate and user friendly.	a) Check the Eye-piece for Diopter adjustment limits with the Diopter apparatus in the SIW Lab. b) Check the system for adjustment of Inter-pupillary distance i.e 55 mm to 70 mm. And its adjustment for smooth functioning.	
6.	It should display the data of Target Range, Azimuth, Elevation and Height Difference with the lasing (Through the use of LASER Beam).	Switch 'ON' the system, aim at targets at a distance of 1 KM with different terrain/ground like plain and height. Then, laze/fire the LASER. Check the information about the aimed target on the screen.	
7.	It should be provided with adjustable, non- magnetic telescopic tripod. It should have the following features; i. Height of extended tripod should be 180 ± 10 cm. ii. Suitable leg locking mechanism should be provided to lock the	<ul style="list-style-type: none"> • Check the Tripod telescopic type with adjustable legs and suitably interfaced with the system. • Check the Tripod made of non-magnetic material with the help of magnet. Check the Tripod height in fully opened condition with the help of measuring tape. 	

S/No	QRs/ Specification	Trail Directives	Remarks
	legs firmly.	<ul style="list-style-type: none"> Open the Tripod and check the legs locking mechanism for its suitability and smooth functioning. 	
8.	The system should display the output video of the day and night camera on single screen.	Check the out-put of both the cameras on OLED screen.	
9.	It should have OLED Display having minimum Resolution 800 x 600	Check the system for display type and its resolution. The firm should submit OEM certificate in r/o the same.	
10.	POWER SUPPLY		
	i. Battery – Rechargeable battery inside cover of main equipment. It should run the equipment at least four hours continuously on single charge. Two spare battery will also be provided with each equipment.	<ul style="list-style-type: none"> Physically check the rechargeable batteries and their quantity. Switch 'ON' the system on fully charged battery and observe the continuous operation on single charge. 	
	ii. External power source: AC adapter on 110- 270 Volt, 50 Hz mains Supply.	Connect the AC/DC adopter on 50 Hz variable AC mains supply and check the out-put voltage by varying the in-put voltage from 110 to 270 volts.	
	iii. Battery charger operable on AC & DC to be provided.	To be Physically checked by the BOO	
	iv. Battery charging time 4 hours maximum.	Put a fully discharged battery with the battery charger on AC mains supply and observe it to charge fully within 4 hours.	
11.	LASER RANGE FINDER :		
	i) Range: Minimum 100 meter to 8,000 meter or more for target size – 2.3 mtr x 2.3 mtr.	Switch 'ON' the system and check the range of targets at 100 meters and 05 Km away by firing the LASER.	
	ii) Accuracy: ± 5 meters.	To be Physically checked by the BOO	
	iii) Measuring frequency : a) Normal: 1 shot and measurement in every 6 seconds. b) Best: Maximum 3 shots and measurements in 6 seconds.	To be Physically checked by the BOO	
	iv) Multiple targets: Displays first and last target.	To be Physically checked by the BOO. Fire a LASER on a target along the single line of axis having multiple targets in between.	
	v) Discrimination : 50 meters	To be Physically checked by the BOO	

S/No	QRs/ Specification	Trail Directives	Remarks
	vi) False range detection: Not more than 1% of the number of shot.	To be Physically checked by the BOO, select 10 Nos of target of different ranges and fire the Laser and note their measuring value. This procedure to be repeated 10 times.	
	vii) Laser pulse: should be Class-I eye safe, Ocular hazard distance of Zero meter. .	The firm should submit OEM Certificate.	
	viii) Reticule : Centre circle with Horizontal and Vertical scale	To be physically checked by BOO.	
12.	THERMAL CAMERA:		
	<p>The Thermal Camera should have:</p> <ul style="list-style-type: none"> i. Cooled Thermal Imager. ii. FPA resolution : 640 x 512 (Minimum) iii. Spectral Wave band in 3 to 5 μm or 8 to 14 μm. iv. Field of view: <ul style="list-style-type: none"> Wide : 12.5^o x 10^o (min) Narrow : 2.5^o x 2^o (max) v. Optical zoom of 5X (min) vi. Digital zoom : 4X (min) 	<ul style="list-style-type: none"> i. Check the DDC OEM certificate or data sheet submitted by the firm. ii. Check the data sheet/OEM certificate submitted by the firm. iii. Check the data sheet/OEM certificate submitted by the firm. iv. Check the FOV in the SIW Lab on ATS and note down the measurements. v. Fix the equipment on ATS and measure the Optical zoom. vi. Procedure suggested in point no. v 	
	<p>Range :</p> <p>a) Range for human target Detection : 3 Km</p>	<p>Detection : Move a group of 03 persons at a distance of 3 Km. Thermal camera should detect the movement.</p> <p>Detection means: - Ability to detect vehicles, structures (man-made/normal) and any movement of man or animal.</p>	
	<p>Recognition : 1.5 Km</p>	<p>Recognition: Move group of 03 persons at a distance of 1.5 Km. Thermal camera should recognize the human being.</p> <p>Recognition: - Ability to differentiate between civilian/uniformed personnel with man pack/weapon.</p>	
	<p>b) Range for Vehicle Detection : 5 Km (min).</p>	<p>Detection: Place vehicle at a distance of 5.0 Km. HHTI should detect the movement of (broad side) of vehicle.</p>	

S/No	QRs/ Specification	Trail Directives	Remarks
	Recognition : 2.5 Km (min). Note: Vehicle dimension minimum 4010 x 1540 x 1875 mm (LxBxH)	Recognition: Place vehicle at a distance of 2.5 Km. HHTI should recognize the type of vehicle.	
13.	COLOUR DAY CAMERA : Specification		
	i. High Resolution Colour CMOS Camera	Put the Day Camera in normal mode so that only day camera image is displayed on the screen.	
	ii. Resolution : 8 MP (3840(H) x 2160 (V)) or better	Firm has to submit National/ International accredited lab certificate/ report in respect of the same.	
	iii. Field of View (FoV) : Wide : 16° x 12° (min) Narrow : 4° x 3° (max)	To be physically check by the BOO in the lab as per the procedure.	
	iv. Optical Zoom : 4 X (min)	Check the optical zoom physically in the lab as per the procedure.	
	v. Digital Zoom : 4X (min)	Check the digital zoom physically in the lab as per the procedure.	
	vi. Focus : Auto & Manual both	Check the focusing mechanism provided for automatic and manual focusing.	
	Range : Colour Day Camera		
	a) Range for human target Detection : 3.0 Km (min).	Detection : Move group of 03 persons at a distance of 3.0 Km. Day camera should detect the movement.	
	Recognition: 1.5 Km (min).	Recognition: Move group of 03 persons at a distance of 1.5 Km. Day camera should detect the nos of persons with or without man pack/ weapon.	
	b) Range for Vehicle Detection: 5.0 Km (min).	Detection: Place Vehicle at distance of 5.0 Km. Day camera should detect the presence of moving vehicle (broad side).	

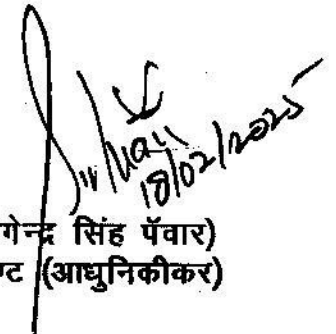
S/No	QRs/ Specification	Trail Directives	Remarks
	Recognition : 2.5 Km (min) Note: Vehicle dimension minimum 4010 x 1540 x 1875 mm (LxBxH)	Recognition: Place Vehicle at a distance of 2.5 Km. Day camera should recognize the type and class of vehicle.	
14.	NAVIGATION SATELLITE SYSTEM:		
	i. It should give co-ordinates in Lat/Lon & Military GR system on Indian datum.	To be Physically checked by the BOO	
	ii. Accuracy : < 05 meters	To be Physically checked by the BOO	
	iii. Acquisition: ≤ 20 second with update rate of 1 per second continuous.	To be Physically checked by the BOO	
	iv. Supports: The system should also supports GPS, IRNSS and <u>GLONASS GALILEO</u> .	To be Physically checked by the BOO.	
15.	DIGITAL MAGNETIC COMPASS :		
	i. DMC Resolution should be 1° or better. ii. Accuracy should be $\leq 1^\circ$.	Choose two targets at the range of 2 km and should apart 50 meter with each other in azimuth direction. Now aim the targets one by one and note the bearing.	
16.	ENVIRONMENTAL :		
	i. Operating temp Range : Minus 30°C to Plus $55^\circ\text{C} \pm 2^\circ\text{C}$	Check the National /International Accredited lab certificate/report submitted by the firm in respect of operating temperature.	
	ii. Storage temp Range : Minus 30°C to Plus $60^\circ\text{C} \pm 2^\circ\text{C}$	Check the National /International Accredited lab certificate/report submitted by the firm in respect of storage temperature.	
	iii. The equipment with all accessories should meet military standard 810- G/JSS 55555 or higher.	Check the National /International accredited lab certificate/ report in respect of the same.	
17.	MISCELLANEOUS:		
	i) Vendor to provide User's manual and Technical /Maintenance Manual.	To be Physically checked by the BOO.	
	ii) Base Workshop level training to minimum 10 technicians at OEM premises on full-fledged running testing, diagnostic and	An undertaking in this regard will be obtained from the firm	

S/No	QRs/ Specification	Trail Directives	Remarks
	calibration set up.		
	iii) Should have a ruggedized / customized container for transportation.	To be physically checked by the BOO. Transportation case placed at a height of minimum 2 mtr with HHTI inside and drop on a hard surface. Transportation case should not be deformed and have any crack. Eqpt should work properly.	
	iv) Warranty: The warranty period should be 2 years and repair and maintenance support for 10 years after completion of warranty period.	Undertaking in this regard must be obtained from firm.	
	iv) Electronic support Package (ESP) should be provided by the OEM in consultation with the user.	An undertaking in this regard will be obtained from the firm	

तकनीकी विशेषज्ञों के उप समूह द्वारा यह निश्चित किया गया है कि उक्त गुणात्मक आवश्यकता को अधिक बेहतर बनाने के लिए गृह मंत्रालय एवं सीमा सुरक्षा बल की वेबसाईट पर विक्रेताओं/फर्मों के सुझाव प्राप्त करने हेतु 15 दिन के लिए अपलोड किया जाए।

नोट - सभी विक्रेताओं/फर्मों से निवेदन है कि अपने सुझावों के साथ निम्नलिखित कागजात संलग्न कर ई-मेल पता comdtord@bsf.nic.in पर भेजने का श्रम करें:-

1. उत्पाद की वास्तविक विवरण पुस्तिका।
2. उत्पाद की साहित्यिक रचना का ब्यौरा।
3. गुणात्मक आवश्यकताओं के उपर व्यापक टिप्पणीयों।


 (दिगेन्द्र सिंह पंवार)
 उप कमांडेण्ट (आधुनिकीकर)