

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 23 अक्टूबर 2025

वरिष्ठ तकनीकी निदेशक

The Senior Technical Director
राष्ट्रीय सूचना-विज्ञान केन्द्र, नोर्थ ब्लॉक,
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 31 अगस्त 2015 के सन्दर्भ में।

2. उपरोक्त विषयान्तर्गत यह सूचित किया जाता है कि तकनीकी विशेषज्ञों के उप समूह द्वारा **Ultra Light Smart Thermal Imager For Weapon System** गुणात्मक आवश्यकता/परीक्षण निर्देशों का प्रारूप दिनांक 08.10.2025 को आयोजित सभा के दौरान तैयार किया गया था जिसको इस आशय से प्रेषित किया जा रहा है कि उक्त गुणात्मक आवश्यकता/परीक्षण निर्देश को गृह मंत्रालय की वेबसाइट पर 15 दिन के लिए अपलोड करने का श्रम करें।

संलग्न : उपरोक्तनुसार

(कपिल चौहान)
23/10/25

उप कमाण्डेंट (मोड)

प्रतिलिपि :-

1. SO (IT), North Block, MHA : उपरोक्त समस्त गुणात्मक आवश्यकता का मसौदा आपके सूचनार्थ एवं
(Through E-mail) अग्रिम कार्यवाही हेतु।
(E-mail address: soit@nic.in)
2. IT Wing, FHQ BSF : उपरोक्त उक्त गुणात्मक आवश्यकता का मसौदे को सीमा सुरक्षा बल
की वेबसाइट पर 15 दिन के लिए अपलोड करने का श्रम करें। आपसे
अनुरोध है कि उक्त मसौदे को गृह मंत्रालय की वेबसाइट पर भी
अपलोड करने हेतु निम्नलिखित पतों 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. Ops Dte (Tech Cell), FHQ BSF : For info w.r.t their letter No.7870 dated 09.10.2025

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)

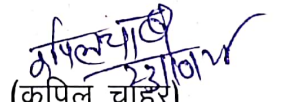
संख्या. पी-63013/225/01/2024/मोड-1/सीसुबल/5184

दिनांक 23 अक्टूबर 2025

विषय : Ultra Light Smart Thermal Imager For Weapon System के सूत्रीकरण गुणात्मक आवश्यकता/परीक्षण निर्देशों पर हितधारकों/निर्माताओं/विक्रेताओं की टिप्पणी के लिए अनुरोध।

1. **Ultra Light Smart Thermal Imager For Weapon System** के सूत्रीकरण 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
2. आवश्यक जानकारी/विवरण निम्नलिखित पते पर दिनांक 06 नवम्बर 2025 तक भेजने का श्रम करें।

रसद निदेशालय, सीमा सुरक्षा बल
लेवल-8, ब्लाक-10,
केन्द्रीय कार्यालय परिसर, लोधी रोड,
नई दिल्ली-110003
ईमेल:- comdtord@bsf.nic.in
3. शीघ्र प्रतिक्रिया का अनुरोध किया जाता है।


(कपिल चहरे)

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-63013/225/01/2025/Mod-I/BSF/5183

Dated, the 23 Oct 2025

Subject : Request for comments of stakeholders/ OEM/ Firms on QRs (Qualitative Requirements) & TDs (Trial Directives) of Ultra Light Smart Thermal Imager For Weapon System

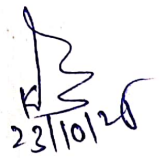
1. The QRs/TDs of "Ultra Light Smart Thermal Imager for Weapon system" is attached as Appendix 'A'. The OEMs/Vendors are requested to forward information of the product, which they can offer and also forward correct specifications of their system against each parameter. Only complied or not complied remarks will not be accepted.

- 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 06 Nov 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.


(Kapil Chahar)
Dy. Commandant (Mod)

DRAFT- QR/TDs Of ULTRA LIGHT SMART THERMAL IMAGER FOR WEAPON SYSTEM

Part-I

Nomenclature of Eqpt: ULTRA LIGHT SMART TI SIGHT FOR WEAPON SYSTEM

1. Trial/ technical evaluation of equipment will be conducted by a Board of Officers (B.O.O) in the presence of vendor or representative of firm to assess actual performance of the equipment.

2. All specifications/ parameters of equipment mentioned in the QRs will be checked by B.O.O during the trial by ascertaining/ verifying in the following ways:

(a) **PHYSICAL CHECK:** - In this category, specifications of the equipment will be checked by B.O.O. physically as per QRs/ TDs.

(b) **FUNCTIONAL CHECK:** - In this category, Vendor/ Supplier will show practically all features/ configurations to the board of officers during trial.

(c) **SUBMISSION OF CERTIFICATE:** - Specification which cannot be checked due to lack of testing facilities/ expertise, certificate(s) will be provided by the vendor, issued by a Government Authorized Laboratory/ International accredited laboratory or OEM as specified against the parameter, and will be acceptable by B.O.O. during trial.

Part-II

GENERAL INFORMATION

Ultra-light thermal imager sight should be compact, lightweight, weapon mounted as well as hand held optical device, which should form an image from LWIR (Long Wave Infra-Red) energy. It should have ability to identify targets in total darkness, smoke and light fog without active illumination. The equipment design should be made in such a way, that it does not affect the accuracy and balance during fire of the weapon on which it is mounted. It should have multi-role flexibility entailing its use for direct fire, reconnaissance, surveillance and over-watch from vehicles. The system should have very low power consumption, to be operable for long duration and it must not be detectable by enemy thermal sensors or infrared tracking devices.

Part-III**Physical and Technical Parameters**

S.No	Qualitative Requirements	Trial Directives	Remarks
1. Thermal Imager Camera			
1.1	Weight- Not more than 200 gm $\pm$ 20g with gun mount	To be physically checked by BOO	
1.2	Dimensions- Not more than 3.5 (L)x2.5(B)x3.5(H) inches with gun mount	To be physically checked by BOO	
1.3	Detection Range- 1200m or more	To be physically checked by BOO	
1.4	Recognition Range- 400m or more	To be physically checked by BOO	
1.5	Resolution – 384x288 pixels or better	Firm to submit OEM certificate in this regard.	
1.6	Pixel Pitch- 12 μ m or better	Firm to submit OEM certificate in this regard	
1.7	Image Rate- 50 Hz or better	Firm to submit OEM certificate in this regard	
1.8	Field of View (FOV)-13°x10° or better	To be physically checked by BOO. Firm to also submit OEM certificate in this regard.	
1.9	Operating temperature – -10°C to +50°C or -20°C to +50°C (as per user requirement)	Firm to submit OEM certificate in this regard	
1.10	Non-Uniformity Correction (NUC) – Sight should have manual and auto NUC features.	To be physically Checked by BOO and firm to also submit OEM Certificate in this regard.	
1.11	Diopter Adjustment – -4D to + 2D or better	Firm to submit OEM Certificate in this regard.	
1.12	Eye Relief – 50mm or more	To be physically Checked by BOO	
1.13	Electronic Zoom- Thermal Imager should have 4x or more electronic zoom	To be physically checked by BOO.	
1.14	Focusing – Sight should have 5m or better to infinity focusing	To be physically checked by BOO	

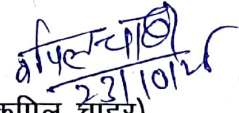
1.15	Initialization time – Sight should have less than 10 seconds initialization time	To be physically checked by BOO	
2. Mil Grade Screen			
2.1	Screen- Mil Grade MIL-STD-810H	Firm to submit OEM certificate in this regard	
2.2	Operating Temperature- -10°C to +50°C or -20°C to +50°C (as per user requirement)	Firm to submit OEM certificate in this regard.	
2.3	Storage – 128 GB ROM or better	To be physically checked by BOO.	
2.4	RAM- 6 GB or better	To be physically checked by BOO	
2.5	Type of Display- Min 6" HD or better	To be physically checked by BOO	
2.6	Battery – 5000 mAH Li-ion or better with continuous run time of minimum 10 hours	To be physically checked by BOO and firm to submit OEM certificate in this regard.	
2.7	Operating System - Fully customized application with provision for regular updates and upgrades	To be physically checked by BOO firm to submit OEM certificate in this regard.	
2.8	Recording- should record thermal footage, firing record and minimum 100 distinct profiles of zeroed weapons.	To be physically checked by BOO	
2.9	Low Battery Indicator- should have low battery Indicator on screen.	To be physically checked by BOO	
3. Gun Mount			
3.1	A) Gun Mount for Mil Std Picatinny Rail- Aluminum Alloy + Steel in black matte anodized finish, light weight and should not wobble or rattle B) Separate customized gun mount for INSAS	BOO to check physically and firm to also submit OEM certificate in this regard.	
3.2	Time for mounting on Iron Picatinny Rail-Less than 30 Seconds	To be physically Checked by BOO.	
3.3	Mount Handle for surveillance- Ergonomic handle for fatigue free surveillance	To be physically checked by BOO	
4. Carrying Case			
4.1	Carrying Case- Hard case-for storage and transportation	To be physically checked by BOO	
5. Accessories			

5.1	Technical literature	To be physically Checked by BOO	
5.2	Training Manual and User Hand book	To be physically Checked by BOO	
5.3	Power supply Adopter/Screen Charger Screen charge time should be less than 02 hours. The system should charge from 0 to 100% within 03 hours.	To be physically Checked by BOO	
6. Training			
6.1	Minimum 02 days or more operational and Maintenance training to 01 person or more per system as desired by user agency at user defined selected locations.	Firm to provide OEM system training Certificate in this regard	
7. Warranty and Repair Support			
7.1	Warranty- The system will remain under warranty period for 2 years from the date of JRI (Joint Receipt Inspection) and the firm will extend all repair and maintenance support during this period without any additional cost	Firm to submit OEM Certificate in this regard	
7.2	Repair support and Maintenance – Undertaking to be provided by firm that repair support/provision of spares will be provided for a period of 5 years after expiry of Guarantee/Warranty.	BOO to physically Checked the undertaking provided by firm	
7.3	Shelf-Life- The Undertaking of shelf-life of equipment up to 7 years be provided by the firm	BOO to physically Check the undertaking provided by 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 दिनों 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 ब्योरा।
3. गुणात्मक आवश्यकताओं के उपर व्यापक टिप्पणीयाँ।


 (कपिल चौहर)
 उप कमांडेंट (आधुनिकीकरण)