

संख्या. पी-63013/228/01/2025/मोड-1/सी0सु0बल/ 786-90

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 01 अप्रैल 2026

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](mailto: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<sup>st</sup> Aug 2015 के सन्दर्भ में।

2. उपरोक्त विषयान्तर्गत सूचित किया जाता है कि तकनीकी विशेषज्ञों के उप समूह द्वारा "TI Monocular" के गुणात्मक आवश्यकता/परीक्षण निर्देशों के मसौदों का प्रारूप दिनांक 03 फरवरी 2026 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 वेबसाइट पर 15 दिन के लिए अपलोड करने का श्रम करें।

संलग्न: उपरोक्तनुसार

कपिल चाहर  
01/04/26  
(कपिल चाहर)

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](mailto:soit@nic.in))
2. IT Wing, FHQ BSF : उपरोक्त उपकरण के गुणात्मक आवश्यकता /परीक्षण निर्देशों के 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](mailto:mpsugandhi@nic.in))  
(b) SO (IT), North Block, MHA  
(E-mail : [soit@nic.in](mailto:soit@nic.in))
3. The DIG (Prov), NSG HQR : For information w.r.t your mail dated 19 March 2026.  
E-mail:[scord@nsg.gov.in](mailto:scord@nsg.gov.in)
4. File.

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

संख्या. पी-63013/228/01/2025/मोड-1/सी0सु0बल/78690 दिनांक 01 अप्रैल 2026

**विषय :** “TI MONOCULAR” के गुणात्मक आवश्यकता/परीक्षण निर्देशों पर हितधारकों/निर्माताओं/ विक्रेताओं की टिप्पणी के लिए अनुरोध।

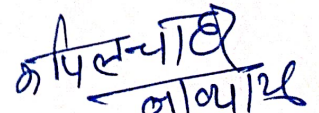
**“TI MONOCULAR”** के गुणात्मक आवश्यकता और परीक्षण निर्देशों को परिशिष्ट 'ए' के रूप में संलग्न किया गया है। हितधारकों/निर्माताओं/विक्रेताओं से अनुरोध किया जाता है कि वे उस उत्पाद की विस्तृत एवं स्टीक जानकारी दें। साथ ही प्रत्येक पैरामीटर के अनुरूप अपने उत्पाद के सही विवरणों को प्रस्तुत करें। सिर्फ 'अनुपालना' 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 15 अप्रैल 2026 तक निम्नलिखित पते पर भेजे जा सकते हैं।

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

2. शीघ्र प्रतिक्रिया का अनुरोध किया जाता है।

  
(कपिल चाहर)  
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-63013/228/01/2025/Mod-I/BSF/786-90

Dated, the 01 April 2026

**Subject : Request for comments of stakeholders/OEM/Firms on QRs (Qualitative Requirements) & TDs (Trial Directives) of "TI MONOCULAR"**

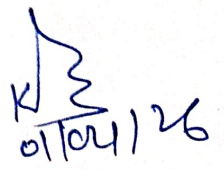
The draft QRs/TDs "TI Monocular" is attached as **Appendix-'A'**. The OEMs/Vendors are requested to forward information of the product, which they can offer and also forward correct specifications of their system against each parameter. Only complied or not complied remarks will not be accepted. The 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 15.04.2026.

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

3. An early response is requested.

  
( **Kapil Chahar** )  
Dy. Commandant (Mod)

**DRAFT QRs & TDs OF TI MONOCULAR**

S/No	Specifications	Parameters	Trial Directives	Remarks
1.	Thermal Imaging Monocular Hand Held compact device which is helmet mountable and head mountable.		(a) Physically check the system for compactness, monocular version and also confirm that the monocular is Thermal Imager. (b) Check the monocular for use as hand held, helmet mountable and head mountable with suitable adaptors / dovetails.	
2.	Magnification	1X	Fix the equipment on Acceptance Test Station (ATS) and measure the magnification of the TI Monocular as per the standard procedure.	
3	(a) Type of Detector : Micro bolometer. (b) Spectral Range : 8 to 14 $\mu\text{m}$ (c) FPA Resolution : 640 x 480 or better at 12 $\mu\text{m}$		Check the detector OEM data sheet/ certificate duly attested by the participating firm and OEM in respect of QRs Para 3 (a) to (c).	
4.	Capturing Frame Rate	30 FPS or better	The firm should submit OEM certificate and datasheet in respect of the same.	
5.	OLED Resolution	800 x 600 (min)	The firm should submit National/ International accredited Lab certificate/ report or OEM data sheet/ certificate duly attested by the participating firm in respect of type of display (i.e OLED) and its Resolution.	
6.	Field of View (FOV)	40° X 30°	(a) Fix the equipment on Acceptance Test Station (ATS) and measure the Field of View as per the procedure. (b) FOV must be 40°X 30° Horizontal - 40° Vertical - 30°	

S/No	Specifications	Parameters	Trial Directives	Remarks
7.	Range: (Single man size target). Detection range – 400 meters or better. Recognition range – 150 meters or better.		Move a single man as target at the range of 400 meters for detection and at 150 meters for recognition at night.	
8	Dioptrre Adjustment	+2 to -4D or better	(a) Check the sight for facility of dioptrre setting. Proceed as per the provision for dioptrre setting provided manually or automatic:- (i) If provided manually, measure the Dioptrre adjustment limits with the help of Dioptrre measuring apparatus in the lab. (ii) If automatic, switch ON the system and observe the thermal picture for reading the OSD texts by wearing spectacles having lens power form +2 to - 4D in the lab.	
9	The system should have mechanism for.	(a) On/ Off. (b) Black Hot / White Hot polarity change. (c) Brightness Control. (d) NUC	Check the system for the following parameters:- (a) Facility to switch On/Off the system.  (b) Facility to change Polarity of Hot.  (c) Facility to control the brightness of the screen.  (d) Switch On the system and observe the picture performance continuously for 30 min for any flickering, freezing of the video and any dead pixels (white or black spot) appearing on the screen.	
10	Battery Status Indicator	System should display battery status on its screen.	Physically check the battery status indication on the screen of the system.	

S/No	Specifications	Parameters	Trial Directives	Remarks
11.	Weight	300 grams with cell/ battery with 10% tolerance.	Check the weight of the system with the help of weighing machine physically without accessories.	
12.	Mil Std	Complete System should be rugged for operations as per MIL STD 810G/H or JSS 5855 for high & low temperature, humidity, shock, vibration and Bump test or better and IP-67	The firm should submit National/ International accredited Lab test report certificate in respect of MIL STD 810G/ H or JSS 5855 and IP-67.	
13.	Battery	Lithium based rechargeable cell/ battery be provided with the system to keep it operational in the operating temp range -30°C to 55°C. <b>Optional</b> One/ two spare batteries as per user requirement	(a) Firm to provide OEM certificate in respect of type of battery and recharge ability.  (b) The firm should submit National/ International accredited Lab test report/ certificate in respect of operating temp range - 30°C to 55°C.	
14.	Battery Efficiency	The system should remain fully operational on single/ set of batteries (rechargeable) for not less than 6 Hrs or better on single charge.	Switch 'ON' the system with fully charged battery in operational mode and not down the continuous run time.	
15.	Battery charger	A suitable Intelligent charger operating on 100 volt to 270 volt AC mains supply should be provided to charge the battery. There should be provision of keeping the battery safe from over-charging. The charger	(a) BOO to physically check the charger for charging and battery fully charged indication.  (b) Connect the charger to AC mains power supply and vary the input voltage of the charger with the help of Variac from 100 volt to 270 volt.	

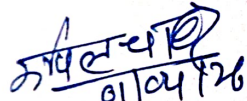
S/No	Specifications	Parameters	Trial Directives	Remarks
		should be able to charge the cells/ battery fully within 5 hours.	(c) Connect a fully discharged battery with the charger and note down the time taken to charge the battery fully.	
16.	Operating Temperature	-30°C to +55°C	The firm should submit National/ International accredited Lab test report/ certificate in respect of temperature -30°C to +55°C.	
17.	Storage Temperature	-40°C to +60°C	The firm should submit National/ International accredited Lab test report/ certificate in respect of temperature -40°C to +60°C.	
18.	Focus	Adjustable (manual or automatic)	Place or select a target at a distance of 50 meters & 400 meters and observe through equipment during night.	
19.	Carrying case	(a) A ruggedize, Polypropylene shock proof container Mil Std for transportation.  (b) An additional soft carrying case with shoulder strap be provided.	(a) Drop the transportation box with equipment and all accessories from a height of 3 meters on hard surface. (b) The firm should submit National/ International accredited Lab test report/ certificate in respect of ruggedized, Polypropylene, shock proofing, IP-67, latest Mil Std for transportation and soft carrying case for water proofing. (c) Check the system for soft carrying case with shoulder strap physically.	
20.	Miscellaneous	(a) Suitable & stable Head and helmet mount accessories to be provided as per the operational requirement of the user. (b) Suitable sling should be	(a) Mount the monocular on head and helmet one by one with the help of respective accessories provided. Check the system mounted on head and helmet for operational suitability in field conditions by cross country	

S/No	Specifications	Parameters	Trial Directives	Remarks
		<p>provided with each equipment for safety.</p> <p>(c) Technical manual/ Operational manual should be provided.</p> <p>(d) One spare Eye guard and black cover should be provided with each system.</p>	<p>movement of soldier in order to ensure the stability.</p> <p>(b) Check the sling provided with the equipment for suitability.</p>	

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 ब्यौरा।
3. गुणात्मक आवश्यकताओं के उपर व्यापक टिप्पणीयों।

  
01/04/26  
(कपिल चाहर)

उप कमांडेण्ट (आधुनिकीकरण)