

संख्या. पी-63013/195/01/2024/मोड-1/सीसुबल 809-12

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 12 मार्च 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 31 अगस्त 2015 के सन्दर्भ में।

2. उपरोक्त विषयान्तर्गत यह सूचित किया जाता है कि तकनीकी विशेषज्ञों के उप समूह द्वारा Video Surveillance Ball-Revision के गुणात्मक आवश्यकता / परीक्षण निर्देशों का प्रारूप दिनांक 05 मार्च 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 वैबसाईट पर 15 दिन के लिए अपलोड करने का श्रम करें।

संलग्न : उपरोक्तनुसार

(दिगेन्द्र) सिंह पवार
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 : i) उपरोक्त उक्त गुणात्मक आवश्यकता का मसौदे को सीमा सुरक्षा बल की वैबसाईट पर 15 दिन के लिए अपलोड करने का श्रम करें। आपसे अनुरोध है कि उक्त मसौदे को गृह मंत्रालय की वैबसाईट 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. The Group Commander : For information w.r.t your letter No. P/604/21/389/VSB/
(Proc), HQr NSG, Prov/Ord/HQ NSG/840 dated 06 Feb 2025.
(Prov Branch: Ord Sec)
Mehramnagar, Near
Domestic Airport Palam,
N/Delhi-110037


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-63013/195/01/2024/मोड-1/सीसुबल/ 809-12

दिनांक 12 मार्च 2025

विषय : “Video Surveillance Ball” के पुनः सूत्रीकरण गुणात्मक आवश्यकता/परीक्षण निर्देशों पर हितधारकों/निर्माताओं/विक्रेताओं की टिप्पणी के लिए अनुरोध।

1. **“Video Surveillance Ball” के पुनः 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 27 मार्च 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।


(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-63013/195/01/2024/Mod-I/BSF/809-12 Dated, the 12 March 2025

Subject : Request for comments of stakeholders/ OEM/ Firms on QRs (Qualitative Requirements) & TDs (Trial Directives) of "Video Surveillance Ball" - Revision

1. The QRs/TDs of "Video Surveillance Ball" -Revision 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 27 March 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)

General.

1. **Sensor-** The Video Surveillance Ball should have following features

- (a) It should have audio and video Svl capacity.
- (b) Should be rugged enough to survive a “throw” upto height of 03 mtr and “roll” of more than 20 mtr with landing in rough terrain, concrete, piles of debris or through windows.
- (c) 360⁰ audio and video coverage.
- (d) Continuous operation up to 02 hrs.
- (e) Night vision capability.

2. **Receiver.** Receiver should have following features:-

- (a) The portable Remote Display Unit should have a TFT display of minimum Five inches or more with inbuilt DVR capability to record and play back.
- (b) This should have output facility for recording on external device.
- (c) This should have S- Video, AV & USB port for extension of display of receiver through RF transmitter.
- (d) This should have LED indication for the signal strength of sensor and BITE test facility on display.

3. **Technical Specifications.**

S.No	QRs/Specification	Trial Directives	Result expected/ Desired	Remarks
(a)	Image sensor			
	(i) Resolution :- More than 450 TV Lines	Check the supporting documents provided by OEM/NABL accredited lab certificate.	Acceptable	
	(ii) Frame rate :- Live Video min 25 fps	Check the supporting documents provided by OEM/NABL accredited lab certificate.	Acceptable	
	(iii) Shutter operation :- Automatic	Should be checked physically by the BOO.	Acceptable	
	(iv) Number of cameras in image sensor :- Minimum Two	Should be checked physically by the BOO.	Acceptable	
(b)	Audio Microphone			
	(i) Audio detection :- Omni directional	Should be checked physically by checking input from all around by the BOO.	Acceptable	
	(ii) Sensitivity of audio microphone: - Should detect human voice from 5 mtr or more.	Should be checked physically by the BOO with the help of measuring tape.	Acceptable	
	(iii) Squelch: - Automatic squelch to decrease noise.	Should be checked physically by the BOO with ear phone.	Acceptable	
(C)	Video and Audio Transmission			
	(i) Indoor transmission distance: - 25 mtr Minimum.	Should be checked physically by the BOO with the help of measuring tape.	Acceptable	
	(ii) Outdoor transmission distance:-100 mtr Minimum.	Should be checked physically by the BOO with the help of measuring tape.	Acceptable	
	(iii) Frequency of control and feedback link/network: - License free.	Check the supporting documents provided by OEM.	Acceptable	

S.No	QRs/Specification	Trial Directives	Result expected/ Desired	Remarks
d)	Illumination			
	(i) Illumination wavelength: – Illumination by using infrared LEDs not visible to Human Eye.	Should be checked physically by the BOO in the dark room with the help of IR sensor and also check the supporting documents provided	Acceptable	
	(ii) Illumination distance:– 5 mtr or more	Should be checked physically by the BOO in the dark room with the help of IR sensor and measuring tape.	Acceptable	
	(iii) Light sensor: – Automatic operation of illuminating light depending on light condition of target area.	Should be checked physically by BOO in the dark room with different light condition of target area.	Acceptable	
e)	Camera			
	(i) Camera Range of sensors ball: – Less than 1 mtr to 20 mtr or more.	Should be checked physically by the BOO with the help of measuring tape.	Acceptable	
	(ii) PAN & Zoom:– PAN 360 ⁰ , 2X Digital Zoom day/night camera	Should be checked physically by the BOO.	Acceptable	
	(iii) Number of Cameras in one sensor:– Two	Should be checked physically by the BOO.	Acceptable	
	(iv) Camera selection/swap:– User selectable	Should be checked physically by the BOO.	Acceptable	
f)	Mechanical specifications			
	(i) Dimensions of Ball unit:– 100 mm diameter or less	Should be checked physically with the help of measuring scale by the BOO.	Acceptable	
	(ii) Weight:– 1Kg (Max)	Should be checked physically with the help of weight machine by the BOO.	Acceptable (suggested weight upto 700 grams)	
	(iii) Stabilization and Motion:– Quick self-stabilization.	Should be checked physically by the BOO.	Acceptable	
g)	Power Source			
	(i) Rechargeable battery: – Li-Ion/LiPO with protection circuit.	Should be checked physically by the BOO.	Acceptable	
	(ii) Battery operation capacity:– Ball unit: Minimum 2 Hrs PDU: Minimum 3 Hrs	Should be checked physically by the BOO.	Acceptable	
	(iii) Battery Charger:– for PDU and Sensor	Should be checked physically by the BOO.	Acceptable	
	(iv) Battery Charging time:– Less than 4 hours	Should be checked physically by the BOO.	Acceptable	
	(v) Battery Charger input: – 220-240V, 50 Hz AC and provision from charging from the vehicle.	Should be checked physically by the BOO.	Acceptable	
	(vi) Fast Charger for charging of Sensor Battery and PDU: – To be provided for Sensor and PDU to charge within 02 hour.	Should be checked physically by the BOO.	Acceptable	
h)	The display Unit - A touch-screen TFT display unit to receive and display audio and video reconnaissance data picked up by Video Surveillance Ball.			
	(i) Remote Display Unit with system software:– The	Should be checked physically and supporting	TFT screen without	

S.No	QRs/Specification	Trial Directives	Result expected/ Desired	Remarks
	portable Remote Display Unit should have a TFT display of minimum five inches along with the system software.	document provided by original equipment manufacturer (OEM) by the BOO.	touch option.	
	(ii) Display:- The display should offer 360° FOV.	Should be checked physically and supporting document provided by OEM by the BOO	Acceptable	
	(iii) Squelch:- Should have automatic squelch with digital noise filter.	Should be checked physically and supporting document provided by OEM by the BOO	Acceptable (FOV(Horizontal) -360°) (FOV (Vertical) -120°)	
	(iv) Endurance:- Should be 3 hours or more in continuous operation	Should be checked physically by the BOO	Acceptable (via Headphone)	
	(v) Memory:- Minimum of 128 GB or more storage for recording of videos.	Should be checked physically by the BOO	Acceptable	
	(vi) Sleep Mode: - Power save mode should be available in case video transmission not required from sensor.	Should be checked physically by the BOO	Acceptable (with 32 GB)	
	(vii) Flip mode: - Image should auto flip in case the Ball is placed upside down.	Should be checked physically by the BOO	Flip option manually through PDU	
	(viii) Audio output jack should be there to listen to the audio being picked up by the ball. :- S - Video, AV and earphone connectors for audio.	Should be checked physically by the BOO.	Acceptable	
	(ix) IP Standard for Ball units:- IP 65 or better	Check the supporting documents provided by certified laboratory.	Acceptable	
	(x) Recording :- (i) Video (include audio) recording continued 02 hrs minimum. (ii) Video extract option must be available.	Should be checked physically by the BOO	Acceptable (2 hour recording but continuously 10 minute minimum)	
j)	Accessories:- The following accessories to be supplied with each system in hard carrying case	Should be checked physically by the BOO	Acceptable	
	(i) Throw able camera ball :- 02	Should be checked physically by the BOO	Acceptable	
	(ii) Training Ball :- 01	Should be checked physically by the BOO	Acceptable	
	(iii) Portable Operator Control Unit with Jacket and battery charger :- 02	Should be checked physically by the BOO	Acceptable	
	(iv) Camera Ball Charger :- 02	Should be checked physically by the BOO	Acceptable	
	(v) Head Phones :- 01	Should be checked physically by the BOO	Acceptable	
	(vi) Telescopic Pole with adaptor: - 02 (For two balls when both are required during the operation.)	Should be checked physically by the BOO	Acceptable	
	(vii) Spare Powering Pin :- 02	Should be checked physically by the BOO	Acceptable	
	(viii) User manual :- 01	Should be checked physically by the BOO	Acceptable	
	(ix) Quick Reference Guide:- 01	Should be checked physically by the BOO	Acceptable	
	(x) Ground Spike:- 01	Should be checked physically by the BOO	Acceptable	
	(xi) Door Hanger for Throw able camera ball:- 01	Should be checked physically by the BOO	Acceptable	
	(xii) Tripod:- 02	Should be checked physically by the BOO	Acceptable	

S.No	QRs/Specification	Trial Directives	Result expected/ Desired	Remarks
	(xiii) Retrieval Rope:- 02	Should be checked physically by the BOO	Acceptable	
k)	Additional Battery charger for PDU and ball units per deployment kit :- 01 X each charger for PDU & ball unit	Should be checked physically by the BOO	Acceptable	
l)	Carrying Case: A single backpack type carrying case housing the complete equipment and its accessories less the pole. A soldier should be able to carry the equipment on his back conveniently. It should be preferably of camouflage pattern :-01	Should be checked physically by the BOO	Acceptable	
	Misc Aspects			
4.	Literature Operating and Technical literature for each discrete components of system should be in English language.			
5.	Demonstration and Training:- Demonstration/Trail of one set of complete system with its full accessories to be given in Delhi on no cost no commitment basis. In site training of users for three days on operation, maintenance, fault finding and user level repairs.			
6.	Warranty:- Comprehensive warranty for 03 years.			
7.	Comprehensive Annual Maintenance Contract/ Repair cover:- The vendor will provide CAMC for 05 yrs after expiry of the warranty. The manufacturer shall guarantee to complete repairs and return the equipment to the customer within 10 days of reporting the fault, during the period the equipment is under warranty / CAMC repair cover to be made available in Delhi.			

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 वेबसाइट पर विक्रेताओं/फर्मों के सुझाव प्राप्त करने हेतु नियमानुसार पर्याप्त समय 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 पेंवार)
उप कमांडेण्ट (आधुनिकीकरण)