

No. P-63013/17/2015-Ord/BSF/5087-89  
Government of India Ministry of Home Affairs  
Directorate General Border Security Force  
(Prov Dte: Mod Cell)  
**Fax: 011-24367683**

Block No.10, CGO Complex,  
Lodhi Road, New Delhi-03

Dated, the Oct 2016

The Technical Director  
NIC, North Block, MHA  
New Delhi

**(Through E-mail)**

**(E-mail address : mpsugandhi@nic.in)**

Sub: **Request for comments of stakeholders/OEM on draft QRs.**

Kindly refer to MHA letter No. IV-24011/12/2011-Prov-I(part)(CFN 3300890)-1710 dated 31<sup>st</sup> Aug 2015.

2. In this connection, it is to inform that draft QR's and Trial Directives of 'Flexible Fiber Scope' formulated by sub group of technical experts during the meeting held on 05<sup>th</sup> Oct 2016 at HQ DG BSF, are forwarded herewith with the request to upload the same on MHA website for 15 days please.

Encl :- As above

Copy to :-

1. SO (IT), North Block, MHA : For information and necessary action alongwith a copy of draft QR's and TD's of 'Flexible Fiber Scope'.  
**(Through E-mail)**  
**(E-mail address: soit@nic.in)**
2. IT Wing, FHQ BSF

i) Alongwith a copy of draft QR's and TD's of 'Flexible Fiber Scope' with the request to upload same on BSF website for 15 days i.e. upto 20<sup>th</sup> October 2016. The text may be removed on 21<sup>st</sup> October 2016.

ii) It is also requested to e-mail this letter alongwith draft QR's and TD's to following addressee :-

(a) Technical Director, NIC, North Block, MHA

**(E-mail : mpsugandhi@nic.in)**

(b) SO (IT), North Block, MHA

**(E-mail : soit@nic.in)**

G (IT)	
प्रादेशिक (विचार एवम कार्य)	
उप-निदेशक (आई टी)	
QC (IT)	
उप-कार्यक्षेत्र (आई टी)	
HEAD CLK	6/10/16
मुख्य निदेशक	
DIARY NO	3591
दफ्तरी नं०	
DATE	6/10
दिनांक	

web desk

**DIRECTOR GENERAL BORDER SECURITY FORCE**  
**(PROVISIONING DIRECTORATE (MOD CELL))**

**Expression of Interest**

Commandant (Ord)  
HQ DG BSF, Prov Dte (Ord Sec)  
Block No. 10, CGO Complex  
Lodhi Road, New Delhi  
(Tele/Fax No. 011-24367683)  
Mail id: [comdtord@bsf.nic.in](mailto:comdtord@bsf.nic.in)

The Sub-group of Technical Experts on Surveillance Equipments constituted by MHA vide their letter No. IV-1017/18/2001-Prov-I dated 05 Jul 2002 held its meeting at BSF Headquarters on 17<sup>th</sup> Feb 2016, 25<sup>th</sup> April 2016, 27<sup>th</sup> July 2016 and 05<sup>th</sup> Oct 2016 to revise the QRs of 'Flexible Fiber Scope'.

After detailed deliberations the referred Sub-group has formulate the revised QRs of Flexible Fiber Scope which are as under:-

S/No	SPECIFICATIONS	PARAMETERS
1.	<b><u>Probe.</u></b>	
	a	Probe effective length. 1.5 mtrs or more.
	b	Outer diameter. 4 mm or less.
	c	Probe type & flexibility. Flexible / Semi-flexible.
2.	<b><u>Optics.</u></b>	
	(a)	Field of view. 70 degrees or more.
	(b)	Direction of view. Forward.
	(c)	Depth of field. 50 mm to infinity.
	(d)	Recognition. Capable of recognizing a human target at least up to a distance of 5 mtrs or more.
	(e)	Day/night viewing capability. Should be able to recognize objects in pitch darkness & day light.
	(f)	Light Source. Eye safe infra-red (invisible to naked eye).
	(g)	Lamp Life. Minimum 1000 hours of operation.
3.	<b><u>Articulation Section.</u></b>	
	(a)	Articulation angle. 4 ways, up/down/right/left/90 degrees or more (to view 360 degrees). All movements should be controlled with joystick.
	(b)	Articulation control. Control with power assist mechanism including locking function. All movements should be electronic or joystick controlled.
	(c)	Operating temperature. -10 degrees C to +46 degrees C (in air).
4.	<b><u>Camera.</u></b>	
	(a)	Camera sensor. CCD or CMOS
	(b)	Camera resolution. Better than 2.9 pixels.
	(c)	Lens. Wide angle 1.8 mm or better.
	(d)	Digital zoom. 2X or better.
5.	<b><u>Audio.</u></b> Microphone in flexible fiberscope.	Supersensitive audio microphone with 5-7 mtrs audio pickup.

*[Handwritten Signature]*

6.	<b><u>LCD Monitor.</u></b>	
(a)	Type.	Handheld LCD monitor with shoulder harness/neck strap to be provided.
(b)	Size.	Minimum – 5" diagonal. Maximum – 7" diagonal.
(c)	Control.	Should have controls for brightness, contrast & zoom.
(d)	Audio video interface.	Provision for audio & video interface should be provided.
7.	<b><u>Recording.</u></b>	
(a)	Encoding wideband.	MPEG 4.
(b)	MPEG 4 frame rate.	30 per sec or better.
(c)	Memory.	Minimum 2 hours of recording on detachable SD card.
8.	<b><u>Power Supply.</u></b>	
(a)	Battery.	Rechargeable & replaceable Lithium Battery. Should be available in India.
(b)	Battery working life.	Minimum 2 hours in day/night working conditions on full charge.
(c)	Battery charging time.	Less than 4 hours.
(d)	Weight of complete system excluding carrying case.	5 kg or less.
9.	<b><u>Accessories with each Fiberscope.</u></b>	
(a)	SD card.	10 Nos. spare detachable SD cards each of 4 GB capacity or more.
(b)	Carrying case.	(i) Soft & hard carrying case with back strap. (ii) Soft & hard carrying case for transport (water proof).
(c)	Spare batteries.	2 Nos. of spare batteries.
(d)	Battery charger.	Quantity 01 per fiberscope. Should work with 220V/230V AC, 50 Hz & 12 V secondary battery.
(e)	Belt sets.	Belt set should enable comfortable operation.
10.	<b><u>Literature.</u></b> Operating & technical literature for each discrete components of system should be in English language.	
11.	<b><u>Training.</u></b> Demonstration of One set of complete system with its accessories should be arranged at buyers' premises on 'NCNC' basis. In situ training for users for three weeks.	

**Note-** All firms are requested to provide the following.

1. Original Brochure of product by OEM.
2. Detail literature about the product.
3. Comprehensive comments for incorporation in the specifications.

The Sub-group has decided to upload the QRs on MHA and BSF website for 15 days to invite the views/ comments/ suggestions of prospective bidders to make the QRs more broad based.

*Rishipal Singh*

(Rishipal Singh)  
Dy Commandant (Mod)