

**DIRECTORATE GENERAL NATIONAL SECURITY GUARD**  
**OPERATIONS BRANCH (WE SEC)**

1. Formulation of QR/TDs for **SWAT Scope** as per Appx att are being contemplated.
2. OEM/Firms are requested to forward their comments/suggestions on the draft QR/TDs as per proforma given below alongwith the details (product specifications, pectoral's etc) of their product meeting the referred QRs.
3. It is requested that comments if any on the QRs may please be forwarded to the under mentioned within 30 days.

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**DRAFT QRs OF SWAT SCOPE**

<b>Ser No</b>	<b>Features</b>	<b>QRs</b>
1.	<b><u>Physical Characteristics</u></b>	(a) Light weight & portable.
		(b) Quickly deployable.
		(c) Mount Type.
		(d) Mount Locking Mechanism.
2.	<b><u>Environment of Characteristics</u></b>	
	(a) Ruggedised	Mil Std 810F or better
	(b) Operating Temperature	-40 <sup>o</sup> C to 63 <sup>o</sup> C
	(c) Weather Resistance	Waterproof & fog proof
3.	<b><u>Operational Characteristics</u></b>	
	(a) Magnification	20x to 60x
	(b) Entrance pupil	72 mm
	(c) Exit pupil	3.6 mm to 1.2 mm
	(d) Eye relief	20.5 mm
	(e) FOV	49 m to 19 m at 1000 m
	(f) Focusing	20 m to ∞
	(g) Resolution	Min 3.0"
	(h) Diopter Setting	+3 dpt
	(j) Transmission	Approx 35%
4.	<b><u>Reticle Pattern</u></b>	
	(a) Reticle	(i) Fire cross hair with center dot. (ii) Reticle pattern with gyration to measure distance & size of tgt.
	(b) Reticle Colour	Black with Red dot centre. Fine reticule should not emit signature towards target side.
	(c) Distance between Reticle dots	10 cm at 100 m
	(d) Distance between centering lines	1m at 100 m
	(e) Illuminated Reticle	Red colour with auto brightness
	(f) Auto Reticle shutoff	After 3 hrs

Ser No	Features	QRs
5.	<b><u>Reflex Sight</u></b>	Should have provision of MIL-Standard-rails for mounting.
6.	<b><u>Optical Coating</u></b>	Should have provision of full-multi coated lens.
7.	<b><u>Other Key Features</u></b>	(a) Tripod should have following provisions:-  (i) Adjustable. (ii) Clamp type locking mechanism. (iii) Tripod head attached with handle.
		(b) Should have provision for :-  (i) Adjustable Sun Shade. (ii) Laser Protection Filter. (iii) Baffle screwable & clampable. (iv) Backlight tube.
8.	<b><u>Power</u></b>	
	(a) Power Requirement to illuminate Reticle	(i) Theeqpt should be able to run on round cell 3 v cr 2032. (ii) Automatic shut-off of reticle illumination after 3 hours.
	(b) Battery Status	(i) Battery status should be indicated on the display while operating the SWAT scope.  (ii) Should have ability to show battery status in percentage left.
9.	<b><u>Battery</u></b>	The system should be provided with :-
		(a) Made of Lithium.
		(b) Commercially available and rechargeable.
		(c) 6hrs to 8hrs of continuous use.
		(d) Should have ability to show battery status in percentage left.
(e) Two spare battery pack should be provided.		
10.	<b><u>Portability and Storage</u></b>	(a) The eqpt to be provided with in suitable rugged case for ease of carriage.
		(b) Literature operation and Technical manual in English should be provided.
		(c) Training demonstration of one complete accessory should be arranged at buyer's premises on NCNC basis. In situ training of users for two day on operation, maintenance, fault finding and user level repairs.

**TRIAL DIRECTIVES FOR SWAT SCOPE**

<b>Ser No</b>	<b>Features</b>	<b>QRs</b>	<b>Remarks (Method of Trial)</b>	
1.	<b><u>Physical Characteristics</u></b>	(a) Light weight, portable weight.	Weight of SWAT scope should be less than 500gm.	
		(b) Quickly deployable.	The mount should have swivel option so that it can be quickly deployed from its storage portion.	
		(c) Mount Type.	Picatinny Rail.	
		(d) Mount Locking Mechanism.	(a) Check quick detach lever mechanism for the quick detach. (b) Check clamp type locking mechanism.	
2.	<b><u>Environment of Characteristics</u></b>			
		(a) Ruggedised	Mil Std810F or better	The firm should provide National/ international accredited lab certificate.
		(b) Operating Temperature	-40 <sup>o</sup> C to 63 <sup>o</sup> C	-do-
		(c) Weather Resistance	Waterproof & fog proof	-do-
3.	<b><u>Operational Characteristics</u></b>			
		(a) Magnification	20x to 60x	To be checked by BOO.
		(b) Entrance pupil	72 mm	To be checked by BOO.
		(c) Exit pupil	3.6 mm to 1.2 mm	The firm should provide the cert.
		(d) Eye relief	20.5 mm	The firm should provide the cert.
		(e) FOV	49 m to 19 m at 1000 m	To be checked by BOO.
		(f) Focusing	20 m to ∞	To be checked by BOO.
		(g) Resolution	Min 3.0"	The firm should provide the cert.
		(h) Diopter Setting	+3 dpt	To be checked by BOO.
		(j) Transmission	Approx 35%	The firm should provide the cert.



8.	<b><u>Power</u></b>		
	(a) Power Requirement to illuminate Reticle	(i) The eqpt should be able to run on round cell 3 v cr 2032. (ii) Automatic shut-off of reticle illumination after 3 hours.	To be checked by BOO.
	(b) Battery Status	(i) Battery status should be indicated on the display while operating the SWAT scope. (ii) Should have ability to show battery status in percentage left.	To be checked by BOO.
9.	<b><u>Battery</u></b>	The system should be provided with:-	
		(a) Made of Lithium.	OEM to be provided by vendors.
		(b) Commercially available and rechargeable.	Battery should be commercially available in the market.
		(c) 6hrs to 8hrs of continuous use.	To be checked by BOO.
		(d) Should have ability to show battery status in percentage left.	To be checked by BOO.
		(e) Two spare battery pack should be provided.	To be provided by vendors.
10.	<b><u>Portability and Storage</u></b>	(a) The eqpt to be provided with in suitable rugged case for ease of carriage. (b) Literature operation and Technical manual in English should be provided. (c) Training demonstration of one complete accessory should be arranged at buyer's premises on NCNC basis. In situ training of users for two day on operation, maintenance, fault finding and user level repairs.	To be checked by BOO. To be checked by BOO. To be checked by BOO.

