

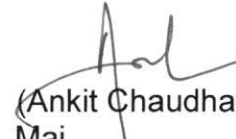
INVITATION OF VENDOR COMMENTS ON REVISED DRAFT QR/ TDs
OF ROUND 40MM HE

1. It is intimated that firms/ vendors' comments are invited on the revised draft QR/ TDs of Round 40mm HE. All firms are requested to offer their comments on e-mail address scord@nsg.gov.in or gcproc@nsg.gov.in as per under mentioned format.

QRs	TDs	Comments by the firm
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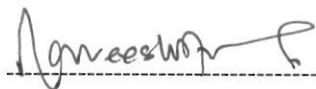
2. You are requested to offer comments within 15 days from the date of uploading on the website. The QR/ TDs of above mentioned equipment/ weapon are being considered by sub group committee meeting for finalization.

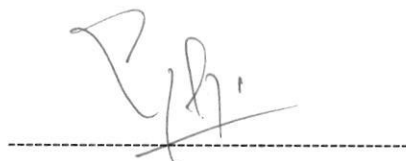
Dated : 20 Oct 2022

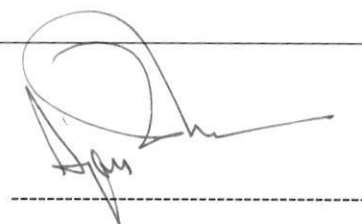

(Ankit Chaudhary)
Maj
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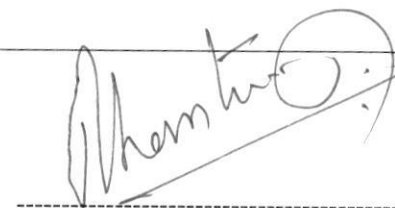
REVISED DRAFT QRS/TDS OF ROUND 40MM HE

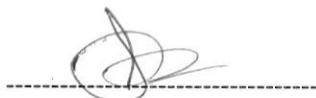
Ser No	Parameter	QRs/Specification	Trial Directives
1.	Caliber	40 x 46mm	To be physically checked by BOOs. OEM to provide certificate in this regard.
2.	Length of Grenade	102 ± 2 mm	To be physically checked by BOOs.
3.	Weight of Grenade(gm)	Minimum 230	To be physically checked by BOOs
4.	Weight of Explosive Charge	40±7 gm	OEM to provide certificate in this regard.
5.	Muzzle Velocity	76±5m/s	OEM to provide certificate in this regard.
6.	MaxRange	375 TO 400 Mtr	<p>(a) When fired from the weapon at an angle of elevation that causes the projectile to achieve maximum horizontal distance, the projectile shall impact at a horizontal distance of 375 to 400 mtrs.</p> <p>(b) To be physically checked by BOOs during field trial. Average range of a group of rounds (10 rounds) to be calculated.</p>
7.	Operational Temperature Range in	-40°C to +55°C	OEM to provide certificate in this regard
8.	Non Arm Distance	Minimum 8 meters from the muzzle of the weapon.	OEM to provide certificate in this regard





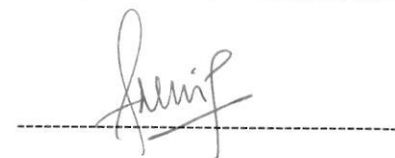




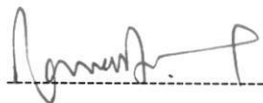
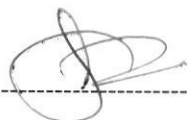


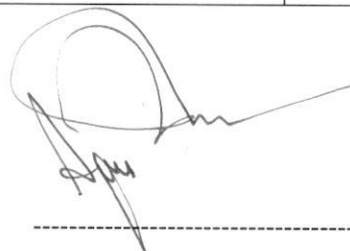
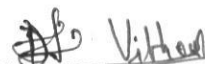
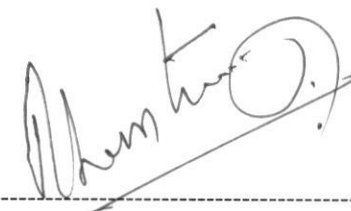







Ser No	Parameter	QRs/Specification	Trial Directives
9.	All Arm Distance	Minimum 28±2 meters from the muzzle of the weapon.	OEM to provide certificate in this regard.
10.	Mode of functioning	(a) Point detonating (b) Point detonating with self destruction mechanism TO BE SPECIFIED BY USER AT TENDER STAGE	OEM to provide certificate in this regard and same to be checked by BOOs during field trial.
11.	Self-destruction Time (in sec) (Applicable in case of round 40 mm HE Point detonating with self destruction mechanism only)	13 to 17	To be physically checked by BOOs during field trial. OEM to provide certificate in this regard.

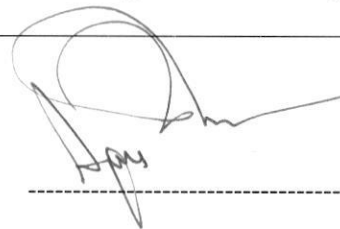

Ser No	Parameter	QRs/ Specification	Trial Directives
12.	Reliability	90%	<p><u>TD</u> 20 Rounds will be fired at max distance and the acceptance criteria will be as under:-</p> <p><u>Critical defect:</u> (a) Premature blast at barrel or in the air before 28 meters is not acceptable. (b) Premature blast along the grenade trajectory- not acceptable.</p> <p><u>Major defect:</u> Primer blowback. – not acceptable. (a) Round stuck up- may be counted towards 90% reliability (b) Failure to extract cartridge case - may be counted towards 90% reliability (c) Incomplete burst/ blind. - may be counted towards 90% reliability</p> <p><u>Note:-</u> 1 misfire out of 10 fired grenades is acceptable. The misfired grenade will not be counted as part of series of 20 grenades being fired for reliability</p>



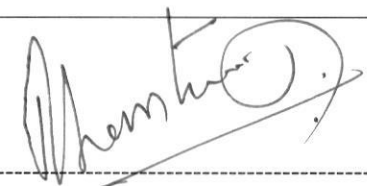









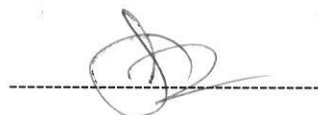


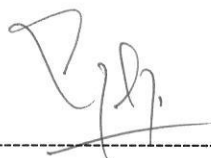




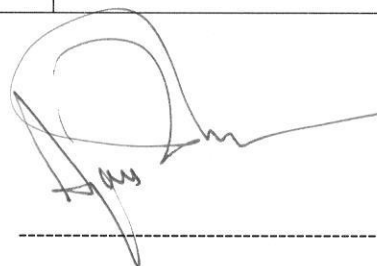
Ser No	Parameter	QRs/Specification	Trial Directives
13.	Consistency (Accuracy) at 75 meters	Grouping of 0.95m x 0.95m or smaller on a vertical target of steel plate with dimensions 2000x 2000x2mm.	30 rounds (inert rounds) to be fired with a mechanical mount and out of 30 rounds, 25 rounds to hit within a group size of 0.95 x 0.95 meters from a distance of 75 meters on a vertical target of steel plate with dimensions 2000 x2000 x 2mm.
14.	Lethality Radius	Minimum 5 meters	OEM to provide certificate in this regard.
15.	Shelf Life	Minimum 10 years	OEM to provide certificate in this regard.
16.	UN HD	1.1	OEM to provide certificate in this regard
17.	Compatibility Group	E	OEM to provide certificate in this regard
18.	Fit for Air Drop	Ammunition should be air droppable and packed inside.	OEM to provide certificate in this regard
19.	Compatibility with weapon	40 mm MGL, 40 mm UBGL (Breech loading type). User to define weapon profile at the time of tender	To be physically checked by BOOs during field trial by firing 05 grenades from each weapon.



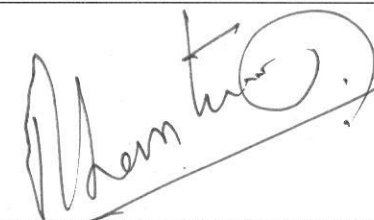


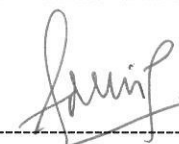




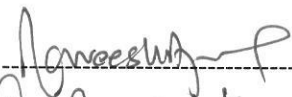





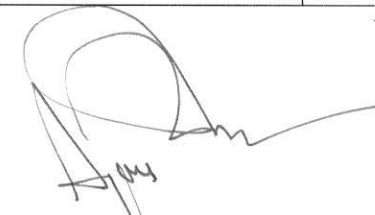





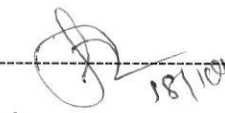
Ser No	Parameter	QRs/ Specification	Trial Directives
20.	<p>The following minimum information will be supplied in English language by the manufacturer :-</p> <p>(a) Frequency of Inspection be clearly mentioned.</p> <p>(b) Parameters for Visual Inspection, Static Proof & Dynamic Proof.</p> <p>(c) Parameters for declaring the ammunition as serviceable, unserviceable and repairable.</p> <p>(d) Instructions for breakdown of ammunition (if any) & method of disposal.</p> <p>(e) Instructions for storage of ammunition.</p> <p>(f) Instructions for safe transportation of ammunition by rail, road, sea and by air.</p> <p>(g) Safety feature of ammunition be clearly explained in the manual.</p> <p>(h) Illustrated/detailed diagrams identifying/ depicting all the parts of the ammunition</p> <p>(j) Material safety data sheet to be provided</p>	Sufficient quantity of each instructions to be provided by the firm.	Firm to provide undertaking certificate in this regard from Para 20(a) to 20 (j) at the time of tendering process.

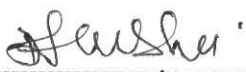

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 Maj Ankit Dohoon
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