**125mm APFSDS Ammunition with Depth of Penetration (DoP) of 550mm for T-72 Tank**

1. **Name of Project**. 125MM Smooth Bore Gun barrel for T-72 & T-90 tanks with missile firing and improved ammunition.

2. **Brief**. The current T-72 & T-90 tank barrels are not capable of firing high penetration APFSDS rounds (above 600mm Depth of Penetration (DoP)) due to limitation of safety margin of 600 Mega Pascals (Mpa). There is a requirement to upgrade a common barrel system and ammunition for existing T-72 & T-90 tanks. Development of ammunition to provide capability of penetration and missile firing capability with these barrels also required to be developed together.

3. **Broad Specification**.

(a) **QRs - Barrel/ Gun Articles**.

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| **S No** | **Parameter** | **Capability** |
| (i) | Equipment | Barrel (including gun articles) and associated systems. |
| (ii) | Integration | With T-90 & T-72 tanks with existing Fire Control System (FCS) |
| (iii) | Capability | To fire ATGM( Anti tank guided missile) through gun barrel and APFSDS ammunition with DoP > 600mm RHA. |
| (iv) | Ammunition | APFSDS, HE(Fragmentation), HEAT & ATGM. |

(b) **QRs - Amn (APFSDS)**.

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| **S No** | **Parameter** | **Capability** |
| (i) | Lethality (DoP) | 600 – 800mm of RHA. |
| (ii) | Effective Rg | 3000 mtr |
| (iii) | Consistency | < .35mils |
| (iv) | Adaptability | Existing FCS & AFVs Sights.  Current/ new barrel or Gun Article of T-72 & T-90 tanks.  Change in barrel metallurgy & designs (improved). |
| (v) | Permissible | Alteration auto loader, CLM and BCU/TPU of T-72 & T-90 tanks. |

(c) **QRs-Msl**. Existing msl (9M119 – UBK20) to be integrated with the barrel system.

4. **Quantity**. 1000 Nos (minimum).

5. **Time Lines**. Prototype & trial eval by 2019. Production & sup by Dec 2020.

6. **Additional Info**. All future upgrades & improvements may be offered by vendor as part of contractual obligations (incl AMC & life time product support)