

**The Purpose of this Sources Sought Notice is to Conduct Market Research on the below
Requirement:
Extreme Long Range-Sniper Rifle (ELR-SR)**

1. Background/Scope

United States Special Operations Command (USSOCOM) is seeking to replace older anti- materiel and anti-personnel rifles such as the M107 and MK15 with a newer system. This Sources Sought Notice will provide valuable market research on state-of-the-art sniper systems. Interested vendors must provide their submission through Marvin Marcia marvin.marcia@socom.mil. For further information, please read the last paragraph of this document.

- 1.1. Scope. This specification establishes the performance characteristics of the USSOCOM Extreme Long Range-Sniper Rifle (ELR-SR). The ELR-SR system is intended to replace legacy M107 and MK15 for anti-personnel and anti-materiel targets. The ELR-SR weapon system will have a precision fire capability of 2500m.

2. DESCRIPTION

1.2. Major Components

- a) The ELR-SR shall be a modular, magazine-fed, multi-caliber capable system which will include barrel configurations with required bolts and barrels of each caliber, required magazines of each caliber, stock, receiver, sound suppressor, ballistic computer, operator manual, cleaning kit, tool kit, bipod, and Transportation Safety Administration (TSA) approved locking hard carrying case **(T)**.

1.3. Caliber

- a) The primary caliber of the system shall be sub-sonic and supersonic capable **(T)**.
b) If the primary system caliber is not a current DOD-approved munition, system shall be capable of transitioning to a current .300 Norma Magnum DOD-approved munition with a quick-change kit **(T)**. The quick-change kit shall be able to switch calibers within 5 minutes.

1.4. Size/Weight

- a) The ELR-SR shall have an overall length of no more than 56 inches **(T)**, no more than 50 inches **(O)**, less suppressor and the length of pull set to 14.5 inches.
b) The ELR-SR shall weigh no more than 22 lbs. with barrel, empty magazine **(T)**, no more than 18 lbs. **(O)**.
c) Shall have continuous timed and biased MIL-STD-1913 rails, with numbered slots, at the 12 o'clock position with a minimum length of 24 inches and a 10 (+/- 1) MIL forward-sloping cant from back to front.
d) Shall provide M-LOK® attachment points at the 3, 6 and 9 o'clock positions with ARCA lock rail with attachment at the 6 o'clock position.

1.5. Action

- a) The ELR-SR shall be manual (bolt action gun) in operation **(T)**.

1.6. Recoil

- a) The ELR-SR, with muzzle device attached, will have a peak free recoil impulse of no more than 25 ft-lbs. **(O)**. The objective is to minimize the effects of recoil on a shooter as much as possible.

1.7. Barrel

- a) The ELR-SR barrel shall be capable of removal and replacement at the operator level **(T)**.
b) Modular changes, including barrel changes, shall be accomplished within 5 minutes and with common tools, in such a way as to meet headspace requirements for each caliber.

1.8. Sound Suppressor

- a) The ELR-SR system shall have a single, precision fire, high decibel reduction sound suppressor that will reduce audible signatures for all calibers to no more than 140dB **(O)**,
b) The sound suppressor should add no more than 8.5 inches in length to the system and should have recoil reducing capabilities.
c) Sound suppressor shall be removable without specialty tools.

1.9. System Service Life

- a) The ELR-SR in either configuration shall have a barrel life of 1200 rounds **(T)**, 1500 rounds **(O)**. Barrel will be considered shot out when incapable of maintaining within 1% over system baseline of Ballistic Coefficient Standard Deviation.
b) The ELR-SR shall not require cleaning at an interval less than 100 rounds to maintain precision and Ballistic Coefficient Standard Deviation of the weapon system as described in Table I **(T)**, less than 200 rounds **(O)**

1.10. Precision

The precision requirements for each ELR-SR configuration, firing suppressed and unsuppressed, are outlined below in Table I.

Table I: System Precision Requirements

Configuration	Precision	
Supersonic	1.2 MOA (AES) at 100 yards (91 meters) (T)	0.75 MOA at 100yards (91 meters) (O)
Subsonic	2.0 MOA (AES) at 100 yards (91 meters) (T)	1.0 MOA at 100 yards (91 meters) (O)

Configuration	Ballistic Coefficient Standard Deviation	
Supersonic	< 1.0% (T)	< 0.5% (O)
Subsonic	< 5.0% (T)	< 2.0% (O)

Table II: System Ammunition Requirements

Configuration	Muzzle Velocity Standard Deviation	
Supersonic	< 7 Feet/Second (T)	< 4 Feet/Second (O)
Subsonic	< 12 Feet/Second (T)	<7 Feet/Second (O)

2.9 Performance

- (a). The system shall produce a Probability of hit (Phit) of >50% at 1500M* with primary supersonic round
- (b). The system shall produce a Probability of hit (Phit) of >30% at 600M* with subsonic round
- (c). The system shall have <225fps velocity migration over the life of the barrel

*= Weapon Employment Zone Conditions

- a. Wind = 0.5mph
- b. Temp = 1 F
- c. Pressure = 0.3 inHg
- d. Humidity = 5% RH
- e. Muzzle Vel. = 7 fps
- f. Range = 0.5m
- g. Inclination = 1 degrees
- h. Heading = 5 degrees
- i. Latitude = 0.001 degrees

This Sources Sought Notice will be used for Market Research purposes. This is not a solicitation for quotes/proposals. This is not to be construed as a commitment by the Government. The Government only commits to efforts via a written contract or agreement. As the Contracting Officer, I am the main POC for this subject. If you have any questions, comments or concerns, please direct all inquiries to me Marvin Marcia at marvin.marcia@socom.mil . I will ensure responses are provided to all submissions and/or inquiries within a reasonable amount of time.

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