

# **Prototype Project Opportunity Notice (PPON)**

for

## **Next Generation Squad Weapons (NGSW)**

Issued by:

U.S. Army Contracting Command – New Jersey  
Picatinny, NJ 07806-5000

In Support of:

PM Soldier Weapons  
Picatinny, NJ 07806-5000

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## **SECTION 1 – EXECUTIVE SUMMARY**

### **1.1 Purpose & Authority<sup>1</sup>**

The purpose of this Prototype Project Opportunity Notice (PPON) is to award up to three prototype Other Transaction Agreements (OTAs) under the authority of 10 U.S.C. § 2371b, with each COMPANY developing two weapon variants under the Next Generation Squad Weapons (NGSW) program and 6.8 millimeter ammunition common to both weapons. The weapons include the Next Generation Squad Weapon-Rifle (NGSW-R) and the Next Generation Squad Weapon-Automatic Rifle (NGSW-AR). These prototype OTAs will develop industry's potential solutions/concepts through prototypes, user evaluation, and testing to ensure producible weapon systems that are safe, suitable, effective, and sustainable with a goal of delivering production representative weapon system(s) with ammunition. A safe weapon system means the weapon system is free from conditions that can cause unintentional death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. A suitable weapon system means the weapon system allows the Soldier to perform the mission with the resources provided. An effective weapon system means a combination of operational and technical effectiveness as determined by technical testing and operational testing/evaluation. A sustainable weapon system means the ability to maintain and train a system once fielded to continually meet the effective standards. The NGSW support concept will be consistent and comparable to the legacy weapons involving the Army two-level field and sustainment maintenance system.

### **1.2 Background**

The NGSW-R is the planned replacement for the M4/M4A1 Carbine and the NGSW-AR is the planned replacement for the M249 Squad Automatic Weapon (SAW) in the Automatic Rifleman Role in the Close Combat Force.

The Small Arms Ammunition Configuration (SAAC) study, completed in 2017, identified potential weapon system approaches that can address the operational needs. To investigate potential technologies that support these approaches, the U.S. Army Contracting Command – New Jersey (ACC-NJ) on behalf of U.S. Army Armament Research, Development and Engineering Center (ARDEC), awarded on 05 December 2017 a competitive Department of Defense Ordnance Technology Consortium (DOTC) Initiative 17-01 INIT 1407 to AAI Corporation doing business as Textron Systems Unmanned Systems through agreement W15QKN-14-9-1001 under Section 815 Prototype OTA authority, pursuant to 10 U.S.C. § 2371b. This DOTC initiative is for the development and fabrication of advanced lightweight small caliber cartridge prototype ammunition and the development and fabrication of a functional prototype weapon system capable of firing this ammunition.

In addition, ACC-NJ on behalf of Project Manager Soldier Weapons (PM SW), issued a competitive PPON under Section 815 OTA authority, pursuant to 10 U.S.C. § 2371b, and awarded on 25 June 2018 six fixed amount, prototype OTAs to the following:

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<sup>1</sup> For additional information please refer to the Department of Defense (DoD), Other Transactions Guide, Version 1.0, dated November 2018 at [https://www.dau.mil/guidebooks/Shared%20Documents%20HTML/Other%20Transactions%20\(OT\)%20Guide.aspx](https://www.dau.mil/guidebooks/Shared%20Documents%20HTML/Other%20Transactions%20(OT)%20Guide.aspx)

W15QKN-18-9-1017 – AAI Corporation Textron Systems  
W15QKN-18-9-1018 – FN America LLC. (Design 1)  
W15QKN-18-9-1019 – FN America LLC. (Design 2)  
W15QKN-18-9-1020 – General Dynamics-OTS Inc.  
W15QKN-18-9-1021 – PCP Tactical, LLC  
W15QKN-18-9-1022 – Sig Sauer Inc.

These Prototype OTA's are for the manufacture and development of a Next Generation Squad Automatic Rifle system demonstrator to inform requirements for this PPON.

In addition, the Government has conducted multiple industry days, reviewed numerous industry white papers, and evaluated the results of other market research. The first Industry Day was held on 25-26 July 2017, at Fort Benning, GA with the primary purpose to provide industry with information on the Next Generation Squad Automatic Rifle program. This was to gain insight into the vendor's weapon technologies and production capabilities and obtain feedback on the Government's overall acquisition strategy. Representatives from 21 companies and members from other services were in attendance. The second Industry Day was held on 12-13 December 2017, at Picatinny Arsenal, NJ. The purpose of this Industry Day was to update industry on the Government's program plans, provide a greater level of detail on requirements than the first Industry Day, and to answer questions from industry. Representatives from 25 companies and members from other services were in attendance. The third Industry Day was conducted on 14 – 16 November 2018 at Picatinny Arsenal. Representatives from 37 companies were present with 20 one-on-one vendor sessions. The purpose of the third Industry Day was to seek Industry questions and comments to assist in shaping the NGSW program strategy that was detailed in the DRAFT PPON released on 4 October 2018. The collective analysis indicates that industry has potential concepts that can address the aforementioned operational needs in the near term and provide future growth as technologies mature. This PPON seeks to explore those potential industry solutions/concepts that can be matured to address the NGSW requirements.

### **1.3 Acquisition Approach**

**OTA Awards:** The Government intends to award up to three independent fixed amount OTAs for NGSW prototyping. Deliverables for each prototype OTA include 53 NGSW-R weapons, 43 NGSW-AR weapons, 845,000 rounds of ammunition, spare parts, test barrels, tools/gauges/accessories, engineering support, and iterative prototyping efforts as defined in the Statement of Work. Each prototype OTA will undergo two prototype test events including Soldier Touch Points. The duration for each prototype OTA is estimated to be up to eight years. The first 27 months will be for prototyping the NGSW-R, NGSW-AR, and ammunition. Following this prototyping effort, there may be additional iterative prototyping efforts for the NGSW-R, NGSW-AR, and ammunition (reference Statement of Work, section 2.4. Part C: Iterative Prototyping Efforts). These iterative prototyping efforts will each have separate durations and will occur within the eight year duration. Below is an estimated timeline based on planned funding. Note, these timelines may change based on available funds.

Major Milestones	FY19	FY20				FY21				FY22-FY27
	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
OTA Agreement										
Prototype Test #1 Pre-Ship Meeting*										
Prototype Test #1 Deliveries										
Prototype Test #1										
Design Completion Review*										
Prototype Test #2 Pre-Ship Meeting*										
Prototype Test #2 Deliveries										
Prototype Test #2										
TDP Delivery										
Iterative Prototyping Efforts										
*Contractor Scheduled										

**Follow-on Production Award(s):** Reference Section 5 for discussion of a potential follow-on production award(s).

#### 1.4 Definitions

“Agreements Officer” (AO) is the United States Army Contracting Command – New Jersey Contracting Activity warranted Officer with authority to enter into, administer, change or terminate OTAs.

“Agreements Specialist (AS)” is the United States Army Contracting Command – New Jersey Contracting Activity Specialist and designee of the AO for executing modifications, administrative matters, and financial aspects of the Agreement.

“Ammunition” is an assembled cartridge case with propellant, primer, and a 6.8 millimeter projectile. This includes the Load, Assembly and Pack (LAP) and is linked, unlinked, or both. The assembled cartridge case for Surrogate and General Purpose (GP) may contain different propellant type and charge weight for each projectile type.

“Common Cartridge” refers to ammunition designed to work in both the NGSW-R and NGSW-AR.

“Cost Share” includes any costs a reasonable person would incur to carry out (necessary to) Statements of Work not directly paid for by the Government.

“Fixed Amount” means an OTA under which an awardee agrees to complete a prototype project for an agreed upon total price and where payments are not based on amounts generated from the awardee’s financial or cost records.

“Innovative” means any new technology, process, material, or method, including research and development; or any new application of an existing technology, process, material, or method.

“NGSW-R” refers to a prototype 6.8 millimeter rifle with sling, flash hider, suppressor, cleaning kit, suppressor removal tool, and quantities of magazines required to provide a minimum of 210 stowed rounds.

“NGSW-AR” refers to a prototype 6.8 millimeter automatic rifle with bi-pod, sling, flash hider, suppressor, cleaning kit, suppressor removal tool, and quantities of magazines/drums/belts/other required to provide a minimum of 210 stowed rounds.

“Nonprofit Research Institution” means a nonprofit institution, as defined in 15 U.S.C. 3703, and includes federally funded research and development centers, as identified by the National Scientific Foundation in accordance with the government wide Federal Acquisition Regulation issued in accordance with section 1303(a)(1) of title 41 (or any successor regulation thereto).

“Nontraditional Defense Contractor (NDC)” An entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by DoD for the procurement or transaction, any contract or subcontract for the DoD that is subject to full coverage under the cost accounting standards prescribed pursuant to section 1502 of title 41 and the regulations implementing such section (see 10 U.S.C. 2302(9)).

Note: Per the statutory definition, NDCs are all entities that have not performed under a narrowly defined set of circumstances within one year of solicitation of the current OT opportunity. In order for an entity to not qualify for NDC status, it would need to meet all elements of the prescribed definition within that time period. This includes performance of a DoD contract or subcontract subject to full cost accounting standards (CAS) coverage within one year prior to solicitation of the Prototype OT opportunity. The effect of this narrow definition, is that a large number of entities will fall into the NDC category, including nearly all small business concerns, and even those firms that work exclusively with DoD. This is in part due to the exemptions to CAS coverage under 41 U.S.C. § 1502 and FAR Part 30, which exempt commercial contracts, Firm Fixed Price contracts based on adequate price competition, and any contract or subcontract with a small business concern, amongst other exemptions. Further, even where an entity is not outright exempt from CAS coverage, the entity may not have been subject to “full” CAS coverage. This is because full CAS coverage only applies to firms that receive a single CAS-covered contract award of \$50 million or more; or received \$50 million or more in net CAS-covered awards during its preceding cost accounting period.

"Other Transaction for Prototype Projects" refers to this type of OTA. This type of OTA is authorized by 10 U.S.C. 2371b for prototype projects directly relevant to enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the DoD, or for the improvement of platforms, systems, components, or materials in use by the armed forces. This type of OTA is treated by DoD as an acquisition instrument, commonly referred to as an "other transaction" for a prototype project or a Section 2371b "other transaction". OTAs are acquisition instruments that generally, are not subject to the federal laws and regulations governing procurement (FAR based) contracts. As such, they are not required to comply with the Federal Acquisition Regulation (FAR), its supplements (i.e. DFARS) or laws that are limited in applicability to procurement contracts.

“Production Representative” means an article or system that accurately represents the production configuration system for both hardware and software, but not produced on a final production line, e.g., hand tooled, although some components may be from production tooling. While highly desirable, the item does not have to be manufactured on a formal production line to be considered production representative.

“Significant Participant” means an entity that makes a significant contribution to the prototype project. Examples of what might be considered a significant contribution include supplying new key technology or products, accomplishing a significant amount of the effort, or in some other way causing a material reduction in the cost or schedule, or increase in performance.

“Small Business” as defined by 10 U.S.C. 2371b means a small business concern as defined under section 3 of the Small Business Act (15 U.S.C. 632)

### **1.5 Eligibility**

In accordance with 10 U.S.C. 2371b paragraph d, Offerors shall meet one of the following conditions to be considered for an award:

(A) There is at least one nontraditional defense contractor or nonprofit research institution participating to a significant extent in the prototype project.

(B) All significant participants in the transaction other than the Federal Government are small businesses (including small businesses participating in a program described under section 9 of the Small Business Act (15 U.S.C. 638)) or nontraditional defense contractors.

(C) At least one third of the total cost of the prototype project is to be paid out of funds provided by sources other than the Federal Government.

(D) The senior procurement executive for the agency determines in writing that exceptional circumstances justify the use of a transaction that provides for innovative business arrangements or structures that would not be feasible or appropriate under a contract, or would provide an opportunity to expand the defense supply base in a manner that would not be practical or feasible under a contract.

In addition, Offerors must have a Dunn and Bradstreet (DUNS) number and must register in the System for Award Management (SAM) to obtain a Commercial and Government Entity (CAGE) code. This system verifies identity and ensures that payment is sent to the right party. In general, to invoice and receive payment after award of an OTA, Offerors must register in Wide Area Work Flow (WAWF) through the Procurement Integrated Enterprise Environment (PIEE). The Offeror must be considered a responsible party by the Agreements Officer, and is not suspended or debarred from such agreement by the Federal Government, and is not prohibited by Presidential Executive Order, or law from receiving such award. Additionally, Offerors who attempt to circumvent the eligibility requirements/conditions may be excluded from consideration at the Agreements Officer’s discretion.

### **1.6 Evaluators**

ACC-NJ, with the assistance of subject matter experts (Government and Government Contractors), will review and evaluate proposals submitted in response to this PPON.

## **SECTION 2 – PPON STATEMENT OF WORK (SOW)**

### **2.1. SOW INTRODUCTION**

This SOW identifies the work to be performed by the COMPANY in developing two weapon variants under the NGSW program and 6.8 millimeter ammunition common to both weapons that meets the COMPANY's proposed requirements in Attachment 1– Capability Matrix. The weapons include the NGSW-R and the NGSW-AR.

The primary place of performance shall be at the COMPANY'S facility, unless designated otherwise. Delivery and Government testing will be at Aberdeen Proving Grounds (APG), Maryland or other Government location.

### **2.1.1. Requirements and Objectives**

This SOW is broken out into three parts:

Part A – Prototype Hardware and Government Testing and Evaluation: Section 2.2 of the SOW defines the required hardware types and quantities (NGSW-R, NGSW-AR, Ammunition, test barrels, spare parts, and tools/gauges/accessories) needed to conduct the planned Government testing and evaluation.

Part B – Prototype Program Management and Engineering Support: Section 2.3 of the SOW defines the scope of the program management and engineering requirements that the COMPANY shall perform during this OTA for prototyping the NGSW-R, NGSW-AR and Ammunition.

Part C – Iterative Prototyping Efforts: Section 2.4 of the SOW identifies potential iterative prototyping efforts that may be included in formal modifications to the OTA during this Rapid Prototyping phase.

## **2.2. PART A: PROTOTYPE HARDWARE AND GOVERNMENT TESTING AND EVALUATION**

The COMPANY shall build and deliver NGSW-R, NGSW-AR, and Ammunition prototypes to support Government testing and evaluation. The Government testing and evaluation will consist of two phases: Prototype Test #1 (PT#1) and Prototype Test #2 (PT#2).

### **2.2.1. Prototype Hardware**

The COMPANY shall provide the following prototype hardware to the Government:

#### **2.2.1.1. Weapon Prototypes**

The COMPANY shall build and deliver NGSW-R and NGSW-AR prototypes to support PT#1 and PT#2. The NGSW-R and NGSW-AR prototypes delivered to support PT#2, shall be production representative hardware that complies with COMPANY proposed performance requirements.

##### **2.2.1.1.1. Weapon Prototype Characteristics**

The NGSW-R and the NGSW-AR prototypes shall:

- a. allow for ambidextrous operation and controls;

- b. include a flash hider, removable suppressor (with or without flash hider installed), and a tool for suppressor removal after firing or for maintenance;
- c. include a tactical carrying sling with quick release attachments;
- d. include selection positions for Safe, Semi-Automatic Firing, and Automatic Firing modes;
- e. be resistant to corrosion, abrasion, impact and Chemical, Biological, Radiological and Nuclear (CBRN) defense contaminants, decontaminants, battlefield-chemicals, electromagnetic pulse and cyber-attacks;
- f. reduce visual detection via a neutral non-reflective, non-black color not lighter than Light Coyote 481 and not darker than Coyote 499;
- g. function in all environments and weather conditions, including ambient, cold, hot, marine, high humidity, rain, and desert conditions;
- h. be compatible with combat clothing (including body armor and Modular Lightweight Load-carrying Equipment), CBRN defense, wet weather, and cold weather gear;
- i. provide interchangeable magazines between both weapons if NGSW-AR utilizes a magazine; and
- j. include, at a minimum, a 12 o'clock position rail(s) that is compliant to Attachment 2- Picatinny Smart Rail Interface Control Documents. Weapon configurations include a non-battery and a battery configuration:
  - A non-battery configuration: battery removed. This is the primary configuration for all weapon deliveries and is included in the overall weapon weight.
  - Replaceable battery configurations: rechargeable battery assembly and non-rechargeable battery assembly that are fully contained within the envelope of the NGSW-R and NGSW-AR and common to both. The battery assembly shall operate at 6-32 volts. The rechargeable battery assembly shall interface with the Universal Battery Charger (NSN: 6130-01-659-7090). The weight of the battery assembly will not be included in the overall weapon weight. Both the rechargeable battery assembly and the non-rechargeable battery assembly shall meet the requirements for safety and transportation per the International Air Transport Association (IATA) Dangerous Goods Regulation.

Deliverables: NGSW-R prototypes, NGSW-AR prototypes, Rechargeable battery assemblies and Non-rechargeable battery assemblies required to support Government testing. The required test quantity and deliverable schedule is listed in Attachment 3 – Delivery Schedule.

#### **2.2.1.1.2. Magazine/Drum/Belt/Other Prototypes**

The COMPANY shall deliver three magazines/drums/belts/other to support the Government development of Modular Lightweight Load-carrying Equipment (MOLLE) compatible pouches.

Deliverables: Three NGSW-R and three NGSW-AR magazine/drum/belts/other delivered to the Government approximately three months prior to PT#1 as detailed in Attachment 3 – Delivery Schedule. If the design has changed prior to PT#2, then three additional magazines/drums/belts/other delivered approximately three months prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

### **2.2.1.2. Ammunition Prototypes**

The COMPANY shall deliver the following ammunition prototypes:

#### **2.2.1.2.1. General Purpose and Surrogate Ammunition Prototypes**

The COMPANY shall develop common cartridges that can be fired from the NGSW-R and NGSW-AR. Design consideration data is provided in Attachment 4 – Ammunition Data. The COMPANY should optimize the propellant type and charge weight for each projectile type. The COMPANY will LAP the common cartridges with the following Government provided projectile types to support Government testing:

- a. GP per Drawing titled “6.8MM GENERAL PURPOSE (GP)”. The GP projectile provides all-purpose solutions for combat, limited training, and basic qualification (reference Attachment 4 – Ammunition Data).
- b. Surrogate per Drawing 13072652. The Surrogate projectile is designed to mimic the behavior of combat projectiles from a weapon design standpoint. Surrogate projectiles have a profile and weight between current and future combat projectiles (reference Attachment 4 – Ammunition Data).

The prototype ammunition to be delivered to support PT#2 shall be production representative hardware that complies with COMPANY proposed performance requirements.

Deliverables: GP and Surrogate ammunition prototypes required to support Government testing. If the NGSW-AR is belt fed, the COMPANY shall deliver the NGSW-AR ammunition quantity linked. The required ammunition test quantity and deliverable schedule is listed in Attachment 3 – Delivery Schedule. The schedule of Government furnished projectiles is listed in Attachment 5 – Government Furnished Property.

#### **2.2.1.2.2. Test Ammunition / Primed Cases and Training Ammunition**

The COMPANY shall develop, build and deliver the following rounds to support Government testing and training:

- a. High Pressure Test (HPT) Round. The HPT cartridge verifies if a weapon can withstand pressure above its intended operating pressure (the higher of Surrogate or GP) without permanent damage. The HPT is loaded to a chamber pressure higher than normal service pressure, stressing both the gun barrel and breech during firing.

HPT pressure establishment testing shall be performed by the COMPANY using at least two different propellant lots of the same propellant formulation and charge load conditioned to -65°F, 70°F, and 160°F. There shall be 30 cartridges fired per temperature, per propellant lot, for a minimum of 180 cartridges. All testing shall occur the same day. HPT cartridges shall be conditioned as follows: 2 hours minimum for 70°F, 4 hours minimum for 160°F, and 6 hours minimum for -65°F. A calculation of  $3\sigma + 15\%$  (JOTP-22 with a safety margin), where  $\sigma$  is the standard deviation of the data set, and 25% (Commission Internationale Permanente pour l'Epreuve des Armes à Feu Portatives) of the average pressure for each data set (6 total) shall be determined. The

highest value resulting from this calculation shall be added to the average pressure of that data set to obtain the pressure of the HPT at 70°F (see Attachment 4 – Ammunition Data, Example HPT Calculation). The HPT lots delivered shall have a minimum average pressure that meets the above requirement. Resulting test data shall be provided to the Government as evidence of how HPT pressure was established. If anything in the cartridge changes after PT#1 that impacts the pressure when firing the cartridge, then a new HPT value shall be established using the same methodology described above.

The HPT shall be visually identifiable and distinguishable from the General Purpose, Surrogate, and DDI Cartridges.

- b. Drill Dummy, Inert (DDI). A DDI cartridge, (dummy cartridge or drill cartridge) is a cartridge that is completely inert, i.e., contains no primer, propellant, or explosive charge. The DDI must facilitate the performance of weapon operator tasks similar to live ammunition to include chambering weapons, clearing weapons, weapon maintenance tasks (including verification of proper weapon setup after maintenance procedures) and ammunition familiarity without risk of activating energetic materials. It must be standardized and easily discernible (visually and tactility) from other types of ammunition (i.e. color, fluting, drilled hole, etc.) by Soldiers under training representative conditions during both day and night. The DDI shall have an empty primer pocket and shall be compatible with magazine/drum/belts/other, weapons, lubes and solvents. The DDI shall be capable of being fed, chambered, ejected, and extracted at least 25 times without any damage to the cartridge such as chipping, peeling, deformation, or components disassembling. The DDI shall have the same outer profile as the GP cartridge and delivered in the same configuration (magazine/drum/belts/other).
- c. Primed Case. Primed Cases (case and primer) shall be provided to support PT#1 and PT#2.

Deliverables: HPT, DDI, and Primed Case prototypes required to support Government testing. The required test quantity and deliverable schedule is listed in Attachment 3 – Delivery Schedule. High Pressure Establishment Test raw data and calculations delivered approximately 30 days prior to PT#1 and PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.2.1.2.3. Lake City Army Ammunition Plant (LCAAP) PPON Support**

The Government owned Contractor operated LCAAP may be utilized as a subcontractor in the Offeror's proposal; however, the Government will not be involved in the negotiation or utilization of this subcontractor. LCAAP may be able to provide classified and unclassified LAP capability. The LCAAP point of contact is:

Roger D. Norton  
Contracts Manager  
Northrop Grumman  
Alliant Techsystems Operations LLC  
Small Caliber Systems Division Lake City Army Ammunition Plant  
P.O. Box 1000

Independence, MO 64051-1000  
Telephone: 816.796.7321  
Fax: 816-796-7142  
Email: [Roger.Norton@NGC.com](mailto:Roger.Norton@NGC.com)

### **2.2.2. Government Testing**

A majority of testing will be conducted at APG, MD. The Government will provide the COMPANY with a summary of the results from each Government test within 30 days after each subtest event.

During a test/subtest event, if the Government must undertake multiple/repeated attempts to complete an action with the COMPANY provided hardware, the Government reserves the right to stop that portion of the test/subtest and move to the next test/subtest. For stopped tests/subtests, only the collected data will be used for evaluation and the remaining portion of the test/subtest will be recorded as incomplete. Additionally, if any COMPANY provided hardware is determined to be unsafe, the Government reserves the right to stop testing and eliminate the COMPANY from further consideration.

The Government will conduct the following tests on the NGSW-R, NGSW-AR, and the Ammunition:

#### **2.2.2.1. Prototype Test #1 (PT#1)**

This Government test will inform the COMPANY of current design compliance to select performance requirements. The test has an estimated duration of 3 months.

##### **2.2.2.1.1. Soldier Touch Point A: Mobility & User Acceptance**

This Government test will provide the COMPANY with Soldier feedback on areas related to mobility and maneuverability on Army relevant obstacles, and user acceptance scenario testing. Reference Attachment 6 – STP Mobility and Attachment 7 – STP User Acceptance.

#### **2.2.2.2. Prototype Test #2 (PT#2)**

This Government test will be used to assess compliance to the COMPANY proposed performance requirements and utilized in follow-on award decisions. The test has an estimated duration of six months.

##### **2.2.2.2.1. Soldier Touch Point B: Mobility, User Acceptance, Controllability**

This test is a Government conducted evaluation on areas related to mobility, maneuverability on Army relevant obstacles, user acceptance scenario testing, and controllability. Reference Attachment 6 – STP Mobility, Attachment 7 – STP User Acceptance, and Attachment 8 – STP Controllability

##### **2.2.2.2.2. Soldier Touch Point C: Limited User Experiment**

This test is a Government conducted assessment with Soldiers in the loop to assess the suitability and effectiveness for combat operations. These assessments may be conducted with multiple squads.

#### **2.2.2.2.3. Live Fire Test and Evaluation (LFT&E)**

This is a test and analysis effort required to support the ballistic lethality evaluation, focusing on the terminal ballistics of the system.

#### **2.2.3. Scope of Testing**

The Government testing will be in accordance with Attachment 9 – Prototype Test Outline.

#### **2.2.4. Hardware Quantities Required for Government Testing**

The hardware quantities required to conduct PT#1 and PT#2, and are listed in Attachment 3 – Delivery Schedule.

#### **2.2.5. COMPANY System Test Support Package**

The COMPANY support package shall consist of:

- a. adequate supply of spare systems and repair parts including spare barrels and suppressors to successfully complete all testing and required maintenance actions during testing. The COMPANY shall be prepared to fix or replace Government test weapons at Government test site within 48 hours of notification by the Government at no additional cost. Failure to provide adequate supply of spare and repair parts may directly affect the results of the testing;
- b. special tools, gauges, and accessories, as necessary, to support all weapons for the duration of PT#1 and PT#2; and
- c. support and participation in Scoring Conferences for PT#1 and PT#2, as requested.

Note: Tools included in the Armament Repair Shop Set and The Small Arms Repairman Tool Kit (reference Attachment 10 – Available Maintenance Tools) are not considered special tools.

Deliverables: COMPANY System Test Support Package delivered approximately 30 days prior to PT#1 and PT#2 as detailed in Attachment 3 – Delivery Schedule. On-site support for Scoring Conferences at APG for PT#1 and PT#2; dates will be scheduled by the Government.

#### **2.2.6. Non-metallic Coupons**

The NGSW-R and NGSW-AR will be subjected to exposure to various chemicals during the chemical compatibility testing. The vendor shall provide coupons (samples) of each type of non-metallic material used on the NGSW-R and NGSW-AR. The coupons shall be labeled to identify the associated weapon components. These coupons should be approximately 0.25 inch x 2 inch x 2 inch in size, and may be cut from sections of actual components. For example, a rubber grip may be cut into sections to provide the coupons.

Deliverables: 22 coupons (0.25 inch x 2 inch x 2 inch) of each non-metallic material delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and 22 coupons (0.25 inch x 2 inch x 2 inch) of each non-metallic material as necessary for new or modified materials (not provided prior to PT#1) for PT#2 as detailed in Attachment 3 – Delivery Schedule.

### 2.2.7. Bulk Energetic Materials

It is recommended that US Military qualified energetics are used in the proposed designs. Energetics are expected to be used in the propulsion system, ignition train, and main explosive charge. Use of US Military qualified energetics eliminates the need to have a qualification plan for these items. The requirement to provide bulk energetic materials is only for the General Purpose cartridge configuration.

However, compatibility testing will need to be performed on all materials coming in contact with any energetics (primer, propellant), regardless of whether the energetics have been previously qualified. The COMPANY shall provide the amount of each material needed as specified in the table below:

Material	Amount
Propellant	2.5g
Primer mix	1 g
Case	10g, < 0.5 inch size
Primer cup	10g, < 0.5 inch size
Anvil	10g, < 0.5 inch size
Other components in cartridge (as needed)	10g, < 0.5 inch size

These components should be the final products to include any heat treatment, coatings, etc. that they would undergo during production. It is not necessary for the COMPANY to provide the projectiles, as the Government will provide them for this test.

In the event that a non-qualified energetic material is required (reference Attachment 11 – Qualified Propellants), the COMPANY shall provide a sample of their energetic material(s) to consist of a 50 pound drum of propellant and/or 75g of primer mix. These amounts are in addition to any materials to be provided for compatibility testing, but may be shipped together.

Shipments will be made to:

W907CC

Receiving Bldg 806 ASP

Picatinny Arsenal, NJ 07806

Marked for:

EMCN: PHIL SAMUELS A18

BLDG: 3022 X: 973-724-4064

OFFICE SYMBOL: RDAR-MEE-W

Deliverables: All required General Purpose Cartridge energetic materials and components delivered to ARDEC approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

### 2.2.8. Test Barrels

The COMPANY shall provide the following test barrels to support Government testing:

### **2.2.8.1. Electronic Pressure, Velocity, Action Time (EPVAT) Barrels**

The COMPANY shall deliver an EPVAT barrel, receiver, and firing pin assembly representative of the NGSW-AR (same length, barrel twist, and rifling profile).

The barrels shall be ported for Kistler 6213 pressure transducer at the chamber location and Kistler 6215 pressure transducer at the port location (representative of the port location on the weapon). The COMPANY shall provide a drawing of the EPVAT barrel to verify that the chamber pressure is correctly being captured. The holes created for the pressure transducers must run into the center of a groove and be drilled in accordance with the Kistler manual. Both chamber and port transducer locations shall be in line with each other, and the centers shall be located on the top of the barrel to allow for easy access of the pressure transducers to avoid any issues with barrel mounting. The COMPANY shall provide a mounting adapter to interface with the Frankford T&E mount (reference Attachment 12 - Adjustable Base, Drawing 7692125) and the COMPANY'S EPVAT barrel.

All barrels shall be broken in sufficiently to ensure that they are operational and provide consistent, reliable results of ammunition performance (i.e., minimal shot to shot variation with regards to velocity and pressure) prior to shipping.

Deliverables: One EPVAT barrel including receiver, firing pin assembly, and mounting adapter delivered approximately 30 days prior to PT#1 and PT#2 as detailed in Attachment 3 – Delivery Schedule. EPVAT barrel drawing including receiver, firing pin assembly, and mounting adapter delivered approximately 30 days prior to PT#1 and PT#2 as detailed in Attachment 3 – Delivery Schedule.

### **2.2.8.2. Mann Barrels**

The COMPANY shall deliver three Mann barrels representative of the NGSW-AR (same length, barrel twist, and rifling profile), three firing pin assemblies, and three actions representative of the NGSW-AR. Barreled receivers shall be delivered fully assembled and pre-gaged. The COMPANY shall provide a mounting adapter to interface between the Frankford T&E mount (reference Attachment 12 - Adjustable Base, Drawing 7692125) and the COMPANY'S Mann Barrel.

All barrels shall be broken in sufficiently to ensure that they are operational and provide consistent, reliable results of ammunition performance (i.e. minimal shot to shot variation with regards to dispersion) prior to delivery.

Deliverables: Three Mann barrels each including firing pin assemblies, actions (weapon components to ignite the primer), and mounting adapters, delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule. Mann barrel drawing including firing pin assembly, actions (weapon components to ignite the primer) and mounting adapter delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule.

If the barrel design or firing mechanism changes prior to PT#2, then a second delivery of the above items are required approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

## **2.3. PART B: PROTOTYPE PROGRAM MANAGEMENT AND ENGINEERING SUPPORT**

The COMPANY shall design, build, and verify performance compliance of the NGSW-R, NGSW-AR, and ammunition prototypes to reduce technical and programmatic risks and establish a final design configuration to be tested in PT#2.

### **2.3.1. Engineering Support**

The COMPANY may conduct engineering integration activities including, but not limited to, system engineering, design engineering, materials, services, testing, technical management, quality assurance, equipment, facilities, prototyping, and administration to assess and optimize weapon system performance. The COMPANY may conduct trade studies to evaluate the impacts of varying system characteristics on system performance. Examples of engineering support may include the evaluation of the following parameters: enablers, shorter barrel lengths, modification/adapter kits, etc.

#### **2.3.1.1. Configuration Management and Control**

The COMPANY shall execute configuration management using CM principles from MIL-HDBK-61A (SE), EIA649, and EIA-649-1 as guidelines. The COMPANY shall create and maintain baseline configurations throughout the program.

##### **2.3.1.1.1. Technical Data Packages (TDPs)**

The COMPANY shall prepare and deliver complete digital TDPs, in native COMPANY format, with at least limited rights<sup>2</sup> for the NGSW-R, NGSW-AR, and Ammunition. The COMPANY shall provide production Level III TDPs as prescribed in MIL-STD-31000A and DI-SESS-81000E. With the TDPs the COMPANY shall arrange the drawings in an "engineering top-down drawing tree" format to ensure that all the necessary drawings have been provided. The COMPANY'S top-down engineering drawing shall also reflect appropriate maintenance drawings, complete parts lists and all other ancillary test and support equipment drawings necessary to facilitate the maintenance concept.

Deliverables: TDP, in native COMPANY format, for NGSW-R, NGSW-AR, and Ammunition delivered approximately 60 days after PT#2 start as detailed in Attachment 3 – Delivery Schedule.

##### **2.3.1.1.2. Computer Software Data Delivery (if applicable)**

The COMPANY shall prepare and deliver complete digital computer software, in native COMPANY format, and computer software documentation with at least restricted rights<sup>3</sup> for the NGSW-R and NGSW-AR. The COMPANY shall provide computer software or computer software documentation as defined under DFARS 252.227-7014(a)(4) and (a)(5) Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation (Feb 2014). The computer software data or computer software documentation that is delivered will provide information necessary to support acquisition, production, engineering, and logistics.

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<sup>2</sup> Reference Attachment 15 – NGSW Model Other Transaction Agreement

<sup>3</sup> Reference Attachment 15 – NGSW Model Other Transaction Agreement

Deliverables: Computer Software Data Delivery, in native COMPANY format, for NGSW-R and NGSW-AR delivered approximately 60 days after PT#2 start as detailed in Attachment 3 – Delivery Schedule.

### **2.3.2. Program Management**

The COMPANY shall organize, coordinate, and control program activities to comply with OTA program requirements and timely delivery of the required products and services. The COMPANY shall monitor the progress of work performed under the contract.

#### **2.3.2.1. Data Deliveries Method**

The COMPANY shall deliver data in accordance with this SOW and the days specified in this SOW are calendar days unless otherwise specified. If a delivery date falls on a Saturday, Sunday, or Federal Government holiday, the COMPANY shall deliver the data on the next business day. All data specified in this OTA shall be provided using the Government's Collaborative Data Environment (CDE), unless otherwise specified. Within ten calendar days after OTA award, the COMPANY shall provide the Government with a list of personnel requiring access to the CDE. Personnel will be required to have or obtain either a Government-issued Common Access Card (CAC) or a Government-approved External Certificate Authority (Refer to <https://iase.disa.mil/pki/eca/Pages/index.aspx> in order to be provided access to the CDE. The CDE website link, user instructions and training will be provided at the Program Start-Up. The COMPANY shall deliver data without encryption, locks, passwords, or other security protection features.

Deliverables: A list of personnel requiring access to the CDE within ten days after OTA award.

#### **2.3.2.2. Information Exchanges**

The COMPANY shall utilize industry best practices in data management throughout performance of this contract. In conjunction with its data management system, the COMPANY shall utilize the Government's CDE for secure Government exchanges that can be used to facilitate information transmission between the Government and COMPANY for controlled, distributed access to project information.

#### **2.3.2.3. Meetings and Reviews**

The COMPANY shall conduct and participate in meetings and reviews to be held at both COMPANY and Government facilities. The COMPANY shall specify the specific location, date(s), and duration of each activity in the IMS.

##### **2.3.2.3.1. Meetings and Reviews Support**

The COMPANY shall prepare data and drawings to aid in the presentations. The COMPANY shall have key personnel available for each activity, and shall make facilities available for Government-only breakout sessions, if requested. The COMPANY shall prepare agendas and minutes for all conferences, meetings and reviews. The agenda and minutes may be in COMPANY'S format.

Deliverables: Briefings and agendas in COMPANY format delivered two business days prior to the meeting. Meeting minutes in COMPANY format delivered two business days following the conclusion of the meeting.

#### **2.3.2.3.2. Sub-Contractor Meetings and Reviews**

Sub-Contractors shall attend meetings and reviews, when required, to address key elements.

#### **2.3.2.3.3. Program Start-Up Meeting**

The COMPANY shall invite the Government to their internal Program Start-Up meeting. This meeting shall also serve as the start of work meeting and allows the Government to meet the COMPANY'S program team. The COMPANY shall provide the Government with COMPANY technical and production metrics that they use to manage and status the Prototype efforts. The COMPANY shall provide the Government a copy of any updates as they occur.

Deliverables: Conduct Program Start-Up Meeting with read ahead package in COMPANY format provided two business days prior to the meeting. Metrics updates provided in COMPANY format within two business days of any updates.

#### **2.3.2.3.4. PT#1 Pre-Ship Meeting**

The purpose of this meeting is to review COMPANY readiness to ship hardware in support of the Government's PT#1. The following topics shall be addressed for both the NGSW-R and NGSW-AR including ammunition prototypes planned for shipping:

- a. Provide the Configuration of the Weapon Prototype and ammunition Prototype to be shipped for PT#1.
- b. Provide the status of the required Safety Documents identified in Section 2.3.4.
- c. Provide the status of the COMPANY System Test Support Package.
- d. Identify COMPANY determined test limitations (if applicable).
- e. Provide COMPANY assessment of compliance to the COMPANY proposed performance requirements of PT#1 configuration hardware.
- f. Provide evidence that the weapon and ammunition prototypes have passed internal quality controls required prior to hardware delivery.
- g. Provide status of all Agreement deliverables.

Government approval is not required for the COMPANY to ship hardware.

Deliverables: Conduct a PT#1 Pre-Ship Meeting at the COMPANY'S facility before the weapon and ammunition prototypes are shipped to the Government for PT#1 with read ahead package in COMPANY format delivered two business days prior to the meeting.

#### **2.3.2.3.5. Design Completion Review**

The COMPANY shall conduct a Design Completion Review (DCR). The DCR shall demonstrate that the weapons and ammunition prototype designs meet the proposed COMPANY proposed performance requirements. The COMPANY shall provide information that substantiates their compliance claims using COMPANY testing results, PT#1 results, or analysis results. The COMPANY shall provide the status of engineering drawings for the prototypes. The

COMPANY shall identify any schedule or performance risks that were internally assessed as medium or high. The review shall be scheduled before the PT#2 pre-ship meeting. This meeting shall be conducted for both the NGSW-R and the NGSW-AR prototypes including ammunition prototypes.

Deliverables: Conduct a DCR at the COMPANY'S facility scheduled before the PT#2 Pre-Ship Meeting with read ahead package in COMPANY format delivered two business days prior to the DCR.

#### **2.3.2.3.6. PT#2 Pre-Ship Meeting**

The purpose of this meeting is to review COMPANY'S readiness to ship hardware in support of the Government's PT#2. The following topics shall be addressed for both the NGSW-R and NGSW-AR including ammunition prototypes planned for shipping:

- a. Provide the final configuration baseline of the NGSW-R, NGSW-AR and ammunition prototypes to be shipped for PT#2.
- b. Provide the completed Safety Documents identified in Section 2.3.4.
- c. Provide the status of the COMPANY System Test Support Package.
- d. Identify COMPANY determined test limitations (if applicable).
- e. Provide COMPANY assessment of compliance to the COMPANY proposed performance requirements of PT#2 configuration hardware.
- f. Provide evidence that PT#2 hardware is production representative hardware.
- g. Provide evidence that the weapon and ammunition prototypes have passed internal quality controls required prior to hardware delivery.
- h. Provide status of all Agreement deliverables.

Government approval is not required for the COMPANY to ship hardware.

Deliverables: Conduct a PT#2 Pre-Ship Meeting at the COMPANY'S facility before the weapon and ammunition prototypes are shipped to the Government for PT#2 with read ahead package in COMPANY format delivered two business days prior to the meeting.

#### **2.3.2.4. Security**

Classification information is contained in the Family of Next Generation Squad Weapons Security Classification Guide (SCG) dated 28 June 2018. The Government considers all other verbal information and documents handled or generated in conjunction with this project to be unclassified information of a sensitive nature that must be protected against release to unauthorized individuals.

##### **2.3.2.4.1. Security Classification Specifications**

The COMPANY shall adhere to the requirements of the DD Form 254 and the Family of Next Generation Squad Weapons SCG for the protection of the unclassified information, Controlled Unclassified Information (CUI), and classified information, data, hardware, and computer software generated for or provided in support of the program. To preserve national security interest, the COMPANY shall ensure all aspects of the OTA and work performed are evaluated

for conformance with security procedures and standards as identified in this OTA, the National Industrial Security Program Operating Manual (NISPOM) and the DD Form 254.

#### **2.3.2.5. Integrated Master Schedule (IMS)**

The COMPANY shall submit the IMS to the Government quarterly and/or when updated. The IMS baseline, established in the Offeror's proposal at award, shall be consistent with the COMPANY Work Breakdown Structure (CWBS). The IMS shall be detailed sufficiently that critical and high risk efforts are identified and planned realistically to assure the program is executable. The IMS will be extended and expanded as the OTA or agreement unfolds and additional insight is needed (for example, rolling wave detail planning or scope changes). The IMS shall include the efforts of all activities, including subcontractors and suppliers. The IMS shall reflect those risks identified in applying the COMPANY'S risk management process. Risk mitigation plans included in the IMS shall be annotated. The COMPANY shall deliver the NGSW-R (including Ammunition) and the NGSW-AR (including Ammunition) IMS to the Government utilizing an MS Project format.

Deliverables: NGSW-R MS Project IMS delivered quarterly and/or when updated. NGSW-AR MS Project IMS delivered quarterly and/or when updated.

#### **2.3.2.6. COMPANY Work Breakdown Structure**

The COMPANY shall develop and provide a CWBS and dictionary to be used as the framework for planning and reporting program status to the Government. The CWBS should be delivered to the Government at the Program Startup Meeting.

Deliverables: CWBS delivered with Program Startup Meeting read ahead packages two business days prior to meeting.

#### **2.3.2.7. Copyright & Data Rights**

##### **2.3.2.7.1. Copyright & Technical Data Rights**

The COMPANY shall provide Unlimited Rights under the conditions defined in DFARS 252.227-7013(b)(1) Rights in Technical Data-Noncommercial Items (Feb 2014). If any content includes copyrighted material, the COMPANY shall furnish full copyright release for that data.

Deliverables: Copyright Release in COMPANY format delivered as necessary.

##### **2.3.2.7.2. Copyright & Computer Software Data Rights**

The COMPANY shall provide Unlimited Rights under the conditions defined in DFARS 252.227-7014(b)(1) Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation (Feb 2014). If any content includes copyrighted material, the COMPANY shall furnish full copyright release for that data.

Deliverables: Copyright Release in COMPANY format delivered as necessary.

#### **2.3.2.8. Export Control Requirement**

Export of technical and/or computer software data under this OTA to Foreign Persons which is not accompanied by a perfected compliance instrument, as defined in International Regulation (ITAR) Section 120-16 is not authorized.

Technical and/or computer software data shall be marked in accordance with the following:

“EXPORT CONTROL WARNING NOTICE: WARNING - This document contains technical and/or computer software data whose export is restricted by the Arms Export Control Act (TITLE 22, U.S.C. , SEC 2751, ET SEQ) or the Export Administration Act of 1979, as amended, (TITLE 50, U.S.C. , APP 2401ET SEQ). Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DOD Directive 5230.25.”

### **2.3.3. Reliability Growth Plan**

The COMPANY shall develop and implement a reliability growth plan for classes I, II, and III failures. The reliability growth plan is a structured method to mature the system’s reliability through finding failures and fixing them during the development of the system. The COMPANY’S reliability growth plan should be structured to achieve at least 75 percent of the final reliability requirement at PT#1 and 100% at PT#2 with 80 percent statistical confidence level. The evaluation shall be in accordance with Attachment 13 – Failure Definition and Scoring Criteria. The COMPANY shall use the Army Materiel Systems Analysis Activity’s (AMSAA) Planning Model based on Projection Methodology (PM2) to develop reliability growth curves and provide values for the following parameters identified:

- a. Management Strategy
- b. Level of Fix Effectiveness
- c. Derating Factor
- d. The lag-time due to corrective action implementation
- e. Probability of Accepting

The COMPANY can request electronic versions of the PM2 Reliability tool (PM2-C for the weapon and PM2-D for the ammunition) from AMSAA using the following link:  
<https://www.amsaa.army.mil/Documents/CRG/Model%20Request%20Form.pdf>

Deliverables: Reliability Growth Plan delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule.

### **2.3.4. System Safety**

#### **2.3.4.1. System Safety Program<sup>4</sup>**

The COMPANY shall establish and maintain a System Safety Program per MIL-STD-882E, Standard Practice for System Safety, which will include a System Safety Plan. As a minimum, the COMPANY shall implement a system safety program and a hazardous material management plan, which shall consist of conducting hazard analyses and assessments specified herein and establishing and maintaining a hazard tracking and risk resolution system. The COMPANY

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<sup>4</sup> Unclassified Defense specifications and standards may be downloaded from the following ASSIST websites: (1) ASSIST <https://assist.dla.mil/online/start/> and (2) Quick Search <http://quicksearch.dla.mil/>

shall identify System Safety Working Group (SSWG) members. The SSWG shall coordinate all matters that are safety related with the Government. The System Safety Plan shall be submitted using DI-SAFT-81626 as a guide. The COMPANY shall submit the required reports in support of the System Safety Program: Health Hazard Assessment Report using DI-SAFT-80106C as a guide; Critical Safety Item, Characteristics and Critical Defect Report using DI-SAFT-80970A as a guide; and Failure Mode, Effects, and Critical Analysis Report using DI-SESS-81495 as a guide. Explosive Hazard Classification Data using DI-SAFT-81299C as a guide, shall be submitted for all explosives or munitions delivered to the Government. Radiation Hazard Control Procedures, using DI-SAFT-80184A as a guide, shall be submitted if the COMPANY is providing the Government with radioactive material (such as in night sights).

Deliverables: Identification of SSWG COMPANY members, System Safety Plan, Health Hazard Assessment Report, Critical Safety Item Characteristics and Critical Defect Report, Failure Mode, Effects, and Critical Analysis Report, Explosive Hazard Classification Data and Radiation Hazard Control Procedures (if necessary) delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule, and updated as necessary approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.4.2. System Safety Hazard Analysis Report (SSHAR)**

The COMPANY shall provide System, Subsystem, and Operating and Support Hazard Analyses. Results of the Hazard Analysis shall be documented and a System Safety Hazard Analysis Report (SSHAR) shall be submitted using DI-SAFT-80101C as a guide. The SSHAR shall be updated to reflect any changes to the system.

Deliverables: System Safety Hazard Analysis Report delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and updated as necessary approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.4.3. Safety Assessment Report (SAR)**

The COMPANY shall conduct a safety assessment of the components, subsystems and system. The Safety Assessment Report (SAR) shall be submitted using DI-SAFT-80102C as a guide. A SAR is required with the delivery of any configuration or component to the Government for testing or demonstration. This may require preparation and delivery of more than one SAR. The SAR shall contain results from the COMPANY'S safety assessments, hazard analyses, and testing. The SAR shall also contain Range Safety recommendations for testing at Government facilities.

Deliverables: Safety Assessment Report delivered approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and updated as necessary approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.4.4. Accident/Incident Report**

The COMPANY and principal subcontractors shall notify the AO immediately following any major accident/incident (including fire) resulting in any one or more of the following: fatalities or disabling injuries; damage of Government property exceeding \$5,000; impacts to program planning or production schedules; degradation of safety of equipment under OTA, such that

personal injury or property damage may be involved; and/or identification of a potential hazard requiring corrective action. The COMPANY shall prepare an Accident/Incident Report for each incident.

Deliverables: Initial Accident/Incident notification delivered within 24 hours with follow on Accident/Incident Report as soon as possible.

#### **2.3.5. Ammunition Hazard Classification**

The COMPANY shall provide technical data to support hazard classification in compliance with the DoD Ammunition and Explosives Hazard Classification Procedures (DAEHCP) (Army Technical Bulletin 700-2). Such pertinent data may include:

- a. ammunition description (include location ammunition will be shipped from);
- b. Material Safety Data Sheet (MSDS) for all energetic components (primer and propellant) and composition of energetic materials (percentages of each energetic material);
- c. top level cartridge drawing including part number, total cartridge weight, energetic weight, cartridge length, and cartridge diameter;
- d. ammunition packaging drawing including quantity of cartridges per M2A2 can and total ship weight;
- e. ammunition lot number; and/or
- f. United Nation Series 3 (See TB 700-2) test reports.

Deliverables: Technical data delivered approximately two months prior to shipping energetic materials to support Government tests as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.6. Radioactive Material**

##### **2.3.6.1. Radioactive Material Justification**

Paragraph 9-3.b.(2) of RDECOM Regulation 385-10 states: "Use of radioactive materials in Army materiel must be minimized, as much as possible, consistent with mission requirements. Radioactive materials should not be used in Army materiel unless there are no reasonable non-radioactive alternatives. It must be established and documented for the record why the use of radioactive material is the only means of meeting military operational requirements." The COMPANY shall submit justification for the use of radioactive material using DI-MISC-80508B as a guide. Government approval of the justification is required prior to the use of any radioactive materials and should be secured as soon as possible, but no later than PT1 and/or updated as necessary for PT2. Government Approval will be based on the rigor of the COMPANY'S analysis of alternatives and the analysis results that justify the material selection. Government approval is planned to take approximately 30 days following the COMPANY submission of the justification.

Deliverables: Radioactive Material Justification in COMPANY format delivered as necessary.

##### **2.3.6.2. Radioactive Wipe Test**

In accordance to AMC Regulation 385-2, Ionizing Radiation Safety Program, radioactive materials shall not be permitted without providing a Radioactive Material Justification. If the COMPANY utilizes radioactive material, the COMPANY shall conduct a radioactive wipe test on all weapons and sights, in accordance to clause ES6050 “Wipe Testing Requirements for Newly Procured Radioactive Commodities,” to prove that there is no leakage of radioactive material, and submit a Radioactive Wipe Test Report using DI-NDTI-80809B as a guide.

Deliverables: Radioactive Wipe Test Report in COMPANY format delivered as necessary

### **2.3.7. COMPANY Test Ammunition**

The Government will provide Surrogate and General Purpose projectiles to the COMPANY to be assembled with the COMPANY common cartridges, which will be used to support the internal COMPANY testing. See Attachment 5 – Government Furnished Property for scheduled deliveries of Government projectiles.

#### **2.3.7.1. Test and Evaluation of Hardware Delivery**

The COMPANY shall perform the COMPANY determined inspections, subsystem tests, H/W integration tests, in process tests, factory acceptance tests and final weapon system integration verifications before delivering any hardware to the Government.

#### **2.3.7.2. Responsibility for Tests**

The COMPANY shall be responsible for the performance of all COMPANY tests. The Government reserves the right to observe COMPANY testing, and independently perform any tests deemed necessary to ensure that the system conforms to the OTA requirements.

#### **2.3.7.3. System Level COMPANY Test Documentation**

The COMPANY shall submit the system level test Plan/Report to the Government for informational purposes.

Deliverables: System Level COMPANY Test Plans in COMPANY format delivered 5 days prior to the COMPANY test. System Level COMPANY Test Report in COMPANY format delivered 30 days after test completion.

### **2.3.8. Environmental Life Cycle Activities.**

The COMPANY shall consider the impacts of environmental life cycle requirements when selecting designs for the system, as well as for any manufacturing and testing of subcomponents and prototypes necessary for this effort.

#### **2.3.8.1. Life Cycle Environmental Assessment.**

The COMPANY shall provide input to the Government development, creation and updating of a Life Cycle Environmental Assessment (LCEA) for program decisions.

Deliverables:

- a. Submission of all available Material Safety Data Sheets (MSDS) for all hazardous materials used both within the system and used in system operations and maintenance.

- b. The locations of all hazardous materials used within the system.
- c. Preliminary descriptions of the manufacturing processes of the system with emphasis on hazardous materials used during manufacturing operations.

The above should be delivered in COMPANY format approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.8.2. Environmental Compliance**

The COMPANY (and its Sub-Contractors) shall comply with all federal, state, and local environmental laws, regulations, and policies for all activities defined in this SOW, whether conducted at Government or COMPANY facilities. Upon request, the COMPANY shall make available to the Government applicable environmental permits, documentation, and procedures. The COMPANY shall be solely responsible for the management, cleanup, protection, and disposal of any and all emissions, effluents, wastes, and hazardous materials used in, generated by, or associated with the actions required by this SOW.

#### **2.3.8.3. Pollution Prevention Program/Plan**

The COMPANY shall establish a Pollution Prevention Plan to minimize program environmental and cost impacts and ensure that all pollution that cannot be prevented will be recycled or disposed of in an environmentally safe manner. The COMPANY shall define the process they will use to identify the pollution prevention initiatives which will eliminate hazardous materials in the performance of the OTA. The plan shall describe the analysis techniques that will be used to evaluate the risks associated with identified non-hazardous materials/process substitutes to ensure no detriment to performance. The plan shall include the COMPANY'S process for materials/process selection and evaluation. The COMPANY shall define their overall process for assigning responsibility to analyze and document the potential cost associated with trading a hazardous material for a less hazardous material over the life cycle of the product.

Deliverables: Pollution Prevention Plan delivered in accordance with DI-MISC-80508B, approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.8.4. Hazardous Materials Management Program/Plan (HMMP)**

The COMPANY shall establish, implement and maintain a HMMP Plan using Section 4 of National Aerospace Standard 411 (NAS411) (Revision 3) as a guide. The HMMP Plan, at a minimum, shall identify and describe the organizational relationships and responsibilities for eliminating hazardous materials, define process used to identify the hazardous materials utilized in the manufacturing process, and establish prioritization criteria for ranking the relative risks of these hazardous materials. Prohibited, restricted and tracked Hazardous Materials are listed in NAS411-1.

Deliverables: Hazardous Materials Management Plan delivered in accordance with DI-MGMT-81398, approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and approximately 30 days prior to PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.8.5. HMMP Report**

The COMPANY shall prepare an HMMP Report using Section 4.3 of NAS411 (Revision 3) as a guide. The HMMP Report, at a minimum, identifies all hazardous materials required for system production, provides a listing of prioritized hazardous materials for minimization/elimination per the criteria established in the HMMP, and identifies those hazardous materials/processes for which non-hazardous substitute materials/technologies may be available for implementation.

Deliverables: HMMP delivered in accordance with DI-MGMT-81397, approximately 30 days prior to PT#1 as detailed in Attachment 3 – Delivery Schedule and approximately 30 days prior PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.8.6. Hazardous Materials**

The COMPANY shall not use cadmium, tungsten, tungsten alloys, hexavalent chromium, or other highly toxic or carcinogenic materials without Government approval. The COMPANY shall not use materials that are identified in the Registry of Toxic Effects of Chemical Substances, published by the National Institute for Occupational Safety and Health, as materials that will produce toxic effects via respiratory tract, eye, skin, or mouth. If the design requires the use of hazardous materials, the COMPANY shall submit justification for Government approval. Government approval to use cadmium, tungsten, tungsten alloys, hexavalent chromium, or other highly toxic or carcinogenic materials in the design should be secured as soon as possible, but no later than PT1 and/or updated as necessary for PT2. Government Approval will be based on the rigor of the COMPANY'S analysis of alternatives and the analysis results that justify the material selection. Government approval planned to take approximately 30 days following the COMPANY submission of the justification. Moderate toxic materials may be used provided the design and control preclude personnel from being exposed to environments in excess of that specified in 29 CFR 1910, Occupational Safety and Health Standards. The COMPANY shall not use Class I Ozone Depleting Chemicals.

Deliverables: Hazardous Material Justification in COMPANY format delivered as necessary.

#### **2.3.8.7. Hazardous Waste Report**

The COMPANY shall identify the specific types and amounts of hazardous waste being generated under this Agreement. If it is determined by the COMPANY that hazardous waste will be generated under this Agreement, the COMPANY shall prepare a Hazardous Waste Report, in accordance with DI-MGMT-82129.

Deliverables: Hazardous Waste Report delivered approximately 180 days after award as detailed in Attachment 3 – Delivery Schedule. Updated Hazardous Waste Reports shall be delivered on a yearly basis until the end of the agreement.

#### **2.3.9. Control of Government Furnish Property (GFP)**

The COMPANY'S quality system shall include at least the following procedures to control GFP:

- a. examination upon receipt, consistent with practicality, to detect damage in transit;
- b. inspection for completeness and proper type;
- c. periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and deterioration during storage;
- d. functional testing prior to installation to determine satisfactory operation;
- e. identification and protection from improper use or disposition;
- f. verification of quantity;
- g. proper storage and security of components to prevent damage or loss; and
- h. log of Government materiel to be maintained, verified by DCMA and posted to the CDE identifying status and location to be updated as required.

### **2.3.10. Integrated Logistics Support (ILS)**

#### **2.3.10.1. Technical Manuals (TMs)**

New equipment technical manuals to support the NGSW-R and NGSW-AR shall be developed by the Contractor. These TMs will be utilized during training and maintenance for Government testing.

The following manuals shall be developed:

- a. TM-10 Operator Manual. The operator manual shall be delivered in COMPANY format, but MIL-STD-38784A and MIL-STD-40051-2C is preferred.
- b. TM-23&P Field Maintenance with Repair Parts and Special Tools List (RPSTL). The Field Maintenance Manual shall be delivered in COMPANY format, but MIL-STD-38784A and MIL-STD-40051-2C is preferred. The goal of the -23&P is to minimize parts and maximize the use of assemblies. Maintenance instructions and RPSTL shall be developed in the same sequential order as the two-level Maintenance Allocation Chart (MAC).

Deliverables: -10TM and -23&P TM delivered approximately 30 days prior to PT#1 and PT#2 as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.10.2. Instructor and Key Personnel (I&KP) Training**

The COMPANY shall develop and submit Training Materials using DI-ILSS-80872, as a guide, and provide training for the Government's I&KP. The training shall be conducted at Aberdeen Proving Grounds, in Aberdeen, Maryland, at a facility provided by the Government. The COMPANY shall anticipate training up to 15 I&KP for PT#1 and 15 I&KP for PT#2.

Deliverables: Training Materials delivered in COMPANY format prior to PT#1 and PT#2 as detailed in Attachment 3 – Delivery Schedule.

### **2.3.11. Marking**

The Marking Plan will provide details on how and where the COMPANY intends to mark the systems to meet the marking requirements. The Marking Plan will be submitted within 60 days

after Agreement Award for approval by the Government. Marking requirements may be added, deleted, or changed depending on final design. The Government's response will be provided within 30 days after submission.

Deliverables: Marking Plan in COMPANY format within approximately 60 days after agreement award as detailed in Attachment 3 – Delivery Schedule.

#### **2.3.11.1. Item Unique Identification (IUID)**

The COMPANY shall provide DoD Item Unique Identification to the system using MIL-STD-130N as a guide and in accordance with DFARS 252.211-7003. IUID markings must survive and remain readable under all operational environmental conditions defined for the life of the weapon system. This requirement will be tested during PT#1 and PT#2 and must survive all the environmental conditions imposed on the weapons system.

Deliverables: IUID markings on hardware as applicable.

#### **2.3.11.2. Ammunition Packaging and Marking**

The COMPANY shall design and develop packaging for its ammunition, which will be tested during PT#2. The COMPANY shall provide ammunition packed into fiberboard cartons with added dunnage only if needed to prevent gross movement. Cartons shall be packed into M2A2 containers with enough cartons to fill the container without excessive filler material. M2A2 containers shall be sealed with a metallic security seal. Two M2A2 containers shall be packed into a wooden wirebound box with associated filler to prevent gross movement. Wirebound boxes shall be sealed with a metallic seal. Forty-eight wirebound wooden boxes shall be palletized and marked in accordance with the palletization drawing. All markings must be in accordance with MIL-STD-129R. Reference Attachment 14 – Ammunition Packaging and Marking Drawings.

Deliverables: All PT#2 General Purpose ammunition shall be delivered in final packaging configuration as described above in accordance with the delivery schedule listed in Attachment 3 – Delivery Schedule. Special Packaging Instructions in COMPANY format shall be delivered in accordance with the delivery schedule listed in Attachment 3 – Delivery Schedule.

#### **2.3.12. Manufacturing Maturity Plan**

The COMPANY shall prepare their Manufacturing Maturity Plan (MMP). The MMP will document the production concept and approach for the follow-on production effort to include supply chain risk. For the ammunition, the COMPANY shall assume that the Government will provide the projectiles. Future ammunition may be classified (SECRET) and may require facilities and personnel capable of handling classified (SECRET). LCAAP may be utilized as a subcontractor to address any classified or unclassified ammunition production needs.

Deliverables:

MMP in COMPANY format delivered approximately 60 days after PT#2 start as detailed in Attachment 3 – Delivery Schedule.

### **2.4. PART C: ITERATIVE PROTOTYPING EFFORTS**

The Government may request iterative prototyping efforts to achieve higher level performance capabilities and provide additional ammunition capabilities. Proposals for iterative prototyping efforts will be separately negotiated and included as modifications to the OTA. Iterative prototyping efforts may allow for follow-on production as authorized under 10 U.S.C. §2371b(f). The scope, magnitude, and duration of each iterative prototype effort could be up to \$50M and five years in length.

Iterative prototyping efforts may require clearances and approvals to obtain and store classified information and hardware. In addition, the COMPANY may be required to LAP and inspect classified (SECRET) ammunition during iterative prototyping efforts. COMPANIES should begin the process to obtain clearances and approvals to be prepared for these efforts.

## **SECTION 3 – PROPOSAL SUBMISSION AND INSTRUCTION**

### **3.1 Introduction**

The purpose of the proposal is to identify innovative solutions for the Department of Defense. Accordingly, Offerors are encouraged to submit proposal(s) following the instructions detailed below. To be considered for award, a proposal submission should include a written section, Bid Samples, and an oral presentation to be conducted at Picatinny Arsenal, New Jersey. A proposal submission that does not include a written section and Bid Samples will not be evaluated and will be eliminated from the competition. While not mandatory, an oral presentation is strongly encouraged. Iterative prototype efforts (reference SOW Section 2.4) shall be excluded from the Offeror's proposal.

In the case of multiple proposal submissions, Offerors may utilize their Bid Sample weapons (rifle or automatic rifle) for multiple proposals. For example, if an Offeror submits two proposals with the same rifle or the same automatic rifle; a second submission of the same weapon is not required for the second proposal. The same weapon evaluation will be used for both proposal evaluations. In this example, for each proposal, the Offeror is still required to submit a written section. If oral presentations are provided, they shall not be combined and must be separate and distinct from each other. Offerors may not submit one proposal with multiple rifles or automatic rifles for their Bid Sample.

Additionally regarding multiple proposal submissions, the Government intends to award up to three prototype OTAs with each Awardee developing two weapon variants and ammunition under the NGSW program. If an Offeror submits multiple proposals that share a common weapon configuration that are among the highest rated, the Government prefers to only award one of the Offeror's proposals. This maximizes the number of weapon variants in prototyping and subsequent evaluation.

Proposals and Bid Samples received after the dates specified will NOT BE ACCEPTED OR EVALUATED. In general, Offerors will be notified approximately six months after the written proposal submission whether their solution is of interest to the Government. The Government and each selected Offeror will then negotiate the terms and conditions of the OTA prior to award.

A notional timeline to OTA award is below:

Weeks	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Prototype Project Opportunity Notice Release																																
Written Proposal Due																																
Interim Hazard Classification Request Due																																
Safety Assessment Report Due																																
Initial PPON Proposal Evaluation																																
Oral Presentations																																
Revised Proposal Due																																
Bid Samples Due																																
Bid Sample Training																																
Bid Sample Testing																																
Final PPON Proposal Evaluation																																
Offeror Notification																																
Negotiate and Finalize OTAs																																
Execute OTA																																

### 3.2 Proposal Submission

- 1) The costs of preparing, submitting, and participating in proposal efforts are not considered an allowable direct charge to any contract or agreement.
- 2) The Government does not anticipate negotiating the NGSW Model OTA (reference Attachment 15 – NGSW Model Other Transaction Agreement).
- 3) Advertising brochures are not desired.
- 4) Multiple proposals may be submitted by the same organization; however, each written proposal must be separate and distinct from one another.
- 5) The proposal(s) shall be valid for a period of 8 months.
- 6) Technical and/or computer software data with military application may require appropriate approval, authorization, or license for lawful exportation.
- 7) All proposals (including any written and oral information) shall be unclassified and will be protected as competitive source selection information.
- 8) Questions regarding the objectives or preparation of the Proposal shall be addressed to Corey Woodson, Agreement Specialist, Army Contracting Command – New Jersey, Email: [corey.w.woodson.civ@mail.mil](mailto:corey.w.woodson.civ@mail.mil) and/or Travis James, Agreement Officer, Army Contracting Command – New Jersey, Email: [travis.t.james2.civ@mail.mil](mailto:travis.t.james2.civ@mail.mil).
- 9) Required proposal information shall be submitted to Army Research Lab (ARL) Safe Access File Exchange (SAFE) system at <https://safe.arl.army.mil/> to the attention of Corey Woodson at [corey.w.woodson.civ@mail.mil](mailto:corey.w.woodson.civ@mail.mil) and Travis T. James at [travis.t.james2.civ@mail.mil](mailto:travis.t.james2.civ@mail.mil).

### 3.3 Proposal Preparation

Offerors shall provide information by addressing each Factor/Sub-Factor in the format and sequence identified in the PPON. The Offerors must provide information in sufficient detail to allow the Government to determine the best overall solutions to address the PPON Scope of Work. The Government will not assume the Offeror possesses any capability, understanding, or

commitment not specified in the proposal. Offerors shall not assume information submitted in one area of the evaluation will be considered in other areas of the evaluation. However, the Government reserves the right to utilize information submitted in one area of the evaluation in other areas of the evaluation at its sole discretion.

The proposal's written section shall be in English language using 12-point Times New Roman font, 1 inch margins on 8.5 inch by 11 inch page size. Unless requested by the Government, hyperlinks, appendixes, and/or other attachments are not allowed. Only Section 2 (Factor 1 – NGSW-R) and Section 3 (Factor 2 – NGSW-AR) have a combined page limit of 100 pages. All other sections do not have a page limit. Section 8 (Bid Samples) and Section 9 (Oral Presentation) are not part of the proposal's written section.

### **3.4 Proposal Content**

Each Proposal submitted shall consist of the following separate sections:

#### **Written Sections:**

Section 1 – Introduction (no page limit)

Section 2 – Factor 1 – NGSW-R (counts toward combined 100 page limit)

- Sub-Factor 1 – User Acceptance
- Sub-Factor 2 – Proposed Threshold Requirements (Tier 1, Tier 2, & Tier 3)
- Sub-Factor 3 – Design Maturity
- Sub-Factor 4 – Integrated Master Plan / Integrated Master Schedule

Section 3 – Factor 2 – NGSW-AR (counts toward combined 100 page limit)

- Sub-Factor 1 – User Acceptance
- Sub-Factor 2 – Proposed Threshold Requirements (Tier 1, Tier 2, & Tier 3)
- Sub-Factor 3 – Design Maturity
- Sub-Factor 4 – Integrated Master Plan / Integrated Master Schedule

Section 4 – Factor 3 – Special License Agreements (no page limit)

Section 5 – Factor 4 – Price (no page limit)

Section 6 – Data Rights Assertions (no page limit)

Section 7 – Significant Nontraditional Participation Or Cost Share (no page limit)

#### **Bid Sample Section:**

Section 8 – Bid Samples (not part of the written proposal)

#### **Oral Presentation Section:**

Section 9 – Oral Presentation (not part of the written proposal; three hour maximum)

#### **3.4.1 Proposal Section 1, Introduction**

(This section does not have a page count limit.)

Company Name, CAGE Code, Date, Point of Contact Information (Name, Title, E-Mail Address, Phone, and Address), and any significant participants, subcontractors or team members. Include an abstract which provides a concise description of the proposal. Include a statement that the proposal is valid for 8 months.

### **3.4.2 Proposal Section 2, Factor 1 – NGSW-R & Proposal Section 3, Factor 2 – NGSW-AR** (These sections count towards the combined 100 page limit.)

**Factor 1 – NGSW-R and Factor 2 – NGSW-AR** each contain four identical Sub-Factors: 1) User Acceptance, 2) Proposed Threshold Requirements, 3) Design Maturity, and 4) Integrated Master Plan / Integrated Master Schedule.

**Sub-Factor 1 – User Acceptance:** The Offeror’s Bid Samples (reference PPON Section 8) will be evaluated for User Acceptance. Offerors should highlight the differences in Bid Samples and the proposed design for each weapon and ammunition, if any, and how the differences will impact User Acceptance (reference Attachment 16 – Bid Sample Test Overview – Section 3. Soldier Touch Point).

Offerors should highlight any additional attributes provided by the proposed weapon and ammunition design not specifically requested by the Government. Examples could include, but are not limited to, innovative weapon features that improve lethality, survivability, mobility, controllability, ergonomics, and human factors.

The Offeror may supplement Sub-Factor 1 – User Acceptance written submission with trade studies, analysis, or other supporting data.

**Sub-Factor 2 – Proposed Threshold Requirements:** The Offeror shall provide a completed Capability Matrix (Attachment 1 – Capability Matrix; does not count towards page limit), in Excel 2013 format, of its proposed threshold requirements for weapons and the ammunition. The Capability Matrix shall not be changed or modified otherwise. The Capability Matrix is divided into three tiers (Tier 1, Tier 2 and Tier 3). Offerors shall propose threshold requirements that are achievable considering the tiered capabilities, the OTA’s timeline, and funding availability. The proposed requirements will be incorporated as Threshold Performance Requirements in the resulting OTA.

The Offeror shall provide substantiating data and/or plans on how they will achieve their proposed threshold requirements identified in the Capability Matrix. Substantiating data may be in the form of U.S. Government test data, third party test data, Offeror test data, manufacturers specification sheets, validated modeling and simulation data, analytical support, design documentation and/or other rationale.

**Sub-Factor 3 – Design Maturity:** The Offeror shall provide a description of the proposed design for the weapon and ammunition. The Offeror may include text, photos, illustrations, and model/drawing extracts. The description shall include subsystems and components. Additionally, the system description shall clearly identify all differences between the proposed configurations and the Bid Samples.

Offerors shall explain their level of design maturity with substantiating data of the proposed weapon and the proposed 6.8mm ammunition at each Level described below:

Level 1: Requirements Analysis – The Offeror has translated the proposed requirements to system and performance requirements of the proposed prototypes.

Level 2: Preliminary Design Analysis – The Offeror has traced the proposed requirements to prototype design components (e.g., trigger mechanism, barrel assembly, cartridge loading mechanism).

Level 3: Subsystem Integration, Testing and Analysis – The Offeror has built, tested, and/or analyzed prototype design components. Component level integration is complete.

Level 4: System Integration, Testing and Analysis – The Offeror has built, tested, and/or analyzed prototype systems. Prototype system level integration is near complete, but may not meet all proposed requirements.

Substantiating data for Sub-Factor 3 – Design Maturity will be based on the Bid Samples, third party test data, Offeror test data, validated modeling and simulation data, analytical data, design documentation and/or other rationale. The substantiating data should be complete, specific, and relevant to the specific maturity levels of the Offeror's self-evaluated design maturity levels. Substantiating data will only be considered if relevant to the proposed weapon and ammunition design.

**Sub-Factor 4 – Integrated Master Plan (IMP)/Integrated Master Schedule (IMS):** The Offeror shall submit both an Integrated Master Plan (IMP) and an Integrated Master Schedule (IMS).

The IMP shall clearly define the Offeror's master plan for the OTA; identify key events, accomplishments and criteria; and be traceable to and consistent with the IMS. The IMP and IMS shall be laid out around the OTA events and deliverables identified in the PPON. The IMP shall have a description for each event inclusive of weapon and ammunition activities. The IMP may be submitted in Microsoft Excel 2013 file and will not count toward page limit.

The IMS shall include a thorough Resource Loading, of the direct costs (labor, material, subcontracts-with material and labor within the subcontracts identified, ODCs, etc.) proposed to be incurred during the performance of the OTA. The Offeror shall include all significant external interfaces, critical items from subcontractors or other detailed schedules that depict significant and/or critical elements, and GFP dependencies. The Offeror shall use a calendar consistent with the Offeror's work schedules. The IMS shall clearly indicate at least one unbroken critical path that reaches from award of the OTA to final delivery. Nomenclature for tasks/milestones on the critical path shall be displayed in underlined, bold red text. If the IMS has multiple critical paths, the proposal shall include the assumptions and logic associated with the multiple critical paths. Assumptions used to develop this IMS shall be provided in sufficient detail to enable Government assessment. The IMS shall adhere to the following:

- 1) The IMS shall be submitted in a Microsoft Office Project 2013 file and does not count towards the page limit. The file shall be unlocked and, in addition to typical schedule specific information, shall include the following for each activity:

- a) COMPANY Work Breakdown Structure;
  - b) crosswalk to Integrated Master Plan Accomplishment Criteria;
  - c) responsible organizational entity;
  - d) resource hours/dollars; and
  - e) cross-walk to Basis of Estimate (if applicable).
- 2) The IMS shall clearly describe the work being accomplished in sufficient detail for the offeror to manage this program. In order to facilitate evaluation, the IMS shall not include:
- a) Level of Effort activities;
  - b) duplicate activities (i.e., the same activity shall not be included more than once in the schedule network);
  - c) regular recurring deliveries (i.e., deliveries that occur every month or quarter); and
  - d) regular recurring meetings (i.e., monthly Program Management Reviews, etc.).

The IMS shall include all tasks and events associated with the weapon and the ammunition and deliverables identified in the Statement of Work.

Any subcontractor schedules shall be incorporated into the IMS.

The Offeror shall conduct a schedule analysis using a schedule analyzer tool (such as Steelray Project Analyzer or similar). The results and Offeror interpretation of this analysis shall be provided to the Government as part of this proposal.

The Offeror shall provide a schedule risk assessment using a Monte-Carlo simulation of their IMS from OTA award through final delivery. The Monte-Carlo simulation shall include three-point estimates for Offeror selected key activities/events for this program. Justification and rationale shall be provided for each three-point estimate. The Offeror shall provide a chart of probability of success versus program duration in months in 5% increments from 5% to 90%. The schedule risk assessment and supporting data does not count towards the page limit.

### **3.4.3 Proposal Section 4, Factor 3 – Special License Agreements**

(This section does not have a page count limit.)

The Offeror shall submit at least two fully executable Special License Agreements (SLAs) that clearly outline all terms and conditions required to grant the rights as described below including any limitations, restrictions, or other provisions. The first SLA shall be for the ammunition. The second SLA shall be for the weapons (both the NGSW-R and NGSW-AR). The Offeror may provide separate terms and conditions for the NGSW-R and NGSW-AR within the NGSW-Weapons SLA. Attachment 17 – NGSW-Ammunition Sample SLA and Attachment 18 – NGSW-Weapons Sample SLA may be utilized and reflect the Government’s preferred SLA terms and conditions. The price of the SLAs shall not be included in Factor 4 – Price. Any royalty costs for third party patents shall be included in the SLA.

Offerors may submit multiple ammunition and/or multiple weapon SLAs for evaluation.

The SLAs for the NGSW-Weapons and NGSW-Ammunition shall:

1. Include conditions for the Government to receive Government Purpose Rights<sup>5</sup> (GPR) to the data where the Government is granted less than GPR. Exemplary conditions include:
  - a. meeting a minimum quantity requirement; and/or
  - b. meeting a dollar threshold value; and/or
  - c. waiting for period of time; and/or
  - d. other conditions.
2. Include conditions for the Government to receive Unlimited Rights to the data. Exemplary conditions include:
  - a. meeting a minimum quantity requirement; and/or
  - b. meeting a dollar threshold value; and/or
  - c. waiting for period of time; and/or
  - d. other conditions.
3. Incorporate rights previously granted under the OTA. For example, in the OTA, the Government is granted Limited Rights<sup>6</sup> to data developed at private expense and Unlimited Rights to data that is form, fit and function. Such previously granted rights shall be incorporated into the SLAs.

Awardees may be granted an additional opportunity to improve upon the SLA terms and conditions prior to execution of the SLA in conjunction with the follow-on production award.

#### **3.4.4 Proposal Section 5, Factor 4 – Price**

(This section does not have a page count limit.)

The Offeror shall provide the completed Attachment 19 – NGSW Pricing, in Excel 2013 format. All pricing shall be fixed amounts. All line item numbers will be summed for a total evaluated price. Offerors may propose milestone payments under line item numbers 0001 – NGSW 4QFY19 - FY20 Efforts and 0002 – NGSW FY21 Efforts. Due to fiscal year budget and funding constraints, Offerors are encouraged to stay within the prescribed funds identified in Attachment 19 - NGSW Pricing. The Government reserves the right to order line item numbers 0007 – Additional NGSW-R Test Assets, 0008 – Additional NGSW-AR Test Assets, 0009 – Additional Ammunition Test Assets, 0010 – Additional Rechargeable Battery Assemblies, and 0011 – Additional Non-rechargeable Battery Assemblies multiple times. Offeror shall provide lead times for line item numbers 0007-0011 with a desired lead time of six months or less.

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<sup>5</sup> “Government Purpose Rights” means those rights as defined under DFARS 252.227-7013 (a)(12 & 13) (Feb 2014) and DFARS 252.227-7014(a)(11&12)(Feb. 2014) as well as license rights to any patents/patent applications covering either the NGSW-Weapon or NGSW-Ammunition.

<sup>6</sup> “Limited Rights” means those rights as defined under Defense Federal Acquisition Regulations Supplement (DFARS) 252.227-7013(a)(14)(Feb. 2014).

**Price Inconsistencies.** Any inconsistency, whether real or apparent, between the proposed performance and price, should be explained in the proposal. Any significant inconsistencies, if unexplained, raise a fundamental issue of the Offeror's understanding of the nature and scope of work required and their financial ability to perform the contract, and may be grounds for rejection of the proposal.

**Unbalanced Pricing:** The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced. Unbalanced pricing exists when, despite an acceptable total evaluated price, one or more line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques without an Offeror's documentation (including calculations and supporting rationale) explaining the apparent unbalanced pricing. The Agreement Officer may reject a proposal where the lack of balance poses an unacceptable risk to the Government.

**Government Furnished Property (GFP):** Other than the GFP identified in Attachment 5 – Government Furnished Property, no additional GFP shall be used in the Offeror's proposal to eliminate any unfair competitive advantages. The Government owned Contractor operated LCAAP may be utilized as a subcontractor in the Offeror's proposal; however, the Government will not be involved in the negotiation or utilization of this subcontractor. During negotiations, the Government may allow the use of GFP if the use results in a cost savings and is in the interest of the Government.

## COMPTROLLER GENERAL ACCESS TO INFORMATION

In accordance with 10 U.S.C. 2371b(c), any Prototype OTA that provides for payments in a total amount in excess of \$5,000,000 shall include a clause that provides for the Comptroller General, in the discretion of the Comptroller General, to examine the records of any party to the agreement or any entity that participates in the performance of the agreement.

### **3.4.5 Proposal Section 6, Data Rights Assertions**

(This section does not have a page count limit.)

The Proposal will identify any intellectual property involved in the effort and associated restrictions on the Government's use of that intellectual property (including any patents or patent applications) in accordance with DFARS 252.227-7013(e) Identification and Delivery of Data to be Furnished with Restrictions on Use, Release or Disclosure, DFARS 252.227-7014(e) Identification and delivery of computer software and computer software documentation to be furnished with restrictions on use, release, or disclosure, and/or DFARS 252.227-7017 (Jan. 2011) Identification and assertion of use, release, or disclosure restrictions.

The Government may request the Offeror provide additional information/detail provided in the Proposal to clarify data rights assertions. Include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal for a system demonstrator. If a patent application has been filed for an invention that your proposal utilizes, and the application has not yet been made publicly available, you may provide only the patent

application serial number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and title, together with either: (1) a representation that you own the invention, or (2) proof of possession of appropriate licensing rights in the invention.

The Proposal will provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized under your proposal.

### **3.4.6 Proposal Section 7, Significant Nontraditional Participation, Nonprofit Research Institution, or Cost Share**

(This section does not have a page count limit.)

To be considered for award, the Offeror shall complete Attachment 20 – Business Status Certification.

### **3.4.7 Proposal Section 8, Bid Samples**

The Offerors' Bid Samples will be utilized in evaluating Factor 1 – NGSW-R: Sub-Factor 1, Sub-Factor 2, and Sub-Factor 3; and Factor 2 – NGSW-AR: Sub-Factor 1, Sub-Factor 2, and Sub-Factor 3. Bid Samples include one functional rifle with 900 rounds of ammunition and 100 inert rounds for User Acceptance; and one functional automatic rifle with 900 rounds of ammunition and 100 inert rounds for User Acceptance. A functional weapon includes a magazine, drum, linked ammunition or other ammunition delivery system and is capable of firing the provided live ammunition. For each weapon (rifle and automatic rifle), Offerors shall provide quantities of magazines/drums/belts/other required to provide a minimum of 210 stowed rounds.

The Government will not supply projectiles for Bid Samples ammunition. A cleaning kit shall be included with instructions to maintain the weapon(s). Offerors shall send their Bid Samples to the addresses identified below. The Bid Samples (not including ammunition) shall remain the Offeror's property; however, by submission of Bid Samples, the Offeror authorizes the Government full access to the Bid Samples at the test site and agrees to all Bid Samples evaluations as stated in Attachment 16 – Bid Samples Test Overview. The Government shall not be held liable for any damage that occurs during Bid Samples evaluation or any damage incurred while at the test site. The Offeror shall carry its own liability insurance within normal limits. Offerors shall comply with all Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE) rules, regulations, and procedures.

The following information shall be submitted for Bid Samples safety assessment purposes only and will not be used in the Offeror's evaluation.

1. Interim Hazard Classification (IHC) Request: The Offeror shall contact the Agreements Specialist and Agreements Officer to obtain an IHC and delivery instructions for the ammunition prior to shipping. The Offeror must provide the following information submitted electronically with the written proposal to process the IHC request:
  - a. ammunition description (include location ammunition will be shipped from);

- b. Material Safety Data Sheet (MSDS) for all energetic components (primer and propellant) and composition of energetic materials (percentages of each energetic material);
  - c. top level cartridge drawing including part number, total cartridge weight, energetic weight, cartridge length, and cartridge diameter;
  - d. ammunition packaging drawing including quantity of cartridges per M2A2 can and total ship weight; and
  - e. ammunition lot number.
2. Safety Assessment Report (SAR): The SAR shall be developed per MIL-STD-882E and in accordance with DI-SAFT-80102C and submitted electronically with the written proposal. The Government reserves the right to stop testing and evaluation of the Bid Samples if they are found unsafe to operate.

The Offeror shall be prepared to answer questions on the SAR and IHC.

Bid Samples (without ammunition) and training hardware/aids shall be delivered to the following:

US Army Aberdeen Testing Center (ATC)  
Building 358,  
ATTN: Larry Overbay, SAS Div.  
Telephone: 410-278-8638  
Email: larry.w.overbay6.civ@mail.mil  
Aberdeen Proving Ground, MD 21005  
DODAAC: W81C5M

Bid Sample Ammunition only shall be delivered to the following:

US Army Aberdeen Proving Ground Garrison  
Ammunition Supply  
Bldg. 714  
Mark For: Larry Overbay, SAS Div., ATC  
Telephone: 410-278-8638  
Email: larry.w.overbay6.civ@mail.mil  
Aberdeen Proving Ground, MD 21005  
DODAAC: W81C5M

Delivery: The Offeror shall pay for delivery to and from the evaluation site. The Offeror shall coordinate return delivery within 15 calendar days after Government notification. It is anticipated that hardware will be available for return at the end of the evaluation period. Ammunition will be expended and not returned.

Offerors shall provide Bid Samples operating instructions and training. The Bid Samples operating instructions and training shall not exceed four hours. Following the receipt of the written proposal, the Government will schedule the Offeror's Bid Samples operating instructions

and training session. The Offeror's Bid Samples operating instructions and training may start as early as the next business day after Bid Samples due date. If Offerors cannot accommodate the assigned date, while not guaranteed, the Government will make an attempt to reschedule.

The Offeror shall provide all training hardware/aids and documentation required to perform Bid Samples operating instructions and training. Live firing and/or live ammunition are not allowed. The classroom setting will be indoors with an approximate class size of 15 students.

The Offeror is responsible for obtaining all clearances to gain access to provide onsite Bid Samples operating instructions and training. The Government will not be responsible for Offeror's employee injury sustained during Bid Samples instruction.

No Government Furnished Material (GFM) or Government Furnished Equipment (GFE) will be provided for integration into the Bid Samples.

Bid Samples test data results will be provided to the Offeror by the Government at the conclusion of the Selection Evaluation (reference Attachment 16 – Bid Sample Test Overview).

### **3.4.8 Proposal Section 9, Oral Presentations**

(Not to be included in the written section, three hour maximum)

The proposal's oral section shall not exceed three hours. The Government will assign the date of the Offeror's oral presentation following receipt of the written proposal. Oral presentations are anticipated to start no sooner than 7 calendar days after written proposal due date. If Offerors cannot accommodate the assigned date, while not guaranteed, the Government will make an attempt to reschedule.

Oral Presentations and anything discussed in the Oral Presentations will not be used in the evaluation of an Offeror's proposal. Only the originally submitted written proposal or final written proposal will be evaluated for award. Oral presentations will be coordinated by ACC-NJ. The oral presentation should be consistent with and compliment the Bid Samples and written proposal sections. The oral presentation is the Offeror's opportunity to further explain, and the Government's opportunity to better understand, the Offeror's NGSW-R, NGSW-AR, SLAs, and price. The Offeror should include the appropriate significant participants and subject matter experts in the oral presentation to aid in the discussion. The Offeror may demonstrate prototype weapons or concepts, provide a slide presentation, and/or utilize the three hours at their discretion. All breaks, caucuses (Government and Offeror), and/or other activities shall be included in the three hours. The Offeror is not required to use the entire three hours; however, the presentation will cease after three hours. Physical copies of the material presented in the oral presentations, (i.e., slides, handouts, video, etc.) are not required nor will they be accepted by the Government. Access to Government computers, network, and internet is not allowed; however, a projector, screen, and conference telephone will be available for use. Physical hardware presented and transported, shall adhere to all federal, state, and local laws. Live firing and/or live ammunition are not allowed. Any questions related to material/hardware to be presented shall be submitted to the Agreement Specialist.

Offerors will be provided a list of Government questions and comments prior to their Oral Presentation.

Within 10 calendar days after the oral presentation, the Offeror will have an opportunity to submit a revised written proposal that replaces the original written proposal and complies with the same requirements outlined above in Section 3.4 Proposal Content. If a revised written proposal is submitted, then any previous versions will be discarded and only the revised written proposal will be evaluated. If a revised written proposal is not submitted, then the Government will continue evaluating the Offeror's originally submitted written proposal. Separate updates to existing written proposal sections are not allowed.

## **SECTION 4 – BASIS OF EVALUATION**

Offeror Proposal(s) will be evaluated in a careful, full and impartial manner pursuant to the stated criteria of this PPON. Awards will be made to the Offeror(s) that provide the best overall solution to address the Government's requirements (objectives, capabilities, need, price, etc.) based on an integrated assessment of the evaluation results. Subsequent to the review of a final Proposal(s) submission, the Government may elect to invite an Offeror prior to award of OTA to provide additional clarifying information. The Government reserves the right to conduct a Pre-Award Survey (Safety and Security) or similar, in order to determine COMPANY responsibility.

The below Evaluation Criteria will be used in the selection of up to three OTA awards. The basis for award of OTA(s) resulting from this PPON will be the result of the evaluation of the Factors specified below.

### **4.1 Evaluation Factors**

Factor 1 – NGSW-R (counts toward combined 100 page limit)

- Sub-Factor 1 – User Acceptance
- Sub-Factor 2 – Proposed Threshold Requirements (Tier 1, Tier 2, & Tier 3)
- Sub-Factor 3 – Design Maturity
- Sub-Factor 4 – Integrated Master Plan / Integrated Master Schedule

Factor 2 – NGSW-AR (counts toward combined 100 page limit)

- Sub-Factor 1 – User Acceptance
- Sub-Factor 2 – Proposed Threshold Requirements (Tier 1, Tier 2, & Tier 3)
- Sub-Factor 3 – Design Maturity
- Sub-Factor 4 – Integrated Master Plan / Integrated Master Schedule

Factor 3 – Special License Agreements (no page limit)

Factor 4 – Price (no page limit)

### **4.2 Order of Importance**

Factor 1 – NGSW-R is slightly more important than Factor 2 – NGSW-AR which is more important than Factor 3 – Special License Agreements, which is more important than Factor 4 – Price. Factor 1 – NGSW-R Sub-Factors are of equal importance. Factor 2 – NGSW-AR 1 Sub-Factors are of equal importance.

The combination of all factors, other than Price, is more important than Price. However, price may become a more significant factor when ratings of acceptable proposals are closely grouped. Offerors will be cautioned, however, that the award may not necessarily be made to the lowest priced Offeror or the Offeror with the highest rating.

### 4.3 Rating Definitions

The evaluators will use the following terms in support of the ratings for Factor 1 – NGSW-R (including Sub-Factors) and Factor 2 – NGSW-AR (including Sub-Factors).

<b>Rating</b>	<b>Definition</b>
Blue Good	The Offeror's proposal has benefits that far outweigh any shortcomings. The risk of unsuccessful Agreement performance is very low.
Green Acceptable	The Offeror's proposal has benefits that outweigh any shortcomings. The risk of unsuccessful Agreement performance is low.
Yellow Marginal	The Offeror's proposal has benefits that offset the shortcomings. The risk of unsuccessful Agreement performance is medium.
Orange Poor	The Offeror's proposal has one or more shortcomings that are not offset by benefits. The risk of unsuccessful Agreement performance is high.

A benefit means an aspect of an Offeror's proposal that enhances performance, provides military utility, and/or reduces schedule or performance risk.

A shortcoming means an aspect of an Offeror's proposal that does not provide adequate performance, does not provide military utility, and/or increases schedule or performance risk.

The evaluators will use the following terms in support of the rating for Factor 3 – Special License Agreements.

<b>Rating</b>	<b>Definition</b>
Blue Good	Offeror's proposed terms and conditions for granting rights to the Data <sup>7</sup> for both the NGSW-Weapons and NGSW-Ammunition are highly favorable to the Government. Both of the proposed SLAs clearly outline all the terms, conditions, and associated costs.
Green Acceptable	Offeror's proposed terms and conditions for granting rights to the Data for both the NGSW-Weapons and NGSW-Ammunition are favorable to the Government. Both of the proposed SLAs clearly outline all the terms, conditions, and associated costs.
Yellow Marginal	Offeror's proposed terms and conditions for granting rights to the Data for one or both the NGSW-Weapons and NGSW-Ammunition are less than favorable to the Government. Both of the proposed SLAs outline all the terms, conditions, and associated costs.

<sup>7</sup> Data as defined under the Government's preferred SLAs, Attachments 17 and 18.

Orange Poor	Offeror's proposed terms and conditions for granting rights to the Data for one or both of the NGSW-Weapons and NGSW-Ammunition are unfavorable to the Government. One or both of the proposed SLAs do not adequately outline all the terms, conditions, and associated costs or the Offeror did not provide one or both of the SLAs.
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Factor 4 – Price does not receive a rating.

#### **4.4 Factor 1 – NGSW-R & Factor 2 – NGSW-AR**

The Sub-Factors under Factor 1 – NGSW-R will be rated separately using the rating definitions. The compilation of these Sub-Factor ratings will form the basis of Factor 1 – NGSW-R rating.

The Sub-Factors under Factor 2 – NGSW-AR will be rated separately using the rating definitions. The compilation of these Sub-Factor ratings will form the basis of Factor 2 – NGSW-AR rating.

##### **Sub-Factor 1 – User Acceptance**

The Government will assess the User Acceptance of the Offeror's weapon and ammunition, utilizing Bid Samples user evaluations and relevant substantiating data provided.

User Acceptance will be evaluated using data collected as described in Attachment 16 – Bid Sample Test Overview – Appendix A and B. Bid Samples' test data will be considered more credible if the Bid Samples more closely match the proposed design. Bid Samples' test data will be considered less credible the more the Bid Samples differ from the proposed design. For example, Bid Samples chambering the 6.8mm ammunition will be considered more credible than other caliber weapons.

The Government may provide additional consideration for design attributes not specifically requested that provide military utility, enhance the usability of the weapon system and/or increase User Acceptance. Examples could include but are not limited to innovative weapon features that improve lethality, survivability, mobility, controllability, ergonomics, and human factors.

##### **Sub-Factor 2 – Proposed Threshold Requirements**

The Government will assess the Proposed Threshold Requirements of the Offeror's Weapon and Ammunition, utilizing Bid Samples, and relevant substantiating data provided.

The Government will assess the risk that the Offeror's weapon and ammunition will achieve the proposed performance levels for the requirements identified in the Capability Matrix for Tier 1, Tier 2, and Tier 3. The individual Tiers will not receive a rating, but collectively form the basis of the Sub-Factor rating. The Government desires capabilities in Tier 1 over capabilities in Tier 2. The Government desires capabilities in Tier 2 over capabilities in Tier 3. Within each tier, the capabilities are equally desired.

Desired capabilities that are presented as a range, reflect a lower and a higher capability in that order. Offerors can propose within and outside the range. Within the range, more favorable

consideration will be assessed for greater capability. Outside the range, significantly less favorable consideration, if any, will be provided for proposed requirements below the lower range, and some additional favorable consideration may be assessed for proposed requirements above the higher range, but only to the extent that it provides additional military utility. Offerors should focus on meeting all lower limit capabilities before trading to achieve any higher capabilities, regardless of tier. Capabilities that are significantly below the lower limit, regardless of tier, could result in a shortcoming that may not be offset by benefits.

Bid Samples' test data and Offeror's substantiating data for achieving the proposed requirements, which are more representative of the proposed design will be considered more credible sources of data. Bid Samples' test data and Offeror's substantiating data will be considered less credible the more the test/analysis/design configuration differs from the proposed design.

### **Sub-Factor 3: Design Maturity**

The Government will assess whether the Offeror's proposed design will successfully meet the requirements based on the relevance of the data the Offeror used to self-evaluate design maturity, Bid Samples' test data, and how well the Bid Samples represent the proposed design.

Offeror's substantiating data, which are more comprehensive in supporting the design maturity levels will be considered more credible. Offeror's substantiating data that are incomplete and/or not relevant in supporting the design maturity levels will be considered less credible.

### **Sub-Factor 4: Integrated Master Plan (IMP)/Integrated Master Schedule (IMS)**

The Government will assess whether the Offeror's IMP/IMS will successfully meet the program requirements and delivery dates (reference Attachment 3 – Delivery Schedule). The evaluation will consider the completeness of the IMP and IMS events and associated descriptions, the IMS logic and structure, critical path(s), and the Offeror's provided risk assessment of the IMS and associated assumptions and justifications.

## **4.5 Factor 3 – Special License Agreements**

The SLAs will be evaluated based on the price affordability, minimum quantity to be procured, period of time, and/or other conditions required for Government Purpose Rights and Unlimited Rights.

A highly favorable SLA rating may allow Unlimited Rights or Government Purpose Rights upon ordering a quantity of 10,000,000 rounds of ammunition and ordering a quantity of 15,000 weapons (NGSW-R and/or NGSW-AR) without additional conditions.

If multiple SLAs are submitted for ammunition and/or weapons, the Government will only use the most favorable ammunition SLA and most favorable weapon SLA for the final evaluation.

## **4.6 Factor 4 – Price**

The Government will conduct price analysis of the overall prices submitted to determine price reasonableness for OTA award(s). Price reasonableness will be based on competitive offers received in response to this PPON and against the Government estimate. A price evaluation will be conducted by summing all line item numbers in Attachment 19 – NGSW Pricing to arrive at a

total evaluated price. Pricing significantly outside the designated fiscal year available fund amounts may limit the number of awards made or make an Offerors' proposal unaffordable. All pricing shall be fixed amounts.

## **SECTION 5 – FOLLOW-ON PRODUCTION AWARD**

Companies are advised that any Prototype Other Transaction Agreement(s) awarded in response to this PPON shall include the following statement relative to the potential for follow-on production:

“In accordance with 10 U.S.C. 2371b(f), and upon a determination that the prototype project (or any subsequent iterative prototyping efforts) was successfully completed under this competitively awarded OTA, a follow-on production contract(s) or OTA(s) may be awarded without the use of competitive procedures.”

Successful completion means the COMPANY delivers production representative weapons system(s) with ammunition that are safe, suitable, effective, and sustainable OR accomplished a particularly favorable or unexpected result that justifies the transition to production. In addition successful completion of iterative prototyping efforts may separately provide for the award of a follow-on production contracts or transactions.

The follow-on production award(s) is anticipated to be a Federal Acquisition Regulation (FAR) based contract award(s), to one or two offerors without further competition but the Government reserves the right to award a follow-on production OTA to one or two offerors without further competition. The Government intends to make one production award for the NGSW-R, NGSW-AR, and Ammunition. However, the Government reserves the right to: 1) make one award for NGSW-R with Ammunition; or 2) make one award for NGSW-AR with Ammunition; or 3) make one award for NGSW-R with Ammunition to one Offeror and one award for NGSW-AR with Ammunition to a different Offeror. The follow-on production award(s) is planned to be an Indefinite Delivery / Indefinite Quantity contract with Firm Fixed Price Delivery Orders up to ten years or a fixed amount OTA up to ten years. The production award(s) may include 250,000 total weapons system(s) (NGSW-R, NGSW-AR, or both), 150,000,000 rounds of ammunition, spare parts, tools/gauges/accessories, and engineering support. Initial production quantities of 200 or more total weapons (NGSW-R, NGSW-AR, or both) per month and 500,000 or more rounds of ammunition per month are expected to be delivered within 6 months of award with plans for ramp-up to 2,000 or more total weapons (NGSW-R, NGSW-AR, or both) per month within three years and 5,000,000 or more rounds of ammunition per month within three years. COMPANIES may be required to LAP classified (SECRET) ammunition as early as 30 days after follow-on production award. The ability to obtain an award may depend upon the ability of the COMPANY to obtain necessary clearances and approvals to obtain and store classified information and hardware. Spare parts production is in addition to these production quantities. The value of this follow-on production award(s) is estimated to be \$10M in the first year and estimated \$150M per year at the higher production rates.

If the Government contemplates a follow-on production award(s), the Government will request new proposals during Prototype Test 2. Proposals are expected to be submitted within 60 days

of the Government request. The proposal(s) shall be valid for a period of 18 months. The Government intends to select the best overall solution(s) for the Follow-On Production award(s). The Follow-On Production areas of evaluation are anticipated to include Soldier Touch Points, Demonstrated Capabilities (based on prototype testing using both General Purpose and Surrogate configurations, emphasis will be on the General Purpose results), Initial & Full Production Capability, Fully Executable Special License Agreements (opportunity will be provided to improve existing SLA terms and conditions), and Price. In general, COMPANIES will be notified approximately three months after the Follow-on Production Proposal submission of the award decision. Fully executable SLAs must be fully executed by both parties prior to any follow-on production award.

In the event the Contractor(s) cannot fulfill the follow-on contractual or agreement requirements, the Government reserves the right to terminate the existing contract(s) or agreement(s) if the first required deliverable date is not met. The Government reserves the right to select the next highest rated COMPANY for a follow-on production award(s). This selection period expires 12 months after the follow-on production award(s). Contracts or agreements not selected within 12 months after the follow-on production award(s) will expire and proceed to closeout.

## **SECTION 6 – OTHER INFORMATION**

ACC-NJ policy is to treat all submissions as source selection information, and to disclose their contents only for the purpose of evaluation. Restrictive notices notwithstanding, during the evaluation process, submissions may be handled by support contractors for administrative purposes and/or to assist with technical evaluation. All ACC-NJ and DoD support contractors performing this role are expressly prohibited from performing DoD-sponsored technical research and are bound by appropriate nondisclosure agreements.

Prototype weapons delivered under the awarded OTAs will be owned by the Government.

Offerors are advised that developments arising from the resulting Agreement may constitute a significant enhancement to the national defense, and to the economic vitality of the United States. As such, in the conduct of all work under the subsequent NGSW OTA(s), the recipient will comply strictly with the International Traffic in Arms Regulation (22 CFR 120-130), the National Industrial Security Program Operating Manual (DoD 5220.22-M) and the Department of Commerce Export Regulation (15 CFR 730-774).

The total OTA(s) amount will not be obligated at time of award. Funding for the OTA(s) will be obligated when funding is appropriated. Based on the availability of funds, the Government and OTA Awardees may need to renegotiate the schedule, milestones events, and/or the Statement of Work.

## **SECTION 7 – CONTACT INFORMATION**

U.S. Army Contracting Command - New Jersey  
Soldier Weapons  
Building 9 Phipps Road






Picatinny Arsenal, NJ 07806-5000









Agreements Specialist – Corey Woodson, Email: [corey.w.woodson.civ@mail.mil](mailto:corey.w.woodson.civ@mail.mil)






Agreements Officer – Travis James, Email: [travis.t.james2.civ@mail.mil](mailto:travis.t.james2.civ@mail.mil)

Be advised, only an Agreements Officer has the authority to enter into a binding agreement on behalf of the Government. He or she will sign the agreement, and only an Agreements Officer has the authority to change the terms of the agreement.

## SECTION 8 – ATTACHMENTS

Attachment	Title	Document
Attachment 1	Capability Matrix Rev A	See Distribution F Data Request
Attachment 2	Picatinny Smart Rail Interface Control Documents	See Distribution F Data Request
Attachment 3	Delivery Schedule	 Attachment 3 - Delivery Schedule.pdf
Attachment 4	<b>Ammunition Data</b> - General Purpose, drawing titled “6.8MM GENERAL PURPOSE (GP)” - Surrogate, Drawing 13072652 - Next Gen Projectile Design Consideration Envelope - Example HPT Establishment Data and Calculations	See Distribution F Data Request
Attachment 5	Government Furnished Property	 Attachment 5 - Government Furnish
Attachment 6	STP Mobility	 Attachment 6 - STP Mobility.pdf
Attachment 7	STP User Acceptance	 Attachment 7 - STP User Acceptance.pdf
Attachment 8	STP Controllability	 Attachment 8 - STP Controllability.pdf

<b>Attachment</b>	<b>Title</b>	<b>Document</b>
<b>Attachment 9</b>	<b>Prototype Test Outline Rev A</b>	 Attachment 9 - Prototype Test Outli
<b>Attachment 10</b>	<b>Available Maintenance Tools</b>	 Attachment 10 - Available Maintenar
<b>Attachment 11</b>	<b>Qualified Propellants</b>	<b>See Distribution F Data Request</b>
<b>Attachment 12</b>	<b>Adjustable Base, Drawing 7692125</b>	 Attachment 12 - Adjustable Base, Dr:
<b>Attachment 13</b>	<b>Failure Definition and Scoring Criteria – NGSW-R</b>	<b>See Distribution F Data Request</b>
	<b>Failure Definition and Scoring Criteria – NGSW-AR</b>	<b>See Distribution F Data Request</b>
<b>Attachment 14</b>	<b>Ammunition Packaging and Marking Drawings</b> - Box, Ammunition, M2A2 Assembly, Drawing 13032542 - Box, Wirebound, Boxes, Ammunition, M2A1 Drawing 7553347 - Palletization, Drawing 19-48-4116	 Attachment 14 - Ammunition Packag
<b>Attachment 15</b>	<b>NGSW Model Other Transaction Agreement Rev A</b>	<b>See Distribution F Data Request</b>
<b>Attachment 16</b>	<b>Bid Samples Test Overview Rev A</b>	 Attachment 16 - Bid Sample Test Overvie
<b>Attachment 17</b>	<b>NGSW-Ammunition Sample SLA</b>	 Attachment 17 - NGSW-Ammunition
<b>Attachment 18</b>	<b>NGSW-Weapons Sample SLA</b>	 Attachment 18 - NGSW-Weapons Sai
<b>Attachment 19</b>	<b>NGSW Pricing</b>	 Attachment 19 - NGSW Pricing.xlsx

Attachment	Title	Document
<b>Attachment 20</b>	<b>Business Status Certification</b>	 Attachment 20 - Business Status Cert
<b>Distribution F Data Request:</b> Submit completed forms to Agreements Officer, Travis James, Email: <a href="mailto:travis.t.james2.civ@mail.mil">travis.t.james2.civ@mail.mil</a> AND Agreements Specialist, Corey Woodson, Email: <a href="mailto:corey.w.woodson.civ@mail.mil">corey.w.woodson.civ@mail.mil</a>	<b>DD Form 2345</b>	 DD Form 2345.pdf   DD Form 2345 Instructions.pdf
	<b>AMSTA-AR Form 1350</b>	 AMSTA-AR Form 1350.pdf
	<b>Non-Disclosure/Non-Use Agreement</b>	 Non-Disclosure Non-Use Agreement