

Drone Dominance Program (DDP) Lethality Prize Challenge

1. Purpose

The DDP announces this Prize Challenge to identify modular lethal payload solutions for Group 1 small unmanned aircraft systems (sUAS).

For the purposes of this prize challenge, a lethal payload is defined as the integrated combination of a warhead and its associated Electronic Safe and Arm Device (ESAD) or Electro-Mechanical Safe and Arm Device (EMSAD) and communication/interface.

The Government will assist selected vendors in working through the Joint Services Weapons System Review (JSWSR) and limited safety releases in preparation for Drone Dominance Phase II Gauntlet (DDG2) events. This support is intended to accelerate safe integration and fielding, but does not guarantee safety approval or certification.

Solutions must be scalable to match the rapid growth of Drone Dominance platforms and cost-effective to enable mass production and fielding. At this point, the lethal payload system represents a significant portion of the total system cost; therefore, affordability and manufacturability are critical design considerations.

Vendors are strongly encouraged to design payloads that integrate across multiple drone platforms and multiple vendors to maximize interoperability within the Drone Dominance ecosystem.

2. Prize and Incentives

- Winners will receive a cash prize of \$10,000.
- Awardees will be presented to all DDG2 sUAS vendors as a part of a preferred munitions solutions list.
- The Government will offer to complete the JSWSR process and limited safety releases at no cost to the winners. This effort is estimated to have a fair market value of approximately \$500,000 per vendor and does not include the cost of payload hardware required for testing.
- The Government may choose to award a FAR-based procurement contract, an Other Transaction Authority (OTA) award (under 10 U.S.C. 4022), a procurement contract for experimental purposes (10 U.S.C 4023), or a combination of awards under those authorities to any chosen participant in this prize challenge for ESAD/EMSAD, warheads, integration components, or as a complete system.
- Selected vendors will receive the Government-owned Distribution C Small Universal Payload Interface (sUPI) Technical Data Package (TDP). The Distro A version is publicly available.

3. Background and Problem Statement

sUAS platforms are scaling rapidly under the DDP; however, the lethal payload ecosystem has not kept pace. This mismatch creates a bottleneck where each new payload-platform pairing requires unique integration and safety review.

This Prize Challenge is intended to establish an affordable, modular lethal-payload ecosystem that enables interoperability across multiple platforms and supports a repeatable, scalable safety-certification pathway.

4. Objective

- Integrate across multiple Group 1 sUAS platforms.
- Support both live and training payload configurations.
- Employ scalable ESAD/EMSAD safety architectures suitable for Government safety review and approval processes.
- Be capable of being demonstrated as part of an integrated drone-payload system at DDG2 events.

5. Technical Areas of Interest

The Government is interested in modular warhead solutions that may address one or more of the following mission-effect areas. Systems are required to provide training munitions in addition to live payloads.

- Priority - Anti-Personnel (APERS) payload effects.
- Anti-Materiel (AMET) payload effects.
- Anti-armor or penetrator effects, including Explosively Formed Penetrator (EFP) mechanisms.
- Modular payload architectures that support interchangeable effects while retaining a common safety and interface approach.
- Training and inert warhead configurations that replicate operational payload characteristics.

The DDP prioritizes prepackaged warhead configurations that are delivered ready for immediate operational use. However, vendors may propose field-packable solutions, and this is not discouraged. Vendors are encouraged to provide both configurations when feasible.

For the purposes of this prize challenge, “prepackaged” refers to payload configurations delivered fully assembled with integrated munitions and ready for immediate operational use, requiring minimal or no additional preparation by the end user.

“Field packable” refers to modular payloads assembled by operators at the point of use instead of pre-built at the factories. A field packable munition does not have explosives inserted into the housing until it is packed by operators.

6. Modular Payload Architecture

Modular Payload Architecture must contain the following 3 primary components:

- Warhead.
- Electronic Safe and Arm Device (ESAD) or Electro-Mechanical Safe and Arm Device (EMSAD).
- Communication/interface component.

Integration with the Small Universal Payload Interface (sUPI) is strongly encouraged. Participants can review the publicly available, Distribution A sUPI information in order to begin this integration process. Vendors may propose a Modular Open Systems Approach (MOSA)-aligned alternative if it is open and compatible across multiple platforms.

The DDP prioritizes lethal payload solutions that demonstrate interoperability across multiple vendors and platforms.

The DDP values feedback on the sUPI integration component and encourages vendors to provide input.

7. Functional Requirements

Minimum functional requirements include:

- Visible safe/arm status indicator.
- Safe Separation Timer (SST).
- Command-based arming capability.
- Mission termination or sterilization logic.
- Impact or command-based detonation capability.

Examples of desired capabilities include:

- Selectable and configurable detonation mechanisms, to include command detonation, proximity detonation (e.g., height-of-burst or sensor-based), and impact detonation.
- Selectable effect types (APERS, AMET, EFP).
- Redundant timer architecture.
- Built-in test (BIT) capability.

8. Training Payload Requirement

The training payload must replicate the live payload in the following characteristics:

- Form factor.
- Weight and center of gravity.
- Mounting interface.
- Electrical interface.

The training payload must simulate ESAD/EMSAD behavior without producing explosive effects.

The ESAD/EMSAD used in the training payload shall be the same as the ESAD/EMSAD used in the live payload configuration.

The training payload shall be capable of simulating all proposed payload variants within a single configuration. Vendors shall not provide multiple distinct training payload systems to represent different payload variants.

For example, if a vendor offers multiple payload variants (e.g., APERS, AMET, EFP), the vendor shall provide a single training payload capable of simulating each variant.

9. Eligibility Requirements

- Be a U.S.-based entity or otherwise authorized to operate within the United States.
- Possess a valid Commercial and Government Entity (CAGE) code.
- Demonstrate the ability to manufacture and deliver payload systems at scale.

10. Required Documentation for Submission

Primary Submission (PowerPoint Format Required):

All respondents shall submit their response in Microsoft PowerPoint (.pptx) format. The submission shall not exceed 12 total slides.

The PowerPoint submission shall include, at a minimum (maximum 10 slides):

- Entity Information (CAGE code, Business name, etc.)
- System overview, including payload components (warhead, ESAD/EMSAD, and interface).
- System architecture, including electrical and mechanical design (diagrams or simplified schematics).
- Software architecture, including software flow diagrams.
- Safety approach, including ESAD/EMSAD functionality and system-level safety considerations.
- Concept of operation (CONOPS), including arming sequence and detonation logic.
- Warhead effects and intended mission applications.
- Surface Danger Zone (SDZ) considerations.
- Summary of previous testing and safety assessments, if available.

Manufacturing and Scalability (maximum 1 slide):

- Current manufacturing capacity.
- Facilities, workforce, and production approach.
- Plan to scale production to approximately 60,000 units by August 2026, 100,000 units by February 2027, and 150,000 units by August 2027.

Pricing and Cost Structure (maximum 1 slide):

- Unit cost estimates at 1,000; 10,000; 60,000; 100,000; and 150,000 unit quantities.
- Cost breakout at each production level, including warhead, ESAD/EMSAD, integration/interface component (sUPI or MOSA), assembly/manufacturing, and additional major cost drivers.

Supporting Documentation (Required):

Respondents shall provide supporting documentation in PDF.

Supporting documentation shall include, at a minimum:

- Detailed electrical schematics.
- Detailed mechanical schematics.
- Detailed software flow diagram.
- Interface Control Document (ICD).
- Test reports and data, if available.
- Safety assessment documentation.
- Quality certifications (ISO 9001).

Supporting documentation shall not exceed 25 pages.

Supporting documentation is intended to provide additional technical depth and validation of the PowerPoint submission. The Government will prioritize evaluation of the PowerPoint submission and may review supporting documentation at its discretion.

11. Submission Instructions

Submissions shall be sent to OSW-dronedominance@mail.mil.

Total submission via email attachments (PPT and PDF), combined, shall not exceed **25 MB**.

If the submission file size exceeds email limitations, but the submission files are less than 25MB combined, respondents shall provide a secure file transfer link (e.g., DoD SAFE or equivalent secure file sharing service).

Respondents are encouraged to optimize file sizes (e.g., compress images and reduce resolution) prior to submission.

Compressed (.zip) files are not preferred and may be restricted by Government network security systems.

12. Judging Criteria

The Phase I Judging Criteria:

- The Judging Panel will evaluate all entries for compliance with the submission rules, eligibility requirements, and overall quality of the submission. The panel will select up to five (5) submissions.
- Eligible entries meeting the submission requirements will be evaluated on the technical approach as it demonstrates an appropriate, realistic, innovative, and cost-effective solution to resolve the problem statement. This includes overall system design, safety approach, integration capability across multiple platforms, and alignment with the objectives of the DDP.
- Submissions will also be evaluated on price, scalability, and manufacturing feasibility. This includes unit pricing at various production quantities, transparency of cost breakdowns, and the vendor's ability to scale production to meet projected demand.
- The Government will consider the maturity of the proposed manufacturing approach, supply chain readiness, and the vendor's ability to transition from low-rate production to high-volume production within required timelines.
- The subcategories above are listed in priority order. However, some subcategories may have the same weight for score. Additionally, the difference in weighting between some sets of subcategories may not be linear.

Additional Judging Information:

The following companies will have non-Government personnel advising throughout the judging process:

- KBR, Inc. CAGE: 7NUQ6
601 Jefferson St Ste 34000
Houston, TX 77002
- Scientific Research Corporation CAGE: 0D5A6
2300 Windy Ridge PKWY STE 400S
Atlanta, GA 30339

13. Program Timeline

- **01 April 2026**
 - Prize Challenge published
- **01 April – 14 April 2026 (10 Business Days)**
 - Prize Challenge Responses due

- **15 April – 21 April 2026 (5 Business Days)**
 - Government evaluation
 - Winners selected
 - Announcement on dronedominance.mil/prize.html
 - List of preferred munitions solutions published

14. Post Selection responsibilities

This section outlines the expectations of Prize Challenge winners to receive all benefits of the prize challenge. It also outlines additional details of how the government will provide those benefits. Everything outlined in this section is an expectation of the prize challenge independent of Drone Dominance Phase II. An “Additional Information” section is provided below to describe how this Prize Challenge interfaces with DDG2.

14.1 Prototype and Testing Requirement

Prize challenge winners shall provide 10 live operational payload systems and 10 training payload systems of each payload type for Government evaluation and safety review no later than 22 June 2026.

For example, if a vendor offers multiple payload variants (e.g., APERS, AMET, EFP), the vendor shall provide 10 live payloads of each variant and 10 training payloads for each variant.

These payload systems are provided for Government evaluation, integration, and safety review purposes and are separate from, and in addition to, any payloads required for participation in the DDG2 qualifier or main event.

Testing includes, but is not limited to:

- Integration testing.
- Safety evaluation.
- Operational demonstrations.
- Efficacy testing.

At the time of submission of payload systems for these testing requirements (no later than 22 June 2026), payload vendors must identify the drone vendor(s) with which they are paired with.

Payload systems will be evaluated as complete, integrated drone-payload systems for the purposes of the JSWSR process. Vendors must ensure that integration is sufficiently mature to support safety evaluation.

The JSWSR process requires approximately 45 days for evaluation.

14.2. Integration Responsibilities

Payload vendors are responsible for ensuring integration of their payload systems onto compatible Group 1 sUAS platforms.

This includes, but is not limited to mechanical, electrical, software, and communication interface integration.

The Government will not act as a system integrator and will not be responsible for resolving integration issues between vendors.

Warhead vendors are expected to coordinate directly with drone vendors to ensure successful integration.

14.3. Safety Review and Government Technical Support

The Government will assist selected vendors in navigating the Joint Services Weapons System Explosives Safety Review Board (JSWSR) process and applicable safety release requirements.

This support may include, but is not limited to:

- Guidance on required safety documentation and submission requirements.
- Feedback on safety architecture, ESAD/EMSAD design, and system-level safety considerations.
- Coordination with relevant safety authorities and review boards.
- Assistance in aligning vendor submissions with JSWSR expectations and timelines.

The Government's support is intended to accelerate the safety review process and reduce risk; however, it does not guarantee approval, certification, or fielding authorization.

Vendors remain fully responsible for meeting all safety requirements, completing required testing, and providing all necessary documentation to support safety review and approval.

Payload systems will be evaluated as complete, integrated systems with their paired drone platforms. Vendors must ensure that integration, safety architecture, and system maturity are sufficient to support the JSWSR evaluation timeline.

14.4 Size, Weight, Power, and Integration Considerations

Respondents shall provide Size, Weight, and Power (SWaP) characteristics and integration considerations for their payload systems.

14.5 Post Prize Challenge Award Schedule

- **21 April – 22 June 2026**
 - JSWSR safety review
 - Vendor integration with paired drone platforms
 - Safety documentation development and submission
 - Iterative feedback with Government
- **NLT 22 June 2026**
 - Delivery of:

- 10 live payload systems per variant
 - 10 training payload systems per variant
 - Vendors must identify paired drone vendor(s)
 - Systems must be fully integrated and ready for evaluation
- **22 June – August 2026**
 - Arena testing
 - Penetration testing
 - Additional hands-on Government testing
- **Post-August 2026**
 - Follow-on contracts
 - Additional procurement
 - Continued testing and scaling

15. Additional Information

The following information is to provide a better understanding of the future of the DDP for prize winners. This information will be very useful for winners of the prize challenge to understand what requirements may arise to continue participation in the DDP.

As a result of being placed on a list of preferred munitions solutions (published in late April 2026), prize challenge winners can expect perspective DDG2 participants/respondents to begin integration work to support an early June demonstration at the DDG2 Qualifier event.

15.1 DDG2 Participation Requirements

Payload vendors must be paired with a drone vendor to participate in DDG2 events.

Lethal payload systems will not be evaluated as stand-alone systems and must be demonstrated as part of an integrated drone-payload system. Payload systems will be evaluated as complete, integrated drone-payload systems for the purposes of the JSWSR process. Vendors must ensure that integration is sufficiently mature to support safety evaluation.

The Government will not pair drone vendors and payload vendors. Vendors are responsible for establishing partnerships and ensuring successful integration for both the DDG2 qualifier and main event. Government anticipates multiple partnerships across the sUAS and munitions industries.

Pairing must be established and identified no later than payload system submission in accordance with Section 9 requirements. Failure to do so may result in removal from the DDG2 events.

Payload vendors are expected to coordinate with drone vendors to determine integration requirements based on DDG2 platform constraints.

Final SWaP and integration requirements will be defined by DDG2 Request for Solutions (RFS) requirements and the capabilities of the selected drone platform.

15.2 DDG2 Anticipated Schedule:

- **13 April**
 - DDP Phase II RFS released
- **Late April**
 - Prize challenge winners announced
 - DDP Phase II sUAS vendors work with munitions vendors to integrate munitions
- **Early May**
 - Deadline for sUAS vendors and their munition subs to apply for DDP Phase II Qualifier
- **Early June (2-3 weeks)**
 - sUAS vendors and Munition vendors participate in Phase II qualifier with integrated training munition
 - JSWSR certification not required in qualifier as that work will still be underway from this prize challenge
- **August**
 - sUAS vendors and Munition vendors participate in DDG2 with integrated JSWR approved training and munitions systems

16. Terms and Conditions

These terms and conditions apply to all participants in the Challenge.

- Agreement to Terms. By responding to this announcement, the participant agrees to comply with and be bound by the rules (including these terms and conditions) of this prize challenge and the decisions of the Government. The final scores and final determination of Winner is final and binding on all Participants. The final scores of the Judging Panel and the final determination of Winner may not be challenged by the Participants.
- Security Requirements. By responding to this announcement, the participant agrees to comply with the DoDM 5200.01 (all volumes) and any revisions to this manual.
- Follow-On Acquisition. At the Government's discretion, the Government may choose to award a FAR-base procurement contract, Other Transaction Authority (OTA) award (under 10 U.S.C 4022), a procurement contract for experimental purposes (10 U.S.C. 4023) or a combination of awards under those authorities to any chosen participant in this prize challenge. If the Government chooses to award an OTA award under 10 USC 4022, the Government may also decide to award a follow-on production OTA award using the same authority.

- Malware. Each participant warrants that any submission is virus free and free of malware.

- Data Rights and Marking. All data submitted under the Prize Challenge will be made available to NSWC-CR and parties authorized to act on behalf of the NSWC-CR as discussed below. By accepting these Terms and Conditions, the Participant consents to the use of data submitted to NSWC-CR. Any materials submitted to NSWC-CR as part of a prize challenge submission become NSWC-CR records and will not be returned. The use of protective markings such as “Do Not Publicly Release – Trade Secret” or “Do Not Publicly Release – Confidential Proprietary Business Information” in the Header or Footer of the Submission is strongly encouraged where appropriate. However, Participants should be aware that the use of protective markings is not dispositive as to whether information will be released publicly pursuant to a request for records under the Freedom of Information Act, (FOIA) 5 U.S.C. §552, et. seq., as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175. Any information received from the Participant is considered to be a federal agency record, and as such, subject to public release under FOIA. Decisions to disclose or withhold information received from a Participant are based on the applicability of one or more of the nine FOIA exemptions, not on the existence or nonexistence of protective markings. All FOIA requests received by NSWC-CR are processed in accordance with 10 C.F.R. Part 1004. Participants will be notified of any FOIA requests for their submissions in accordance with 29 C.F.R. § 70.26. Participants may then have the opportunity to review materials and work with a NSWC-CR FOIA representative prior to the release of materials.

By participating in this Challenge, each individual (whether participating singly or in a group) warrants and assures the Government that any data used for the purpose of submitting an entry for this Challenge, were obtained legally through authorized access to such data.

Upon submission, the Participant hereby represents and warrants that:

1. It is the sole author and copyright owner of the submission; that the submission is an original work of the Participant and that the Participant has sufficient rights to use and to authorize others, including NSWC-CR, to use the submission, as specified throughout the Official Rules; that the submission does not infringe upon any copyright or upon any other third party rights of which the Participant is aware; and that there are no known or pending patents on or related to the technology proposed within the submissions or, if there are known or pending patents, that the patent holder grants to the Government a fully paid, nonexclusive, irrevocable, worldwide license to use, or have used on the Government’s behalf, reproduce, prepare derivative works, distribute copies to the public, and perform and display publicly copyrightable works of the patented material. Except as provided above, any submission shall be accompanied by a statement delineating which intellectual

property rights and licenses will not be extended to the government for this challenge.

2. The submission, and any use thereof by NSW-CR is not defamatory or libelous in any manner; does not constitute or result in any misappropriation or other violation of the publicity rights or right of privacy of any person or entity, or infringe, misappropriate or otherwise violate any intellectual property rights, privacy rights or any other rights of any person or entity.
 3. It is free to enter into this challenge without the consent of any third party and has the capability to fully fulfil its obligations as stipulated by the Prize rules.
 4. There is no suit, proceeding, or any other claim pending or threatened against the Participant, nor does any circumstance exist, to its knowledge, which may be the basis of any such suit, proceeding, or other claim, that could limit or impair the Participant's performance of its obligations pursuant to the Prize rules or Terms and Conditions.
 5. It will not infringe, violate, or interfere with the intellectual property, publicity, privacy, contract or other rights of any third party in the course of performance of this agreement or cause NSW-CR to do any of the same.
- By participating in this Challenge, each individual (whether participating singly or in a group) warrants and assures the Government that there are no known or pending patents on or related to the technology proposed within the submissions or, if there are known or pending patents, that the patent holder provides the Government a description of the patented material and its use in the proposed Challenge solution.
 - Relationship of the Parties. Nothing contained in these Terms and Conditions is intended to create or constitute a relationship between NSW-CR with the Participants. Participation in the Prize Challenge does not imply any form of sanction, endorsement or support of the Participant by the NSW-CR, nor does it grant either party any authority to act as agent, nor assume or create any obligation, on behalf of the other party. Participant may not use the NSW-CR logo or official seal in their submission.
 - Government Right to Cancel, Suspend or Modify Challenge. The Government reserves the right, in its sole discretion, to cancel, suspend or modify the Challenge. These rules may be changed without prior notice, and all participants should monitor dronedominance.mil/prize.html for the latest information. The Government further reserves the right to select no winners and award no prize if the Government determines, in its sole discretion, that an award is not in the best interest of the Government.
 - Responsibility for Costs Incurred. Nothing in these rules, to include information on the websites publicizing the award, may be interpreted as authorizing the incurrence of any costs, or modifying the statement of work or authorizing work

outside the terms and conditions of any existing agreements or contracts with the Government. Participation in this prize challenge is at participant expense. The Government will not be responsible for any costs incurred by the participant, to include submission costs, travel costs, technology demonstration or development costs or any associated costs.

- Release of Claims. The participant agrees to release and forever discharge any and all manner of claims, equitable adjustments, actions, suits, debts, appeals, and all other obligations of any kind, whether past or present, known or unknown, that have or may arise from, are related to or are in connection with, directly or indirectly, this prize challenge or the participant's submission.
- Liability. By participating in this challenge, the participant agrees to assume, and thereby has assumed, any and all risks of injury or loss in connection with, or in any way arising from participation in this challenge, or development of any submission. Based on the subject matter of the prize challenge, the type of work that it will require, as well as the unlikelihood of claims for death, bodily injury, property damage, or loss potentially arising from or related to participation in the prize challenge, no individual or entity participating in the prize challenge is required to obtain liability insurance.
- Indemnification. The participant agrees to indemnify the Government and its affiliates, directors, officers, employees against all liabilities, damages, losses, costs, fees (including legal fees), and expenses relating to any allegation or third-party legal proceeding arising from:
 1. the participant's acts or omissions in relation to the Challenge (including the participant's use or acceptance of any prize and the participant's breach of these Terms); and
 2. the participant's submissions violating any rights of any other person or entity or any obligation the participant may have with them.
- Compliance with Laws. The participant agrees to follow and comply with all applicable federal, state and local laws, regulations, and policies.
- Disclaimers. All content provided by the government is provided on an "as is" and "as available" basis. The government disclaims all representations and warranties (express or implied), including any warranties of merchantability and fitness for a particular purpose. The government is not responsible for any incomplete, failed, or delayed transmission of your application information or submissions due to the internet, including interruption or delays caused by equipment or software malfunction or other technical problems. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by the United States government.

- Severability. If any term (or part of a term) of these terms or rules is invalid, illegal or unenforceable, the rest of the terms or rules will remain in effect.
- Translations. In the event of any discrepancy between the English version of these terms and rules and a translated version, the English version will govern.
- Governing Law. This prize challenge is subject to all applicable federal laws and regulations. ALL CLAIMS ARISING OUT OF OR RELATING TO THESE TERMS WILL BE GOVERNED BY THE FEDERAL LAWS AND REGULATIONS OF THE UNITED STATES OF AMERICA.