业 TRADEWIND

TRADEWIND SOLUTIONS MARKETPLACE

OPEN CALL (OPEN UNTIL RESCINDED)

Welcome to the Tradewind Solutions Marketplace.

The Chief Digital and Artificial Intelligence Office (CDAO) in conjunction with its marketplace manager, IN₃, is initiating a long-term, open call for new and novel technology solutions to support the DoD in advancing research, development, prototyping, and adoption of AI/ML, digital and data analytics capabilities. This initiative, entitled the "Tradewind Solutions Marketplace" will solicit, collect, assess, and curate AI/ML, digital and data analytics solutions, and make those solutions available through rapid acquisition methods DoD-wide. The Solutions Marketplace serves Government laboratories, industry and academic organizations, and individual developers by providing a forum to showcase their relevant research, products, and services to prospective Government customers, and serves DoD by providing a forum to access AI/ML, digital and data analytics solutions and rapidly ingest game changing technology solutions.

What is the Tradewind Solutions Marketplace?

The Tradewind Solutions Marketplace is a digital environment of competed video pitches. The video solutions housed within the marketplace have been assessed and vetted through competitive procedures which conform to the competition requirements of 10 USC 4021 and 4022, FAR/DFARS Part 35, and Class Deviation 2022-O0007, implementing Section 803 of the FY2022 National Defense Authorization Act (NDAA), and thus are readily available to be viewed, selected, and awarded by DoD activities. The Marketplace provides a venue for customer organizations to search, view, review, compare, contrast, contact, negotiate, and procure AI/ML, digital and data analytics capabilities through rapid acquisition procedures. For Government laboratories, industry

and academic partners, and individual developers the Marketplace is a single location to promote AI/ML, digital and data analytics technology solutions, products, and services to the DoD in an environment with a rapid acquisition contract pathway. Once a video pitch has passed through the assessment process, and been placed within the Marketplace, that technology solution has satisfied Federal competition requirements (per 10 USC 4021 and 4022, FAR/DFARS Part 35, and Class Deviation 2022-O0007, implementing Section 803 of the FY2022 National Defense Authorization Act (NDAA), and is available for funding via Other Transaction Agreement or procurement contract. Thus, the Tradewind Solutions Marketplace serves as the DoD's digital environment of post-competition, readily awardable, technology solutions.

What are the Goals of the Tradewind Solutions Marketplace?

The Goals of the Solutions Marketplace are to establish a centralized location where DoD can assess the state of the art in available AI/ML, digital and data analytics technology solutions, and where Government laboratories, industry and academic partners, and individual developers can promote their research, technologies, and related products and services to the Government. Further, the structure of the publication and assessment functions of the Marketplace allow for streamlined procurement of available solutions, addressing a major barrier to small business and nontraditional defense contractors, which is possessing contracting pathways. Finally, by leveraging the statutory authorities available, the Solutions Marketplace can provide a technology transition pathway from idea to research, research to prototype, prototype to test and evaluation, and to production, fielding and sustainment of a given technology solution. The Tradewind Solutions Marketplace assessment process provides a streamlined acquisition pathway, by satisfying the competitive standard of 10 USC 4021 and 4022, FAR/DFARS Part 35, and Class Deviation 2022-O0007, implementing Section 803 of the FY2022 National Defense Authorization Act (NDAA), and providing a dramatically reduced 'speed-tocontract' for customer organizations.

Who Can Participate?

All US-based companies, traditional and nontraditional, large business and small business, universities, non-profit companies, Government laboratories and individuals are welcome to participate. In addition, foreign universities, research institutions, and entities may submit video pitches for their related technology solutions provided that such submissions are compliant with international law, including export laws for both the county of origin of the technology provider and the United States.

Why Should Entities Participate?

The CDAO as the primary sponsor of this initiative seeks to establish the Tradewind Solutions Marketplace as a low barrier entry point for industry, academia, and individuals to identify technology solutions, ongoing research efforts, and proposed future development activities that are relevant to the DoD. Participating entities will have their proposed solutions assessed by DoD and supporting industry and academic Subject Matter Experts (SMEs) and will receive feedback on the technical merit of their solution. Further, by submitting against this open call for solutions, all submitted solutions that are deemed "awardable" by the assessing DoD and SME personnel will be considered competed for the purposes of 10 USC 4021 and 4022, FAR/DFARS Part 35, and Class Deviation 2022-O0007, implementing Section 803 of the FY2022 National Defense Authorization Act (NDAA) and will be eligible for award of further research, prototyping, procurement for experimental purposes, and even production. Some of the benefits of participation in the Solutions Marketplace include:

- Exposure and marketing of your technology solution(s) to relevant DoD customer organizations
- Access to the streamlined submission process requiring only minimal organizational and technical information
- Fast track assessment timelines for solution submissions; with notifications made within 30 calendar days of receipt (subject to submission volume)
- Direct feedback from operators, customers, SMEs, and end users within the DoD community to help product teams develop, iterate, and refine product designs and functionality
- Contract pathways for award of research, development, prototyping, test and evaluation, procurement for experimental purposes, and even production
- Fully negotiable award terms including payment, intellectual property and data rights license terms, schedule, milestones, and pricing
- Potential for multiple awards with single customer, or across multiple customers with no funding ceilings or limits to duration of effort, based on a single video solution submission
- Unlimited number of solution video submissions across their entire portfolio of relevant solutions
- Submissions may be submitted at any time while this call remains open

Initial Strategic Focus Areas

As identified by the CDAO, and based on its current set of customer interests, the Government is seeking video solution pitches which are relevant to one or more of the following strategic focus areas, which are derived from DoD's initial direction to provide next-generation capabilities that increase the effectiveness of U.S. forces and support Department-wide reform efforts by addressing critical operational and business challenges. This initial list of strategic focus areas will evolve as the customer base and mission focus areas supported by the Solutions Marketplace evolve. The Initial Strategic Focus Areas for the Solutions Marketplace include:

- *Improving situational awareness and decision-making*. AI/ML, digital and data analytics capabilities applied to surveillance, reconnaissance, and/or perception tasks such as imagery analysis to extract useful information from raw data and equip leaders with increased situational awareness.
- *Increasing safety of operating equipment*. AI/ML, digital and data analytics capabilities that enhance the safety of operating aircraft, ships, and vehicles in complex, rapidly changing situations by alerting operators to hidden dangers.
- *Implementing predictive maintenance and supply*. AI/ML, digital and data analytics capabilities that predict the failure of critical parts, automate diagnostics, and plan maintenance based on data and equipment condition.
- *Streamlining business processes*. AI/ML, digital and data analytics capabilities which reduce the time spent on highly manual, repetitive, and frequent tasks.
- *Assuring cybersecurity*. AI/ML, digital and data analytics capability which preserve the ability to use friendly cyberspace capabilities and protect data, networks, net-centric capabilities, and/or project power in and through cyberspace through the employment of cyberspace capabilities.
- *Developing a digital-age workforce*. AI/ML, digital and data analytics training, education, and immersive programming that supports development of a modern, AI/ML, data, and digital-competent workforce.
- *Increasing autonomy and mobility of DoD systems*. AI/ML, digital and data analytics capabilities which reduce manual input, operation, and decision-making related to DoD Platforms, Systems, Subsystems, and Components.
- *Discovering blue sky technology applications*. Novel applications of AI/ML, digital and data analytics capabilities with the potential to materially impact one or more DoD mission areas.

Submission Guidelines for the Tradewind Solutions Marketplace

Interested organizations, entities, or individuals may submit one or more video solutions for assessment to the Solutions Marketplace. The Government, with support from supporting subject matter expert advisors will assess the submitted solution videos to determine whether the solution video qualifies to be included within the Marketplace. To increase the likelihood that your video is accepted into the Marketplace, it is highly recommended that you conform with the following submission guidelines:

- Solution videos should be submitted in the following format:
 - Videos should be no longer than five (5) minutes in length
 - Resolution: HD 1920x1080
 - Frame rate: 23.98 FPS
 - Audio: Stereo or Mono Mix
 - Encoded for streaming as a .mp4 file under 5gb
 - Color Space: Rec709 or sRGB
- Solution videos should (at a minimum) include the following content:
 - Identification of the problem(s) addressed
 - Description of the solution and relevant application to problem
 - Differentiators (company content choice)
- Solution videos are to be submitted through the following link:
 - o <u>www.tradewindmarketplace.com</u>
- Solution videos must be accompanied by a fully completed submission (automated form available via the Tradewind Solutions Marketplace weblink), which includes:
 - Solution Title
 - Current Technology Readiness Level (See Appendix A)
 - \circ 1500 Character Abstract describing the video solution.
 - Relevant strategic focus area
 - Principal Investigator
 - Related Keywords
- Solution video submissions must adhere to the basic eligibility requirements

Basic Eligibility Requirements, Disclaimers, and General Information

- A single entity may submit multiple solution videos.
 - Each video submission requires a completed video submission form available via the submission link: <u>www.tradewindmarketplace.com</u>
- Solution videos shall be unclassified, and must not include any proprietary information, export-controlled information or controlled unclassified information (CUI).
- Foreign universities, research institutions, and entities may submit video pitches for their related technology solutions provided that such submissions are compliant with international law, including export laws for both the county of origin of the technology provider and the United States.
- All costs of preparing and submitting solution videos and submission forms are the responsibility of the submitting entity and not eligible for funding or reimbursement by the Government.
- Best practices, video tips, and Frequently Asked Questions (FAQ's) are available at the Tradewind Solutions Marketplace website.
- All submissions must be made through the Tradewind Solutions Marketplace website. No hard copy or physical submissions (CD/DVD/Blue Ray) will be accepted).

How Your Solution Video Submission Will Be Assessed

All video solutions will be assessed within thirty (30) calendar days of submission, unless volume levels are abnormally high for a given period. Solutions are assessed by Government personnel and supporting SMEs to determine which video solutions will be selected for placement in the Marketplace. During the assessment period, the Government and/or supporting SMEs may contact submitting entities to clarify information either within the video submission or within the submission form. It is the aim of the Government to populate the Marketplace with technology solutions that possess a high level of technical merit, as those solutions may subsequently be selected for funding by DoD customer organizations. Solution videos submitted against this open call will be assessed in accordance with the scoring rubric included as **Appendix B**. Video solution submissions that meet or exceed the assessment criteria will be included within the Tradewind Solutions Marketplace, accessible by DoD customer organizations and supporting activities (video submissions are accessible by the Government and Government support Contractors only).

Special Note on Assessors

Non-Government, SME assessors may be used in the assessment of solution videos. Such assessors will be operating at the direction of the Government and through signed nondisclosure agreements (NDAs). The Government understands that information provided in response to this open call is presented in confidence and it agrees to protect such information from unauthorized disclosure to extent required by law. The pool of SME assessors is comprised of experts from industry, academia and non-profit research institutions with programs related to data, analytics, digital and artificial intelligence/machine learning.

Customer Viewing and Funding of Marketplace Solutions

The video solutions selected to be included within the Marketplace will be accessible by, and actively marketed to, DoD customer organizations. Through Marketplace advertising, solution showcases, "movie nights", and other regular activities, the solutions included within the Marketplace will be made available to DoD requiring activities. Where a given activity identifies a solution that it seeks to fund, that activity may contact the solution provider directly or through the CDAO's marketplace manager, IN3. The funding activity may request additional information from solution providers, request demonstrations of a video solution, and negotiate an agreement to procure the solution directly with the solution provider, or through the CDAO's marketplace manager, IN3. For contracting support, customer organizations may leverage the current Tradewind contracting activity (Army Contracting Command - Rock Island), future contracting capabilities to be made available through the CDAO itself or may leverage their own contracting support activity. Regardless of a funding customer's preferred contracting support activity and pathway, the funding action will take the form of a procurement contract or other transaction agreement, as the Tradewind marketplace assessment satisfies the competitive standards required under 10 USC 4021 and 4022, FAR/DFARS Part 35, and Class Deviation 2022-O0007, implementing Section 803 of the FY2022 National Defense Authorization Act (NDAA).

Acquisition Pathways for Awardable Video Submissions

The process for award of any Marketplace video solution will vary based upon requiring activity need, type of solution, solution maturity, and structure/maturity of the solution provider. While all solutions which are assessed as awardable and placed on the Solutions Marketplace have satisfied the competition requirements of 10 USC 4021 and 4022, FAR/DFARS Part 35, and Class Deviation 2022-O0007, implementing Section 803 of the FY2022 National Defense Authorization Act (NDAA), the award of such solutions may require the offeror and Government customer to collaboratively develop and negotiate a scope of effort, pricing, project milestones and deliverables, period of performance, relevant terms and conditions and a definition of successful completion for the effort. The

customer organization may choose to leverage the CDAO or the CDAO's marketplace manager, IN₃ to facilitate this project collaboration, or may leverage their own contracting support activity. Ultimately, the choice of the award vehicle will be determined by the nature of the offering and after coordination with the offeror and the expectations of the program and may be awarded under Federal Acquisition Regulation (FAR) procurement instrument or non-FAR authority. The available agreement and contract vehicles are listed below:

- Blanket Purchase Agreement (BPA) FAR Subpart 8.405-3 A Blanket Purchase Agreement (BPA) is a simplified method of filling anticipated repetitive needs for supplies or services by establishing "charge accounts" with qualified contractors. BPAs should be established for use by an organization responsible for providing supplies for its own operations or for other offices, installations, projects, or functions.
- *Indefinite Delivery Indefinite Quantity (IDIQ) Contract* FAR Subpart 16.505 A contract containing the scope of products or services that can be ordered against it may be established and awarded to one or multiple vendors. When the need arises to place orders against the multiple award contract, the awardee(s) holding a base contract are requested to submit a proposal to provide each contractor a fair opportunity to be considered for each order.
- *Basic Ordering Agreement (BOA)* FAR Subpart 16.703 A basic ordering agreement is a written instrument of understanding, negotiated between an agency, contracting activity, or contracting office and a contractor, that contains (1) terms and clauses applying to future contracts (orders) between the parties during its term, (2) a description, as specific as practicable, of supplies or services to be provided, and (3) methods for pricing, issuing, and delivering future orders under the basic ordering agreement. A basic ordering agreement is not a contract.
- *Research & Development Other Transaction (R&D OTA) –* 10 USC 4021 R&D Other Transactions are contractual instruments other than standard procurement contracts, grants, or cooperative agreements. OTs can include flexible business arrangements to acquire research activities to advance new technologies new technology. This may apply to processes, concepts, from nontraditional defense contractors* (as well as from traditional defense contractors when statutory requirements for small business participation or cost sharing arrangements are satisfied) allowing the Government access to cutting edge solutions.
- Prototype OTA 10 USC 4022 Prototype Other Transaction Authority (OTA) is the term commonly used to refer to the (<u>10 U.S.C. 4022</u>) authority of the Department of Defense (DoD) to carry out certain prototypes, research, and production projects. <u>Other Transaction (OT)</u> authorities were created to give DoD the flexibility necessary to adopt and incorporate business practices that reflect commercial industry standards and best practices into its award instruments.

- Production OTA 10 USC 4022(f) See definition above
- Purchase for Experimentation 10 USC 4023 Procurement for Experimental Purposes authorizes the Government to acquire quantities necessary for experimentation, technical evaluation, assessment of operational utility, or to maintain a residual operational capability. Procurement for Experimental Purposes can be competitive or non-competitive and awarded using a contract or agreement. FAR and DFARS are not applicable; therefore, formal competitive procedures do not apply, and any resultant contract is not required to include standard provisions and clauses required by procurement laws. Instead, a contract could be written using commercial terms. Another option is to use an Other Transaction-like agreement, similar to the agreements written under the authority of <u>10 U.S.C. §4021</u> or <u>10 U.S.C. §4022</u>.
- CRADA -15 USC 3710a A Cooperative Research and Development Agreement (CRADA) is a written agreement between a private company and a Government agency to work together on a project. It's one of the principal mechanisms used by federal labs to engage in collaborative efforts with non-federal partners to achieve the goals of technology transfer. The Government laboratories provide equipment, personnel expertise, facilities, or other resources with or without reimbursement, but the Government doesn't provide any funding to the non-federal partners. The non-federal partners provide personnel, funds, services, facilities, equipment, or other resources to conduct specific research or development efforts that are consistent with the mission of the laboratory.

A Note on Federated Contracting

The Tradewind Solutions Marketplace has adopted an approach that permits an interested Government agency to procure a technology of interest from the Solutions Marketplace through the CDAO's contract support activity, ACC-RI, or through their own contracting support activity. In the latter case, the rules and processes related to negotiation and award of solutions, as determined by the interested agency's contracting activity, will be used for the execution of the award. It should be noted that contracting activities from the Services and other Fourth Estate organizations may have specific requirements for award. Under this federated contracting approach, different contracting support activities may request additional information from selectees, such as a further description of the offering, pricing information, desired milestones, and intellectual property requirements and/or restrictions.

Varying contracting support activities may also elect to use their existing FAR-based contract mechanisms or Other Transaction agreements to award solutions selected from the marketplace, which may leverage existing Consortia to handle the processing and submission of the offering to the Government. This may require the selectee to become a member of the agencies' Consortium. Rules for membership may vary among Consortia.

In all cases and under each circumstance the goal remains to be as efficient and timely with all procurement actions, and to leverage existing award mechanisms and contracting support resources to the maximum extent.

Living Document

This open call supporting the Tradewind Solutions Marketplace is a living document which is intended to evolve as the marketplace initiative evolves. All information presented within this document is subject to change. Specifically, the strategic focus areas will be updated throughout the life of the program. Solution providers and customer organizations should check in regularly for updates to the marketplace at <u>www.tradewindmarketplace.com</u>.

Appendix A

Technology Readiness Level (TRL) Scale

Leve	Definition	DoD DAG Description			
1	Basic principles observed and reported	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties.			
2		Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.			
3	critical function and/or	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.			
4	Component and/or breadboard validation in laboratory environment.	Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared to the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.			
5	Component and/or breadboard validation in relevant environment.	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment.			
6	System/subsystem model or prototype demonstration in a relevant environment.	Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness.			
7	System prototype demonstration in an operational environment.	Prototype near, or at, planned operational system. Represents a major step up from TRL 6, requiring demonstration of an actual system prototype in an operational environment such as an aircraft, vehicle, or space.			
8	Actual system completed and qualified through test and demonstration.	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.			
9	Actual system proven through successful mission operations.	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. Examples include using the system under operational mission conditions.			

Appendix B

Tradewind Solutions Marketplace – Video Submission Scoring Rubric

Tradewind Marketplace DRAFT v0-3 Evaluation Criteria Defined

TRADEWIND

		VIDEO PRODUCTION PROMPTS			
INTRODUCTION	weight 15%	Deliver a clear, concise description of what your innovation does or will do, and how it will impact the DoD. Briefly describe the use-case you envision. Your goal is to set context, frame and briefly summarize. Do not attempt to entirely explain your innovation in this section.			
FOCUS AREA ALIGNMENT	PROBLEM ALIGNMENT	ow well does your innovation map to our Strategic Focus Areas? Argue it is a perfect fit with c f the Strategic Focus Areas for the Tradewind Marketplace.			
weight 30%	ALTERNATIVE USE-CASES	If your innovation is not compliant with the stated strategic goals, what capabilities does your proposed innovation provide the DoD?			
TECHNOLOGY VIABILITY	SCIENTIFIC FEASIBILITY	Is the science behind the innovation sound? Why should a skeptic believe that your approach is built upon a firm scientific foundation?			
	ENABLING TECHNOLOGIES	Do the required enabling technologies introduce added risk? Using proven underlying technologies and techniques helps to lower technical risk.			
weight 35%	ALTERNATIVE TECHNICAL APPROACHES	Why is your approach is the best from a technical perspective? If you can convincingly refute alternative means to solving this problem, please briefly do so.			
INNOVATION MATURITY	JUDGE TRL ASSESSMENT	Please give the viewer a clear understanding of your innovation's technology readiness level (TRL.) In this SubDimension, the judges will assign the TRL they think best matches your innovation's maturity			
	SELF-REPORT TRL	Do you accurately understand today's technology readiness level (TRL) for your solution? Briefly provide some details supporting your self-assessment.			
weight 15%	TECH MATURATION PLAN	No matter your current technology readness level, technical risks remain. Identify those risks. Briefly present a credible plan to tackle the risks between today and a fully-scaled version of your innovation.			
PITCH QUALITY	weight 5%	We don't care about video production quality. We care about your ability to communicate about your innovation and the impact you believe it will have. (Amateur videos shot on your smart phone are fine. Do make sure the audio is clear and easily understood. Practice and/or multiple takes are recommended.)			

Tradewind Marketplace DRAFT v0-3 Evaluation Criteria

				100	
		UNSATISFACTORY	MARGINAL	SATISFACTORY	SUPERIOR
INTRODUCTION	weight 15%	Ineffective summary. Failed to convey innovation's ultimate use-case and value.	Adequate summary. Gradually conveys innovation's ultimate use case and value.	Effective summary Systematically conveys innovation's ultimate use-case and value.	Exceptional summary. Immediately conveys innovation's ultimate use-case and value.
FOCUS AREA ALIGNMENT	PROBLEM ALIGNMENT	Not aligned with a published Strategic Focus Area.	Somewhat aligned with a published Strategic Focus Area.	Aligned with a published Strategic Focus Area.	Perfectly aligned with a published Strategic Focus Area.
weight 30%	ALTERNATIVE USE- CASES	No alternative use- cases come to mind.	Perhaps alternative use- cases could be explored.	Strong alternative use- cases should be explored.	Exciting alternative use- cases should be explored.
TECHNOLOGY VIABILITY	SCIENTIFIC FEASIBILITY	No scientific basis for presented approach.	Incomplete scientific basis for presented approach.	Credible scientific basis for presented approach.	Convincing scientific basis for presented approach.
	ENABLING TECHNOLOGIES	Requires nonexistent or unavailable technology.	Requires emerging, cutting edge technology.	Requires proven technologies.	Requires DoD-fielded technologies.
weight 35%	ALTERNATIVE TECHNICAL APPROACHES	No examination of alternatives.	Partially refutes alternatives.	Adequately refutes alternatives.	Persuasively refutes alternatives.
INNOVATION MATURITY	JUDGE TRL ASSESSMENT	TRL 1-3	TRL 4-5	TRL 6-7	TRL 8-9
	SELF-REPORT TRL	Innovator's TRL assessment is unrealistic	Innovator's TRL assessment seems optimistic.	Innovator's TRL assessment seems realistic.	Innovator's TRL assessment seems highly credible.
weight 15%	TECH MATURATION PLAN	Inappropriate next steps.	Somewhat appropriate next steps.	Appropriate next steps.	Highly appropriate next steps.
PITCH QUALITY	weight 5%	Poorly presented. Very difficult to impossible to follow.	Moderately presented. Sometimes difficult to follow.	Effectively presented. Convincing, easy to follow.	Clearly and persuasively presented. Compelling arguments.