UNITED STATES AIR FORCE (AF) CYBERWORX

COMMERCIAL SOLUTIONS OPENING

FA7000-23-S-C001

AF CYBERWORX INNOVATION OPPORTUNITIES

8 August 2023

Table of Contents

1. **INTRODUCTION AND BACKGROUND** 3
2. **PURPOSE** 3
3. **CSO APPROACH AND OVERVIEW** 4
4. **GENERAL INFORMATION** 4
5. **SUBMISSION INFORMATION** 5

1. INTRODUCTION AND BACKGROUND

AF CyberWorx is a problem-solving organization focused on human centered design that builds rapid prototypes to improve the user experience. It is located at the United States Air Force Academy (USAFA) in Colorado Springs, CO. USAFA is designated as a federal laboratory, with the unique position to establish various partnerships and agreements with academia and industry and is chartered with solving the AF's mission problems by engaging users, industry, and academia in human centered design processes that result in solutions for the war fighter. There is interest in capturing the most creative and advanced technologies where the department can make use of defense specific projects and dual-use technologies to further its technological gain. In realizing the potential to leverage superiority in innovative technologies, AF CyberWorx endeavors to create valued partnerships by aligning itself with partners that assist in technology transfer/transition by spin-off technologies and guiding small business economic development with the primary goal of broadening the defense industrial base. This Commercial Solutions Opening (CSO) is a competitive solicitation seeking proposals for innovative, commercial technologies, and services that accelerate attainment of critical defense capabilities as detailed in Attachment 8. This CSO may result in the award of prototype projects, which include not only commercially available technologies fueled by commercial or strategic investment, but also concept demonstrations, pilots, and agile development activities that can incrementally improve commercial technologies, existing government-owned capabilities, or concepts for defense application.

2. PURPOSE

2.1 This CSO is issued in accordance with DFARS Class Deviation 2022-O0007 and is a competitive solicitation of proposals focused on technologies to meet the AF CyberWorx's mission. AF CyberWorx is soliciting solution briefs in response to Areas of Interest (AoI) which will be posted as calls to this CSO. Nontraditional defense contractors and small businesses are encouraged to submit solution briefs or proposals under this CSO.

2.2 "Nontraditional Defense Contractors" is defined in 10 U.S.C. § 2302(9) as an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the 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 41 U.S.C. § 1502 and the regulations implementing such section. This includes all small business concerns under the criteria and size standards in 13 C.F.R, § 121.

2.3 "Innovative" means any technology, process, or method, including research and development that is new as of the date of submission of a proposal, or any application that is new as of the date of submission of a proposal of a technology, process, or method existing as of such date.

3. CSO APPROACH AND OVERVIEW

3.1 This CSO seeks innovative, commercial approaches to meet various technology objectives of AF CyberWorx. All items, technologies, and services acquired using a CSO will be treated as commercial items. The Government encourages proposals that span a wide spectrum of possible technical and business solutions in response to the specific AoI in Attachment 8 or posted as separate calls. The Government reserves the right to award any combination of proposals which offer the best overall value to the Government, and to oversee any and all processes and approaches once initiated. Awards as a result of this announcement will be in the form of FAR Part 12 commercial contracts. The AF also reserves the right to award Other Transactions (OT).

3.2 OT for Research, Prototype, and Production: Upon favorable review and available funds, the government may choose to award an OT for Research, Prototype, and Production as deemed appropriate for the transaction. The Agreements Officer will negotiate directly with the offeror on the terms and conditions of the OT, including payments, and will execute the OT on behalf of the government. Upon successful completion of a prototype project under an OT for Prototype agreement, the government and offeror may negotiate a follow-on production contract or agreement without further competition as authorized under 10 U.S.C. § 2371b(f). Any concept/technology/solution successfully proven through an OT for Prototype can be transitioned to production. Any resultant OT for Prototype awarded under this CSO will include language providing for the potential award of a follow-on production contract or agreement.

3.3 Awards resulting from this CSO will be made based on the evaluation results of a two or three phased proposal process described in Section 5. The Government reserves the right to fund all, some, one, or none of the proposals submitted; may elect to fund only part of a submitted proposal; and may incrementally fund any or all awards under this CSO. All awards are subject to the availability of funds.

3.4 All coordination and communication between offerors and the Government will be conducted using (www.sam.gov) and the points of contact associated with this CSO, as specified in Section 4.

3.5 Notice to Offeror(s)/Supplier(s): Funds are not presently available for this effort. No award will be made under this solicitation until funds are available. The Government reserves the right to cancel this solicitation, either before or after the closing date. In the event the Government cancels this solicitation, the Government has no obligation to reimburse an offeror for any costs.

3.6 Access to unclassified sensitive or classified information is not anticipated for projects awarded under this CSO.

4. GENERAL INFORMATION

4.1 *Points of Contact* Questions regarding the content of this CSO must be addressed to the Contracting Office below.

Attn: Contracting/Agreements Officer, 10 CONS/PKC
10CONS.CyberWorx@us.af.mil

5. SUBMISSION INFORMATION

5.1 *Submission Overview* This CSO is open for Solution Brief submissions continuously or until superseded. Phase I submissions shall include both the Quad Chart and Solutions Brief prepared in accordance with the formats in Attachments 1 and 2 respectively. Subject to funding availability, all solution briefs will be evaluated IAW Attachment 7. Calls may be placed against the CSO and specific information related to due dates will be provided in each call. The calls may also include specific terms which apply to the call such as further technical details, cut-off date for solution briefs and quad charts and/or proposal submission and any pertinent information. Proposals or solution briefs submitted in response to calls should be submitted according to directions contained within each individual call and in accordance with this CSO. Offerors should monitor (www.sam.gov) for specific calls or amendments to this CSO.

5.2 *Two or Three Phased Submission* This CSO may be conducted in two OR three phases as follows:

5.2.1 *Phase I Quad Chart and Solution Brief:* Interested offerors must submit Quad Charts and Solution Briefs in accordance with instructions provided in this CSO. Phase I submissions will be evaluated against criteria as described in Attachment 7 of this CSO.

All Quad Charts shall include the information indicated on the sample template in Attachment 1.

The Solution Brief narrative expands on the Quad Chart presentation. Instructions for format and content are located in Attachment 2.

Solution Briefs and quad chart submissions shall be sent to 10CONS.CyberWorx@us.af.mil for review. All solution briefs must be unclassified.

The government will not pay companies for the costs associated with solution brief submissions.

5.2.1.1 *Notification of Selection*. All offerors providing Phase I submissions will be contacted by the Government, either with an email letter informing them that

the effort proposed is not of interest to the Government at this time or with a request for either a pitch session OR request for proposal by a specific date.

5.2.2 *Phase II Pitch Session:* Phase II submission will only be accepted from offerors who upon review of Phase I submissions, are invited by the Contracting Officer to a pitch session. In addition to the pitch, the government, at its discretion, may request an additional written submission to further supplement the information provided in the Phase I solution brief. Instructions for format and content are located in Attachment 3.

Please note: The government reserves the right to forgo Phase II and go directly to Phase III.

5.2.3 *Phase III Technical, Cost, and SOW Proposal*: Phase III proposals will only be accepted from offerors who upon review of either Phase I or Phase II submission, are invited by the Contracting Officer to submit a full proposal (Technical, Cost, and Statement of Work (SOW)). In order to be considered for award under Phase III, offerors must be registered in the System for Award Management (SAM) at www.sam.gov, be considered responsible within the meaning of FAR Part 9.1, Responsible Prospective Contractors, have a satisfactory performance record, and otherwise be eligible for award based on federal law and regulation.

5.2.4 *Proposal Submission:* Upon notification for a proposal by the Contracting Officer, offerors will have 30 calendar days to prepare and submit a proposal in accordance with the format and instructions in Attachments 4-6.

5.2.5 *Proposal Review, Evaluation and Selection Process:* Each proposal will be evaluated by the Government and the proposal must stand on its own technical merit. Proposals will be evaluated in accordance with the evaluation criteria and process specified in Attachment 7. The primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and funds availability. In order to provide the desired evaluation, qualified Government personnel will conduct reviews and (if necessary) convene panels of experts in the appropriate areas. IAW Class Deviation 2022-O0007 price shall be considered to the extent appropriate, but at a minimum, to determine that the price is fair and reasonable. Proposals need not be evaluated against each other since they are not submitted in response to a common performance work statement or statement of work.

5.2.6 *Small Business Subcontracting Plan*: Large business offerors shall submit either an individual subcontracting plan and/or master subcontracting plan (if available) in accordance with FAR Clause 52.219-9 Small Business Subcontracting Plan (Nov 2021), DFARS 252.219-7003 Small Business Subcontracting Plan (DoD Contracts) – Basic (Dec 2019) and DFARS 252.219-7004 Small Business Subcontracting Plan (Test Program) (May 2019). The

offeror's small business subcontracting plan shall include, but is not limited to, detailing the commitment/targets for each category of small business, veteran-owned small business, service-disabled veteran-owned small business, small disadvantaged business, HUBZone, and women-owned small business concerns. The plan shall describe for each category the total value subcontracted expressed in dollars and percentage of total subcontracted value if an individual subcontracting plan. The plan shall also state the extent and nature of work to be performed by small business concerns, the method used to develop goals, the method used to locate potential suppliers, if the goals include indirect costs (if so, describe the cost allocation method) and describe the efforts the offeror will make to assure small businesses have an equitable opportunity to compete for subcontracts. If the planned goals do not meet or exceed DoD FY subcontracting goals found at https://business.defense.gov/About/Goals-and-Performance, substantial explanation/rationale shall be provided. The plan shall also provide the name and duties of the contractor's subcontracting plan administrator.

ATTACHMENT 1: QUAD CHART FORMAT

The following information must be included in the Phase I Quad Chart. Quad Charts shall not exceed 1-page in landscape view. Quad Charts must follow the formatting guidelines on the slide template below. All font/text must be at least 12-point font.

Project Title

Objective: Clear concise (1-2 sentence) description of the goal for the effort.

Description of Effort: Brief description of the technology proposed.

Photo/graphic illustration of concept technology

Benefits: Brief Statement that identifies the advantages of the proposed technology over current practices and competing technology.

Challenges: List of technical/scientific challenges.

Maturity of Technology: Description of the current maturity of the proposed technology.

Major Goals and Milestones by Fiscal Year (FY): List goals/milestones and any deliverables.

Rough Order of Magnitude (ROM): Amounts broken out by years. Example: Year 1: $XX

Period of Performance:

Contact Info:

ATTACHMENT 2: PHASE I SOLUTION BRIEF FORMAT

The solution brief narrative expands on the Quad Chart presentation and must be 8.5 x 11 inches with one-inch margins, no longer than five pages, single-spaced (must use standard single-space function in Microsoft Word), with text in Times New Roman, no smaller than 12-point font. All solution briefs must specify a project title, the Offeror's organization, and the specific AoI topic number associated with the proposal.

Pages shall be numbered starting after the cover page being Page 1, and the last page being no greater than Page 5. The page limitation covers all information including indices, photographs, foldouts (counted as 1 page for each 8.5 by 11 portion) tables, charts, appendices, attachments, resumes, etc. The Government will not consider pages in excess of these limitations.

Alternatively, Solution Briefs may take the form of briefing slides which should not exceed fifteen (15) slides unless otherwise stated on the AoI. Any pages or slides submitted beyond this limitation will be removed and not evaluated. Solution Briefs shall be standard 12-point, Times New Roman font with a standard (4:3) slide dimensions.

Format: The Solution Brief will be formatted as follows:

Title Page: CSO Number, Title of Program, Area of Interest and Call number, Name of Offeror, Business Size, Offeror's Commercial and Government Entity (CAGE) number, Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number, Contracting POC and Technical POCs with appropriate telephone numbers, and email addresses for the POCs. For proposed efforts under which classified data will be accessed or generated, add the following information: Classified level at which offeror is cleared, contractor address for forwarding classified material (name, address, zip code), cognizant security office (name, address, zip code), and offeror's security officer's name and telephone number).

Executive Summary (one page): Provide an executive summary of the technology.

Technical Concept: Describe the unique aspects of the technology and the proposed work as it relates to the AoI. Identify whether the effort includes the pilot or demonstration of existing commercial technology (identified as commercially ready and viable technology), or the development of technology for potential defense application. If development or adaptation is proposed, identify a suggested path to mature the technology. Identify aspects which may be considered proprietary.

The technical portion of the solution shall include a discussion of the nature and scope of the effort and the offeror's proposed technical approach/solution. It may also include any proposed deliverables. Resumes, descriptions of facilities and equipment, and a proposed SOW are NOT required to be submitted with the solution brief paper.

Offeror Viability/Rough Order of Magnitude (ROM) Cost/Price: Provide a brief overview of the offeror's business establishment. Provide a ROM and a summary of current fundraising to date or a summary of the top line (gross sales/revenues). Provide a summary of product commercialization and go-to-market strategy.

Price Portion: The cost/price portion of the solution brief shall include a ROM cost/price estimate. No detailed price or cost information should be included; only a time-phased bottom-line figure should be provided.

Solution briefs and quad charts shall be sent to the Contracting Officer identified above for review 10CONS.CyberWorx@us.af.mil

ATTACHMENT 3: PHASE II PITCH SESSION FORMAT

During this step, offerors are invited to pitch and further discuss the proposed concept/technology/solution in person or virtually. The government will provide the offeror 30 minutes for the offerors' pitch and additional time if needed for follow up questions/discussion.

Pitch Content: Offerors shall provide an in person or virtual pitch to demonstrate and provide further details on the technical and business viability of the proposed solution. In addition to the pitch, the government, at its discretion, may request an additional written submission to further supplement the information provided in Phase I solution brief.

During the pitch session, the offeror must detail/address:

Estimated Price/Schedule: Provide a ROM price and notional schedule for how this concept could be tested within the DoD.

Data Rights Assertions: The solution brief will identify any Intellectual Property (IP) involved in the effort and associated restrictions on the government's use of that IP.

Data rights will be negotiated at the contract/OT level.

***Note: The Government reserves the right to forgo Phase II and go directly to Phase III.**

ATTACHMENT 4: PHASE III TECHNICAL PROPOSAL FORMAT

The Technical Proposal portion of the Phase III submission shall conform to the following:

1. Page Limitations and Formatting:

(a) Technical Approach: The Technical Proposal page limitations will be stated in the Phase III RFP or attachments. The page limitation covers all information including indices, photographs, foldouts (counted as 1 page for each 8.5 by 11 portion) tables, charts, appendices, attachments, resumes, etc. The document must be provided in Microsoft Word. Signed pages may be submitted in Adobe. Font shall be standard 12-point, Times New Roman. Character spacing must be "normal," not condensed in any manner. Pages shall be single-spaced (must use standard single-space function in Microsoft Word), if double sided (each side counts as one page), 8.5 by 11 inches, with at least one-inch margins on both sides, top and bottom. All text, excluding text in tables and charts (single-spaced), must adhere to all font size and line spacing requirements listed herein. Font and line spacing requirements do not have to be followed for illustrations, flowcharts, drawings, and diagrams. These exceptions shall not be used to circumvent formatting requirements and page count limitations by including lengthy narratives in such items.

(b) Statement of Work (SOW): The same formatting rules for the Technical Approach apply to the SOW with the exception of page limitation, which is (10) pages (see attachment 6).

(c) Price Proposal: The Price Proposal does not have a page limit restriction (see attachment 5)

(d) The Government will verify, upon receipt, that the proposal and SOW conform to the stated requirements. Any pages in excess of the stated page limitation will not be considered for evaluation purposes.

2. Technical Approach: The following describes the technical approach requirements:

The Technical Approach proposal(s) shall describe the background and objectives of the proposed work, the approach, deliverables, and the resources needed to execute. Include the nature and extent of the anticipated results. Include ancillary and operational issues such as certifications, algorithms, and any engineering/software development methodologies to be used. Provide a detailed project schedule that outlines the various phases of work to be accomplished within the proposed period of performance. You may refer to the solution brief that prompted this proposal request, but do not duplicate it. Provide additional details of data rights assertions that may include, but are not limited to: royalty provisions, limited licenses (scope, duration, and manner), options, conditions, right-of-first refusal, and exclusive dealing terms, amongst others.

Government Support Required: Identify the type of support, if any, the offeror requests of the government in general, such as facilities, equipment, data, and information or materials.

ATTACHMENT 5: PHASE III PRICE PROPOSAL FORMAT

The price proposal must include pricing information sufficiently detailed for meaningful evaluation of the proposal. Since the CSO is limited to commercial solutions, detailed costs will not be required. For pricing purposes, offerors should assume a contract start date of approximately ninety (90) days after submission of the proposal.

Since all proposals are considered commercial items, technologies, or services, the requirements of the Truth in Negotiations Act (TINA) are not applicable. However, if the Contracting Officer determines additional information is necessary to support a determination of a fair and reasonable price, other than certified cost and pricing data may be requested.

The responsibility for providing adequate supporting data and attachments lies solely with the offeror. Further, the offeror must also bear the burden of proof in establishing reasonableness of proposed prices; therefore, it is in the offeror's best interest to submit a fully supportable and well-prepared price proposal.

The offeror shall prepare the Price Proposal (with the exception of the pricing narrative information described below) using Microsoft Excel format, but shall merge all Price Proposal documents into one Adobe PDF file for ultimate proposal submission. Include the AoI Number and the Project Title on all pages. The offeror shall retain the Excel version of all Price Proposal documents for subsequent submission to the Government should the offeror's proposal be selected for award.

a. Format. Price proposals shall be formatted as follows.
   (1) Paper Size – 8.5 X 11-inch paper
   (2) Margins 1-inch
   (3) Spacing – single
   (4) Font – Times New Roman, 12 Point
   (5) Electronic Software: Microsoft Word, Excel, or Adobe Acrobat

b. Additional Information: The following information should be contained in a cover sheet attached to the price proposal:
   (1) Full company name and address
   (2) CSO number submitting proposal against
   (3) Point of contact, name, title, and phone number
   (4) CAGE code
   (5) Unique Entity ID number
   (6) If an offeror proposes the use of Government Furnished Property (GFP), other than GFP identified in an Open Period CSO Amendment or Request for Proposal, the offeror's proposal must specifically identify each piece of GFP in the Cost/Business Proposal. Include the following information in the proposal:
      (a) A list describing all Government property that the offeror or its subcontractors propose to use on a rent-free basis. The list shall identify the accountable contract under which the property is held and the authorization for its use (from the Contracting Officer having cognizance of the property);
      (b) The dates during which the property will be used and, for any property that will be used concurrently in performing two or more contracts, the amounts of the respective uses in sufficient detail to support prorating the rent;

(c) The amount of rent that would otherwise be charged in accordance with FAR 52.245-9, Use and Charges; and
(d) The voluntary consensus standard or industry leading practices. and standards to be used in the management of Government property, or existing property management plans, methods, practices, or procedures for accounting for property.

NOTE: If an offeror takes exceptions to the requirements called out in the announcement, the exceptions should be clearly stated in the price proposal.

ATTACHMENT 6: PHASE III STATEMENT OF WORK (SOW) FORMAT

A SOW must be included with the full proposal as part of the Phase III submission. The SOW is limited to ten (10) pages in length and must be a separate and distinct document suitable for incorporation into the procurement instrument. DO NOT INCLUDE ANY PROPRIETARY INFORMATION IN THE SOW. In addition to the contractor proposed SOW, a government generated Supplemental Requirements SOW containing additional contracting requirements may be included in any resulting award(s). Pages should be numbered, and the initial page should have a date (document date) shown under the title.

The proposed SOW must accurately describe the work to be performed. The proposed SOW must also contain a summary description of the technical methodology as well as the task description, but not in so much detail as to make the SOW inflexible. The SOW template should include the following sections and specifically respond to the Request for Proposal (RFP):

1. *OBJECTIVE*. This section is intended to give a brief overview of the project and should describe why the work is being pursued and what the offeror intends to accomplish.

2. *SCOPE*. This section includes a statement of what the SOW covers. This should describe the capability area (CSO topic) to be investigated, goals, and milestones for the effort. Provide a detailed project schedule that outlines the various phases of work to be accomplished within the proposed period of performance.

3. *BACKGROUND*. The offeror must identify appropriate documents that are applicable to the effort to be performed. This section includes any information, explanations, or constraints that are necessary to understand the project tasks and requirements. This section should describe the effort's relationship to previous and ongoing efforts.

4. *TASKS AND TECHNICAL REQUIREMENTS*. This section contains the detailed description of tasks that are necessary to perform the proposed work. These tasks will represent the work to be performed in any potential contract award, and, thus, shall be considered contractually binding. This section should be developed in an orderly progression and presented in sufficient detail to establish the feasibility of accomplishing the overall program goals. This section should clearly distinguish base period tasks from option tasks. The sequence of performance must be presented by fiscal year and task order, as in the Technical Proposal. The SOW must contain every task to be accomplished. Note: The Government reserves the right to modify and negotiate the language in the SOW prior to any potential contract award.

    4.1. Task descriptions must be definite, realistic, and clearly stated. Use the phrase "the contractor shall" whenever the work statement expresses a provision that is binding. Use "should" or "may" whenever it is necessary to express a declaration of purpose. Use "will" in cases where no offeror requirement is involved (e.g., power will be supplied by the Government).

4.2. Do not use acronyms or abbreviations without first defining them. Place abbreviations and acronyms in parentheses following the first usage of the spelled-out phrase.

4.3. If presentations and meetings are identified in the offeror's schedule, the offeror shall include the following statement in the SOW: "Conduct presentations and meetings at times and places specified in the contract schedule."

4.4. The desired project structure consists of base period tasks, focused on demonstrating the feasibility of the technology, and option tasks, which cover design, fabrication, testing, and evaluation of the final product. Execution of option tasks will be dependent upon and determined by the contractor's performance during and the results produced from the base period tasks.

ATTACHMENT 7: EVALUATION CRITERIA AND SELECTION PROCESS

The Government will review each Quad Chart/Solution Brief (Phase I) and select the offerors that have the greatest potential to meet the needs of AF CyberWorx requirements based upon the AoI. Initially, a determination will be made if each offeror is technically qualified and has a comprehensive understanding to undertake the development of the technology based on the information stated in the Quad Chart/Solution Brief. The Government will determine the most technically competent and capable of the qualified offerors using the criteria below:

- Criteria (Factors) for Selecting Quad Chart/Solution Briefs/Pitch Sessions (if applicable) for Full Proposal Submission:
    - Technical merit/applicability,
    - Importance to agency programs, and
    - Funds availability
- Relative Importance: All Factors are of equal importance
- Method of Evaluation: Peer or scientific review

The evaluation criteria listed above will be used to evaluate submittals for all phases. Price shall be considered to the extent appropriate, but at a minimum, to determine that the price is fair and reasonable. Proposals need not be evaluated against each other since they are not submitted in response to a common performance work statement or statement of work. The government reserves the right to fund all, some, one, or none of the proposals submitted or may elect to fund only part of a submission under this CSO.

All phases will be categorized as Recommended, Selectable, or Nonselectable as follows:

- Recommended: Proposals are recommended for acceptance if sufficient funding is available, and normally are displaced only by other Recommended proposals.
- Selectable: Proposals are recommended for acceptance if sufficient funding is available, but at a lower priority than Recommended proposals. A Selectable proposal may require additional development. To ensure a diversity of approaches, a Selectable proposal may be prioritized over a Recommended proposal if the Selectable proposal presents a unique approach unlike any of the Recommended proposals.
- Not Selectable: Even if funds were available, the proposal should not be funded.

ATTACHMENT 8: Area(s) of Interest

Air Force CyberWorx is interested in innovative technologies and services related to the areas of mission or technical interest listed below. Submissions should identify innovative solutions that fill capability needs related to the development of AF CyberWorx capabilities. The items, technologies, or services can also directly improve the effectiveness or efficiency of operating and/or maintaining current capabilities related to the topics listed below. The level of detail provided for each topic or the order in which they appear is not intended to convey any information regarding relative priority.

TOPIC: AFCWX-001, MODERN PRODUCT DEVELOPMENT METHODS

AF CyberWorx seeks innovative solutions in the human centered design, user experience design, lean startup, agile development, and technology transition and transfer domains. This topic includes:

- Advancement of the Department of Defense, Joint Services, Air Force, and Airmen's knowledge on human centered design, user experience design, lean startup, and agile development methods, tools, and approaches, including training development and delivery
- Institutionalization and normalization of design thinking, service design, content design, product design, behavioral science, ethnographic research, usability research, accessibility assessment, lean startup methods, and/or agile development processes and learnings
- Solutions that intentionally take on a customer-first mindset to Air Force problems
- Services that help programs better understand stakeholder needs to inform improvements to products, services, policies, and processes
- Design processes, workspaces, and tools that allow humans to effectively and efficiently achieve their goals
- Organizational transition and transformation solutions related to technology transition and transfer policies, strategies, and techniques
- Public-Private Partnerships (P3) and Intellectual Property (IP) management

TOPIC: AFCWX-002, COMMUNICATIONS TECHNOLOGIES

AF CyberWorx seeks innovative solutions in the communications technologies ecosystem. This topic includes:

- Mesh networks with dynamic routing
- Software defined radios (SDR) supporting multi-band, multi-waveform signals
- Software defined routing and/or networking technologies and solutions
- Application of 5G, LEO SATCOM, Light Fidelity (LiFi), and other not yet defined data transport methodologies
- Data transportation security and encryption
- Covert communications methodologies, techniques, and technologies

- Innovative hardware and software to support trusted communications operating on networks that are suspect and/or known as hostile or compromised
- New capabilities to acquire, process, and disseminate information across force elements
- Application of communication technologies to enhance mission readiness and enable new mission capabilities

TOPIC: AFCWX-003, DISTRIBUTED COMPUTING AND STORAGE DESIGN PATTERNS

AF CyberWorx seeks innovative solutions in the distributed computing and storage design patterns domain. This topic includes:

- Software development methodologies and patterns
- Multi-cloud computing and storage solutions
- Containerization and scaling of workloads for Enterprise and Edge (Internet of Things [IoT], embedded, etc.) solutions
- DevSecOps development and sustainment
- Low Code/No Code platforms
- Data analytics, including Big Data storage, transport, and normalization (cleanse, munge, etc.)
- Software architecture and applications that can be utilized to automate operational and administrative processes
- Artificial Intelligence (AI) and Machine Learning (ML) solutions and improved algorithms for strategic, operational, and tactical use-cases

TOPIC: AFCWX-004, EMERGING TECHNOLOGIES

AF CyberWorx seeks innovative solutions in emerging technologies to enhance mission readiness, enable new mission capabilities, and execute effective and efficient operations. This topic includes:

- Quantum computing and storage technologies
- Extended reality (XR), including augmented reality (AR), virtual reality (VR), mixed reality (MR), and new immersive technologies
- Directed Energy Applications
- Nanotechnologies
- Sensing technologies
- Robotics and autonomous systems partnering and Robotic Process Automation (RPA)
- Cognitive Performance, Mental health and resiliency
- Biomechanical and bio-electrical interfaces