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# FY23 SPARK KICK-OFF EVENT OPEN CALL FOR PROPOSALS

## THANK YOU FOR JOINING US!

## THE LIVE EVENT WILL BEGIN IN A FEW MINUTES



- Housekeeping and Welcome from Ms. Jessica Parker, SPARK Operations Lead
- Opening Remarks from Mr. Josh Israel, JPEO-CBRND Chief Engineer
- Overview of SPARK and explanation of FY23 changes and focus areas
  - Ms. Parker, Mr. Israel, & Dr. Julia Dooher, JPEO-CBRND Chief Scientist
- Moderated Q&A







#### Live event Q&A ⑦ × **HOUSEKEEPING REMARKS** Featured My questions Most recent Welcome to the Live Event! Please type your questions here and we will answer them during the designated Q&A portion! Thank you for joining us for the FY23 SPARK kick-off for the call for proposals! Anonymous 7:23 PM 6 Can you explain the SPARK process in more This is an MS Teams live event, if you have joined via phone, please make sure detail? you are muted at all times ሪ Anonymous 7:24 PM This event is being recorded What are the focus areas for SPARK this year? Please enter any questions into the Q&A panel – if you see a question you like, Anonymous 7:25 PM 6 1 give it a thumbs up, we will go through and answer these questions during the How many finalists are selected to do an latter half of the event! oral pitch? Anonymous 7:25 PM ሪ How much funding can I receive through SPARK? SPAR Ask a question

#### SPARK funds Proposals are just 3 innovative concepts pages for up to \$50,000 Seedling projects are All JPEO staff are generally **3 months** in invited to participate duration Contractors and A JPEO Sponsor is external organizations required for external are welcome to **SPARK** performers submit proposals Hundreds of SPARK has created proposals have been success stories across received since 2017 all JPEO areas

# INGENUITY



Inspiration Creativity Analysis Technology Development Teamwork Success

# CREATIVITY

# THE SPARK INITIATIVE

# WHY SPARK?

Serving as venture capital for emerging JPEO-CBRND program areas, SPARK paves the way for new approaches and continuous innovation for the warfighter

#### **Empower JPEO Staff**

- Technical and Programmatic
- Their idea, or they bring it to life as sponsor
- Trust and support our people and their initiative

**Reduce barriers** to good ideas being shared and considered

• Non-traditional, relatively quick submission

#### Scout for **new performers** (orgs or teams)

• JPEO Staff may identify the performer, or performer steps forward and we see if a match

#### Invest **in gray areas** around (or before) a POR

 Not "wheelhouse" POR activities, but chance to address important problems or opportunities not being tackled

#### Embrace **new ways** of doing things

- Try out an engineering hypothesis or prototype
- Try out a workplace tool or process
- Thoroughly reviewed, but risk friendly

Through SPARK, **provide funding back** to areas deemed to benefit the JPMs and JPLs, the warfighter, and bill payers

# WHAT DO I NEED TO INCLUDE IN A PROPOSAL?

- Title of Proposed SPARK Project
- Proposer Name, Organization, and Contact Info
- Proposed Amount
- Expected Project Duration
- Challenge Statement
- What is the SPARK here?
- What's the benefit?
- What are the risks?
- List stakeholder partners
- Other, if necessary
- If applicable, do you have a current contracting vehicle for the performer, or not yet?
- Name and signature of sponsoring JPEO government personnel if proposer is external to JPEO
- TRL of proposed technologies must be at TRL 4 or greater; technologies at the TRL1, TRL2, and TRL3 levels will not be considered for award.





# SPARK

#### **FY23** Timeline



#### Data Integration

- Operational data science (Artificial Intelligence/Machine Learning) for CBRN decision support
- CBRN and non-CBRN operational/tactical data fusion to inform Joint All-Domain Command & Control (JADC2)
- Integrated/system of systems testing & training approaches

#### Digital Transformation

- Development, Security, and Operations (DevSecOps) with focus on security and operations areas for Joint Capability Delivery
- Digital Engineering to support portfolio integration
- Workforce upskilling in Digital Transformation

SPARK

FY23 FOCUS AREAS





#### DATA INTEGRATION

- Operational data science (Artificial Intelligence/Machine Learning) for CBRN Decision Support: JPEO-CBRND is
  interested in exploring applications of data science for command & control (C2) and decision support of CBRND operations—any
  military activity that involves a CBRN threat, such as reconnaissance, threat identification, protective posture, decontamination,
  medical treatment, and site exploitation. Proposals may apply broadly to any area of data science (e.g., operational data acquisition,
  model development, and data visualizations) Technologies that apply common data science use cases (e.g., route planning, image
  analysis) towards CBRN defense are highly encouraged.
- CBRN and non-CBRN operational/tactical data fusion to inform JADC2: The DoD is moving towards more jointly integrated operations supported by data sources from multiple domains under the concept of Joint All-Domain Command & Control (JADC2). As the main provider of CBRN data for each of the services, JPEO-CBRND is seeking solutions that integrate CBRN data with other all-domain data to provide the commander with additional decision-making aids. Proposals may identify any technology that provides data fusion, such as applications that provide an all-domain common operating picture, message translation software that integrates data from multiple sources, or cross-domain solutions that enable data to be shared on multiple enclaves.
- Integrated/system of systems testing & training approaches: JPEO-CBRND is evolving its approach to capability development by focusing on a system of systems (SoS) approach to CBRN defense. These SoS solutions will require new ways of performing integrated testing and training using new tools and methodologies. The organization is seeking proposals that provide the capability to do integrated testing (live, virtual, or constructive) or training in any setting (e.g., field, laboratory). Some examples include integrated soldier kit models for size/weight/power/cooling performance or enterprise training platforms that offer CBRN and non-CBRN integrated C2 modules.

#### **DIGITAL TRANSFORMATION**

- Development, Security, and Operations (DevSecOps) with focus on Security and Operations areas for Joint
  - **Capability Delivery:** JPEO-CBRND is seeking proposals that will explore applying DevSecOps to the development of CBRN defense applications. The organization is looking to identify technologies and processes that facilitate and provide operator feedback directly to software developers in a more agile manner (DevOps). The organization is also pursuing software pilots that will utilize DoD-approved DevSecOps environments to perform real-time monitoring of cyber risk to pursue a continuous authority to operate (cATO).
- Digital Engineering to support portfolio integration: JPEO-CBRND is implementing the DoD Digital Engineering (DE) Strategy
  with a specific emphasis on DE to support portfolio integration. The organization is looking for DE tools, technologies, and techniques
  that provide system of systems (SoS) integration services, such as mission engineering, portfolio optimization, and reference
  architecture validation. Scope of digital engineering is broad and may include anything from model-based systems engineering,
  modeling & simulation, portfolio lifecycle management, or digital twin.
- Workforce upskilling in Digital Transformation: The Army has placed a priority on digital transformation in acquisitions and JPEO-CBRND is seeking to develop its workforce in the areas of DevSecOps, enterprise data management, data science, cyber, and general topics in digital innovation. Proposals in this topic may include technologies and platforms that directly provide workforce development, continuous learning, certification, or other solutions for talent management.

## FAQs



#### Q: I am new to working with the JPEO. What if I have an idea, but I don't have a government sponsor?

A: If you need assistance, submit your capability (not your proposal nor any proprietary information) via <u>JETT</u> to connect with the right folks at the JPEO that may be a good fit to sponsor your ideas. Under "What brings you to the JPEO-CBRND?" select Other and in the text box type that you are looking for a SPARK sponsor.

After clicking on the JETT link on the JPEO-CBRND's Work With Us page, you will be prompted to answer a series of questions that will create a roadmap to connect you with a JPM, JPL, a program manager, or a technologist to share ideas and inventions. Industry members will have the opportunity to read descriptions of JPM or JPL market research areas of interest and be able to select up to three offices that are most appropriate to contact regarding a given capability or technology. For each office selected, industry members will be asked to answer a short questionnaire and upload any additional relevant information. These responses will go directly to the designated office for review and follow-up. *JETT is not a source selection portal, nor will information provided be used to award a contract. JETT is intended only for publicly available material and is not to be used to submit anything proprietary or classified, including personally identifiable information (PII).* To access the JETT tool, either go to the JPEO Work With Us page and click on the JETT logo, or go directly to

https://jacks.jpeocbrnd.army.mil/JETT







## FAQs



#### **Q: Who can submit proposals?**

A: All government JPEO-CBRND staff, regardless of time or role in the organization. If you have an idea on how to identify and explore technology more creatively, or how to help us function more effectively and efficiently internally, we want to hear from you. Personnel from external organizations or contractors are also welcome to submit ideas; a JPEO-CBRND government sponsor (an individual) will need to sponsor such proposals. Junior staff are very much welcomed to participate, as well as those with years of experience. Projects that leverage insight gained from industry experience and/or other DoD/government organizations are valued. If you are from an outside organization (e.g., partner government organization, military component, industry, laboratory, university) and you have an idea that may address a JPEO-CBRND or JPEO-CBRND customer need, we would love to see your SPARK proposal.

#### Q: What is the role of a sponsor?

A: The sponsor is a critical member of the team. They provide important execution help, and their insight can shape the direction of a SPARK and thereby ensure its relevance and impact. If the SPARK performer is an external entity, the sponsor interfaces with the JPEO SPARK office and JPEO financial office to keep the effort on track. Usually, the program office under which the SPARK falls handles contracting actions or downstream funding actions. The sponsor continues to check in with the performer team throughout the duration of the project.

#### Q: I'm a JPEO staff member; I have ideas on how to improve acquisition processes under the JPEO roof, or workplace matters, but not sure how I would go about turning it into a SPARK.

**A:** Please contact us. We want to hear your ideas across the SPARK focus areas. Perhaps some help is needed to shape your improvement concept.

## FAQs

#### **Q:** When is the SPARK proposal window open?

**A:** You can download the proposal template today, and the submission window will stay open until 26 May. Check the SPARK website for the proposal template or reach out to the SPARK mailbox!

#### **Q: How will the review process be conducted?**

A: Proposals are evaluated for technical, operational, and programmatic merit and innovation. All proposals are reviewed by multiple reviewers to ensure robust and balanced assessment. Cost realism is also assessed. Invited reviewers participate with an open mind and all proposals will be reviewed in accordance with legal considerations (e.g., regulations, conflict of interest / proprietary considerations).





#### **SPARK PROJECTS** PREVIOUSLY FUNDED AND FUTURE INTEREST

Contact SPARK team for additional past-funded project details



Expanded Threat Detection



Enhancing Biodetection



Optimizing Medical Countermeasures









Maximizing Extractable Signals & Integrating Sensor Systems



UAS-Enabled CBRN Detection



Individual Protection, Decon, & Disablement



Workforce & Analysis





Modernized User Training







Artificial Intelligence

## THE JPEO-CBRND SPARK TEAM IS HERE TO HELP



JPEO-CBRND Chief Engineer: Josh Israel

**SPARK Operations Lead:** Jessica Parker



JPEO CBRND SPARK Mailbox: usarmy.apg.dod-jpeo-cbrnd.mbx.spark@army.mil

SPARK Website: https://www.jpeocbrnd.osd.mil/Work-With-Us/SPARK/







# THANK

YOU

TO ALL OUR TALENTED REVIEWERS AND SUBJECT MATTER EXPERTS FOR DEDICATING THEIR TIME TO SPARK



# **Q&A SESSION**

# REMAINDER OF THE LIVE EVENT IS DEDICATED TO ANSWERING YOUR QUESTIONS