

DSO's Joint EMBM Acquisition Plan Moves Forward

By John Knowles

The Defense Spectrum Organization (DSO) has outlined the next stages of its plan to develop a Joint Electromagnetic Battle Management (EMBM-J) capability to support Electromagnetic Spectrum Operations (EMSO) at the Joint Force Commander (JFC) level, including Combatant Commands and Joint Task Force (JTF) elements.

Within the Defense Information Systems Agency (DISA), DSO is developing an EMBM-J system to help JFCs "in all activities related to organizing, understanding, planning, deciding, directing, and monitoring joint EMS operations (JEMSO)," according to a program description. Further, it states that Combatant Commands and JTF JEMSO Cells (JEMSOCs) "coordinate with Service Component EMS Operations (EMSO) staffs to enable situational understanding of the electromagnetic operational environment (EMOE), and prioritize, integrate, and deconflict Service electromagnetic spectrum operations (EMSO) plans for their assigned operational areas, across all domains, functions and technologic standards implementation. In an evolving and growing competitive environment, the traditional, manual, time- and labor- intensive methods of managing the myriad of electromagnetic emitters and apertures on the modern battlefield are no longer adequate. An EMBM system operating in command centers will allow commanders to coordinate, synchronize, and integrate EMS operations into the maneuver space across the full range of their military operations." The need for an EMBM-J system is also driven by "new spectrum dependent systems (SDSs) [that] will enable dynamic and autonomous maneuver in spectrum. Therefore, the design of this EMBM system must anticipate and account for current and unknown future EMS maneuver behaviors of SDSs. Joint Force

Commanders will then achieve unity of effort resulting in EMS superiority.”

The EMBM-J program is divided into four capabilities. The first increment, which focuses on Situational Awareness (EMBM-SA), has been under development by Expression Networks via a \$121 million contract awarded in 2020. Hosted in the National Geospatial-Intelligence Agency (NGA) commercial cloud services (C2S) environment, the first EMBM-SA capability release is scheduled for delivery in the coming weeks.

The next EMBM-J increment, which calls for developing an EMBM Decision Support (EMBM-DS) capability, was outlined in a Request for Initial Presentation (RFIP) solicitation issued last month on behalf of DSO by Defense Information Systems Agency (DISA’s) Emerging Technology Directorate. The RFIP seeks responses for an Other Transaction (OT) agreement under which a contractor will begin developing the EMBM-DS prototype that enables JFC-level JEMSOC end-users to “plan current and future EMS operations using the Joint Planning Process” and to “rapidly recommend well-informed spectrum operation decisions.” As with EMBM-SA, the EMBM-DS capability will be hosted on NGA’s commercial cloud services hosting environment and will be interoperable with EMBM-SA.

During the EMBM-DS selection process, DSO will task each selected bidder to conduct 30-day challenge demonstrations, after which it will select one or more companies to receive a Request for Project Proposals (RFPP) solicitation. DSO’s goal is to receive a Minimum Viable Capability Release (MVCR) from the contractor within one year of initial selection and a completed prototype (MVCR plus two additional releases) six months later – a total development schedule of 18 months. After the prototype phase is completed, DSO could award a follow-on production contract to the developer. The contracting point of contact is Crag Carlton, (618) 418-6805, e-mail craig.j.carlton.civ@mail.mil.