US Army Seeks Info for CMOSS-Based Radios

The US Army's Program Executive Office for Project Manager Tactical Radios (PM TR) is requesting white papers from companies that can support its efforts to develop a tactical communications solution that can be integrated into the CMOSS Mounted Form Factor (CMFF) chassis for on a variety of platforms.

For the past several years, the Army has been developing the C5ISR/EW Modular Open Suite of Standards (CMOSS) in order to create a common set of hardware interfaces that have been implemented in the CMFF chassis. The CMOSS effort has evolved concurrent with a variety of other DOD standards initiatives, such as Vehicular Integration for C4ISR/EW Interoperability (VICTORY) standard to provide network-based interoperability and the Modular Open RF Architecture (MORA) enabling shared RF resources such as antennas and amplifiers, as well as the Software Communications Architecture (SCA) and Future Airborne Capability Environment (FACE), which enable software portability. These open standards, in addition to commercial hardware standards such as VPX, enable the Army and other Services to easily insert systems solutions in the form of VPX cards into chassis, such as the CMFF "system." By making it easier to reconfigure the EW, sensor, communications and PNT capabilities in a chassis, forward deployed units can pull a CMFF chassis from a ground vehicle or aircraft, rapidly modify the CMFF for a different mission and quickly re-install it onto the weapons platform.

In its Request for White Papers (RWP), PM TR is soliciting information to integrate a communications solution into the CMFF chassis. The RWP (Notice ID W56KGY-25-R-1001) identifies four specific "problem areas" (PAs) of the CMFF communications capability: 1) a digital software defined radio (SDR) card to

support the SINCGARS, WREN TSM, ATC (VHF/UHF LOS AM/FM) waveform applications; 2) a cryptographic subsystem (CSS) card; 3) a digital radiohead (DRH) using digital inputs; and 4) a VICTORY audio adapter.

According to the RWP, the goal of PA 1 is to prototype one or two "multi-waveform, multi-channel SDR card(s) residing within a CMFF-compliant chassis that can simultaneously support multiple Waveform Applications (WFAs)" and to "satisfy CMFF Block II capability for both ground and aviation platforms."

PA 2 will focus on prototyping a "CMFF CSS card residing within a CMOSS/MORA/VICTORY-compliant CMFF Chassis using one or two (or preferably one) SDR card(s). The goal of this PA is to "reduce CMFF program risk by focusing on and implementing a prototype CSS card that supports all required waveforms hosted on a separate SDR card(s)."

The goal of PA 3 is to prototype DRH units, "each with digital and optional analog interfaces, to support simultaneous WFA operation in the VHF, UHF, and L and S-bands."

Finally, the aim of PA 4 is to develop "a VICTORY Audio Adapter (VAX) that can control and translate audio signals between analog (platform) and VICTORY (CMFF chassis) digital audio supporting multiple WFAs instantiated on SDR cards" in a CMFF chassis. Additionally, "the VAX shall interoperate with SDR card(s) (PA 1) provided as part of CMFF Block II and enable interface to external analog intercoms and peripherals (headset, etc.)."

PM TR is soliciting the white papers for this prototyping effort via the Consortium for Command, Control, and Communication in Cyberspace (C5) OTA. Further details of the solicitation are available to consortium members at https://cmgcorp.org/portal/member-resources/c5-ota/. The Army's contracting point of contact is Kellie Lamar-Reevey, e-mail kellie.n.lamar-reevey.civ@army.mil. Responses to the PM

TR RWP are due by April 18. — *JED Staff*