News Release

Joint Program Executive Office, Joint Tactical Radio System
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JPEO JTRS Releases the Software Communication Architecture (SCA) Next Draft Specification

SAN DIEGO - The Joint Program Executive Office for the Joint Tactical Radio System (JPEO JTRS) has released the SCA Next Draft Specification. The Specification is available for download from the JPEO JTRS Software Communications Architecture (SCA) website at http://sca.jpeojtrs.mil/scanext.asp.

The SCA facilitates the development of software for software defined radios. It defines a common framework for the deployment, management, interconnection and intercommunication of waveforms components in embedded, multi-processor radios. The SCA separates the waveform from the radio's operating environment allowing waveform portability across various radio types. It also allows radio developers to interchange and upgrade existing radio services and hardware without major system revisions. While the SCA is published and maintained by JPEO JTRS, it has received wide support and use from the commercial radio developers and industry organizations.

SCA Next is more scalable, lightweight, and flexible than SCA 2.2.2. It is compatible with radio sizes ranging from small, single channel radios to prime-power, multi-channel sets. As a technology refresh, it incorporates advances in portability for Digital Signal Processor (DSP) and Field Programmable Gate Array (FPGA) processors and new design patterns for its Application Program Interfaces (APIs).

Common Object Request Broker Architecture (CORBA) is no longer required, permitting radio-specific middleware similar to Android's Remote Procedure Call (RPC) for communication between software components and hardware devices. Registration of components and devices has been redesigned, incorporating a 'push' model that substantially reduces communication. This enhancement facilitates dynamic or static configurations and reduces startup times.

A flexible specification for the Application Environment Profile (AEP) defines the minimum operating system features required for a specific radio platform. Units of functionality permit a radio supplier to independently define optional services such as log, event, CORBA, multichannel, etc.

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About JPEO JTRS

The Joint Tactical Radio System, headquartered in San Diego, Calif., was initiated in early 1997 to improve and consolidate the Services' pursuit of separate solutions to replace existing legacy radios in the Department of Defense inventory. The JTRS program has evolved from separate radio replacement programs to an integrated effort to network multiple weapon system platforms and forward combat units where it matters most - the last tactical mile. JTRS will link the power

of the Global Information Grid to the warfighter in applying fire effects and achieving overall battlefield superiority.

JTRS is developing an open architecture of cutting edge radio waveform technology that allows multiple radio types (e.g., handheld, aircraft, maritime) to communicate with each other. The goal is to produce a family of interoperable, modular software-defined radios which operate as nodes in a network to ensure secure wireless communication and networking services for mobile and fixed forces. These goals extend to U.S. allies, coalition partners and disaster response personnel. For more information, please visit http://jpeojtrs.mil/.