

US Army expands use of SitaWare

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The US Army is to broaden its use of Systematic's SitaWare command-and-control (C2) software suite and will use it as the backbone of its developing Mounted Computing Environment (MCE), *Jane's* has learned.

The MCE is one of the elements of the army's Common Operating Environment (COE), which also includes the Command Post CE (CP CE) and the Dismounted CE.

SitaWare consists of three interoperable and scalable segments: SitaWare Headquarters (HQ), designed for use in command posts (CPs) and HQs at battalion level and above; SitaWare Frontline, a battle management system intended principally for use in vehicles at battalion and below; and SitaWare Edge for the dismounted user.

The US Army's Mission Command office, part of the Program Executive Office Command, Control and Communications - Tactical (PEO C3-T), purchased enterprise-wide licenses for SitaWare in early 2017 as a result of a conscious effort to switch to commercial-off-the-shelf (COTS) solutions wherever possible. This was initially to provide the common architecture in the CP CE, using SitaWare HQ. The latest development will now use SitaWare Frontline to achieve the same in the MCE.

The COTS SitaWare system has an open architecture, allowing external systems to be easily integrated, and built-in mechanisms that allow information to be shared between different command systems at different levels. It has a software development kit (SDK) that will allow the army to customise it for its own needs. The system supports client-server and peer-to-peer architectures as well as ad-hoc collaboration and data-sharing.

SitaWare also provides for a common data-object model, supporting light-weight data exchanges of Common Operating Picture (COP) and C2 information, as well as chat and general data-object file transfers. The SitaWare tactical communications (STC) module is communications and network agnostic and is specifically designed to support data transmission over low bandwidth networks.

Rafael Torres Jr, president of Systematic US told *Jane's* that "the US Army can now develop capabilities in-house and can also easily utilise third-party technologies using the SDK and the open Application Programming Interfaces (API)." He noted that current "stovepipes" between different systems will be eliminated: the existing situation with different displays for different functional systems will be replaced with a single interface using Frontline in the MCE and HQ in the CP CE, providing common services, mapping, and a common operational picture (COP).

Speaking to *Jane's*, Paul Mehney, director, public communications for PEO C3-T, *said*, "To facilitate interoperability between CP CE and MCE, the programme office is developing essential movement and manoeuvre warfighting functionality, allowing users at echelons from corps to battalion to plan and execute operational orders and battle plans across computing environments. In the initial CP CE capability this interoperability will allow the Army to divest four standalone

systems: Command Post of the Future (CPOF), Command Web, Tactical Ground Reporting (TIGR), and Global Command and Control System-Army (GCCS-A).”

He added, “The MCE will provide a common set of applications and services to enable mission command on ground platforms. MCE will enable modular and scalable solutions for the convergence of current software systems and the agile development and certification of new on-the-move capabilities.”

Mehney noted that “the programme office is currently working with Systematic to develop and integrate backend common software to enable the MCE to be interoperable with the CP CE”, providing seamless exchange of data between command levels and a common look and feel across the environments. This process will be simplified because the different elements of SitaWare are already interoperable.

Torres also observed that as SitaWare is hardware agnostic it could be hosted on whatever hardware the army selected for use in vehicle platforms in the future. He noted that even though the contract for the latest generation of rugged platform hardware, the Mounted Family of Computer Systems (MFOCS) II, had not yet been awarded this meant that the system could be hosted on the hardware whatever solution is selected.

Mehney said CP CE will undergo operational test and achieve initial operational capability in fiscal year 2019 but did not give a timeline for MCE, which will follow.

Comment
This is more evidence that the decision to go for a COTS solution to solve the interoperability and “stovepipe” problem is paying off and the US Army’s objective of a single interface for a range of different applications and a truly common picture across command levels may be in sight. As yet there is no indication that the use of SitaWare will spread to the dismounted CE, which is not PM Mission Command’s responsibility, but it would not be surprising if the possibility of SitaWare Edge being integrated with the US Army’s Nett Warrior soldier system and other dismounted applications was investigated, particularly if it provides similar seamless data exchange.