# Maritime Tactical Command and Control (MTC2)
# Industry Day Question and Answers
# 30 Nov 11

**Q:** On which platforms and at which locations will MTC2 replace Global Command and Control System – Maritime (GCCS-M)?

**A:** As the Navy's follow-on to the GCCS-M program, MTC2 is planned for all of the platforms and shore sites that are currently provided GCCS-M by PMW150. In addition to these sites, we are in discussions with the Expeditionary Community to ensure their C2 needs can be adequately addressed.

**Q:** Will the web posting following today's session include today's slides?

**A:** Yes.

**Q:** How does MTC2 fit in with the NAVSEA combat systems, Undersea Warfare Decision Support System (USW-DSS), etc? Are you going to take over those programs?

**A:** PMW150 will work with other system commands to define program intersections and interoperability that is within the MTC2 trade space. MTC2 is not necessarily going to take over other programs, but it may fill some unfulfilled requirement gaps as directed by our Resource Officer and defined by our Requirements Management & Governance board.

**Q:** There are lots of tactical decision aids out in the fleet now, including Composable Forcenet (CFn). How do these fit in with MTC2?

**A:** MTC2 will address the requirements, but the material solutions may or may not be the ones selected (depends upon technological advances and architectural considerations). Similar to the current GCCS-M, MTC2 will interface with numerous other tactical decision aids to provide enhanced situational awareness and enable collaborative planning and execution.

**Q:** Have all the other Services and DISA adhered to the small "j" concept in "joint C2" (which indicates that jC2 is not a program, but rather a collection or family of programs)?

**A:** The DoD C2 community, with the direct involvement of Joint Staff J8, OUSD(AT&L), OASD(NII), and all of the Components/Services, have embraced the construct of a Joint Command and Control (jC2) portfolio approach. This approach is designed to enable us to more rapidly respond to warfighter requirements.

**Q:** Regarding the diagrams of planning and processes shown on slides 8 and 9, what piece does the HALO COP correlate to?

**A:** HALO COP correlates to Enhanced Situational Awareness, Planning and Execution stage. HALO COP enables the operator the ability to synthesize a geospatial display that aggregates operationally relevant data in order to enable a user to gain situational awareness for C2 purposes. In the HALO COP, the operator simply click on a particular unit and understands its readiness for planning purposes, current and future tasking and status, and other amplifying information. It then allows the operator to click and drag units into specific plans.

**Q:** Are you headed towards getting an approved requirements document?
**A:** Yes, the MTC2 Initial Capabilities Document (ICD) has completed Navy review and is currently in Joint Requirements Oversight Council (JROC) staffing. MTC2 also intends to leverage the JROC approved Joint Command and Control Capability Development Document (CDD) (jC2 CDD) as its overarching requirements documents. We intend to work with the Fleet to develop prioritized capability needs on an annual basis to inform our Capability Development Packages (CDP), which will result in capability releases to our warfighters on an annual or 18-month basis.

**Q:** When the requirements documents are approved will they be released for public review?
**A:** PMW150 will evaluate the releasability of the document once it is JROC approved and will either post the information or post excerpts. Material capability requirements are incorporated into RFIs, RFPs, developers guidance, and other program documentation.

**Q:** Will Distributed Common Ground System – Navy (DCGS-N) and MTC2 "talk"? Can I subscribe to one through the other?
**A:** MTC2 views DCGS-N (specifically increment 2) as an Authoritative Data Source (ADS) for intelligence/ISR information, and will be able to pull processed and evaluated intelligence information (at the appropriate classification level) for display on the Common Operational Picture (COP).

**Q:** Is part of the program dedicated to building the application store, as well, or just delivering the software applications to the application store?
**A:** MTC2 will seek to provide an "App Store" concept with functionality to support Widgets, and leverage PEO C4I "storefront" that is being developed to provide an App Store for its Application Providers (C2 from PMW150 and ISR/IO from PMW120) to make capabilities available for hosting on the Navy's enterprise networks (PMW160 CANES with ACS) thereby making access to data "transparent" to the user.

**Q:** Will MTC2 be building databases, as well, or just functional applications?
**A:** MTC2 will be providing functional applications and interface to databases. Database will likely be separate from most of our applications, but there are different considerations for each individual capability. The actual implementation of persistent storage is expected to be abstract from the applications. MTC2 expects to provide applications with a mechanism for defining persistence needs and characteristics (i.e. schema, storage requirements, etc…). The underlying "stack" will be responsible for the actual persistence, while MTC2 will provide an interface to the persisted data.

**Q:** Will MTC2 rely on reach back than the current system—will the CVNs be the only platforms to get a database? Will MTC2 follow the Military Integrated Data System/Intelligence Database (MIDS IDB) model?

**A:** It depends on the application and the platforms' operational requirements as to whether or not a given platform will require resident databases. MTC2 will not specifically follow the MIDS IDB model, but will employ a hybrid mixture of "reach back" and local data persistence as determined by mission needs. It is expected that a "data cloud" will be employed, with an ability to determine mission essential data required at a particular site in disconnected ops, or where latency associated with reach back impacts effectiveness. In these cases data may be provisioned locally (resident databases), with an ability to "re-sync" data to the enterprise where applicable. The intent is to facilitate true collaboration on data from Operational down to Tactical levels. This function is also expected to be abstract from applications and handled by the underlying platform. Similar to handling persistence needs for applications, MTC2 expects to provide a mechanism where applications can express these needs, and an interface to the data, regardless of physical location.

**Q:** What is "UL" on slide 15, second column of the release plan?

**A:** The "UL" on slide 15 represents a Unit Level platform and the second column (UL v1) indicates the first release of Unit Level capabilities.

**Q:** Will it matter if you have three Carrier Strike Groups (CSG) operating in the same area with three different versions of MTC2?

**A:** MTC2 plans to enable individual platforms to download the latest updates prior to deployment and while deployed. Obviously there will be some challenges associated with versioning, but from a technical perspective the impact of version mismatch in MTC2 versions should be minimized from an interoperability perspective. MTC2 is focused on capability (i.e, applications), the main issue would be whether a particular platform has a capability. Participants may still work with limited capability compared to other participants, but the lack of capability should not prevent interoperability.

**Q:** Has PMW150 made any deals with PMW160 regarding their responsibility to provision the lower levels of the architecture stack on slide 16?

**A:** PMW150 is working closely with PMW160 to develop the strategy, identify interdependencies and ensure linkages are in place for the provisioning of the lower levels of the architecture stack. These meetings are coordinated and work through Engineering Integrated Product Team meetings.

**Q:** Is there concern that, as operators use various applications, they will use them in non-standard ways and you will lose?

**A:** There is a possibility that operators will attempt to use applications provided by MTC2 in a non-standard way, but the training that will accompany the applications will provide system administration and user guidance along with the operational and functional description for the proper use of MTC2. MTC2 anticipates that

management and governance of Information technology and Combat System, policies, and doctrine will further serve as a guide for proper use of applications.

**Q:** Do you anticipate any Request For Information (RFI) to go out to industry for their input prior to the build conferences?
**A:** Potentially, we may go out to industry with RFIs to help identify technologies and capabilities that may be incorporated into MTC2, but there are no guarantees that they will be solicited.

**Q:** Are Service Level Agreements (SLA) for the required Authoritative Data Sources (ADS) being prepared as part of your engineering services in prep for FY14 releases?
**A:** Yes, some have already been worked (or are currently being worked) within the C2 Rapid Prototyping Continuum (C2RPC) effort.

**Q:** The commercial app store concept includes multiple applications that have similar functionality so that customers can choose the one that best fits their needs at any given time. Will the MTC2 app store include multiple apps with similar functionality so that operators can choose the one they want to use?
**A:** PMW150 does not anticipate having the same overlapping functionality within the MTC2 app store, as the funding is just not available to build multiple overlapping capabilities. However, we must consider operators in the fleet building apps (or widgets) on the fly to use for their own needs, and what process will need to be in place to allow these to be posted in the app store for others to use. In addition, MTC2 may leverage the DoD app store if it aligns to requirement demand from the Fleet.

**Q:** Which groups at OPNAV do you deal with? Is OPNAV N3/N5 involved?
**A:** MTC2 mainly deals with OPNAV N2/N6 and N8, our resource and requirements sponsor. Interaction with N3/N5 happens at the OPNAV level.

**Q:** Have you considered using companies in the gaming industry as partners?
**A:** We haven't targeted gaming industry partners, but it certainly would be a great model to dissect, due to the number of sailors in the Navy coming right out of High School that have significant gaming experience.

**Q:** Regarding the building of applications by operators and playing of computer games such as World of Warcraft, it was observed that "the Navy doesn't train to do that".
**A:** MTC2 is using an approach that moves us away from schoolhouse brick and mortar training and incorporates virtual, interactive courseware, embedded, online, on-demand anytime training for the user. MTC2 is looking to build software that is intuitive and familiar to the user to make it easy to learn and use. MTC2 is investigating many training methodologies to determine the best training value.

**Q:** Who will be the next high-level visionary that supports these types of future C2 capabilities after ADM Willard is gone?

**A:** ADM Willard is the C2 visionary who envisaged these future C2 capabilities. MTC2 has continued to be presented to high level senior stakeholders and there is strong support at OPNAV right now. We envision that MTC2 future C2 type capabilities will continue to grow stronger in support because of the dynamic changing environment of the warfighter having to do more with less and the need for better robust tools in their decision making.

**Q:** Is Command and Control C2 Multiple Award Contracts (C2 MAC) Indefinite Delivery Indefinite Quantity (IDIQ) the planned vehicle for MTC2?

**A:** The current C2 IDIQ MAC is one of many options. The obvious challenge with using the C2 IDIQ MAC is that it ends in FY15, whereas MTC2 is planned to go to FY18. MTC2 has not made a decision on the contract vehicle it will use for the program.

**Q:** The perception is that GCCS-M lost contact with the fleet and therefore did not meet the fleet's needs. What will be your source of requirements from the fleet?

**A:** MTC2 will adopt an annual build conference process to take a new look at requirements annually and from there we will develop a CDP which will form the basis for our Fleet Capability Releases. CDP development will be led by United States Fleet Forces Command (USFFC) and or Navy Cyber Forces as the representative of the operators. MTC2 will also institute user feedback reports on deployed systems to gain valuable inputs from the Fleet. C2RPC prototype avenue that allows for direct feedback from users on prototyped capabilities.

**Q:** Are you considering any sort of a wiki to enable operators to post comments/feedback/needs?

**A:** Yes, absolutely. Our engineering team currently uses a Wiki for internal purposes, but we would also look at providing a Wiki to gain valuable feedback from the users.

**Q:** Can you talk any about the data aggregation strategy for the rich data environment you are envisioning?

**A:** Data aggregation will be a big challenge for MTC2. It is expected that data aggregation will be performed in a number of different ways, and at different levels of the architecture. For example, in some instances it makes sense to "import" disparate data sets into a single repository where it can be combined for purposes of analysis. Other use cases (such as very large and disparate data sets) may call for an indexing capability. Still other use cases (such as highly transitive or volatile data) will call for more near-real-time view. Primarily this aggregation and integration of data is expected to be performed at the platform (technology stack) level, with data exposed to applications through MTC2 interfaces. However, that does not preclude the aggregation of data at the presentation layer where an application may pull source data for visualization.

**Q:** Will SPAWAR make available a Bidders Library for MTC2 which includes information on GCCS-M? If so, what information will be included and when will the information become available?

**A:** We do expect to have some type of Wiki set up and the information made available that would consist of MTC2 information and relevant legacy program information that affects MTC2.

**Q:** How much interaction will software developers have with personnel in the Fleet operating current maritime C2 systems?

**A:** It will vary by application/functionality and need, but in general the MTC2 program will strive to establish and maintain open lines of communication with the fleet users, where the developer may or may not be involved. Obviously the Program Office and Contracting Officer would oversee these communications.

**Q:** You stated that PMW-150 intends to hold additional industry days, with the intent to be approximately 1 industry day per quarter; do you expect to issue requests for information (RFIs) in addition to holding the industry days?

**A:** Yes, MTC2 is planning to hold additional industry days potentially once a quarter if there is new relevant information to pass on. PMW 150 may or may not issue RFI's depending on the need.

**Q:** Do you expect to issue a draft RFP? If so, when can industry expect the draft RFP to be issued?

**A:** At this time, all avenues of Market Research are being considered. MTC2 requirements have not been formally approved through the JROC, so a firm plan for delivery cannot yet be provided. Notionally, we anticipate that RFP(s) could be released in the Late FY14 timeframe, but that date is subject to change pending requirements approval and cost analysis.

**Q:** Will the operation and maintenance of the C2RPC capabilities transition to the MTC2 Program? Will information on these collaborative efforts be made available as part of a Bidders Library?

**A:** Yes, the operation and maintenance of C2RPC "select" capabilities that will transition to MTC2 will be covered under the program. Details will be articulated during the RFP process and there is the potential of creating a Wiki to make information available to industry.

**Q:** You stated in the meeting that the RFP for MTC2 would be out in middle to late 2013. That seems to be different to what is presented on slide 18 of the industry day slides. Do you have additional insight into the timing of its release?

**A:** We stated that notionally we anticipate release of RFP's in the late FY14 timeframe, but that date could shift right or left, if required. Currently, the plan is to release an RFP in late FY14, but this is largely dependent upon requirements approval and cost analysis for the capabilities to be delivered. The timeframe on the release of this RFP is purely notional and could shift to the right or left.

**Q:** I see lots of contracts in the Federal Procurement Data System (FPDS) that say they are for GCCS-M. However, we cannot pinpoint a contract, or contracts, that MTC2 is the follow-on to. Is it possible that you can provide the contractor(s) and contract number(s) that MTC2 is the follow-on to?

**A:** Any contracts that MTC2 may award will not constitute “follow-on” contracts.