Program Executive Office
Command, Control, Communications,
Computers and Intelligence (PEO C4I)

Maritime Tactical Command and Control
(MTC2) Industry Day

09 November 2011
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Statement A: Approved for public release, distribution is unlimited (1 NOVEMBER 2011)
Agenda

• Introduction
  ➢ Opening/Admin - Contracts
• MTC2 Overview
• Current C2 Environment
• MTC2 PoR
• MTC2 Program Direction
• MTC2 Vision
• MTC2 Notional Software Package/Delivery Model
• MTC2 Architecture
• MTC2 Training
• MTC2 Notional Program Schedule
• Conclusion
  ➢ Closing Remarks
  ➢ Questions & Answers
Introductions

• PMW-150 MTC2 Development
  ➢ APM:
  ➢ APM-E:
  ➢ APM-C:
  ➢ COR: YNC Anthony Knight

• SPAWAR 2.0 Contracts
  ➢ PCO (pre-award): Mary O’Hara
  ➢ Contract Specialist: Lindsay Taelman

• SPAWAR 3.0 Legal
• The goals of today’s MTC2 Industry Day are to:
  ➢ Introduce industry and research communities to MTC2’s vision and goals
  ➢ Encourage and promote teaming arrangements among potential organizations that have the relevant expertise, facilities, and capabilities for executing strategies responsive to the MTC2 program goals; and
  ➢ Facilitate interaction between investigators who may have capabilities to develop elements of interest and relevance to MTC2’s goals

• The Program Office anticipates that this will be the first in a series of MTC2 Industry Days to continually keep industry informed and engaged throughout MTC2’s acquisition planning process
Administrative Matters

• For the purposes of today’s meeting, the Program Office **will not** discuss any specific contract strategies that MTC2 is contemplating
• This presentation will be posted to the FBO website by Thursday, November 10, 2011
• Questions and Answers
  ➢ Time will be allotted after the presentation of this brief to answer questions from those in attendance
  ➢ Written questions must be submitted by Thursday, November 17, 2011
  ➢ Send written questions via email to YNC Anthony Knight (COR) at anthony.s.knight@navy.mil
  ➢ Questions received after COB November 17 will not be answered
  ➢ Answers to timely written questions will be posted on the FBO Industry Day website
What is MTC2?

- New Start in FY12 (funded in FY13) as a follow-on to Global Command and Control System Maritime (GCCS-M)
- Software-Only
  - Leverage ISNS/CANES/CCE/NGEN
  - Fields to MOC, Afloat, and Ashore from operational down to tactical level
- Will deliver an entire suite of maritime C2 capabilities
- Addresses identified gaps in operational and tactical Maritime C2 requirements
- MTC2 will leverage capabilities resident in the Command and Control Rapid Prototyping Continuum (C2RPC) effort as well as other Science & Technology (S&T) projects
- Will align to the joint C2 objective architecture, and will augment the joint C2 capabilities delivered at the Force/MOC
- MTC2 is investigating teaming with International Partners in a cooperative development environment
Current C2 Environment

C2 POR Today:
“Tracks on a Map”
*Current Ops*
*(Comms, COP, Intel)*

**PLANNING**

- Course of Action Development
- Mission Analysis
- Transition to Execution
- Plans & Orders Development

**EXECUTION**

- Maintain Alignment
- Adjust Apportionment
- Advance the Plan
- Comply with Procedure
- Counter the Enemy

**ADM Willard’s “Areas of Control”**

NWP 3-32 Maritime Operations at the Operational Level of War

**Navy Planning Process**

NWP 5-01 Navy Planning
Vision for MTC2 POR of tomorrow:
Provide tools to support the entire range of Navy Command and Control functions

MTC2 PoR

PLANNING

Course of Action Analysis

Course of Action Development

Mission Analysis

Transition to Execution

Plans & Orders Development

Situation Awareness

Counter the Enemy

Comply with Procedure

Maintain Alignment

Adjust Apportionment

Advance the Plan

EXECUTION

Navy Planning Process

ADM Willard’s “Areas of Control”

NWP 5-01 Navy Planning

NWP 3-32 Maritime Operations at the Operational Level of War
MTC2 Program Direction
(Post-GCCS-M)

FY11

GCCS-M

MOC

FORCE

GROUP

UNIT

3.X.X

4.0.1

4.0.2

4.0.3

GCCS-M provides a robust Situational Awareness across the Wide Area Network

FY15->

GCCS-M/J

MOC

FORCE

GROUP

UNIT

GCCS J

4.1 (FORCE)

4.0.3

4.1 (G/U)

TODAY


FUTURE

jC2/MTC2

MOC

FORCE

GROUP

UNIT

joint C2 MTC2

MTC2

Future C2 will provide apps to “fill gaps” at the FL/MOC

LEGACY
GCCS-M vs. MTC2
True “SA” … Not Just “Tracks on a Map”

Legacy Systems provide simple “Tracks on a Map” Support SA Only

MTC2 provides dynamic Command and Control, anchored by Enhanced SA through a rapid-access Information “Halo”:
Associates tracks to relevant data (Fuel Status, Ammunition Loadout, Manning, CASREP, Mission Readiness, Plans and Tasking)
MTC2 (Interrelated “Halo” COP)

Intel

Plans & Tasks

Capabilities & Readiness

“Halo COP”
Multiple Perspectives in Multiple C2 Domains

Utilize authoritative data sources to support readiness, tasking, NETOPS, etc.

- Personnel/Training
- NETOPS/Sensors
- NRRESORTS
- Planning/Tasking
- Intel/ Tactical ISR

Other Tactical
Battle Watch
Intel
NETOPS
MTC2 Notional Software Package/Delivery Model

Complete Delivery In 5 Releases
MTC2 Architecture

IaaS (Virtualization, Compute Resources, Storage)

Run-Time Services

Task Orchestration Services

Entity/Object Services

Presentation/Visualization Services

Application Integration API/SDK

Briefing

Force Employment

Force Planning

SAIF

Planning

DaaS (Integrated & Synchronized Data Cloud)

SaaS

PaaS
MTC2 Training Concept

Blended Training in an Integrated Learning Environment (ILE)

• Offers a blend of different learning methods, techniques and resources and applies them in an interactively meaningful learning environment

• Begins with foundational training and ends with sustainment of skills and performance support

1. Foundational training in traditional classroom setting
   - A-school
   - Combines instructor-led with computer-based instruction

2. Distributed Learning
   - Readily available anytime…anywhere
   - Online and On-demand
   - Mobile delivery
   - SCORM compliant interactive courseware (ICW)
   - Hosted on an approved learning management system (LMS)

3. Performance Support Tools
   - Provides a web-based document delivery environment providing context-sensitive help
   - Provides duty/function/task aids, manuals, quick reference guides/cheat sheets, etc.

4. Virtual Service Desk (VSD)
   - A web-based, 24/7 accessible capability
   - Provides users a single point of entry to access information and self-help utilities
### MTC2 Notional Program Schedule

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Summary/Way Ahead

- Industry partnership is essential
- MTC2 will facilitate rapid software delivery
- MTC2 will leverage the Navy’s computing infrastructure provided by ISNS/CANES/NGEN
- MTC2 is planning to field to the MOCs in late FY14
Closing Remarks

Questions?
We get IT.
We also integrate it, install it and support it. For today and tomorrow.

Visit us at www.peoc4i.navy.mil