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**Net-Enabled Command Capability (NECC)
Increment I
Capability Development Document (CDD)
Change 1 Annex**

Increment: I

20 June 2008

This document has been approved by J8 for release to
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Change Overview

The Deputy Secretary of Defense directed in Program Decision Memorandum II (PDM-II) dated 19 November 2007, that Defense Information Systems Agency (DISA) and United States Joint Forces Command (USJFCOM) "migrate the Global Command and Control Family of System capabilities to the NECC Program of Record by FY11 to permit phase out of legacy programs." PDM II intent is to fully fund development and operation of NECC Increment I to permit the phase out of legacy GCCS FoS by FY11. Service implementation costs were also funded through FY12. PDM II directed that any request for acceleration of functionality will be reviewed prior to implementation by the Milestone Decision Authority (MDA) to ensure that program cost, schedule, and requirement parameters are not breached. NECC Increment I will produce net-centric capabilities to replace the GCCS FoS as its first priority and threshold capability requirement. The plan for replacing the GCCS FoS is detailed in this GCCS Family of Systems to NECC Functionality Transition Plan (FTP).

To meet this accelerated GCCS FoS transition, DISA and USJFCOM stood up a Net-Centric Tiger Team (NCTT) including the Services and other NECC stakeholders, to provide detail associated with the migration of all FoS functional capability within Increment I. The NCTT effort was conducted through six Mission Capability Area Teams (MCAT). The MCATs performed requirements analysis, mission process analysis, technical design, and migration planning for their mission areas and corresponding FoS components and capabilities. The combined efforts of the MCATs are documented in the GCCS Family of Systems to NECC FTP included as a linked extension to this CDD.

In addition the NECC Increment I mission space will be expanded to include the National Military Command System (NMCS) through where GCCS FoS is accessed and used today. This mission space is inclusive of the multiple domains currently supported by GCCS FoS capability to include: UNCLASSIFIED, Secret Internet Protocol Router Network (SIPRNET), Joint Worldwide Intelligence Communications System (JWICS), Allied, and multinational/coalition/bi-lateral mission networks. In general, the changes resulting from PDM II address NECC Increment I: scope; scale; Initial Operational Capability/Full Operational Capability (IOC/FOC); programmed Increment I length; and program costs. Joint Combat Capability Developer (JCCD) will collect and staff any additional information regarding capability/application migration and/or undocumented capabilities recommended by the NECC Joint Analysis Team (JAT) Net Centric Tiger Team (NCTT) in a subsequent change annex.

NECC priorities remain unchanged. NECC KPP, KSA and requirement (Extension D) threshold and objective values are not impacted by PDM II as they reflect stated joint command and control capability needs for NECC as good or better than current GCCS FoS. All capabilities delivered in support of NECC Increment I will meet or exceed GCCS FoS threshold values or currently fielded system capability values, whichever is higher, for functionality and performance. The top priority as reflected throughout the NECC Increment I CDD and this Change Annex is GCCS FoS migration to a net-centric SOA environment to set the baseline for Increment I improvements and additions listed in Table 6-1.

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Per CJCSM 3170.01C, Enclosure F, Para 3.c, this annex documents changes to the Net-Enabled Command Capability (NECC) Increment I CDD dated 7 June 2007 (Reference Joint Requirements Oversight Council Memorandum, 173-07).

Changes:

CDD Core, Page ii, Preface, Last Paragraph

Original: ...The NECC CDD Core and Extensions are currently posted on the Defense Online (DOL) Portal. A CAC card is required to access the web site. To access DOL:

- a. Click on this link <https://gesportal.dod.mil/sites/necc/JCCD/default.aspx>
- b. Register
- c. Close browser
- d. Re-access web site and request access to desired JCCD folders
- e. You should receive e-mail notification of your requests immediately. The account request process should take one or two days.
- f. Once you have access, enter the JCCD Home “Coordination Cell” link, then under “Shared Documents/NECC Capability Documents/Increment I/ NECC Capabilities Development Document and Extensions and select the appropriate file.
- h. Problems with access can be addressed by Paul Radcliff, DSN 836-2277 or Commercial (757) 836-2277; email: paul.radcliff@jfc.com

New: ...The NECC CDD Core and Extensions are currently posted on the **Army Knowledge Online (AKO)** Portal. A CAC card is required to access the web site. New AKO/DKO users need to follow the instructions provided on the AKO/DKO website. To access **AKO**:

- a. **Click on this link <https://www.us.army.mil>**
- b. Register
- c. Close browser
- d. Re-access web site and request access to desired JCCD folders
- e. You should receive e-mail notification of your requests immediately. The account request process should take one or two days.
- f. **Once you have access, the following links will take you to the appropriate NECC Increment I CDD and Linked Extension files:**

CDD - Capability Development Document (CDD)

<https://www.us.army.mil/suite/doc/10212039>

CDD - Linked Extension A

<https://www.us.army.mil/suite/doc/10212830>

CDD - Linked Extension B

<https://www.us.army.mil/suite/doc/10212831>

CDD - Linked Extension C

<https://www.us.army.mil/suite/doc/10212965>

CDD - Linked Extension D

<https://www.us.army.mil/suite/doc/10212966>

CDD - Linked Extension E

<https://www.us.army.mil/suite/doc/10212967>

CDD - Linked Extension F

<https://www.us.army.mil/suite/doc/10212968>

CDD - Linked Extension G

<https://www.us.army.mil/suite/doc/10212969>

CDD - Linked Extension H

<https://www.us.army.mil/suite/doc/10212970>

CDD - Linked Extension I

<https://www.us.army.mil/suite/doc/10212972>

CDD - Linked Extension J

<https://www.us.army.mil/suite/doc/10212973>

CDD - Linked Extension K

<https://www.us.army.mil/suite/doc/10212974>

CDD - Linked Extension L

<https://www.us.army.mil/suite/doc/10212975>

CDD - Linked Extension M

<https://www.us.army.mil/suite/doc/10213016>

CDD - Linked Extension N

<https://www.us.army.mil/suite/doc/10213017>

- h. Problems with access can be addressed by Paul Radcliff, DSN 836-2277 or Commercial (757) 836-2277; email: paul.radcliff@jfc.com.mil

Justification: Defense Online (DOL) was replaced by AKO; therefore, provided new links to the NECC Increment I CDD and Linked Extensions.

CDD Core, Page iii, Executive Summary, Paragraph 4

Original: ...Increment One IOC is currently defined as providing users with selectable capabilities to conduct mission tasks supporting command capability and C2 activities from the National Military Command System (NMCS) through the Joint Force Commander and Service/Functional components. FOC for Increment I (projected for 4QFY10) will be achieved when NECC fielded to the NMCS, Combatant Commanders (CCDR), JTFs, JTF Service and Functional Component Commanders has met threshold Increment I capabilities, including having trained/certified personnel in place...

New: ... **Increment I** IOC, projected for FY10, will consist of GCCS FoS capabilities (as listed in Annex C of the GCCS FoS GCCS Family of Systems to NECC Functionality Transition Plan (FTP)) for Situational Awareness (SA). Additional capabilities from Mission Capability Packages will be available and evaluated, but GCCS FoS SA will be the primary focus for IOC. IOC shall also include Cross Functional capabilities needed to ensure interoperability and integration. These capabilities will be available at a designated Service JTF Capable Headquarters at one geographic Combatant Command representative of activities conducted between NMCS, Joint Force Commander (JFC), and Service/Functional components. Based upon Service implementation plans, FOC for Increment I (projected for FY17) will be achieved when NECC has met threshold Increment I capabilities, including complete migration of GCCS

FoS functionality to NECC and is available to users wherever GCCS FoS is accessed and used today, including having trained/certified personnel in place...

Justification: PDM II compliance and clarity of current GCCS FoS mission space.

CDD CORE, SECTION 1 - CAPABILITY DISCUSSION

CDD Core, Page 2, Section 1.1 What NECC Is, Paragraph 1

Original: Beginning in the FY08-10 timeframe, NECC will become the Department of Defense (DoD) principal command and control information technology capability, as envisioned in Joint Vision 2020 (now reflected in the National Military Strategy). The objective “mission space” for this capability is defined as the area supporting command capability and C2 activities from the National Military Command System (NMCS) through the Joint Task Force (JTF) and Service/Functional components to unit level commanders. As such, NECC enables horizontal and vertical information flow and collaboration across this command spectrum. In addition, NECC exploits global expertise and information centers of excellence (CoE) through a reach-back functionality, based on net-centric services. NECC Increment I mission space extends from NMCS through Service/Functional Components with the focus on the Joint Force Commander (JFC) with emphasis on situational awareness and joint deployment planning and execution.

New: NECC will become the Department of Defense (DoD) principal joint command and control information technology capability, as envisioned in Joint Vision 2020 (now reflected in the National Military Strategy). The objective “mission space” for this capability is defined as the area supporting command capability and C2 activities from the National Military Command System (NMCS) through the Joint Force Commander (JFC) and Service/Functional components to unit level commanders. NECC Increment I mission space extends from the NMCS to where the GCCS FoS is accessed and used today with emphasis on situational awareness and joint deployment planning and execution focus areas. As such, NECC enables horizontal and vertical information flow and collaboration across this command spectrum. In addition, NECC exploits global expertise and information centers of excellence (CoE) through a reach-back functionality, based on net-centric services.

Justification: PDM II compliance.

CDD Core, Page 3, Section 1.2 NECC Intent and Focus, sub-paragraph 3,

Original: **NECC Increment I focus will address the mission space from NMCS through Service/Functional Components with the emphasis on JFC operations throughout the Joint Warfighting environment and keyed to capability needs in situational awareness and joint deployment planning and execution. Future increments will expand to address the full NECC mission space.

New: NECC Increment I focus will address the mission space from the NMCS to where the GCCS FoS is accessed and used today with the emphasis on JFC operations throughout the Joint Warfighting environment and keyed to capability needs in the situational awareness and joint

deployment planning and execution focus areas. In Increment I, NECC will produce net-centric capabilities to replace the Global Command and Control System (GCCS) Family of Systems (FoS) with no loss of current GCCS FoS functionality/performance as its first priority with current GCCS FoS performance as its threshold capability requirement. These capabilities will be developed before capabilities that enhance or are in addition to GCCS FoS capabilities. PDM-II directed the migration of GCCS FoS functionalities to the NECC Program of Record by FY11 to permit phase out of legacy GCCS FoS programs. Increments II and III will address NECC capabilities above and beyond those of current GCCS FoS and non-FoS functionality migrated to NECC during Increment I. Subsequent capability threshold updates and enhancements for Increment II and III requirements will be governed, per JCIDS and JS/CC/S/A priorities, by future NECC Increment Key KPPs and KSAs.

Justification: PDM II compliance and clarity of current GCCS FoS mission space.

CDD Core, Page 4, Section 1.3 GCCS Capability Transformation to NECC capability

Original: Transformation to future warfighting capabilities requires enhanced battlespace awareness, timely information exchange, and net-centric forces to support critical joint and multinational operations. Those GCCS Family of Systems (FoS) applications supporting...
...To facilitate the rapid provisioning of capabilities to the warfighters, NECC will employ a SOA...
...Transformation will be successful when the appropriate segments of the Joint and Service systems have moved to NECC with no loss of current required capabilities. The GCCS FoS-NECC Functionality Transition Plan will address this transition...

New: Transformation to future warfighting capabilities requires enhanced battlespace awareness, timely information exchange, and net-centric forces to support critical joint and multinational operations; and GCCS FoS functionalities, as documented in the GCCS FoS to NECC FTP System Requirements Specifications (SRS) provide the baseline for this transformation (reference Linked Extension F). Those GCCS Family of Systems (FoS) capabilities/applications supporting the envisioned NECC concepts will evolve from their current state of joint and Service variants into a single integrated capabilities-based, NECC architecture. During the transition phase, legacy GCCS FoS C2 capabilities/applications that do not comply with NECC concepts or architectures will be maintained to ensure no loss in near term operational capability. Those GCCS FoS functionalities conforming to NECC concepts and architectures will be leveraged and/or improved to meet NECC requirements. The GCCS migration is more than just moving to a net-centric environment. It includes developing supporting applications and functionality to support emerging concepts and processes, such as adaptive planning, intelligence campaign planning, and incorporating the Joint Functional Concepts (JFC). To assist this development, NECC will organize required C2 capabilities into joint MCPs and warfare domain-specific applications based on GIG Enterprise Services (GES) enabling shared access to Service/Agency/joint-provided data sources. To facilitate the rapid provisioning of capabilities to the warfighters, NECC will employ a SOA. NECC will transition current and emerging C2 capabilities, to include GCCS FoS, to a single SOA-based architecture. Transformation will be successful when the appropriate segments of the Joint and Service

systems have moved to NECC with no loss of current required capabilities **IAW the GCCS FoS to NECC FTP (reference Linked Extension F).**

The Deputy Secretary of Defense directed in Program Decision Memorandum II (PDM-II) dated 19 November 2007, that Defense Information Systems Agency (DISA) and United States Joint Forces Command (USJFCOM) "migrate the Global Command and Control Family of System capabilities to the NECC Program of Record by FY11 to permit phase out of legacy programs." To meet this accelerated FoS transition, DISA and USJFCOM stood up a Net-Centric Tiger Team (NCTT) including the Services and other NECC stakeholders, to provide detail associated with the migration of all FoS functional capability within Increment I. The NCTT effort was conducted through six MCATs. The MCATs performed requirements analysis, mission process analysis, technical design, and migration planning for their mission areas and corresponding FoS components and capabilities. The combined efforts of the MCATs are documented in the GCCS Family of Systems to NECC Functionality Transition Plan (FTP) included in Linked Extension F of this CDD.

Justification: PDM II compliance.

CDD Core, Page 6, Section 1.5 Cross-Functional Capabilities

Original: "...accomplish warfighter mission tasks as addressed in the following paragraphs.

The following sub-sections provide an overview of..."

New: (Insert new second paragraph as follow)

"...accomplish warfighter mission tasks as addressed in the following paragraphs.

To ensure successful implementation of NECC Increment I across the NECC mission space, wherever GCCS FoS is used and accessed today, NECC, NCES and Services must acknowledge and integrate NECC, NCES and Service CES approaches to supporting warfighters via enterprise services. The coordination effort between NECC, NCES and Service CES approaches applies to all the following sub-sections.

The following sub-sections provide an overview of..."

Justification: PDM II compliance.

CDD CORE, SECTION 2 - ANALYSIS SUMMARY

CDD Core, Page 9, Section 2 Analysis Summary

Original: Reference the JC2 (NECC) AoA for a complete review of the analysis and recommendation details at the USJFCOM Portal link: <https://portal.jfcom.mil>

Path is: Organizations/J8/JCCD/JCCD Shared Directory/NECC CDD/References

New: Conclusions reached in the JC2 (NECC) Analysis of Alternatives (AoA) revealed the existing GCCS FoS are generally perceived to be deficient in functionality and performance and also constrained by their architectural designs and program management processes and procedures; alternative technical and programmatic approaches for implementing NECC capabilities needed to be investigated. The JC2 (NECC) AoA was conducted as a part of the NECC planning activity strategy for implementing NECC in conjunction with NECC Increment I Milestone A (MS A) and Milestone B (MS B) decisions. The AoA reviewed all capabilities for NECC at large with the resultant recommendations focusing on NECC Increment I. **Reference the JC2 (NECC) AoA for a complete review of the analysis and recommendation details at the AKO Portal link: <https://www.us.army.mil/suite/doc/10597878>. Subsequent to the AoA, PDM II directed DISA and USJFCOM to migrate GCCS FoS functionalities in their entirety to NECC by FY11 to permit phase out of legacy programs.**

Justification: PDM II compliance and USJFCOM portal address change.

CDD CORE, SECTION 3 - CONCEPT OF OPERATIONS SUMMARY – NO CHANGE

CDD CORE, SECTION 4, THREAT SUMMARY – NO CHANGE

CDD CORE, SECTION 5, PROGRAM SUMMARY

CDD Core, Page 17, Section 5.1.1 NECC Increments by Fiscal Year (FY)

Original:

- I: Required operational capabilities developed by the FY08-10 period
- II: Required operational capabilities developed approximately by the FY10-11 period
- III: Required operational capabilities developed by the approximately FY12-13 period

New:

- I: Required operational capabilities developed by the **FY08-11 period**
- II: Required operational capabilities developed approximately by the **FY12-13 period**
- III: Required operational capabilities developed by the approximately **FY14-15 period**

Justification: PDM II compliance.

CDD Core, Page 20, Section 5.3.1 Network Centric Enterprise Services

Original: “...timelines through information/idea sharing and parallel planning.”

New: “timelines through information/idea sharing and parallel planning.”

To ensure successful implementation of NECC Increment I across the NECC mission space, wherever GCCS FoS is used and accessed today, NECC, NCES and Services must acknowledge and integrate NECC, NCES and Service CES approaches to supporting warfighters via enterprise services.”

Justification: PDM II compliance.

CDD Core, Page 20, Section 5.4 Technical Refresh

New: **5.4 Technical Refresh**

Future development of NECC products will be aligned to support DoD IT system development strategy (which calls for synchronized software upgrades and delivery). Future development will focus on capability that accounts for inherently rapid changes in information technology synchronized with dynamic requirements in support of the evolution of command and control. Additionally, products developed in support of NECC will embody the DoD SOA environment as it emerges and is refined to include maintaining compliance with evolving NCES and GES standards and directives.

Technical refresh is defined to include inherent performance and technical upgrades gained through hardware modernization and/or software updates that maintain and enhance system interfaces with upgraded networks to ensure continued interoperability across the NECC mission space. Technical refresh may enhance requirements within the scope of NECC validated requirements, but will not include new capabilities beyond the scope of validated requirements.

Refreshes and upgrades are managed and directed by the NECC JPMO and NECC CPMOs, in coordination with JCCD, consistent with emerging priorities for future development and disciplined through design reviews with the NECC stakeholders (JS/CC/S/A). Future NECC development, delivery, and fielding of these upgrades are coordinated and synchronized through the JCCD, CPM, and JCIDS processes. Any new KPPs, KSAs, and other additional requirements resulting from technical changes that have the potential to significantly impact the program's cost and schedule defined in the APB will undergo review by JCCD and CPM and submitted to the appropriate JCIDS governing bodies for approval as described in Section 6.1.

Justification: Per JS J8 and C2 FCB direction to support JCB concerns.

CDD CORE, SECTION 6 - CAPABILITIES REQUIRED FOR THE CURRENT INCREMENT

CDD Core, Page 21, Section 6 Capabilities Required For The Current Increment, Last Paragraph and Table 6-1 NECC Increment I and Post Increment I Capabilities

Original:

...The capabilities for fielding in Increment I were identified during the conduct of the JC2 AoA, but it is understood the actual capabilities selected may differ from the ones currently selected due to necessary tradeoffs. Some current Increment I selections could move to Post Increment I and Post Increment I capabilities could move to Increment I based on TD phase developments and coordinated JPEO and warfighter, as represented by the JCCD, trade off decisions. A complete listing of NECC capabilities, by Mission Capability Package, is provided in Table 6-1,

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NECC Increment I, and Post Increment I Capabilities. (“XXX” indicates the Increment the specified capability is expected to be fielded.)

Table 6-1. NECC Increment I and Post Increment I Capabilities

Attributes	Mission Capability Package	Incr I	Post Incr I
	1 Force Projection		
1, 2, 3, 4, 5, 6, 7	1.1 Conduct Planning		
	1.1.1 Checklist	XXX	
	1.1.2 Shared Data	XXX	
	1.1.3 Workflow	XXX	
	1.1.4 Orders	XXX	
	1.1.5 Course of Action (COA) Development and Selection	XXX	
	1.1.6 Command Relationships	XXX	
	1.1.7 Force/Logistics Selection	XXX	
	1.1.8 CONOPS		XXX
	1.1.9 Initial Mobilization		XXX
	1.1.10 Civil Engineering Support Plan (CESP)		XXX
	1.1.11 Logistics Needs		XXX
	1.1.12 Crisis Management	XXX	
	1.1.13 Force Conversion		XXX
	1.1.14 Force and Logistics Needs	XXX	
	1.1.15 Arrival of Forces		XXX
	1.1.16 Unit Deployment	XXX	
	1.1.17 Movement		XXX
	1.1.18 Notification		XXX
1, 2, 3, 5,6	1.2 Conduct TPFDD Development / Maintenance		
	1.2.1 Deployment Data	XXX	
	1.2.2 Transportation Needs	XXX	
	1.2.3 Force Modules		XXX
	1.2.4 Cross-Linkage		XXX
	1.2.5 Continuous Asset Visibility	XXX	
	1.2.6 In-Transit Visibility	XXX	
	1.2.7 Sustainment Estimates		XXX
	1.2.8 Transportation Feasibility		XXX
	1.2.9 Transportation Visibility	XXX	
	1.2.10 Automatic Notification	XXX	
1, 2, 3, 5,6	Provide Total Force Visibility of Conventional Force Management Information		
	1.3.1 Force Structure	XXX	
	1.3.2 Force Capabilities Identifier	XXX	

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Attributes	Mission Capability Package	Incr I	Post Incr I
	1.3.3 Force Readiness	XXX	
	1.3.4 GFM Strategic Guidance	XXX	
	1.3.5 Force Availability	XXX	
	1.3.6 Force Location	XXX	
	1.3.7 Force Apportionment	XXX	
	1.3.8 Common Operational Picture (COP)	XXX	
	1.3.9 Work-in-Progress	XXX	
	2 Force Readiness		
1, 2, 3, 4, 5, 6	2.1 Readiness Oversight		
	2.1.1 Total Force Analysis	XXX	
	2.1.2 Single/Multiple TPFDD	XXX	
	2.1.3 Historical/Trend analysis	XXX	
	2.1.4 Readiness Reporting Updates	XXX	
	2.1.5 Readiness Information	XXX	
	2.1.6 Registering Units	XXX	
	3 Intelligence		
1, 2, 3, 4, 5, 6, 7	3.1 Joint Intelligence Preparation of the Battlefield (JIPB)		
	3.1.1 Plotting Data		XXX
	3.1.2 Geospatial Intelligence		XXX
	3.1.3 Characteristics and Performance Data Analysis		XXX
	3.1.4 Force Protection Analysis		XXX
	3.1.5 Fused Intelligence		XXX
	3.1.6 SCI Level Information		XXX
	3.1.7 Battlespace		XXX
	3.1.8 Nodal Analysis		XXX
	3.1.9 Virtual Knowledge Base (VKB)		XXX
	3.1.10 BLUE Critical Infrastructure		XXX
	3.1.11 Information Integration		XXX
	3.1.12 Product Generation		XXX
	3.1.13 Threat Assessments		XXX
1, 2, 3, 5,6	3.2 Targeting		
	3.2.1 Frequency Analysis		XXX
	3.2.2 Target Numbering		XXX
	3.2.3 Political-Military Objectives		XXX
	3.2.4 Target Lists		XXX
	3.2.5 Imagery		XXX
	3.2.6 Weapon Analysis		XXX
	3.2.7 METOC Impacts		XXX
	3.2.8 Battle Damage Assessment (BDA)		XXX
	3.2.9 Target System Analysis (TSA)		XXX

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Attributes	Mission Capability Package	Incr I	Post Incr I
	3.2.10 Mobile Targeting		XXX
	3.2.11 Weapon-Derived Data		XXX
	3.2.12 Theater-Level Targets		XXX
	3.2.13 Target Archives		XXX
	3.2.14 Mapping		XXX
	3.2.15 Joint Munitions Effectiveness Manual (JMEM)		XXX
	3.2.16 Law Of Armed Conflict (LOAC), Rules of Engagement (ROE), No-Strike Target Lists		XXX
	3.2.17 Database Management		XXX
	3.2.18 Digital Target Materials		XXX
	3.2.19 Non-Lethal Targeting Solutions		XXX
	3.2.20 Areas of Interest		XXX
	3.2.21 Target Folder Definition and Management		XXX
	3.2.22 Target List Validation		XXX
	3.2.23 Weapon Target Pairing		XXX
1, 2, 3, 4, 5, 6, 7	3.3 ISR Management		
	3.3.1 Modeling and Simulation		XXX
	3.3.2 Collection Requirements		XXX
	3.3.3 Collection Management		XXX
	3.3.4 Collection Message Types		XXX
	3.3.5 Intelligence Requirements		XXX
	3.3.6 Feedback Products		XXX
	3.3.7 Collection Publications and Directives	XXX	
	3.3.8 ISR Asset		XXX
	3.3.9 Link Collection Requirements and ISR Assets	XXX	
	3.3.10 Collection Needs, Tasking, and Coverage		XXX
	3.3.11 ISR Asset Battle Management		XXX
	3.3.12 ISR Asset Status		XXX
	3.3.13 Terrain Masking of Sensors		XXX
	3.3.14 Target Match		XXX
	3.3.15 ISR Management, Targeting: Surveillance Targets		XXX
1, 2, 3, 4, 5, 6, 7	3.4 Joint IPB, ISR Management, and Targeting		
	3.4.1 General Military Intelligence (GMI)		XXX
	3.4.2 GMI Overlays		XXX
	3.4.3 Dynamic Links		XXX
	4 Situational Awareness		

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Attributes	Mission Capability Package	Incr I	Post Incr I
1, 2, 3, 4, 5, 6, 7	4.1 Shared Situational Awareness		
	4.1.1 Blue Force Location, Automated Track Feeds	XXX	
	4.1.2 Blue Force Location, Other Data Source	XXX	
	4.1.3 Blue Force Location, ISR Sensors	XXX	
	4.1.4 Unit Aggregation/De-Aggregation	XXX	
	4.1.5 Red/Gray/Unknown Force Tracking	XXX	
	4.1.6 Display Moving Targets	XXX	
	4.1.7 Display Red/Gray Unknown ISR Assets	XXX	
	4.1.8 Multiple Target Database	XXX	
	4.1.9 Overlay Generation and Display	XXX	
	4.1.10 Map Displays	XXX	
	4.1.11 Coordinate Conversion	XXX	
	4.1.12 METOC Data	XXX	
	4.1.13 Joint Force Synchronization	XXX	
	4.1.14 Display Urgent Information	XXX	
	4.1.15 COP on The Move	XXX	
	4.1.16 Identify and Access Amplifying Data	XXX	
	4.1.17 Record/Playback	XXX	
	4.1.18 Projected Location/Coverage	XXX	
	4.1.19 Historical Location	XXX	
	4.1.20 Global COP	XXX	
	4.1.21 Track Refresh	XXX	
	4.1.22 Filter Display and Dissemination Based on Track Attributes	XXX	
	4.1.23 Customize Symbology	XXX	
	4.1.24 Color Mapping	XXX	
	4.1.25 Mission Management	XXX	
	4.1.26 Friendly Force Description	XXX	
	4.1.27 Non-NECC Equipped Forces	XXX	
	4.1.28 Customized COP	XXX	
	4.1.29 Common Tactical Picture (CTP)	XXX	
	5 Force Employment – Air/Space Operations		
1, 2, 3, 5,6	5.1 Air and Space Operations		
	5.1.1 Air and Space Planning		XXX
	5.1.2 Pre-Planned Air Support Request		XXX
	5.1.3 Allocation Options		XXX
	5.1.4 Support Resource Matching		XXX
	5.1.5 Aerospace Deconfliction		XXX
	5.1.6 Emitting Weapons Systems Deconfliction		XXX
	5.1.7 Monitor ATO/STO Execution		XXX
	5.1.8 Automated Alerting		XXX

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Attributes	Mission Capability Package	Incr I	Post Incr I
	5.1.9 Blue Force Deconfliction		XXX
	5.1.10 ISR Collection Alerts		XXX
	5.1.11 Automated Plan Evaluation		XXX
	5.1.12 Immediate Air Support Request (ASR)		XXX
	5.1.13 Mission Reports		XXX
	5.1.14 Space Infrared (IR) Correlation		XXX
	5.1.15 Automated Production of COA Options		XXX
	5.1.16 Automated Immediate Targeting Capability		XXX
	5.1.17 Automated Operational and Combat Assessment		XXX
	5.1.18 New Triad Planning		XXX
	5.1.19 Integrated Missile Defense Planning		XXX
	5.1.20 Information Operations Planning		XXX
	6 Force Employment – Land Operations		
1, 2, 3, 4, 5, 6, 7	6.1 Display Battlefield Geometry		
	6.1.1 Plans/Orders Development		XXX
1, 2, 3, 4, 5, 6, 7	6.2 Plan Joint Fires and Land Operations		
	6.2.1 Estimates and Orders		XXX
	6.2.2 Planning Capability		XXX
	6.2.3 Text and Voice Dialogue		XXX
1, 2, 3, 4, 5, 6, 7	6.3 Prepare for Land Operations		
	6.3.1 Mission Rehearsals		XXX
	6.3.1.1 En Route Planning		XXX
	6.3.1.2 Rehearse operations		XXX
	6.3.1.3 Functional Area Rehearsals		XXX
	6.3.1.4 Fire Plan Rehearsal		XXX
	6.3.2 Task Organization		XXX
	6.3.3 Combat Power		XXX
	6.3.4 Biometric Data		XXX
	6.3.5 Functionalities		XXX
1, 2, 3, 4, 5, 6, 7	6.4 Execute Joint Fires and Land Operations		
	6.4.1 Networked Fires		XXX
	6.4.2 Clearance of Fires		XXX
	6.4.3 Analysis and Calculations		XXX
	6.4.4 Handover		XXX
	6.4.5 Operate		XXX
	6.4.6 Monitor		XXX
	6.4.7 Task / Re-task		XXX
	6.4.8 ISR Synchronization		XXX
	6.4.9 Terrain and Airspace Management		XXX
	6.4.9.1 Integrated Air Picture		XXX

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Attributes	Mission Capability Package	Incr I	Post Incr I
	6.4.9.2 Integrated Air and Ground Functions		XXX
	6.4.9.3 Sensors		XXX
	6.4.9.4 Responsive Data Set		XXX
1, 2, 3, 4, 5, 6, 7	6.5 Assess Joint Fires and Land Operations		
	6.5.1 Assessment		XXX
	6.5.2 Combat Support Estimates		XXX
	6.5.3 Fire Support Information		XXX
	6.5.4 Fire Support Estimates		XXX
	6.5.5 Target Cross Reference		XXX
	6.5.6 Close Air Support (CAS) Planning		XXX
	7 Force Employment – Maritime/Littoral Operations		
1, 2, 3, 4, 5, 6, 7	7.1 Undersea Warfare		
	7.1.1 Water-space Management (WSM)		XXX
	7.1.2 Prevention of Mutual Interference (PMI)		XXX
	7.1.3 Anti-Submarine Warfare (ASW)		XXX
	7.1.4 ASW Decision Support		XXX
	7.1.5 ASW Courses of Action		XXX
1, 2, 3, 6	7.2 Mine Warfare (MIW)		
	7.2.1 MIW Situational Awareness		XXX
	7.2.2 MIW Mission Planning & Evaluation, Asset Mgmt & Deconfliction		XXX
	7.2.3 Collaborative Mine Warfare and Undersea Warfare Operations		XXX
1, 3, 4, 5, 6	7.3 Maritime Patrol Aircraft (MPA) Support		
	7.3.1 MPA Shared Situational Awareness		XXX
	7.3.2 MPA Mission Support		XXX
	8 Force Protection		
1, 3, 5,6	8.1 Improved Early Warning (IEM)		
	8.1.1 Suspend Simulated and/or Exercise Scenarios		XXX
	8.1.2 WMD Effects Area Prediction		XXX
	8.1.3 Terrorism Alerts/Advisories		XXX
	8.1.4 Alert for Intrusion of Base or Critical Facility		XXX
	8.1.5 Critical Infrastructure Protection SA		XXX
	8.1.6 Rear Area & HS/HD: Crisis Response/ Consequence Management		XXX
	8.1.7 Civil Military Operations		XXX
	8.1.8 Information Exchange		XXX
	8.2 Conduct Crisis Action / Contingency Planning: Integrated Air and Missile Defense (IAMD)	XXX	

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Attributes	Mission Capability Package	Incr I	Post Incr I
	9 Cross Functions		
1, 2, 3, 4, 5, 6, 7	9.1 Collaboration	XXX	
	9.1.1 Relevant Data Exchange	XXX	
	9.1.2 Reachback		XXX
1, 2, 3, 4, 5, 6, 7	9.2 Security Cross-Domain Services	XXX	
1, 2, 3, 5,6	9.3 Training	XXX	
	9.3.1 Collaborative Training	XXX	
	9.3.2 Embedded Training	XXX	
	9.3.3 SCORM Compliant Courseware	XXX	
	9.3.4 Test / Simulation Environment	XXX	
1, 2, 3, 4, 5, 6, 7	9.4 Office Automation	XXX	
1, 2, 3, 4, 5, 6, 7	9.5 Messaging	XXX	
1, 2, 3, 4, 5, 6, 7	9.6 Information Assurance	XXX	
	9.6.1 Protect and Defend	XXX	
	9.6.2 Multinational Information Sharing	XXX	
1, 2, 3, 4, 5, 6, 7	9.7 Discovery / Mediation / Storage	XXX	
	9.7.1 Information use	XXX	
	9.7.2 Profiles		XXX
1, 2, 3, 4, 5, 6	9.8 Language Translation		XXX
1, 3, 5,6	9.9 Mission Rehearsal / After Action Review		XXX
	9.9.1 Data Collection		XXX
	9.9.2 Data Analysis		XXX
	9.9.3 Data Presentation		XXX
1,3,4,5,6	9.10 Effects Assessment Data Management		XXX
	ATTRIBUTES LEGEND		
	Attributes per Joint C2 Functional Concept		
1	Superior Decision Making		
2	Flexible Synchronization		
3	Shared Understanding		
4	Dispersed Command and Control		
5	Simultaneous C2 Processes		
6	Shared Quality Information		

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Attributes	Mission Capability Package	Incr I	Post Incr I
7	Robust Networking		

New: Replaced last subparagraph and Table 6-1 with the following:

During system development, cost-performance tradeoff decisions could defer some non-GCCS FoS functionalities originally scheduled in Increment I to Post-Increment I development; and conversely, system engineering trade studies or technological opportunities may identify Increment II and III capabilities that should be developed in Increment I. JPEO will coordinate programmatic adjustment and cost-performance tradeoffs with the JCCD (as the warfighter representative).

To meet NECC Increment I FOC, Table 6-1 is based upon analyses of the GCCS FoS documented in the GCCS FoS to NECC FTP (reference Linked Extension F), the NECC Joint Program Executive Office (JPMO)/JCCD Mission Capability Area Team (MCAT) GCCS FoS Migration Plan products, and other related documents.

PDM-II directed the migration of GCCS FoS functionalities to the NECC Program of Record by FY11 to permit phase out of legacy GCCS FoS programs. NECC Increment I will produce net-centric capabilities to replace the GCCS FoS as its first priority. The plan for replacing the GCCS FoS is detailed in the GCCS Family of Systems to NECC Functionality Transition Plan (FTP).

Migrated GCCS FoS functionality associated with NECC Increment I capability needs may not initially meet NECC threshold parameters until FY11. In addition, the Services may identify unique GCCS FoS interfaces essential to joint planning and execution that must be sustained in NECC. JPEO will continue to develop and mature these transitioned GCCS FoS functionalities to ensure compliance with NECC interoperability and data interface standards, architectures, and to facilitate collaborative vertical/horizontal information exchange to achieve NECC Increment I thresholds.

Associated GCCS FoS requirements documentation pedigree (i.e., related ICDs, CDDs, CPDs, ORD, etc. or other requirements documentation [GRiD, GCCS-J Block V Requirements Identification Document (RID)] and/or references) articulate specific GCCS FoS KPPs, KSAs, and other attribute references for capabilities migrated to NECC. For specific GCCS FoS requirement descriptions for functionality migrated to NECC within NECC Increment I, refer to "GCCS FoS to NECC Functional Transition Plan Appendix C," NECC Increment I CDD Linked Extension F. For requirement descriptions and performance thresholds and objectives specific to NECC Increment I enhancements above and beyond the GCCS FoS, refer to "NECC Increment I CDD MCP list and Requirement Description," NECC Increment I CDD Linked Extension D."

The Joint Combat Capability Developer (JCCD) at USJFCOM and materiel provider (DISA) in consulting with the users (CCDRs and Services) can prioritize the delivery of functionality within already provided funding for NECC Increment I. Requests for acceleration of

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functionality will be reviewed by the Milestone Decision Authority prior to implementation to ensure that the program’s cost, schedule and requirement parameters are not breached.

Table 6-1, annotated with the following terms, provides a list of NECC capability needs by Mission Capability Package and identifies the Increment in which it is partially or fully met.

- **Partial:** Indicates that this NECC capability will be partially addressed in this Increment by migration of current GCCS FoS capability
- **Full:** Indicates that this NECC capability will be fully addressed in this Increment
- **Full FoS:** Indicates that GCCS FoS functionality will provide this capability (refer to “GCCS FoS to NECC Functional Transition Plan -Appendix C,” NECC Increment I CDD Linked Extension F)
- **Enh:** Indicates that an enhancement to GCCS FoS functionality will be delivered as part of this NECC capability

All capabilities delivered in support of requirements listed in the Increment I column of Table 6-1 will meet or exceed GCCS FoS threshold values or currently fielded system capability values, whichever is higher, for functionality and performance. See GCCS FoS to NECC FTP, Appendix C (reference Linked Extension F) for GCCS FoS requirements related to the NECC CDD capabilities listed in Table 6-1 below.

Table 6-1. NECC Increment I and Post Increment I Capabilities

For NECC attribute details governing Table 6-1 capabilities, see Extension H , Section 6.2.

Attributes	Mission Capability Package	Incr I	Post Incr I
Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.			
Footnote ¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.			
Footnote ² – Identifies NECC capability needs not associated with the GCCS FoS.			
	1 FORCE PROJECTION		
1, 2, 3, 4, 5, 6, 7	1.1 Conduct Planning		
	1.1.1 Checklist	Full (Full FoS & Enh)	
	1.1.2 Shared Data	Full (Full FoS & Enh)	
	1.1.3 Workflow	Full (Full FoS & Enh)	
	1.1.4 Orders	Full (Full FoS & Enh)	
	1.1.5 COURSE OF ACTION (COA) DEVELOPMENT AND SELECTION	Full (Full FoS & Enh)	
	1.1.6 Command Relationships	Full (Full FoS & Enh)	
	1.1.7 Force/Logistics Selection	Full (Full FoS & Enh)	

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	1.1.8 CONOPS	Partial (Full FoS)	Full (Enh)
	1.1.9 Initial Mobilization	Partial (Full FoS)	Full (Enh)
	1.1.10 Civil Engineering Support Plan (CESP)	Partial (Full FoS)	Full (Enh)
	1.1.11 Logistics Needs	Partial (Full FoS)	Full (Enh)
	1.1.12 Crisis Management	Full (Full FoS & Enh)	
	1.1.13 Force Conversion	Partial (Full FoS)	Full (Enh)
	1.1.14 Force and Logistics Needs	Full (Full FoS & Enh)	
	1.1.15 Arrival of Forces	Partial (Full FoS)	Full (Enh)
	1.1.16 Unit Deployment	Full (Full FoS & Enh)	
	1.1.17 Movement	Partial (Full FoS)	Full (Enh)
	1.1.18 Notification	Partial (Full FoS)	Full (Enh)
1, 2, 3, 5, 6	1.2 Conduct TPFDD Development / Maintenance		
	1.2.1 Deployment Data	Full (Full FoS & Enh)	
	1.2.2 Transportation Needs	Full (Full FoS & Enh)	
	1.2.3 Force Modules	Partial (Full FoS)	Full (Enh)
	1.2.4 Cross-Linkage	Partial (Full FoS)	Full (Enh)
	1.2.5 Continuous Asset Visibility	Full (Full FoS & Enh)	
	1.2.6 In-Transit Visibility	Full (Full FoS & Enh)	
	1.2.7 Sustainment Estimates	Partial (Full FoS)	Full (Enh)
	1.2.8 Transportation Feasibility	Partial (Full FoS)	Full (Enh)
	1.2.9 Transportation Visibility	Full (Full FoS & Enh)	
	1.2.10 Automatic Notification	Full (Full FoS & Enh)	
1, 2, 3, 5, 6	1.3 Provide Total Force Visibility of Conventional Force Management Information		
	1.3.1 Force Structure	Full (Full FoS & Enh)	
	1.3.2 Force Capabilities Identifier	Full (Full FoS & Enh)	

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	1.3.3 Force Readiness	Full (Full FoS & Enh)	
	1.3.4 GFM Strategic Guidance	Full (Full FoS & Enh)	
	1.3.5 Force Availability	Full (Full FoS & Enh)	
	1.3.6 Force Location	Full (Full FoS & Enh)	
	1.3.7 Force Apportionment	Full (Full FoS & Enh)	
	1.3.8 Common Operational Picture (COP)	Full (Full FoS & Enh)	
	1.3.9 Work-in-Progress	Full (Enh)	
	2 Force Readiness		
1, 2, 3, 4, 5, 6	2.1 Readiness Oversight		
	2.1.1 Total Force Analysis	Full (Full FoS & Enh)	
	2.1.2 Single/Multiple TPFDD	Full (Full FoS & Enh)	
	2.1.3 Historical/Trend analysis	Full (Full FoS & Enh)	
	2.1.4 Readiness Reporting Updates	Full (Full FoS & Enh)	
	2.1.5 Readiness Information	Full (Full FoS & Enh)	
	2.1.6 Registering Units	Full (Full FoS & Enh)	
	3 Intelligence		
1, 2, 3, 4, 5, 6, 7	3.1 Joint Intelligence Preparation of the Battlefield (JIPB)		
	3.1.1 Plotting Data	Partial (Full FoS)	Full (Enh)
	3.1.2 Geospatial Intelligence		Full (Enh)
	3.1.3 Characteristics and Performance Data Analysis		Full (Enh)
	3.1.4 Force Protection Analysis	Partial (Full FoS)	Full (Enh)
	3.1.5 Fused Intelligence	Partial (Full FoS)	Full (Enh)
	3.1.6 SCI Level Information	Partial (Full FoS)	Full (Enh)
	3.1.7 Battlespace	Partial (Full FoS)	Full (Enh)
	3.1.8 Nodal Analysis		Full (Enh)
	3.1.9 Virtual Knowledge Base (VKB)		Full (Enh)
	3.1.10 BLUE Critical Infrastructure	Partial (Full FoS)	Full (Enh)

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	3.1.11 Information Integration	Partial (Full FoS)	Full (Enh)
	3.1.12 Product Generation	Partial (Full FoS)	Full (Enh)
	3.1.13 Threat Assessments	Partial (Full FoS)	Full (Enh)
1, 2, 3, 5, 6	3.2 Targeting		
	3.2.1 Frequency Analysis		Full (Enh)
	3.2.2 Target Numbering	Partial (Full FoS)	Full (Enh)
	3.2.3 Political-Military Objectives	Partial (Full FoS)	Full (Enh)
	3.2.4 Target Lists	Partial (Full FoS)	Full (Enh)
	3.2.5 Imagery	Partial (Full FoS)	Full (Enh)
	3.2.6 Weapon Analysis	Partial (Full FoS)	Full (Enh)
	3.2.7 METOC Impacts	Partial (Full FoS)	Full (Enh)
	3.2.8 Battle Damage Assessment (BDA)	Partial (Full FoS)	Full (Enh)
	3.2.9 Target System Analysis (TSA)		Full (Enh)
	3.2.10 Mobile Targeting	Partial (Full FoS)	Full (Enh)
	3.2.11 Weapon-Derived Data		Full (Enh)
	3.2.12 Theater-Level Targets	Partial (Full FoS)	Full (Enh)
	3.2.13 Target Archives	Partial (Full FoS)	Full (Enh)
	3.2.14 Mapping	Partial (Full FoS)	Full (Enh)
	3.2.15 Joint Munitions Effectiveness Manual (JMEM)	Partial (Full FoS)	Full (Enh)
	3.2.16 Law Of Armed Conflict (LOAC), Rules of Engagement (ROE), No-Strike Target Lists	Partial (Full FoS)	Full (Enh)
	3.2.17 Database Management	Partial (Full FoS)	Full (Enh)
	3.2.18 Digital Target Materials	Partial (Full FoS)	Full (Enh)
	3.2.19 Non-Lethal Targeting Solutions	Partial (Full FoS)	Full (Enh)
	3.2.20 Areas of Interest	Partial (Full FoS)	Full (Enh)
	3.2.21 Target Folder Definition and Management	Partial (Full FoS)	Full (Enh)
	3.2.22 Target List Validation	Partial (Full FoS)	Full (Enh)
	3.2.23 Weapon Target Pairing	Partial (Full FoS)	Full (Enh)
1, 2, 3, 4, 5, 6, 7	3.3 ISR Management		
	3.3.1 Modeling and Simulation		Full (Enh)
	3.3.2 Collection Requirements	Partial (Full FoS)	Full (Enh)
	3.3.3 Collection Management	Partial (Full FoS)	Full (Enh)
	3.3.4 Collection Message Types	Partial (Full FoS)	Full (Enh)

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Attributes	Mission Capability Package	Incr I	Post Incr I
Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.			
Footnote ¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.			
Footnote ² – Identifies NECC capability needs not associated with the GCCS FoS.			
	3.3.5 Intelligence Requirements		Full (Enh)
	3.3.6 Feedback Products		Full (Enh)
	3.3.7 Collection Publications and Directives	Full (Full FoS & Enh)	
	3.3.8 ISR Asset	Partial (Full FoS)	Full (Enh)
	3.3.9 Link Collection Requirements and ISR Assets	Full (Full FoS & Enh)	
	3.3.10 Collection Needs, Tasking, and Coverage	Partial (Full FoS)	Full (Enh)
	3.3.11 ISR Asset Battle Management	Partial (Full FoS)	Full (Enh)
	3.3.12 ISR Asset Status	Partial (Full FoS)	Full (Enh)
	3.3.13 Terrain Masking of Sensors	Partial (Full FoS)	Full (Enh)
	3.3.14 Target Match		Full (Enh)
	3.3.15 ISR Management, Targeting: Surveillance Targets	Partial (Full FoS)	Full (Enh)
1, 2, 3, 4, 5, 6, 7	3.4 Joint IPB, ISR Management, and Targeting		
	3.4.1 General Military Intelligence (GMI)	Partial (Full FoS)	Full (Enh)
	3.4.2 GMI Overlays	Partial (Full FoS)	Full (Enh)
	3.4.3 Dynamic Links	Partial (Full FoS)	Full (Enh)
	4 Situational Awareness		
1, 2, 3, 4, 5, 6, 7	4.1 Shared Situational Awareness		
	4.1.1 Blue Force Location, Automated Track Feeds	Full (Full FoS & Enh)	
	4.1.2 Blue Force Location, Other Data Source	Full (Full FoS & Enh)	
	4.1.3 Blue Force Location, ISR Sensors	Full (Full FoS & Enh)	
	4.1.4 Unit Aggregation/De-Aggregation	Full (Full FoS & Enh)	
	4.1.5 Red/Gray/Unknown Force Tracking	Full (Full FoS & Enh)	
	4.1.6 Display Moving Targets	Full (Full FoS & Enh)	
	4.1.7 Display Red/Gray Unknown ISR Assets	Full (Full FoS & Enh)	
	4.1.8 Multiple Target Database	Full (Full FoS & Enh)	
	4.1.9 Overlay Generation and Display	Full (Full FoS & Enh)	
	4.1.10 Map Displays	Full (Full FoS & Enh)	
	4.1.11 Coordinate Conversion	Full (Full FoS & Enh)	
	4.1.12 METOC Data	Full (Full FoS & Enh)	

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	4.1.13 Joint Force Synchronization	Full (Full FoS & Enh)	
	4.1.14 Display Urgent Information	Full (Full FoS & Enh)	
	4.1.15 COP on The Move	Full (Full FoS & Enh)	
	4.1.16 Identify and Access Amplifying Data	Full (Full FoS & Enh)	
	4.1.17 Record/Playback	Full (Full FoS & Enh)	
	4.1.18 Projected Location/Coverage	Full (Full FoS & Enh)	
	4.1.19 Historical Location	Full (Full FoS & Enh)	
	4.1.20 Global COP	Full (Full FoS & Enh)	
	4.1.21 Track Refresh	Full (Full FoS & Enh)	
	4.1.22 Filter Display and Dissemination Based on Track Attributes	Full (Full FoS & Enh)	
	4.1.23 Customize Symbology	Full (Full FoS & Enh)	
	4.1.24 Color Mapping	Full (Full FoS & Enh)	
	4.1.25 Mission Management	Full (Full FoS & Enh)	
	4.1.26 Friendly Force Description	Full (Full FoS & Enh)	
	4.1.27 Non-NECC Equipped Forces	Full (Full FoS & Enh)	
	4.1.28 Customized COP	Full (Full FoS & Enh)	
	4.1.29 Common Tactical Picture (CTP)	Full (Full FoS & Enh)	
	5 Force Employment – Air/Space Operations		
1, 2, 3, 5, 6	5.1 Air and Space Operations		
	5.1.1 Air and Space Planning	Partial (Full FoS)	Full (Enh)
	5.1.2 Pre-Planned Air Support Request	Partial (Full FoS)	Full (Enh)
	5.1.3 Allocation Options	Partial (Full FoS)	Full (Enh)
	5.1.4 Support Resource Matching	Partial (Full FoS)	Full (Enh)
	5.1.5 Aerospace Deconfliction	Partial (Full FoS)	Full (Enh)
	5.1.6 Emitting Weapons Systems Deconfliction		Full (Enh)
	5.1.7 Monitor ATO/STO Execution	Partial (Full FoS)	Full (Enh)
	5.1.8 Automated Alerting	Partial (Full FoS)	Full (Enh)
	5.1.9 Blue Force Deconfliction		Full (Enh)
	5.1.10 ISR Collection Alerts	Partial (Full FoS)	Full (Enh)
	5.1.11 Automated Plan Evaluation		Full (Enh)
	5.1.12 Immediate Air Support Request (ASR)	Partial (Full FoS)	Full (Enh)
	5.1.13 Mission Reports		Full (Enh)

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	5.1.14 Space Infrared (IR) Correlation		Full (Enh)
	5.1.15 Automated Production of COA Options		Full (Enh)
	5.1.16 Automated Immediate Targeting Capability	Partial (Full FoS)	Full (Enh)
	5.1.17 Automated Operational and Combat Assessment		Full (Enh)
	5.1.18 New Triad Planning	Partial (Full FoS)	Full (Enh)
	5.1.19 Integrated Missile Defense Planning	Partial (Full FoS)	Full (Enh)
	5.1.20 Information Operations Planning		Full (Enh)
1, 2, 3, 4, 5, 6, 7	6 Force Employment – Land Operations		
	6.1 Display Battlefield Geometry		Full (Enh)
	6.1.1 Plans/Orders Development	Partial (Full FoS)	Full (Enh)
1, 2, 3, 4, 5, 6, 7	6.2 Plan Joint Fires and Land Operations		
	6.2.1 Estimates and Orders	Partial (Full FoS)	Full (Enh)
	6.2.2 Planning Capability	Partial (Full FoS)	Full (Enh)
	6.2.3 Text and Voice Dialogue		Full (Enh)
1, 2, 3, 4, 5, 6, 7	6.3 Prepare for Land Operations		
	6.3.1 Mission Rehearsals	Partial (Full FoS)	Full (Enh)
	6.3.1.1 En Route Planning		Full (Enh)
	6.3.1.2 Rehearse operations		Full (Enh)
	6.3.1.3 Functional Area Rehearsals		Full (Enh)
	6.3.1.4 Fire Plan Rehearsal		Full (Enh)
	6.3.2 Task Organization	Partial (Full FoS)	Full (Enh)
	6.3.3 Combat Power	Partial (Full FoS)	Full (Enh)
	6.3.4 Biometric Data		Full (Enh)
	6.3.5 Functionalities		Full (Enh) ²
	6.4 Execute Joint Fires and Land Operations		Full (Enh)
	6.4.1 Networked Fires		Full (Enh)
	6.4.2 Clearance of Fires		Full (Enh)
	6.4.3 Analysis and Calculations		Full (Enh)
	6.4.4 Handover		Full (Enh)
	6.4.5 Operate		Full (Enh)
	6.4.6 Monitor	Partial (Full FoS)	Full (Enh)

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	6.4.7 Task / Re-task	Partial (Full FoS)	Full (Enh)
	6.4.8 ISR Synchronization	Partial (Full FoS)	Full (Enh)
	6.4.9 Terrain and Airspace Management	Partial (Full FoS)	Full (Enh)
	6.4.9.3 Integrated Air Picture		Full (Enh)
	6.4.9.2 Integrated Air and Ground Functions		Full (Enh)
	6.4.9.3 Sensors		Full (Enh)
	6.4.9.4 Responsive Data Set		Full (Enh)
1, 2, 3, 4, 5, 6, 7	6.5 Assess Joint Fires and Land Operations		
	6.5.1 Assessment	Partial (Full FoS)	Full (Enh)
	6.5.2 Combat Support Estimates		Full (Enh)
	6.5.3 Fire Support Information		Full (Enh)
	6.5.4 Fire Support Estimates		Full (Enh)
	6.5.5 Target Cross Reference	Partial (Full FoS)	Full (Enh)
	6.5.6 Close Air Support (CAS) Planning	Partial (Full FoS)	Full (Enh)
	7 Force Employment – Maritime/Littoral Operations		
1, 2, 3, 4, 5, 6, 7	7.1 Undersea Warfare		
	7.1.1 Water-space Management (WSM)	Partial (Full FoS)	Full (Enh)
	7.1.2 Prevention of Mutual Interference (PMI)	Partial (Full FoS)	Full (Enh)
	7.1.3 Anti-Submarine Warfare (ASW)	Partial (Full FoS)	Full (Enh)
	7.1.4 ASW Decision Support	Partial (Full FoS)	Full (Enh)
	7.1.5 ASW Courses of Action		Full (Enh)
1, 2, 3, 6	7.2 Mine Warfare (MIW)		
	7.2.1 MIW Situational Awareness	Partial (Full FoS)	Full (Enh)
	7.2.2 MIW Mission Planning & Evaluation, Asset Mgmt & Deconfliction	Partial (Full FoS)	Full (Enh)
	7.2.3 Collaborative Mine Warfare and Undersea Warfare Operations	Partial (Full FoS)	Full (Enh)
1, 3, 4, 5, 6	7.3 Maritime Patrol Aircraft (MPA) Support		
	7.3.1 MPA Shared Situational Awareness	Partial (Full FoS)	Full (Enh)
	7.3.2 MPA Mission Support		Full (Enh)
1, 3, 5, 6	8 Force Protection		
	8.1 Improved Early Warning (IEW)	Partial (Full FoS)	Full (Enh)

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	8.1.1 Suspend Simulated and/or Exercise Scenarios	Partial (Full FoS)	Full (Enh)
	8.1.2 WMD Effects Area Prediction		Full (Enh)
	8.1.3 Terrorism Alerts/Advisories		Full (Enh)
	8.1.4 Alert for Intrusion of Base or Critical Facility		Full (Enh)
	8.1.5 Critical Infrastructure Protection SA		Full (Enh)
	8.1.6 Rear Area & HS/HD: Crisis Response/ Consequence Management		Full (Enh) ²
	8.1.7 Civil Military Operations		Full (Enh)
	8.1.8 Information Exchange		Full (Enh) ²
	8.2 Conduct Crisis Action / Contingency Planning: Integrated Air and Missile Defense (IAMD)	Full (Full FoS & Enh)	
	9 Cross Functions		
1, 2, 3, 4, 5, 6, 7 local/state/federal government	9.1 Collaboration	Full (Full FoS & Enh)	
	9.1.1 Relevant Data Exchange	Full (Full FoS & Enh)	
	9.1.2 Reachback	Partial (Full FoS)	Full (Enh)
1, 2, 3, 4, 5, 6, 7	9.2 Security Cross-Domain Services	Full (Full FoS & Enh) ¹	
1, 2, 3, 5, 6	9.3 Training		
	9.3.1 Collaborative Training	Full (Full FoS & Enh)	
	9.3.2 Embedded Training	Full (Full FoS & Enh)	
	9.3.3 SCORM Compliant Courseware	Full (Full FoS & Enh)	
	9.3.4 Test / Simulation Environment	Full (Full FoS & Enh)	
1, 2, 3, 4, 5, 6, 7	9.4 Office Automation	Full (Full FoS & Enh)	
1, 2, 3, 4, 5, 6, 7	9.5 Messaging	Full (Full FoS & Enh)	
1, 2, 3, 4, 5, 6, 7	9.6 Information Assurance	Full (Full FoS & Enh) ¹	
	9.6.1 Protect and Defend	Full (Full FoS & Enh) ¹	
	9.6.2 Multinational Information Sharing	Full (Full FoS & Enh)	
1, 2, 3, 4, 5, 6, 7	9.7 Discovery / Mediation / Storage	Full (Full FoS & Enh)	
	9.7.1 Information use	Full (Full FoS & Enh)	

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Attributes	Mission Capability Package	Incr I	Post Incr I
<p>Note: Full GCCS FoS migration details are stated in Extension F (GCCS FoS to NECC FTP); NECC Thresholds, Objectives, Attributes are stated in Paragraph 6 of this document, and Extensions D and H.</p>			
<p>Footnote¹ – Identifies NECC cross-functional enterprise level capability needs that enable and enhance capabilities in more than one functional or mission area not addressed in current GCCS FoS.</p>			
<p>Footnote² – Identifies NECC capability needs not associated with the GCCS FoS.</p>			
	9.7.2 Profiles	Partial (Full FoS)	Full (Enh)
1, 2, 3, 4, 5, 6	9.8 Language Translation		Full (Enh) ²
1, 3, 5, 6	9.9 Mission Rehearsal / After Action Review	Partial (Full FoS)	Full (Enh)
	9.9.1 Data Collection	Partial (Full FoS)	Full (Enh)
	9.9.2 Data Analysis	Partial (Full FoS)	Full (Enh)
	9.9.3 Data Presentation	Partial (Full FoS)	Full (Enh)
1, 3, 4, 5, 6	9.10 Effects Assessment Data Management	Partial (Full FoS)	Full (Enh)
ATTRIBUTES LEGEND			
Attributes per Joint C2 Functional Concept			
1	Superior Decision Making		
2	Flexible Synchronization		
3	Shared Understanding		
4	Dispersed Command and Control		
5	Simultaneous C2 Processes		
6	Shared Quality Information		
7	Robust Networking		

Justification: PDM II compliance.

**CDD Core, Page 58, Section 6.2 Key System Attributes (KSA),
Table 6-8**

New: Add new KSA #4

Key System Attribute	Development Threshold	Development Objective	Rationale
<p>KSA #4: Technical Refresh:</p> <p>Technical refresh enables the program to leverage information technology advances to provide enhanced warfighter capabilities within the scope and budget of the NECC program.</p>	<p>1. Inherent performance and technical upgrades gained through hardware modernization. (e.g. improved processors, etc.)</p>	<p>N/A</p>	<p>Rapid improvements in technological capability significantly out-pace DoD ability to document, develop, and field Information Technology Systems</p> <p>Technical Refresh provides materiel developers the ability to synchronize changes in requirements with scheduled technology upgrades and enhancements; thereby, reducing the gap between the latest industry technological advances and the capability provided to the field</p>
	<p>2. Level-of-effort software development to maintain system interfaces with upgraded networks and with other interdependent systems (e.g. new standards for Information Assurance, etc.)</p>		
	<p>3. Refined Key Supporting Attributes requirements, (e.g. Improved integration of land, air/space, maritime/littoral and intelligence information into a Common Tactical Picture in support of the Common Operating Picture (COP) etc.)</p>		

Justification: Per JS J8 and C2 FCB direction to support JCB concerns.

CDD Core, Page 66, Section 6.2 Key System Attributes (KSA)

New: Add new section as follows:

6.2.4 Technical Refresh (KSA #4)

Rapid improvements in technological capability significantly outpace DoD's ability to document, develop, and field Information Technology (IT) Systems. The JCCD and NECC JPMO, in coordination with NECC CPMOs, will implement a disciplined technical refresh program to synchronize changes in operational requirements and capability needs with scheduled technology upgrades and enhancements thereby reducing the gap between the latest industry technological advances and capabilities provided to the field.

Technical refresh is defined to include inherent performance and technical upgrades gained through hardware modernization and/or software updates that maintain and enhance system interfaces with upgraded networks to ensure continued interoperability across the NECC mission space. In addition, technical refresh may also include level-of-effort software development to maintain system interfaces with upgraded networks and with other interdependent systems (e.g. new standards for Information Assurance, etc.). Technical refresh may enhance requirements within the scope of NECC validated requirements, but will not include new capabilities beyond the scope of validated requirements.

Justification: Per JS J8 and C2 FCB direction to support JCB concerns.

CDD CORE, SECTION 7 - FAMILY OF SYSTEM AND SYSTEM OF SYSTEM (SOS) SYNCHRONIZATION – NO CHANGE

CDD CORE, SECTION 8 - INFORMATION TECHNOLOGY AND NATIONAL SECURITY SYSTEMS (IT AND NSS) SUPPORTABILITY – NO CHANGE

CDD CORE, SECTION 9 - INTELLIGENCE SUPPORTABILITY – NO CHANGE

CDD CORE, SECTION 10 - ELECTROMAGNETIC ENVIRONMENT EFFECTS (E3) AND SPECTRUM SUPPORTABILITY – NO CHANGE

CDD CORE, SECTION 11 - ASSETS REQUIRED TO ACHIEVE INITIAL OPERATIONAL CAPABILITY (IOC)

CDD Core, Page 70, Section 11 Assets Required to Achieve Initial Operational Capability (IOC), sub-paragraph 2

Original: Increment I development will commence in FY08 with IOC estimated for 4QFY09. Although Increment I capabilities will not support all operational and tactical users beyond the

NMCS, JFC and Service/Functional Component levels, NECC will provide services those users can access. To support expanded services to this critical community, it is expected that Increment II activities will commence prior to completion of Increment I. Since future increments will build upon and be shaped by Increment I, it is imperative that NECC provide early delivery of capabilities to support commencement of Increment II development.

New: Deleted sub-paragraph 2

Justification: PDM II compliance and in response to PA&E guidance provided during IOC/FOC discussion at the 15 May JAT.

CDD Core, SECTION 12 - SCHEDULE AND IOC/FULL OPERATIONAL CAPABILITIES (FOC) DEFINITIONS

CDD Core, Page 71, Section 12 Schedule and IOC/Full Operational Capabilities (FOC) Definitions, sub-paragraph 1

Original: NECC will not have a traditional IOC and Final Operational Capability (FOC). With the GCCS FoS as its starting point, the program will regularly and frequently field spirals that provide subsets of the capabilities specified in this CDD. Increment I IOC is currently defined as providing users with selectable capabilities to conduct mission tasks supporting command capability and C2 activities from the NMCS through the JFC and Service/Functional components to include Standing Joint Force Headquarters (SJFHQ). The traditional FOC concept is problematic for NECC. A services/software intensive, evolutionary acquisition program continually develops and delivers new, incremental capabilities in defined spirals and increments. Therefore, an evolutionary acquisition program will attain FOC only at such time as the user determines that Increment I has met all threshold capabilities. NECC is estimated to reach IOC in 4QFY09.

New: NECC will not have a traditional IOC and FOC. With the GCCS FoS as its starting point, the program will regularly and frequently field spirals that provide subsets of the capabilities specified in this CDD. IOC will consist of GCCS FoS capabilities (as listed in Annex C of the GCCS Family of Systems to NECC Functionality Transition Plan (FTP)) for Situational Awareness (SA). Additional capabilities from Mission Capability Packages will be available and evaluated, but GCCS FoS SA will be the primary focus for IOC. IOC shall also include Cross Functional capabilities needed to ensure interoperability and integration. These capabilities will be available at a designated Service JTF Capable Headquarters at one geographic Combatant Command representative of activities conducted between NMCS, JFC, and Service/Functional components. To ensure critical system interoperability and compatibility, Increment I development will commence in FY08 with IOC estimated for FY10. The traditional FOC concept is problematic for NECC. A services/software intensive, evolutionary acquisition program continually develops and delivers new, incremental capabilities in defined spirals and increments. Therefore, an evolutionary acquisition program will attain FOC NLT FY17 only at such time as the user determines that Increment I has met all threshold capabilities to include complete migration of GCCS FoS functionality to NECC supporting command capability and C2 activities from NMCS to where the GCCS FoS is accessed and used today.

CDD Core, Page 72, Section 12 Schedule and IOC/Full Operational Capabilities (FOC) Definitions, sub-paragraph 3

Original: This section establishes support objectives for NECC increments of operational capability. NECC will evolve over time through ongoing concept development and experimentation. Based on a three-year Increment I beginning in FY08, followed by projected two two-year increments, the content of each fielding increment will be determined by the maturation of key technologies. Because this CDD specifies capabilities for both Increment I and future increments, it will be regularly reviewed and revised to ensure that the program's spirals are meeting current warfighter needs. Synchronization of C2 FoS and other related program baseline schedules with NECC spiral acquisition schedule is critical to sustainment of C2 system interoperability and vertical/horizontal collaboration for warfighters at all command and control levels throughout NECC development and fielding process.

New: This section establishes support objectives for NECC increments of operational capability. NECC will evolve over time through ongoing concept development and experimentation. Based on a **four**-year Increment I beginning in FY08, followed by **two** projected two-year increments, the content of each fielding increment will be determined by the maturation of key technologies. Because this CDD specifies capabilities for both Increment I and future increments, it will be regularly reviewed and revised to ensure that the program's spirals are meeting current warfighter needs. Synchronization of C2 FoS and other related program baseline schedules with NECC spiral acquisition schedule is critical to sustainment of C2 system interoperability and vertical/horizontal collaboration for warfighters at all command and control levels throughout NECC development and fielding process.

Justification: PDM II compliance.

CDD Core, Page 72, Section 12 Schedule and IOC/Full Operational Capabilities (FOC) Definitions, new sub-paragraph 5

New:

By FY11, to support Service implementation of FOC, NECC will complete development and migration of the functionality of the GCCS FoS capabilities, operating on the enterprise Global Computing Nodes (GCN), and supporting mission tasks sustaining C2 activities from the NMCS through the JFC and Service/Functional components.

Justification: PDM II compliance

CDD Core, Page 72, Section 12.2 Initial Operational Capability (IOC)

Original: IOC (forecasted for 4QFY09) for Increment I shall be considered attained when users at the NMCS through the JFC and Service/Functional components to include SJFHQ have been provided with selectable capabilities to conduct mission tasks supporting command capability and C2 activities, the Commanders have determined personnel are adequately trained and judged to be mission ready; maintenance and support personnel, facilities and supporting infrastructure are in place to support the JFC/JTF/SJFHQ [to include required spares/repair parts, Test,

Measurement, Diagnostic Equipment (TMDE), etc.]; and selected capabilities are certified as interoperable by the JITC prior to IOC. JITC and test organizations will certify each spiral in series. Each spiral will be tested in the most current operating environment resulting in an iterative testing and certification process and a cumulative IOC determination to maintain joint command and control integrity and NECC user trust.

New: Increment I IOC is achieved when users are provided capabilities meeting Situational Awareness¹ (SA) requirements for the User Defined Operational Picture (UDOP) as well as capabilities which address Joint synchronization through the use of Association Management capabilities. IOC shall include SA Training and enabling capabilities from Force Employment, Force Projection, and Force Readiness in accordance with the Functionality Transition Plan (FTP). It shall also include Cross Functional capabilities needed to ensure interoperability and integration. These capabilities will be available at a designated Service JTF Capable Headquarters at one geographic COCOM and evaluated between NMCS, JFC, and Service/Functional components. NECC is projected to reach IOC by FY10..

Footnote 1: For the purpose of Shared Situational Awareness capability development in NECC, the term Common Operational Picture (COP) shall be considered consistent with the term User Defined Operational Picture (UDOP)." - derived from NECC CDD Linked Extension D, Para 4, page D-22, dated 7 June 2007. UDOP is further defined by the following 21 NECC requirements: 4.1.1-.5; 4.1.7; 4.1.8-.14; 4.1.17-.19; 4.1.21-.24; 4.1.26-.27 supported by Capability Modules documented in the GCCS FoS to NECC Functionality Transition Plan (NECC Increment I CDD Ext F).

Justification: PDM II compliance.

CDD Core, Page 73, Section 12.3 Full Operational Capability (FOC)

Original: FOC for Increment I (projected for 4QFY10) will be achieved when NECC fielded to the NMCS, CCDRs, JTFs, JTF Service and Functional Component Commanders has met threshold Increment I capabilities. Increment I FOC requires positioning for long-term life cycle management. Change, alteration, and modification to available technology will be the order of the day as NECC progresses toward FOC. Increment I FOC is event-driven and not tied to a specific date.

New: Replaced paragraph with FOC definition as follows:

12.3 Full Operational Capability (FOC)

Increment I FOC is achieved when users are provided with all functional capabilities defined in this CDD at threshold values, to include complete migration of GCCS FoS functionality to NECC. FOC will support mission tasks sustaining C2 activities from the NMCS through the JFC and Service/Functional components, down to where the GCCS FoS is used and accessed today. Based upon Service implementation plans, NECC is projected to reach FOC NLT FY17."

Justification: PDM II compliance.

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SECTION 13 - OTHER DOCTRINE, ORGANIZATIONAL, TRAINING, MATERIEL, LEADERSHIP AND EDUCATION, PERSONNEL, AND FACILITIES (DOTMLPF) CONSIDERATIONS – NO CHANGE

SECTION 14 - OTHER ATTRIBUTES – NO CHANGE

CDD Core, SECTION 15, PROGRAM AFFORDABILITY

CDD Core, Page 77, Section 15 Program Affordability, Table 15-1

Original:

15 Program Affordability

The estimated research, development, test, and evaluation (RDT&E) cost to develop NECC (as currently defined in the NECC CDD) is approximately \$2.7 billion over the long term. The PB08 cost estimate for the total NECC program is depicted in Table 15-1.

Table 15-1 NECC Funding (\$M)

PE0303158K,A,F,N,M (\$ in Millions / Then Year)	Increment I			Increment II			Increment III		INCR I TOTAL	FYDP TOTAL
	FY08	FY09	FY10	FY10	FY11	FY12	FY12	FY13		
RDT&E										
Current \$ (POM 08+PDM III)	92.5	168.1	223.1	TBD	93.3	75.6	TBD	87.5	483.7	740.1
Required \$	92.5	168.1	223.1	TBD	93.3	75.6	TBD	87.5	483.7	740.1
Delta \$ (Current - Required)	0.0	0.0	0.0	TBD	0.0	0.0	TBD	0.0	0.0	0.0
PROCUREMENT										
Current \$ (POM 08+PDM III)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Required \$	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Delta \$ (Current - Required)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
O&M										
Current \$ (POM 08+PDM III)	7.3	1.2	5.8	TBD	7.6	9.2	TBD	9.2	14.3	40.3
Required \$	7.3	1.2	5.8	TBD	7.6	9.2	TBD	9.2	14.3	40.3
Delta \$ (Current - Required)	0.0	0.0	0.0	TBD	0.0	0.0	TBD	0.0	0.0	0.0
TOTAL										
Current \$ (POM 08+PDM III)	99.8	169.3	228.9	TBD	100.9	84.8	TBD	96.7	498.0	780.4
Required \$	99.8	169.3	228.9	TBD	100.9	84.8	TBD	96.7	498.0	780.4
Delta \$ (Current - Required)	0.0	0.0	0.0	TBD	0.0	0.0	TBD	0.0	0.0	0.0
QUANTITIES										
Current \$ (POM 08+PDM III)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Required \$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Delta \$ (Current - Required)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

This cost estimate is based on preliminary information used and developed during the FY08 budget review process by an OSD issue team. An independent cost estimate will be conducted to meet NECC program Milestone B requirements; this will provide a more refined and detailed cost estimate.

15.1 Implementation Costs

The Executive Agents, CCDRs (via Service sponsor), Services, and Agencies need to assess the impact of NECC on their implementation costs and to plan for and fund those implementation costs in subsequent budget submissions through the FY08-13 budget cycle.

15.2 Way Ahead

As the way ahead is determined for NECC acquisition structure, affected Executive Agents, CCDRs (via Service sponsor), Services, and Agencies will build program and budget estimates to execute their respective responsibilities to execute NECC-specific responsibilities in concert with CES definitions.

Services and Agencies will build program and budget estimates to execute assigned Executive Agents' responsibilities for life cycle management.

Linked Extensions

The following evolving linked extensions are maintained and managed separately by the JCCD after initial JROC validation. They will reside on the JCCD Defense Online (DOL) website (see Page ix) and will ultimately migrate to a single Secret Internet Protocol Router Network (SIPRNet) site co-located with the NECC NRiD repository. JCCD Defense Online (DOL) website at: <https://gesportal.dod.mil/sites/necc/JCCD/default.aspx>. The CDD is posted in the "Coordination Cell" link under "Shared Documents," "NECC Capability Documents/ NECC Capabilities Development Document and Extensions

Extension A - Integrated Architecture Products

Extension B - References

Extension C – Glossary

Extension D - MCP List and Description

Extension E - Threat Summary and Assessment

Extension F - GCCS FoS to NECC Transition

Extension G - DOTMLPF Considerations

Extension H – C2 Shortfalls, NECC Attributes, FoS Synchronization, JCA Linkage, GEOINT

Extension I – JC2 Joint Functional Concept, C2 Joint Integrating Concept, and the C2 Capabilities Based Assessment

Extension J – NECC Requirements Identification Database (NRiD) – to be developed

Extension K: United States Army Annex to the NECC CDD

Extension L: United States Navy Annex to the NECC CDD

Extension M: United States Marine Corps Annex to the NECC CDD

Extension N: United States Air Force Annex to the NECC CDD

New:

15 Program Affordability

The costs in Table 15-1 reflect the Program Office Estimate (POE) of Increment I using the Program Office Estimate, 27 Nov 2007_Final MSB & PR09 cost model. Costs will be updated once the completed Independent Cost Estimate (ICE) is reconciled with the POE. This cost estimate includes the reengineering of the GCCS FoS to satisfy the NECC technical baseline; as such, FoS functionalities shall be replaced by NECC.

Table 15-1 NECC Estimated Costs (\$M)

Base Year (BY) FY 07	Objective	Threshold
Development (RDT&E)	765.0	841.0
Procurement (PROC)	251.0	277.0
Military Construction (MILCON)	0.0	N/A
Operations & Maintenance (O&M)	1149.0	1263.0
Total BY Acquisition Costs	2165.0	N/A

Then Year (TY) Costs	Objective	Threshold
Development (RDT&E):	813.0	N/A
Procurement (PROC):	297.0	N/A
Military Construction (MILCON)	0.0	0.0
Operations & Maintenance (O&M)	1387.0	N/A
Total TY Acquisition Costs	2497.0	N/A

15.1 Implementation Costs

The Executive Agents, CCDRs (via Service sponsor), Services, and Agencies continue to assess the impact of NECC on their implementation costs and to plan for and fund those implementation costs in subsequent budget submissions through the FY10-15 budget cycle. It is critical that the Executive Agents (EA) for the Combatant Commands not only address their implementation costs based on NECC impacts, but that they simultaneously address maintaining the C2 capabilities of the CCDRs for which they are fiscally responsible. It is essential that all CCDRs are adequately funded during the transition to NECC in order for them to continue to provide global support to the NMCS. It is incumbent upon Service CCDR EAs to closely coordinate budget submissions with the CCDRs to allow for accurate and timely feedback to

support their missions. It is not an option to allow any CCDR to lose capabilities during the NECC transition due to variations in Service budget planning.

15.2 Way Ahead

As the way ahead is determined for NECC acquisition structure, affected Executive Agents, CCDRs (via Service sponsor), Services, and Agencies will build program and budget estimates to execute their respective responsibilities to execute NECC-specific responsibilities in concert with cost element structure (CES) definitions.

Services and Agencies will build program and budget estimates to execute assigned Executive Agents' responsibilities for life cycle management IAW the Component Cost Analysis Requirements Document (CARD) provided to the JPMO by the Component Program Management Office (CPMO).

Linked Extensions

The following evolving linked extensions are maintained and managed separately by the JCCD after initial JROC validation. They will reside on the [Army Knowledge Online \(AKO\)](#) website (see Page ii) and will ultimately migrate to a single Secret Internet Protocol Router Network (SIPRNet) site co-located with the NECC NRiD repository. [Access the Army Knowledge Online \(AKO\)](#) website at: <https://www.us.army.mil>. The [NECC Increment I CDD](#) is at the following links:

CDD - Capability Development Document (CDD)

<https://www.us.army.mil/suite/doc/10212039>

Extension A - Integrated Architecture Products

<https://www.us.army.mil/suite/doc/10212830>

Extension B – References

<https://www.us.army.mil/suite/doc/10212831>

Extension C – Glossary

<https://www.us.army.mil/suite/doc/10212965>

Extension D - MCP List and Description

<https://www.us.army.mil/suite/doc/10212966>

Extension E - Threat Summary and Assessment

<https://www.us.army.mil/suite/doc/10212967>

Extension F - GCCS Family of Systems to NECC Functionality Transition Plan (FTP)

<https://www.us.army.mil/suite/doc/10212968>

Extension G - DOTMLPF Considerations

<https://www.us.army.mil/suite/doc/10212969>

Extension H – C2 Shortfalls, NECC Attributes, FoS Synchronization, JCA Linkage, GEOINT

<https://www.us.army.mil/suite/doc/10212970>

Extension I – JC2 Joint Functional Concept, C2 Joint Integrating Concept, and the C2 Capabilities Based Assessment

<https://www.us.army.mil/suite/doc/10212972>

Extension J – NECC Requirements Identification Database (NRiD) – to be developed

<https://www.us.army.mil/suite/doc/10212973>

Extension K: United States Army Annex to the NECC CDD

<https://www.us.army.mil/suite/doc/10212974>

Extension L: United States Navy Annex to the NECC CDD

<https://www.us.army.mil/suite/doc/10212975>

Extension M: United States Marine Corps Annex to the NECC CDD

<https://www.us.army.mil/suite/doc/10213016>

Extension N: United States Air Force Annex to the NECC CDD

<https://www.us.army.mil/suite/doc/10213017>

Justification: PDM II compliance and replaces the previous Table 15-1 with a revised version because it did not reflect program threshold and objective cost per CJCSM 3170. In addition, Defense Online (DOL) was replaced by AKO; therefore, provided new links to the NECC Increment I CDD and Linked Extensions.

CDD Linked Extension A - Integrated Architecture Products, Page A-4, first full sub-paragraph

Original: This Overview and Summary (AV-1) defines the first phase (Version 1.0) of a multi-phased architecture effort to architecturally render NECC. The first phase (Increment I) Milestone B is scheduled for FY07 with Milestone C and culmination of Increment I scheduled for FY10.

New: This Overview and Summary (AV-1) defines the first phase (Version 1.0) of a multi-phased architecture effort to architecturally render NECC. The first phase (Increment I) Milestone B is scheduled for FY08 with Milestone C occurring approximately six months later, Increment I development is scheduled to culminate in FY11.

Justification: PDM II compliance.

CDD Linked Extension D - Mission Capability Package (MCP) List and Description, Page D-1, first paragraph

Original: NECC MCPs are DOTMLPF capabilities binned together to form readily identifiable capability sets to facilitate support of the warfighter via evolutionary acquisition and incremental fielding of capability improvement(s). Each MCP is supported by Service/Agency-provided software applications developed and organized to meet joint capability mission area and warfare domain-specific execution requirements. The currently identified and supported NECC MCPs include: Force Projection, Force Readiness, Intelligence, Situational Awareness, Force Employment - Air/Space Operations, Force Employment – Land Operations, Force Employment – Maritime/Littoral Operations, and Force Protection. Use of MCPs enable focused identification of cross cutting vertical/horizontal information exchange requirements between the NMCS, Combatant Commands, JTF, JTF components, IC components, HS/HD components, DOD Agencies, non-DOD Agencies, and multinational components, as required. The capability-based needs measures will serve as a basis for refinement in the Test and Evaluation Master Plan (TEMP) to derive measurable metrics and measures of effectiveness (MOEs). MCP descriptions are keyed to the comparable SV-4 hierarchical/(functional decomposition) diagrams (Page A-61-79). Note: Cross Functional Capabilities cut across all MCPs and are described throughout the document.

New: NECC MCPs are DOTMLPF capabilities binned together to form readily identifiable capability sets to facilitate support of the warfighter via evolutionary acquisition and incremental fielding of capability improvement(s). Each MCP is supported by Service/Agency-provided software applications developed and organized to meet joint capability mission area and warfare domain-specific execution requirements. The currently identified and supported NECC MCPs include: Force Projection, Force Readiness, Intelligence, Situational Awareness, Force Employment - Air/Space Operations, Force Employment – Land Operations, Force Employment – Maritime/Littoral Operations, and Force Protection. Use of MCPs enable focused identification of cross cutting vertical/horizontal information exchange requirements between the NMCS, Combatant Commands, JTF, JTF components, IC components, HS/HD components, DOD Agencies, non-DOD Agencies, and multinational components, as required. For specific GCCS FoS requirement descriptions for functionality migrated to NECC within NECC Increment I, refer to “GCCS FoS to NECC Functional Transition Plan Appendix C,” NECC Increment I CDD Linked Extension F. All capabilities delivered in support of NECC Increment I will meet or exceed GCCS FoS threshold values or currently fielded system capability values, whichever is higher, for functionality and performance. For requirement descriptions and performance thresholds and objectives specific to NECC Increment I enhancements above and beyond the GCCS FoS, refer to “NECC Increment I CDD MCP list and Requirement Description,” NECC Increment I CDD Linked Extension D. The capability-based needs measures will serve as a basis for refinement in the Test and Evaluation Master Plan (TEMP) to derive measurable metrics and measures of effectiveness (MOEs). MCP descriptions are keyed to the comparable SV-4 hierarchical/(functional decomposition) diagrams (Page A-61-79). Note: Cross Functional Capabilities cut across all MCPs and are described throughout the document.

Justification: PDM II compliance.

CDD Linked Extension F - GCCS FoS to NECC Transition, Cover Page

Original Title: GCCS FoS to NECC Transition

New Title: **GCCS Family of Systems (FoS) to NECC Functionality Transition Plan (FTP)**

CDD Linked Extension F - GCCS FoS to NECC Transition, Page F-1

New:

GCCS Family of Systems to NECC Functionality Transition Plan (FTP)

The FTP and its associated Annexes can be accessed and downloaded at the DKO NECC Home Page (<https://www.us.army.mil/suite/page/453391>) or directly from the folder on the DKO NECC site, <https://www.us.army.mil/suite/folder/10614651>.