

Coalition Warrior Interoperability Demonstration (CWID)

2009 Trial Transition Report (TTR)



Prepared by CWID
Trial Transition Information Working Group (T2IWG)

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Summary

CWID is a Chairman of the Joint Chiefs of Staff's annual event. It enables U.S. combatant commands, coalition partners, U.S. Military Services, Department of Defense (DoD) agencies (C/C/S/As), and homeland security/homeland defense (HS/HD) organizations to explore and assess technologies to solve command and control (C2), communications system, and Intelligence, Surveillance and Reconnaissance (ISR) capability gaps. CWID enhances interoperability and/or validates interoperability of current operational systems and provides assessments of technologies that address program objectives based on C/C/S/A capability gaps. The intent of CWID is to identify, investigate, and assess technologies capable of being fielded into an operational environment within 18 to 24 months following CWID execution. CWID also serves as a venue for spiral development or validation of fielded and near-fielded systems to accelerate development and/or reduce program risk.

The 2009 CWID TTR, by directive, catalogues successful Interoperability Trials (ITs) that have been engaged in Post-CWID follow-on funding, development, or testing. The document provides a reference to ITs from the most recent CWID assessments as well as those from the previous four years. Readers should refer to the appropriate CWID annual report for more detailed technical information on trials contained in this report.

Transition information updates will be provided informally to the Senior Management Group (SMG) as individual IT situations change. Innovative solutions demonstrated between 2005 and 2009 are listed here by execution year. Technologies highlighted in this report may be in operational use today as evolved versions of participating ITs, components of tool suites, and/or deployed as originally demonstrated in earlier CWIDs. This document is provided to the CWID SMG Chairman for review and approval prior to submission to the SMG Stakeholder representatives for distribution to Stakeholders and prior to being incorporated into Public Affairs and Strategic Communications program information pamphlets. Appendices A through E provide the status of trials as of the date of this report which is categorized by the CWID year in which they were most recently demonstrated between 2005 and 2009.

New to CWID in 2009, Top Performing Technologies (TPT) is a significant change from previous methodologies employed to highlight IT performance during the annual CWID event. Both a report and a process, TPT provides a significant CWID program paradigm shift by offering, to the acquisition decision maker, an objective performance report reflecting the ITs ability to meet certain metrics established by authoritative sources within DoD to a level approved by the SMG. TPT, as a process, establishes entrance/exit criteria at key SMG decision points by leveraging DoD mandated, standardized requirements as well as specific performance requirements articulated by funded programs, technology sponsors, or the Joint Chiefs of Staff (JCS). Underlined trial names, where they appear, indicate one of the following: Outstanding Trial (2005), Top

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Performing Technical Solution (2006), Most Promising Technology (MPT) (2007/2008) or a CWID TPT (2009) as documented in the respective annual CWID Final Report.

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CWID 2009

- **Tactical Cellular (TACTICELL):** 2009 TPT. Capability consists of a network, data services, and user devices. The network is comprised of a mobile 3G network supported with satellite reach-back. Data services are provided through available cellular applications and included streaming video, Web browsing, e-mail, Voice-over Internet Protocol (VoIP), chat, Video Teleconferencing (VTC), Blue Force Tracking (BFT), whiteboard, and send track with image. User devices include netbooks and handsets. System currently deployed by Joint Special Operation Command (JSOC) and is expected to transition to U.S. Special Operations Command's (USSOCOM) High Bandwidth Communications on the Move (HB-COTM) program. (2009 IT 5.06) Updated 1QFY10
- **Coalition open Joint Operations Picture / UK (CoJOP):** Fielded United Kingdom (UK) capability following CWID 2007, currently supports Afghanistan coalition forces. Joint Command and Control Support Programme (JC2SP) to field open JOP as a component of the Interoperability Project (IOP). Used CWID to begin the certification process for US operational networks. Selected into the 2008 Coalition Warfare Program (CWP). (2009 IT 2.47, 2008 IT 1.68, 2007 IT 3.70) Updated 1QFY10
- **Classification Trusted Stateless Environment (CSTE):** 2009 TPT. Developed by USSOCOM to provide the next generation networking environment for (Special Operations Forces (SOF) to operate in the cyber domain. Post CWID 09, two operational test beds are being generated with the same capabilities as demonstrated in CWID 09, one in late August at the Tactical Local Area Network (TACLAN) facility in Brandon, FL, and one currently at the technology vendor location in Annapolis, MD to continue testing and allow agencies (US Air Force Academy and Navy Post Graduate School) to participate in the CSTE environment. The initial operational capability (IOC) of the CSTE cyber structure (called Onyx) is scheduled to be fielded at the approval of funding +90 days. CSTE will continue to participate in CWID as part of spiral development process until full operational capability (FOC). Anticipated IOC is expected to be NLT 4QFY10 as part of the TACLAN Program of Record. (2009 IT 2.26) Updated 1QFY10
- **Joint Strike Fighter Off-board Mission Support Environment (JSF OMSE):** 2007 MPT; Also participated in CWID 2008 as it continues U.S. Air Force sponsored spiral development of Joint Strike Fighter (JSF) mission planning system software designed to support all aspects of collation mission preparation and post mission analysis collaboration (2009 IT 1.18, 2008 IT 1.07, 2007 IT 5.08) Updated 1QFY10
- **Cross Domain Collaborative Information Environment (CDCIE):** 2009 TPT; Emerged from United States Joint Forces Command (USJFCOM) Joint Experimentation as an FY08 Joint Capability Technology Demonstration (JCTD). Enables joint forces to share information in the form of chat/whiteboarding (with language translation interface) and web services between DoD and non-DoD networks of various security classifications with coalition partners, other government agencies, and Non Governmental Organizations (NGO). Technology spinoffs are being employed in United States Central

Command (USCENTCOM), United States Pacific Command (USPACOM), and United States Northern Command (USNORTHCOM). Operational Utility Assessment (OUA) was conducted in conjunction with CWID 2009, Trident Warrior 09 and Enterprise Challenge 09; the final OUA report reflecting demonstrated operational utility with minimal risk indicated is awaiting USJFCOM endorsement. The JCTD has commenced transition to Defense Information Systems Agency (DISA) programs of record (PORs) (Program Executive Officer-GIG Enterprise Services, Program Management Office-Net Centric Enterprise Services and Program Executive Officer-Mission Assurance Program Management Office Information Assurance 32) that is expected to be completed by mid-FY10. (2009 IT 1.55) Updated 1QFY10

■ **Mobile, Modular, Micro C4 Gateway (M3C4G):** The M3C4G is continuing to support remote US Army operations by providing man portable communications to forward deployed units. The M3C4G has successfully gone through the DoD Information Assurance Certification and Accreditation Process (DIACAP) and has an official Authority to Operate (ATO) assigned by PEO C3T. Twenty units have since been fielded with the US Army. The USMC is currently undergoing field trials with the unit. The M3C4G has been successfully added to the CHS-3 contract out of Fort Monmouth and is now available through the North Atlantic Treaty Organization (NATO) Basic Order Agreement (BOA) as well as the GSA Schedule. (2009 IT 2.09) Updated 1QFY10

CWID 2008

■ **High Power X-Band Satellite Communications (XTAR):** DISA has awarded two separate Defense Information Services Network Satellite Telecommunications Services-Global (DSTS-G) efforts to XTAR for satellite coverage. The 2008 participation allowed DISA to certify the XTAR for current military operations. (2008 IT 1.53) Updated 3QFY10

■ **Compartmented High Assurance Information Network (CHAIN):** 2008 MPT. CHAIN participated in CWID 2008 as part of the Combined Enterprise Regional Information Exchange System (CENTRIXS) Cross Enclave Requirement (CCER) competitive down select process sponsored by DISA. Undergoing war fighter evaluation as a CWID trial, as well as being evaluated by DISA CCER personnel, CHAIN met or exceeded requirements. In spring of 2009, CHAIN was evaluated by the DISA CCER PMO at the JITC, with a 100% pass rate for all test cases. CHAIN also underwent a positive Risk Decision Authority Criteria (RDAC) with NSA. Currently, the DISA PMO is working closely with the Multi National Information Sharing (MNIS) program manager to determine the feasibility of implementing specific portions of CHAIN's information assurance architecture to support the proposed CCER network. In addition, United States European Command (USEUCOM), the Canadian government, and the Australia Ministry Of Defense have expressed further interest in deploying CHAIN as the solution to their need for a secure coalition information sharing architecture. (2008 IT 2.27, 2007 IT 1.01) Updated 1QFY10

■ **Global Command and Control System (GCCS):** POR; early CWID trial prior to being fielded, continues to participate in CWID as part of spiral development, most recently in 2008 to test GCCS-J 4.1.1/Internal Control and Operating Procedures (ICOP) which is significant migratory step toward a service oriented architecture in the situational awareness and command and control arena within the joint warfighting community. (2008 IT 1.63) Updated 3QFY08

■ **Commercial Joint Mapping Tool Kit (CJMTK):** National Geospatial Agency (NGA) POR; Associated programs Battle Command Commercial Extension (BCE) and CJMTK Geospatial Appliance (CGA) continue spiral development; currently fielded in support of joint operations. BCE algorithms are being fielded and the feedback from CWID was taken seriously by the program office to improve the product. CGA is being tested by Defense Intelligence Agency (DIA) and DISA. NGA pilot is being conducted to study methods for implementing the system. (2008 ITs 1.02, 5.14, 2007 IT 2.21, 2005 IT 2.09). Updated 1QFY09

■ **Joint Environment Toolkit (JET):** Net-enabled weather service provider to facilitate strategies in support of operational decisions. JET v1.1 provided net-centric weather capabilities to CWID 2009 as a core component system. The program completed CONUS IOC fielding to United States Air Force (USAF) and United States Army (USA)

sites in FY09 and is currently fielding OCONUS and in the Air and Space Operations Centers (AOCs) during FY10. JET provides the weather web services in the initial instantiation of Net-Enabled Command Capability Meteorology and Oceanography Capability Module (NECC METOC CM) and is integrated into the Distributed Common Ground Station-Army (DCGS-A) to provide meteorological functionality and web services. (2008 IT 2.16) Updated 1QFY10

■ **Agile Client (AC):** Demonstrated both situational awareness using AC's improved 3D display and multiple data access technologies, and command and control using web services of Joint Effects Model (JEM) and Net-Enable Mission Execution System (NEMXS). Middle weight client for GCCS-J program. Slated for deployment in GCCS-J version 4.2, and is currently being reviewed for GCCS-M version 4.1. (2008 IT 2.10) Updated 3QFY08

■ **Enhanced Mobile Incident Command Post (eMICP):** The eMICP has become a standard vehicle in United States Coast Guard (USCG) Area Commander's inventory at the USCG Communication Assistance Master Stations (CAMS) for contingency response. Based on lessons learned from the production prototype, the second eMICP is currently in production and scheduled to be delivered October 2009. eMICP-1 became Fully Mission Capable (FMC) during September 2008 in support of the Republican National Convention 08. Since CWID 08, eMICP has provided multi-agency command & control capability for Hurricane Ike, a Super Bowl and the Presidential Inauguration. (2008 IT 5.18) Updated 1QFY10

■ **Trans Information Sharing Coalition (TISC):** TISC is a three year JCTD initiative that is sponsored by the U.S. European Command and the U.S. Southern Command. TISC bring together a portfolio of "best of the Web" information sharing capabilities and concepts in order to address a range of challenges associated with the need for collaboration among an extensive list of traditional and non-traditional partners in complex environments. From governments and militaries to Non-Governmental Organizations and private organizations, all are stakeholders in the success of humanitarian assistance, disaster relief, stabilization, and reconstructive efforts. Finding effective mechanisms and means to engage with this community on mutual terms is a process regularly marked by paradoxes, contradictions, conflicting interests, and unpredictable circumstances. CWID provided a limited operational utility assessment. (2008 IT 5.81) Updated 1QFY10

■ **Datatek IPv4 – IPv6 Transformer:** 2008 MPT; Datatek developed the IPv4-IPv6 Transformer under a US Army Small Business Innovation Research (SBIR) Phase I and II initiative. It was subsequently selected to participate in the Army's 1st Commercialization Pilot Program (CPP), which was a follow-on to the SBIR program to commercialize promising SBIR technologies. Datatek was 1 of 25 companies out of over 400 SBIR Phase II projects to be selected. A development program is underway to provide an enhanced IPv4-IPv6 Transformer for sale in early 2010. Successfully participated in 2009's Joint User Interoperability Communications Exercise (JUICE),

sponsored by the US Army. Successfully demonstrated in the September 2009 Command, Control, Communications, Computers Intelligence, Surveillance, Reconnaissance (C4ISR) On-the-Move exercise at Ft. Dix as a collaboration between the US Army and the French Ministry of Defense. The IPv4-IPv6 Transformer enabled IPv6 Geo-casting to operate with an IPv4 wireless laptop in a Humvee. IPv6 Geo-casting is considered an important application of IPv6 for the military, since it enables transmission of IPv6 data to a specific set of geographic coordinates. (2008 IT 1.15) Updated 1QFY10

■ **Joint Automated Deep Operations Coordination System (JADOCS):** Originally developed to reduce the sensor-to-shooter timeline for time-critical strikes, JADOCS has evolved into a comprehensive JC2 tool, providing horizontal and vertical integration, Joint system interoperability, and improved situational awareness across the military decision-making process. The services are currently negotiating with the Army to determine a targeted POR. (2008 IT 1.40) Updated 1QFY10

■ **RIOS Incident Site Communications Capability (RISCC):** 2008 MPT; This system provides warfighter friendly interoperability between disparate radios, cellphones, Satellite Phones, VoIP phones, Video, and laptop voice and data over various reach-back solutions such as SATCOM, EVDO (Evolution Data Only), and BGAN (Broadband Global Area Network). The system has been deployed by Department of Homeland Security (DHS) at the 2008 Republican and Democratic National Conventions, and with the Joint Task Force Headquarters (8 systems) during the 2009 Presidential Inauguration. The Drug Enforcement Agency and Federal Protection Service have contracted to deploy RIOS interoperability networks. The U.S. Technical Support Working Group (TSWG) has contracted to develop and deploy RIOS with the National Guard, Virginia State Police and the Virginia Department of Emergency Management to connect Federal and State agencies into Virginia's RIOS Communications Link (COMLINC) network of 911 centers. RIOS is currently undergoing testing with SOCOM and the Joint Communications Support Element. (2008 IT 1.62) Updated 1QFY10

■ **Coalition ARSST – TS Prototype:** US designated “Niche System” for integrating space capabilities into NATO Consultation, Command and Control Agency (NC3A) command Control Center operations. Risk reduction event in preparation for FY09-10 POR migration. (2008 IT 1.61) Updated 3QFY08

CWID 2007

- **Integrated Information Management System (IIMS)**: 2007 MPT. USAF and USA sponsored; scalable system that supports a common operational picture for commanders and geographically separated unit control centers addressing conventional and Chemical, Biological, Radiological and Nuclear (CBRN) events; spiral development effort in support of transition agreements with the Joint Warning and Reporting Network POR; spiral development effort in support of the AF Theater Battle Management Core System - Unit Level/Unit Command and Control (TBMCS-UL/UC2); scheduled to be fielded in 2Q FY10 (2007 IT 3.27, 2006 IT 1.20, 2004 IT 2.05) Updated 1QFY10

- **USCG Information Sharing and Communications (USCG IS&C)**: USCG PORs. Three discrete product capabilities were demonstrated: Boarding Team Communications, Bio-metric Data Collection, and Maritime Domain Awareness Data Sharing Community Of Interest (MDA DS COI). The Biometrics Data Collection portion of the trial has become **Biometrics At Sea System (BASS)**. BASS is now a USCG system of record and has contributed to 320 illegal migrant prosecutions to date. The system has been improved from using a localized preloaded database to linking into and operating directly with the US-Visit Database from the cutter over a satellite link. Boarding Team Communications and MDS Data Sharing COI are still in development for future deployment (2007 IT 3.58) Updated 1QFY10

- **Weapons of Mass Destruction Collaborative Advisory Response System (WMD CARS)**: 2007 MPT; WMD CARS was used in the SOUTHCOM-led Joint Argentine-US Consequence Management (CM) series of experiments during 2006-2007. Innovations demonstrated through WMD CARS that proved useful to users during CWID are being rolled into various product lines within Defense Threat Reduction Agency's (DTRA) Battle Management Program. (2007 IT 6.53, 2006 IT 5.17) Updated 3QFY07

- **Collaboration Gateway (CG)**: As part of the JFCOM CDCIE, CG 1.1 was certified along with Data Sync Guard (DSG) and is being fielded around the world, including the Afghanistan theater. The follow-on version, CG 2.0, extends the capabilities of version 1 by supporting multiple domain configurations and multiple guards like Radiant Mercury (RM), Information Support Server Environment (ISSE), and Extensible Markup Language (XML) Firewalls in addition to the DSG supported in version 1. CG 2.0 was successfully demonstrated in CWID 09, Trident Warrior 09 and Empire Challenge 09. Certification of CG 2.0 is expected early 2010. Version 3.0 of CG is currently in development and will continue to add capabilities to improve administration and maintenance of the system; more flexibility in chat with dynamic cross domain rooms and cross-domain one-to-one chat; and federation of CG servers to other eXtensible Messaging and Presence Protocol (XMPP) servers in a single domain. On the horizon is voice integrated into the XMPP chat and possibly video to follow. (2007 IT 1.17, 2004 IT 1.06) Updated 1QFY10

■ **Global Information Grid Quality of Service Edge Solution for Interoperability (GIG QoS ESI):** Comprehensive Edge Solution Technology (CEST)-Voice, the first product from CEST product line, can be used to mitigate core network performance problems such as severe packet loss or severe bandwidth limitations that can significantly degrade VoIP quality. Further development work on this product line is currently being supported by SBIR Phase II funding from the US Air Force. In addition, development of other CEST functions for GIG interoperability will soon commence under a U.S. Army Communications-Electronics Research, Development, and Engineering Center (CERDEC) Basic Award Announcement (BAA) multi-year award. (2007 IT 6.13) Updated 1QFY10

■ **Collaborate - Access - Browse (CAB):** Allows access to assets on a lower classification network from a workstation on a higher classification network without any new user infrastructure. Currently being evaluated for security accreditation level by the Air Force Research Lab (AFRL) in Rome, NY the through CT&E (Certification, Test and Evaluation) process. Undergoing an evaluation installation at the Joint Staff for a pilot program of 2000 users. On Unified Cross Domain Management Office (UCDMO) Baseline. (2007 IT 1.54) Updated 3QFY07

■ **Assured File Transfer (AFT):** 2007 MPT; Provides bi-directional transfer of high risk document formats (Microsoft Office, Images, Compressed files). Will undergo the test and evaluation process beginning Fall, 2008. UCDMO approval pending. (2007 IT 1.55) Updated 3QFY07

■ **Rapid Force Warning (RFW):** Demonstrated use of satellite communications equipment enabling users to receive missile warning data in remote locations that do not have an established communications infrastructure. Capability used in the USAF Shared Early Warning System (SEWS) Program Office. (2007 IT 2.37) Updated 3QFY07

■ **Riverbed Information Optimization System (RIOS):** The USA 25th Infantry Division (25ID) employed a network acceleration solution from Riverbed throughout its Secret Internet Protocol Router Network (SIPRNET) network during its deployment in support of Operation Iraqi Freedom (OIF) 09-11. Since CWID 2007 there have been significant enhancements to the RIOS platform to aid in securely optimizing traffic as well as protection of the appliances themselves. Riverbed recently extended its commitment to federal enterprises by completing a successful assessment by the Joint Interoperability Test Command (JITC). Riverbed is currently in the process of seeking Federal Information Processing Standards Publications (FIPS) 140-2 Validation and is also officially in evaluation for an EAL4+ certification under the Canadian Communications Security Establishment's (CSE) Common Criteria Evaluation and Certification Scheme (CCS). (2007 IT 3.80) Updated 1QFY10

■ **Tactical Emergency Asset Management System (T.E.A.M.):** 2007 MPT; USNORTCHCOM sponsored technology. The state of Alabama, through the Alabama Department of Homeland Security, has fielded a fleet of eight T.E.A.M. systems. The

Alabama Department of Public Health purchased and deployed a system in 2008. The Alabama Department of Public Safety (State Patrol) has installed the same communications capabilities in their 40 ft. Mobile Operations Center (MOC). Two systems continue to be used as surrogate Army Future Combat System communications systems to test next-generation Army communications at White Sands, New Mexico. A number of other states are attempting to fund the purchase of these systems, including Indiana, Michigan and Florida. The T.E.A.M. system has been deployed in response to several local and state emergency/disaster situations, including the 2008 Enterprise, Alabama tornado, 2008 hurricanes in Louisiana and Mississippi, and the January, 2009 ice storms in Kentucky. The system has also participated in a border security exercise along the U.S./Mexican border, participated in a U.S. Department of Homeland Security Counter-Person-borne IED experiment, and multiple state and local emergency response and communications exercises. (2007 IT 6.04) Updated 1QFY10

■ **Enhanced Video, Text and Audio Processing (eVITAP):** 2007 MPT; First fully automated, commercially available real-time foreign media analysis, multi-lingual, broadcast news monitoring capability; searchable, real-time data for rapid analysis. Capability is currently in use by DIA, COCOM J2s, Enterprise License JFCOM / Joint Lessons Learned Information System, and Intelligence Agencies. (2007 IT 6.89) Updated 3QFY07

■ **Coalition Secure Management and Operations System (COSMOS):** 2005 Advanced Concept Technology Demonstration (ACTD), 5-Nation Memorandum of Understanding signed allowing increased technology sharing amongst nations. Technology Transition Agreement signed between COSMOS and MNIS PMO achieves transition target. Canada will implement COSMOS in Land Command Support System (CA National Land C2 System) and deploy to Operation Enduring Freedom (OEF) in Fall '09. UK is pursuing an urgent operational need to implement COSMOS with BOWMAN (UK National Land C2 System) and deploy to OEF by 2012. Australia plans to implement COSMOS with Battlefield Command Support System (BCSS) (AS National Land C2 System). USA PM Battle Command is evaluating COSMOS concepts for implementation in ABCS. USMC is evaluating COSMOS elements for implementation in C2PC/JTCW JS/JFCOM/DISA Multinational Information Sharing (MNIS) Analysis of Alternatives (AOA) Draft Final Report recommends COSMOS included as a material solution. (2007 IT 3.14) Updated 3QFY07

■ **Joint Network Defence and Management System (JNDMS):** Development of this proof of concept system continued after CWID 2007. The final version of JNDMS was deployed and demonstrated on the Defence Research & Development Canada network in June 2009. The JNDMS concept strongly influenced the requirements specifications for a capital project to acquire and deploy an integrated situational awareness capability for computer network defense for the Canadian Department of National Defence (DND). (2007 IT 6.36) Updated 1QFY10

■ **Automatic Ingest, Mosaic and Mapping System (AIMM):** AIMM was sponsored

by Public Safety Canada and used by US NORTHCOM; Naval Surface Warfare Center (NSWC) Dahlgren; Space and Naval Warfare Systems Command (SPAWAR) as well as Canada. PCI Geomatics has continued to develop the inherent capabilities of the AIMM system which provide a cost-effective and time-efficient system for transforming geospatial data and imagery into critical decision support information. Re-branded as ProLines GeoImaging Server, since the 2007 CWID trial, successfully pursued follow-on funding, development and testing for commercial software systems outside of DoD and DND. The innovative geospatial tools have been adopted and used operationally by The Council for Scientific and Industrial Research (CSIR) Satellite Application Centre as well as COTESSA a supplier for The Multinational Geospatial Co-production Program (MGCP). (2007 IT 2.57) Updated 1QFY10

■ **Multi-National Coalition Security System (MNCSS):** Message and document classification and marking tools sponsored by USSTRATCOM. Classification tools have been adopted and successfully deployed at CENTCOM Headquarters, Multi National Forces- Iraq (MNF-I), Central Command Air Forces (CENTAF), and SOUTHCOM. Tools have been updated to accommodate full Controlled Access Program Coordination Office (CAPCO) marking requirements. (2007 IT 2.21) Updated 1QFY10

■ **ct Mission Planning System (ctMPS):** Successfully conducted on-site compatibility testing of the ctMPS™ product in November 2007 at Canberra ACT, Australia for the Australian Department of Defense. Purchase order issued by the Australian Department of Defence, 19 December 2007 for 30 licenses and for 6 months of additional software development. ctMPS™ provides real-time, globally collaborative mission planning capability to the Government Off-The-Shelf (GOTS) mission planning product PFPS (Portable Flight Planning Software) suite. It has been installed in the Joint Mission Planning System (JMPS) Advanced Development Laboratory, at Hanscom Air Force Base (AFB), at the Air Force Special Operations Command (AFSOC), and the Command and Control Battle Lab at Langley AFB among others. ctMPS™ is currently still under privately funded development (2007 IT 5.59) Updated 1QFY10

■ **Italian Navy Maritime Command & Control Information System (MCCIS-Italy):** Italian Maritime command and control (C2) system; demonstrated, spiral developed and fielded to support maritime commanders and staff personnel by automatically acquiring and maintaining information for display and analysis; conforms to GCCS-J and Air Tasking Order (ATO) data formats. (2007 IT 2.06, 2006 IT 4.61, 2005 IT 2.50) Updated 1QFY10

CWID 2006

■ **Intelligent Road/Rail Information Server (IRRIS):** USA POR; government owned; expanded utility to U.S. Transportation Command. Currently in use by the Federal Emergency Management Agency's (FEMA's) for participation in the Top Officials (TOPOFF) series of terrorism preparedness exercises. IRRIS was used at the National Response Coordination Center (NRCC) to view simulated disaster outcomes as well as track FEMA's mobile disaster recovery vehicles. Data for the exercise was coordinated through FEMA's GIS Solutions Branch within the Office of the Chief Information Officer, responsible for the overall mapping support for the NRCC. The use of IRRIS helped FEMA decision makers visualize and comprehend activities taking place in response to the disaster scenario. (2006 IT 3.16) Updated Prior to 2008

■ **Collaborative Information Exchange Environment (CIEE):** National Guard Bureau (NGB) has leveraged CWID to support the evolution of what is now the Joint Collaborative Information Exchange Environment (JIEE), as it moves toward program of record status, in meeting operational requirements and information sharing needs of the National Guard and mission partners. Currently JIEE is about to receive a 3-year DISA ATO that indicates its status as a program in production, laying the groundwork for future program of record status. JIEE enhancements continue to focus on supporting the HD/CS information sharing environment and the expanding role the NGB plays within the Strategic Operational Information Sharing Plan of Action (SOIS POA). JIEE provides the NGB Joint Staff and our Joint Force Headquarters - State (JFHQ-S) with the ability to quickly move from steady state operations into crisis operations while maintaining high levels of visibility, collaboration and information sharing capabilities. (2006 IT 5.47) Updated Prior to 2008

■ **Wide Area Interoperability System (WAIS & ACU 1000):** Available on GSA schedule; Department of Homeland Security (DHS), FEMA and USCG purchased technology as core of Mobile Disaster Vehicles communications suite. (2006 IT 4.03) Updated Prior to 2008

■ **Distributed Common Ground System (DCGS):** Developed by the USAF under the DCGS Block 10.2 program. The US Army has integrated the capability into their DCGS system and has currently deployed over 50 systems into the operational AOR. The AF is currently conducting testing and upon successful completion will establish it as operational and continue the deployment of 5 sites within the active duty and 7 units within the ANG. Internationally, the technology is being evaluated by the UK and Australia, while Canada is attempting to establish the capability within their CANSOFCOM organization. (2006 IT 2.25) Updated 1QFY10

■ **Coalition Incident Response COP (CIR - COP):** Supported proof of concept for National Guard geospatial capability requirements within its JIEE, in support of Homeland Defense / Civil Support (HD/CS) operations. This trial supported and tested the concept of an incident- or event-based National Guard Common Operational Picture.

Version 4.2, released in September of 2008, delivered a similar Common Operating Picture capability by adding robust Geospatial functionality that allows for visualization of events and related missions, assets and other operational information. (2006 IT 1.48) Updated Prior to 2008

■ **Joint Effects Based C2 (JEBC2):** USNORTHCOM sponsored technology from Joint Warrior Interoperability Demonstration (JWID) 04 thru CWID 06. Formerly named MI2, morphed into JEBC2 with added capabilities and provided applications in the mil-to-mil, mil-to-civ environments. Trial was very successful in crossing domain Common Operational Picture (COP), it also provided cross domain chat, e-mail, streaming video, etc. The Secure Network Server that is part of this technology, is EAL-7 certified. USNORTHCOM, using COCOM Initiative Funds (CIF), is fielding the capability under the MI2 nomenclature and intends to evaluate it as a core service during CWID 2010 in preparation for operational employment in the Fall of CY10. (2006 IT 5.37, 2005 IT 3.70, 2004 IT 2.16) Updated 1QFY10

CWID 2005

- **Juniper Netscreen Security Products:** Successfully demonstrated secure information exchanges across multiple security domains and communities of interest (COI) with AES 256-bit encryption. Follow on procurement activity included organizations such as DISA, JFCOM, NATO, UK, New Zealand, Canada, Australia and SPAWAR San Diego. (2005 IT 3.13, 2004 IT 1.22) Updated Prior to 2008
- **Joint Warning and Reporting Network (JWARN):** ACAT III program conducted spiral development; completed integration with the Navy Deployable Joint Command and Control (DJC2) Program and GCCS 4.0. Increment 2 design and development FY08 – FY09. (2005 IT 2.47) Updated Prior to 2008
- **Incident Commander's Radio Interface (ICRI):** 2005 Outstanding Trial. NORAD-USNORTHCOM and civil law enforcement activities purchased technology in support of Homeland Security/Homeland Defense (HS/HD); U.S. Marine Corps installed in Rapid Response Vehicles to interface with civil authorities for crisis response; used effectively following hurricane Katrina; 2008 limited fielding with the U.S. Navy Small Boat Division. ICRI and accessories are available for purchase under GSA contract. Selected and deployed with all fifty-five National Guard Civil Support Teams and a host of other coalition and HS/HD organizations. The General Services Administration, Federal Supply Service, recently awarded C-AT Contract Number GS-07F-0653N, under schedule number 084, Service Identification Number (SIN) 426 99. (2005 IT 4.88) Updated 1QFY10
- **ARINC Wireless Interoperability Solution (AWINS):** Supported Maryland State government in hurricane Katrina relief effort; fielded as primary communications-integration system employed by the Maryland Transit Administration Emergency Response Vehicles (2005 IT 3.68) Updated Prior to 2008
- **Advanced Geospatial Imagery Library Enterprise (AGILE):** An advanced imagery management and dissemination solution for the Air Force that provides high-resolution, large-file imagery at high speed over low bandwidth to combat forces. Servers are currently located at the 480th ISR Wing, Langley Air Force Base, Va., and its 9th Intelligence Squadron at Beale AFB, Calif. Those servers are now populated with unexploited imagery from the U-2, Global Hawk, national satellites and commercial satellites. These servers also contain Predator/Reaper images (still frames only) and imagery products. Additional servers are planned for deployment worldwide, including Task Force ODIN, NATO/ISAF, U. S. Army Topographic Engineering Center, Fort Belvoir, Va., and Osan Air Base, Korea, to assist U. S. forces and partners deployed around the world. (2005 IT 5.44) Updated 1QFY10
- **Instaknow Active Collaboration Engine (ACE):** In June 2006, contracted to provide the Louisiana State Police with its Active Collaboration Engine software to integrate data. Deployed by USAF to build program management real time dashboards.

Awarded Phase I SBIR grant by US Navy Office of Naval Research in 2006 to build solutions that enable rapid insertion of innovative and advanced C2 and Combat System technologies into the complex open-architecture framework of existing combat systems for naval tactical and surveillance operations. (2005 IT 4.16) Updated Prior to 2008

■ **Multi Level Chat (MLC):** Transitioned to CENTRIXS-M POR in 2006. Approved system at PACCOM connects three network levels. MLChat is recorded on the UCDMO baseline list. (2005 IT 3.9) Updated 1QFY2009

■ **Dynamic Team Management for Cross – Organization Collaboration (DTM)/ Integrated Directory/Collaboration Core Services (ID/CCS):** Significant portions of what were demonstrated in both JWID 04 and CWID 05 were incorporated in IBM's bid for the DISA Collaboration (first NCES piece) contract, which IBM was awarded in 2006. Participation in JWID 04 and CWID 05 was a key step in advancing these capabilities. (2005 IT 4.15, 2004 IT 1.02) Updated Prior to 2008

■ **Defense Message System (DMS):** Meets DoD requirements for secure, accountable, writer-to-reader messaging; explored capability to extend Simple Message Transfer Protocol messages to allies in a coalition environment. Combined Fielding Approval Given for US-UK ACP 145 GW on 3 Sept 2008. U.S. and UK gateways began exchange of operational traffic in October 2008. U.S./UK ACP 145 GW is operational. (2005 IT 1.01) Updated 1QFY2010