Net-Enabled Mission Command (NeMC) & Network Integration LandWarNet / LandISRNet
These appendices are subcomponents of the LWN ICD (LandWarNet Initial Capabilities Document) and the NeMC (Network Enabled Mission Command) ICD which provide a bridge between the Intelligence Community and the Army Chief of Staff strategy of one Army network.

The Appendices directly map to the identified gaps and required capabilities from the 30 September 2010 Intelligence Capabilities Based Assessment (CBA).

**Background/Status:**

- LandISRNet is the MI contribution to the total Army Network and brings the Army G-2 vision of relevant ISR to the tactical edge (RITE) into the Global Network Enterprise.
- LWN ICD (TRADOC Capability Manager GNE, Proponent) w/LandISRNet Appendix currently at USASCoE and is in the process of being converted to the new TRADOC Template.
- NeMC ICD (Mission Command Combined Arms Center (CAC), Proponent). w/Intel Appendix (based on the LandISRNet concept) approved by AROC and scheduled for 2nd JROC 4 August 2011.
LandWarNet and LandISRNet

Figure A: The Network – Army Enterprise View (LandWarNet and LandISRNet)
Leverage Coalition, Joint, National Technical Means & IC HUMINT/OSINT

Sensors: Manned/unmanned/unattended

Intelligence Apps: DCGS-A Cloud

Core Enterprise Services: (GISA APCs)

Relevant ISR to the Edge (RITE)
- Leverage Army programs for SCI/SIPR/Coalition to the edge
- 3G & Aerial Layer to Soldier Handheld
- Sensor Datalinks

DoD guidance, policy, and direction

IC guidance, policy, and direction

Leverage National Analytics: NSA, NGA, DIA, CIA, NRO

Leverage IC services/data centers

Leverage DISA GIG
Network Synchronization Workgroup (NSWG)-II
Mission Command Sub-Group Intent

**Purpose:** Align existing TOC strategies in order to enhance operational effectiveness, capabilities and relevancy; improve integration and SWAP while decreasing time for development, certification, and fielding and reducing costs over time.

**Key Tasks:**
- Define a holistic strategy for Ops-Intel Convergence
- Develop recommendations for fielding a unified Ops-Intel capability to warfighter

Common, scalable MC architecture and infrastructure (hardware, services, applications) aligned with the COE that can be deployed at multiple echelons, in multiple Computing Environments, based on mission, across multiple security enclaves (NIPR, SIPR, JWICS, NSANet, and Coalition).
NSWG-II Transport Sub-Workgroup

- Concepts
  - Colorless Core
  - Capabilities and QoS maintained
- COAs identified and assessed
- Architecture and systems (eliminated and added)
- Operations (eliminated and added)
- Implementation planning
- Develop POM guidance

CONVERGED NETWORK STRATEGY

One Network

Where We Are Going …
Leveraging the Power of Converged IP
Questions?
Backup Slides
What is LandWarNet?

• LandWarNet is defined as the Army’s portion of the global information grid and consists of all globally interconnected, end-to-end Army information capabilities supporting Warfighters, policy makers, and support personnel. As the Army’s enterprise system of systems, LandWarNet moves information through a seamless network that facilitates information-enabled joint Warfighting and supporting operations from the operational base to the edge of tactical formations, down to the individual Soldier.

• LandWarNet is not a program of record or a new network for the future, it exists today. It is the name for the Army’s enterprise networking capabilities that enable Soldiers, Leaders, and units – today and in the future to operate anytime, anywhere, at every echelon as part of the joint force.

• LandWarNet, underpinned by integrated architectures enables, “one Army battle command system” as part of “one network” and facilitates a consistent alignment of joint capabilities across all layers of the network (platforms and sensors, applications, services, transport, and standards) to design and field an integrated system of systems. This network provides the link from Soldier to sustaining base, with tailored software applications that are optimized for conducting joint operations.
What is Net-Enabled Mission Command (NeMC)?

• NeMC will align existing BC and C2 Programs – a loosely coordinated set of disparate applications, services, and transport networks to form a NeMC capability. This capability supports a coherent and interoperable Enterprise Common Operating Environment (COE) and the foundational characteristics outlined in the Global Information Grid (GIG) 2.0 ICD. Specifically, Global Authentication, Access Control, and Directory Services and Information and services “from the edge.”

• The NeMC consists of a five layer network that includes sensors, applications, services, transport and standards. The NeMC ICD defines an overarching requirement for a single land component mission command and control capability that consists of a coherent collection of command posts (CP), aerial and ground platforms, manned and unmanned sensors, and dismounted leaders and Soldiers linked by an integrated suite of MC applications and services, connected by a robust transport layer from the strategic level to the tactical edge. This robust transport layer is capable of delivering voice, date, imagery, and video to the tactical edge.

• The future force will possess a suite of interoperable MC applications, sensors, and services designed to deliver interoperable and backwards compatible capabilities across the entire force. These capabilities will support both the art of battle command and the science of control, as well as support the emergence of MC as a Warfighting function.
What is LandISRNet?

• LandISRNet a subcomponent of LWN provides a bridge to the Intelligence Community. Conceptually, LandISRNet has four components providing an agile network backbone, an integrated sensor coverage area, fixed and deployable modular nodes, and Intelligence support to ARFORGEN. The LandISRNet required capabilities contribute to requirements identified in FM 2.0 Intelligence. LandISRNet provides: Support to Force Generation, Situational Understanding, ISR and to Targeting and Information Superiority.

• The Army lacks a synchronized capability to extend the Army’s deployed capacity to detect, collect, process/exploit, analyze and disseminate intelligence and intelligence-related information to home station intelligence operations, and to connect that capacity to National Intelligence partners and vice versa in the Joint Operating Environment. LandISRNet provides a holistic, comprehensive Army MI Force Strategy that provides the network to optimize intelligence support to Army full spectrum operations with: A layered Architecture that provides networked communications for all ISR data to and from the tactical edge. Robust interfaces that access Service Intel, COCOM and national data stores and ISR applications/services from NSA (NSAnet), DIA, NGA, NRO, CIA, and Department of State (at a minimum) as well as Army MI applications/services that optimize those data sets in support of Army and Coalition operations. Core capabilities in support of Brigade Combat Team (BCT) and Division/Corps full spectrum operations on a sustained Army Force Generation (ARFORGEN) cycle. The ability to get inside the decision cycle of the enemy. A capability to fuse all sensors across the Foundation, Ground, Aerial, and Space layers.
NetOps Capabilities

User Services –
Identify Management, email, collaboration, messaging, mobile, applications, voice, video, storage/backup/recovery, content

Foundation Capabilities –
NetOps Knowledge Base, IT asset management, governance, transport/IP MGT, event/incident MGT, common operating environment, security event MGT, defense in depth, cryptography
Army Network Strategy

Army’s Strategic Vision for the Network

The Network is the Army’s Number One Modernization Effort.

The Army’s Portion of the DoD Network, LandWarNet, Must be Able to Provide Soldiers, Civilians and Mission Partners the Information They Need, When They Need it and in Any Environment – From the Garrison to the Tactical Edge. To do so, it Must be a Completely Integrated and Interoperable Network, From the Highest to the Lowest Echelon, Forming a True Enterprise Network.

- 2011 Army Posture Statement