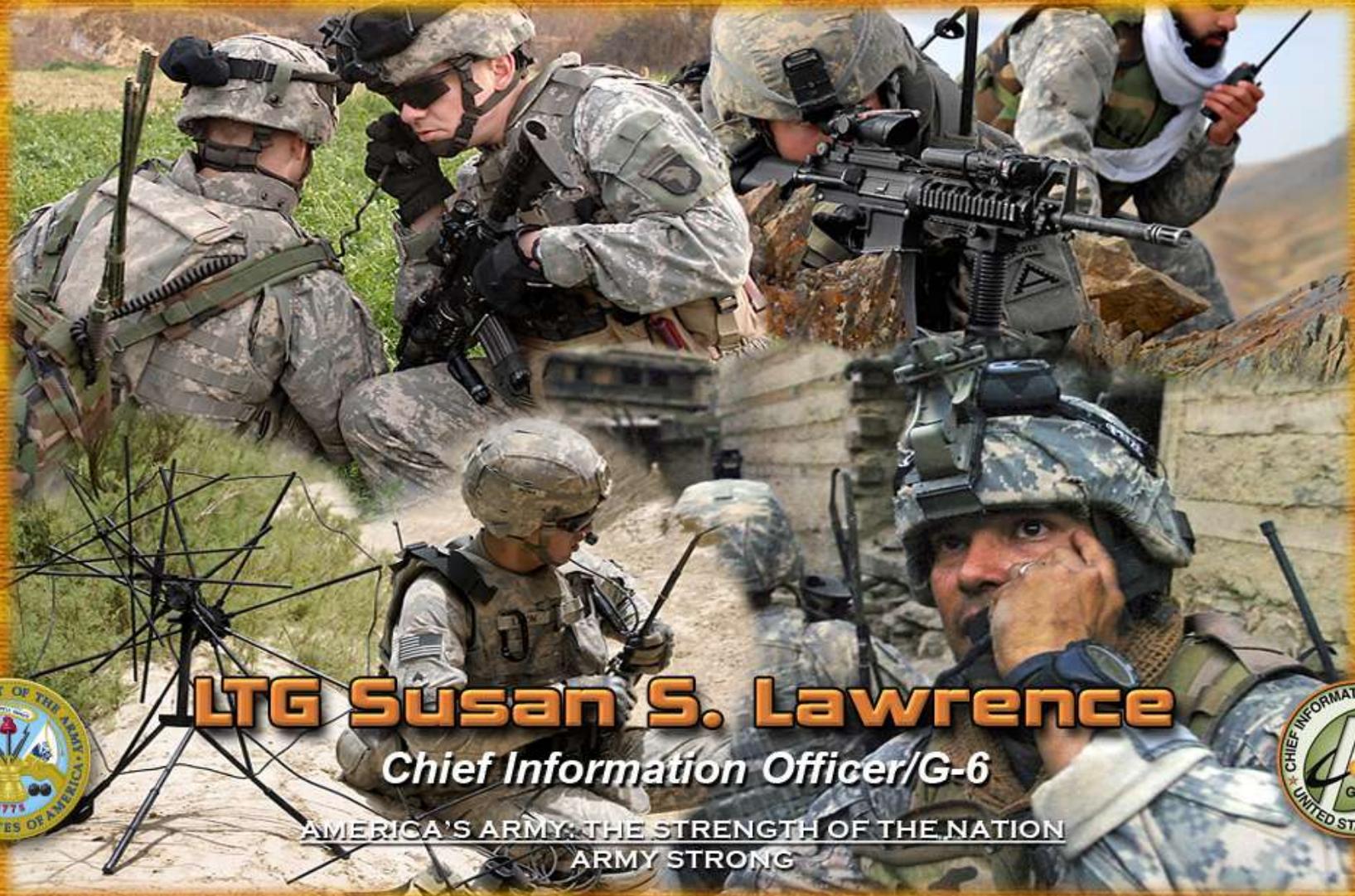


The Army Network

Information Brief



LTG Susan S. Lawrence

Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG





Overview

- ★ Our World is Changing...So is Defense Environment...And So Must We
- ★ Powering America's Army Through LandWarNet
- ★ The Network Must Bring to Bear All Functions
- ★ The Need for Change – Addressing the Gap
- ★ Totality of the Network – Portfolio Perspective
- ★ Game Changers
 - Warfighting Effect
 - Common Operating Environment (COE)
 - Network Integration Evaluations (NIEs)



Our World is Changing...

Speed, Scale, Flexibility, Replication

Economic Recovery...

GDP Growth

Global Competition

Businesses Networked IT
as Differentiator

Natural Disasters

Safety &
Security

New Threats...
Evolving Everyday

Innovation

Public Sector Spending

Technology & Business
Architecture

Productivity

Emerging
Markets

Social Networking

Broadband

Information Age

Networked Age

Cutting-Edge Technology, in Particular Cyber-Related Resources, will Continue to Become Cheaper and More Widespread, Even to Those with Minimal Financial Means



...So is the Defense Environment

Collaboration is Not Optional

- JIIM Operations: Joint, Interagency, Intergovernmental, Multinational
- Coalition Operations: Full Spectrum Operations

Enterprise to the Edge... "From the Cloud to the Warfighter"

- Across the Department of Defense
- Operationally Effective and Efficient

Across Boundaries: Ground, Sea, Air, Space, and Cyber

- Horizontal and Vertical Integration

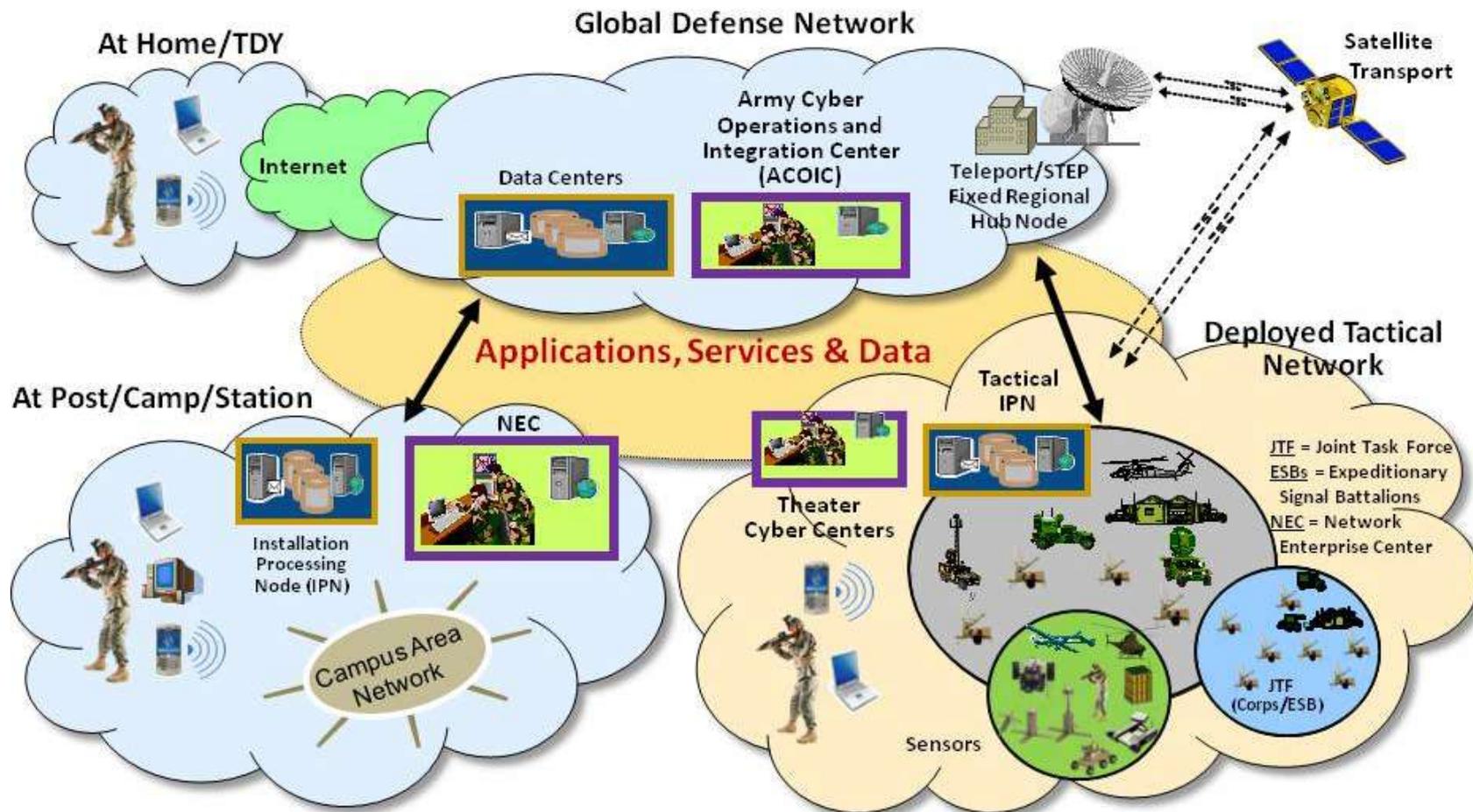
Agility, Flexibility, Resiliency, and Security

- Response Time Will Continue to Shrink
- Have to Hit the Ground Running



LandWarNet

"Powering America's Army"



The Network Must be Capable, Reliable and Trusted and to Get There it has to be a Single, Secure, Standards-Based Environment that Ensures Access at the Point of Need and Enables Global Collaboration



LandWarNet Must Bring to Bear All Functions

Collaboration

Sensor Video

CPOF

Telephony

Imagery

Collab Plan

Chat

VTC

E-mail

Warfighting Operations

Business Operations

Global Access

MISSION COMMAND

ACQUISITION

MOVEMENT & MANUEVER

SUSTAINMENT

HEALTH

PERSONNEL

FORCE MGT

PROTECTION

INTEL

TRAINING

INSTALLATION & ENVIRONMENT

LEGISLATIVE AFFAIRS

LOGISTICS

PUBLIC AFFAIRS



Totality of the Network

- A Capabilities Portfolio Perspective -

Joint Capability Areas

- 1. Force Support
- 2. Battlespace Awareness
- 3. Force Application
- 4. Logistics
- 5. Command and Control
- 6. Net Centric/C4 Cyber
- 7. Protection
- 8. Building Partnerships
- 9. Corporate Mgmt & Supt.
- 10. Information Management

Army Functions

- Warfighting**
 - Fires
 - Intelligence
 - Movement & Maneuver
 - Sustainment
 - Mission Command
 - Protection
- Business**
 - Personnel
 - Finance
 - Acquisition
 - Training
 - Installations and Environment
 - Force Management
 - Health
 - Logistics
 - Legislative Affairs
 - Public Affairs
- Network**
 - Network Services
 - NetOps
 - Applications/Data
 - Network Transport

Network Capabilities

- Reachback & Split-Base Operations
- Joint & Coalition C4I Interoperability
- Protected and Networked C4ISR
- Continuous Situational Awareness
- Global Collaboration
- Universal Access



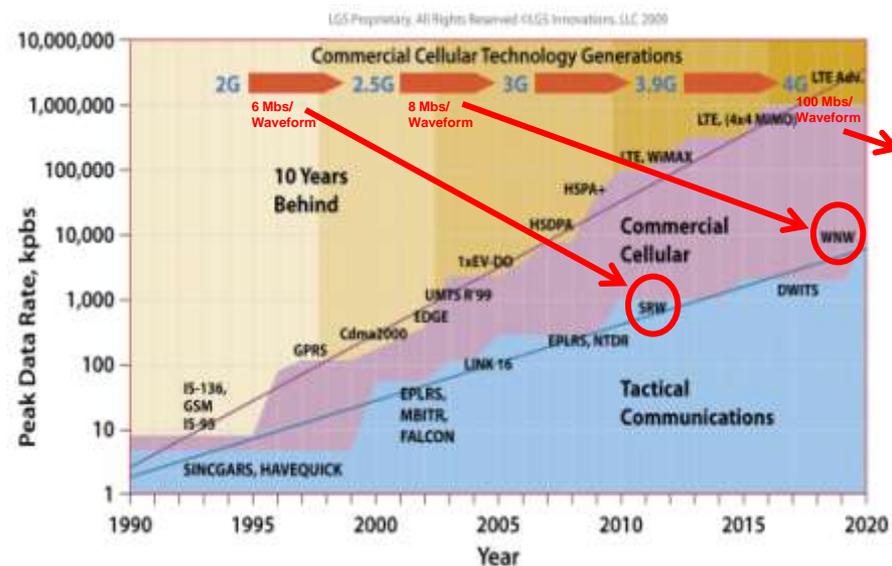
Addressing the Gaps

★ Current State of Army's Network(s): Multiple, Inconsistent, Complex, and Disparate

- Compounded by Fragmented Network Requirements and Funding Approach
- Newly Established Technical Standards, Early in Implementation (COE and EoIP)

★ Commercial Technology is Rapidly Evolving and is Leveraged by our Enemies

- Army Investments Cannot Keep Pace with Industry Growth or Spending
 - Industry to Spend \$3T over Next Decade
 - Army and DoD Budget Expected to Decrease
- Current Acquisition Processes Excessively Long – Stagnating Army's Ability to Modernize
 - Testing & Certification can take 18 Months
 - Poor Track Record for Sustainment & Life-Cycle Management



Unity of Effort ★ Reduce Complexity ★ Establish a Single Network Architecture



The Operational View

Computing Environment

Cloud

Market Place



- Services & Applications Built on Standards
- Hosted in a Market Place
- Capability Available to all via the COE

National



- XXX Corps
- XX Div
- X Bde
- II Bn

Scalable



Back End

Network

Communication



SPACE

AERIAL



TERRESTRIAL

Transport

Sensors & Platforms

Connected via the Network, Extending the Network to the Warfighter at the Edge

End Users

Connected via the Network - Vehicle Acts as a Common Access Point for Warfighters

- Co
- ...
- Plt
- Sqd

Front End



“The Effect” – Afghanistan Mission Network

Training Real-Time How We Will Fight



“This is the best game changer preparing us for deployment.”

-- MG James L. Huggins, Jr.
Commanding General
82d Airborne Division

- ★ Key Element of AMN Concept – Connected at Home Station
- ★ Leveraged to Enhance and Improve Pre-Deployment Training
- ★ CENTRIXS-ISAF (CX-I)...The US Component of AMN - Over 40 Sites in CONUS

“America’s Army – The Nation’s Force for Decisive Action – Ready Today, Prepared for Tomorrow”



Common Operating Environment... "The Big Game Changer"



Stringent Technical Standards for both Network Infrastructure and Applications



- ★ Reduces Redundant Fieldings Across Programs (e.g., MTS and FBCB2 Both Fielding GPS Systems When one Suffices)
- ★ Reduces Integration Complexity (e.g., MRAP and Stryker Vehicles – Today each Application has its Own Hardware – Need One Computing Environment For Vehicles that All Applications Can Operate on)
- ★ Aligns PEOs to Provide Products Across Programs (i.e., PEO Soldier Provides Mobile/ Handheld Devices to all PEOs/PMs)

- ★ Directs Integration of Multiple Applications/ Mission Command Systems on Single Hardware Platforms
- ★ Changes the Way we Field Applications (Apps Store, Faster, Cheaper, Pulled – not Pushed)
- ★ Leverages More COTs and Emerging Technologies by Using Control Point Testing vice Complete Systems Test (Key to Network Integration Evaluations)





Network Integration Evaluations

A photograph showing the silhouettes of soldiers in a mountainous landscape at sunset. The sun is low on the horizon, creating a bright glow. One soldier in the foreground is holding a rifle, and another is visible in the background. The terrain is rugged and rocky.

"We must have an affordable modernization strategy that is integrated and synchronized between our Soldier programs, our networks, combat vehicles, tactical wheeled vehicles, aviation, and missile defense capabilities."

Gen. Raymond T. Odierno, Chief of Staff of the Army, Eisenhower Luncheon (Oct 11, 2011)