Developing and Populating the Global Information Grid for Joint and Coalition Operations: Challenges and Opportunities

Presented at
The 2004 Command and Control Research and Technology Symposium
June 15-17, 2004
Developing and Populating the Global Information Grid for Joint and Coalition Operations: Challenges and Opportunities

- Network-Centric Operations
- The Global Information Grid
- The Maritime Context
- The Price of Admission \textit{and} Omission
- Challenges and Opportunities
- Future Signposts to Focus On
“In today’s world, it is inconceivable that anything could be accomplished outside of coalition operations.”

Dr. David Alberts
Director, Research and Strategic Planning
Office of the Assistant Secretary of Defense
Networks and Information Integration
Seventh ICCRTS – September 16, 2002
“Is there a place for small navies in network-centric warfare? Will they be able to make any sort of contribution in multinational naval operations of the future? Or will they be relegated to the sidelines, undertaking the most menial of tasks, encouraged to stay out of the way - or stay at home? … The “need for speed” in network-centric operations places the whole notion of multinational operations at risk.”

Professor Paul Mitchell
Director of Academics
Canadian Forces College
Naval War College Review – Spring 2003
Network-Centric Operations
“Network-centric warfare broadly describes the combination of emerging tactics, techniques, and procedures that a fully or even partly networked force can employ to create a decisive warfighting advantage.”

*Network-Centric Warfare*

*Office of Force Transformation*

*December 2003*
Network-Centric Operations

- Network-centric warfare – new power source
- Focus of CCRTS and ICCRTS
- NCW – Enables a warfighting advantage
- Increasing body of work and metrics
The Global Information Grid
“The Global Information Grid is the foundation for network-centric warfare.”

Dr. Michael Frankel
Deputy Assistant Secretary of Defense
C3ISR, Space, and IT Programs
Eighth ICCRTS June 17-19, 2003
The Global Information Grid

• U.S. “Foundation for network-centric warfare”
• Major investment: $18B across the FYDP
• US SECDEF Priority:
  ▪ Strengthen combined/joint warfighting capabilities
• US SECDEF New Granularity:
  ▪ Develop the GIG
• ASD NII mandate: “Develop, populate, and protect the Global Information Grid
• U.S. Service architectures must be compatible with the Global Information Grid
The Maritime Context
“FORCEnet is the architectural framework for naval warfare that aligns and integrates warriors, networks, sensors, command and control, platforms and weapons into a globally networked, distributed combat force, scalable across the spectrum of conflict from seabed to space and from land to sea.”

FORCEnet Campaign Plan
Office of the CNO and CMC
June 3, 2003
The Maritime Context

- Information sharing in navies – “old hat”
- Blessing and a potential curse
- U.S. Navy Component of the GIG: FORCEnet
- The need for “maritime domain awareness”
- U.S. CNO goal: “A maritime NORAD”
- Immediate coalition implications apparent
The Price of Admission and Omission
“The significant involvement of coalition forces in Operation Enduring Freedom – including over 100 shops deployed in Central Asia for an extended period – has reemphasized the requirement for improved internet protocol data systems interoperability with allied and coalition forces.”

Admiral Robert Natter
Commander, Fleet Forces Command
SSC Charleston *Combat Clips*
Summer 2002
The Price of Admission and Omission

- Coalition concerns – the price of admission
- U.S. realities – the price of omission
- Issue actively discussed at the working level
- Slowly working its way to the leadership level
The Importance of Connectivity
Challenges and Opportunities
“Achieving shared situational awareness with allies and partners will require compatible information systems and security processes that protect sensitive information without degrading the ability of multinational partners to operate effectively with U.S. elements.”

*The National Military Strategy*

May 2004
“FORCEnet will be developed and delivered to function in a Joint/Allied/Coalition/Interagency environment and associated architectures, systems and doctrine must focus on interoperability.”

FORCEnet Campaign Plan
Office of the CNO and CMC
June 3, 2003
“The United States is unlikely to hamstring its own military forces or slow its implementation of network-centric warfare given its obvious benefits. It may decide simply to ‘pass’ entirely on alliance participation.”

Professor Paul Mitchell
Director of Academics
Canadian Forces College

Naval War College Review – Spring 2003
“Not only will allies have little to contribute to a come-as-you-are party, they won’t be able to track the course of the conversation.”

Professor Tom Barnett
United States Naval War College
The Seven Deadly Sins of NCW
U.S. Naval Institute Proceedings
January 1999
Challenges and Opportunities

- Does the U.S. “slow down?”
- Does the coalition “speed up?”
- Technical and policy issues
- “Chicken and egg” effect
- Progress on policy issues – releasability
- Propitious time to address technical issues
Future Signposts to Focus On
“Strengthening regional alliances and coalitions helps to create favorable regional balances of power that help to bring pressure to bear on hostile or uncooperative regimes.”

*The National Military Strategy*

May 2004
“The United States wants its partners to be as interoperable as possible. Not being interoperable means you are not on the net, so you are not in a position to derive power from the information age.”

VADM Art Cebrowski
Director, Office of Force Transformation
Military Transformation, A Strategic Approach
Fall 2003
Future Signposts to Focus On

- U.S. Navy FORCEnet design parameters
- Defense Exchange Agreements
- CNO Staff – N61 – focus on interoperability
  - ASCANNZUKUS
- Office of the Secretary of Defense
  - TTCP
  - CWP
- Joint Forces Command – NATO Transformation EA
Questions?