

Regional Tactical Information Environment

An Industry Perspective



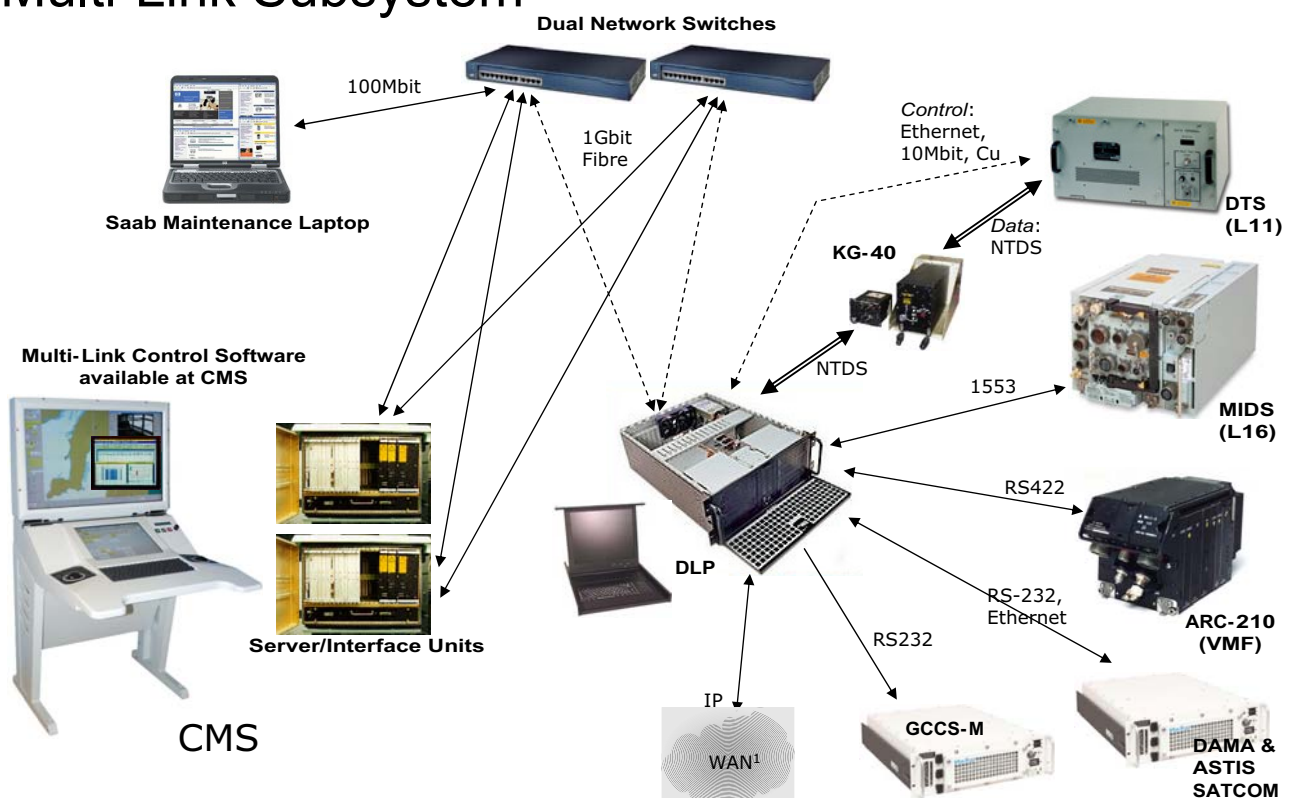
Jock McManus

IPv6 Summit
Nov, 2007

1 SAAB SYSTEMS PTY LTD



Multi-Link Subsystem



2 SAAB SYSTEMS PTY LTD

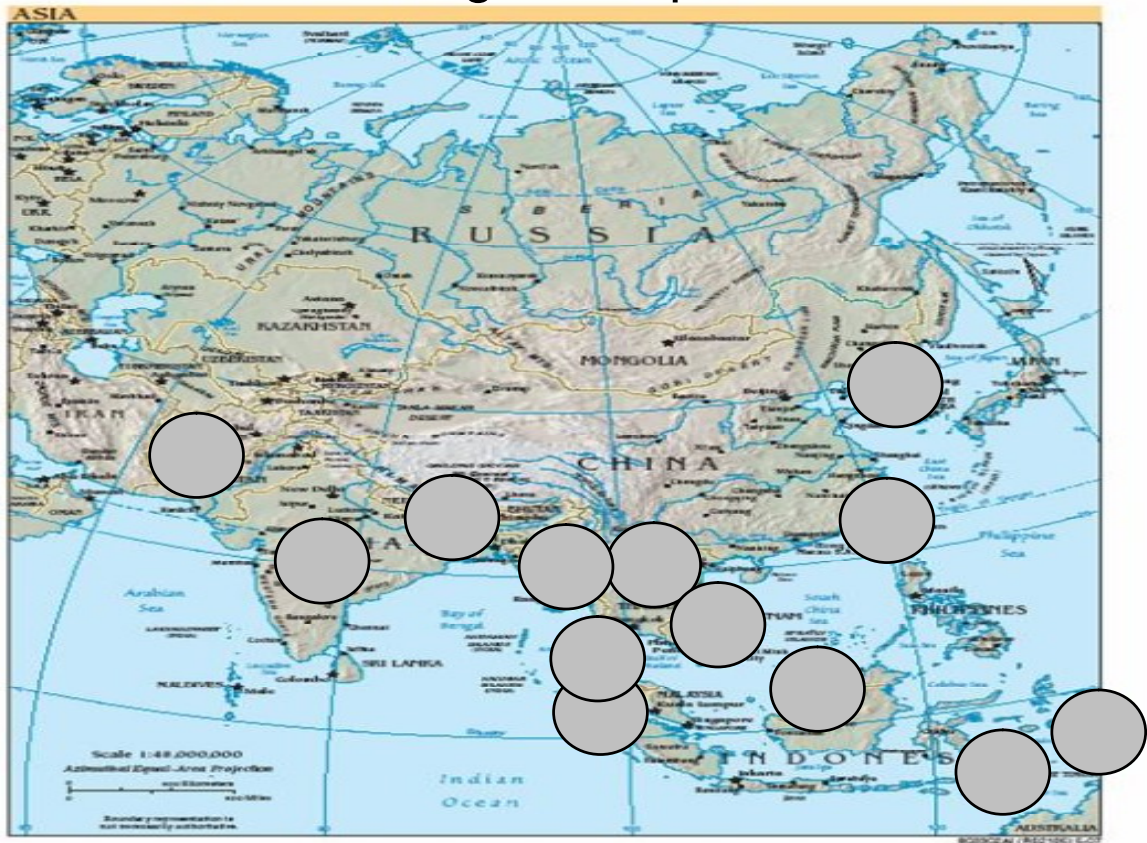


¹ WAN connection usually available in Land Based Test Site

Introduction



Recent Regional Operations



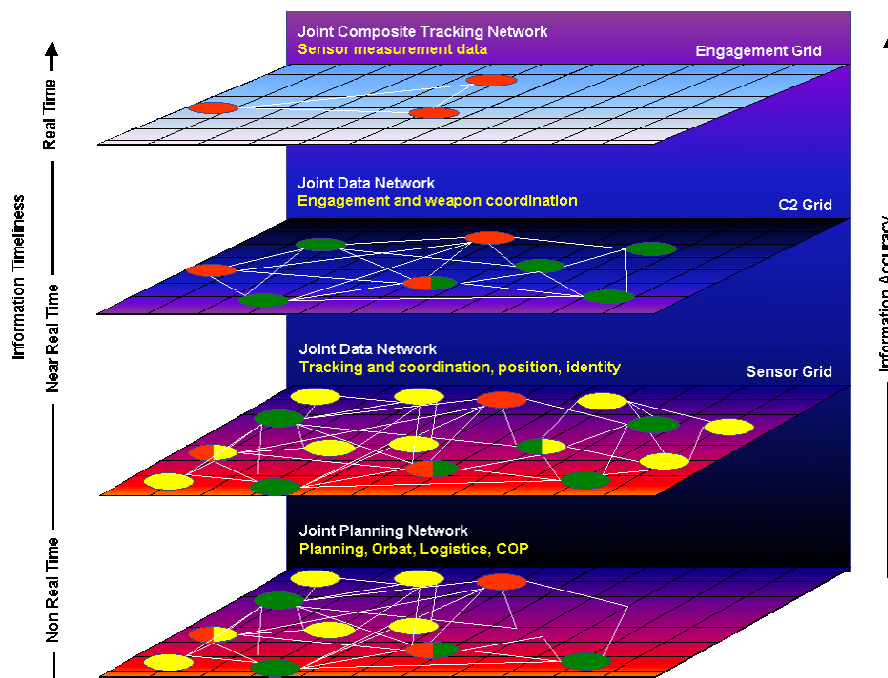
Recent Regional Operations

HMAS PIRIE CATCHES FIVE FOREIGN FISHERS NORTH OF DARWIN

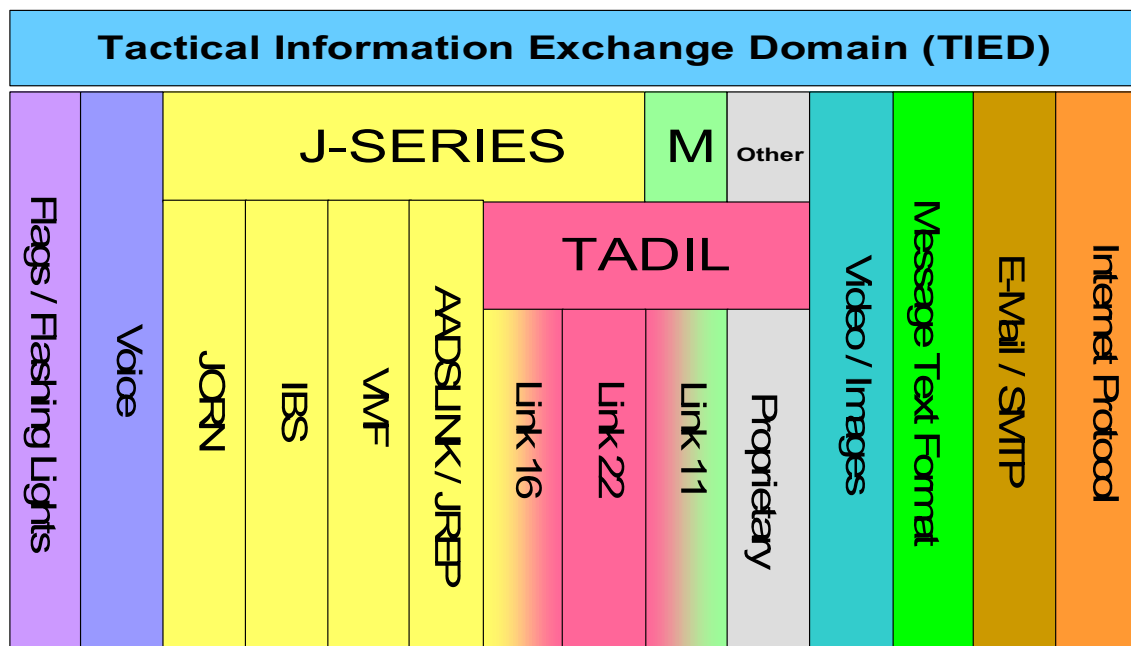
Five illegal foreign fishing vessels were brought into Darwin on 16 September 2007 by Armidale Class Patrol Boat HMAS PIRIE following an operation coordinated by Border Protection Command, involving Defence, Customs and Australian Fisheries Management Authority officers.



Network Centric Warfare Concept



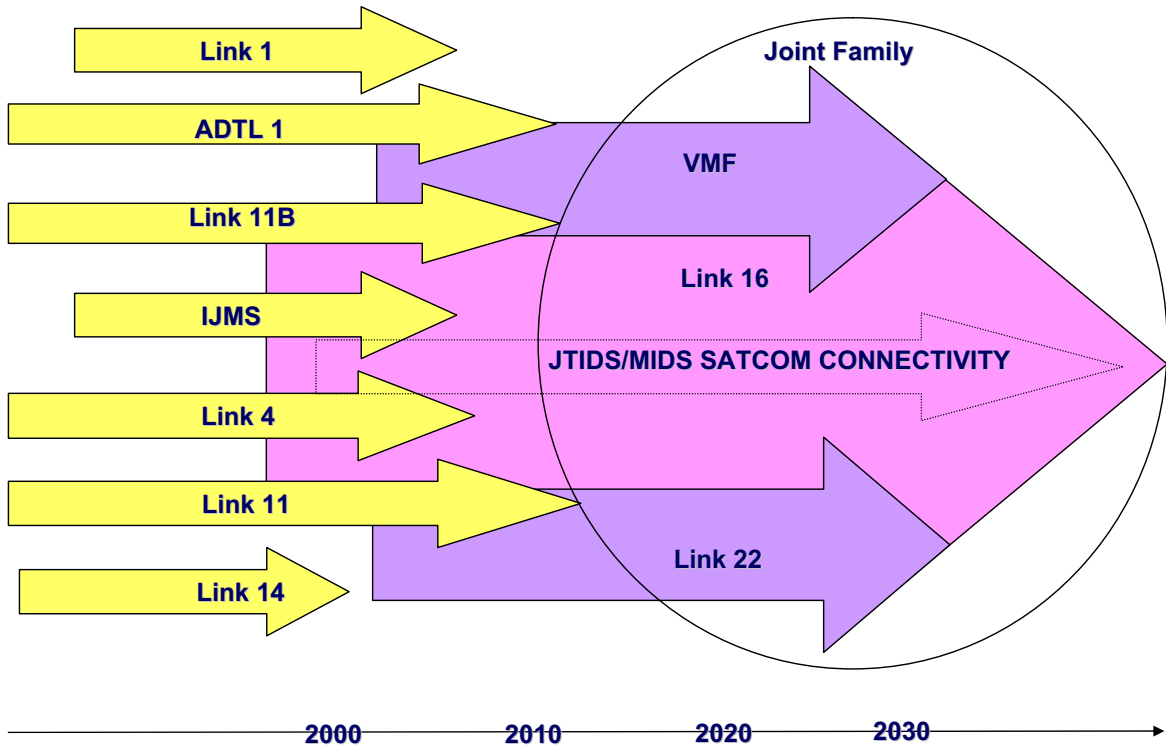
Migration to Commercial Technologies



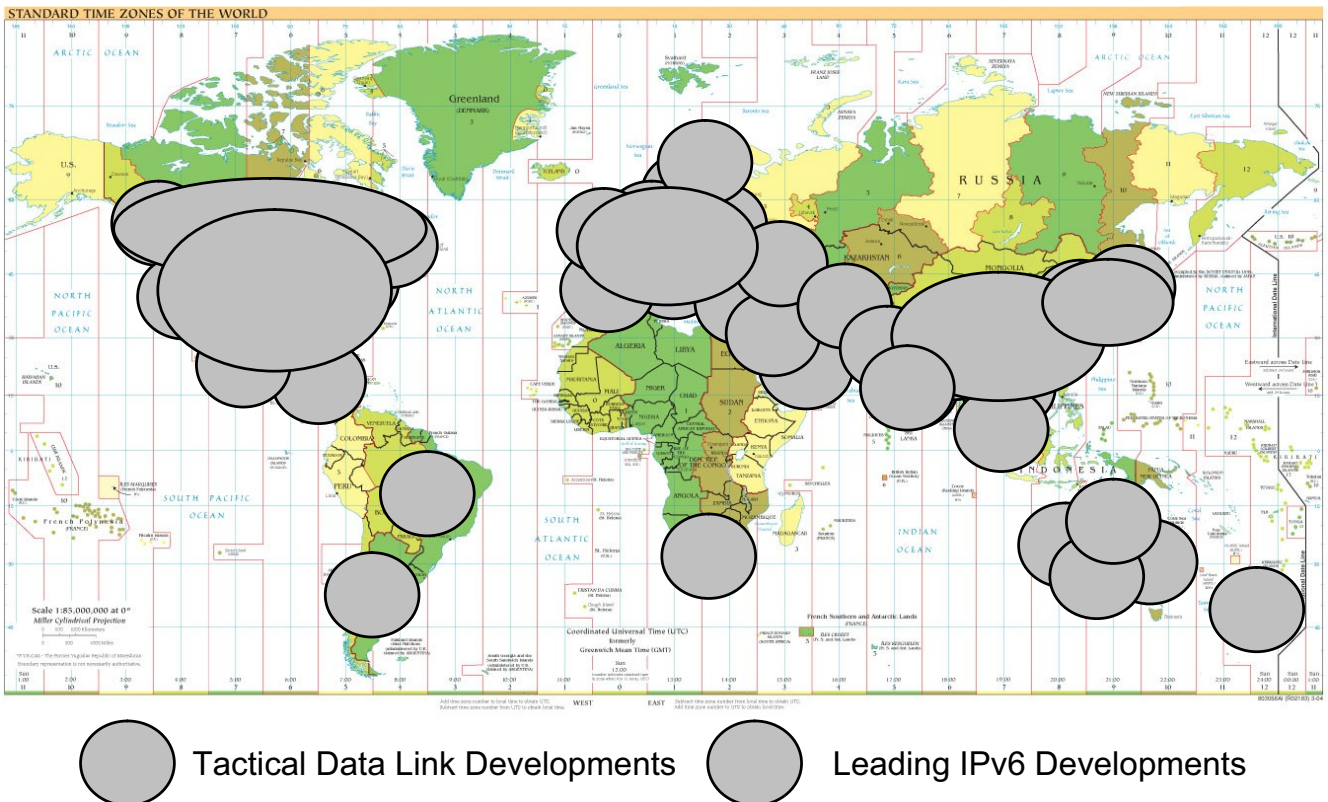
The Future of Interoperability - US DoD

- NCW doctrine represents a fundamental shift in military culture, away from powerful compartmentalized war machines and toward interconnected units operating cohesively. The tenets of NCW are:
 - A robustly networked force improves information sharing;
 - Information sharing enhances the quality of information and shared situational awareness; and
 - Shared situational awareness enables collaboration and self-synchronization and enhances sustainability and speed of command.
- At the enterprise level, forging new communication paths will ease logistic burdens, improve communication and combat effectiveness of the warfighter, decrease instances of fratricide, minimize collateral damage, and hasten the flow of business.
- For the warfighter, situation awareness will be improved tremendously by linking what he sees with what an overhead satellite sees. The fog of war would be lifted by seamless communication between unit members, offsite detection devices, and commanders operating behind the line.

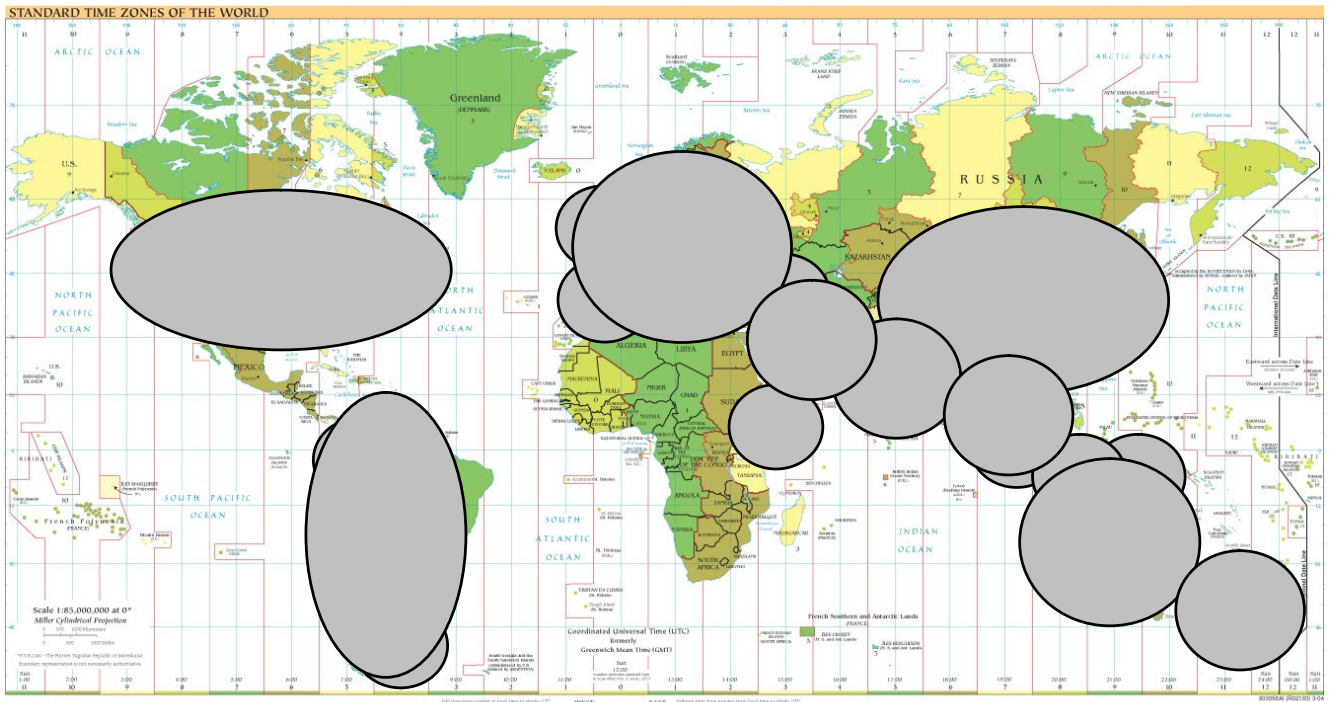
The Future of Interoperability - NATO



IPv6 Activity vs TDL Activity



Information Exchange vs Operational Need



● Recent Conflicts/Operations ● Information Technology (IP+TDL)

Example

- ViaSat and DRS Technologies, under a contract with the U.S. Navy have demonstrated an Internet Protocol data connection from the cockpit of an F/A-18 jet fighter to a ground network.
- The data link uses ViaSat Multifunctional Information Distribution System LVT(1) terminals modified to provide IP communications to and from an onboard DRS Airborne Tactical Server (ATS).
- In the test, the aircrew employed an Infrared camera to record video. The aircrew created video captures and transferred IP data files at rates in excess of 70 kbps, moving images of 35,000 bytes to the ground network in seconds. In combat, these images could be used for intelligence and reconnaissance missions to identify and locate targets, enemy movements, or friendly forces.

Conclusion

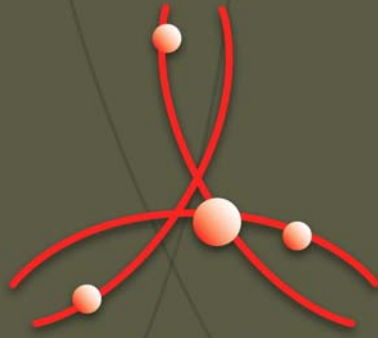
- Modern Military capability developers are increasingly embracing Commercial Technologies such as IPv6
- Highly likely that Future Regional Operations will require Military and Civil organisations to be interoperable to achieve effective outcomes
- Opportunities exist in common regional areas to explore how to collaborate in capability development

Recommendations

- Commercial and Defence Industry representatives need to engage in collaborative R&D programs that addresses Military/Civil interoperability needs
- Information should be shared in Forums such as the IPv6 summit, ADIESA Focus Groups and the various annual Symposiums and Exhibitions

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IDLS2008

BUILDING INTEROPERABILITY IN A GLOBAL CONTEXT

19-21 August 2008
sydney convention centre

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