



COP 21 TD : Common Operational Picture 21st Century Technology Demonstration



Current COP Deficiencies:

- Required information originates from various stovepipe systems
- Information overload
- Information is not timely
- Lack of tools to understand how a situation has developed and is expected to develop
- Limited visualization capability
- Constraints of security domains
- Decisions are being made on incomplete unreliable information
- Limited decision-aid/planning tools

Objectives:

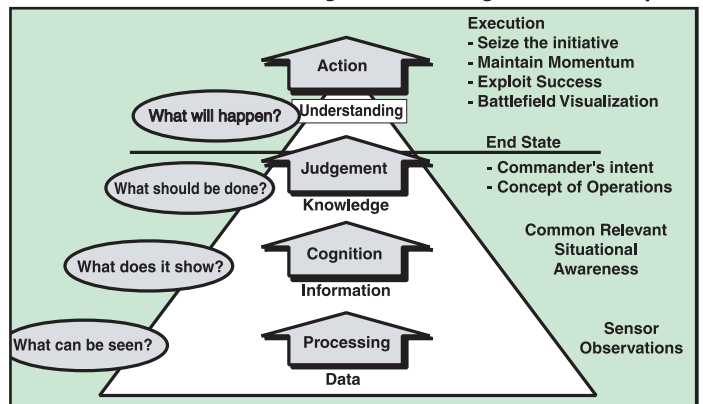
- Influence concepts, doctrine and capabilities of the future CFCS COP by demonstrating leading-edge information technologies
- Leverage allied COP initiatives (US, UK and AUS) through experimentation
- Assist in developing the future CF COP operational architecture
- Assess / mitigate risk of emerging information technologies

What is a COP?

"The integrated capability to receive, correlate and display a variety of sources of information in order to provide a common view of the battlespace."

(Adapted from Annex G CFCOP CONOPS, Oct 99)

Information Sciences - Working across the cognitive Hierarchy



The CF CCIS systems principally focus at the levels of information/data (situation awareness). The goal of COP 21 TD is to move to the apex of the pyramid (Battlefield Visualization).

Battlespace Visualization

The process whereby the Commander develops a clear understanding of his current state with relation to the adversary and the environment, envisions a desired end state, and then subsequently visualizes the sequence of activity that will move his assets from its current state to the end state.

(B-GL-300-005/FP-000 Information Operation)

COP 21 TD : Common Operational Picture 21st Century Technology Demonstration

Technological Infrastructure

The system architecture is based on the three-tiers model

- The presentation tier uses Web browser and thick applications
- The application tier is made up of integrated products and custom-developed applications and services
- The data tier is made up of a number of different data sources

Foundation Software

- J2EE infrastructure and WEB servers
- BEA WebLogic 8.1 platform
- Contextual search and agents based on the autonomy software
- CompuSult Web Enterprise Suite

Portal Client Types

- Light client (Web browser)
- Thick client applications



Net-Centric Enterprise Services (NCES) Approach

- Significant trend in achieving interoperability across nations and organizations
- Focus is on sharing of services and adherence to standard protocols rather than using the same application
- US DoD is replacing GCCS by the Joint Command and Control (JC2) based on NCES

Situation Awareness Portal

Improve Warfighter Situation Awareness through :

- Single point of access to multiple information sources
- Multiple collated windows to view several documents together
- Filtering and categorizing information using Portfolio views
- Interaction with information via web-based applications (running within the portal)

Provide capabilities in the areas of :

- Portal-to-portal interoperability
- Information visualization
- Knowledge management
- Geospatial access and exploitation
- Commander's decision support

• Key Contacts
 Mr. Denis Gouin
 PM COP 21 TD
 DRDC Valcartier
 (418) 844-4000 ext. 4339
 denis.gouin@drdc-rddc.gc.ca

• Sponsoring Agency
 DJFC

• Lead Federal Agencies
 DRDC
 J2IM
 DGOR

• DND Stakeholders
 Army, Navy, Air Force
 ADM (IM)
 NDCC
 JIIFC
 CFEC

Mr. Scott Mutton
 Industry Lead COP 21 TD
 xwave
 (613) 831-0888
 scott.mutton@xwave.com

• Prime Contractor
 xwave

• Sub-contractors
 Thales Systems Canada
 CompuSult Limited
 BEA

For more information

Project Leader
 Phone: (418) 844-4000 ext.: 4339 Fax: (418) 844-4538
 Email: collabo-valcartier@drdc-rddc.gc.ca

Defence R&D Canada – Valcartier
 2459 Pie-XI Blvd North, Val-Bélair, Quebec G3J 1X5
 Phone: (418) 844-4000 Fax: (418) 844-4635
 collabo-valcartier@drdc-rddc.gc.ca

www.valcartier.drdc-rddc.gc.ca

Fact Sheet IS-216-A
 © DRDC Valcartier 2006-03

