

3. Congress on European Defence

Panel V: Network Centric Warfare 2010

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NCW / NEC / NetOpFü Overview

Domains:

- **Physical**
 - Networks
 - Sensors
- **Information**
 - Creation
 - Manipulation of Information
 - Sharing
- **Cognitive**
 - 'minds of participants'
 - Common Situational Awareness
(common relevant operational picture)

NATO/RTO-Information Systems Technology Panel (1)

Communications:

- Military Communications (Symposium Rom, 2005)
- Dynamic Communications Management (Symposium Budapest, 2006)
- Information Management over Disadvantaged Grids (TG 2002 – 2004)
- Tactical Communications in Urban Environments (ET 2005)
- Information Architecture/Infrastructure supporting NCW Communications (TG 2005 – 2007)
- Communications Electronic Warfare in a NCW Scenario (TG 2005 ff)

NATO/RTO-Information Systems Technology Panel

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Security:

- Adaptive Defence in Unclassified Networks (SY 2004, The Haag)
- Enhancing Information Systems Security through Biometrics (WS 2004, Toronto)
- CBIS (Content Based Information Security)
US Activity and ET, Demonstration in 2005
- NEC Security (TG 2004 - 2006)
- Network Centric Operations Security (WS 2005)

NATO/RTO-Information Systems Technology Panel

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Applications/Cognitive Domain:

- Visualization and the Common Operational Picture (WS 2004, Toronto)
- Visualization Technology for Network Analysis (TG 2005-2007)
- Advanced Multi Sensor Surveillance Systems (TG 2004-2006)
- Information Fusion Demonstration (TG 2003-2006)
- Information Fusion for Command Support
(Specialist Meeting including Demo, October 2005)
- Command Center Challenges for Urban Operations (TG 2004-2006)
- C2 Decision Support (in NCW) (ET 2005)
- Ontology Fusion (ET 2005,
TG 2006-2008)

Example: NEC-Security Workshop:

Topics to be covered – from policies to technologies:

- Information Security Models and Policies
- Trust Models
- NEC Security and Architecture
- Global NEC Risk Analysis
- Joint Intrusion Detection Systems
- Dynamic Network Management
(adaptive, ad hoc, reliable)

National and International Projects related to NEC (Examples)

VeNaGuA	Verbund Nachrichtengewinnung und Aufklärung
MIP	Multilateral Interoperability Programme
INSC	Interoperable Networks for Secure Communications
STGP (STP-G)	Shared Tactical Ground Picture
CAESAR/ MAJIIC	Coalition Aerial Surveillance and Reconnaissance, Multi-Sensor Aerospace-Ground Joint Interoperable ISR Coalition