Information Technologies in Support to Counterterrorism in Culturally and Linguistically Diverse Communities

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21st Century “Terrorism” Phenomenon

9/11/2001
New York

10/23/2002
Moscow, Nord Ost

3/11/2004
Madrid

7/7/2005
London

1/25/2011
Domodedovo, Moscow

4/11/2011
Minsk

5/2/2011
Abbottabad, Pakistan

What’s next…
New Security Environment Challenges

- Globalization;
- Information Technologies;
- Terrorism;
- Nuclear Weapons & WMD Proliferation;
- Key Environmental & Resource Constraints;
- ...
CALD Communities Challenges

- Language Barriers
- Cultural Differences
- Globalization
- Societal Synergy
- Information Technologies
- ...

Target: Achieving society resilience against terrorism
Comprehensive Approach in NATO seeks to make improvements in five key areas of work:

- Planning and conduction of operations;
- Lessons learned, training, education and exercises;
- Enhancing cooperation with external actors;
- Public messaging;
- Stabilization and reconstruction.
The Umbrella MoU between Nation and NC3A is used to address Scope, Governance, Financing and other issues as a base for implementing projects through simple Technical Agreements, referring to the MoU. Cooperation agreements with Public research & Training Institutions are used to involve deeper Nations. And similar approach is envisioned with Industry Associations. MoUs with other agencies are providing integrated support to the C4ISR systems life cycle.
NC3A as in previous cases could be bottom up and NATO to Nations and Organizations facilitator to achieve interoperability through support to capabilities development process.

Matching the operational scenario with required interoperability solutions and later supporting them by existing and jointly developed expertise in NC3A is the goal of MN DSCA / CMI effort.
# Interoperability Focus Areas for DSCA

## Interoperability Enablers

| IFA1 | Community of Interest Info Protection (CIP) |
| IFA2 | Collaboration & Info Sharing Environment (CISE) |
| IFA3 | Warning & Alerting Services (W&A) |
| IFA4 | Support Request Services (SRS) |
| IFA5 | Info Sharing Services (ISS) |
| IFA6 | Sit. Awareness & Common Oper. Picture (SAS) |
| IFA7 | Tactical Communication (TACOM) |
| IFAx | … |

## Preceding Steps

- Preparedness & Planning
- Prediction & Warning
- Response
- Recovery
- …
Role of NC3A in Cooperation with CoE C-IED & NAMSA

NORTH ATLANTIC COUNCIL

CONFERENCE OF NATIONAL ARMAMENTS DIRECTORS

DEFENCE AGAINST TERRORISM PROGRAMME OF WORK

COUNTERIED TASK FORCE

COUNTERIED ROADMAP - CLEARING HOUSE

COE-CIED (doctrine and training)
1. Co-operate to increase security
2. Support the transformation
3. Drive the development of capabilities via support to:
   • education, training and multinational exercises.
   • improving interoperability.
   • development of concepts, doctrine, procedures and standards.
   • testing and validating concepts and materials.
   • contributing to the process of lessons learned.

NC3A (technology solutions)
1. Clearing House Support
2. Multinational C-IED Programme Office Packages:
   • Jammers
   • Remote Controlled Vehicles
   • Entry Control Point Suite
   • Persistent Surveillance
   • Biometrics
3. Research and Development support, Training support

NAMSA (logistics)
1. Logistics partnership & support
2. Urgent requirements & operations support in the field of logistics
3. Consolidation of the requirements and centralization of logistics activities

NATO-EU CAPABILITY GROUP

EUROPEAN UNION/ EUROPEAN DEFENCE AGENCY
Role of IT in Support to Counterterrorism in CALD Communities

- Automated machine translation
- Non-verbal communication
- Social Networks
- Incident/Emergency Management Systems
- Other

Target: Operationalization of the Comprehensive Approach supported by IT as a key enabler
Some National & International Examples

**CAX - ENVironment**

- DB
- User Screens
- MHS
- IDS
- FM
- GIS
- Simulation

**Basic low-cost Environment for Simulation & Training - BEST**

- PMA
- CMM
- DSS
- SDA
- HFA
- KMP
- NIS

**CAX-ENV**
EU Network of Excellence on Cyber Security

Industry

Academia

Other Stakeholders

SysSec Community

Center of Research Excellence

Center of Academic Excellence (Education)

SysSec
Multinational Exercises

EU TACOM SEE 2006

PHOENIX 2010

Target: Establishing a NATO CoE DSCA in Bulgaria
IT Governance in Support to Counterterrorism Operations

Defense Support to Civilian Authorities

Integrated Air & Missile defense

Bi SC AIS
AMN Suite

ISR
Command and Control + Logistics

Comms And Core Services

Cyber Defense
Security
Interoperability

Planning, Architecture and exercises

Transition operations

Target: Integrated ‘smart defence’
Distributed Networked Battle Lab Support

- **Supports full lifecycle**
  - From Concept Development & Experimentation to pre-deployment testing
  - From functional testing to CONOPS evaluation

- **Federation of NATO and national laboratories**

- **NATO, government, industry and academia**

- **Different security classifications**

**Proposal: NATO CoE cooperation**
Conclusions

- IT could be a successful key enabler for operationalization of Comprehensive Approach in CALD Communities and thus countering terrorism;

- Both horizontal & vertical Integration is required for achieving complete synergy of the operationalization of Comprehensive Approach;

- A possible solution for supporting the IT governance challenges in operationalization of Comprehensive Approach and countering terrorism is a distributed Network of Excellence on the bases of DNBL with Bulgarian participation.
Thank you for the attention!