Secure CIS Services Provision in NATO
- Résumé And Operational Perspectives -

26 June 2012

Presentation to AFCEA at SHAPE by Director NCSA
LtGen (DEU AF) Kurt Herrmann
Outline

• Basic Approach, Mission and Structures
• CIS Support to NATO-led Operations
• CIS Support to Exercises
• Information Assurance and Cyber Defence Services
• Functional Area Services
• Implications of NCS and NATO Agencies Reform
• Lessons Identified for Common CIS Service Provision
• Conclusions & Outlook
Provision of Secure End-to-end CIS services in NATO
Principles of CIS Support to Operations

OPS Command

CIS Backbone

Central services:
- Network-Mgmt
- Service-Mgmt
- Co-ordination

Resources:
- Personnel
- Static and deployable assets
(NATO)

DCM

Theatre of Operation

Reach-Back

Augmentations

External Resources

PoP

PoP

PoP

PoP

PoP
NCSA’s Position

CIS support to:
- Static HQ structures
- NATO Operations

Consul-
tation
- NATO HQ Brussels

C2 for
- NFS
- Nations’ customers
- NCS
- ACT
- +Sub-structure
- +Sub-structure
- NCSA DCIS elements
- DCMs
- CIS Logistic Depot

Supporting
NATO elements
- NC3A
- NAMSA
- Contractors

Supporting
National CIS elements

NCSA “as a whole”
(indivisible mission / organisation)

Reach back

Policy direction

OPCON
(for Operations)

Military Committee

NAC

NATO C3 Board

SACEUR

© 2005-NCSA
NCSA Area of Responsibility

NATO HQ & Agencies

OPERATION
OCEAN SHIELD

KFOR

ISAF

EUFOR

Support
African Union
DARFUR

Operation Active Endeavour

NATO UNCLASSIFIED
CIS Support to ISAF

- Sustained CIS Support
- Coherent CIS Services
- Improved Service Management
- Flexibility and Responsiveness
Afghanistan Mission Network - Governance -

Accessing countries:
- Denmark
- Spain
- Poland
- Australia
- Czech Republic

AMN Secretariat
- France (French-AMN)
- United States (Centrix-ISAF)
- Germany (DEU-AMN)

AMN Steering Group
- NATO (AMN Core)
- United Kingdom (Overtask)
- Other National Extensions
CIS Support to Other Operations

• Maritime Operations
  – Operation Active Endeavor
  – Operation Ocean Shield

• KFOR
CIS Support to Training & Exercises

- Military Training and Exercise Plan
- More than 100 Events in 2011
- Focus on Pre-deployment Training/Exercises
- NRF Related Support
Cyber Defence Services

• System Engineering
  – System hardening
  – Anti-virus
  – Forensics analysis
  – Advice to projects

• Incident Detection & Response
  – Intrusion detection
  – Incident handling
  – Web site monitoring
  – Email monitoring

• Vulnerability Management
  – Assessments and testing
  – Security awareness
  – Cyber Defence Exercises
Service Management Framework (SMF)

Employment Areas:
- Operational Networks in Theatre (e.g. AMN)
- Static structure: NCSA HQ and sectors

Lines of operation:
- Service Management (SM) Toolset
- Training and Exercises
Functional Area Services

- JADOCS
- JCHAT
- LOGFAS
- NITB NATO Intel Toolbox
- JOCAWatch
- ICTS
- ICC
- JTS Joint Targeting System
- Analyst Notebook
- FMV Full motion Video
- NIRIS
- IFTS
- iGeoSIT
- COPIM

NATO UNCLASSIFIED
Operation and Maintenance of Functional Area Services

- Standards for interoperability
- Service Oriented Architecture (SOA)
- Governance
- Assurance and Validation Testing
- Authoritative Data Sources (ADS)
- Service Level Agreements (SLA)
- Key Performance Indicators (KPI)
- Training
Robust Network Structure

- Bandwidth
- IP-based
Moving Forward ...
Future NATO CIS Structure

Current

- NCSA Deployed
- NCSA Central
- NCSA Static
- NC3A
- Others

Future

- CIS Group
- C&I Agency

Transition 1 Juli 2012
Impact of New NATO Command Structure On CIS

**STATIC**
- SECTOR, ACT HQ
  - Sq.JWC
  - Sqn JFTC
- SECTOR, ACO HQ
  - Sqad
  - Squad
  - JEWOC
  - CAOC
- SECTOR JFHQ 1
  - Sq. Mar CC
  - SECTOR JFHQ 2
  - SECTOR
  - JALLC
  - SGT
  - SGT
  - SGT

**CENTRAL**
- NCSA HQ
  - Functional Services (FS) for all NCS- elements & Ops Centres (LOG FS, OPS FS, INTEL FS, others)
- NATO Signal Regiment
  - NSB
  - NSB
  - NSB
  - NSB
  - DCM
- C&I Agency
  - NATO CIS LOGISTIC DEPOT
  - NATO CISO SCHOOL
  - NATO PROGRAMMING CENTRE

**DEPLOYABLE**
- NATO CIS LOGISTIC DEPOT
- NATO CIS Grp

CLD, NCISS, and NPC → C&I Agency
NCS & NATO Agencies Reform

- Transfer to Future Structure 01 Jul 12
- Crosswalk of Personnel
- SLAs will Remain in Effect
- Shared Operations Center Concept
- Implementation of New CIS structures Complementary to NCSA Deactivation
CONCLUSIONS

• CIS Services Delivery: Key Functions under control of NATO structures
• Judicious mix of resources
• Common Service Architecture
• Preservation Synergies and Efficiency
• Federation: From AMN to FMN
OUTLOOK ...