



# Secure CIS Services Provision in NATO

## - Résumé And Operational Perspectives -

26 June 2012

SHAPE

Presentation to AFCEA at SHAPE by Director NCSA

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NATO CIS Services Agency

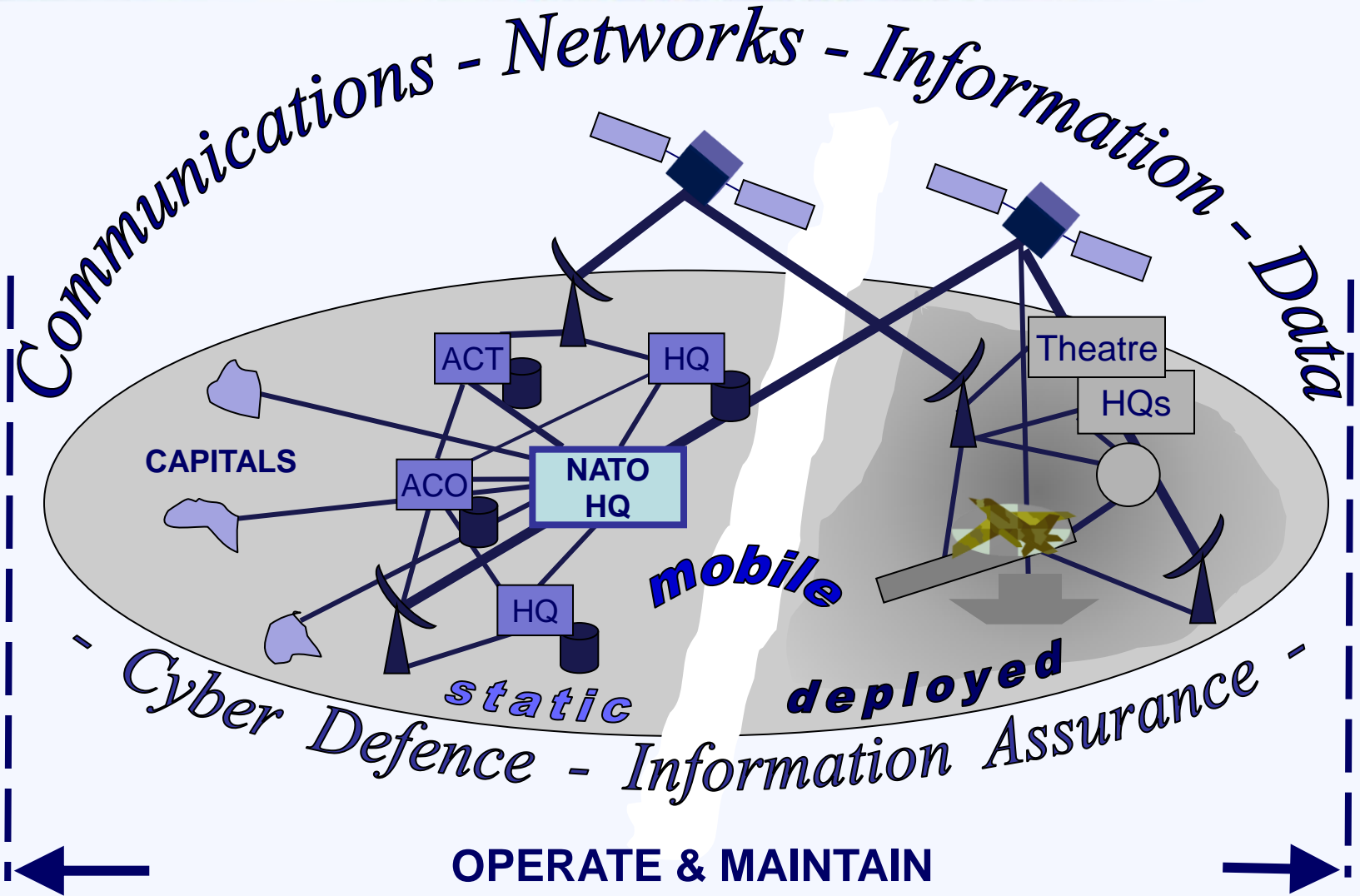
# Outline

- **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

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# 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

Reach-Back

Theatre of Operation

PoP

PoP

PoP

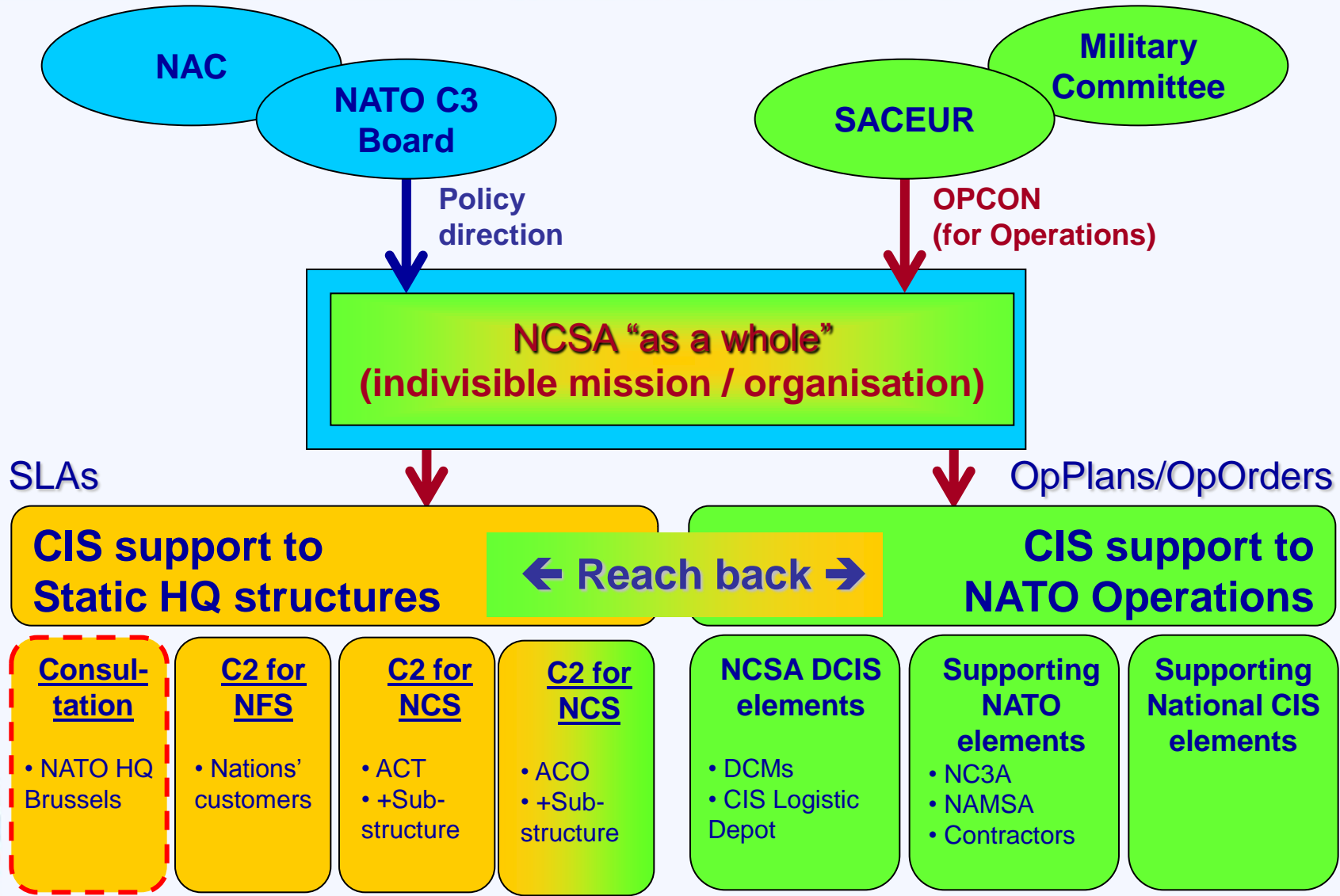
Augmentations

External Resources



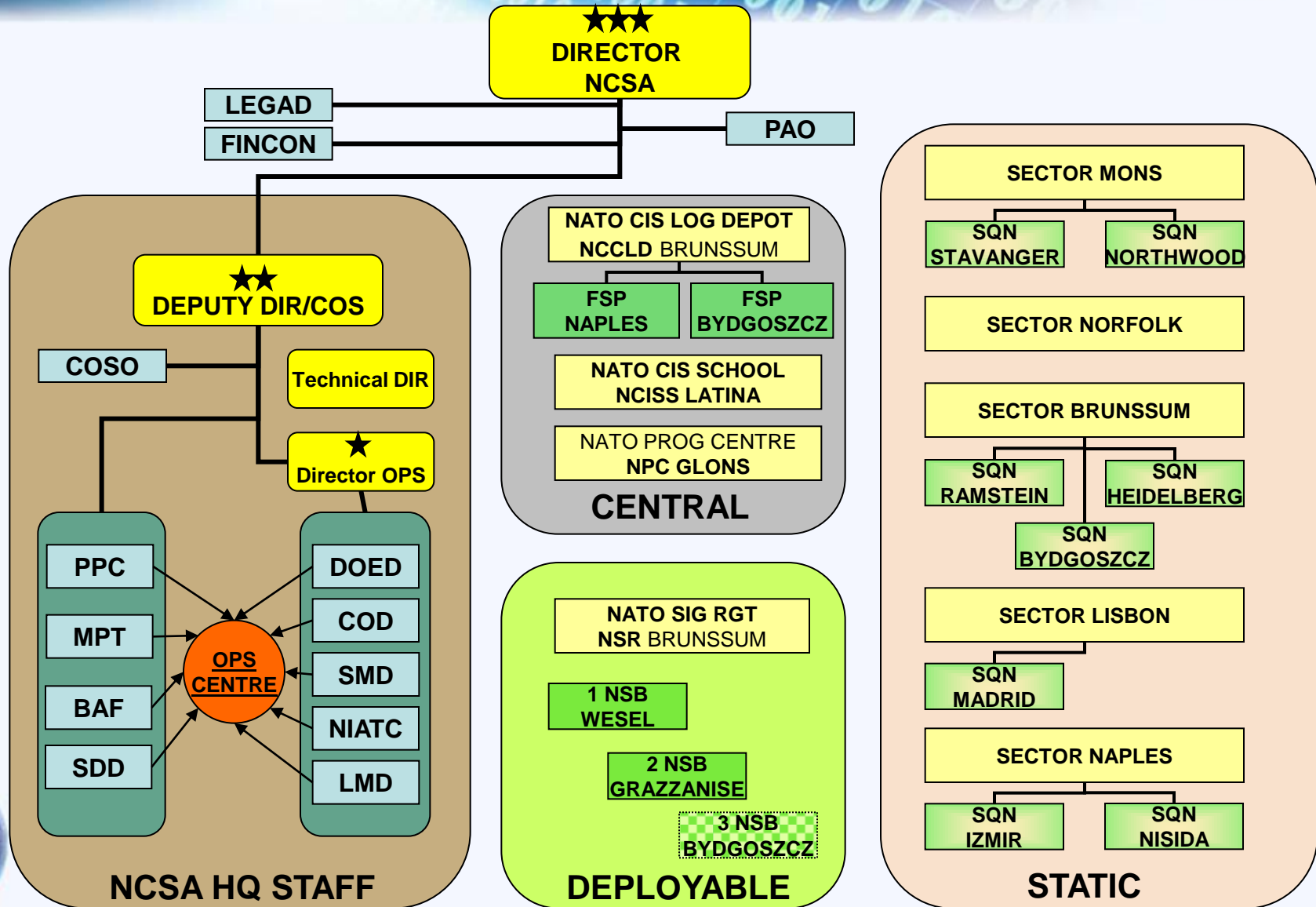
# NCSA's Position

CONNECTING NATO



# NCSA Organisation

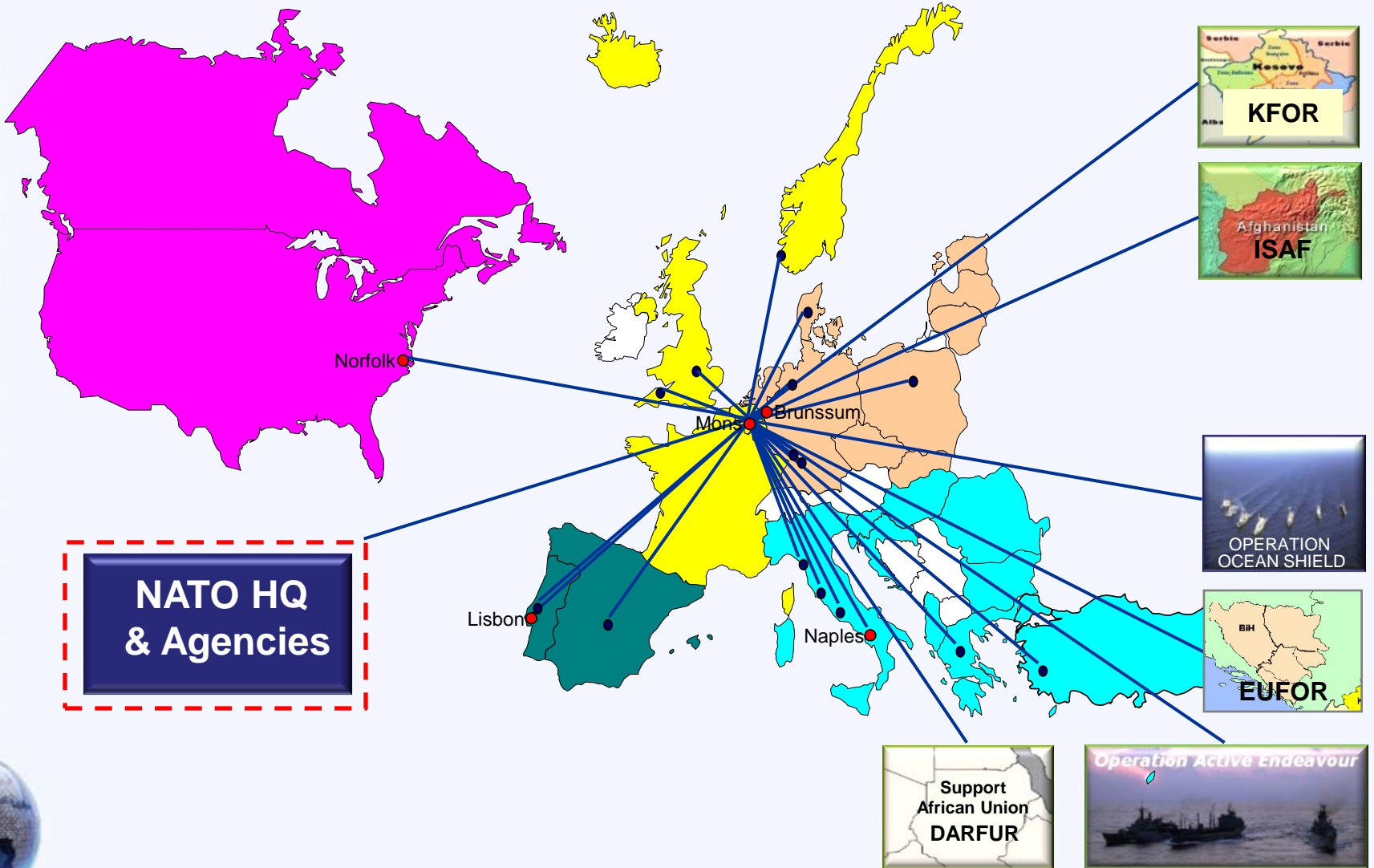
CONNECTING NATO



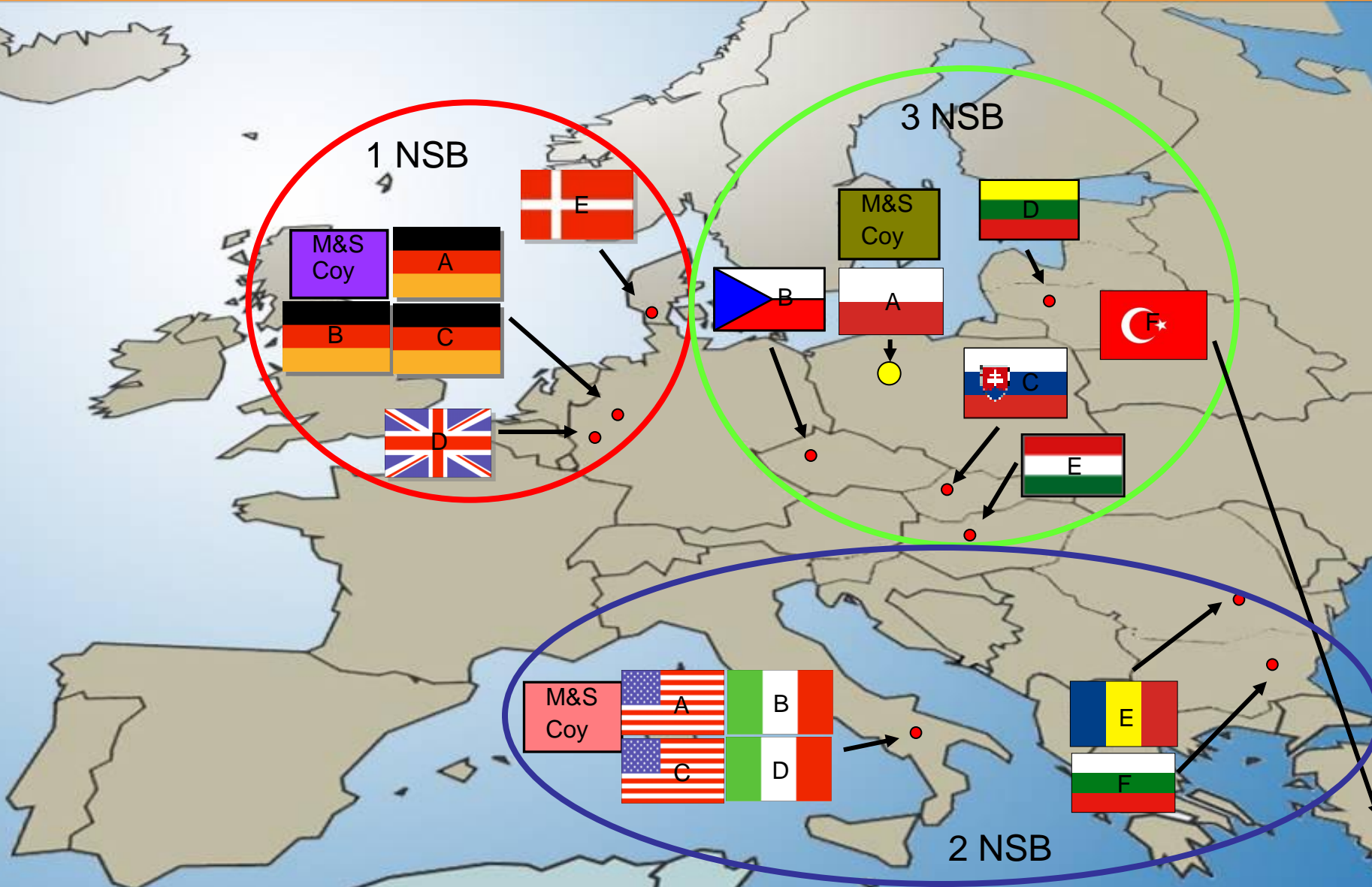
# NCSA Area of Responsibility



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# DCIS FOOTPRINT



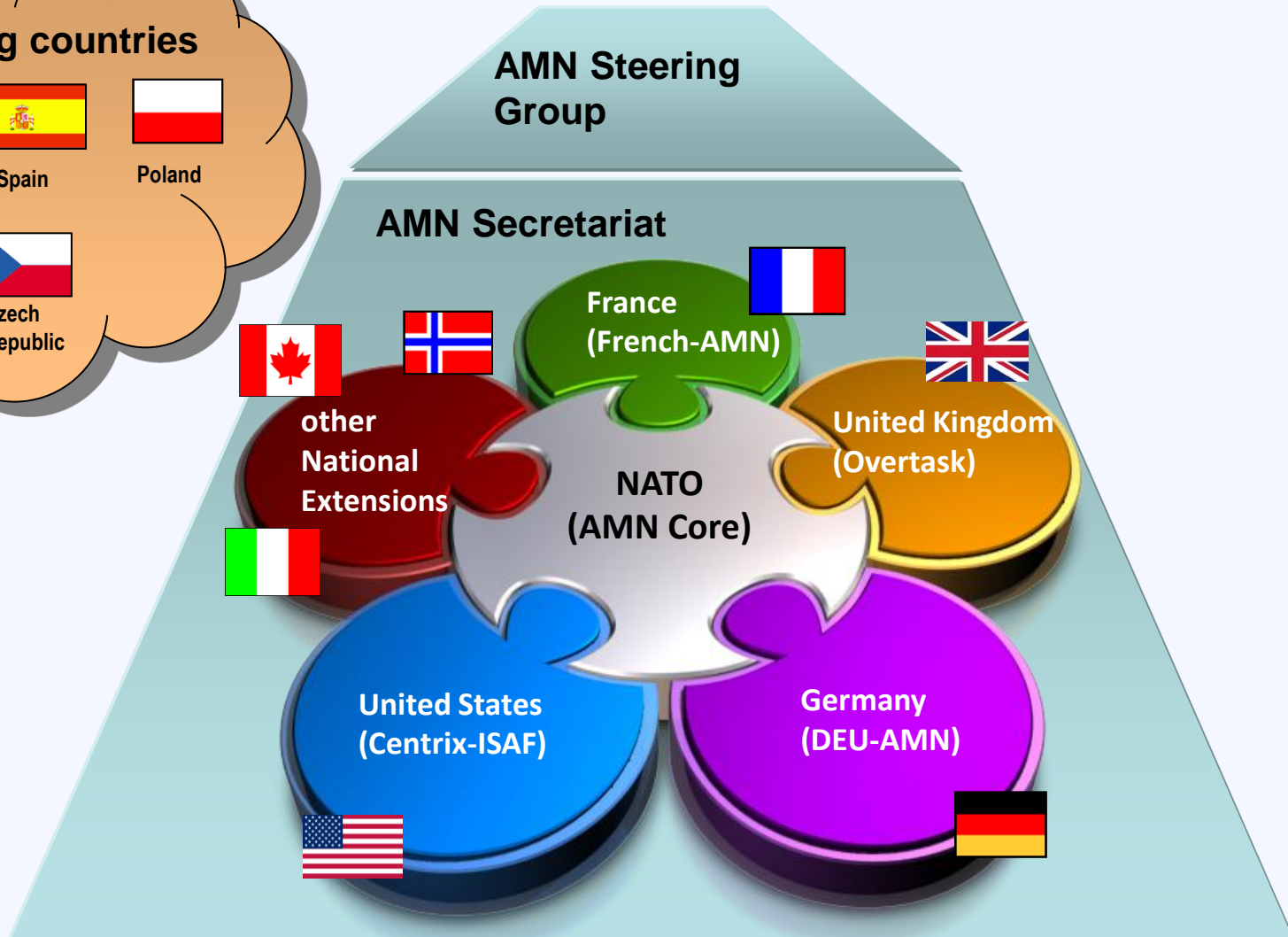
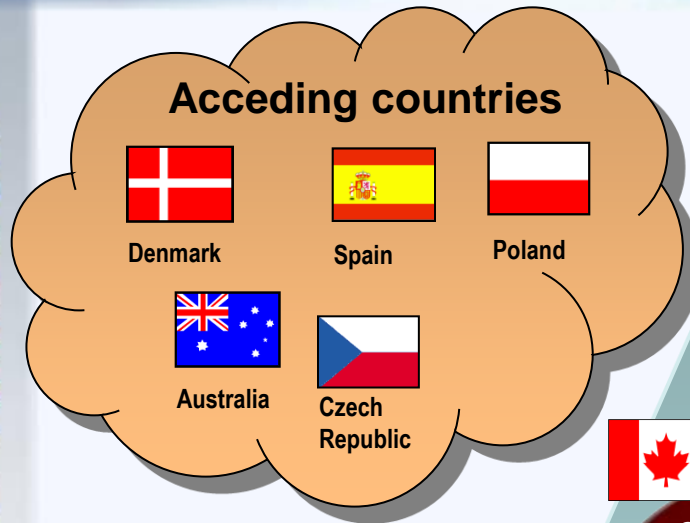
# CIS Support to ISAF

- Sustained CIS Support
- Coherent CIS Services
- Improved Service Management
- Flexibility and Responsiveness



# Afghanistan Mission Network - Governance -

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# CIS Support to Other Operations

- **Maritime Operations**
  - Operation Active Endeavor
  - Operation Ocean Shield
- **KFOR**



# CIS Support to Training & Exercises

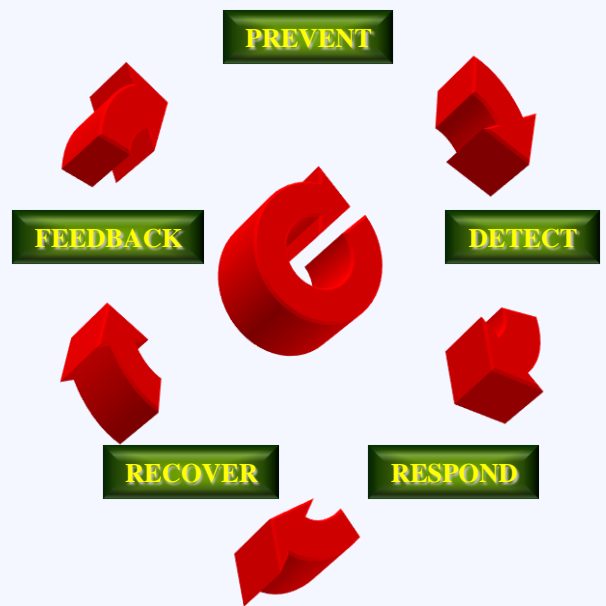
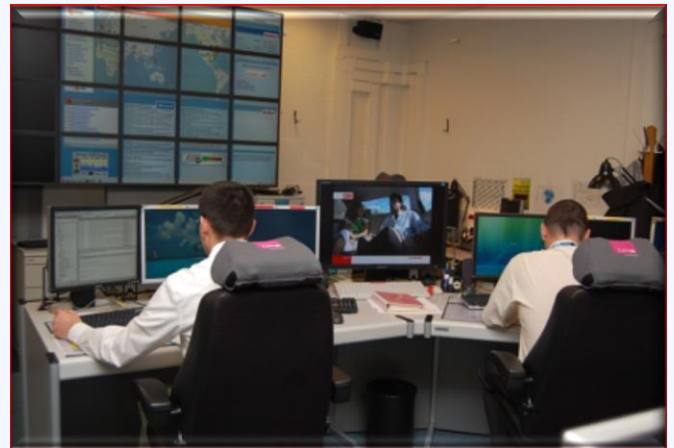
- Military Training and Exercise Plan
- More than 100 Events in 2011
- Focus on Pre-deployment Training/  
Exercises
- NRF Related Support



# Cyber Defence Services

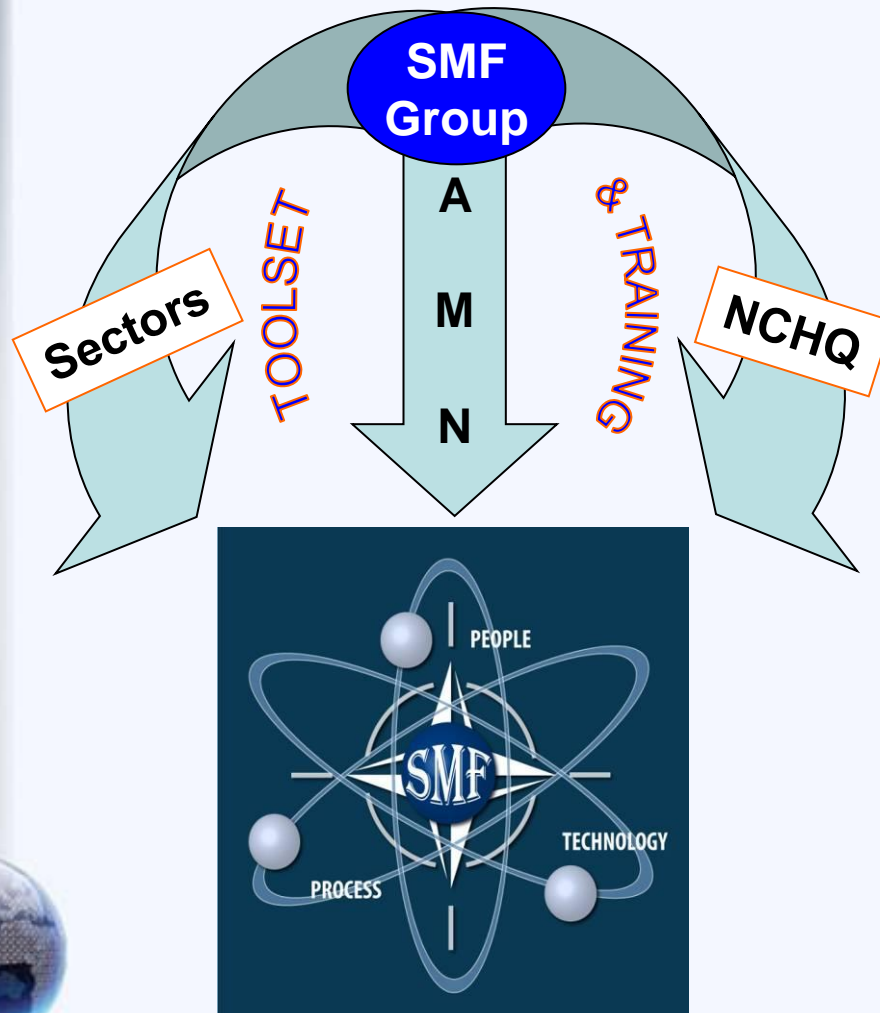
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- System Engineering
  - System hardening
  - Anti-virus
  - Forensics analysis
  - Advice to projects
- Incident Detection & Response
  - Intrusion detection
  - Incident handling
  - Web site monitoring
  - Email monitoring
- Vulnerability Management
  - Assessments and testing
  - Security awareness
  - Cyber Defence Exercises



# Service Management Framework (SMF)

CONNECTING NATO



## 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

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



# 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



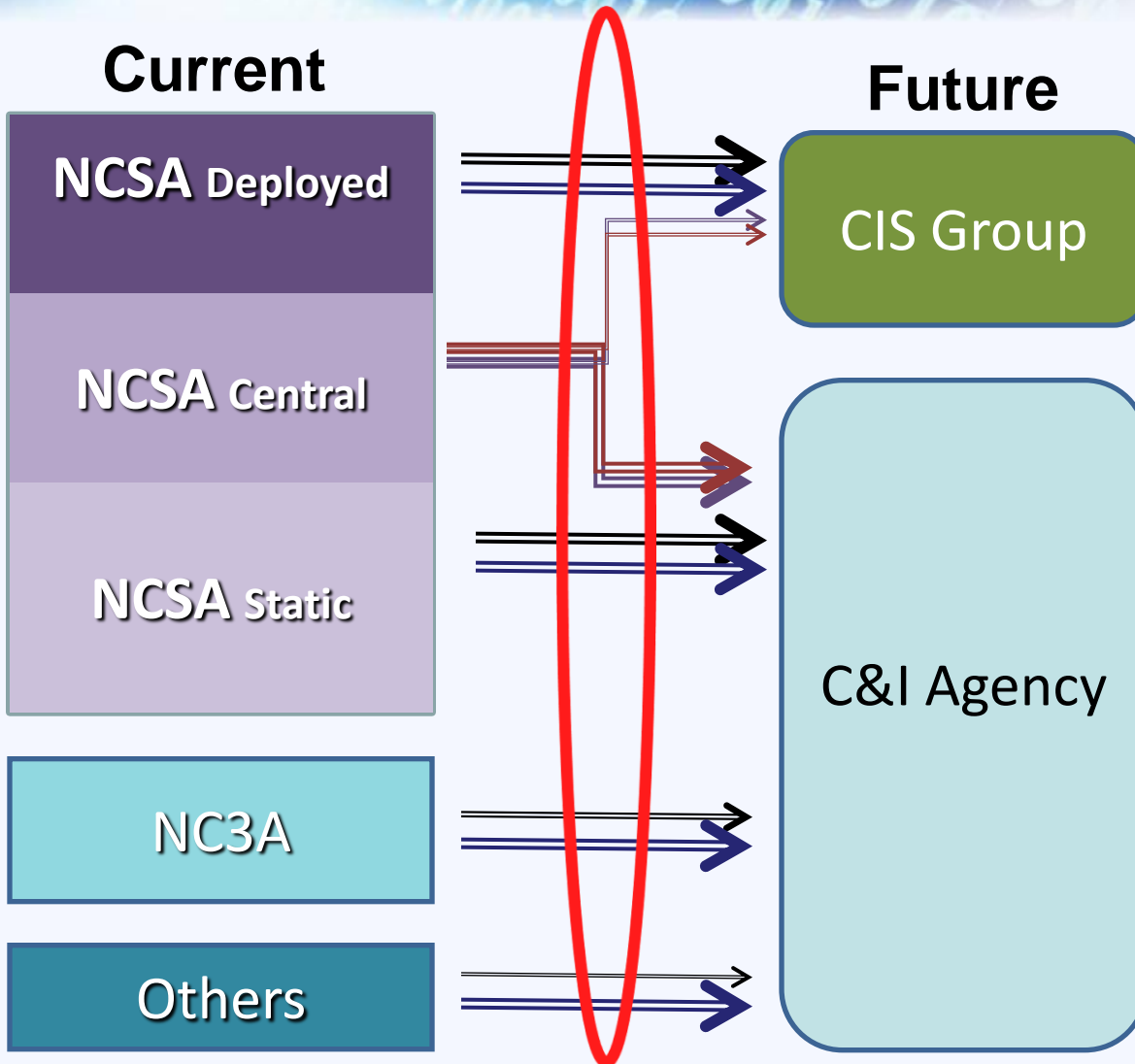
# Moving Forward ...

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# Future NATO CIS Structure

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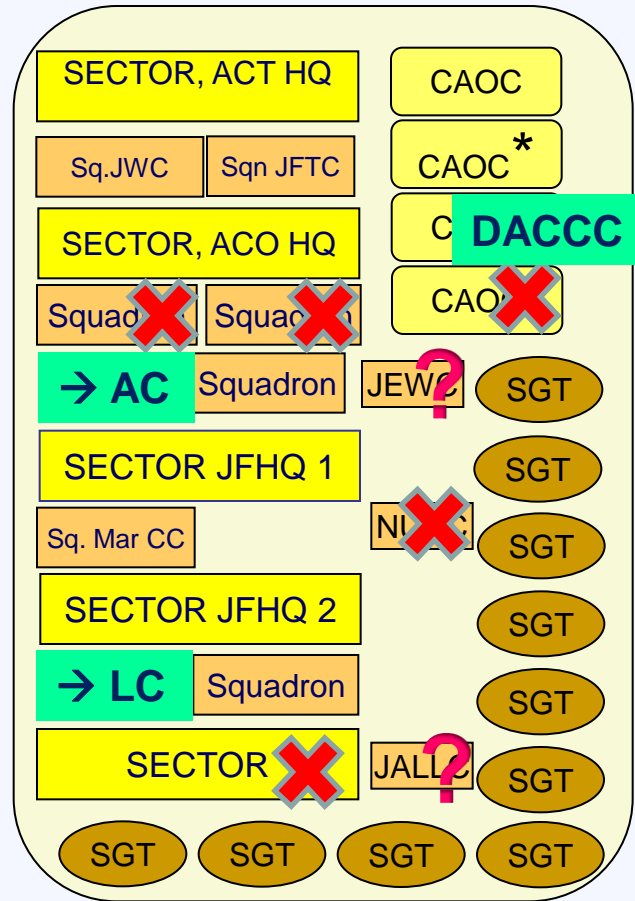
**Transition 1 Juli 2012**

NATO UNCLASSIFIED

# Impact of New NATO Command Structure On CIS

CONNECTING NATO

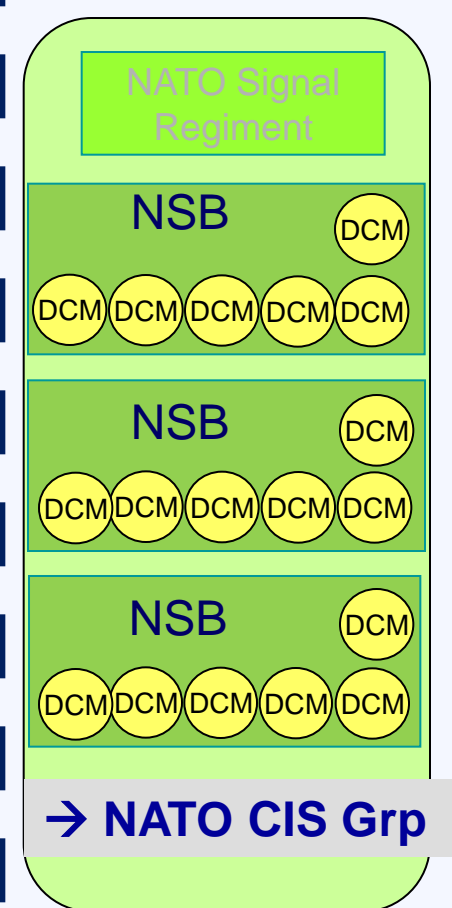
## STATIC



## CENTRAL



## DEPLOYABLE

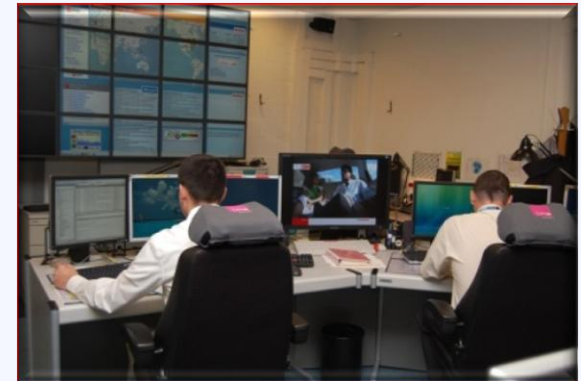


**CLD, NCISS, and NPC → C&I Agency**



# 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 ...

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# Questions?

