NATO Consultation, Command and Control Agency

Born Interoperable Solutions with the NATO Comprehensive C4ISR Approach

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SHAPE - Belgium
1. New Environment for NATO C4ISR Systems and NC3A Comprehensive C4ISR Approach
2. Multinational projects – NC3A proposal to NATO and Nations
3. NC3A C4ISR Catalogue – base for NNEC cooperative development
4. Born Interoperable Solutions with the NATO Comprehensive C4ISR Approach
Areas of C4ISR support to NATO & Nations
Realignment with the New Strategic Concept and National Strategies

- Energy Security
- Climate Change Issues
- Partnership / Enlargement
- Cyber Security
- Emergency Management Ops
- CRO/Expeditionary Ops
- Piracy Prevention/Fighting
- Fighting Terrorism

NC3A as a NATO Strategy Focused Organization

- Integrity
- Transparency
- Accountability

Comprehensive Support of New Strategic Concept Development - from Foresight / Scenarios to M&S, Analysis / Assessment and Planning / Exercises, facilitating the Consultations

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NC3A in relations with others

Use Comprehensive C4ISR capabilities

Deliver Comprehensive C4ISR capabilities

“Transparency for Interoperability and Quality in Secure Environment”
Since last NC3B on 11.11.09, following the approval of the proposed Comprehensive C4ISR Approach we developed and presented to NC3B on March 13 our brochure on this concept. Now we could report that have made progress in all three areas of implementation:

1. Extending our support to all Integrated Security Sector Players in addition to current focus on Defense in order to provide success for the Implementation of the NATO Comprehensive Approach:
   1. NC3A signed an MoU with Bulgaria and France to cooperate in C4ISR Area. For example in Bulgaria we were invited to provide advice to MoI, MoFA, MoTITC, in Italy to Carabinery and Special Service. Together with C3Staff we strengthened contacts with EU MS and our relations with EDA are improving in close coordination with ACT.
   2. Cooperation with NIAG and NCOIC is improving, relations with industry are progressing.
   3. We have signed a Cooperation Agreement with the Bulgarian Academy of Sciences in the area of Research, Development and Training.

2. Further development of cooperation model with NATO commands and agencies for integrated support of the life cycle of C4ISR systems for NATO and Nations:
   1. MoU for cooperation in implementing of the Comprehensive Approach in support to NATO and Nations is under negotiation with NAMSA.
   2. Under development of Multinational Integrated C2 for Air Domain project closer cooperation with NPC and ACO was established.
   3. The support NC3A provides to other Agencies and NATO organizations through C4ISR projects and shared services is improving and cooperation with BICES is progressing.

3. Identifying and activation of new opportunities for funding of C4ISR projects in support of NATO and Nations:
   1. White paper for NATO C4ISR Integration Fund was developed and consultations with Nations started.
   2. NC3A provided support to SEE Defense Ministerial Process to launch a C4ISR cooperation project by invitation of Bulgaria as a current chairing Nation for the process. Very successful CIO conference for SEE was organized 24-25 February 2010. Our team is fully integrated in all key meetings of SEDM-CC and SEE BRIG PMSC and we look forward to support next SEDM Ministerial meeting in Albania. White paper on C4ISR support to Regional Defense Cooperation Initiatives is prepared.
   3. White paper was developed and process of consultations started on Multinational C4ISR Projects. Some initial consultations started on proposals for Multinational ICC, MSA, C-IED, CIMIC, Cyber defense, CAX, Operational and Capability Planning.

In addition the NC3A approved Cooperation development Strategy, works on Customer Support Plan and has delivered first ever Catalogue of C4ISR Expertise that will evolve further to a Handbook to use NC3A in Support to C4ISR needs of NATO and Nations / Organizations.

Our future steps are in the areas to:

1. Finalizing NC3A Customer Support Plan to be presented to NC3B in November.
2. Strengthen new established NC3A Situation center as an entry point for all customers and maintaining comprehensive picture on NC3A operation with customers.
3. Activate a Tiger team to explore new opportunities for C4ISR support to NATO and Nations.
MN Projects Generation
with Embedded Interoperability

NATO & Partner Nations

NAC / CNAD, NC3B
(Transformation Authority)

NC3O
(Nation-NC3A (charter))

NC3A
(facilitator & implementation Authority)

Other NATO Entities

NATO C3 Agency

ACO
(Operational Authority)

NCSA, NAMSA
(Support Authority)

ACT
(Transformation Authority)

National MODs, etc.
(National operational, transformation, support authorities)

MN Project

Results Benefiting Both NATO and Nations

Cooperation / partnership

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MNPI started as part of the Comprehensive C4ISR Approach to support NNEC for NATO and Nations. Funding is from SIP to CD and followed by MN on two levels – governance and implementation.

Cooperation Development Concept - Stages

- Feasibility Preparation
- Execution (Annual POW)

Time:
- 2009
- 2012
- 2013 ...
- 2016

Effort:
- DSA N&N CD Funding (SIP Funding)
- Self Sufficient
NC3A Proposals for Multinational Cooperation

- **Multinational (MN) Success Stories:** MAJIIC; TACOMS; NRC-CAI
- **MN Initiatives in Preparation Phase:**
  - MN Integrated Command & Control (ICC) with ACO
  - MN Counter Improvised Explosive Devices (C-IED) with ACT
  - MN Maritime Situation Awareness (MSA) with ACT
- **MN Projects in feasibility**
  - MN Project Office for AMN/AMN-U (POAMN) with ACO
  - MN Expert Visual Met (VISME) with ACO
  - MN Alliance Defence Analysis and Planning for Transformation (ADAPT) with ACT/DPPD
  - MN Computer Aided Exercise / Joint Exercise Management Module (JEMM) with ACT
  - MN Cyber Defence Engineering Support (CDES) with ACT
  - MN Civil-Military Cooperation (CIMIC) with ACT
  - Regional C4 Cooperation in SEE with SEDM
- **DNBL/CFBLNet supports all MN Project and brings Industry and R&D Community in to support Interoperability**

MN Cooperation allows nations to share costs on programmes of common interest. NC3A can help in several ways:

- Legal & contractual issues
- Programme /Project management
- Technical management
- Acquisition support

NC3A has significant existing experience in helping nations run multinational programmes - MAJIIC; TACOMS; NRC-CAI.

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6. MN Civil-Military Cooperation (CIMIC) with ACT

DNBL/CFBLNet supports all MN Project and brings Industry and R&D Community in. I want this Board as BoD to NC3A to encourage Nations in joining this effort, following the vision of SecGen and Defense Ministers on collaborative capability development.

MN projects under NC3B/NAC approval are open for partner Nations as well.
• Development started in September and is now available for Nations and Organizations

• More than 50 entries with special chapter on Interoperability

• All CAT expertise, but added are acquisition services, legal services, finance management services, BLST services (incl. DNBL), training

• Not only expertise areas, but model of their implementing through projects in support to nations

• Leaflets available on request for supporting TA development
Several critical themes are shared amongst nations

- Challenge of move to NEC, SOA
- Information assurance & cyber warfare
- Air and Maritime C2 and air surveillance
- Deployable CIS, shift to expeditionary missions
- Cross-domain information exchange, ASDE, civ-mil
- Proven interoperability, standardisation, testing
- Modelling, simulation & training
1. Coordinate with HQ, ACT, ACO and Nations requirements for capabilities
2. Use toolbox of tested elements (from NC3A or Industry Catalogue) and proven interoperability
3. Be sure Information Assurance and Cyber Defense aspects are addressed
4. Implement Service Oriented Architecture Approach to scope the solution in cooperation with NCSA
5. Pursue Test and Validation through DNBL and CAX
6. Manage development through Multinational Program Office
7. Use NATO Programming Center and NAMSA to support the solution
Cooperation in support of Interoperability

NC3A
- CAX
- Acquisition, R&D
- DNBL

Operations

NCSA
- FX
- CPX
- PE
- Training

NAMSA

ACT
Industry
Nations

ACO
Nations
Mil/Civ Personnel

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Conclusion

- Interoperability in secure environment – one of the 4 priorities of NC3A General Manager.
- Collaboration between NC3A and Nations is the key to keep interoperability on the level required for operations.
- Multinational projects in the “Born Interoperable” Framework are proven solution for Interoperability Challenge (this is improvement in accordance with MAJIIC and TACOMS – one for bridging existing systems, other to develop standards)

Offer to the Nations / Organizations:

1. Catalogue, Toolbox and Architecture development capability
2. Test and experimentation with DNBL, support to CAX
3. Acquisition and implementation of NATO interoperable capabilities (SOA, BOA with Industry)
4. Program office support for MN projects (executive agent or even fund management agent)
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