NATO Centres Of Excellence

2012

This catalogue aims at highlighting the scope of the work being carried-out by NATO accredited Centres of Excellence (COE), and provides a reference for those who seek to understand and utilise them even better.

In the past seven years, since the first was accredited, the COEs have more than proven their versatility and training capabilities, collected lessons learned, improved force interoperability effectiveness. Performing in specific areas of expertise, COEs have contributed to, assisted with experimentation and evolved doctrine for today's security challenges and beyond. To date, there are sixteen NATO accredited COEs, with five more in the accreditation process, and more in the "idea" stage.

As Nation-sponsored entities, COEs offer a unique agility not only for capability development, but also for support to training and operations. They respond to relevant and time-critical problems as well as projects for future needs. Another value of these entities is that they deliver expertise directly back to their Sponsoring Nations, and at the same time to partners such as the United Nations, academia and Non-Governmental Organizations. NATO COEs are a great credit to the Nations, and serve as solid models of multinational solutions.

There are many successful examples of how NATO COEs have benefitted the Alliance; too many to list them all in this brief introduction. So, let me finish by stressing how fully I support the COEs network, and how great an importance I place on their ability to converge around coherent practices to address emerging challenges. This is all the more important in regards to the on-going and future shrinking of the NATO Command Structure.

Stéphane Abrial
General, French Air Force
Supreme Allied Commander Transforma

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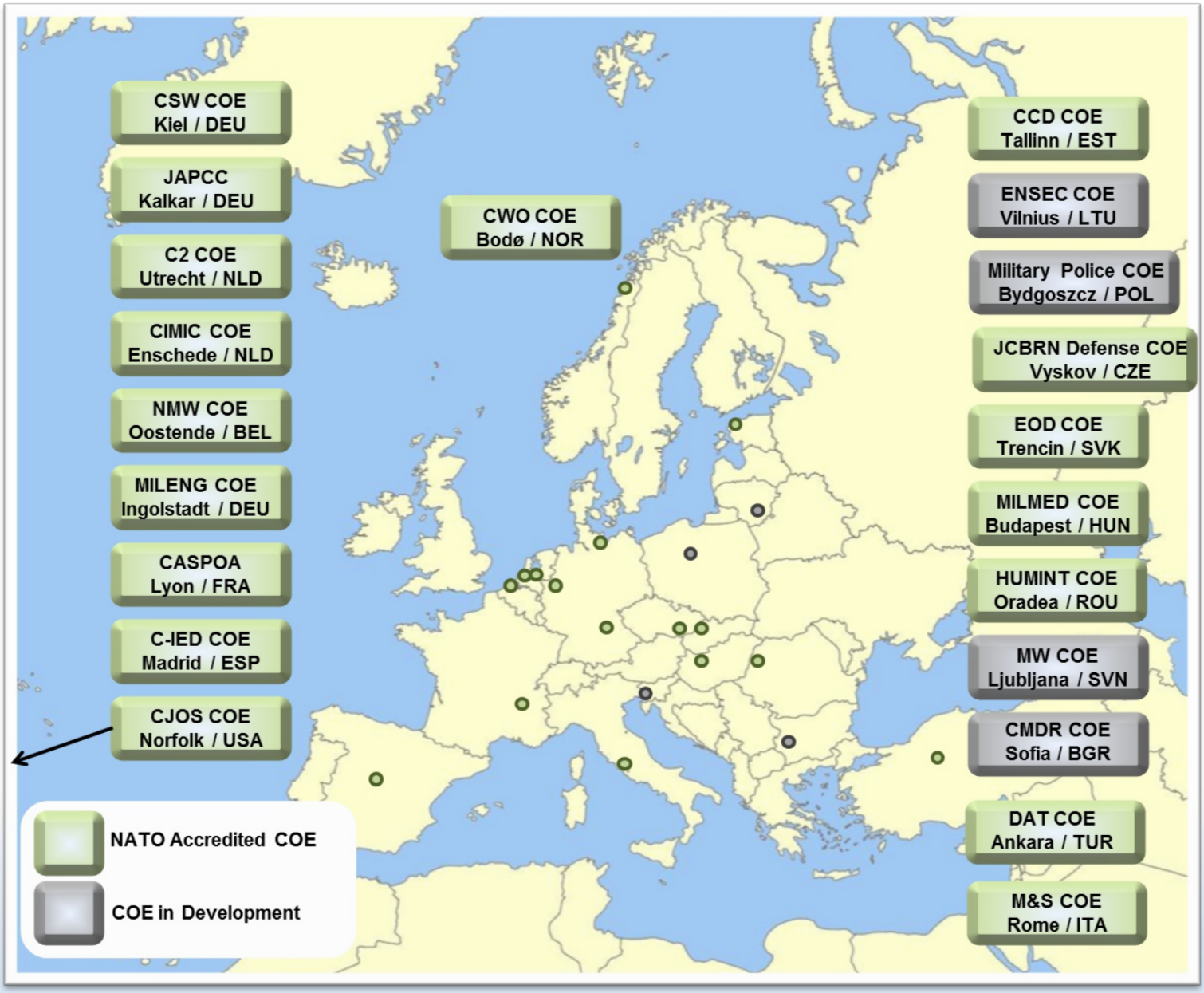
COE Locations



As of August 2012

What is a NATO COE?

The idea for NATO COE originated in MC 324/1 "The NATO Military Command Structure," dated 14 May 2003. The Military Committee refined this idea into MCM-236-03 "MC Concept for COEs," dated 04 Dec 2003. Once the idea and the concept were firmly established, the accreditation was next. In 2004, IMSM-0416-04 —NATO COE Accreditation Criteria were agreed on and the first NATO COE was accredited on 01 Jun 2005.

The definition of a NATO centre of Excellence as defined by MCM 236-03 is:

A COE is a nationally or multi-nationally sponsored entity, which offers recognised expertise and experience to the benefit of the Alliance, especially in support of transformation. It provides opportunities to enhance education and training, to improve interoperability and capabilities, to assist in doctrine development and/or to test and validate concepts through experimentation. A COE is not part of the NATO Command Structure (NCS), but forms part of the wider framework supporting NATO Command Arrangements (NCA).

Principles:

COE are nationally or multi-nationally managed and funded at no cost to NATO and are open for participation by all member states. They conform to appropriate NATO procedures, doctrines and standards. Additionally, they should not duplicate assets and resources or compete with capabilities that already exist with NATO. The Strategic Commands form relationships with their respective COEs through specific Memorandum of Understanding (MOU) arrangements developed between the Sponsoring Nations (SN) and with NATO.

Resources:

The SN, presently ranging from 1 to 17 in a COE, provide the budgets which range from 7,000 to 27,500 Euros per officer position per year. The number of personnel in a COE ranges from 4 to 97. The 16 accredited COE have 732 non-NATO Command Structure Peace Establishment (PE) positions. Approximately 560 of the positions are filled (230 non-host Nation positions). SN are encouraged not to populate a COE at the expense of NATO billets in the NCS. Nations can also use their COE personnel to be represented in the numerous NATO working groups and panels. This allows SN to save costs and, at the same time, provide a subject matter expert who is constantly involved with the area of expertise.

There are many reasons why a nation decides to offer a NATO Centre of Excellence. One of the most common reasons is to contribute to NATO whilst at the same time directly benefiting one or more Nations.

The number of NATO COE are constantly growing but the basic principle remains the same: NCA are supported by a network of COEs which are nationally or multi-nationally managed and funded and open for participation by all member states.

Background References for NATO COE:
MCM-236-03 MC Concept for COE, 04 Dec 2003
IMSM-0416-04 NATO COE Accreditation Criteria, 11 Jun 2004

Command and Control Centre of Excellence (C2 COE)
Framework Nation: The Netherlands
Location: Utrecht, Netherlands
PE Posts: 21 out of 22

Mission

The C2 COE will support NATO, nations and international institutions/organizations by providing subject matter expertise on all aspects of the Command and Control (C2) process with a focus on the operational environment.

To achieve this mission, the C2 COE's aim is to become a national and international main source of expertise for transformation in the domain of C2 by networking with Sponsoring Nations, ACT, and ACO as well as other international institutions/organizations.

- Be a worldwide well known and appreciated entity in the C2 and operational communities of interest, playing a catalyst role in the further development of C2.
- Offer an important contribution to NATO missions.
- Heavily support the NRF NNEC assessment programme.
- Organise workshops, seminars and conferences as possibilities to build and strengthen social networks and transmit our knowledge and experience with(in) NATO and (Sponsoring) Nations.
- Publish documents related to, transformation, of C2.

2011 Major Work Items

Conducted C2 in Comprehensive Approach workshop.
C2 Assessment of Operation Unified Protector.
Provided NEC awareness training to relevant NTM-I/NTM-A staff in theatre and during pre-deployment training.
NEC development.
NNEC assessment of deployable forces.
Assessment report NRF 17.
Provided Subject Matter Expertise to NATO training and exercises.
Conducted seminar C2 in an NEC environment.
Supported implementation of NATO Common Operational Picture.
Continued support to NATO School.
Supported NATO Individual Training and Education Programme (ITEP).
Conducted workshop on social media and the power of knowledge.
C2 Assessment of NRF 2012 and provided full report to HQ SACT.
Promotion of Comprehensive Approach to crisis management.
Provide NNEC awareness briefings.

2012 Programme of Work Items in Support of NATO

- Afghan Mission Network assessment from the operational perspective in theatre.
- C2 assessment of deployable forces.
- NRF assessment.
- Support the NATO Defence Planning Process and Capability Requirements 2012 review.
- On-going support to NATO education and training.
- Develop Concept of Operations for land competency and proficiency for new NATO Command Structure.
- Support SACT in developing Geospatial Information System requirements.
- Continue support to NATO Lessons Learned and best practices development and collection.
-

COE Address

Visiting address:

Command and Control COE
Building K01
3584AB UTRECHT
The Netherlands

Postal address:

Command and Control COE
P.O. Box 90004
3509 AA UTRECHT
The Netherlands

COE Contact Information

Phone: +31 (0)30 21 87 012
Fax: +31 (318) 68 31 05
Email: jep.hendricks@c2coe.org
Website: Http://www.c2coe.org

Director

Colonel A. P. P. Visser, NLD A
Phone: +31 (0)30 21 87 000
Email: a.visser@c2coe.org

Analysis and Simulation Centre for Air Operations (CASPOA)
Centre d'Analyse et de Simulation pour la Préparation des Opérations Aériennes
Framework Nation: France
Participating Nations : USA, Italy, UK
Location: Lyon, France
PE Posts: 38 out of 50

Mission

The CASPOA's main task is to prepare present and future NATO air operations in combined joint environments.

As an « Air C2 expert », CASPOA is experimenting new concepts and doctrine, educating and training personnel to plan, task and control Air operations. Moreover, capitalizing on the collection of lessons identified, it feeds the NATO Lessons learned process, contributing thereby to enhancing the efficiency and effectiveness of the Joint Force Air component structures.

2011 Major Work Items

- In 2011, CASPOA establishes 54 courses, educating and training more than 528 personnel from 18
  countries (as of 18 oct/ total expected for 2011: 700)

  - New JTS (targeting) and PR (Personnel Recovery) courses ;

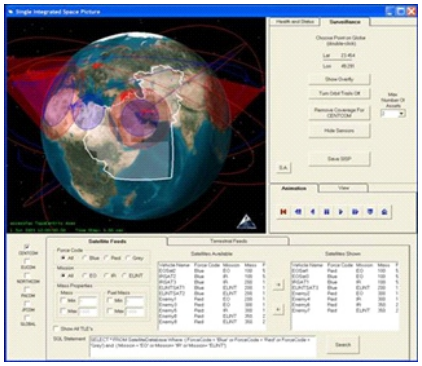
  - Support of NRF by education, training and SME;

  - Operation unified protector:
    SME in air planning;
    Air C2 tools instructions in CFACUP;
    collection and analysis of Lessons identified;

  - Adaptation of courses for future E&T;
-
  - Collaboration with NATO Agencies on testing upgraded tools.

Way ahead for 2012

- Participation to the establishment of unified protector Lessons learned;
- New “TOPFAS” course;
- Participation to MNE7 program;
- Increased contribution to ETOC and e-ITEP programs;
- Participation to “access to global commons” works.



COE Address
CASPOA COE
Base Aérienne 942
BP19
69579 LIMONEST Cedex
France
N 45° 51’ 05 E 4° 47’ 12

COE Contact Information
Phone: +33 (0) 4 81 18 33 56/53
Ikm : +33 (0) 4 78 14 31 98
Fax: +33 (0) 4 81 18 33 58
Email:studentoffice@caspoa.org (for courses)
ikm@caspoa.org (for other issues)
Website: www.caspoa.org
NS site :
http://wise.defensenns.gouv.fr/WISE/CASPOA

Director
Colonel Philippe Zivec
Phone: +33 (0) 4 81 18 33 60
Email: philippe.zivec@intredef.gouv.fr

NATO Cooperative Cyber Defence Centre of Excellence (CCD COE)
Framework Nation: Estonia
Location: Tallinn, Estonia
PE Posts: 21 out of 28

Mission

To enhance the capability, cooperation and information sharing among NATO, NATO nations and Partners in cyber defence by virtue of education, research and development, lessons learned and consultation.

The vision of the CCD COE is to be the main source of expertise in the field of cooperative cyber defence by accumulating, creating, and disseminating knowledge in related matters with NATO, NATO nations and partners.

Program of Work:

- The primary aim of the CCD POW is to support work on the most pressing cyber defense issues facing NATO. Within the domain of cooperative cyber defence, CCD COE cores areas of research include:
  - Legal and Policy
  - Concepts and Strategy
  - Tactical Challenges and Solutions

2011 Major Work Items

Participated in Cyber Defence Exercises.
Organised Technical Courses:
Cyber Defence Monitoring Solutions
IT Systems Attacks and Defence
Botnet Infiltration Training
Security Events Management
Hosted the 3rd International Conference on Cyber Security. Videos of the 2011 conference are available at: www.ccdcoe.org/iccc/materials (Username: C6guest, Password: C6conference)
Published multiple papers and books addressing cyber threats, security and solutions. All the publications can be downloaded from the Centre homepage.

Books:
"3rd International Conference on Cyber Conflict. Proceedings"
"Frameworks for International Cyber Security. Part 3"
"Strategic Cyber Security"
Articles:
"An Introductory Study to Cyber Security in an NEC"
"Applying time-dependent algebraic systems for describing situations"
"A Usage-centric Botnet Taxonomy"
"CoCoViLa as a multifunctional simulation platform"
"Composition of Services on Hierarchical Service Models"
"Estonia after the 2007 Cyber Attacks: Legal, Strategic and Organisational Changes in Cyber Security"
"Evolutionary Algorithms for Optimal Selection of Security" "Methods for Detecting Important Events and Knowledge From Data Security Logs"
"On the Arms Race Around Botnets – Setting Up and Tracking Down Botnets"
"Quantitative system reliability approach for optimizing IT security costs in an AI environment"
"Sun Tzu and Cyber War"
"Theoretical Offensive Cyber Militia Models"
"Ten Rules for Cyber Security"

2012 Programme of Work Items in Support of NATO

- Training Courses on Cyber Defence:
  The Centre will continue to provide training courses in the same areas as 2011. The number of courses will be increased to satisfy the high demand for specialist training.

- 4th International Conference on Cyber Conflict CyCon 2012 (for more info please visit www.cycon.org):
  In 2012 the conference will focus on military and paramilitary activities in cyberspace. This topic will be explored from the political, legal and technical perspectives within two parallel tracks

- Technical Cyber Defence Exercise:
  Goal of the exercise is to give its participants a hands-on experience in defending computer networks. The exercise will take place in March 2012 and it will concentrate on the defending the communication systems.

- Development of Cyber Defence requirements for NNEC.

- Continued improvement to the Alliance computer network defence capabilities.

- Analyse the cyber threat to NATO HQ.

COE Location
NATO Cooperative Cyber Defence Centre of Excellence
Filtri tee 12, Tallinn 10132, Estonia

Director
Colonel Artur Suzik, EST Army
Phone: +372 717 6800
Email: artur.suzik@ccdcoe.org

COE CONTACT Information
Phone: +372 7176 800
Email: ccdcoe@ccdcoe.org
http://www.ccdcoe.org

Public Affairs
Kristiina Pennar
Phone: +372 7176 811
Email: kristiina.pennar@ccdcoe.org

C-IED Centre of Excellence (C-IED COE)
Framework Nation: Spain
Location: Madrid, Spain
PE Posts: 29 out of 54

Mission

To provide subject matter expertise in order to support the Alliance, its Partners and the International Community in the fight against Improvised Explosive Devices (IED) and cooperate to increase security of Allied Nation and troops deployed in theatres of operations, reducing or eliminating the threats from IED used or for use in particular by terrorists or insurgents.

- The primary aim of the C-IED COE POW is to reduce the strategic impact of IEDs in Afghanistan and future conflicts by limiting their tactical and operational effects. Responsibilities include:
    - Driving the collection of technical information.
    - Developing, in coordination with HQ SACT, advanced multinational courses for C-IED experts.
    - Identifying the adversary's Tactics, Techniques and Procedures.
    - Identify emerging threats and predict future actions.
    - Assisting in the development of C-IED analysis priorities and drafting of analyses of C-IED Lessons Learned (LL's).
    - Supporting dissemination of informing of new technical capabilities applicable to C-IED prediction-prevention.
    - Identifying activities and technologies involved in the detection and neutralization of IED components.
    - Identifying activities and technologies that provide protection for people, equipment and installations.
    - Carrying out concept development and experimentation. Assist in setting up standards for the evaluation of C-IED systems.
    - Analysing and comparing operational needs with the technological solutions in order to identify capability strengths and requirements.
    - Fostering the interoperability of electronic counter-measures and C-IED systems.
    - Providing nations with recommendations to guide C-IED acquisition policy.

2011 Major Work Items

- Organized the STAFF OFFICER AWARENESS and WEAPONS INTELLIGENCE TEAM courses.
- Offered On-Call teams ready to support C-IED training requirements upon request.
- Established links of cooperation among organizations working on C-IED issues (EU-EUROPOL, DAT-COE, EOD COE, C-IED TFs, JIEDDO, TEDEC).
- Chairmanship of the C-IED NATO Working Group and the European Defence Agency C-IED Project Team.
- Involved in IED Data Base and Integration Tool software development.
- Participated in the Intelligence and Fusion Capability Study and in the Biometrics policy definition, both led by ACO.

2012 Programme of Work Items in Support of NATO

- Provide out of theatre weapon's intelligence training.
- Perform as the coordinator for C-IED lessons learned and share with C-IED Community of Interest.
- Complete revision of NATO STANAG 2294 C-IED Training Standards.
- Provide analysis on current and past IED data to identify emerging threats.
- Develop recommendations and courses of action regarding international reduction of IED attacks.
- Provide Subject Matter Expert Support to Partner Nations.

COE Address
C-IED COE
CTRA. M-618 KM 10.400
28240 Hoyo de Manzanares
MADRID
SPAIN

Director
Colonel Santiago San Antonio, ESP A
Phone: +34 918 562 482
Email: ssandem@c-iedcoe.es

Civil-Military Co-operation Centre of Excellence (CIMIC COE)
Framework Nations: Germany and The Netherlands
Location: Enschede, The Netherlands
PE Position: 51 out of 56

Mission

To assist NATO, Sponsoring Nations and other military and civil institutions/organisations in their operational and transformation efforts in the field of civil-military interaction by providing innovative and timely advice and subject matter expertise in the development of existing and new concepts, policy and doctrine; specialised education and training; and the contribution to the lessons learned processes.

The primary aim of the CCOE POW is to provide support, create products, offer specialised education and training, in order to enhance the general knowledge about CIMIC/CMI, and to enable military and civil operators to conduct CIMIC/CMI related tasks in different missions and scenarios, while simultaneously contributing to the lessons learned process.
CCOE also aims to provide subject matter expertise in order to support the transformational and operational requests of the Strategic Commands, the Sponsoring Nations and other Customers. This includes the contribution to the development of CIMIC/CMI-policy, doctrine and standards.

2011 Major Work Items

Doctrine, Concepts and Experiments

- Support to the operationalisation of NATO's contribution to a Comprehensive Approach
- Entry of CIMIC doctrine into ratification as AJP 3.4.9
- Contributing to the development/revision of CIMIC/CMI policy
- Provision of CIMIC SME support to the development of other doctrinal elements
- Development and finalisation of 'Advanced Cultural Competence Model' (including work onthe related publications)
- Release of ISAF related studies
- Support to the Task Force on building capability through multi-national approaches
- Support to and participation in NATO and Multi-national experiments (Countering Hybrid Threat, MNIOE, CIMIC in a maritime environment)

Education & Individual Training (E&IT)

- Reshaping the NATO CIMIC /CMI E&IT landscape
- Developing ADL CIMIC Awareness Course (NCAC)
- Support to NATO Operational Planning Course, NSO, MNCG
- Conducted following courses:

- Former CIMIC landscape
- NATO CIMIC Basic Course (NCBC)
- NATO CIMIC Staff Officer Course (NCSC)
- CIMIC Liaison Module (CLM
- CIMIC Functional Specialist Course (CFSC)
- NATO CIMIC/CMI Higher Command Course (NCHCC)

- New landscape CIMIC Courses
- NATO CIMIC Field Worker Course (NCFWC)
- NATO CIMIC Staff Worker Course (NCSWC)
- NATO CIMIC Liaison Course (NCLC)
- NATO CIMIC Functional Specialist Course (NCFSC)

Exercises

Providing Subject Matter Expert support to NATO, Sponsoring Nations and other entities (including ISAF preparation) e.g. Steadfast Series, Viking, Common Effort.

2012 Programme of Work Items in Support of NATO

Doctrine, Concepts and Experiments

- Support to the operationalisation of NATO's contribution to a Comprehensive Approach
- Contribution of CIMIC SME within the role as custodian for CIMIC doctrine
- Contributing to the development/revision of CIMIC/CMI policy
- Support to the development and revision of CIMIC planning documents and tactical procedures
- Contribution to the operationalisation of CMI requirements/procedural foundations
- Further development of "Advanced Cultural Competence Model" (including the release of related publications)
- Support to and participation in NATO and Multi-national experiments (Countering Hybrid
- Threat, MNIOE, Collaborative assessment)

Education & Individual Training (E&IT)

Conduct following courses:

- NATO CIMIC Field Worker Course (NCFWC)
- NATO CIMIC Staff Worker Course (NCSWC)
- NATO CIMIC Liaison Course (NCLC)
- NATO CIMIC Functional Specialist Course (NCFSC)
- NATO CIMIC/CMI Higher Command Course (NCHCC)

Operate the new ADL CIMIC Awareness Course (NCAC)

Exercises

Provide Subject Matter Expert support to NATO exercises Sponsoring Nations and other entities (including ISAF preparation).

COE Address

Visitor's address:
CIMIC Centre Of Excellence
Complex Twente - Building C1
Lonnekerveldweg 30
7524 PP Enschede
The Netherlands

Mail address:
CIMIC Centre Of Excellence
PO Box 5013
7500 GA Enschede
The Netherlands

COE Contact Information
Phone: +31 53-480-3400
Fax: +31 53-480-3444
Email: registry@cimic-coe.org
Web: http://www.cimic-coe.org

Director
Colonel Hans-Jürgen Kasselmann, DEU A
Phone: +31 53-480-3410
Email: Kasselmann.h@cimic-coe.org

Combined Joint Operations From The Sea Centre of Excellence (CJOS COE)
Framework Nation: United States
Location: Norfolk, United States
PE Posts: 27 out of 32

Mission

The Combined Joint Operations from the Sea Centre of Excellence is an independent, multinational, NATO-accredited organization hosted by U.S. Fleet Forces Command (USFFC) charged with developing and promoting innovative maritime concepts and doctrine in order for NATO, sponsoring nations, Allies and other international partners and organizations to effectively counter current and emerging global security challenges.

Vision

To be recognized as the pre-eminent centre for delivering coherent and innovative solutions to current and future challenges in combined jount maritime operations.

2011 - 2012 Major Projects

Maritime Security Cooperation
Provide advice, innovative concepts that deliver coherent solutions in addressing global challenges in maritime security

Allied Maritime Force Integration and Interoperability
Deliver a commander's handbook to improve integration of forces conducting allied operations and exercises

NATO C2/MSA
Provide support and advice to ACT and ACO that energizes the fusion of best practices to meet MSA needs for the Alliance

NATO Joint Operations on and from the Sea
Deliver an allied joint sea basing concept that encompasses the full range of capabilities maritime forces deliver

Support to the UN
Provide maritime advice to DPKO in support of ongoing UN operations

Provide support to ACT, Sponsoring Nations and other customers and COEs:
Maritime CIMIC, Global Commons, Humanitarian Assistance and Disaster Relief (HADR)

Published and On-going Work

Concept Papers

"A Framework for Enhanced International Maritime Security Cooperation."

"In what way could Maritime Unmanned Systems be used in Combined Joint Operations from the Sea?"

"Amphibious Operations Planning Study to identify TTPs and considerations to mitigate the asymmetric threat."

"The qualitative aspects and strategic utility of European aircraft carriers."

"Develop a generic command structure for future UN operations incorporating a maritime component."

"LIFE Concept to include a guide for HADR operations from the sea."

"Development of an Allied Interoperability Handbook to improve integration of forces during allied operations and exercises."

Experimental Tactics

EXTAC 789 "Tactics on Maritime Counter-Piracy"
ANNEX F to EXTAC 783(B), "Amphibious Force Protection during Ship-to-Shore Movement"
EXTAC 790A "Maritime Situational Awareness"

Point Papers

Role of "Special Forces in Counterinsurgency Operations"
"Joint Operations on and from the Sea capabilities booklet"
"Humanitarian Assistance to Combat Operations: The Full Spectrum Capabilities of Aircraft Carriers"
"UNIFIL Maritime Command and Control"

COE Address
Combined Joint Operations from the Sea
Centre of Excellence (CJOS COE)
1562 Mitscher Avenue, Suite 250
Norfolk, Virginia 23511

COE Contact Information
Phone: +1 757-443-9850
Fax: +1 757-443-9805
Website: www.cjoscoe.org

Director
VADM Michelle Howard, USN
+1 757-836-5201

Deputy Director
Cdre Stephen Chick, RN
+1 757-443-9850 x47007
Stephen.chick.uk@navy.mil

Deputy Director of Operations
CDR Linda Spangler, USN
+1 757-443-9850 ext 47502
linda.spangler@navy.mil

Centre of Excellence for Operations in Confined and Shallow Waters (CSW COE)
Framework Nation: Germany
Location: Kiel, Germay
PE Posts: 33 out of 41

Mission

The COE CSW shall act as a catalyst for NATO transformation. It will provide and advice principles for the planning and conduct of operations. The COE CSW will concentrate and advance NATO's expertise and capacities to conduct maritime operations in the specific areas of confined and shallow waters.

Therefore the COE CSW shall:

1. Develop Policies and Doctrines related to Operations in CSW,
2. Support Planning, Conduct and Evaluation of Exercises or Operations in CSW
3. Provide Inputs to the NATO Exercise Programming Process,
4. Provide Capabilities for NATO Education and Training

2011 Major Work Items

Played a leading role in maritime domain and participated in the analysis of ACT's Countering Hybrid Threat (CHT) Experiment.

Maritime Security Conference – co-hosted with CJOS COE. Theme: "Delivering Maritime Safety and Security in Global Partnership: Creating a Strategic Framework for Maritime Security Cooperation."

Contributed to the NATO Defence Planning Process Project Initiation Decision Paper.

Scenario for Harbour Protection/Force Protection Experiment.

Deployable MSA Component – focus on security of international waterways in coastal areas, estuaries, and riverine environments.

Detection of Unmanned Underwater Vehicles – supported NATO's innovative approaches to Multinational Capability Development.

MCM Operations in Confined and Shallow Waters – to identify emerging technologies and procedures to enhance NATO's ability to counter static underwater threats.

Maritime CIMIC Experiment – developed guidance and/or doctrine to assist the Maritime Commander in conduct of CIMIC in the uniquely different environment that Maritime Forces must operate in.

Surface-to-Surface Missile Trials into and from Confined and Shallow Waters

Future platform requirements for a CSW-Submarine

2012 Programme of Work Items in Support of NATO

Provide ideas and concepts for the use of networked autonomous vehicles and non-lethal capabilities for force protection in confined and shallow waters.

Support to the NATO Defence Planning Process and Capability Requirements review 2012.

Continuing support to Countering Hybrid Threats capstone concept development.

Provide Subject Matter Expertise to ACO Force Protection Working Group.

Augment evaluation teams for NRF certification process.

Support and participation in NATO exercises.

Contribution to NATO's Lessons Learned, Lessons Identified and Best Practises (LL&LI&BP)

Arrange together with CJOS COE the 2nd combined Maritime Security Conference. Theme is to examine how existing and future maritime security initiatives can be moved efficiently.

Develop a concept for the future employment and related operational requirements of corvettes in the littorals.

NEMO SOLUS SATIS SAPIT

COE Address
Centre of Excellence for Operations in Confined and Shallow Waters (COE CSW)
Schweriner Strasse 31
24106 Kiel
Germany

COE Contact Information
Phone: +49 431 384 1803
Email: http://www.COECSW.org

Director
+49 431 384 1000
dir@coecsw.org

Executive Director
+49 431 384 1800
execdir@coecsw.org

Centre of Excellence for Cold Weather Operations (CWO COE)
Framework Nation: Norway
Location: Bodø, Norway
PE Posts: 4 out of 4

Mission

The CWO COE will serve as the provider and coordinator for the full spectrum of expertise and capabilities in the field of cold weather operations by making primarily all Norwegian competence and secondarily, through coordination, all accessible related expertise of the other NATO Nations and Partner nations available for the transformation of NATO.

THE COE CWO is not one geographical location, but a concept that encompasses training areas, infrastructure, manpower and knowledge draw from all four services in the Norwegian Armed Forces, the Norwegian Defence Research Establishment and from military and civilian expertise.

2011 Major Work Items

- Course offerings include:
    - Officer's Winter Warfare Course
    - NATO Winter Warefare Course
    - NATO Winter Survival Course
    - NATO Avalanche Warning Course
    - Survival Evasion Resistance and Extraction Instructor Course

- Conducted Cold weather seminar. Topic: Leadership under cold weather operations and safe manoeuvring in winter environment.

- Production and custodianship of an Allied Joint Publication for cold weather operations.

- Published cold weather handbooks/directives with English translations.

- Performed cold weather operations fact finding in winter exercise Cold Challenge 2011.

- Provided Risk Assessment on Cold Weather Operations and cold injuries.

- Close coordination with Solvenia Centre of Mountain Warfare School for information and expertise exchange.

- Work to establish CWO working group with NATO and Partner nations.

- Strengthened multinational cooperation with Canada, Finland, Sweden, Slovenia, and United Kingdom.

- Presented Operational Risk Assessment to be used as planning tool for cold weather operations

2012 Programme of Work Items in Support of NATO

- Continue Cold Weather Operations training opportunities.
- Provide support to NATO Defence Planning and Process Requirements review 2012.
- Support the development of NATO Individual Training and Education Programme (ITEP).
- Support the development of NATO Education and Training Catalogue.
- Participate in the Training and Synchronization Conference.
- Contribute to the development of NATO Lessons Learned.
- Support Joint Force Training Centre's Regional Command Training and Above Kandak Training.
- Provide liaison and collaboration between JFCBS, NSHQ and CWO COE to ensure relevant cold weather operations information sharing takes place.

COE Address
Centre of Excellence Cold Weather Operations
NJHQ, Reitan/Bodø
P.O. Box 33
N-8058 Tverlandet
Norway

Director
LtCol Kurt Malme
kmalme@mil.no
+47 7553 6725

Defence Against Terrorism Centre of Excellence (DAT COE)
Framework Nation: Turkey
Location: Ankara, Turkey
PE Posts: 68 out of 93

Mission

To support SACT in his efforts of transforming NATO in the field of defence against terrorism and be a principle advisor to SACT on defence against terrorism.

Program of Work(POW):

The primary aim of the COE-DAT POW is to provide NATO timely advice and subject matter expertise on defence against terrorism for services and support products such as:

* Training and education
* Testing and validating concepts
* Doctrine development
* Standardization and improvement of capabilities and interoperability

2011 Major Work Items

- Completed 21 educational activities [8 Courses, 3 ATCs (Ukraine, Montenegro and Algeria), 4 workshops, 2 conferences, 4 C-IED trainings events] within a wide range of subjects related to defence against terrorism. Over 700 participants from 99 countries and 200 lecturers from 51 countries have taken part in COE-DAT activities in 2011.

- Conducted the first iterations of;

  - "NATO Terrorism Experts Conference" with 29 participants from 8 countries

  - "NATO Russia Council (NRC) Critical Infrastructure Protection Conference" with 34 participants from 15 countries

- Conducted DAT POW Meeting with the participation of MILENG COE, JCBRN COE and C-IED COE

- Produced workshop books "Response to Nuclear and Radiological Terrorism" and Defence Against Terrorism" and published "Defence Against Terrorism Review V and VI".

2012 Program of Work Items in Support of NATO

- Continued support of NATO Education and Training at the strategic and operational levels with an emphasis on developing interagency cooperation, especially with Partnership for Peace and Mediterranean Dialogue Countries, with educational activities.

- Plans to conduct 24 educational activities; 8 courses, 3 ATCs (Kyrgyzstan, Belarus and Afghanistan), 7 workshops, 4 C-IED training events, 1 conference and 1 symposium, with emphasis on developing interagency cooperation, especially with Partnership for Peace and Mediterranean Dialogue Countries.

- Will conduct the first iterations of;

  - Prevention of Recruitment of Terrorist Organizations Workshop
  - Critical Energy Infrastructure Protection Workshop
  - Piracy Nexus Terrorism WS
  - Air Oriented Terrorism WS

- COE-DAT also continues to assist in NATO concept and doctrine development.

COE Address
Centre of Excellence Defence Against Terrorism
P.O.B. 57 – 06582
Bakanlıklar-ANKARA
TURKEY

COE Contact Information
Phone: +90 312 425 82 15
Fax: +90 312 425 64 89
E-mail: info@coedat.nato.int
Website: www.coedat.nato.int

Director
Colonel Altan ÖZTAŞ
Phone: +90 312 425 82 15 / 1002
Email: director@coedat.nato.int

Explosive Ordnance Disposal Centre of Excellence (EOD COE)
Framework Nation: Slovakia
Location: Trenčín, Slovakia
PE Posts: 14 out of 38

Mission

To provide support to NATO operations and transformation efforts with EOD expertise and assist in development of NATO wide EOD tactics, techniques and procedures while remaining current in technology development. To improve relations, interoperability and a practical cooperation with partners, with NATO command elements, with member countries and with international organization in the area of EOD. EOD COE is one of tools of the NATO Supreme Allied Command for Transformation aiming to improve military capabilities, value and efficiency of the Alliance.

Major Work Items in Support of NATO in 2011

Support to Training and Education

Initial EOD Staff Officer (EOD SO) training

SME support to training of the Operational Mentoring Liaison Team (OMLT) at Joint Force Training Centre (JFCT) Bydgoczsz

Mobile Training Team (MTT) with initial EOD SO training to Bosnia and Herzegovina

Support to Lessons Learned and Analysis Activities

Analysis of Lesson learned from ISAF and their implementation in EOD COE Training;

Support to ACO Force Protection Working Group (FPWG)

Analysis of C-IED ISAF Briefing Day outputs and their implementation in EOD COE Training;

Participation in Counter IED Lessons Learned Workshop

Support to Concepts, Doctrine and Standardization development

Support NATO EOD, MILENG and C-IED Working Groups

Assist in the development of NATO EOD/CIED Terminology

I EOD SOT, 16 May - 3 Jun 2011, Trenčín, SVK

Support to Technologies and Research

Analysis of Seminar outcomes from NATO EOD Demonstrations and Trials 2010

Develop EOD Community of Interest network.

Major Work Items in Support of NATO for 2012

Support to Training and Education

Initial EOD Staff Officer (EOD SO) training
Former Warsaw Pact Ammunition Course
Homemade Explosive Awareness Course
EOD Management of Ammunition Risk (on study)
Mobile Training Team (on request)
EOD SO & EOD Operator´s Seminar

Support to Lessons Learned and Analysis Activities

Liaison between EOD COE/NATO bodies and enhancement of collaboration in EOD/IED information sharing
Analysis of EOD/IED operational observation and trend analysis from ISAF
Support to 2012 NATO Lessons Learned Conference (JALLC)
Building of EOD Community LL Webpage at JALLC NATO LL Web Portal

Support to Concepts, Doctrine and Standardization development

Support NATO EOD, MILENG, C-IED and CBRN Training Working Groups
Assist in the development of NATO EOD Terminology

Support to Technologies and Research

NATO EOD Demonstration & Trials 2012

I EOD SOT, 16 May - 3 Jun 2011, Nováky, SVK

EOD COE participated in the 17th International Trade Fair ELO SYS 2011, Trenčín, SVK

COE LOCATION
Explosive Ordnance Disposal
Centre of Excellence
Olbrachtova 5
Trenčín, Slovakia
91101

COE CONTACT INFORMATION
Director
COL Jaroslav BIELENÝ
Phone : +421 960 333 500,
Mobile: +421 903 824 351
Email: director@eodcoe.org

Aide-de-camp
Mrs. Dipl. Eng. Silvia BLIŽŇÁKOVÁ
Phone: +421 960 333 505,
Email: adc@eodcoe.org
Website: http: //eodcoe.org

Assistant
Mrs. Dipl. Eng. Anna FARKAŠOVÁ
Phone: +421 960 333 502,
Fax: +421 960 333 504,
Email: assistant@eodcoe.org

HUMINT Centre of Excellence (HCOE)
Framework Nation: Romania
Location: Oradea, Romania
PE Posts: 55 out of 64

HCOE Mission

To improve the interoperability and operational capability of NATO HUMINT through standardized training and education, doctrine development, lessons learned collection and analysis, exercise support, research and experimentation.

HCOE Vision

To become the leading agent of change for the NATO HUMINT Enterprise.

HCOE Goals

- To unite and lead a critical mass of experienced professionals in the endeavor of NATO HUMINT transformation.
- To transform the NATO HUMINT Enterprise into a more interoperable and more capable force that better supports NATO missions and operations

Program of Work

The NATO HCOE program of work (POW) is ambitious in scope, and aims to improve the NATO HUMINT Enterprise through four pillars of transformation:

- Education and Training
- Lessons Learned Collection and Analysis
- Doctrine, Interoperability and Standardization
- Research, Concept Development and Experimentation

To accomplish the POW, HCOE uses an incredibly talented workforce of dedicated HUMINT professionals who have amassed (in aggregate): hundreds of man years experience in the HUMINT career field; over 50 HUMINT deployments to Kosovo, Iraq, Afghanistan and Bosnia theaters of operation; over 75 man years of instructor experience; and, over 50 HUMINT exercises.

Through the HCOE, NATO is now poised to improve its HUMINT Enterprise, and avoid divergence/duplication of effort when dealing with these four pillars of transformation. The HCOE synergy of like minded, experienced, coalition professionals are tackling difficult issues, and creating better results in the HUMINT functional area while saving time, energy and resources. This synergy will help transform the way NATO prepares its HUMINT resources before a crisis occurs, and during the execution of NATO operations.

Major Products and Key Activities in 2011

The HCOE supported multiple strategic, operational and tactical customers and delivered its POW through: courses, conferences, work shops, seminars, studies, exercises and deployments. Some of the many highlights are captured below:

Command Level

HCOE Director is Chairman of the:

- NATO HUMINT Working Group (NHWG)
- NATO HUMINT Technology Working Group (NHTWG)

The HCOE developed the necessary formal and informal communication links with every relevant player that has a vested interest with NATO HUMINT and its four pillars of transformation.

Doctrine, Interoperability and Standardization

- HCOE assumed NATO custodianship of HUMINT Doctrine (AJP 2.3)
- HCOE assumed NATO custodianship of HUMINT TTPs (AintP-05)

Through the NHWG, the HCOE also took lead in developing the NATO HUMINT Policy for the NATO Military Committee (MC).

Research Support, Concept Development and Experimentation

- Human Aspect of the Operational Environment (HAOE): HCOE hopes to equip NATO commanders and policy makers with the tools to win the battle of perception through cultural awareness and understanding of motivating factors/actions behind indigenous attitudes/behaviors.
- NATO HUMINT Operator Tool Set (NHOTS): HCOE will research, identify and recommend the tools of the trade needed to equip HUMINT field operators for success in a coalition environment. The goal is to eliminate stovepipes and inefficiencies by creating a "plug and play" capability that improves interoperability/compatibility.

Education & Training

- HUMINT Standardization Course
- HUMINT for SOF Introduction Course
- HUMINT Collators Course
- HUMINT Contact Handling Course (under development)
- HUMINT Debriefing/Report Writing Course (in the planning stages)
- HUMINT Mission Planning/Force Protection Course (in the planning stages)

HCOE has gained a prominent role in coordinating and hosting the premier NATO HUMINT Exercise (STEADFAST INDICATOR, SFIR)

Way Ahead for 2012 and 2013

HCOE will continue the activities cited above and will execute numerous initiatives in response to NATO HUMINT priorities. Some of these highlights are included below:

HCOE will initiate a HUMINT Terminology Study to identify the national variations of the HUMINT lexicon. HCOE objectives are to (1) identify all the disparities in terminology, and (2) propose changes for a standardized HUMINT operational language.

HCOE will lead a HUMINT Mobile Team Data Collection (MTDC) to KFOR and ISAF that will capture lessons learned/best practices, in order to improve HCOE course curriculum and NATO doctrine/exercises.

HCOE will take the role of the NATO "central hub" for HUMINT education and training to include Office of Primary Responsibility (OPR) and Curriculum Control Authority (CCA).

HCOE will research to develop an unclassified HUMINT Operator Handbook that Field HUMINT Teams (FHTs) can use to prepare/execute HUMINT operations.

HCOE will deploy/rotate two personnel in Kosovo and Afghanistan in order expand the knowledge/capability/currency of the HCOE cadre, and feed doctrine and curriculum with real-world lessons learned/best practices.

COE CONTACT Information:

Director
Col Eduard SIMION
Phone: +4 0730233573
+4 0259433128
Email: dirhumintcoe@agat.ro

Col. Vladimir Saponja (SVN A) Dean of Academics
Phone: +4 0259434932
Email: hcoe.secretariat@mid.ro

Joint Air Power Competence Centre (JAPCC)
Framework Nation: Germany
Location: Kalkar, Germany
PE Posts: 82 out of 97

Mission

To provide innovative and timely advice and subject matter expertise, both proactively and responsively, for the transformation of Joint Air and Space Power to the Alliance and Nations. As a COE, with a strategic and operational level focus, offer independent thought, analysis and solutions.

The primary aim of the JAPCC POW is to foster and develop new ideas for the command, control and employment of air assets from all service branches and to facilitate appropriate measures to implement these ideas.

Priorities include:

- High-quality and timely customer support with Air and Space expertise to inform and enable decision-makers.
- Contribute Air and Space expertise to Alliance decision-making processes through active leadership and participation in NATO committees and working groups.
- Develop and champion innovative visions, concepts, and solutions for the transformation of Air and Space Power.
- Promote and showcase the effectiveness and relevance of Air and Space Power as the critical element in Air, Land and Maritime integrated operations.
- Partner with relevant NATO entities and nations to synchronise work and products.

2011 Major Work Items

Enhancing NATO's Space Capability
Sace Situational Awareness Team
Bi-SC Space Operations Course

Air C2 in the NATO Command Structure
Partner with EU and Nations for C2 Leadership Improvement
Joint ISR Task Force and Panel Chairman
AJP 3.3 NATO Air Power Doctrine Review

Air Domain Cooperation
NATO Force Protection Doctrine for Air Operations
Covoy Protection
Air-Land Integration
Air & Space Power Support to Counter Piracy
Support to NATO Cyber Transformation Activities

JAPCC On-Going
Air and Space Contribution to C-IED Operations
Joint Unmanned Aerial Systems
Joint Personnel Recovery
JAPCC Journal
ATP 56 AAR STANAG Custodian
ATP 3.3.4.3 Air Trainsport Doctrine Custodian
ATP 4.3 Air Logistics Doctrine Custodian

Missile Defence
Joint Integrated Air & Missle Defence Study
Support to NATO Active Layered Theatre Ballistic Missile Defence
Support to NATO Integrated Air & Missile Defence Working Group

Air Global Common
NATO Denfence Planning Process in the areas of Joint Percision Strike and air related matters
AAR Flight Plan
Airlift Roadmap
Annual JAPCC Conference – “Understanding Air Power – A Joint Appraisal”

2012 Programme of Work Items in Support of NATO

JISR Capabilities Development
Assured Access to the Global Commons
Research on the resiliency of military space assets and services
Develop Lessons Learned capability and sharing
Continues support to C-IED efforts
Support NATO Ballistic Missile Defence
Contributions to NATO training and exercises
Support to NATO Defence Planning Process and Capability Requirements Review

Annual JAPCC Conference - “Warfare in the 21st Century - Decline or Rise of Air Power?”

COE Address
JAPCC
Roemerstrasse 14
D-47546, Kalkar
Germany

COE Contact Information
Phone (general): +49 2824-90-2201
Fax (Admin): -2274
www.japcc.de
Contact@japcc.de

Director of Staff:
Col (USA) Grossman, grossman@japcc.de

JAPCC Branch Heads:
Policy & Doctrine:
Col (NDL) Bank, bank@japcc.de
Future Concept & Development:
Col (DEU) Theuerkauf, Theuerkauf@japcc.de
Combat Air:
Vacant
Combat Support:
Col (ITA) Sardo, Sardo@japcc.de
Combat Service Support:
Gp Capt (GBR) Parkinson, Parkinson@japcc.de
C4ISTAR:
Col (DEU) Heilmann, Heilmann@japcc.de

Joint Chemical Biological Radialological Nuclear – Defence (JCBRN COE)
Framework Nation: Czech Republic
Location: Vyškov, Czech Republic
PE Posts: 58 out of 64

Mission

To support NATO and its military transformation in the field of CBRN defense through and in support of HQ SACT, assist Sponsoring Nations, other NATO-nations and other Customers in their CBRN defense-related efforts.
The primary aim of the JCBRN Defence COE is:

Support development of concepts and doctrine through experimentation.
Promote interoperability and standardisation.
Provide assistance in analysis to determine future capability requirements.
Develop and distribute lessons learned from operations, exercises, and experiments.
Provide education and training.
Assist research.
Promote relationships among related CBRN bodies.
Development of databases.

2011 Major Work Items

Courses:

CBRN Defence Units Evaluators Course
CBRN First Responders Trainers Course

Workshops:

NBG Workshop for Directors and Experts of Training Centres
NATO-UKRAINE Workshop on CBRN Protection of High Visibility Event
CBRN Intelligence
Science for Peace and Security
CBRN reach-back and Fusion

Participated in NATO Exercises:

STEADFAST JUNCTURE 11
STEADFAST JOIST 11

- Provided support and validation of NATO's Countering Hybrid Threats concept.
- Supported the Joint CBRN Working Group Objectives.
- Assisted in Identifying functional information exchange requirements (IERs) required for ballisti missile defence.
- Supported the development of the Modelling and Simulation System for Emergency Response Planning.
- Contributed to the implementation of NATO's Comprehensive Approach.
- Conducted CBRN risk analysis of NATO's Joint Force Command Headquarters.

2012 Programme of Work Items in Support of NATO

Continue organizing and supporting Courses, Workshops and Conferences promoting the development and exchange of CBRN information and expertise.

Support to NATO Training and Education-
Continued Assistance and support of NATO STEADFASR exercise series and support to COMET/BLISTER series.
Develop CBRN/Toxic Industrial Material hazard data for scenario documents.
Provide Subject Matter Expert support for JFC HQ exercises and to the NATO School.
Support the evaluation of CBRN defence units for NRF rotation.

CBRN Concept and Doctrine Development-
Provide IMS, ACO, and ACT with SME support and participate in Plenary, Seminars and other related meetings.
Support the development of NATO CBRN reach-back and fusion implementation.
Support to develop a new strategic CBRN defence concept.
Support NATO Hybrid Threat Concept.
Custodianship of AJP 38 and ATP 3.8.1

CBRN Lessons Learned-
Collect and evaluate Lessons Learned from NATO exercises and NRF.
Support development and Bi-SC Joint CBRN Prevention in the Maritime Environment Concept.

COE Address
Joint Chemical, Biological, Radiological and Nuclear
Defence Centre of Excellence
Víta Nejedlého
682 03 Vyškov, Czech Republic

COE Contact Information
Phone: +420 973 452 805
Fax: +420 973 452 800
Email: assistant@jcbrncoe.cz
Website: www.jcbrncoe.cz

Director
Colonel Jiri Gajdos, CZE A
Phone: +420 973 452 801
Fax: +420 973 452 810
Email: gajdosj@jcbrncoe.cz

Military Engineering Centre of Excellence (MILENG COE)
Framework Nation: Germany
PE Posts: 32 out of 41

Mission

The MILENG COE's mission is to provide subject matter expertise in support of collaborate efforts to transform Military Engineering within the Alliance, NATO nations and the wider community of interest in order to promote and enhance the efficiency and effectiveness of Military Engineering.

The MILENG COE will encompass all aspects of Military Engineering as encapsulated in MC 0560/1 "Military Committee Policy for Military Engineering" and Allied Military Engineering Doctrine. However, in the fields of Counter Improvised Explosive Devices (C-IED), Explosive Ordnance Disposal (EOD) and Chemical, Biological, Radiological and Nuclear Defence (CBRN) the MILENG COE will assume a supporting role to the relevant NATO COE and other entities.

- MILENG COE Core Tasks are:
  - Secretariat to NATO Senior Joint Engineers Conference (NSJEC)
  - Concepts and Doctrine development
  - MILENG Information and Knowledge Management (IKM)
  - MILENG Lessons Learned
  - Education and Training
  - MILENG Support to NATO Individual training and support to exercises

2012 Major Work Items

1. **Courses**
   a. NATO Military Engineering Staff Officers Course (NMESOC)
   b. Military Engineering Advanced Operations and Planning Course (MEAOPC)
   c. Military Engineering Operations and Planning Course (MEOPC)
   d. Tactical Interoperability Orientation Course (TIOC)

2. **Events – Seminars & Workshops**
   a. The MILENG COE will conduct a **Military Search Workshop** on the **06 – 08 Mar 2012** in Ingolstadt. This workshop is a follow up of the first Military Search workshop held in Apr 2011. The Sponsoring Nations, NATO Nations, PFP Nations, NATO Command Structure and Centres of Excellence are asked to send their SMEs to ensure that the workshop can fulfil its aim.
   b. The MILENG COE will host the **Route Clearance Equipment Team of Experts** meeting on the 11-13 April 2012.
   c. The MILENG COE will be subject to its first NATO **Accreditation Assessment** in Apr 2012
   d. On the 24-25 Apr 2012, the MILENG COE will conduct the MILENG COE Steering Committee (SC) meeting in Ingolstadt
   e. The MILENG COE will host the writing team for the revision of **AJP-3.14 Force Protection** in April or May 2012 (TBC).
   f. The **NATO Senior Joint Engineer Conference (NSJEC) & MILENG SC** is planned to take place in Oct 2012, location TBC.
   g. The MILENG COE will conduct its' annual **Information Exchange Seminar** (IES) 27-29 Nov 2012 in Ingolstadt. Topic for the seminar TBC
   h. The MILENG COE Industry Day will take place 28 Nov 2012 in Ingolstadt.

2012 Programme of Work Items in Support of NATO

1. **Participation in / Direct support to**
   a. Provide Secretariat for the NATO Senior Joint Engineer Conference (NSJEC)
   b. Provide permanent Panels' secretaries for the Land Standardisation Board (LSB) MILENG WG
   c. Provide support to Working Groups (WG) and liaison to other WGs (ACO FPWG, AJOD, EPWG, EODWG, C-IEDWG,…)
   d. NATO Response Force (NRF) preparation and exercise support
   e. NSO to ensure MILENG is reflected correctly in the appropriate courses
   f. Other COEs and specific POW activities
   g. JALLC iot exploit NATO and national MILENG Lessons Learned.

2. **Custodianships, Concepts & Doctrine, IKM**
   a. On behalf of NSJEC maintain the NATO MILENG Visions & Objectives
   b. Custodian of Military Engineering Doctrine
   c. Improve broader understanding and integration of MILENG "MILENG support to" tasks e.g. (C-IED, FP, EP, Military Search, CA & Multinational approaches.
   d. Develop MILENG COE web based Information Knowledge Exchange facility

COE Address
Military Engineering Centre of Excellence
Pionierkaserne auf de Schanz
Manchinger Strasse 1
85053 Ingolstadt
Germany

COE Contact Information
Phone (general): +49 (0)841 88660 5101
Email(general): secretary@milengcoe.org

Director:
Colonel Otto Radlmeier (DEU A)
Phone: +49 (0)841 88660 5000
Email: **director@mileng.org**

Deputy Director:
LTC Kevin Borthwick, (GBR A)
Phone: +49 (0)841 88660 5010
Email: **cos@milengcoe.org**

IKM Officer
Capt Stijn Verbeke, (BEL A)
Phone: +49 (0)841 88660 5441
Email: **survso@milengcoe.org**

NATO Centre of Excellence for Military Medicine (MILMED COE)
Framework Nation: Hungary
Location: Budapest, Hungary
PE Posts: 40 out of 53

Mission

To support and assist the Strategic Commands, other NATO bodies, nations, other civil and military bodies by supporting the transformation of the Alliance and thereby improving medical support to operations and to provide subject matter expertise in the following areas:

– Medical training and evaluation leading to certification
– Medical Lessons Learned focusing on tactical aspects
– Standards development and custodianship
Near real time disease surveillance (DHSC)

MILMED COE is involved in a number of interlinked medical related activities:

- Medical training
- Doctrine and standards development
- Lessons Learned process
- Evaluation of medical capabilities
- DHSC

2011 Major Work Items

- Standardized Medical Terminology for NATO Terminology Database.
- Reviewed AJP 4.10 (B)
- Stabilization and further development of a comprehensive NATO Trauma Registry (NTR)
- Development and functional integration of the Deployment Health Surveillance Capability (DHSC) to the MILMED COE Structure as a Satellite Branch, which offers near real-time medical (epidemiological and biological) surveillance for NATO in a deployment setting.
- Supported NATO HQ in the improvement of force health protection of soldiers in NATO missions.
- Supported the development of the NATO Medical Doctrine.
- Developed Tactical Clinical Lessons Learned Database.
- Developed and conducted courses such as:
  - Emergency Management of Battlefield Injuries Course (EMBI)
  - Major Incident Management and Support (MIMMS) Course
  - NATO Medical Evaluation (MEDEVAL) Course

2012 Programme of Work Items in Support of NATO

First Responder Trainer Training (FRT) in primary management of battlefield injuries: Training and qualification of Non-Medical personnel Trainers
Doctrine development regarding to NATO agreed Training requirements for non-medical personnel deploying to NATO missions
Further DHSC roll out into operation
Opening of LL database for nations
Execution and evaluation of NATO Trauma Registry Pilot (Phase 1 and 2)
Continuous execution of the already developed courses
Standardization of Surgical education and training
Simulation in pre-clinical treatment
Development of e-learning capabilities (e.g. decentralized re-certification)
Interoperability in the FHP interface (e.g. multi drug resistance management in MMU)
Interoperability in Patient Evacuation Control

COE Address
Address:
NATO Centre of Excellence for Military Medicine
Szilágyi Erzsébet fasor 20-22
H-1125 Budapest

Postal Address:
NATO Centre of Excellence for Military Medicine
Budapest
P.O.B.: 113.
H-1255

COE Contact Information
Phone: +36-1-8830100
Fax: +36-1-8830127
Email: info@coemed.org
Website: http://www.coemed.org

Director
Colonel Dr. KOPCSÓ, István (HUN A)
Phone: +36-1-8830100
Email: director@coemed.org

Deputy Director
COL Dr. HARBAUM, Thomas (DEU AF)
Email: ddirector@coemed.org

NAVAL MINE WARFARE CENTRE OF EXCELLENCE (NMW COE)
Framework Nation: Belgium and The Netherlands
Location: Oostende, The Netherlands

Mission

To support SACT in his efforts of transforming NATO by providing NATO with subject matter expertise in the field of Naval Mine Warfare with a primary focus on education and training.

Program of Work:

While NMW COE's has retained its function as an education and training institution for the Belgian and Netherlands Navies, the Framework Nations provide ACT and other NATO entities prioritised access to the services and support of the NMW COE.

- The primary aim of the NMW COE POW is to:
  - Provide education and training for NATO and Partner naval personnel and ships in NMW.
  - Assist in NATO joint policy, doctrine, strategy and concept development.
  - Advise and assist Operational NATO Commands.
  - Act as NMW technical advisor to the CC MARs Naples and Northwood.
  - Support NATO standardization and interoperability by contributing Naval Mine Warfare subject matter expertise to NATO working groups and conferences.

2011 Major Work Items

- NMW COE conducted the Mine Warfare Staff Officers Course – open to NATO Nations (MSOC-N) 10 Jan – 06 May 2011. The aim of this MCM specialization course is to train officers for the following functions in the field of mine warfare:
  - Mine warfare staff functions ashore and afloat.
  - Commanding officer of a NMCM-flotilla, -squadron or –division
  - Instructor at a mine warfare school.

  The candidates are required to have an extensive seagoing NMCM experience. The entry level for the course is the Advanced Mine Warfare Course – open to NATO Nations (AMWC-N) in a recent past.

- NMW COE hosted and chaired the Bi-SC Naval Mine Warfare Conference (NMWC) 21 Jun – 23 Jun 2010.

- NMW COE chaired the 2nd and 3rd Decision Aid for Risk Evaluation (DARE) Workshops 31 Jan - 04 Feb 2011 in Panama City and 11-15 Apr 2011 in Tallinn. A new chapter on this software in ATP-6 VOL III and a new, operator oriented user guide were created.

- NMW COE conducted computer assisted Wargames (including operational planning) for BEL, DEU, GBR, NL MARFOR and NOR.

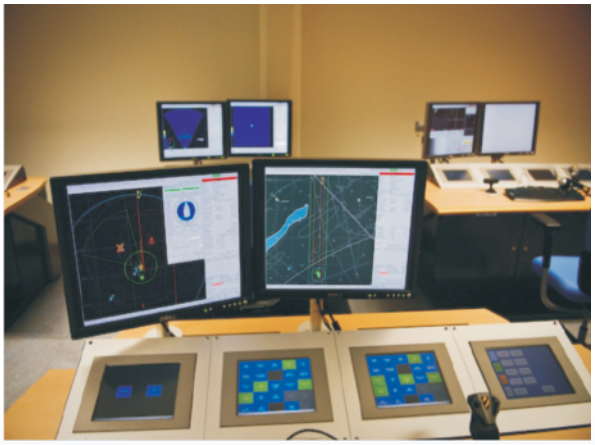
- The Minister of Defense of the Kingdom of Belgium, the Minister of Defense of the Kingdom of the Netherlands and the Minister of Defense of the Kingdom of Spain decided on a MOU concerning the cooperation between the Mime Countermeasures Force Command of the Spanish Navy (COMTEMECOM) and the Belgian and Netherlands navel mine warfare assets through liaison of the NATO Navel Mine Warfare Centre of Excellence /Belgian-Netherlands Navel Mine Warfare School (EGUERMIN). It was signed 05 May 2011

2012 Major Work Items

- NMW COE will host the 2011 NMWG/3 meeting 19-22 Sep 2011 under the umbrella of the NATO Naval Armaments Group (NNAG) and the Military Committee Maritime Standardization Board (MCMSB). This Group is aimed at promoting cooperation and standardization in the field of Naval Mine Warfare to improve NATO forces' effectiveness over the whole spectrum of current and future operations.

- NMW COE will host and facilitate the MC Northwood NATO CAX 2011 DYNAMIC MOVE 17-28 Oct 2011. DYNAMIC MOVE is a biannual Naval Mine Warfare Computer Assisted Exercise (CAX), designed to train the participants from NATO and national commands, including PfP nations, in a range of Naval Operations focused on the NRF concept. Mediterranean Dialogue (MD) nations are invited as observers. The aim is to exercise Naval Mine Warfare (NMW) tactics and procedures, the Allied Worldwide Navigational Information System (AWNIS) and Naval Cooperation and Guidance for Shipping (NCAGS) procedures, in order to enhance participants' ability to conduct littoral and amphibious operations.

- NMW COE will conduct the successor course (3 out of 5 modules / 2 more in 2012) of the Mine Warfare Staff Officers Course – open to NATO Nations (MSOC-N). The candidates are required to have an extensive seagoing NMCM experience.



COE Address
NATO MINE WARFARE COE
3de & 23ste Linieregimentsplein
B-8400 Oostende
BELGIUM

COE Contact Information
Phone: +32 5956 3433
Fax: +32 5956 3430
Email: nmw-coe@eguermin.org
Website: www.eguermin.org

Director
CDR Philippe Cornez
Phone : +32 5956 3400
Email : dir@eguermin.org

Head Expertise
Commander Stefan Rings
Phone: +32 (0)59.56.3368
Email :
head.expertise@eguermin.org

Modelling and Simulation COE (M&S COE)
Framework Nation: Italy
Location: Rome, Italy

Mission

The mission of the M&S COE is to support NATO and Nations in their transformation efforts by providing subject matter expertise on all aspects of M&S activities.

CORE AREAS

To complement the existing NATO M&S capabilities, the M&S COE will be generally committed to:

a. Education and training:

– Coordinate Training and Expert Certification for M&S Subject Matter Experts (SMEs).
– Organise M&S courses, symposia and workshops.
– Support the operational training of M&S tools, processes and systems.
– M&S support to NATO operations and training.
– Interact with national M&S agencies, institutions, industry, academia and organizations.

b. Knowledge Management, Lessons Learned and Analysis:

– Support the development and management of shared repositories for models, simulations, data, techniques, tools and best practices.
– Support and integrate Repositories of Best Practices, lessons identified and lessons learned in cooperation with NATO and National Lessons Learned centres.
– Support definition and verification of M&S technical architectures.
– Support Development and maintenance of shared database of models and scenarios.
– Support the development and integration of existing and future NATO and National M&S tools and activities.
– Interact with national M&S agencies, institutions, industry, academia and organizations.

c. *Support to Concept development and experimentation:*

– Contribute to the development of concepts and conduct of experimentation, which require M&S expertise.
– Simulation Based Acquisition (SBA).
– Support the development of capabilities through the M&S COE Test bed.

d. *Doctrine development, standards and interoperability:*

– M&S System Integration and interoperability.
– Contribute to the linking of real world and simulation systems.
– Provide advice and assistance to NATO and national authorities in the area of M&S systems, interconnectivity and data transfer.
– Assist to identify NATO and National M&S capability gaps.
– Provide proposals and new perspectives for transformation in the field of M&S.
– Interact with national M&S agencies, institutions, industry, academia and organizations.
– Define interoperability testing requirements and conduct testing activities to contribute to assess and verify interoperability of M&S systems and architectures.
– Execute M&S verification and validation activities to facilitate the accreditation of models, simulations and data.

COE Contact Information
Phone: +39 06 4691 4192
Email: sesto.mes.1sz@smd.difesa.it
Website: https://transnet.act.nato.int/WISE/COE/Individual/MS/index_html

Director
Col. Francesco MASTROROSA
Phone: +39 06 4691 4132
Email: Francesco.mastrorosa@esercito.difesa.it

COE in Accreditation Process

Energy Security COE (ENSEC COE)
Framework Nation: Lithuania
Location: Vilnius, Lithuania

Mission

The mission of ENSEC COE is to assist Strategic Commands, other NATO bodies, nations, partners and other civil and military bodies by supporting NATO‟s capability development process, mission effectiveness, and interoperability in the near, mid and long terms by providing comprehensive and timely subject matter expertise on all aspects of energy security. The mission includes cost effective solutions to support military requirements, energy efficiency in the operational field, and interaction with academia and industry.

COE Contact Information
Colonel
Romualdas.petkevisius@esc.urm.lt
Director ENSEC COE
Phone: +370 5 234 1009
Email: info@esc.mfa.lt
Website: www.esc.mfa.lt

COE in MOU Negotiations

Military Police COE (MP COE)
Framework Nation: Poland
Location: Bydgoszcz, Pol

Mission

To enhance the NATO MP capability by providing subject matter expertise on all aspects of MP activities, thus improving the Alliance's interoperability in the field of MP operations.

The NATO MP COE will provide the lead subject matter expertise for the development of MP standards and capabilities. In this way NATO MP COE will support cooperation and interoperability of NATO and Partner Nations. The NATO MP COE is single location for SMEs working for the benefits of NATO and Partner Nations and will ensure a coherent joint approach for all Nations in a given subject matter based on contributions from all participants.
This will include the cooperation between Nations and organisations through the sharing of information and developments concerning MP related activities and events.

COE Contact Information
COL Grzegorz WASIELEWSKI
Chief MP COE Establishment Team
Phone: +48 22 6853 095, +48 22 6853 093
Email: mpcoe@wp.mil.pl
Website: www.mpcoe.wp.mil.pl

COE in Concept Development

Crisis Management Disaster Relief COE (CM & DR COE)
Framework Nation: Bulgaria
Location: Sofia, Bulgaria

Mission

To establish and maintain an internationally recognized and respected centre for contributing with its activities for research, building and development NATO and Nations Crisis Management & Disaster Relief capabilities and to become NATO transformation expert and adviser in the area of Crisis Management & Disaster Relief.

COE Contact Information
Col Dr. Sc. Eng. Mitko Stoykov
Phone: +359888535343
Email: mitkostoykov@hotmail.com

LTC Dobril Radoslavov
SACT National Liaison Representative from Bulgaria
Phone: +1 757 747 3188
Email: dobril.radoslavov@act.nato.int

Multi-Nationalized COE

Multi-Nationalized COE for Mountain Warefare (MN COE MW)
Framework Nation: Slovenia
Location: Ljubljana, Slovenia

Mission

To support the concept of developing and transforming forces and assets, and operational methods of the mountain warfare for the Republic of Slovenia, all NATO member countries, partners, other countries and international organizations, through the following core areas:

- development of mountain warfare specific doctrine, tactics and concepts
- education and training
- capability development and support to experimentation
- MW lessons learned process

Slovenia intends to offer the existing Multi-Nationalized Mountain Warfare Centre of Excellence as a NATO COE in 2015.

COE Contact Information
Col Bostjan Blaznik
Email: bostjan.blaznik@mors.si
Phone: +386 4 576 3114
Website: https://transnet.act.nato.int/WISE/COE/Individual/MW

NATO COE Establishment Process

There are many steps in the COE establishment process. COE generally start either as an idea from NATO or an Alliance Nation, or as the offer of an established (multi-) national COE by an Alliance Nation. It culminates with the accreditation by the Military Committee (MC) and the endorsement of the North Atlantic Council (NAC).

Much dialogue and teamwork is required throughout the process starting with a close coordination between the Framework Nation (FN) and the HQ SACT Transformation Network Branch (TNB).

The following steps are necessary in order to complete the process:

Concept – The first step is the development of a formal document that provides all relevant information about the mission of the COE. TNB, HQ SACT or SHAPE subject matter experts and HQ SACT Legal will provide assistance and participate in meetings to help the FN thoroughly understand the process which includes the concept proposal and its development, and to ensure the draft will meet the established criteria.

Formal Offer - Sent from national CHoD to SACT and includes the final national draft of the concept.

Information Campaign – If the FN seeks a multi-national COE it must work to attract other SN.

MOU Development – Occurs dynamically with the information campaign. MOU templates are supplied by TNB and tailored with the assistance of TNB and legal teams.
Events supporting MOU development are:

- 1st MOU Conference: Goal is to sell COE, to attract potential SN. Any interested nation attends.
- 2nd MOU Conference: Nations that consider becoming an SN attend. It will address legal aspects of the COE in greater detail. Concept changes as well as questions concerning the PE will be discussed.
- MOU Signing Ceremony

First Steering Committee Meeting – FN and SN meet to formalize first COE budget and POW and to discuss any open business. TNB supports FN in setting up the meeting and attends as a non-voting member.

Accreditation Process – Conducted by HQ SACT through TNB. MC established criteria are assessed in order to achieve accreditation.
The following steps are performed:

- Questionnaire: Prior accreditation visit. Provided in order to determine accreditation readiness. Several iterations may be necessary.
- Accreditation Visit: Follows the COE's first Steering Committee Meeting.
- Accreditation Package – After a successful accreditation visit TNB prepares the package for the consideration of the MC and the NAC.
- Approval of recommendation for accreditation by MC; NAC endorsement

The entire process takes between 18 months and 4 years.
TNB contact information for the COE Establishment questions:

Mr. Tony Wedge
+1 757 747 3553
tony.wedge@act.nato.int

NATO COE Programme of Work (POW) Process

The POW has evolved through lessons learned and feedback from the COE in order to provide better clarity for NATO Requests For Support (RFS), to better align the centres and NATO's planning time lines, provide accountability and enhance COE flexibility in response to NATO RFS and Emergent Requests For Support (ERFS).

RFS are collected through the annual COE POW development process which is the primary tool for coordination of NATO inputs to COE POW. A prioritized list of RFS is developed and submitted annually to each COE. Out of the regular planning cycle requirements for support from the centres are collected on emergent basis as ERFS.

RFS Process:

The 2013 COE POW development cycle will collect NATO-wide inputs which, together with inputs from the SN and other entities, will be combined into the draft POWs and presented to the COE Steering Committees for approval as the 2013 COE POW.

2013 COE POW development draft time lines:

- April: First drafts of 2013 COE POW distributed for NATO stakeholders' reviews and comments.
- Apr - mid May: Collection of NATO inputs to the 2013 COE POW (initial RFS)
- End of May: Initial review of the NATO inputs by COEs
- 5-7 June: The COE POW Workshop - review and coordination of the initial RFS between COEs and NATO stakeholders.
- June: Evaluation and resourcing of RFS COEs
- July-August: Formal submission of the NATO's RFS (DCOS CAP DEV letters)

ERFS Process:

The ERFS are short term notice requests for support from COEs not included in the regular COE POW development cycle. Emergent requirements are submitted to the centres as they materialize on an ad hoc basis. EFRS should not replace regular inputs through the COE POW development process as they have to compete for resources against already existing, approved and budgeted COE POW items.

The ERFS process steps:

1. Contact the subject COE with the ERFS and info TNB.
2. ERFS will be evaluated by the centre and will determine appropriate expertise and available resources, and reply. In the case where an ERFS cannot be accomplished, request COE contact ACT/TNB for further prioritization.
3. ACT validation and prioritization of the ERFS in coordination with the potentially affected stakeholders.
4. Final acceptance or rejection of the ERFS by COE based on ACT's prioritization recommendation and update of the COE POW.

More information, including events and forms, is available on the COE Webpage on TRANSNET (login required), and on the COE POW page on NSWAN (HW SACT Home page -> COE -> COE POW).

TNB contact information for the COE POW questions:
Mr Robert Napiorkowski
+1 757 747 4299
robert.napiorkowski@act.nato.int

NATION PARTICIPATION IN NATO COE

Country	COE	Framework Nation of
BEL	C2, JAPCC, MILENG, NMW	NMW
BGR	DAT	CMDR
CAN	CJOS, JAPCC, MILENG	
CZE	EOD, HUMINT, JAPCC, JCBRN, MILENG, MILMED	JCBRN
DEU	C2, CCD, CIED, CIMIC, CJOS, CSW, DAT, JAPCC, JCBRN, MILENG, MILMED	CIMIC, CSW, JAPCC, MILENG
DNK	CIMIC, MILENG	
ESP	C2, CCD, CIED, CJOS, JAPCC	CIED
EST	CCD, ENSEC	CCD
FRA	CASPOA, CIED, CJOS, EOD, JAPCC, MILENG, MILMED	CASPOA
GBR	CJOS, DAT, JAPCC, JCBRN, MILENG	
GRC	CJOS, CSW, HUMINT, JAPCC, JCBRN, MILENG	
HUN	CCD, CIED, CIMIC, DAT, EOD, HUMINT, JAPCC, JCBRN, MILMED	MILMED
ITA	CCD, CJOS, ENSEC, JAPCC, JCBRN, MILENG, MILMED, M&S	M&S
LVA	CCD, CIMIC, ENSEC	
LTU	CCD, ENSEC	ENSEC COE
NLD	C2, CCD, CIED, CIMIC, CJOS, CSW, DAT, JAPCC, MILENG, MILMED, NMW	C2, CIMIC, NMW
NOR	C2, CJOS, CWO, JAPCC, MILENG	CWO
POL	CCD, CIMIC, CSW, EOD, HUMINT, JAPCC, JCBRN, MILENG, MP	MP
PRT	CIED, CJOS, JAPCC	
ROU	CIED, CJOS, DAT, EOD, HUMINT, JAPCC, JCBRN, MILENG, MILMED	HUMINT
SVK	C2, CCD, EOD, HUMINT, JCBRN	EOD
SVN	CIMIC, HUMINT, JCBRN, MW	MW
TUR	C2, CJOS, CSW, DAT, ENSEC, HUMINT, JAPCC, MILENG	DAT
USA	C2, CCD, CJOS, CIED, DAT, JAPCC, JCBRN, MILENG, M&S	CJOS

For more information on COE contact

Colonel Helmar Storm
Transformation Network Branch Head
Phone: +1 757 747 4046
Email: helmar.storm@act.nato.int

For questions or input to the COE Catalogue contact

Ms. Betsy Allee
Phone: +1 757 747 4130
Email: elizabeth.allee@act.nato.int

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