NATO
OTAN

ALLIED COMMAND TRANSFORMATION

2018
COE CATALOGUE

TABLE OF CONTENTS

SACT' s Message 3
What is a NATO COE? 4
COE Questions & Answers 5
COE Annual Report 6

NATO Accredited COEs

Air Operations COE	(AO COE)	8
Cooperative Cyber Defence COE	(CCD COE)	10
Counter Intelligence COE	(CI COE)	12
Counter-Improvised Explosive Devices COE	(C-IED COE)	14
Civil-Military Cooperation COE	(CIMIC COE)	16
Combined Joint Operations from the Sea COE	(CJOS COE)	18
Crisis Management and Disaster Response COE	(CMDR COE)	20
COE for Operations in Confined and Shallow Waters	(CSW COE)	22
COE for Cold Weather Operations	(CWO COE)	24
Command and Control COE	(C2 COE)	26
COE Defence Against Terrorism	(COE DAT)	28
Energy Security COE	(ENSEC COE)	30
Explosive Ordnance Disposal COE	(EOD COE)	38
Human Intelligence COE	(HUMINT COE)	40
Joint Air Power Competence Centre	(JAPCC)	42
Joint Chemical Biological Radiological & Nuclear Defence COE	(JCBRND COE)	44
Military Engineering COE	(MILENG COE)	46
COE for Military Medicine	(MILMED COE)	48
Military Police COE	(MP COE)	50
Modelling and Simulation COE	(M&S COE)	52
Mountain Warfare COE	(MW COE)	54
Naval Mine Warfare COE	(NMW COE)	56
Stability Policing COE	(SP COE)	58
Strategic Communications COE	(STRATCOM COE)	60

NATO COE in Accreditation Process

Security Force Assistance COE	(SFA COE)	62

NATO COE Establishment Process 32
Current COEs Status & Location 33
Map of COE Locations 34
Nations Participating in COEs 36
NATO COE Accreditation Process 37
How does NATO request COE products and services? 64
COE Steering Committee 65
HQ SACT Coordination with COEs 66
COE FOGO Champions System 67

NORTH ATLANTIC TREATY ORGANISATION
SUPREME ALLIED COMMANDER TRANSFORMATION



It is my privilege to present the 2018 NATO Centre of Excellence (COE) Catalogue. This edition captures the growing NATO COE enterprise, which now consists of 24 accredited COEs, with one more in the accreditation process and several others under development. I am pleased to have four NATO partner nations actively supporting NATO COEs, and six more cooperating on NATO projects. In addition, NATO COEs have proven to be a highly successful multinational solution to support NATO's transformational efforts.

Today's complex and ever changing security environment demands more from the Alliance. NATO must be more ready, responsive, and resilient by working closely with a wide network of partners, of which COEs form an essential part. To remain fit for purpose, NATO must be able to operate and adapt simultaneously; this is the focus of the NATO Command Structure (NCS) Adaptation. This means, amongst other things, leveraging the NATO Force Structure and non-NCS entities, like the COEs, to provide invaluable subject matter expertise.

As Allied Command Operations focuses on warfighting, and Allied Command Transformation on Warfare Development, COEs will become vital enablers to our future command structure. Not only will the increased flexibility and strengthened link to COEs limit the additional resource required to adapt, but ACTs Warfare Development efforts will increasingly leverage the benefits and strengths of this approach. Together, as one-NATO, we will ensure future interoperability, build resilience and cooperation through partnerships, and facilitate concrete steps to strengthen the EU-NATO relationship, with the ultimate goal of maintaining NATO's warfighting edge.

Furthermore, the COEs are part of a diverse innovation ecosystem, with less-structured and more adaptable links to non-NATO entities such as the EU, partner nations, international organisations, Non-Governmental Organisations, industry and academia. As such, they offer a wide array of complimentary capacity and expertise that can be used to provide solutions to the complex problems the Alliance faces now and in the future.

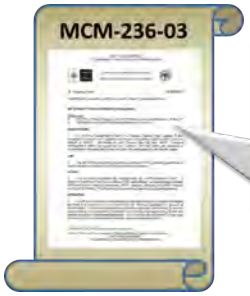
Finally, I would like to thank all the NATO and Partner nations who support the success of the COEs. This commitment of personnel and resources to NATO's Warfare Development is invaluable and instrumental to a strong Alliance.

Denis Mercier
General, French Air Force
Supreme Allied Commander Transformation

What is a NATO COE?

Background

The idea for NATO COEs 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 Centres of Excellence (COE)" dated 04 Dec 2003. Once the idea and the concept were firmly established, the accreditation criterion was defined. In 2004, IMSM-0416-04, "NATO COE Accreditation Criteria" was agreed on and the first NATO COE was formally accredited on 01 Jun 2005.



A COE is a nationally or multinationally sponsored entity, which offers recognised expertise and experience to the benefit of the Alliance, especially in support of Transformation.

...

A COE is not part of the NATO Command Structure...



Definition of a NATO COE

"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." A COE is not part of the NATO Command Structure (NCS), but forms part of the wider framework supporting NATO Command Arrangements (NCA)

Principles

- No cost to NATO.
- Conform to NATO procedures, doctrines and standards.
- No duplication with existing assets.
- Relationships with Strategic Commands through Memorandum of Understanding agreements.
- Relationships with partners are supported and encouraged.

Resources:

The makeup and characteristics of the COEs are unique to each one. Key points of interest:

- 1-21 Sponsoring Nations (SN).
- 26 of 29 NATO nations participate in COEs.
- Manning from 16 to 89 posts.
- Operating costs per position: 6 to 25K €.
- Total manning is approximately 1226 billets/942 filled for 24 accredited COEs.
- Sponsoring Nations are encouraged not to populate a COE at the expenses of NATO billets in the NATO Command and Force Structure.

There are many reasons why a nation or nations, as Framework Nation (FN) decide to offer a Centre of Excellence to NATO. 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 COEs is consistently growing. Through the MC Concept and the NATO accreditation criteria, COEs have proven to be a successful and enduring model for strong multinational solutions. As a result, the NATO Command and Force Structure is supported by robust network of COEs, which are nationally or multi-nationally managed and funded and open for participation by NATO and Partner nations.

COE Q&A

Are COEs part of NATO?

The MC Concept states, "A COE is not part of the NATO Command Structure, but forms part of the wider framework supporting NATO Command Arrangements". We may say metaphorically that NATO accredited COEs have one foot within NATO (because they are "part of the wider framework supporting NATO Command Arrangements" and because they are activated as NATO Military Bodies) and they have one foot outside NATO (because they are "not part of the NATO Command Structure" or of the NATO Forces Structure). This gives COEs great flexibility in the relationships with other international and civilian entities.

Where does the COE idea come from? Can NATO "initiate" a COE?

The idea for a COE generally can come from either NATO or an Alliance Nation. If the idea comes from NATO, it is resulting from an identified capability shortfall. If the idea comes from an Allied Nations, it may not necessarily be directly related to capability shortfalls, yet be beneficial for NATO.

What is the difference between a NATO COE and any other COE?

A NATO COE is a COE that has been accepted and accredited by the Military Committee. During the accreditation process, the COE can request from the NAC to be granted the status of a NATO Military Body, and thus granting it international status under the Paris Protocol.

Can NATO task the COEs?

No, NATO cannot task the COEs, because they are not under command authority of NATO. In fact, COEs are "not part of the NATO Command Structure" they are owned by their sponsoring nations.

How does NATO request COE products and services?

NATO can ask the COEs by submitting a Request for Support (RFS) in the Programme of Work (POW) tool, through a process entitled the COE POW Development Cycle (Page 64).

Can Nations join / withdraw from a COE after it is NATO-accredited?

Yes, they can. The addition of any new Sponsoring Nation (SN) to a COE is done through a Note of Joining (NOJ), to be signed by the joining Nation and the already participating SNs. Unless otherwise specified; the NOJ will come into effect on the date of the last signature. Any SN may withdraw from the COE giving the twelve months written notice to all other SNs and by informing the Director and Steering Committee (SC) in writing.

Are the COEs eligible for common funds?

In short, COEs are to be funded by the Sponsoring Nations. However, there are provisions allowing for the potential use of Common Funding, but only in exceptional circumstances, which have not been clearly defined. Decision by the MC on a case-by-case basis.

Can Partner Nations join COEs?

Yes, they can. Partner Nations can join NATO COEs as Contributing Partners, which means that they will be able to provide inputs and have access to COE's products and services, however they will not have voting right in the Steering Committee (SC). These relationships should be managed by the COEs on case by case basis, taking into account security aspects.

Can COEs engage with non-military entities, such as industry and academia?

Yes they can, moreover they are encouraged to do so. These relationships should be managed by the COEs on case by case basis, taking into account security aspects.

Where can I find more information about the COEs?

Each COE has its own homepage. In addition, you can find information about the COEs in general at http://www.act.nato.int/centres-of-excellence and more details at https://portal.transnet.act.nato.int/Pages/home.aspx (You need to sign up for a TRANSNET account)

COE Annual Report

The following 2 pages provide information about the key COE events which took place in 2017. The number of NATO accredited Centres of Excellence (COE) continues to grow and the 24th NATO COE (Counter intelligence COE) received its NATO accreditation in February 2017. An additional four offers or potential offers to establish new NATO COEs are currently being processed.

One of TNB's aims this year has been to increase NATO and the NATO Nations recognition of NATO COEs and improving knowledge about their contribution to NATO's Transformation. That was achieved by delivering a well-received brief to the Military Committee, increasing publicity on individual COEs events & products and by publishing a revised COE Catalogue. Promoting NATO COEs is a continuing effort, performed in close cooperation with the COEs.

The 2017 Centres of Excellence Directors' Conference

The objective of the annual Centres of Excellence Directors' Conference is to provide the primary venue to foster interaction between COE Directors and, upon invitation, equivalent representatives from NATO Bodies and Multinational Organisations, to inform them about recent developments, compare experiences and share best practices. To discuss mutual support and cooperation, and provide a forum for an exchange of views on the way ahead, thus facilitate directors' networking in order to increase the individual and collective effectiveness of the Centres.

The Military Medicine Centre of Excellence, in the last week of September, hosted the 2017 Centres of Excellence Directors' Conference, in Budapest, Hungary. The Conference was co-chaired by ACT Transformation Network Branch Head, Colonel Roberto Esposito and by NATO COE for Military Medicine Director, Colonel Laszlo Fazekas. Hungarian Deputy MOD, Mr. Tamás Vargha, attended the morning session of the first day and gave the opening remarks, praising the COEs' contribution to the Alliance. Deputy Supreme Allied Commander Transformation, Admiral Manfred Nielson and Deputy Chief of Staff Capability Development, Lieutenant General Jeffrey Lofgren, were engaged in a fruitful discussions with the COE Directors on NATO Command Structure Adaptation and how this adaptation could affect the COEs Programme of Work. JCBRND COE in Vyškov, CZE, will host next year's COE Directors' Conference in June 2018.

NATO Command Structure Adaptation

The COEs contribution to NATO Command Structure (NCS) Adaptation process is focused on future relationships between NATO COEs and NATO entities. NCS adaptation will most likely result in an increased need for the Subject Matter Expertise in COEs and is likely to lead to an increase in Request For Support from NATO and a need for revising the MC concept for COEs (MC 236) to adapt it to be in line with the needs of the new NCS.

TNB has specifically contributed to the discussion about optimizing the use of COEs in the future NATO Command Structure. TNB has initiated a review of strategic documents governing NATO - NATO COE relationship as part of NATO Command Structure Adaptation process with the aim of increasing commitments and obligations between NATO and the NATO COEs.

ACOS CEI BRIEF TO MC ON NATO COEs

On the 15 of June ACOS CEI, supported by the Chairman of the COE Directors briefed the Military Committee on NATO Accredited COEs. It was a concise briefing that provided the audience with the basic information about COEs and corrected several misconceptions nations have about COEs.

The Military Committee were invited to discuss the following: - Consider the need for developing a NATO Strategy for COEs. - Consider reviewing the MCM 236-3 (MC Concept for Centres of Excellence) after completion of NCS Adaptation. - Consider the proposal of COEs presenting key relevant products to the MC 4 times a year. - Note the benefit of COEs' knowledge and expertise as contributors to NATO's adaptation and capability development. - Recognize the good will of nations in providing the resources for each COE. - Consider COEs' role in the NCS Adaptation process. We received general support for all proposals.

COE Accreditation and Periodic Assessment

In 2017 TNB provided advice and assistance to Italy throughout the establishment of the NATO Security Force Assistance COE (SFA COE). This is the 25th NATO COE, and the 3rd COE, in which Italy serves as a Sponsoring Nation (alongside the Modelling and Simulation COE in Rome and the Stability Policing COE in Vicenza). The SFA COE was officially established in 13 December and it is likely to receive NATO accreditation in 2018.

In 2017 TNB also continued to conduct Periodic Assessments of NATO COEs. These assessments are needed to ensure that the products and services provided by NATO COEs remain consistent with the quality, standards, practices and procedures within NATO. Five COEs were periodically assessed in 2017 and all of the assessments resulted in a positive outcome.

NATO – EU co-operation

TNB and COEs participated in the implementation plan of a common set of proposals for NATO – EU co-operation. It resulted in the Joint Declaration between NATO and EU concerning mutual cooperation, namely, the proposal 7.2 - Encourage cooperation and exchange of expertise through respective COEs and other relevant training activities and programmes in support of partners. This proposal has the objective of enhancing the interoperability between NATO COEs and EU entities in a way that can benefit NATO and EU. The first meeting held at the NATO HQ - Brussels was designed to initiate a process to realise the aspirations from the Joint Declaration.

The aim was to identify possible projects in areas where NATO and the EU hold common interest and encourage cooperation and exchange of expertise between the NATO COEs and the EU. Representatives from the International Staff, the International Military Staff, Allied Command Operations, and NATO's COEs together with multiple representatives of the European Union to include the European Commission, European Defence Agency, the European External Action Service and multiple subject matter experts attended the meeting.

New COE Programme of Work tool

To improve the communication and coordination between NATO and COEs a new online tool for continuous submission and coordination of NATOs request for support (RFS) was introduced this spring. This online tool, which is hosted on Transnet, offers a possibility to continuously submit and review RFS, which provides increased flexibility to the POW development cycle and will eliminate the need for future POW workshops. In 2017 TNB conducted two COE's POW Workshop, the first in Naples and the second in Norfolk. We coordinated 358 unique Request for Support (RFS) which resulted in 649 RFS to individual NATO COEs.



NATO AIR OPERATIONS
CENTRE OF EXCELLENCE
(AO COE)

While maintaining a high level of expertise in the Air Operations discipline based on current operations, AO CoE, capitalizing on 20-year of experience including 10 as a NATO CoE, responded to the requests from the Alliance, non-NATO nations and partnership for peace. Using flexibility and agility, the Air Operations COE provided them with state of the art courses and products.

Director's Message



COL Thierry CHAPEAUX

Mission Statement

The NATO Air Operations CoE (AO CoE) continuously educates and trains individuals on how to plan, conduct and lead present and future NATO air operations in a joint environment. Further, AO CoE provides the expertise and infrastructure to evaluate NATO Air C2 systems (such as the current and future versions of tools like ICC, JTS, FAST). Not just content to comply with NATO standards, AO CoE also participates in NATO doctrine development by providing expertise in the field of Air Operations and, shapes Air C2 E&T as the NATO Department Head for Air Command and Control Systems. In summary, AO CoE greatly contributes to the transformation of NATO.

Who We Are



Drawing from many different experiences and skills in the Air Operations domain, simulation and Air C2 Systems, AO CoE is manned with military and civilian personnel. This staff is dedicated Education and training of NATO personnel and partners, NATO Air C2 Systems experimentation and Air C2 doctrinal works.

To enhance open-mindedness and better contribute to NATO transformation, AO CoE welcomes the participation of Canada, Belgium, Spain and Great Britain, and the integration of representatives from Italy and the United States. Moreover, to meet the joint aspect of Air Operations, AO CoE integrates officers from the army and navy.

Vision



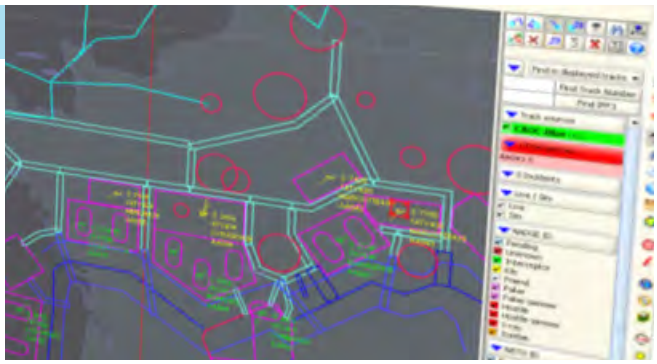
AO CoE aims to become the NATO's preeminent source of training and expertise in the Air Operations domain, covering the full-spectrum of Alliance Air Operations. It will be the preferred NATO forum where personnel, ranging from newcomers in the operational environment to senior leaders, can share experience and expertise in Air operations.

In line with this vision, the Air Operations CoE educates and trains personnel to plan, command, task and control air operations as well as experiment with new concepts and doctrine. In the Air Operations field, AO CoE provides state of the art training and simulation capabilities including a Current ops room with 26 work stations and an EXCON team room with 12 positions.

At the same time, AO CoE collects operational lessons learned and provides expert analysis for the development of NATO doctrine in the Air C2 domain.

All 13 Air Ops CoE courses offered to NATO are "approved" or "listed" in NATO's Education and Training Opportunities Catalog (ETOC). Beside the support it brings to the NCS, AO CoE also meets the NFS requirements.

Major Products and Activities in 2017



Major activities carried out in 2017 by the Air Operations CoE:

- delivered over 66 courses including via mobile training teams, educating and training more than 920 personnel from 43 NATO and partner nations;
- contributed to curricula for the training of military personnel in the field of Command and Control in joint and multinational air operations;
- facilitated the NATO Lessons learned process by providing the Joint Analysis Lessons Learned (JALLC) with analysis support from current operations and exercises;
- contributed to 11 Allied Joint Publications and 3 Tactical Publications related to Air Operations;
- provided C2 Systems Support Specialists in response to NCIA and NCS requests;
- collaborated with multiple NATO agencies for testing upgraded C2 programmes;
- as the DH for Air C2 systems appointed by NATO, AO CoE greatly facilitated and contributed to the delivery of the first ITC course by the DACCC.

Major Products and Activities in 2018

As for major activities scheduled for 2018, AO CoE will:

- deliver 62 training events and welcome about 970 students;
- support the NRF preparedness by educating, training and contributing Air C2 SMEs to training events. Provide continued support for the Alliance Future Surveillance and Control Capability task force;
- contribute to the development, test and evaluation of the current and future Air C2 systems;
- provide guidance for the Allied Command Operations joint targeting community both as an SME and training provider;
- share vision and expertise with the NATO Scientific Technology Organisation (STO) through membership in the NATO Modelling and Simulation Group (NMSG);
- develop an Air Operations Community of Interest and work with the Joint Air Power Competence Centre (JAPCC) through the JALLC Sharepoint Portal;
- feed Lessons Learned process from exercises and operations both national and multinational directly supporting the JALLC;
- support SHAPE and AIRCOM in capturing training requirements, offering optimal training opportunities and cooperating with NCIA, the NCS and ACT.

NATO AO COE - CASPOA Contact Information

Mailing Address:

Air Operations COE - CASPOA
Base Aérienne 942, BP 19
69579 LIMONEST Cedex
France
N 45° 51′ 05 E 4° 47′ 12

Director:

Colonel Thierry CHAPEAUX
Phone : +33 (0) 4 81 18 33 55
Email : thierry.chapeaux@intradef.gouv.fr

Contact:

Phone : +33 (0) 4 81 18 33 56/53
Fax : +33 (0) 4 81 18 33 58
Email : ikm@caspoa.org (general purpose)
studentoffice@caspoa.org (only for course purpose)
Website : www.caspoa.org
NS: http://wise.defensenns.gouv.fr/WISE/CASPOA

NATO COOPERATIVE CYBER DEFENCE CENTRE OF EXCELLENCE (CCD COE)

In 2018 the NATO Cooperative Cyber Defence Centre of Excellence is celebrating its tenth anniversary. In ten years, this Centre has made a vast difference in cyber defence field at Euro-Atlantic level. It hosts CyCon, the annual International Conference on Cyber Conflict; it organizes Locked Shields, the most complex international technical live-fire cyber defence exercise in the world; and it has launched Tallinn Manual, the most comprehensive guide on the application of international law to cyber operations. This international hub has considerably expanded its circle of members, partners and reach in the global community. Developments in cyberspace are increasingly complex, both the technologies and threat landscape are in constant change at an accelerating pace. To respond to different challenges we always have to think about solutions that are one step ahead. It is important to take the work of the Centre even further, in a sustainable manner. To continue to dig deeper in our focus areas while reaching out to new international audiences. Our goal for the years to come is to keep up the momentum and keep up the drive.

Director's Message



Ms. Merle MAIGRE

Mission Statement



NATO CCD COE's mission is to support its member nations and NATO in the fields of cyber defence research, training and exercises. The Centre provides cyber defence expertise in the fields of technology, strategy, operations and law, often in an interdisciplinary manner.

Who We Are

The NATO Cooperative Cyber Defence Centre of Excellence (NATO CCD COE) is a NATO-accredited knowledge hub offering a unique interdisciplinary approach to the most relevant issues in cyber defence. This Tallinn-based cyber defence hub conducts research, trainings and exercises in four core areas: technology, strategy, operations and law.

The heart of the Centre is a diverse group of international experts from military, government, academia and industry, representing 20 member nations. NATO CCD COE embodies and fosters the cooperation of like-minded nations in cyber defence.

Vision

NATO CCD COE is a premier subject matter expert and a fundamental resource in strategic, legal, operational and technical aspects of cyber defence. It offers thought leadership on the cutting edge of all aspects of cyber defence and provides a 360-degree view of the sector.

Publications and Courses

Most of the Centre's publications and research papers are available online (Cyber Defence Publications Library on the Centre`s website). A comparative glossary of cyber terminology, a database of national cyber security strategies, the International Cyber Developments Review and comprehensive overviews of national cyber security organizations are also made available.

To best meet the training needs of our members, partners and NATO as a whole, CCDCOE provides courses in different formats and locations, covering a broad range of topics within the technical, legal, strategic, and operational



cyber security domain. The Centre complements the training by organising workshops, conferences, exercises and e-learning.

The following courses will be available in 2018*:

General: Executive Cyber Seminar - Critical Information Infrastructure Protection
Law course: International Law of Cyber Operations
Operational course: Cyber Defence at Operational Level
Technical courses: Malware and exploits essentials IT systems monitoring IT Systems attack and defence Botnet mitigation Introductory digital forensics Web applications attack and defence
Industrial Control Systems security Smartphone security and forensics

Recent news, publications and other resources can be found at www.ccdcoe.org

*Courses are mainly available for participants from the member nations of CCDCOE.



Locked Shields

Locked Shields is the most complex international technical live-fire cyber defence exercise in the world. The annual exercise provides a unique opportunity for nearly 900 cyber security experts to practise the defence of their national IT systems and critical infrastructure under the intense pressure of a severe cyberattack. The focus is on realistic scenarios, cutting-edge technologies and simulating the entire complexity of a massive cyber incident.



CyCon

CyCon, the annual International Conference on Cyber Conflict, addresses the most relevant issues concerning the cyber defence community. In the ten years of its existence, CyCon has become a community-building event for cyber security professionals, adhering to the highest standards of academic research and bringing to Tallinn around 600 decision-makers, opinion-leaders, top military brass, law and technology experts, from the governments, military, academia and industry of nearly 50 countries. 10th anniversary conference on cyber conflict, CyCon will take place from 29 May to 1 June in 2018.

The Tallinn Manual

The Tallinn Manual 2.0 published in February 2017 is the most comprehensive *guide for policy advisors and legal experts* on how International Law applies to cyber operations carried out between and against states and state actors. Invaluable and independent analysis by an international group of renowned scholars forms the basis for further research of specific cases.

Member Nations

The Centre is staffed and financed by its sponsoring nations and contributing participants. Belgium, the Czech Republic, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, the Netherlands, Poland, Slovakia, Spain, Turkey, the United Kingdom and the United States are signed on as Sponsoring Nations of NATO CCD COE. Austria, Finland and Sweden have become Contributing Participants, a status eligible for non-NATO nations.

NATO CCD COE Contact Information

Contact:
NATO Cooperative Cyber Defence Centre of Excellence
www.ccdcoe.org
Connect with us in Twitter @ccdcoe
Ccdcoe@ccdcoe.org
+372 717 6800

NATO COUNTER INTELLIGENCE CENTRE OF EXCELLENCE (CI COE)

Director's Message

Nations today face increasingly complex and evolving challenges that increase overall global instability and result in rising extremist violence, humanitarian suffering, and reduced personal freedoms. These ever evolving challenges are further shaped by hostile intelligence services. The threats from these organizations include theft of homeland and military defense secrets, valuable scientific and trade secrets, and technology used to inflict mass casualties in NATO and coalition countries.

The NATO Counter-Intelligence Center of Excellence (CI COE) is a leader in the unified effort to reduce the actions of these hostile intelligence services and efforts through enhancing counter-intelligence capability and competency of partner nations. NATO CI COE serves as a force-multiplier for the counter-intelligence efforts of NATO operations, exercises, policies, concepts and strategies and function as a focal point for resources focused on the most serious and emerging cyber and hybrid threats.



COL Robert BALA



Mission Statement

The NATO Counter-Intelligence Center of Excellence will enhance counter-intelligence capabilities, foster interoperability and provide comprehensive subject matter expertise to the Alliance, its Nations, and its Partners in order to increase overall global stability and reduce the impact and scope of hostile intelligence efforts.

Who We Are

The NATO CI COE was established in 2015 under the Paris Protocol and is located in Krakow, the capital of scenic and historical Malopolska Region, and will utilize a modern Slovak military training area in Lest. The Republic of Poland and Slovak Republic signed the NATO Operational and Functional Memoranda of Understanding as Framework Nations in addition to Croatia, Czech Republic, Germany, Hungary, Italy, Lithuania, Romania and Slovenia as Sponsoring Nations, and Headquarters Allied Command Transformation. In February 2017 the CI COE accomplished the NATO accreditation process and the formal opening of the Centre was held in October 2017. NATO CI COE will unify doctrine, integrate best practices, and serve as a hub for expertise enabling NATO forces to achieve the highest levels of interoperability and integration of counter-intelligence forces in support of strategic objectives.



Vision

The NATO CI COE will act as a catalyst for counter-intelligence aspects NATO Operation, exercises, policies, concepts and strategies and will actively engage in all aspects of the Alliance's counter-intelligence activities. It will conduct counter-intelligence focused courses, seminars, conferences and workshops in an effort to establish a Counter-Intelligence Community of Interest with the NATO Command Structure, NATO Force Structure and Sponsoring Nations. The NATO CI COE will support the development, promotion and implementation of new policies, concepts, strategies and doctrine that transform and enhance NATO counter-intelligence capabilities and interoperability.

Key Products and Activities

2017

In 2017 the NATO CI COE focused on development of various projects with special attention on education and training, doctrine development and lessons learned.



Within the education and training domain, the Centre has actively supported the CI oriented exercise Steadfast Interest 2017 held in September in Slovakia as well as prepared and conducted the first NATO Counter Intelligence Course with the "NATO Selected" accreditation.

In the field of doctrine, the CI COE took responsibility as a custodian for CI Allied Publication AIntP-19 focused on the development of CI standards, tactics, technics and procedures for the NATO led operation.

The Centre took responsibility for the CI Lessons Learned Community of Interest to harmonize the NATO CI LL activities among NATO Nations, based on their willingness to exchange information on Lessons Learned and Best practices.

2018

Education and training

1. Conduct advanced training through organization of counter-intelligence focused courses to individuals from senior military and civilian leadership to staff level, as well as units and teams;
2. Facilitate the collaboration between relevant NATO COEs, committees and working groups on CI issues related to NATO's effort to defeat or counter human and cyber threat networks;
3. Support the Steadfast series of exercises through development, design and execution;
4. Enhance standardization and interoperability within the alliance in support of NATO operations by providing CI related courses.

Doctrine & Standards

1. Develop the Allied Intelligence Publication AIntP-19;
2. Support the harmonization processes of NATO CI polices, doctrines and other publications.

Concept Development & Experimentation

1. Set up tools/standards for CI Operators, by establishing common technologic baseline for the whole spectrum of CI activities;
2. Support development of Biometrics in support of NATO operations.

Analysys & Lessons Learned

1. Provide subject matter expertise and advice on requests pertaining to counter-intelligence;
2. Facilitate the comprehensive approach and make the best use of combined experience and capabilities of all Sponsor Nations and NATO members;
3. Provide a repository for International, National and NATO shared information, analysis and lessons learned in counter-intelligence in close cooperation with Joint Analysis and Lessons Learned Centre (JALLC) – NATO LL CI COI.

NATO CI COE Contact Information

Contact:
NATO Counter Intelligence
Centre of Excellence
Rakowicka Street 29
30-901 Kraków 50
Poland

Tel. no: +48 261 131 688
Fax: +48 261 131 540
e-mail: cicoe.registry@cicoe.org

Public Affairs Officer
Tel. no: +48 261 131 594
e-mail: pao.media@cicoe.org
Website: www.cicoe.org



NATO COUNTER - IMPROVISED EXPLOSIVE DEVICES CENTRE OF EXCELLENCE (C-IED COE)

Director's Message

Other than providing C-IED support to NATO and Sponsoring Nations on a daily basis, the main focus of the C-IED CoE in 2018 is to continue with the institutionalization of C-IED within International community.

Mission Statement

The C-IED CoE mission is to provide subject matter expertise in order to support the Alliance, its Partners, and the International Community in the fight against IEDs and to co-operate to increase the security of Allied Nations and all of the troops deployed in theatres of operations by reducing or eliminating the threats from improvised explosive devices used by terrorists or insurgents.

Who We Are

The C-IED CoE is organized into three pillars: Attack the Network, Defeat the Device and Prepare the Force, and has a staff over 60 people, of which more than 40 are subject Matter experts in the field of C-IED.

Vision

The vision of the CoE is to use a comprehensive approach to face the challenge, with the support of not only military personnel, but also the contribution from law enforcement, police, intelligence community and civilians from Academy and research & technology industry. The synergy of all these elements will contribute to the defeat of both terrorist /insurgent networks using IEDs and IEDs themselves.
The C-IED CoE is the natural venue for all C-IED issues within NATO area. Its director chairs and participates in related working groups of both NATO and the European Defense Agency (EDA), in order to create synergies between both organizations.

Our five goals are:

- Improve the C-IED CoE as an organization capable of establishing relationships with organizations to exchange information to Attack the Network (AtN) and Counter Threat Network (CTN) operations.
- Establish the C-IED CoE as the training and education subject matter experts (SME's) for C-IED related activities.
- Establish the C-IED CoE as the out of theatre lessons learned coordinator for C-IED related activities.
- Become one of the focal points for the generation of modern defense technology military capabilities in C-IED related technologies, capabilities and knowledge.
- Achieve a robust capability to communicate and exchange IED and C-IED information with other organizations.



Key Products and Activities

Support to Education & Individual Training

- Implement the role of Department Head for Training for C-IED within NATO
- Develop and implement courses in collaboration with other organisms.
- Conduct NATO accredited courses
- Provide C-IED related Mobile Training and Advisory Teams (MTT & MAT)
- Support NATO Missions Training & Partner support (like Defence Capacity Building activities)



- Support NATO Command Structure (NCS) / NATO Force Structure (main) exercises
- Conduct Senior Leadership Seminars and / or Engagement (SLS & SLE)
- Conduct Non Classified C-IED related Courses (for partners)
- Support other NATO courses with C-IED expertise.

Support to Technologies, Experiments and Information Management

- Assess technological developments to defeat the IED
- Analyze current IED trends to identify potential solutions
- Provide predictive analysis of Global IED threats
- Support C-IED enablers' concept of employment development
- Collaborate with other organizations (e.g. EDA, UN and JIDO) in R&D projects
- Collect / assess / analyze C-IED Equipment Database
- Conduct in cooperation with the EOD CoE the EOD Demonstrations and Trials and Technological Workshop.

Support to Concepts, Doctrine and Standardization Development

- Foster C-IED interagency information sharing
- Conduct a C-IED Interagency Workshop
- Keep on supporting NATO Human Network Analysis Targeting development
- Provide support to NATO Defense Against Terrorism Program of Work (DAT POW)
- Support development electronic Military Training and Exercise Programme (E-MTEP), support and maintain Education & Training Opportunities Catalogue (ETOC) and Partnership Real-time Information, Management and Exchange System (ePRIME)
- Develop Advanced Distributed Learning (ADL) tools in support of C-IED and courses.
- Custodianship for STANAG 2294, STANAG 2295 and STANAG 2637
- Support C-IED related doctrine development
- Keep on supporting the NATO Biometric and Exploitation Concepts development
- Support NATO initiatives and work strands (RTO SCI 243, SCI 233, SCI 256).
- Support Partner Nations in their CIED doctrine development process.



Support to Lessons Learned and Analysis Activities

- Provide C-IED related advice to operations with Mobile Advisory Teams (MAT)
- Act as C-IED Community of Interest content manager on Joint Analysis Lesson Learned Center (JALLC) portals
- Maintain and improve C-IED Lessons Learned
- Analyze new threats and Technical Tactical Procedures (TTPs)

NATO C-IED COE Contact Information

Contact:
Phone: 0034 91 856 10 48
Fax: 0034 91 856 23 90
Email: info@ciedcoe.org
Web: www.ciedcoe.org

Address: Crta. M-618 Colmenar Viejo - Torrelodones km. 14, 28240, Hoyo de Manzanares , Madrid, Spain

Director
Colonel Juan Gomez Martin, ESP A
Phone: +34 918562482; Email: jgomez@ciedcoe.org

NATO CIVIL-MILITARY COOPERATION
CENTRE OF EXCELLENCE
(CIMIC COE)

CIMIC in 360 degrees is a cross-cutting, joint function and must be an integral part in every kind of operation from the strategic down to the tactical level. CIMIC includes all our military and civilian stakeholders, as well as the general public and media, both at home, as well as in deployments.

Director's Message



COL (GS) Wolfgang PAULIK

Mission Statement

To assist NATO, Sponsoring Nations (SN) and other military and civilian institutions/organizations in their operational and transformation efforts in the field of CIMIC and Civil-Military Interaction (CMI).

Who We Are

The CCOE was granted the title of a NATO accredited Centre of Excellence, on 31st July 2007. Initially located in Enschede, NLD, the CCOE was re-located in 2014 to The Hague, the International City of Peace and Justice, to enable comprehensive engagement with national and international stakeholders. It is the objective of the CCOE to incorporate a large variety of Sponsoring Nations, as this will expand the knowledge and expertise available from the CCOE.

Vision

The CCOE is the preferred network campus to connect people and share collective knowledge of Civil-Military Interaction to gain unity of purpose of people dedicated to respond to mission challenges.

Key Products and Activities in 2017

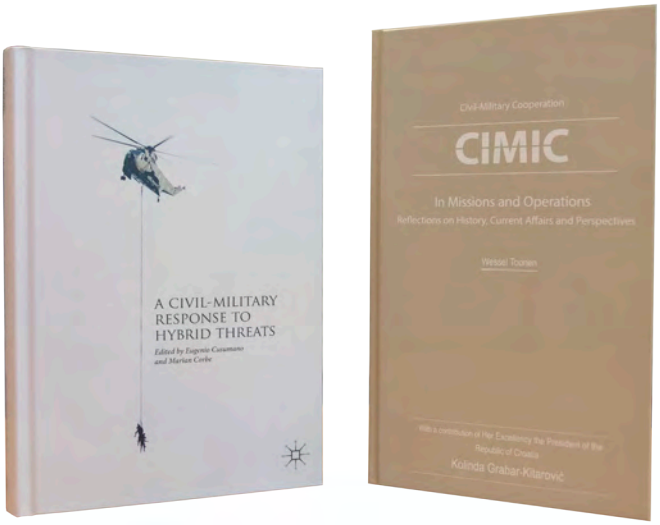
- 10th Anniversary Celebration and CIMIC Award of Excellence 2017, October 10th, The Hague.
- Joint Community-of-Interest Conference with STRATCOM COE in Riga, Latvia, preceded by Annual Discipline Conference, as part of our Strategic Direction East Baltic Initiative.
- Publication of "A Civil-Military Response to Hybrid Threats" and "CIMIC in Missions and Operations" and video production "25 Years NATO CIMIC."
- Department Head for CIMIC and custodian for NATO CIMIC doctrine contributing to partners.
- Execution of internal as well as external CIMIC and CMI courses.
- Conduct a Joint Analysis study on CIMIC and CMI in Collective Defence.



- Contribute to and revision of CIMIC and CMI requirements, procedural foundations, concept development, planning documents and tactical procedures.
- Implementation of a regional view and Counter Hybrid Threat in academic program.
- Support selected exercises with CIMIC and CMI expertise.
- Implementation of Cross Cutting Topics within CIMIC (e.g. Protection of Cultural Property, Protection of Civilians, Building Integrity).
- Execution and co-hosting of the United Nations course on 'Supporting Humanitarian Action in Responding to Emergencies and Disasters'.

Key Products and Activities in 2018

- Revision of course landscape, especially to cover countering Hybrid Threats / building resilience topic and to include state-of-the-art scenarios and vignettes, ensuring best possible trained CIMIC personnel for NATO command and force structure.
- Initiative Strategic Direction South: projecting stability. Community of Interest Conference and Annual Discipline Conference in Rome (May 2018). Cluster approach with partner COEs and non-military partners.
- CCOE EU Disciplinary Leadership for CIMIC, synchronization with NATO Disciplinary Head function. Link with European Security and Defence College.
- Standardization of products for NATO: AJP 3.19 to be promulgated with the CIMIC Handbook to be revised to ensure best possible standardization of the CIMIC capability in NATO.



- Support of NATO command structure: Exercise support Pyramid Pinnacle, CREVAL of tactical CIMIC units, especially the CSU VJTF, utilizing Integrity Building topic for practical military use.
- Validating Lessons Identified / Learned in the CIMIC capability, especially with an "Analysis Makes the Difference" workshop together with the HUMINT COE, NATO JALLC and relevant CIMIC units.
- 2018 CIMIC Award of Excellence in conjunction with IO / NGO Community.

NATO CCOE Contact Information

Contact:
CIMIC Centre of Excellence
Brasserskade 227A, 2497 NX The Hague
The Netherlands

Phone:+31 (0)15 28 44793
Email:pao@cimic-coe.org
Web:www.cimic-coe.org

Mail Address
PO Box 90701, 2509 LS The Hague
The Netherlands

Director:
Colonel (GS) Wolfgang Paulik, DEU A
Phone: +31 (0)15 28 44796
Email: ComGrp@cimic-coe.org

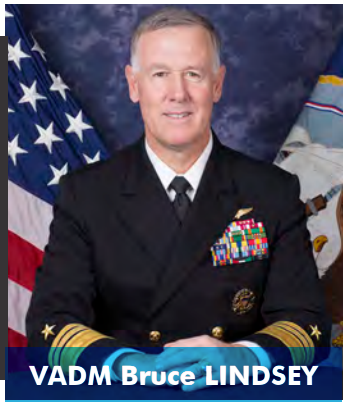




NATO COMBINED JOINT OPERATIONS FROM THE SEA CENTRE OF EXCELLENCE (CJOS COE)

Director's Message

As I begin my tour as the Director of CJOS COE, I'm impressed by the scope and intellectual depth of CJOS COE's portfolio. From concept and doctrine development to maritime futures and exercise support, CJOS COE is focused on improving NATO's interoperability. NATO's transformation will require the Alliance to become increasingly interoperable and CJOS COE is uniquely positioned to play lead role in this effort. Through our robust Programme of Work we facilitate NATO interoperability across the maritime domain and through projecting power ashore. CJOS COE embraces this challenge and I look forward to our continued success in 2018 and beyond.



VADM Bruce LINDSEY



Mission

To provide a focus for the sponsoring nations and NATO to continuously improve the capability to conduct combined and joint operations from the sea. Our aim is to ensure that current and emerging maritime global security challenges can be successfully addressed across the full spectrum of maritime operations.

Who We Are

Independent of the NATO command structure, CJOS COE draws on knowledge and capabilities of Sponsoring Nations, Allied Command Transformation (ACT), United States Fleet Forces Command (USFFC), and other neighboring U.S. commands to promote "best practices" inside the Alliance and out. CJOS COE also plays a key role in aiding NATO's transformational goals, specifically those focused on maritime based joint operations.

Vision

Working closely with partners and stakeholders from international militaries, governments, non-governmental agencies, industry, and academic communities of interest, CJOS COE seeks to optimize the efficient delivery of Maritime Effect.



Major Products and Activities

Combined Joint Operations

- Chemical, Biological, Radiological, and Nuclear Defence (CBRN) Support to Amphibious Operations;
- Collaborative Anti-Submarine Warfare (ASW): Providing support to ACT in the execution of NATO HQ's ASW Roadmap;
- Integration of Unmanned Aerial Systems in Maritime Operations;
- Maritime Intelligence, Surveillance and Reconnaissance (ISR) Improvement: Leading the development of NATO's Maritime ISR Doctrine.

Concept/Doctrine Development

- Allied Joint Publication-3 Revision: Development of Joint Battlespace Management procedures to facilitate operations in coastal and littoral environments and enhance power projections from the sea;
- NATO Concept for Joint Sea-Based Operations: Development of implementation plan for NATO's Joint Sea-Based

Operations Concept;

» Space Support: Support to MARCOM and MAROPS WG in the development of NATO Space and IAM-D Doctrine in addition to SME support to TRIDENT series exercises.

Interoperability



» Interoperability Handbook: Updating the 2011 edition of Interoperability Handbook, designed to enable coalition operations in the NORTHCOM AOR;

» Lessons Learned / Analysis: Providing support to multiple NATO entities in the lessons learned process to help deliver improved NATO exercises and procedures;

» Multinational Maritime Information Services Interoperability (M2I2): CJOS chairs the Maritime Information Warfare Working Group to provide improved C4I interoperability within NATO.

Maritime Future

» Dual-Use of Military Defence Capabilities (DuMDC): Development of a Capstone Concept in DuMDC in support of the Italian Defence Staff;

» Framework for Future Alliance Operations (FFAO)/Strategic Foresight Analysis (SFA): Providing support to ACT's Long Term Military Transformation Programme;

» Future Aspects of Sea Control: Study on Anti-Access/Area Denial challenges and help to develop strategies to preserve NATO maritime operations in contested environments;

» Urbanization Concept: Contributed to NATO Study on Urbanization and participated in associated workshops and wargames to validate this concept.

Maritime Security

» Maritime Cyber Security: Analysis and evaluate priorities and methods for safeguarding maritime critical infrastructure from cyber threats;

» Maritime Security Regimes (MSR) Roundtable: In 2018 CJOS COE will expand on the work of previous Roundtables to build a better understanding of the current global MSA environment, and examine best practices for information sharing across MSRs;

» Maritime Situational Awareness (MSA): Support MARCOM in the identification and development MSA synchronization mechanisms;

» Multinational Capability Development Campaign (MCDC) – Counter Unmanned Autonomous Systems (CUAxS): Develop an operational concept addressing specific countermeasures against Unmanned Autonomous Maritime Systems.

Exercises

» BOLD ALLIGATOR 2017
» BRILLIANT MARINER 2017
» TRIDENT JAGUAR 2017
» TRIDENT JAVELIN 2017
» TRIDENT JUNCTURE 2017

Strategic Communications

» Cutting the Bow Wave 2017
» Old Dominion University / CJOS COE Distinguished Lecture Series (periodic)

NATO CJOS COE Contact Information

Contact:

CJOS COE
1562 Mitscher Ave Suite 250
Norfolk, Virginia 23511
Fax: +1 757-836-3437
Website: www.cjoscoe.org
Email: cjoscoe@navy.mil

Director
VADM Bruce H. Lindsey, USA-N

Deputy Director
CDRE Tom Guy, GBR-N
Phone: +1-757-836-2452

NATO CRISIS MANAGEMENT AND DISASTER RESPONSE CENTRE OF EXCELLENCE (CMDR COE)

Director's Message

As part of the wider network of NATO Centres of Excellent (COE), the principle raison d'être of which is to contribute to and to support the transformation and adaptation of the Alliance, the CMDR COE serves as a hub of expertise and a platform for information, knowledge, and good practices exchange in the crisis management and disaster response (CMDR) domain whilst establishing and nourishing a pool of experts and a community of interest. Exceeding at CMDR requires both a deep insight in what is already at hand and a keen foresight in what lies ahead. We, at the CMDR COE, believe in an inclusive, transformative and capable CMDR and strive to provide the necessary conditions enabling such a collaborative collective approach to CMDR!

Meet Challenges, Seize Opportunities, Anticipate the Future!



COL Vassil ROUSSINOV



Mission Statement

Taking fully into account and aligning to the imperatives of the current security reality, the Centre's objective is to act as a catalyst for the improvement of NATO's, NATO Nations' and Partners' capabilities in CMDR operations placing utmost importance on the principles of the Comprehensive approach and on enhancing collaborative partnerships. A point of departure for the Centre's work on achieving its mission is the adoption of functional approaches to CMDR based on firm theoretical basis. To that end, the Centre has elaborated original and, since September 2017, officially (internally) adopted definitions for crisis, crisis management and disaster management.

Who We Are

The CMDR COE is a multi-national NATO military body sponsored by the Hellenic Republic, the Republic of Poland and the Republic of Bulgaria (Framework Nation). The Centre, located in Sofia, Bulgaria, has a 38-strong team of both civilian and military experts working on a wide range of CMDR-related issues, all with the ultimate goal of supporting NATO's standardisation and transformation.

Strong partnerships and effective collaboration are critical in achieving the afore-mentioned goal and hence, the Centre has forged excellent partnerships and enhanced cooperation with key NATO and EU bodies, institutions and agencies. For instance, the CMDR COE works closely with HQ SACT, SHAPE and NATO HQ and contributes to various NATO initiatives, such as NATO Smart Defence.

As a hub of expertise in CMDR, the Centre has generated a wealth of information and expertise and has also been a home for a number of key NATO events and of a variety of CMDR-related conferences, workshops, and trainings.



Vision

The Centre is determined to firmly establish and further sustain its position as an internationally recognised and respected body which provides value-added E&T products, research and analysis, strategic policy recommendations and advice by means of concept experimentation and doctrine development.

Major Products and Activities



2017

- UNISDR Training of Trainers Workshop for the Implementation of the Sendai Framework, 17-19 Jan 2017
- EADRCC Exercise "CRNA GORA 2016" Lessons Identified Conference, 25-27 Jan 2017
- CMX17 Final Planning Conference FPC, 06-10 Feb 2017
- Crisis Management and Disaster Response Course, 20-24 Mar 2017
- MSG-147 Demo-Experiment, 20–24 Mar / 16-20 Oct 2017
- Disaster Relief Operations Course, SEEBRIG HQ, Larissa, Greece, 25-27 Apr 2017
- 3rd NATO Centres of Excellence FINCON Conference, 15-18 May 2017
- Disaster Management Course, 15-19 May 2017
- CMDR COE Annual Conference "Interagency Interaction in CMDR", 1-2 Jun 2017
- NATO Protection of Civilians (PoC) Experiment, 18-22 Sep 2017
- Disaster Relief in CSDP Context Course, 28 Nov-1 Dec 2017

2018

- EADRCC Exercise "BOSNIA & HERZEGOVINA 2017" Lessons Identified Conference, Jan 2018
- Crisis Management and Disaster Response Course – 19-23 Mar 2018 (NATO SELECTED, NATO ETOC CODE: ETE-CM-21784)
- Exercise VIKING 18, 6-16 Apr 2018
- CSDP High Level Course (module 3), 16-20 Apr 2018
- Disaster Management Course – 28 May-01 Jun 2018 (NATO ETOC CODE: ETE-CM-22007)
- CMDR COE Annual Conference "Interagency Interaction in CMDR", 4-6 Jun 2018
- MSG-147, 1st week of Jul 2018
- Crisis Response Operations Planners Professional Development Course – 17-21 Sep 2018 (NATO SELECTED, NATO ETOC CODE: JPL-OP-31878)
- CAX Forum, 24-29 Sep 2018
- Crisis Management and Disaster Response Exercise Planners Training Course – 15-19 Oct 2018 (NATO SELECTED: NATO ETOC CODE: ETE-CM-21785)
- Strategic Decision Making for Crisis Response Operations Course – 26-30 Nov 2018 (NATO SELECTED, NATO ETOC CODE: ETE-CM-41879)
- Gender Focal Point course – under development, in cooperation with the Nordic Centre for Gender in Military Operations (NCGM).

NATO CMDR COE Contact Information

Contact:
Phone: +359 2 92 24705
Fax: +359 2 92 24755
E-mail: office@cmdrcoe.org

Mailing Address:
34A Totleben Blvd. 1606 Sofia, Bulgaria

Director
COL Vassil Roussinov
Phone: +359 2 92 24700
E-mail: vassil.roussinov@cmdrcoe.org



NATO CENTRE OF EXCELLENCE FOR OPERATIONS IN CONFINED AND SHALLOW WATERS
(CSW COE)

As a global commons, the sea remains of high significance to the international community as well as to individual states. It should be considered quite an acceptable observation to state that everyone is, directly or indirectly, affected by maritime issues; whether it be by trade, exploration, nutrition, or even simple proximity. Thus, the protection of the maritime environment is of essential importance for mankind. Especially a continuous and unhampered flow of goods is the basis of all economy and is vital for the wealth and prosperity of humanity.

Any sea traffic inevitably requires sailing through Confined and Shallow Waters (CSW) at least twice, as a ship leaves and enters a port, but most of the time even more frequently as it usually transits through marginal seas, narrow straits, choke points, etc. Therefore, any obstruction, and especially a disruption of the safe passage through CSW, creates a huge impact on our livelihood. Following this persuasive logic, the need for a Centre of Excellence (COE) dealing with the specific challenges for operations in CSW becomes very clear.

Director's Message



RADM Jan C. KAACK



Mission Statement

The COE CSW mission is to provide joint and combined subject matter expertise in the range of operations in CSW in order to support the Alliance, our participating nations and other customers thus contributing to NATO transformation and enhancing the interoperability amongst the allies and partners.

Who We Are

The COE CSW was established in 2007 and accredited by NATO on 03 March 2009. Concentrating expertise from different nations and thus creating synergy in a relevant field of competence is a brilliant way indeed to advance transformational efforts in areas such as the unique and extremely demanding operational environment of CSW. Our multinational team of subject matter experts covers the pertinent warfare areas and supports NATO in the entire COE work spectrum.

In December 2015 the North Atlantic Council assigned the COE CSW as the Department Head for Maritime Operations that translates NATO's naval training requirements into individual and collective Education & Training solutions.



Vision

As the very hub of knowledge, the NATO Centre of Excellence for Operations in Confined and Shallow Waters (CSW) is recognised as an essential provider of competence and a tangible supporter to the Alliance, the participating nations, and other customers.

- We are an indispensable element of NATO Transformation by generating synergies and sharing best practices in a multinational environment.
- We are playing the key role in advancing the joint and combined understanding of specific challenges related to operations in CSW, as well as in driving forward the development of high standard capabilities and skills.

Activities for 2017 and 2018

- Acting as Department Head in the Maritime Operations discipline;
- Managing Lessons Learned in the Maritime Domain;
- Leading the NATO Smart Defense Project 1.44 FIT FOR CSW (Flexible and Interoperable Toolbox meeting the Future operational Requirements in Confined and Shallow Waters);
- Supporting the development and execution of major NATO and maritime exercises;
- Fostering a common understanding and the development of Operational Maritime Law;
- Contributing to the evaluation process of NATO Maritime Forces;
- Promoting global Maritime Security by facilitating interaction and cooperation between relevant institutions, inter alia by collaborating with the Munich Security Conference and by facilitating the establishment of a Maritime Security and Safety Network;
- Providing core competence in all Harbour and Force Protection matters as well as Counter-Improvised Explosive Devices (C-IED) in the Maritime Environment;
- Supporting the NATO Urbanisation Project and the A2/AD Simulation Study;
- Implementing conceptual and doctrinal projects, inter alia on NATO Maritime Synthetic Collective Training, Impact of Offshore Facilities on Maritime Situational Awareness, Integration of UAS into maritime operations, or the Employment of Autonomous Underwater Vehicles in Naval Mine Counter Measure Operations.

Participants

Framework Nation:	Federal Republic of Germany
Sponsoring Nations:	Hellenic Republic
	Kingdom of the Netherlands
	Republic of Italy
	Republic of Poland
	Republic of Turkey
Contributing Partner:	Republic of Finland
Voluntary National Contribution:	Republic of Lithuania (joining process in progress)
	Kingdom of Denmark (joining process in progress)

NATO COE CSW Contact Information

Contact:
Phone: +49 431 71745 6310
Fax: +49 431 71745 6099

Address:
Schweriner Strasse 31, 24106 Kiel, Germany

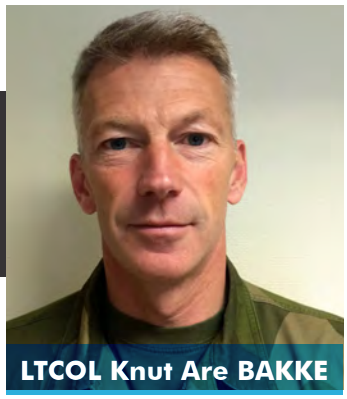
http://www.COECSW.org
Unclassified e-mail: info@coecsw.org
NSWAN: info@csw.coe.nato.int

Director: Rear Admiral Jan C. Kaack
Phone: +49 431 71745 1000;
dir@coecsw.org
Executive Director: +49 431 71745 6000
execdir@coecsw.org



NATO COLD WEATHER OPERATIONS
CENTRE OF EXCELLENCE
(CWO COE)

Director's Message



LTCOL Knut Are BAKKE

Experiences from units conducting training and operations worldwide indicates that if you can fight and survive in the extremes of an sub-arctic or arctic environment you will be very well prepared to fight in all other climatic conditions.



Mission Statement

The COE-CWO mission is to support SACT in his efforts of transforming NATO in the field of cold weather operations. COE-CWO will serve as the main provider and coordinator of expertise in the area of Cold Weather Operations in NATO. COE-CWO will provide NATO- and Partner nations the necessary competence in order to operate under Arctic, sub-Arctic and Cold Weather conditions.

Who We Are

The NATO Centre of Excellence for Cold Weather Operations (COE-CWO) core staff holds 16 PE posts. In addition COE-CWO is a network concept that encompasses training areas, infrastructure, manpower, skills and knowledge drawn from all services in the Norwegian Armed Forces, the Norwegian Defense Research Establishment, the NATO and PfP Cold Weather community of Interest and Civilian Academia.

Vision

The COE-CWO vision is to be NATO and Partner Nations preferred provider of the full spectrum of Cold Weather Operations competence.



Major Products and Activities 2017

- Conduct a variety of courses within winter warfare, with emphasis on practical application of skills.
- Provide collective winter training opportunities for International units up to battalion level.
- Support HQ SACT in the Future Work with expertise on the developing situation in the Arctic.
- Support HQ SACT/ACT SEE in the NDPP capability requirements process regarding Cold Weather Operations
- COE-CWO will participate in the planning of exercise Trident Juncture 2018, with focus on participating foreign units related to cold weather operations.
- Conduct research and analysis on nutrition, survivability and sustainability during Cold Weather conditions.
- Support NATO with lessons learned from the Cold Weather environment.

Major Products and Activities 2018



- Conduct a variety of Cold Weather Courses with emphasis on practical application of skills.
- Provide collective winter training opportunities for International units up to battalion level.
- COE-CWO will participate in planning and execution of the exercise Trident Juncture 2018, with focus on participating foreign units related to cold weather operations and SME support to EXCON for the CPX/CAX part of the exercise.



- COE-CWO will conduct an international Cold Weather seminar.
- Identification of aspects of Nutrition of military operations in the Cold Weather environment.
- Support NATO with lessons learned from the Cold Weather environment.
- Produce and revise Cold Weather Operatons manuals in the English language, and make them available on the web for NATO and Partner nations.
- Support HQ SACT in Future Work with expertise on the developing situation in the Arctic.

NATO CWO COE Contact Information

Contact:
Centre of Excellence Cold Weather Operations
FVS, Terningmoen
P.O. Box 393
N-2403 Elverum
Norway
Email: coe-cwo@mil.no
Website: www.forsvaret.no/coe-cwo

Director
LtCol Knut Are Bakke
E-mail: knbakke@mil.no
Phone: +47 6240 8160



NATO COMMAND AND CONTROL CENTRE OF EXCELLENCE (C2 COE)

Director's Message

Command and Control (C2) is one of those things that seems to be everywhere. But what is it? How does it work? Why is it different within the alliance? At the NATO Command and Control Centre of Excellence we work on answering these questions. We are "Catalysing C2", which means that we research, publish and experiment & evaluate on specific C2 topics. These topics include C2 processes and structures, human factors such as leadership and information & knowledge management. At the NATO C2COE we are "Agents of Change". As such, we support ACT with the transformation of NATO, specifically on Command and Control.



CAPT I.J.C. van PAMELEN-HOLLENBERG

Who are we?

The Netherlands is the so called "Framework Nation" of the NATO C2COE, providing the centre with infrastructure, support resources and the main manning body. On top of that the NATO C2COE is reinforced by seven "Supporting Nations"; Germany, the United States, Estonia, Slovakia, Spain, Norway and Turkey. Our SME's are staff officers from various military backgrounds and all service branches are represented within the centre.



Mission Statement

"The NATO C2COE will support NATO, nations and international institutions/organisations with subject matter expertise on Command and Control. The main level of interest is C2 at the operational level."

Vision

"To be a principal source of expertise focusing on specific areas in the domain of Command and Control in order to best support the Transformation of NATO."

Major Products and Activities in 2017



- **NATO C2 in a Civil Environment:** Together with Headquarters NATO Rapid Deployable Corps – Spain, the NATO C2COE organised the "NATO C2 in a Civil Environment" seminar in Spain. The aim of the seminar was to understand C2 when working closely with civilian stakeholders in operations, such as a Senior Civil Representative, Host Nation authorities, civilian leadership of UN- or EU-missions and other organisations.
- **STEADFAST COBALT 2017:** The NATO C2COE cooperated with the USEUCOM forward HQ element to observe, provide analysis and feedback, as well as provide best practices for future reference. Specific feedback was desired on how to make it a more effective and operationally relevant exercise in the future.
- **TRIDENT JAVELIN 2017:** NATO C2COE is supporting JWC Training Teams and SHAPE J7 Evaluation Teams by providing Subject Matter Experts on C2. During TRJN 17, NATO C2COE SMEs have been engaged as evaluators, trainers and researchers for the centre's own Future of the Command Post research.
- **TRIDENT JAGUAR 2017:** During Trident Jaguar 2017, the NATO C2COE supported the JWC and the training

audiences with C2 subject matter expertise. The centre also evaluated the first version of the NATO Force Structure Joint Task Force Headquarters Handbook together with JALLC and JWC. Furthermore, the SME's continue to collect data to keep the handbook up to date with new best practices and lessons learned. Eventually, this will lead to a new version of the handbook in cooperation with the JWC.



Major Products and Activities in 2018

- **The Future of the Command Post:** Throughout 2018, the NATO C2COE is focusing its efforts on "The Future of the Command Post". The centre will study the C2 aspects from 2035 and beyond. Human Aspects, as well as Information & Knowledge Management will play a big role while Catalysing C2.
- **TRIDENT JUNCTURE 2018:** TRJE18 is a live exercise (25 Nov – 7 Oct), followed by a Command Post exercise (14 – 23 Nov) aimed at training and evaluating Joint Force Command Naples, C2 of the NRF19 and provide training to participants.
- **TIDE Sprint 2018:** The NATO C2COE participates in the ACT initiated TIDE Sprint in which specialists discuss services, standards, concepts and experiments aimed at information, decision and execution superiority. The Centre is leading the C2 Track with the aim to involve the operational community, in accordance with ACT priorities.
- **UKRAINE C4 TRUST FUND:** NATO is cooperating with the Ukraine in order to improve the Command, Control, Communications and Computers (C4) of the Ukraine national forces, through the 'NATO-Ukraine C4 Trust Fund (C4TF)'. The NATO C2COE supports this initiative by providing Subject Matter Expertise on Command and Control (C2) to the Mobile Training Teams NATO has planned to organise in Ukraine.

Where to meet us

The NATO C2COE SME's attend a wide range of exercises, seminars and conferences throughout the year. To name a few:

PROJECT	WHERE
Federated Mission Networking (FMN)	Helsinki Finland
NATO's C2 capability – Cyberspace domain factors	SHAPE CYBER/ Mons Belgium
Research Task Group on C2 Agility, Cyber, Autonomy and Automation	NATO STO/ Paris France
MCDC project C2 in Information Age	Brno Czech Republic
C2 Track TIDE Sprint	Firenze Italy
Seminar "Future of the Command Post"	Berlin Germany
TRIDENT JUNCTURE 2018	Norway

NATO C2COE Contact Information

Find us on:
Website: www.c2coe.org
Facebook: NATO Command and Control Centre of Excellence
LinkedIn: NATO Command and Control Centre of Excellence

Visiting Address:
Kromhout Barracks, Herculeslaan 1
Building K1, 4th floor,
3584 AB Utrecht
The Netherlands

Contact:
Phone : +31 30 21 87012
Fax : +31 30 21 87022
Mob : +31 61 07 11986
E-mail : c2coe@c2coe.org
Web :www.c2coe.org

Mailing Address:
PO Box 90004
3509 AA Utrecht
The Netherlands

Director:
Captain I.J.C. (Renée) van Pamelen-Hollenberg (NLD N)
Phone: +31 30 21 87000
E-mail: renee.vanpamelen@c2coe.org

NATO CENTRE OF EXCELLENCE
DEFENSE AGAINST TERRORISM
(COE-DAT)

Director's Message

Terrorism continues to be a significant threat to NATO and its partners and will continue to challenge our way of life. We can only hope to combat terrorism by coming together and sharing our experiences, best practices, and challenges. Terrorism is a problem that can only be addressed together. Understanding how other nations perceive and combat terrorism and understanding the context within which terrorism gestates will generate fresh and comprehensive ideas to fight, prevent, and respond to terror. Over the next year, the Centre will sponsor several opportunities to share and learn about Counter-Terrorism and Terrorism (CT/T), and I invite you to participate.



Col Mehmet ASLANTAŞ

Mission Statement

COE-DAT's mission is to provide key decision-makers with realistic solutions to terrorism and CT challenges, in order to transform NATO and Nations of interest to meet future security challenges. COE-DAT is focused on NATOs three declared core tasks of collective defence, crisis management, and cooperative security by enhancing NATO's awareness, capabilities, and engagement efforts. COE-DAT accomplishes this mission through our Programme Of Work (POW) which focuses on terrorism and CT-centric events at the strategic and operational level. Our core activities are education and training, doctrine and concept development, and contributions to the analysis and lessons learned process.

Who We Are

COE-DAT is a NATO accredited multi-national sponsored entity located in Ankara, Turkey, whose membership is open to all NATO members. The Centre is composed of 62 multi-national billets with representatives from 8 nations focused on providing key decision-makers with realistic solutions to terrorism and Counterterrorism (CT) challenges. Like the other accredited COEs, COE-DAT is designed to complement NATO's current resources while also serving as NATO's Department Head in Education and Training for CT. As such, COE-DAT is charged with ensuring synergy, coordination, and collaboration across this discipline. Since COE-DAT's inauguration in 2005, the Centre has worked in partnership with over 2,327 guest lecturers, conducted 204 educational and training activities on site or through Mobile Training Teams, and hosted over 11,720 participants from 107 countries on a myriad of terrorism and CT topics impacting NATO.



Vision

An internationally recognized and respected resource for Defense Against Terrorism expertise for NATO, the hub of a wide network of international military, government, non-government, industry and academic communities of interest.

Key Products and Activities for 2017 and 2018

2017 Major Work Items

In 2017, 19 Education & Training activities will take place including 10 courses, 3 workshops, 2 ATC/METs, and 3 conferences. Activities included title such as:

- Defense Against Terrorism Course, 6-10 February 2017
- Defense Against Suicide Bombing Course, 20-24 February 2017

- Operational Planning for CT Course, 6-10 March 2017
- Financial Aspects of CT Course, 3-7 April 2017
- Terrorist Use of Cyberspace Course, 24-28 April 2017
- Critical Infrastructure Protections from Terrorist Attacks Course, 8-12 May 2017
- Legal Aspects of CT Course, 22-26 May 2017
- Radicalisation and Countering Violent Extremism (CVE) Workshop, 13-15 June 2017
- CT Capacity Building Workshop, 20-21 September 2017
- Exploitation of Social Media in Coalition Operations Workshop, 26-28 September 2017
- Counter Terrorism / Attacking the Network (AtN) Course, 9-13 October 2017
- Terrorism Experts Conference, 24-25 October 2017
- Terrorist Use of Cyberspace Course, 6-10 November 2017
- Defense Against Terrorism (Executive Level) Seminar, 21-22 November 2017
- Terrorism and Media Course, 4-8 December 2017



2018 Major Work Items

In 2018, 18 Education & Training activities will take place including 8 courses, 5 workshops, 3 ATC/METs, and 2 conferences. The draft schedule is as follows

- Defense Against Terrorism Course, 12-16 February 2018
- Terrorism Scenario Development Workshop, 6-7 March 2018
- CT Training Needs Analysis Workshop, 26-27 March 2018
- Defense Against Suicide Attack Course, 16-20 April 2018
- Terrorist Use of Cyberspace Course, 7-11 May 2018
- Critical Infrastructure Protection from Terrorist Attacks, 21-25 May 2018
- Annual CT Discipline Conference, 26-27 June 2018
- Terrorist use of Weapons of Mass Destruction (WMD) Course, 10-14 September 2018
- Counter Terrorism / Attacking the Network Course, 17-28 September 2018 –with C-IED COE in Madrid, Spain
- Terrorism and Media Course, 8-12 October 2018
- Terrorism Experts Conference, 16-17 October 2018
- Border Security, Refugees and CT, 5-9 November 2018
- Defense Against Terrorism Executive Level Seminar, 20-21 November 2018
- NATO Member Experience in CT/T workshop, Spring 2018

The complete Event and Course Calendar can be found at our Website and Knowledge Portal at (www.coedat.nato.int).

NATO COE-DAT Contact Information

Contact:

For unclassified: info@coedat.nato.int and/or opsexe@coedat.nato.int
For classified: info@ptcak.mod.tu.nato.int

Mailing Address: Terörizmle Mücadele Mükemmeliyet Merkezi Devlet Mahallesi, İnönü Bulvarı, Kirazlıdere Caddesi, No: 65 06582 Çankaya, Ankara / TURKEY

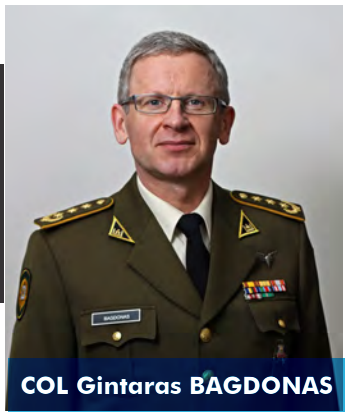
Director: Colonel Mehmet ASLANTAŞ (TUR A)
Phone: +90 312 4258215/1002,
Email: coedatdirector@coedat.nato.int
Deputy Director: Colonel Jeremiah MONK (US Air Force)
Phone: +90 312 4258215/1003,
deputydirector@coedat.nato.int



NATO ENERGY SECURITY
CENTRE OF EXCELLENCE
ENSEC COE

Being the recognized hub of knowledge and expertise, the professional team of NATO ENSEC COE is dedicated to support the NATO bodies, Allies and Partner Nations in their efforts of enhancing energy security. Especially so in four key areas: Raising awareness on energy developments with security implications; Providing the knowledge and expertise on the NATO defined areas; Contributing to energy efficiency of all military activity; and Supporting the critical energy infrastructure protection.

Director's Message



COL Gintaras BAGDONAS

Mission Statement

The mission of the ENSEC COE is to assist Strategic Commands, other NATO bodies, nations, partners, and other civilian 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.



Who We Are

We, the NATO ENSEC COE, are a widely recognized international military organization that strives to provide qualified and appropriate expert advice on questions related to operational energy security. We offer technical, scientific and academic subject matter expertise on energy security that contributes to: risk assessment analyses; energy wise secure solutions for the development of environmentally friendly and efficient military capabilities; developing the Smart Defence Initiative; and Supports NATO Operations through targeted technical scientific assessment.



Vision

NATO ENSEC COE acts to be the recognized hub of knowledge and expertise in Energy Security within NATO, and to be a unique platform of cooperation and partnership in this area for Allies and Partner Nations.

Major Products and Activities

2017

EXPERIMENTATION

- "Deployable Modular Hybrid Power Generation & Management System" project (HPGS). The System uses conventional fuel and renewable sources, such as wind and solar energy to function and provide energy to the intended target. The electricity power obtained through renewable sources is charged into batteries for storing, thus addressing the need for energy during the downtime for both solar and wind capacity. The system will be used to improve energy efficiency and diminish dependence on conventional power sources and is capable of supplying power to a battalion-sized unit. The concept of power generation, distribution and storage of HPGS will be included into NATO standardization document under 3.12 series (MILENG).
- The development of an effective, easily applicable and cost efficient set of tools for energy management in the operational environment is on-going, based on the ISO 50001 concepts. The results of this experiment are expected to support and demonstrate the possibilities of the future development of energy efficiency related concepts. This project is now in the ACT experiment program.

COURSES

- Energy Security Strategic Awareness Course in NATO School Oberammergau.
- Table Top Exercise on Critical Energy Infrastructure Protection (CEIP). The Centre, with assistance from Ukrainian partners, organized a tailored Table Top Exercise and Advanced Training Course on CEIP that focused on enhancing inter-institutional coordination in Ukraine. This was carried out as part of the Comprehensive Assistance Package for Ukraine.
- "Energy Security Strategic Awareness Course" that focused on the Caucasus region was organised in April, in Tbilisi – Georgia together with the US Naval Postgraduate School, and the Georgian DELTA institute.

STRATEGIC ANALYSES

- "Energy Efficiency: Cultural Change" project. It started in 2015 and is still on-going after an extended survey performed during NATO/International exercises in 2015/2016 and 2 Advanced Research Workshops in Vilnius with an international board of experts. The result is a defined "tool box" and handbook (published in 2017) that can be used to develop a practical solution that improves the cultural approach to energy in operations.
- "Critical Energy Infrastructure Protection: Ukrainian case and lessons learned" study. It forms an overview of the situation and discusses the criteria of Critical Energy Infrastructure objects. Also it indicates possible threats, risks, and response measures. Lastly it allows to look deeper into the Critical Energy Infrastructure Protection during the Ukrainian war and draws the lessons learned for the NATO European countries and the Baltic States in particular.

2018

CONFERENCE:

- IESMA 2018 - November 14-15th: It is a conference and exhibition in VILNIUS on Innovative Energy Solutions for Military Applications.

COURSES

- "Energy Security Strategic Awareness" course in NATO School Oberammergau.
- "Energy Security Awareness" course in Baku, Azerbaijan focused on the Caucasus region.
- "Energy Efficiency in Military" course in cooperation with NATO MILENG COE.
- Table top exercise on CEIP with a focus on fuel supply chains, for collective defence.
- Participation in the "Trident Juncture" exercise to provide relevant incidents that are focused on energy security.

EXPERIMENTATION

- The development of an energy management system in the operational environment will enter a new phase with it being tested in a Forward Operational Base in Africa.
- The testing and exploitations of the HPGS will continue with extensive usage in different locations/nations, with planned upgrades and optimization of the system, in order to prove that hybrid technologies are ready for military use.
- Helping develop concepts and doctrines for NATO with our expertise on energy security issues.

STRATEGIC ANALYSES

- Analysis of the competition for energy resources in the Arctic region and how it could affect the energy security of NATO members.
- Analysis of hybrid and cyber threats (in particular, cyber threats on the pipeline system of NATO) that could affect national and collective defence, with the main purpose of developing NATO's capacity to support national authorities in protecting critical infrastructure, as well as enhancing their resilience against energy supply disruptions.
- Analysis of risk factors associated with the integration of Renewable Energy supplies into energy systems

WEBSITE AND PUBLICATIONS

- In order to enhance the Energy Security awareness inside NATO, ENSEC COE hosts a website which includes the Centre's production - researches and studies, also articles about current relevant energy developments.

NATO ENSEC COE Contact Information

Contact:
Phone: +370 5 203 26 86
Email: info@enseccoe.org
Website:www.enseccoe.org

NATO COE Establishment Process

The initial step is generating an idea for a COE. This idea generally comes from two main sources, NATO or an Alliance Nation. If the idea comes from NATO, it is generally the result of an identified shortfall area in NATO capabilities. If the idea comes from an Alliance Nation, it does not have to be related with NATO capability shortfalls. It can be an excellent idea for a COE that has not been yet considered by NATO. The idea for a COE can represent either the tactical, operational or strategic level. Regardless the origin of the idea, the NATO COE establishment process culminates with the accreditation by the Military Committee (MC), which is forwarded for approval of the North Atlantic Council (NAC). At the same time the COE can be activated by the NAC as a NATO Military Body and thus hold International Status.

Comprehensive dialogue and teamwork is required throughout the COE establishment process starting with a close coordination between the Framework Nation (FN) and the HQ SACT Transformation Network Branch (TNB) The following major steps are necessary in order to complete the process (these steps are expanded in the COE Establishment Manual):

First Contact Visit - A visit from TNB to assist you to build your COE proposal and to answer all your questions. This includes advice and assistance on building your COE concept which is a formal living document that provides all relevant information about the mission of the COE.

Formal Offer - After the First Contact Visit, your nation can make an informed decision to offer a COE to NATO.

Information Campaign - If the FN seeks a multi-national COE it must work to attract other Sponsoring Nations (SNs). This campaign should be pursued in all levels (SMEs, working groups, NLRs, MILREPs, NMRs, CHODs, Ministerial, etc.) in order to ensure that nations have the maximum awareness of the COE.

Memoranda of Understanding (MOU) Development - Occurs simultaneously 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 Establishment Conference: Goal is to "sell" COE, to attract potential Sponsoring Nations (SN). Any interested nation attends.
- 2nd Establishment Conference: Potential SNs attend and bid for posts. It will address legal aspects of the COE in greater detail. Any interested nation can attend, yet usually attendees are from the potential sponsoring nations.
- MOU Signing Ceremony. This formal signing ceremony is a short event, usually held in the HQ SACT. The Sponsoring Nations are usually represented by their National Level Representatives here in the HQ SACT. Normally the Director of the COE and a Flag Level Sponsor from the Framework Nation attend the ceremony.

First Steering Committee Meeting – Framework Nation and Sponsoring Nations meet to take command of the COE.

	Centre of Excellence (COE)	FWN	Sponsor Nations	Location
1	**Joint Air Power Competence Centre (JAPCC)**	DEU	BEL,CAN, CZE, DEU, DNK, ESP, GBR, GRC, HUN, ITA, NLD, NOR, POL, ROU, TUR, USA	Kalkar, DEU
2	**Defence Against Terrorism (DAT)**	TUR	BRG, DEU, GBR, HUN, NLD, ROU, TUR, USA	Ankara, TUR
3	**Naval Mine Warfare (NMW)**	BEL&NLD	BEL, NLD, ITA*, POL*	Oostende, BEL
4	**Combined Joint Operations from the Sea (CJOS)**	USA	CAN, DEU, ESP, FRA, GBR, GRC, ITA, NLD, NOR, PRT, ROU, TUR, USA	Norfolk, USA
5	**Civil-Military Cooperation (CIMIC)**	NLD&DEU	DEU, DNK, HUN, LVA, NLD, POL, SVN	The Hague, NLD
6	**Cold Weather Operation (CWO)**	NOR	NOR	Elverum, NOR
7	**Joint Chemical Biological Radiological & Nuclear Defence (JCBRND)**	CZE	CZE, DEU, FRA, GBR, GRC, HUN, ITA, POL, ROU, SVK, SVN, USA, AUT	Vyškov, CZE
8	**Analysis and Simulation Centre for Air Operation (AO COE)**	FRA	FRA	Lyon Mont Verdun, FRA
9	**Command & Control (C2)**	NLD	DEU, ESP, EST, NLD, NOR, SVK, TUR, USA	Utrecht. NLD
10	**Cooperative Cyber Defense (CCD)**	EST	BEL, CZE, DEU, ESP, EST, FRA, GBR, GRC, HUN, ITA, LVA, LTU, NLD, NOR*, POL, ,PRT*, SVK, TUR, USA, AUT, FIN, SWE	Tallinn, EST
11	**Operations in Confined and Shallow Waters (CSW)**	DEU	DNK, DEU, GRC, ITA, LTU, NLD, POL, TUR, FIN	Kiel, DEU
12	**Military Engineering (MILENG)**	DEU	BEL, CAN, CZE, DEU, DNK, ESP, FRA, GBR, GRC, HUN, ITA, NLD, NOR, POL, ROU, TUR, USA	Ingolstadt, DEU
13	**Military Medicine (MILMED)**	HUN	BEL, CZE, DEU, FRA, GBR, HUN, ITA, NLD, ROU, SVK, USA	Budapest, HUN & Munich, DEU
14	**Human Intelligence (HUMINT)**	ROU	CZE, GRC, HUN, POL, ROU, SVK, SVN, TUR, USA	Oradea, ROU
15	**Counter – Improvised Explosive Devices (C-IED)**	ESP	CZE, DEU, ESP, FRA, HUN, GRC*, NLD, PRT, ROU, TUR, USA, SWE	Madrid, ESP
16	**Explosive Ordnance Disposal (EOD)**	SVK	CZE, HUN, POL, ROU, SVK	Trencin, SVK
17	**Modelling and Simulation (M&S)**	ITA	CZE, DEU, ITA, USA	Rome, ITA
18	**Energy Security (ENSEC)**	LTU	DEU, EST, FRA, GBR, ITA, LVA, LTU, TUR, USA, GEO	Vilnius, LTU
19	**Military Police (MP)**	POL	BGR, CZE, DEU, GRC, HUN*, HRV, ITA, NLD, POL, ROU, SVK	Bydgoszcz, POL
20	**Strategic Communications (STRATCOM)**	LVA	DEU, EST, FRA, GBR, ITA, LVA, LTU, NLD, POL, FIN, SWE*	Riga, LVA
21	**Crisis Management and Disaster Response (CMDR)**	BGR	BGR, GRC, POL	Sofia, BGR
22	**Mountain Warfare (MW)**	SVN	DEU, HRV, ITA, SVN, AUT	Begunje na Gorenjskem SVN
23	**Stability Policing (SP)**	ITA	CZE, ESP, FRA, ITA, NLD, POL, ROU, TUR	Vicenza, ITA
24	**Counter Intelligence (CI)**	POL&SVK	CZE, DEU, HUN, HRV, ITA, LTU, POL, ROU, SVN, SVK	Krakow, POL
25	**Security Force Assistence (SFA)**	ITA	ALB, SVN	Roma, ITA

In Red: Partner Nations **In Yellow: In Accreditation Process** ***: In Process of Joining**

NATO CENTRES OF EXCELLENCE
LOCATIONS



Analysis and Simulation Centre for Air Operation (AO)
Lyon, France

Cooperative Cyber Defense (CCD)
Tallinn, Estonia

Counter Intelligence (CI)
Krakow, Poland

Counter – Improvised Explosive Devices (C-IED)
Madrid, Spain

Civil-Military Cooperation (CIMIC)
The Hague, the Netherlands

Combined Joint Operations from the Sea (CJOS)
Norfolk, Virginia, United States

Crisis Management and Disaster Response (CMDR)
Sofia, Bulgaria

Operations in Confined and Shallow Waters (CSW)
Kiel, Germany

Cold Weather Operation (CWO)
Elverum, Norway

Command & Control (C2)
Utrecht, The Netherlands

Defence Aga
Ank

Energy S
Vilniu

Explosive C
Trenč

Human Inte
Orad

Joint Air P
Cen
Kalka

*Turkey recognises the Republic of Macedonia with its constitutional name



inst Terrorism (DAT)
ara, Turkey

Security (ENSEC)
us, Lithuania

Ordnance Disposal (EOD)
in, Slovakia

lligence (HUMINT)
ea, Romania

ower Competence tre (JAPCC)
ar, Germany

Joint Chemical Biological Radiological & Nuclear Defence (JCBRND)
Vyškov, Czech Republic

Military Engineering (MILENG)
Ingolstadt, Germany

Military Medicine (MILMED)
Budapest, Hungary

Military Police (MP)
Bydgoszcz, Poland

Modelling and Simulation (M&S)
Rome, Italy

Mountain Warfare (MW)
Poljče, Slovenia

Naval Mine Warfare (NMW)
Oostende, Belgium

Security Force Assistence (SFA)
Roma, Italy

Stability Policing (SP)
Vicenza, Italy

Strategic Communications (STRATCOM)
Riga, Latvia

In Yellow: In Accreditation Process

	Country	Sponsoring Nation of	Framework Nation of
	ALB	SFA*	
	BEL	CCD, JAPCC, MILENG, MILMED, NMW	NMW
	BGR	CMDR, DAT, MP	CMDR
	CAN	CJOS, JAPCC, MILENG	
	CZE	CCD, C-IED, CI, EOD, HUMINT, JAPCC, JCBRND, MILENG, MILMED, MP, M&S, SP	JCBRND
	DEU	C2, CCD, C-IED, CIMIC, CI, CJOS, CSW, DAT, ENSEC, JAPCC, JCBRND, MILENG, MILMED, MP, M&S, MW, STRATCOM	CIMIC, CSW, JAPCC, MILENG
	DNK	CIMIC, CSW, MILENG	
	ESP	C2, CCD, C-IED, CJOS, JAPCC, MILENG, SP	C-IED
	EST	C2, CCD, ENSEC, STRATCOM	CCD
	FRA	CASPOA, CCD, C-IED, CJOS, ENSEC, JCBRND, MILENG, MILMED, SP, STRATCOM*	AO COE
	GBR	CCD, CJOS, DAT, ENSEC, JAPCC, JCBRND, MILENG, MILMED, STRATCOM	
	GRC	CCD, CI, C-IED*, CJOS, CMDR, CSW, HUMINT, JAPCC, JCBRND, MILENG, MP	
	HRV	MP, MW	
	HUN	CCD, C-IED, CIMIC, CI, DAT, EOD, HUMINT, JAPCC, JCBRND, MILENG, MILMED, MP	MILMED
	ITA	CCD, CI, CJOS, CSW, ENSEC, JAPCC, JCBRND, MILENG, MILMED, MP, M&S, MW, NMW*, SP, STRATCOM	M&S, SP
	LVA	CCD, CIMIC, ENSEC, STRATCOM	STRATCOM
	LTU	CCD, CI, CSW*, ENSEC, STRATCOM	ENSEC
	NLD	C2, CCD, C-IED, CIMIC, CJOS, CSW, DAT, JAPCC, MILENG, MILMED, MP, NMW, SP, STRATCOM*	C2, CIMIC, NMW
	NOR	C2, CCD*, CJOS, CWO, JAPCC, MILENG	CWO
	POL	CCD, CI, CIMIC, CMDR, CSW, EOD, HUMINT, JAPCC, JCBRND, MILENG, MP, NMW*, SP, STRATCOM	CI, MP
	PRT	CCD*, C-IED, CJOS	
	ROU	C-IED, CI, CJOS, DAT, EOD, HUMINT, JAPCC, JCBRND, MILENG, MILMED, MP, SP	HUMINT
	SVK	C2, CCD, CI, EOD, HUMINT, JCBRND, MILMED, MP	CI, EOD
	SVN	CIMIC, CI, HUMINT, JCBRND, MW, SFA*	MW
	TUR	C2, CCD, C-IED, CJOS, CSW, DAT, ENSEC, HUMINT, JAPCC, MILENG, SP	DAT
	USA	C2, CCD, C-IED, CJOS, DAT, ENSEC*, HUMINT, JAPCC, JCBRND, MILENG, MILMED, M&S	CJOS
	AUT (P)	CCD, JCBRND, MW	
	FIN (P)	CCD, CSW, STRATCOM	
	GEO (P)	ENSEC	
	SWE (P)	CCD*, C-IED, STRATCOM*	

P: Partner Nation ***: In Process of Joining**

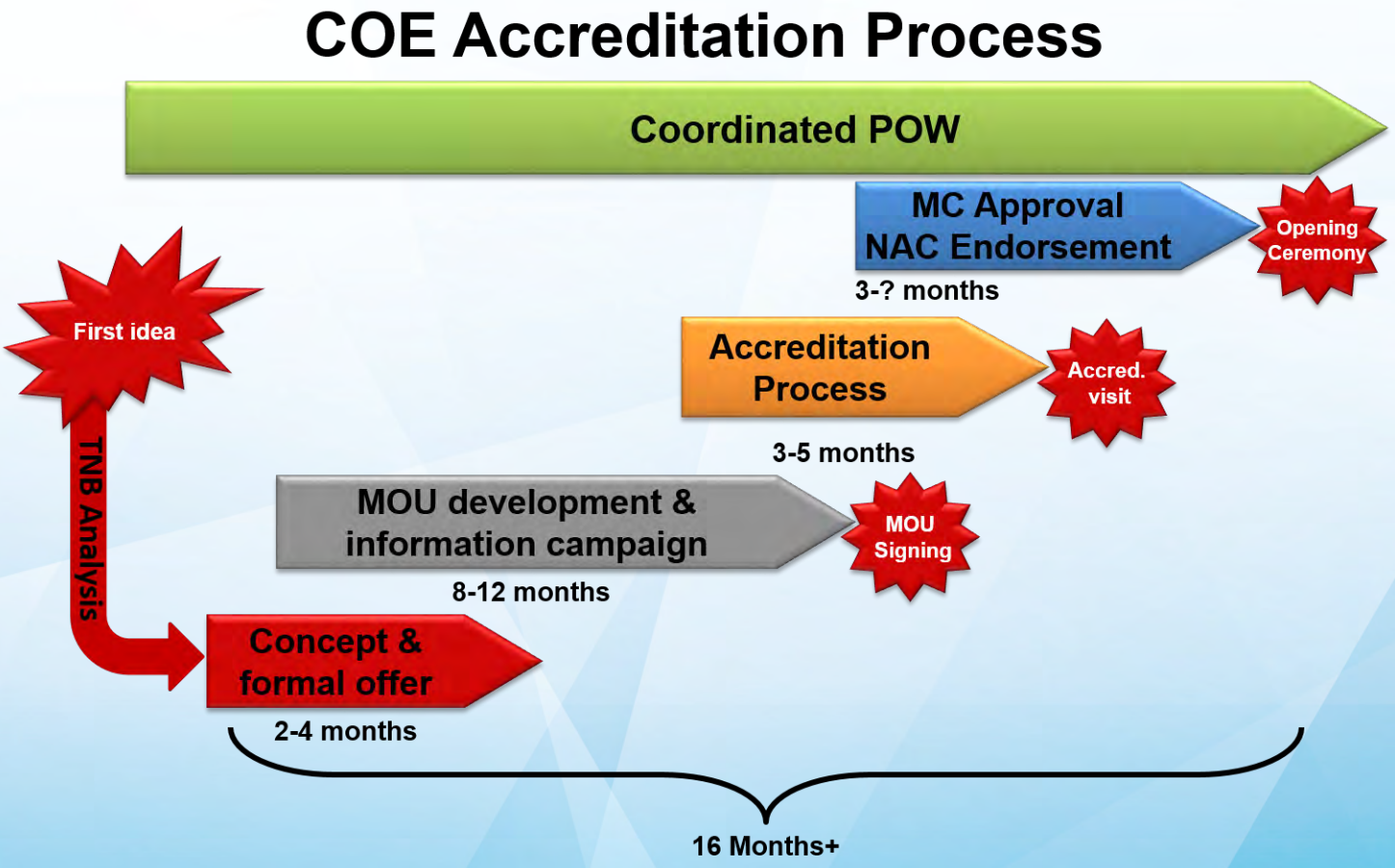
NATO COE Accreditation Process

The accreditation is a formal process with the assessment conducted by HQ SACT through TNB. The newly established COE is assessed against the IMS established accreditation criteria for COEs.

The following steps are performed:

- Accreditation Questionnaire: TNB provides the COE with a questionnaire to determine its readiness for NATO accreditation.
- Accreditation Visit: TNB visits the COE to verify COE readiness for accreditation.
- Accreditation Report: HQ SACT report/recommendation to the MC and NAC for the accreditation of the COE.
- Accreditation Request: A formal request from a Framework Nation to request accreditation and (if appropriate) activation of COE as a NATO Military Body.
- Approval of recommendation for accreditation by MC; NAC approval.

The overall COE establishment and accreditation process takes between 11 months and 2 years. For more details regarding the COE accreditation read NATO COE Establishment manual, which is located on TRANSNET COE Homepage under "How to Become a COE" at: https://coe.transnet.act.nato.int/SitePages/Home.asp



NATO EXPLOSIVE ORDNANCE DISPOSAL
CENTRE OF EXCELLENCE
EOD COE

The EOD COE, since its establishment as a NATO COE is providing products and services consistent with NATO standards, practices and procedures enhancing interoperability of NATO members and partnering nations in fields of EOD. The expertise accumulated within the Centre is fostering development of future EOD capabilities in support of the NATO level of ambitions.

Director's Message



COL Lubomir MRVAN

Mission Statement

The EOD COE mission is to support and enhance the NATO transformation and operational efforts in the field of EOD.

Who We Are

The EOD COE is one of the tools of the NATO Supreme Allied Commander for Transformation aiming to improve military capabilities, value and efficiency of the Alliance. It was established by Slovakia as a Framework Nation with support of five Sponsoring Nations (CZE, FRA, HUN, POL and ROU). In January 2011 the Centre met successfully the accreditation criteria. Afterwards, the North Atlantic Council activated the EOD COE as an International Military organization on 28 April 2011. The Centre passed the periodic assessment in 2014.



In 2016, the EOD COE fulfilled the accreditation criteria in accordance with BiSC DIR 75-7 Education and Individual Training, and gained "unconditional" accreditation as the NATO Education and Training Facility.

Vision

To be NATO`s catalyst for improvement and transformation of EOD.



Key Products and Activities

2017

- Maintain the unclassified EOD Lessons Learned Database
- Maintain the unclassified EOD Lessons Learned Database
- Contribute to NATO Defence Planning Process (NDPP) through the inputs delivered in the MILENG Defence Planning Advisory Group (DPAG) including the update of the EOD related CCs/CSs
- Organize Integration of the Exoskeleton in the Battlefield Workshop
- Participate in development and update of Allied Joint and Allied Tactical Publications through the contribution to MILENG doctrine AJP 3.12 development, ATP 3.12.1 and EOD doctrine AJP -3.18 and ATP 3.18.1
- Develop cooperation with the EOD community those are subjects of MARITIME EOD operations

- Provide support to NSO delegated WGs
- EOD/IEDD Equipment Catalogue
- To take part in SCI-298 Identification and Neutralization Methods and Technologies for C-IED project
- Support Military Engineering Discipline Department Head by assuming the responsibility for the EOD specialized Education and Individual Training
- Maintain the EOD COE Quality Assurance processes
- Deliver Education and Individual Training to NATO and PfP countries
- Support EOD related Collective Training and Exercises
- Organize the EOD Workshop



2018

- Enhance NATO's Global programing framework by EOD Education and Training solutions
- Improve NATO EOD IM SOT by using Modelling and Simulation technologies
- Deliver the AJP 3.18 "Allied Joint Doctrine for Explosive Ordnance Disposal Support to Operations" related
- Advanced Distributed Learning as "NATO Approved" JADL course
- Develop and deliver HME-B course in Train the Trainers (T3) form
- Continue development of the FWP AC as an ADL delivered product
- Deliver 6 Education and Individual Training events
- Clarify and extend support to EOD related Collective Training and Education
- Continue the support for the Allied Joint and Allied Tactical Publications development
- To take part in SCI-298 Identification and Neutralization Methods and Technologies for C-IED
- Lead the development of the NATO EOD Terminology
- Organize the NATO EOD Demonstration and Trials-2018 with Senior Military Leaders Seminar and EOD workshop
- To continue Integration of Exoskeleton in the Battlefield project twice organize workshops and technical live demonstration and to elaborate the NATO Concept of Employment
- Continue the enlargement of EOD COI by developing new relationships within the Maritime Environment
- To manage the EOD/IEDD Equipment Catalogue

NATO EOD COE Contact Information

Contact:
Explosive Ordnance Disposal Centre of Excellence
Olbrachtova 5, 91101 Trenčín, Slovakia
http://www.eodcoe.org

Director:
Colonel Ľubomír MRVÁŇ
Phone: +421 960 333 500
Email: lubomir.mrvan@eodcoe.org
IKM cell: OF-3 Zuzana ČAHOJOVÁ
Phone: +421 960 333 559
Email: zuzana.cahojova@eodcoe.org
Mrs. Anna FARKAŠOVÁ Phone: +421 960 333 562
Email: anna.farkasova@eodcoe.org



NATO HUMAN INTELLIGENCE
CENTRE OF EXCELLENCE
(HUMINT COE)

Today's security environment encompasses a multitude of challenges ranging from conventional military forces, proliferation of weapons of mass destruction, hybrid warfare, cyber-attacks, and international terrorism. Therefore, NATO's core tasks of collective defence, crisis-management and cooperative security drive the need for a strengthened deterrence and defence posture.

To assist in addressing these requirements, the HCOE provides incredible flexibility in supporting the specialized capabilities of the NATO Response Force, NATO's enhanced Forward Presence, as well as operations in Kosovo and Afghanistan.
Regardless of the task, I am fully confident that the HCOE will continue to be a key partner in achieving NATO priorities, enable the collection of relevant and actionable intelligence, and be relied upon as the principal provider of HUMINT expertise within the Alliance.

Director's Message


COL ROU A Florin-Vasile TOMIUC

Mission Statement

The HCOE provides the highest quality services and products in response to the requirements and needs of the NATO Command Structure, the NATO Force Structure, the NATO Nations and, when feasible, Partner Nations.



Who We Are

The epicentre of HUMINT knowledge, our experienced professionals endeavor to transform the NATO HUMINT Enterprise into a more interoperable and capable force that better supports NATO missions and operations. HCOE chairs the NATO HUMINT working groups, is an accredited NATO Education and Training Facility, and Department Head for HUMINT Education and Individual Training in NATO.

Vision

The HCOE is the focal point of HUMINT expertise within NATO and is the spearhead for all major HUMINT projects and initiatives within the Alliance.

Major products and activities

Doctrine and Standards

- Fulfill custodian related responsibilities for NATO HUMINT Publications;
- Participate in Joint Intelligence Working Group and Allied Joint Operations Doctrine Working Group in order to support harmonization within Intel-series and other operational doctrines;
- Provide SME support to related working groups, NATO exercises, courses, CD&E and LL&BP processes on NATO HUMINT Doctrine and Standards;
- Contribute to the Information Exchange Requirements development for NATO HUMINT;
- Update the NATO HUMINT Operator Handbook.

Concept Development & Experimentation

- Develop HUMINT support to Human Network Analysis and Support to Targeting;
- Explore opportunities provided by the cyber environment;
- Support ACT in developing Long-Term Military Transformation elements: Strategic Foresight Analysis and Framework For Future Alliance Operations;
- Develop NATO HUMINT Operator Toolset prototypes;
- Identify HUMINT support to the Human Aspects of the Operational Environment.

Education & Training

- Lead and host the NATO HUMINT exercise and provide support to other major NATO exercises;
- Conduct NATO HUMINT individual training;
- Lead and conduct the Human Network Analysis and Support to Targeting Intelligence Analyst Course;
- Design and develop new courses in coordination with the Requirement Authority and ACT.

Lessons Learned & Analysis

- Collection of NATO HUMINT observations, lessons identified and best practices from NATO operations (KFOR and RSM) and exercises (STEADFAST INTEREST);
- HUMINT lessons identified and best practices from NATO past operations – Allied Military Intelligence Battalion" – Study;
- Provide support to Joint Analysis Lessons Learned Centre and other NATO Commands;
- Update and manage the NATO HUMINT LL/BP database;
- Chair the NATO HUMINT LL/BP Community of Interest;
- Active support to SHAPE J7 for conducting a Joint Evaluation during NATO Exercises (TRIDENT JAVELIN 2017, TRIDENT JUNCTURE 2018 AND TRIDENT JAGUAR 2018) in order to assist COM NRF in its preparation for the NRF18, 19 stand-by period.



Department Head

- Engaged in Global Programming with the Requirement Authority, JFT, Department Head Coordinator, and Education and Training Facilities to identify effective, efficient and affordable HUMINT E&T solutions;
- Build a HUMINT Education and Individual Training Community of Interest in NATO;
- Participate in the Intel Annual Discipline Conference and contribute to the Discipline Alignment Plan;
- Review the HUMINT Training Requirements Analysis and make recommendations to the Requirements Authority;
- Shape a systematic approach to HUMINT E&IT; conduct the 1st HUMINT Training Needs Analysis;
- Ensure content assessment for the E&IT solutions;
- Initiate processes for HUMINT e-Learning development;
- Oversight to HUMINT E&T related lessons identified and best practices;
- Contribute to HCOE Academic outreach.

NATO HUMINT COE Contact Information

Contact:
Armatei Romane 24A
410087 Oradea,
Romania
+4 0259 434 932
registry@natohcoe.org
INT@hcoe.rou.bices.org
www.natohcoe.org



NATO JOINT AIR POWER COMPETENCE CENTRE OF EXCELLENCE (JAPCC COE)

Air Power has been of utmost importance to the NATO Alliance since its inception. The Alliance's ability to rapidly project power, deter outside aggression, and ensure collective security is underpinned by the strength, flexibility and high quality of its air forces and naval and army air services. These air power characteristics are reliant upon advanced equipment, superior training, high levels of interoperability, and seasoned experience; all enabled by strong leadership and exercised through a well-developed Air Command and Control system.

The Joint Air Power Competence Centre, established as the first NATO-accredited Centre of Excellence in 2005, provides subject matter expertise across a broad range of Joint Air and Space Power mission areas and leads NATO in the development of Concepts and Doctrine, Capability Development, Education and Training, Exercise Development and Execution, and Lessons Learned in accordance with NATO MC(M) 236. Within this framework, the JAPCC contributes to the transformation of Combined Joint Air and Space Power. We are NATO's Air Warfare Center.

Director's Message



GEN Tod D. WOLTERS



Mission Statement

The mission of the Centre, as a team of multinational experts, is to provide key decision-makers with effective solutions to Air and Space Power challenges, in order to safeguard NATO's and the Nations' interests.

Who We Are

The JAPCC is a Memorandum of Understanding (MOU)-based organization made up of 16 Sponsoring Nations, hosted by Germany as the Framework Nation. The JAPCC is open to all NATO members as well as selected Partner Nations.

Vision

The JAPCC acts as NATO's catalyst for the improvement and future transformation of Joint Air and Space Power, delivering effective solutions through independent thought and analysis.

Major Products and Activities

Joint Air Power Following the 2016 Warsaw Summit

» NATO is facing an increasingly diverse, unpredictable and demanding ¬security environment, 'an arc of insecurity and instability along NATO's ¬periphery and beyond'. In recent times this has led to a range of steps by NATO to reinforce its collective defence, enhance its capabilities, and strengthen its resilience. NATO has committed itself to provide its armed forces with sufficient and sustained resources, thereby underlining its stated strategic intent that 'NATO's essential mission is unchanged and that NATO will ensure that it has the full range of capabilities necessary to fulfil the whole range of Alliance missions, including to deter and defend against potential adversaries, and the full spectrum of threats that could confront the Alliance from any direction'.



Air Warfare Communication in a Networked Environment



» Network technology is expanding at an exponential rate. As technology improves, effectively unlimited connectivity is no longer strictly a future concept; however, combined decision-making and data sharing processes (or maybe 'protocols') are not evolving at the same speed as technology. Machines will boost communication in a networked environment to levels yet to be determined. This will require nations and the Alliance to alter current communication patterns.

Education, Training, Exercises and Evaluation (ETEE)

» In line with the SACT Concept for CoEs, the JAPCC conducts multiple activities in the Education, Training, Exercise and Evaluation arena. The main activity concerning ETEE is Support to Major NATO Exercises. The JAPCC has supported AIRCOM and the Joint Warfare Centre (JWC) since 2013 in the scenario development, exercise scripting, and exercise execution for the RAMSTEIN AMBITION and TRIDENT Series exercises, and serves as the lead for the OPFOR Air Cell. With a very small team of three planners the JAPCC was able to plan and execute 6400 sorties in 8 days for TRIDENT JAVELIN 2017.

» As the Department Head for Space Support to Operations the JAPCC coordinates findings and develops solutions for the E&T requirements identified by the Requirements Authority (SHAPE ACOS J3).

» The JAPCC also provides SME support on Air and Space Power to the Multinational Aviation Training Centre (MATC) initiative to analyse further formulas for cooperation between the JAPCC and the supporting nations. In 2017, the JAPCC increased cooperation that is focused on improved interoperability, standardisation, and qualitatively improved air capabilities through scenario building and doctrinal and procedural assessment support and will potentially result in future cooperation between MATC nations.

» Furthermore, the JAPCC continued use of the Standardized Heavy Air Refuelling Course, a course created by JAPCC and AIRCOM personnel to train JFAC AAR planners and executioners. In addition, the JAPCC developed a three-day course focused on what it takes to obtain an AAR Clearance between nations.

» Finally, the JAPCC also supports four Force Protection courses and exercises in collaboration with many external organizations and is the Office with Principal Responsibility for the Force Protection Course at NATO School Oberammergau (NSO).

NATO JAPCC COE Contact Information



Contact:
Phone (general): +49 2824-90-2201
website: www.japcc.org
Email: Contact@japcc.org

Mailing Address:
Von Seydlitz Kaserne, Roemerstrasse 140
D-47546, Kalkar, Germany
Assistant Director
Air Commodore Madelein Spit (NLD)
AD@japcc.org

NATO JOINT CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR DEFENCE CENTRE OF EXCELLENCE (JCBRND COE)

NATO continues to be both strategically and operationally prepared with policies, plans, and capabilities to counter a wide range of state and non-state CBRN threats. Consequently, the JCBRN Defence COE continues to support NATO, its nations and its partners to further develop capabilities to counter the proliferation of WMD and to defend against CBRN threats.

Director's Message



COL Vratislav OSVALD

Mission Statement

Our Centre supports NATO's readiness and transformation in the field of CBRN defence by assisting NATO, Sponsoring Nations, Contributing Partners, other NATO-nations and other Customers in their CBRN defence-related efforts.



Who We Are

The Centre combines skills and expertise from more than 60 personnel from thirteen nations in the area of Concepts, Doctrine Development, Capability Development, Experimentation, Training, Exercises, Education, Lessons Learned, Modelling & Simulation, Reachback and Operations Planning Support, acts as NATO Department Head for WMD/CBRND Training and Education and forms the core for the NATO CBRN Reachback Element.

Vision

We are continuing to develop our Centre to an essential, indispensable capability in the field of CBRN, that provides its technical, operational, procedural, scientific, and leadership expertise and advice across all our nations and all our services, more and more reaching out beyond the pure military, and including European Union and other partners, too.

Major Products and Activities

2017



- Support the Committee on Proliferation (Defence Format) exhibiting COE's capabilities.
- Support of the Joint CBRN Defence Capability Development Group (JCBRND CDG).
- Chair the Training and Exercise Panel (TEP) and the Doctrine & Terminology Panel (DTP).
- Develop the Allied Joint Doctrine on Comprehensive CBRN Defence.
- Support the concept development and experimentation of the CBRN/C-IED Exploitation Functional Concept.
- Support the development of conceptual documents (e.g. CBRN Defence Inputs into Allied Joint Doctrines), including custodianship for the Allied Joint Doctrine for CBRN Defence.
- Develop Capability Requirements within the NATO Defence Planning Process (NDPP) 2021.
- Support the development of the Framework for Future Alliance Operations (FFAO) 2018.
- Co-operate with and provide support to NATO Modelling & Simulation Group 147.
- Implement a Standing RFI process in support of NATO Intelligence and Fusion Centre (NIFC) situational awareness.

- Provide exercise support and CBRN reachback to NATO's major exercise programme (TRJR 17, EADRCC EX BIH 2017, NATO CMX, TRJN 17).
- Develop the CBRN parts for the new NATO Exercise Setting and Scenario "OCCASUS".
- Conduct Live Agent Training Course for NATO and EU / EU Partner participants.
- Execute NATO Department Head role for WMD/CBRN training and education including chairing the CBRN Defence Annual Discipline Conference.



2018

- Continue the standing tasks and responsibilities as above.
- Support the Future Forces Forum 2018 exhibiting COE's capabilities.
- Develop Allied Joint Doctrine on WMD Disablement.
- Support the development of a Joint NATO Urban, Urban Littoral and Megacity Doctrine.
- Contribute to and revise the CBRN Defence requirements, concept development, planning documents and tactical procedures.
- Support CBRN Capability Roadmap Development and its implementation.
- Support the follow-on work (e.g. on stakeholders) of MC0603/1.
- Implement new software for explosion and 3D simulation into its Modelling & Simulation portfolio.
- Support the review of the Combined Joint CBRN Defence Task Force CONOPS and the CBRN Reachback Element CONOPS review.
- Provide exercise support and CBRN reachback to NATO's major exercise programme.
- Provide a Mobile Education and Training Team for a CBRN First Responders Training in KWT.
- Support the Validation of AEP-66 Ed. 1 Handbook for Sampling Identification Biological Chemical Radiological Agents (SIBCRA) and the CBR Forensic Sampling Training Concept.
- Be prepared to provide reachback and operations planning support to active operations.
- Act as Chairman of the COE Directors Conference.

NATO JCBRND COE Contact Information

Contact:
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

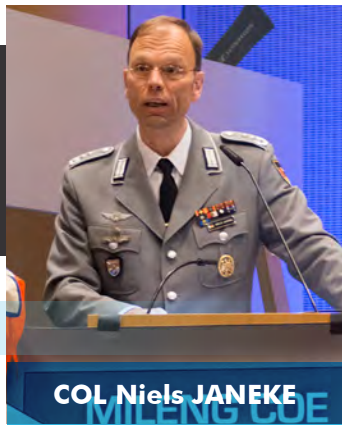
Director
Colonel Vratislav Osvald, CZE A
Phone: +420 973 452 801
Fax: +420 973 452 810
Email: osvaldv@jcbrncoe.cz
Website: www.jcbrncoe.cz



NATO MILITARY ENGINEERING CENTRE OF EXCELLENCE (MILENG COE)

MILENG COE is the only permanently established fulltime body dedicated to NATO Military Engineering. As the major hub and advocate for MILENG in NATO and beyond we are the main promoter for MILENG in its broad sense in support of operations and are dedicated to enhance interoperability through standardisation to deliver the required effects to the benefit of NATO and our 17 Sponsoring Nations.

Director's Message





Mission Statement

MILENG COE provides a significant contribution with joint combined subject matter expertise to the various aspects of military engineering. This include concepts, materiel, doctrine and capability development, education and training and the lessons learned process in order to support NATO's military transformation, the participants and other partners thus enhancing the Alliance's military engineering capability and interoperability in order to improve the effectiveness of military engineering support to NATO's missions.

Who We Are

The Director MILENG COE is the Principle Advisor to HQ SACT for MILENG, the Deputy Chairman of MCLSB MILENG WG, the Chairman of MILENG DPAG (to provide SME in support of NDPP) and a member of the NSJEC Advisory Board. The MILENG COE is Department Head for MILENG Training and Education.

Major Products and Activities



- The MILENG COE provides through its Policies Concept and Doctrine Development Branch (PCD) support to NATO concepts and doctrine development, ensuring that MILENG aspects are adequately represented. The MILENG COE has a leading role as the working body for the MCLSB MILENG WG in the development of concepts, doctrines and procedures. The MILENG COE acts as custodian of Military Engineering related policies and doctrine like "MC Policy Power generation for DFI", co-custodian "MC Policy Military Engineering" and keystone documents like "AJP 3.12 Military Engineering" and follow on ATPs, STANAGs. For all aspects of Military Engineering, MILENG COE Provides direct SME support to HQ's ACT and ACO.
- The MILENG COE is a NATO Accredited Education and Training Facility. The Training and Education branch (T&E) delivers NATO approved and listed courses meeting the NATO requirements for the NCS/NFS headquarters, NATO interoperability courses for the National tactical level and 3 ADL courses (Introduction to Military Engineering, Military Search Planning and Mobility Staff Awareness and Planning). The MILENG COE provides Mobile Training Teams (MTT) tailored to the HN requirements, once per year. They also provide instructor support to NATO and National Training Institutions.
- The annual MILENG COE's Industry Day and Information Exchange Seminar provides MILENG SMEs from Nations and NCS/NFS the opportunity to discuss with industry the challenges of today's operational environments, lessons learned, solutions and future developments.

- MILENG COE, with support from NATO HQ ESCD is running the NATO Interoperable Bridge Classification Project. The intention is to have a proposed common NATO approved method, rapid and reliable, designated for calculating the Military Load Classification (MLC) of existing civilian bridges in order to respond to the operational requirements of the mobility challenge.



- Since September 2017, the reviewed MC Policy for Military Engineering 560/2 is approved and provide to the military community a new description about MILENG: Military Engineering is a function in support of operations to shape the physical operating environment. In this function, MILENG is coordinated by military engineering staff. MILENG is an inherent aspect of each joint function; at all levels of command, in any mission, campaign or operation, and in all phases. It achieves the desired objectives by enabling or preventing manoeuvre or mobility; developing, maintaining, and improving infrastructure. MILENG incorporates areas of expertise such as engineering, Explosives Ordnance Disposal, Environmental Protection, military search and management of infrastructure, including contracted civil engineering. MILENG also makes a significant contribution to Countering Improvised Explosive Devices (C-IED), protecting the force; and providing life support.

MILENG COE Key Events

ADC MILENG	29 Jan 18
15th MILENG WG	30 Jan – 02 Feb 18
MILENG DPAG	20 – 22 Feb 18
21th MILENG COE SC	20 Mar 18
16th MILENG WG (GBR)	19 – 22 Jun 18
MTT (HUN)	25 – 29 Jun 18
22th MILENG COE SC (GRC)	23 Oct 18
NSJEC 2018 (GRC)	24 – 25 Oct 18
IES 2018	04 – 06 Dec 18
MILENG COE Industry Day	05 Dec 18

Course Calendar

Course Calendar The complete Event and Course Calendar can be found on our Website and the Knowledge Portal. Please register to access the MILENG COE knowledge Portal trough the website at www.milengcoe.org.

NATO MILENG COE Contact Information

Contact:
Military Engineering Centre of Excellence
Pionierkaserne auf der Schanz
Manchinger Str. 1
85053 Ingolstadt
Germany
Email:info@milengcoe.org
Phone: +49 (0)841 88660 5101
Fax: +49 (0)841 88660 5102 www.milengcoe.org



NATO MILMED COE
CENTRE OF EXCELLENCE (MILMED COE)

Director's Message


COL Dr. László FAZEKAS

NATO MILMED COE Director's priority in the next 3 years is given to the integration of all MILMED COE members into the most successful military medical team in NATO. All possible efforts to be made to enhance the relationship with the sponsoring MILMED COE nations and possible future member nations. It is also important to initiate and follow the support to NATO partner nations especially located in the eastern and southern flanks of NATO, so that MILMED COE will become the open medical gate of the Alliance.

Mission Statement

The mission of the NATO MILMED COE is to support and assist the Strategic Commands, other NATO bodies, nations and other civil and military organizations 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, exercises and evaluation leading to certification
- Medical Lessons Learned
- Standards development and custodianship
- Deployment related health surveillance

Who We Are

NATO MILMED COE is a hub of military medical knowledge, building a reliably accessible Community of Interest within its areas of expertise. MILMED COE is an essential part of NATO's transformation efforts by being a medical knowledge centre to the benefit of the entire Alliance. NATO MILMED COE, as a knowledge centre, remains an open institution that links military and civilian medicine together by collecting up-to-date medical knowledge and expertise from both communities, continuing to cooperate with the widest possible range of partners. NATO MILMED COE develops and implements projects to empower superior and effective medical support services across NATO, during missions abroad and in their home countries. NATO MILMED COE unites highly experienced medical professionals and it is composed of 5 branches: Support, Training, Lessons Learned, Interoperability, Deployment Health Surveillance Capability (DHSC) Branch – a satellite branch located in a country other than the Framework Nation.



Vision

Further development of NATO medical support by innovation, experience, creating and sharing best practices. NATO MILMED COE aims to remain a hub of military medical expertise and a focal point of knowledge, providing invaluable training, education and deployment health surveillance capabilities, lessons learned databases and concept development support.

Major Products and Activities



- Slovakia and the United States of America signed the Note of Joining to the NATO MILMED COE as of 12 June 2017
- MILMED COE's Training Branch is currently offering 11 different courses and training for NATO and partner nations
- Conduct trainings by Mobile Training Teams based on requests
- Participation in Medical Evaluation of Military Medical Units
- NATO Medical Support Education and Training Annual Discipline Conference in 2018
- Multinational Medical Lessons Learned Team annual meeting in 2018
- Assisting NTR module development in MEDICS
- Developing Knowledge Management for NATO Medical Community
- Medical Lesson Learned Workshop in 2018



- Maintain and continuous update of Medical Standardization Documents Searching Tool
- Contribute in Continuous Improvement in Healthcare Support on Operations (CISHO)
- Successful inclusion of the Concept Development and Experimentation (CD&E) into MILMED COE portfolio
- Medical Scenario Development and Ex VW´19 Experimentation
- Participating in Future Forces Forum in October 2018 in Prague, Czech Republic
- Close cooperation with NATO Science & Technology Organization / Human Factors & Medicine
- Deployment Health Surveillance Capability – EpiNATO-2 support to NATO and EU operations
- Implementing of a Deployment Health Surveillance Hub
- Public Health Surveillance for refugees
- Force Health Protection NATO Conference incl. Tropical Medicine in 2018 in Litchfield, UK
- CBRN Conference in October 2016 in Prague and also in 2017
- Vigorous Warrior 2019, Multinational Military Medical Exercise in May 2019 in Romania
- NATO MILMED COE provides the chairman to COE Directors Conference and hosted the conference in September 2017
- NATO MILMED COE was part of ACT team briefing the NATO Military Committee in June 2017

NATO MILMED COE Contact Information

Contact:
Phone: +36 1 883 0100
Fax: +36 1 883 0127
Email: info@coemed.org, dir.pr@coemed.org
Web: www.coemed.org

Róbert Károly krt. 44.
H-1134, Budapest, HUNGARY

Postal Address:
NATO Centre of Excellence for Military Medicine
H-1555, Budapest, P.O.B.: 66, HUNGARY



NATO MILITARY POLICE
CENTRE OF EXCELLENCE
(MP COE)

Director's Message

Dear All,

Welcome to the NATO Military Police Centre of Excellence offer placed in the latest edition of the COE catalogue for 2018. The NATO MP COE is a unique permanent NATO Military Body, which provides sustainable work on all MP aspects across the full spectrum of NATO operations. With the armed forces heavily engaged throughout the world, the need to prepare military police officers for international cooperation is becoming increasingly important. Therefore, the Centre not only offers a variety of MP-related courses and events to fulfil those requirements but also, in cooperation with Subject Matter Experts (SMEs), prepares products and provides additional opportunity to enrich knowledge of the worldwide MP Family. It would be a pleasure and privilege to meet you in person at the NATO MP COE.



COL Grzegorz WASIELEWSKI



Mission Statement

The NATO Military Police Centre of Excellence enhances capabilities of NATO MP, fosters interoperability, and provides subject matter expertise on MP activities, in accordance with the alliance's strategic concept.

Who We Are

The NATO MP COE is a training organisation which develops and provides subject matter expertise by support of, or in cooperation with, other military and civil actors for further evolution of MP standards and capabilities in order to enhance cooperation and interoperability of NATO nations and military police and gendarmeries in their role in the development of future capability in accordance with the NATO Strategic Concept, Smart Defence Initiative and Framework Nations Concept across the full spectrum of operations.

The NATO MP COE focuses on but does not limit its activities to the cooperative aspects of MP in support of the NATO Strategic Concept, and current or future operations in the following core areas:

- Doctrine, Concept Development and Experimentation
- Education and Training
- Research and Development
- Analysis and Lessons Learned
- Consultation



Vision

The NATO MP COE is an organisation which provides a learning process, it develops and ensures enhanced subject matter expertise by support of, or in cooperation with, other military and civil actors for further evolution of MP standards and capabilities in order to support cooperation and interoperability of NATO nations and partner military police and gendarmeries in their role in the development of the future capability for the NATO New Strategic Concept, Smart Defence Initiative and Framework Nations Concept across the full spectrum of operations.

NATO Approved Courses and QA guarantor

The NATO MP COE has earned an unconditional Quality Assurance Accreditation Certificate (2017-2023) and delivers five residential and three e-learning courses, using principles and methods of Global Programming and the NATO Systems Approach to Training. These courses strongly relate to the identified needs of the Requirement Authority and are based on the relevant Training Requirements Analysis as well as the corresponding Training Needs Analysis. All courses are uploaded on ETOC.

Major Products and Activities for 2018

Residential Courses

- NATO Military Police Senior Non-Commissioned Officer Course (NATO APPROVED) NATO ETOC Code: MPG-MP-21783 / ePRIME ref. No.: SrNCOC18-1: ACT.672.7; SrNCOC18-2: ACT.672.9
- NATO Military Police Junior Officer Course (NATO APPROVED) NATO ETOC Code: MPG-MP-21567 / ePRIME ref. No.: ACT.672.8
- NATO Military Police Senior Officer Course (NATO APPROVED)
- NATO ETOC Code: MPG-MP-3204 / ePRIME ref. No.: ACT.672.6
- NATO Military Police Lessons Learned Staff Officer Course (NATO APPROVED),
- 09-13 April 2018 (NATO ETOC CODE MPG-MP-32023)
- NATO certified e-Learning/ADL courses available at: jadl.act.nato.int:
  - ADL 186 Introduction to the NATO MP Doctrine e-Learning course
  - ADL 187 – Introduction to the NATO Lessons Learned Process for the Military Police Staff
  - ADL – Introduction to the NATO Military Police Mobility Support Operations (available by the end of 2017)

Events

- Annual Military Police Lessons Learned Conference, 3-6 December 2018
- Annual Tactical Lessons Learned Forum, 14-18 May 2018
- MP Doctrine and Standardization Forum, 12-15 November 2018
- Military Policing Annual Discipline Conference, 7-8 November 2018
- Provost Marshal Forum 7-8 March 2018
- Military Police Close Protection Forum, 4-6 April 2018
- MP Annual Tactical Lessons Learned Forum, 14-18 May 2018: MP Involvement in NATO Multinational Exercises
- Cyber Crime Investigation Conference (CCIC), 20-22 March 2018
- NATO COE Legal Advisor Workshop 19-23 February 2018 (support for the ACT)

Other Involvements and Achievements

- Chairmanship of the NATO MP Panel Lessons Learned Capability Team
- Chairmanship of the NATO MP Panel Terminology Writing Team
- Custodianship of the ATP-3.2.7.
- Development of the NATO MP Standardized Report Handbook
- Publication of the NATO MP COE Lessons Learned Reports Booklet
- (edition 2, September 2017)
- Management of MP LL Portal – information platform for NATO/PfP MP CoI

Contribution to

- Establishment and enhancement of LL Capability based on the NATO LL System at the Rakovski National Defence College in Sofia, Bulgaria
- Training on the NATO LL System for the Polish Air Force Academy in Dęblin, Poland
- Multinational Joint Commission MP-Subcommittee, Ukraine
- Strategic Foresight Analysis Report 2019 development
- Framework for Future Alliance Operations Report 2018 development
- Multinational Capability Development Campaign 2018 – nonlethal weapons

NATO MP COE Contact Information

Contact:
Phone:+48 261 410 052
Fax: +48 261 410 059
Mobile: +48 571 271 534
E-mail: registry@mp.coe.nato.int
Website: www.mpcoe.org
Address: ul. Szubińska 105,
Bydgoszcz 85-915, Poland

Director:

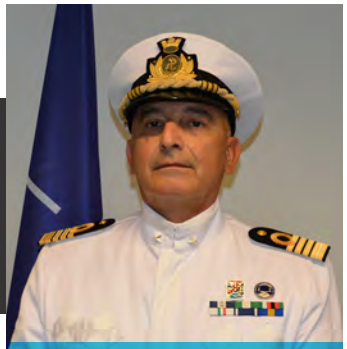
COL Grzegorz WASIELEWSKI
Phone: +48 261-410-050



NATO MODELLING AND SIMULATION CENTRE OF EXCELLENCE (MS COE)

The NATO M&S COE is an international source of expertise and a catalyst for transformation, connecting NATO, government, academia, industry, and operational/training entities. The NATO M&S COE improves NATO and national M&S professionals through education and training; promotes cooperation and sharing between Nations and organizations; and contributes to the development of new M&S concepts and standards.

Director's Message



CAPT Vincenzo MILANO

Mission Statement

To support NATO, its Nations and Partner Nations by providing leadership, subject matter expertise, technological capability in all aspects of M&S activities.



Who We Are

An organization of experienced military leaders and young "digital generation" talents from 4 NATO Nations, representing all domains (sea, land, air, space & cyberspace) with expertise in various combat and combat support roles and in the application of modelling and simulations in support of military activities.

Vision

to contribute to NATO Transformation by enhancing operational effectiveness and resource management.

Major Products and Activities 2017

Expanded knowledge and common understanding through education, training, executing events.

- NATO Basic M&S Course. Fundamentals of M&S theory, applications in defense and the role of M&S in military activities.
- NATO CAX Specialist Certification Course supported by JWC and JFTC to prepare CAX Specialists to perform duties during NATO Computer Assisted Exercises.
- NATO M&S Cadet Course and M&S Standards Courses as ADL education.
- Established the NATO Exercise Support M&S Integration Specialist Course to provide fundamental education on establishing a federation of simulations.
- NATO M&S E&T Roadmap - led the multi-national effort to define the NATO M&S professional. Developing certification standards and support from Nations for M&S academic courses for inclusion as NATO opportunities.
- NATO CAX Forum 2017 - led this annual event of 230 Military, Academia and Industry experts from 28 nations, promoting the exchange of information and best practices among NATO and national simulation/exercise Centres.
- MESAS 2017 - led this annual conference focused on the application of M&S in the autonomous systems domain, to promote better use of M&S in tomorrow's operating environment.



Supporting Concept Development and Experimentation

- M&S as a Service (MSaaS) – developed and tested an architecture and operational concept for cloud-based M&S services.
- M&S COE Simulation Lab – Established a central node for distributed M&S environments for training and

experimentation with NATO, Nations, Industry and Academia.
» M&S Enclave - formalized relationships between NATO's primary M&S entities (NATO and National Training Centres) to work together to promote interoperability.

Supporting Warfighter Training and Interoperability

» CWIX – Led the M&S Focus Area, improving use of M&S and enhancing interoperability.
» Supported NATO Exercises.

Promoted M&S while building expertise within the Armed Services, Industry, Academia and Government Agencies; presented numerous papers at international conferences including:

» International Training and Education Conference (ITEC) 2017.
» Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) 2017.

Major Products and Activities 2018

Work with M&S Community of Interest to develop, enhance and promote standardization.

Support the Education and Training Opportunities Catalogue (ETOC) with courses open to NATO, Nations and Partners, through the exchange of expertise within NATO and National M&S communities:

» Conduct NATO CAX Specialist Certification Course and Basic M&S Course; introduce the new M&S supporting CD&E Course.
» Provide e-learning via the M&S Cadet and M&S Standardization Courses at www.mscoe.org/

Lead, Manage and Host Conferences, Workshops and Fora

» CAX Forum 2018 (Computer Assisted exercises)
» MESAS 2018 (Modeling and Simulation for Autonomous Systems)
» NATO Urbanisation Project
» Host NMSG workshops, seminars and lecture series

Support ACT M&S Concept Development activities

» Establish certification process to verify and validate new models and simulations for NATO (IVCT)
» Modelling and Simulation as a Service (MSaaS) – develop and implement new MSaaS concepts through our distributed simulation architecture.
» NATO Urbanisation Project - improve and integrate 2D/3D model of future urban terrain; explore implementing it in the MSaaS architecture; assess adding simulation capabilities.
» Support NATO scenario production by providing technique for GIS environment conversion to proprietary terrain formats of NATO's primary simulations

NATO MS COE Contact Information

Contact:
Phone: +39 06 4691 4365
Fax: +39 06 4691 3641
Email: info@mscoe.org
Website: https://www.mscoe.org

NATO Modelling & Simulation
Centre Of Excellence
Piazza Villoresi, 1, 00143 Rome / Italy

Director: Capt. Vincenzo Milano (ITA Navy)
Phone: +39 06 4691 4361
Fax: +39 06 4691 4193
Email: director@mscoe.org
mscoe.director@smd.difesa.it



NATO MOUNTAIN WARFARE CENTRE OF EXCELLENCE (MW COE)

Director's Message

The establishment of the NATO MW COE contributes to the transformation and adaptation of the Alliance' capabilities which enable its forces to better operate in the mountain environment. The NATO MW COE incorporates a professional core that will ensure and develop the subject matter expertise to meet the requirements of mountain warfare challenges. This will enhance the ability of individuals and military units to engage in mountain warfare, as well as the Alliance's readiness to operate in mountainous environment.

I am strongly convinced that all of this would not be possible without qualified and dedicated staff members, who put great effort in contributing to the promotion and operation of the NATO MW COE.



COL Boštjan BLAZNIK



Mission

The mission of the NATO MW COE is to assist NATO member countries, partners, other countries and international organisations, in order to enhance mountain warfare capabilities through the following core areas:

- Development of mountain warfare-specific doctrine and tactics.
- Concept development and experimentation.
- Mountain warfare lessons learned process.
- Education and training.
- Support to capability development.

Who we are

The NATO MW COE is a multi-nationally sponsored entity, which offers recognised expertise and experience to the benefit of the Alliance, especially in support of its transformation endeavours. One mandatory purpose of the NATO MW COE is to provide tangible improvement to NATO capabilities, thereby adding value.

The NATO MW COE represents the core with the required professional skills to develop standardized training. The field of mountain warfare is currently covered by various NATO bodies. Therefore one of the main tasks assumed by the NATO MW COE is to synthesize the existing contents and verify their mutual compliance. In line with the interests of the participating countries expressed within the Steering Committee, the NATO MW COE is conducting activities such as the development of concepts, doctrines, lessons learned, and education and training according to NATO standards, and thus contributes to increased interoperability and development of the Alliance in the field of Mountain Warfare (MW).

Vision

The vision of the NATO MW COE is to be the hub for mountain warfare expertise in the NATO community.

Major Products and Activities

2017

- Organization of the MW Allied Training Publication-6 (ATrainP-6) - Writing Meeting, as the NATO MW COE has been tasked as a custodian by the NSO.
- Organization of the 1st MW Terminology Workshop with the purpose to develop essential MW terminology, as well as the classification of mountains and mountainous terrain.
- Organization of the seminar "SME Exchange of Information, Movement in Mountains, Testing of Equipment and Techniques" with focus on comparing and exchanging particular mountain-specific knowledge, required for planning and executing MW training and operations.

- Organization of the seminar "Mountain Warfare and Combat Functions, Seminar for Planners" considering the Force Generation Process for operations in mountains.
- Mobile Training Team activities (Common training with the Croatian Special Operations Forces).
- Survivability and mobility projects.
- Establishment of the NATO MW LL Portal/Database.
- Attending of annual meetings of the wider-interest community (International Association of Military Mountain Schools - IAMMS) and the EU P&S MTI Conferences with expert talks.
- Attendance of MW Exercises (Capricorn, 5 Torri).
- Liaison with civilian standardization organizations, involved in the development of safety and technical standards for climbing equipment / training / medical issues and mountain protection: 1st Cooperation and Collaboration meeting with the Union Internationale des Associations d'Alpinisme (UIAA).
- Support to the NATO ACT COE's LEGAD Annual Conference being held in Slovenia.



2018

- Continuation of the ATrainP-6 for MW - Writing Meetings, as the NATO MW COE has been tasked as a custodian by the NSO (Generating the 1st Draft in 2018).
- Development of the vSkills Basic Knowledge Handbook in cooperation and collaboration with the UIAA.
- Development of the NATO MW Concept.
- Continuation of the MW-related Terminology development.
- Organization of the 1st Annual MW COE Congress to provide a deeper cognition from science, experience and real-life acting, hence involving different point of views regarding special MW-related matters.
- MW courses development IAW the Bi-SC Directive by initiating the process for a possible accreditation for Infantry / Mountain Battalion level (Company / BN Commanders and Staff).
- Seminar related to the ISTAR structure required for ensuring successful operations in the mountains.
- Experiments and studies: survivability and mobility projects.
- Attendance of annual meetings of the wider-interest community (IAMMS, EU P&S MTI).
- Attendance of Exercises (Capricorn, 5 Torri, Trident Juncture 18).
- Liaison with civilian standardization organizations, involved in the development of safety and technical standards for climbing equipment / training / medical matters and mountain protection.

NATO MW COE Contact Information

Contact:
Mountain Warfare Centre of Excellence
Poljče 27, 4275 Begunje na Gorenjskem
Slovenia
Phone: +386 4 532 3610
E-mail: info@mwcoe.org
Website: www.mwcoe.org
NS-WAN: SI MWCOE



NATO NAVAL MINE WARFARE
CENTRE OF EXCELLENCE
(NMW COE)

Director's Message

Naval mine warfare is as relevant as ever. Modern sea mines are becoming more and more complex and sophisticated. At the same time, the threat of improvised underwater explosives has to be taken into account. Meanwhile, the Allies sea mining capabilities receive limited attention.

The present generation of mine countermeasure vessels is to be replaced over the course of the next 10 to 15 years. Implementing the use of new innovative technologies, these capabilities could differ significantly from the current means and may well include autonomous, remote controlled and other revolutionary techniques to be deployed.
These new capabilities will require new doctrine and tactics, planning and evaluation algorithms, tools, and most important, education and training of personnel. The NATO Naval Mine Warfare Centre of Excellence aims to guide and support the development of all that is essential to take NATO's Naval Mine Warfare capabilities into the next era.



CDR s.g. Guy TERRYN



Mission Statement

To assist NATO, Nations, Partners and other bodies by supporting the NATO transformation and operational efforts; NATO's capability development process; mission effectiveness and interoperability by providing comprehensive expertise on Naval Mine Warfare.

Who We Are

The Naval Mine Warfare COE started as a School, focusing mainly on the Education and Training pillar, and is currently being transformed by internationalizing and expanding focus to all four COE pillars. The Belgian-Netherlands Mine Warfare School in Oostende at the Belgian coast and recognized worldwide as EGUERMIN (Ecole de GUERre des MINes) exists since 1965 providing courses and training to NATO nations and partners. EGUERMIN became "The Principal Advisor on Naval Mine Warfare" to NATO's Commander In Chief Channel in 1975.

The Ministers of Defense of Belgium and the Netherlands formally offered EGUERMIN as Naval Mine Warfare Centre of Excellence to the Supreme Allied Command Transformation and in November 2006 the Naval Mine Warfare COE was accredited by the North Atlantic Council.

Belgium and the Netherlands act as Framework nations. MOU negotiations are currently being held with a number of interested nations, in order for them to join the NMW COE as Sponsoring nation. The NMW COE and EGUERMIN remain co-located and will therefore continue to mutually benefit from the combined expertise, knowledge and experience.

Vision

The NATO Naval Mine Warfare Centre of Excellence is the recognized hub of knowledge and expertise in Naval Mine Warfare for NATO, Allied and Partner nations, and their associated research institutes in support of NATO transformation.



Major Products and Activities for 2017

» The 2017 BI-SC NATO NAVAL Mine Warfare Conference was organized and held by NMW COE 12-14 June under the chairmanship of Maritime Command. Theme topic was to discuss developments in unmanned and autonomous MCM systems in order to collect and identify elements that need further development

for the successful deployment of these systems.



- Provide Instruction and training as requested by the next Commander Standing NATO Mine Countermeasures Group 1 and Group 2 and his staff.
- Support and Augment Allied Maritime Command Exercise DYNAMIC MOVE during preparation and execution.
- Participate in Concept Development and Experimentation initiatives and campaigns for future Naval Mine Warfare capabilities.
- Development of scenario's for the evaluation of the new stand-off NMW concept within the frame of the Belgian and Netherlands MCMV replacement project.
- Enhance the NMW COE produced Naval Mine Warfare Vision by studying three topics further, as was requested by the Maritime Enterprise Advisory Board lead by the Commander Allied Maritime Command. The topics are: Mitigation of risk to shipping, Future Mine Countermeasures concepts and review of NATO's policy, doctrine, concepts and capabilities of mine laying.
- Support NCIA in modernization of the legacy Planning and Evaluation software.
- Legacy Planning and Evaluation methods for MCM are not entirely applicable to modern autonomous systems. A major focus of NMW COE 's work was aimed at development of alternative approaches to overcome these shortfalls and presenting a viable alternative approach.
- Requests for support from NATO Command and Force Structure: NATO Defence Planning Process (NDPP), Support to Allied Command Transformation's Focus Areas, Standing Naval Forces Mine Countermeasures Headquarters Evaluation.
- Contribute to the Maritime Observation Team for Lessons Learned and Analysis during Exercise Brilliant Mariner 2017.
- Provide instruction and training during the NATO NMW staff officers' course.

Major Products and Activities for 2018

- Support MARCOM by hosting the 2018 NNMWC.
- Continue to be NATO's central hub leading and supporting various activities related to adapting the MCM Planning and Evaluation process with regard to modern systems.
- Augment and support Allied Maritime Command Exercise DYNAMIC MOVE I-2018 (Ostend, BEL) and DYNAMIC MOVE II-2018 (La Spezia, ITA).
- Provide instruction and training during the NATO NMW staff officers' course.
- Assist the International Staff Defence Investments Division to facilitate NMW capability development designated as one of the Defence Planning Priorities.

NATO NMW COE Contact Information

Contact:

Phone: +32 2 44 31133
Fax: +32 2 44 39184
Email: NMW-COE@mil.be
Website: http://www.eguermin.org

COE Address

NATO Naval Mine Warfare Centre of Excellence
3de & 23ste Linieregimentsplein, B-8400
Oostende, BELGIUM

Director:

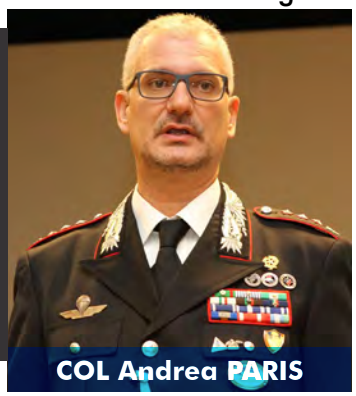
CDR s.g. Guy TERRYN (BEL-N)
Phone:+32 2 44 31134
Email: beparteguermin-dir@mil.be



NATO STABILITY POLICING CENTRE OF EXCELLENCE (SP COE)

Director's Message

2017 was fully committed to spreading the knowledge of Stability Policing throughout the Alliance and outside the Alliance as well as improving the actual number and quality of our products in all functional areas in order to support NATO, in perfect alignment with the goals set out in the COE's Strategic Plan 2016-2018. Next year 2018 will see an improved training catalogue, the execution phase of a project in favour of the HN police in a Theatre of Operations, the implementation of completed projects in the area of Lessons Learned and the development of doctrinal and conceptual products. The COE will continue to make all efforts in order to make Stability Policing an effective Alliance's capability.



COL Andrea PARIS

Mission Statement

The mission of the NATO Stability Policing Centre of Excellence is to be an internationally recognized focal point and a hub of expertise for a Community of Interest in the field of Stability Policing, which is a set of police related activities intended to reinforce or temporarily replace the indigenous police of an unstable area in order to contribute to the restoration and/or upholding of the public order and security, rule of law, and the protection of human rights (AJP 3-22).

Vision

To this end, the SP COE acts as a prime mover to increase the contribution to the Stabilization and Reconstruction efforts of the Alliance in unstable scenarios, providing the NATO with a unique tool to fill the capability gap in the area of Stability Policing.

The SP COE will help the Alliance, the Sponsoring Nations and PfP Nations to enhance and transform their capabilities, procedures and functions in order to meet potential and future security challenges in line with NATO's three declared core tasks of collective defence, crisis management and cooperative security.



Major Products and Activities in 2017

Doctrine & concept development

- External coordination of the "NATO Stability Policing capability in
- emerging security challenges"
- Contributing to the Strategic Foresight Analysis and Framework
- for Future Alliance Operations;
- Participating in the MP Panel and chairing the writing team for
- The development of the ATP descending from AJP 3-22;
- Contributing to the Urbanisation project;
- Contributing to several forums;

Education & Training

Delivery of the following trainings :

- Introduction to Stability Policing for Leaders;
- Crowd and Riot Control awareness in NATO Ops (2 iterations);
- Introduction to Stability Policing for Field Commanders;
- Preserving a crime scene (2 iterations).

Lessons Learned

- Delivery of a Joint Analysis report on Stability Policing;
- Establishment of a new Lessons Learned Community of Interest on Stability Policing.

Additionally, the Centre participated in several exercises, bringing into them the Stability Policing dimension. Furthermore, the COE participated in a number of NATO and international conferences and seminars to spread the Stability Poling concept.

Major Products and Activities in 2018

In 2018 the SP COE will keep acting in support of ACT for the experiment and the validation of the capstone concept resulting from the project "NATO Stability Policing capability in emerging security challenges" with Subject Matter Expert's. Besides this, it will also contribute to NATO's Bi-Strategic Education and Individual Training Directive. In addition, the COE will deploy and lead four Mobile Training Teams to support the "Resolute Support" Operation in the improvement of the Afghan Uniform Police. Finally, the COE will participate in NATO and international exercises and will deliver the following products and activities:



Doctrine & concept development

- Developing a planners's guide on Stability Policing;
- Contributing to the Urbanization project;
- Contributing to NATO Strategic Foresight Analysis and Framework for Future Alliance Operations;
- Contributing to the NATO AJD Campaign Plan 2016 – 2020.

Education & Training

Delivery of the following trainings:

- IIntroduction to Stability Policing for Leaders;
- Crowd and Riot Control awareness in NATO Operations;
- Introduction to Stability Policing for Field Commanders;
- Preserving a crime scene;
- Train the trainer;
- Stability Policing for planners.

Lessons Learned

- Invest and enlarge the Lessons Learned Community of interest in Stability Policing;
- Invest in the outcomes of the Joint Analyses Report in order to make them available for the NATO community.



NATO SP COE Contact Information

Contact:
Phone: +3904441449604
Email: info@nspcoe.org
Website : www.nspcoe.org

COE Address:
NATO Stability Policing
Centre of Excellence
Via Giacomo Medici 87
36100 Vicenza, Italy

Director:
Col. Andrea Paris
Office: +39 0444 1449601
Email: director@nspcoe.org

NATO STRATEGIC COMMUNICATIONS CENTRE OF EXCELLENCE (STRATCOM COE)

Director's Message

"Strategic communication is becoming a more and more important area for NATO countries and our role is to assist in this important area by bringing together military, academic, business and government knowledge. This has been a busy year for us. We have organised several trainings on Strategic Communication to NATO and partner nation senior officials and been part of NATO trainings. The next year will be even busier as we continue to analyse Russia and DAESH, look into the future of communications on social media and beyond and continue publishing the next academic journal."



Mr. Jānis SĀRTS

Mission Statement

Mission of the Centre is to provide a tangible contribution to the strategic communications capabilities of NATO, NATO allies and NATO partners.



Who We Are

The NATO StratCom Centre of Excellence, based in Latvia, is a multinational, cross-sector organization which provides comprehensive analyses, advice and practical support to the alliance and allied nations.

Vision

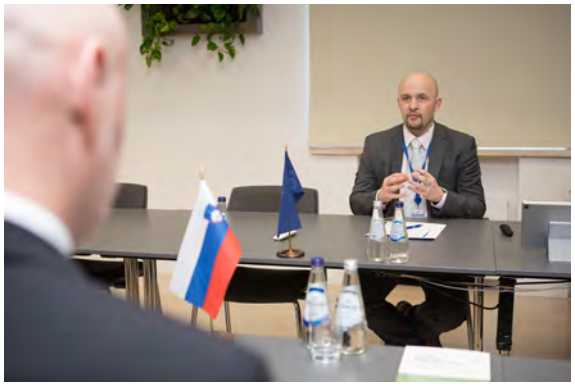
Vision of the NATO Strategic Communications Centre of Excellence is to understand and use state of the art methods that address challenges in the information environment that NATO and NATO countries face.



Major Products and Activities

2017

- Study "Violent Extremism as an emerging threat for NATO nations"
- Comparative study on Russian information campaign in Nordic –Baltic countries
- New challenges in information environment: analysis of hostile activities on social media and Robotrolling
- Seminar "Strategic Communication for the Senior Officials"
- Support to the overall StratCom training and education both with NATO and national facilities (JWC, JFTC, etc)
- Support to exercises: Strategic level table top exercise, NATO HQ exercises CMX, TRIDENT JAVELIN 17 (TRJN17), TRJR 17



- Strategic Communications Conference
- Seminar on commercial sector challenges at information age
- Working relationship with other COEs (CIMIC - StratCom Conference)

2018

- NATO StratCom policy & doctrine development
- Multinational Information Operations Experiment (MNIOE)
- Multinational Capability Development Campaign (MCDC)
- Research "Robotic networks in social media"
- Research "Emerging issues in social media"
- Research "Data exploitation by malicious actors"
- Experiment on audience perception
- Quantitative analysis of visual content in social media
- StratCom Terminology Improvement
- Supporting NATO and NATO nations on enhanced Forward Presence engagements
- Course "Strategic Communication for Senior Officials"
- StratCom education and training support to ACT





NATO STRATCOM COE Contact Information

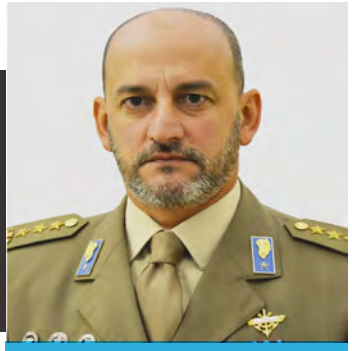
Contact:
Kalnciema iela 11B, Riga, LV-1048, Latvia

Office: +371 6733 5463
Mobile: +37126533953
Facebook.com/stratcomcoe
Twitter.com/stratcomcoe www.stratcomcoe.org

NATO SECURITY FORCE ASSISTANCE
CENTRE OF EXCELLENCE
(SFA COE)

SFA is included in a broader strategy such as defence and related security capability building initiative which was launched during the Wales Summit in 2014. The Security Force Assistance Centre of Excellence (SFA COE) will support cooperation and interoperability by providing a hub of expertise for the benefit of the Alliance, NATO Nations and NATO partners, thus ensuring a coherent joint approach based on contributions from all participants.

Director's Message



COL Franco MERLINO

Mission Statement

The mission of the Security Force Assistance Centre of Excellence (SFA COE) is to improve the effectiveness of the Alliance in promoting stability and reconstruction efforts for conflict and post-conflict scenarios through education, training and doctrine activities and also provide a unique capability to Alliance, NATO Nations, NATO Partners and International Organizations in the field of SFA.



Who We Are

The SFA COE is a multinational organisation focused on the close cooperation that applies a joint approach to SFA capacity building in the following core areas:



- Doctrine and Standards
- Education and Training
- Analysis and Lessons Learned
- Concept Development and Experimentation
- This approach requires the effective application and the harmonization of both military and civilian capabilities for conducting exercises and experiments by defining and developing scenario, programs and tools.



Vision

The SFA COE is to be an internationally recognized focal point to expand capabilities of NATO, Nations and other partners by providing comprehensive expertise and support in the area of SFA.

Major Products and Activities

Leading to the NATO Accreditation, the Centre conducted activities at national and international level in order to consolidate the foundations and to increase the current knowledge for the future implementation of NATO policy, doctrine and operational understanding of SFA. In particular, according to the four pillars of the Transformation, the Centre has developed the following activities:





DOCTRINE and CONCEPT DEVELOPMENT

- NATO Operations Pre-deployment training of national Units;
- Doctrinal Seminar in favour of SFA operators (from strategic to tactical level, NATO JFTC Bydgosh);
- External courses lectures and seminar on Security Sector Reform (Post-Conflict Operation Italian Centre, LUISS University, Ministry of Defence of Macedonia, Ministry of Defence of Austria);
- International Relationship with other Military Centres (USA- JCISFA; MP COE; SP COE);
- Working relationship with other COEs (CIMIC - StratCom Conference)

LESSONS LEARNED

- Mobile Joint Analysis Team on SFA rules and activities in theatre (AFG;IRQ);
- After Action Review and Gap Analysis;
- Monitoring international SFA activities and Lessons Learned-Gathering Best Practices;

STANDARDIZATION

- Working Groups on Peace and Stability Operations Institute (USA), and European Security and Defence College (Austria);
- EXE "Brilliant Ledger 2017" in support of NATO Rapid Deployable Corps- ITA HQ;

EDUCATION AND TRAINING

- Professionalization of the Centre's personnel;
- First International "SFA Orientation Course";
- "Teaching and training Course" on engagement, assessment and evaluation, cross cultural communication, stress management.

NATO SFA COE Contact Information

Contact:
Phone: +39 063037334
Mailing address:
centro@sfa.esercito.difesa.it
COE Address:
Via della Stazione di Cesano
423 - 00123 Roma

Director:
Col. Franco MERLINO
Mobile: +39 3779727241
dir@sfa.esercito.difesa.it













How Does NATO request COE products and services?

HQ SACT coordinates the submission of NATO Requests for Support (RfS) to the COE Programmes of Work (POW). The overall aim of the process is to optimize the use of the COEs and resources.

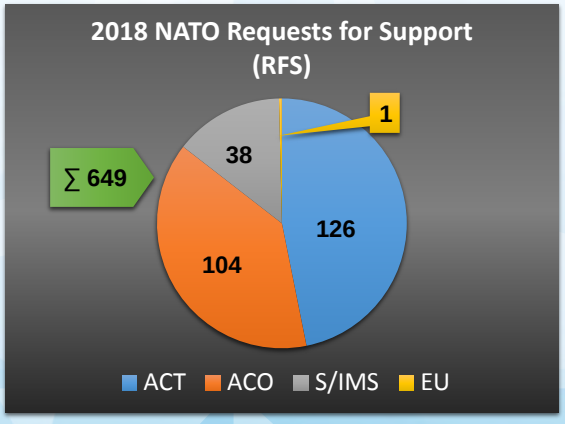
In an effort to streamline the process and better use the resources available to both NCS and COEs, NATO NCS will primarily use the Programme of Work tool, in TRANSNET, to forward Requests for Support to NATO accredited COEs.

The tool was upgraded in 2017, the new version has built-in functionality and allows users to better coordinate, provide feedback on the requests, monitor the progress of a particular RfS, and monitor the development of products and projects.

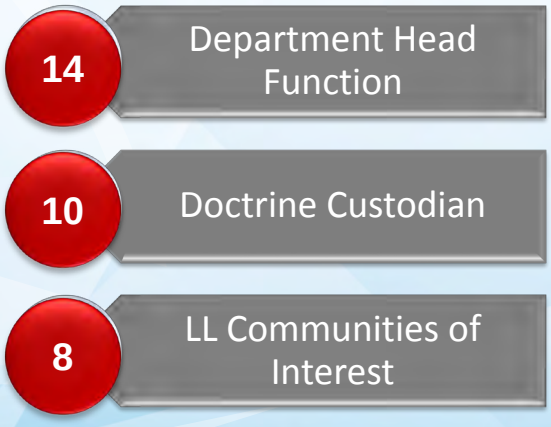
2018 RfS process steps:

1. Requestor contacts COE by submitting the RfS in POW tool;
2. The COE evaluates the RfS to determine appropriate expertise and available resources;
3. The COE provides response (feedback) to RfS;
4. The ACT (SME) provides validation and prioritization of the RfS and coordinates with the potentially affected stakeholders;
5. The COE steering committee accepts or rejects the RfS for COE POW;
6. The COE POW is updated, as necessary.

NATO COE contribution to the Alliance



*The number includes RFS's which are addressed to several COEs. There is 358 unique RFS.



Cross functional RFS Examples

- 2 SPP RfS to 23 COEs knowledge management, COE Support to LTMT Programme of Work (FFAO)
- 4 CEI-IDLL RfSs to 23 COEs – support LL process / participation to LL conferences
- 5 JFTC RfSs to 23 COEs – support to RS TE, BJ 18,
- 19 JWC RfSs to 14 COEs - participation in different phases of TRJE 18
- 9 SHAPE J7 RfS to 20 COEs – support to TRJE / TRJR 18

COE Steering Committee

The Steering Committee (SC) is the highest decision making level of the COE. It is the main body for guidance, oversight and decisions on all matters concerning the administration, policies and operation of a NATO accredited COE. The SC is responsible for the direction, guidance and supervision of the COE. It approves the POW and the budget and supervises their execution. The Terms of Reference (TOR) of each COE's SC are laid down in their Operational MOU.

The SC consists of one representative from each Sponsoring Nation. The chair of the SC is from the Framework Nation (FN), and is not identical with the representative of the FN. The Chair does not have a vote in the SC. The COE Director also attends the meetings of the SC without a vote. HQ SACT is invited to participate, normally with the assigned SME in the relevant SC meetings to advise the SC on NATO entities' requirements and priorities. Other representatives, as invited by the SC, may attend in an advisory capacity. Normally, the SC make decisions by consensus of the representatives.

The responsibilities and tasks of the SC may include:

- The consideration and approval of additional in-year requests for the POW and possible amendments to the budget.
- Review the budget report and approve the annual financial statement.
- Provide guidance on the functional relationships of the COE with other organisations and nations.
- Review and amend the Concept of the COE.
- Propose changes to the MOU and its Annexes.

Routine meetings of the SC take place at least once a year and the Chairman of the SC may call additional meetings.

NATO COE Director

The Director of a NATO COE is responsible to the SC for the fulfilment of the mission, the tasks and the operation as well as administration of the COE. Taking into account the requests of HQ SACT, SNs, CPs and the other partners, the COE Director prepares and submits a draft POW to the SC for the following calendar year. The SC considers all requests for services and products, including associated costs, and then approves the POW for the COE.



HQ SACT Coordination with COEs

A. Bi-SC DIR 80-1, Coordination of NATO COE, 8 Nov 2013
B. MCM-236-03, MC Concept for COE, 4 Dec 2003
C. MC 58-4, Terms of reference for SACT, 12 Apr 2010
D. HQ SACT DIR 80-3 HQ SAXCT coordination with COE

HQ SACT - Acts on behalf of ACT and ACO as the strategic staff authority with overall responsibility for all COE and manages the ACT-COE staff level relationship (HQ SACT DIR 80-3).

HQ SACT Transformation Network Branch (TNB) - The process of establishing and accrediting new COE, the periodic re-assessment of existing COEs as well as the overall coordination between COEs and HQ SACT is orchestrated by the TNB. Generally speaking, TNB acts as the conduit between the NCS and the COEs.

TNB supports and conducts COE related collaborative events including the COE Directors conference. The branch provides advice and assistance on request to COE on a broad range of subjects such as (cyber) security, legal and financial issues, CIS questions, drafting initial COE concepts and MOUs and modification of existing (legal) documents. TNB draws expertise to support the requests from within HQ SACT and if necessary from other entities within the NCS.

TNB contributes to all COE related tasks from within the NCS and briefs, reports to and advices on a regular basis SACT and DSACT as well as all HQ SACT FOGOs on COE related issues.

TNB administers and maintains the COE Transnet website and the Programme of Work (POW) web based tool.

ON behalf of SACT, TNB coordinates closely with the FOGO Champions and SME for all COE in order to assure that the COEs receive clear guidance and have competent POCs at HQ SACT.

TNB contributes to the education of incoming staff officers the HQ SACT concerning the role and importance of COEs for the Alliance and promotes COEs and their valuable activities during HQ internal events and by publishing the COE catalogue.

Once the NCS adaptation has been decided upon, TNB will be renamed, restructured and moved to a new division within HQ SACT. This will have only little effects on daily operations and will help to support the NCS and the COEs in a more efficient way.



The COE FOGO Champions System

Primary Focal Point - HQ SACT Flag or General Officer COE Champion. The strategic link between the COE and NATO is assisted by an appointed Flag or General Officer (FOGO). Deputy Chief of Staff Capability Development (DCOS CD), on behalf of SACT, serves as the primary focal point for COEs and as supervisor for FOGO COE Champions and COE Subject Matter Experts (SME).

COE FOGO Champion - Each COE is paired with an ACT FOGO who will act as a champion within the HQ. FOGO COE Champions provide COEs with strategic direction and guidance, advice on NATO priorities and deliver better visibility for the work of both NATO and COEs. The intent is for these champions to improve the NATO RFS process, to better align the work of each COE with NATO priorities, and to provide enhanced visibility for ACT activities. ACT designated COE/FOGO pairing is illustrated below.

SACT Subject Matter Expert (SME) - The functional coordination of the products and services offered by the COE is accomplished by a HQ SACT Subject Matter Expert (SME) in the specialty of the COE. The SME represents HQ SACT at the Steering Committee meetings and is the most important POC for the COE at ACT. The SME is responsible to coordinate the Program of Work with the COE.





For more information on COE contact:

COL Roberto ESPOSITO
Transformation Network Branch Head
Phone: +1 757 747 4330
E-mail: Roberto.esposito@act.nato.int

LTC Uwe WILLERT
Transformation Network Branch
COE Section Head
Phone: +1 757 747 4018
E-mail: Uwe.willert@act.nato.int

Mrs Rasa PAZARAUSKIENE
Transformation Network Branch
COE Assessment Accreditation
Phone: +1 757 747 3553
E-mail: Rasa.pazarauskiene@act.nato.int

CDR Helene LANGELAND
Transformation Network Branch
COE Strategic Communications
Phone: +1 757 747 4302
E-mail: Helene.langeland@act.nato.int

LTC Gabriel TOMA
Transformation Network Branch
Doctrin, Standardization & Interoperability
Phone: +1 757 747 3427
E-mail: Gabriel.toma@act.nato.int

CDR Cesar CORREIA
Transformation Network Branch
COE Lesson Learned
Phone: +1 757 747 3348
E-mail: Cesar.correia@act.nato.int

MAJ Ferit GURBUZ
Transformation Network Branch
Education, Course and Training
Phone: +1 757 747 4298
E-mail: Ferit.gurbuz@act.nato.int

CDR Don DASHER
SACT Representative Europe
Staff Officer/ COE POC in STRE
Phone: +32 (0)2 707 1268
E-mail: dasher.bobby@hq.nato.int

Design: Mr Brandon CHHOEUN
SACT Graphics & Reproduction

Cover Design: MC2 Michael GENDRON
SACT Graphics & Reproduction

NATO OTAN

Version:2018 V1 | Printed: DEC 2017| Graphics Print Jobs: HQ SACT Graphic & Reproduction