

# European Security & Defence

5/2015



## Defence in Poland



### FRONTEX

The EU's external border control agency is still dependent on the capacities of member states.



### Česká zbrojovka

The long-standing Czech company provides a wide range of small arms for the international markets.

# The Military Engineering Centre of Excellence

**Christian Wilhelm**

The Military Engineering Centre of Excellence (MILENG COE) in Ingolstadt is home to NATO Military Engineering. It brings together peerless military engineering expertise in the domains of policies and doctrine as well as training and education. Within the scope of the “Smart Defence” project, work here is carried out independently and on a multinational basis for NATO and the 16 participating countries. MILENG COE’s Director is the Principal Advisor, Military Engineering, to Supreme Allied Command Transformation in Norfolk (USA).

Within the NATO Military Command Structure (NCS), Allied Command Transformation (ACT) has a key role to play in shaping the future of the Alliance. It is where the idea originated to pool existing national knowledge and skills in centres of excellence, and to make them available for the transformation process of NATO and interested non NATO states. This concept was originally termed the MC Concept for Centres of Excellence and has now developed into a network of 22 Centres of Excellence (COE) accredited by the North Atlantic Council (NAC).

## Centres of Excellence: “Ask, not task”

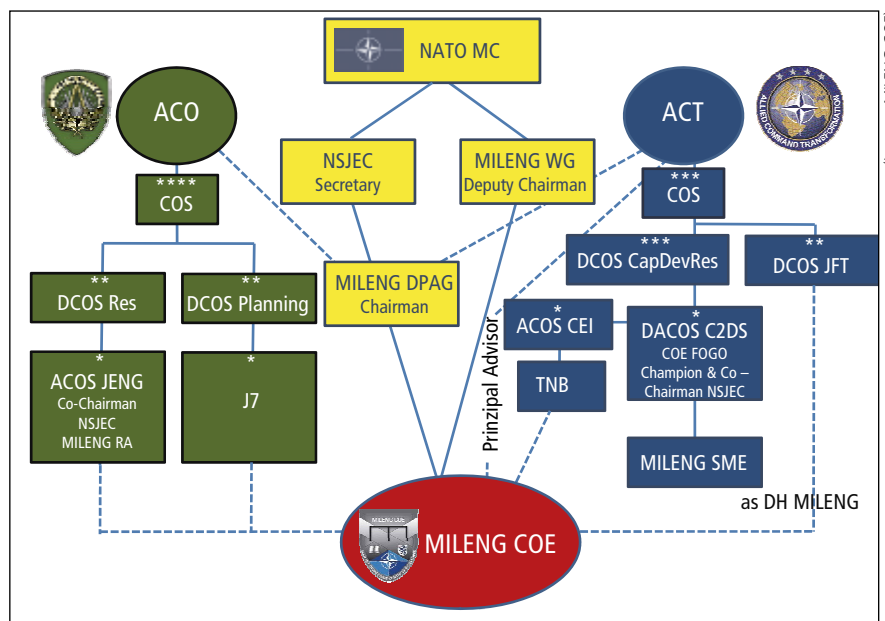
A COE is a nationally or multi-nationally funded International Military Organisation (IMO). It lawfully and deliberately exists outside the NATO command structure and the national command structures so that both NATO member states and e.g. members of the Partnership for Peace (PfP) programme retain the right to participate in it. The “NATO COE Accreditation Criteria” stipulate that all COE must work in accordance with NATO procedures, regulations and standards. A Memorandum of Understanding (MoU) forms the contractual basis for establishing a COE and for its work. The MoU regulates the relationship between supporting framework nations, sponsoring nations and the primary customer, NATO. MILENG COE has 16 sponsoring nations

(to become 17 when Hungary joins), making it the COE with most participating nations. There are over 50 roles within MILENG COE, 38 of which are currently filled. The MILENG COE Director is a German, as are a further 13 staff in cross-divisional positions, two of which are covered by air force personnel. The voting rights of each National Senior Joint Engineer on the Joint Steering Committee ensure that each sponsoring nation has equal participation. The Director of MILENG COE is

German Army Corps of Engineering and Commander of the German Army Engineer School and Army School of Construction Engineering.

## Military Engineering COE: “Interoperability is a Question of Attitude”

In addition to having compatible material and equipment, a further basic prerequisite for the Alliance to have effective and



**MILENG COE involvement at strategic level**

responsible only to this “board”, which decides the centre’s work on an annual basis, and which approves requests from the Supreme Allied Commander Transformation (SACT) for the NATO command structure. This is necessary for the COE to have an active role supporting SACT in developing NATO. The Chairman of the Steering Committee is the General of the

efficient defence capabilities is a common operational understanding of the harmonisation of requirements, procedures and training. At the heart of the “Smart Defence” concept, which has entered the NATO mindset, is the notion of multinational burden-sharing and the interoperability of operational forces. MILENG COE’s task is to further develop joint capabilities

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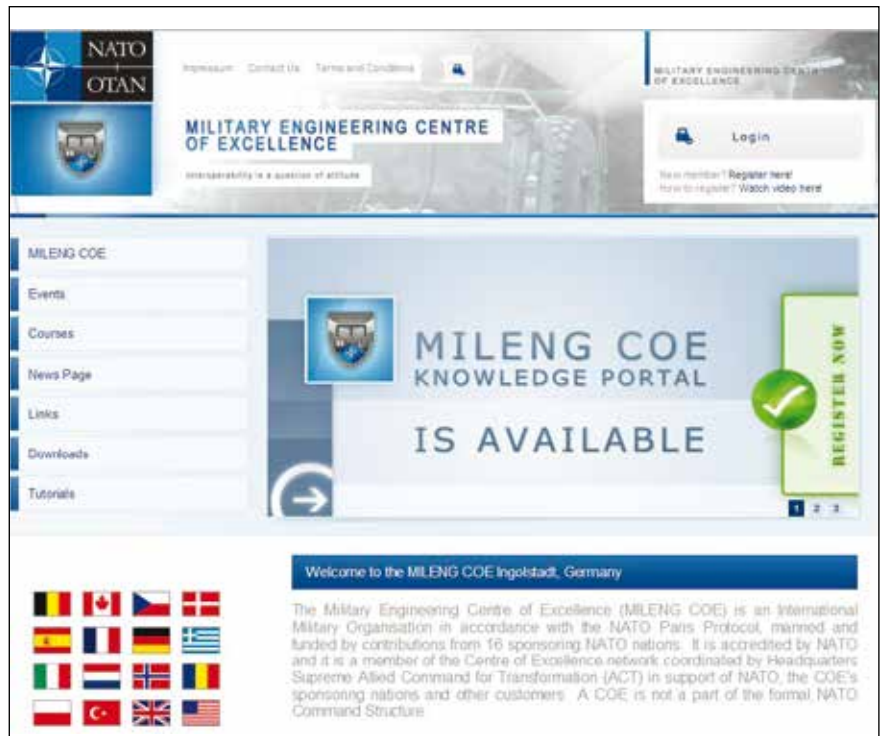
that contribute to the role of military engineering (jointness), and to promote and facilitate the relevant standardisation and interoperability.

Within the framework of assessing and advancing NATO capabilities, MILENG COE, together with the Chair of the MILENG Defence Planning Advisory Group (DPAG) and the Deputy Chair of the MILENG Working Group (MILENG WG) from the NATO Standardisation Office, has significant influence on decisions made as part of the NATO Defence Planning Process (NDPP). MILENG COE provides the secretariat for the NATO Senior Joint Engineer Conference (NSJEC), the forum for the NATO member states' most senior representatives in the field of military engineering. As such, it contributes to coordination between the Military Committee, ACO and ACT at a strategic level.

However, the professed aim of providing more effective support to NATO-led operations (and others) is not one that can be achieved through technical and planning measures alone. Practical training and a new attitude to cooperation are required for true interoperability.

### Policies, Concepts and Doctrine: "Doctrine Development" and "Future Operations"

NATO documentation also reflects the need to make enhancements and, at a time of scarce resources, to consider new developments. The basic document covering all aspects of military engineering is MC 0560/1, the "Policy for Military Engineering". Additional documents derive from this policy and are coordinated cen-



**The MILENG COE Online Knowledge Portal**

trally by MILENG COE. They include the Allied Joint Publication "MILENG" (AJP 3.12) and the subsequent Allied Tactical Publications "MILENG" (ATP 3.12.1), "Military Search Doctrine" (ATP 3.12.1.1), "Military Search Training Requirement" (ATP 3.12.1.2) and "Route Clearance" (ATP 3.12.1.3). MILENG COE is also the central coordinator for the NAC policy "Power Generation for Deployed Forces Infrastructure".

The Policies, Concepts and Doctrine Branch (PCD) is responsible for improving existing standards and specifications and for forecast analyses. Through the

work of this branch, MILENG COE acts as a think tank, supporting work on developing a security policy description of the world by contributing specialist MILENG knowledge. It is involved in the Strategic Foresight Analysis (SFA), Framework for Future Alliance Operations (FFAO) and Urbanisation projects, which describe the thematic issues and concerns for a changing world in the period until 2030 and beyond. The results are summarised in studies and serve as a basis for providing advice and developing specifications at the military-political level in NATO and NDPP.

For example, Strategic Foresight Analysis 2013 establishes the basis for the future security of the Alliance, based on the principles of NATO's Strategic Concept 2010. It outlines four key security-related areas – politics, people, technology and environment – which are then subdivided into a further 15 areas. Examples are the shifting global power (politics), urbanisation (people), access to advanced technology (technology) and environmental/climate change (environment). The Framework for Future Alliance Operations builds on this and summarises these 15 trends in 10 descriptions of possible world instability. They include a wide range of possible crises and conflicts, which NATO could face in the year 2030 – from the effects of a major natural disaster causing mass displacement to conflicts. Future NATO missions, in particular operations in an urban environment, also pose new challenges to



**Training at METLC 1/2015**

military engineering, for example due to the infrastructure involved.

### Training & Education: Multi-Level Training and High Intensity Conflict

Given that individual preparation is a prerequisite for collective success, individual and collective training are considered to be very closely linked. This holistic approach is based on training the staff of NATO's multinational headquarters at a tactical, operational and strategic level. It is supported by the fact that MILENG COE, in its capacity as Department Head for Military Engineering Education & Training, will in future be responsible at NATO level. It also encompasses the areas of environmental protection, route clearance, infrastructure and military search.

The Military Engineering Tactical Leaders Course (METLC), Military Engineering Operations & Planning Course (MEOPC) and Military Engineering Advanced Operations and Planning Course (MEAOPC), which are currently offered through MILENG COE, focus on stabilisation and support operations (SptOps). By way of contrast, the NATO Military Engineer Staff Officers Course (NMESOC) is more generalised and tailored to the specific

needs of the HQ of the permanent NATO command structure. The courses – currently still based on scenarios such as Afghanistan – are constantly being updated in line with developments in the geopolitical situation. In the past, the focus was – quite rightly – on asymmetric warfare, but this is now complemented by elements of conventional warfare in High Intensity Conflicts (HIC).

In 2014, a total of nine courses were carried out at Ingolstadt. Together with the training conducted in Greece by the Mobile Training Team, this means that over 200 participants from 22 countries received training. Most of the training was undertaken by trainees from the sponsoring nations, but three PfP countries also availed themselves of the training offering.

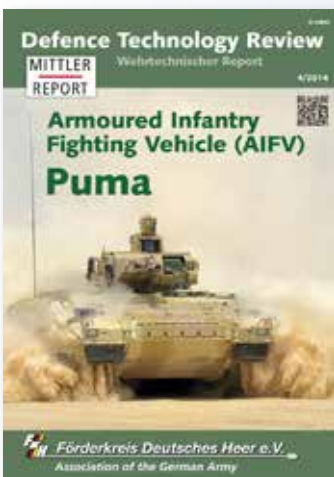
MILENG COE plans to completely overhaul the training offering in June 2015, with a view to redefining the balance of course content. The aim is to achieve a ratio of 2/3 HIC to 1/3 SptOps. This would be in line with the guidelines issued by SA-CEUR at the last NATO Training Synchronisation Conference in February 2015. The MEAOPC is likewise being adapted to meet the new needs of the NATO command structure, particularly since gaps in training have been identified there.

### Information Hub: Information Exchange Seminar and Industry Day

The free and willing exchange of information plays a prominent role in all areas of military engineering. Consequently, MILENG COE also views itself as a “communication enabler” between all stakeholders in the community of interest, which has a broad scope, encompassing military roles, civilian non-government organisations and industry stakeholders. The military engineering knowledge portal operated by MILENG COE ([www.milengcoe.org](http://www.milengcoe.org)) represents only the technical aspects of Information and Knowledge Management (IKM). The Information Exchange Seminar is a platform for discussion with highly-qualified partners for the sponsoring nations, NATO member states, military and civilian organisations. This year's theme of “Warfighting” also reflects the changed framework conditions for military engineering and is expected to stimulate a discussion on future developments. Industry Day 2015 – once again the largest specialist defence industry exhibition for military engineering solutions – is being held in parallel, creating cost efficiencies for participants attending both events. ■

## New Brochure

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