

1/2018

Newsletter

Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence



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Fellow Comrades and Colleagues, dear Readers,

For more than ten years, our Centre has been providing Transformation Support, Support in Education, Training, Exercises and Evaluation, and recently Operations Support to NATO and to the Centre's Sponsoring Nations. The expertise and experience, the knowledge and capabilities, the help and support of our Subject Matter Experts is highly appreciated throughout the Alliance; and our involvement in many Working Groups, Exercises and other activities is well established regular business, reflected in many documents on all levels and executed on a day-to-day basis.

But one thing it is not: It is not routine business. It must not lead to mental petrification, to the routine assessment "That's the way we have always done it." Every new request and every additional task raises new questions and poses new challenges; and reacting to these questions and challenges by simply providing routine answers would inevitably lead to our failure.

This simple, but momentous statement is even more important in times, in which we can watch an evolving shift in paradigms. For many years, the co-operation between the North Atlantic Alliance and the European Union was restricted to a few areas and activities only, and by trying not to poach in each other's reserve, both organizations sometimes acted overly carefully and may have missed early opportunities to increase co-operation and efficiency. Step by step, this has changed, and the Warsaw Summit Communiqué clearly recognizes that "The European Union remains a unique and essential partner for NATO" and welcomes "the European Council Conclusions of June 2016, calling for further enhancement of the relationship between NATO and the EU". Furthermore, the Joint Declaration by the President of the European Council, the President of the European Commission, and the Secretary General of the North Atlantic Treaty Organization requires "developing coherent, complementary and interoperable defence capabilities of EU Member States and NATO Allies, as well as multilateral projects."

As if we had already anticipated these political statements, our Centre has opened its doors for its first Non-NATO nation, Austria, who joined the Centre in summer 2016 as a Contributing Partner. Since then, our Austrian officer has perfectly integrated into our team, and he provides significant added value to the Centre.

In parallel, the Centre for its first time engaged in a major European Union project, the eNOTICE – the European Network of CBRN Training Centres. Not only as a consortium member, but as a member of the Security Advisory Board, too, our Centre will engage in this project playing a prominent role.

And as if that weren't enough, the European Commission has sent a high ranking delegation to our Centre recently, whose task was to evaluate the possibilities of closer co-operation between us and the EU CBRN Centres of Excellence. This co-operation is mentioned in the NATO Parliamentary Assembly Defence and Security Committee (Draft) Report on NATO-EU Co-operation after Warsaw: "NATO-EU collaboration on CBRN threats and the potential impacts of WMD use is focused through collaboration between the NATO Joint CBRN Defence Centre of Excellence and the EU CBRN Centre of Excellence.", and it already yields fruit by training EU personnel in our Centre's own trainings and courses.

Last but not least, our advice to the European Defence Agency is already very much appreciated e.g. when it comes to the development of doctrinal documents on CBRN defence.

Will these new tasks, will these new challenges have an immediate influence on our structures and processes? I am convinced that they will – and this influence will go hand-in-hand with the need to adapt to other requirements and challenges, too. Only to mention two out of many: Civil Emergency Planning and Co-operation becomes more and more important; and the new concept for Weapons of Mass Destruction Disablement is going to provide new requirements.

Hence, it will be interesting to see, how our Centre develops further, how it adapts, how it will change its shape.

Have I in my first sentences expressed some fears of our Centre being petrified in routine? Don't worry – as long as the demands for our expertise continue to grow and to diversify, routine will stay a foreign word in our day-to-day business. Let's face the upcoming challenges, thus, and please read on the following pages about those challenges, who already found their way onto our agenda. I hope you will enjoy the reading, and I look forward to receiving your feedback – just drop me a note or write to our directorate's mailbox assistant@jcbrncoe.cz!



*Volker R. Quante
Colonel, DEU A
JCBRN Defence COE
Deputy Director*

KICK-OFF MEETING H2020 eNOTICE



In parallel to NATO's new approach towards the European Union (EU) in mid-2016 (see my opening remarks to this newsletter), the Joint CBRN Defence Centre of Excellence (JCBRND Defence CoE) has taken the initiative to join a project proposal under the umbrella of Horizon 2020, an EU initiative to foster EU wide co-operation, inter alia in the field of multinational security: eNOTICE (picture 1).

eNOTICE stands for **E**uropean **N**etwork of **C**BRN **T**raining **C**entres; and the project aims at establishing a pan-European network of civilian and military CBRN training centres, fostering their co-operation and, if possible, aligning their activities to increase efficiency and gain synergy effects.

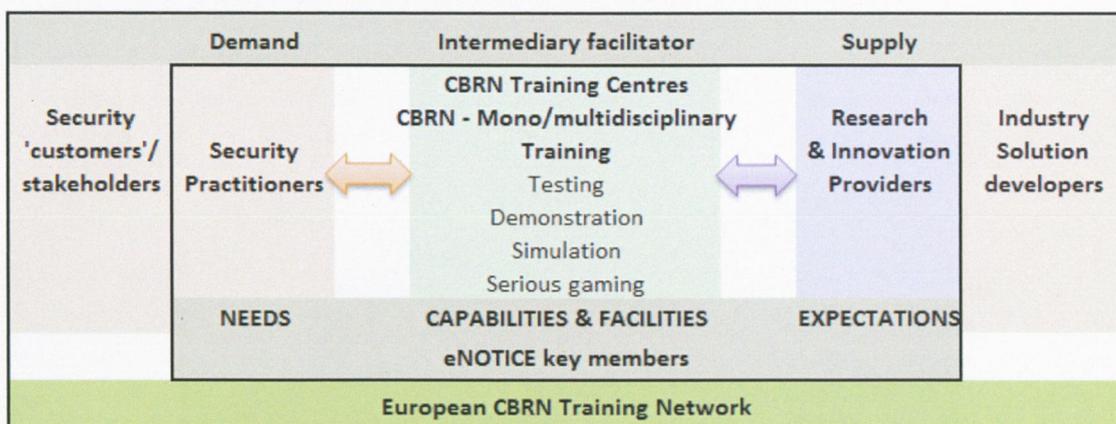
Thirteen consortium members¹ have joined the project proposal and, after its acceptance by the European Commission,

started work on 15 September 2017 with a kick-off meeting in Brussels. Divided into five work packages, the project will address synergies between suppliers, training professionals, users and policy (picture 2). Over the next five years (SEP 2017 – AUG 2022), the consortium members will establish a roster (catalogue) of European CBRN training centres, map and analyse capabilities and needs, identify key performance indicators and good practices, and make these available in a to-be-developed web portal. A common methodology and template for the preparation, organisation, evaluation and follow-up of exercises, tests, validations and demonstrations will be elaborated and shall support the integration of the consortium members as well as CBRN training centres all over Europe into a stable and sustainable network that will provide its added values beyond the five-years timeline of the project.

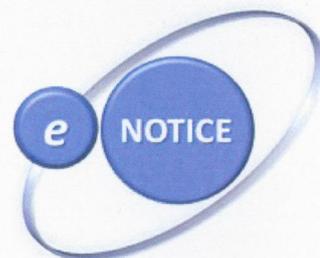
Whilst some of these steps might look obvious and at least partially achieved already in the military networks, in which our Centre is active, we must not forget that the military kind of co-operation and deep multinational integration we are used to experience in our day-to-day work is not that common among civilian emergency services yet. These undoubtedly have excellent skills and equipment, but often are focused on and restricted by regional responsibilities. They are funded and directed by local authorities or federal states and are very often not yet acting in a pan-European context. A broad spectrum of project activities (picture 3) will support them to integrate their activities in the future network, and the first training activity is scheduled for DEC 2017 already, when all project participants will have the opportunity to join a practical exercise in Gurcy (FRA), organized by the Service Départemental d'Incendie et de Secours de Seine-et-Marne.

The JCBRN Defence CoE will support the eNOTICE by providing its expertise in the assessment of capabilities, needs and gaps, in the field of quality assessment and assurance as already executed in our role as ACT's Department Head for WMD and CBRN Training, and as a member of the project's Security Advisory Council. By doing this, we will try to make the eNOTICE network a complement to the already established network of military training centres and will avoid competition, and we will at the same time gain synergy effects for the closer civil-military co-operation, NATO and our nations are striving for.

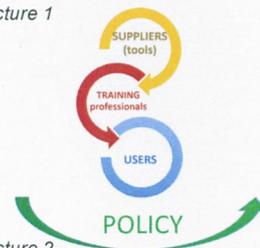
Author: COL Volker R. Quante (DEU A)



Picture 3



Picture 1



Picture 2

¹ Université Catholique de Louvain (BEL), Autonoom Provinciebedrijf Campus Vesta (BEL), Service Départemental d'Incendie et de Secours de Seine-et-Marne (FRA), Association pour la recherche et le développement des méthodes et processus industriels (FRA), Umeå universitet (SWE), Stadt Dortmund, Fire Department (DEU), Universitaet Paderborn (DEU), Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence (CZE), Middle East Technical University (TUR), Università degli Studi di Roma "Tor Vergata" (ITA), (West Midlands Police Authority) The Chief Constable of the West Midlands Police (GBR), Centrum Naukowo-badawcze Ochrony Przeciwpożarowej im. Jozefa Tuliszkowskiego – Państwowy Instytut Badawczy (POL), Akademia Sztuki Wojennej (POL)

EDA CBRNe¹ WORKSHOP

The European Defence Agency (EDA) conducted a Chemical, Biological, Radiological, Nuclear and explosive (CBRNe) Workshop in PARNDORF/AUT from 28th – 31st AUGUST 2017. According to EDA's 3 Year Planning Framework (3YPF), and as indicated by the Countering Improvised Explosive Devices (C-IED) community meetings, the Austrian Armed Forces hosted a workshop dedicated to CBRNe advances and challenges.

The overall objective of the Workshop was to focus on seeking synergies and improving tactics, techniques, and

procedures (TTPs), with emphasis on the recent CBRNe threat. The C-IED and CBRNe support to military operations and civilian missions is one of the priorities of the EU capability Development Plan, and is an area, which benefits from pooling and sharing of European capabilities.

Forty-four Participants represented AUT, BEL, DEU, IRL, ITA, ITA, NLD, ESP; as well as EDA, C-IED COE and JCBRN Defence COE (picture 1). In addition, representatives from TERROGENE and the WILDCAT Corporation were in attendance to represent private industry.

As already mentioned "CBRNe" is not a NATO agreed abbreviation or term; there is still the need for a definition on "CBRNe". A potential definition could be "Countering CBRN (ordnance and) improvised devices (ID)". NATO member states should task DTP through JCBRND-CDG to develop a respective definition as appropriate.

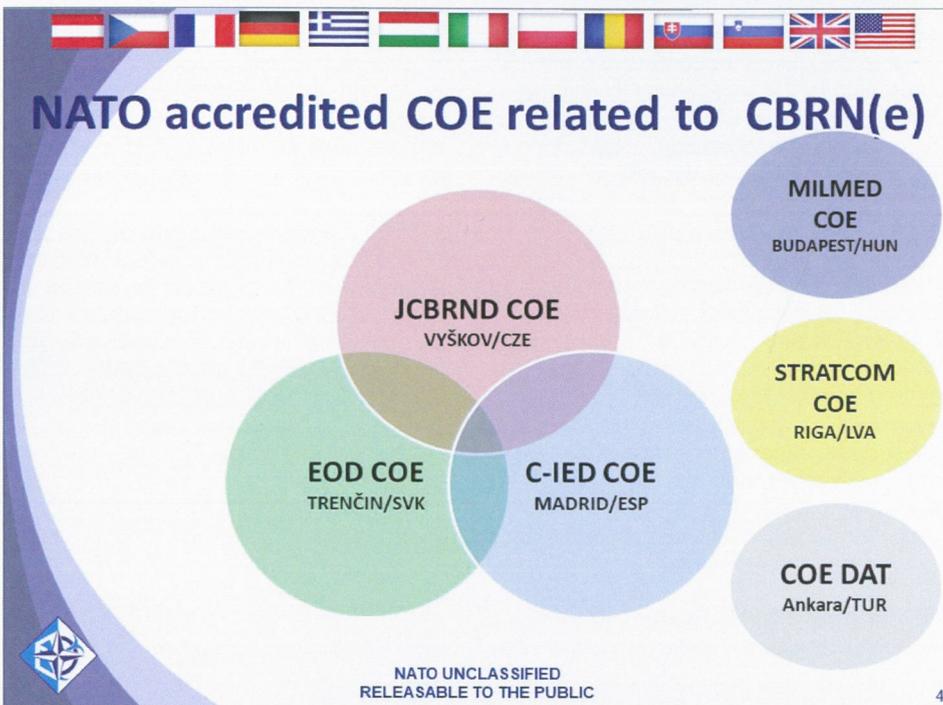
All concerned Centres of Excellence (picture 2) should reach an agreement on who is in lead (C-IED COE or JCBRND COE?), and who supports (JCBRND COE or C-IED-COE, EOD COE, DAT COE?). All CBRNe related issues have to be coordinated by these Centres of Excellence.

During a syndicate discussion, nations and organisations discussed needed capabilities in general, education and training needs, research, and potential contributions by nations and Centres of Excellence.

JCBRN Defence COE will continue supporting EDA on further developing Counter CBRN ID capabilities in order to coordinate EDA activities with similar NATO initiatives, but also to provide appropriate expertise. In addition, a C-IED COE, EOD COE and JCBRND COE coordination meeting on CBRNe should be initiated. MILMEDCOE, COE DAT and STRATCOM COE might be included.

Author: LTC Bernd Allert (DEU A)

¹ "CBRNe" is not a NATO agreed abbreviation or term.



Picture 2



Picture 1

FURTHER DEVELOPMENT OF THE NATO CBRN REACHBACK ELEMENT MODELLING AND SIMULATION CAPABILITIES

NATO's efforts to counter terrorism include projects to develop and enhance capabilities, which counter terrorist's use of WMDs. Funding from NATO's Defence against Terrorism Programme of Work (DAT POW) plays a key role in establishing the NATO CBRN Reachback Element (CBRN RBE) at the Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence (JCBRN Defence COE) in Vyškov, Czech Republic.

As the proof of the statement above, Mr. Jamie Shea, Deputy Assistant Secretary General for Emerging Security Challenges, NATO, confirmed DAT POW funding of the "NATO CBRN Reachback Element Modelling & Simulation Capabilities Enhancement Project" in March 2017. The Project was designed to enhance CBRN RBE capabilities to better respond to the current and envisaged future terrorist threats with a particular emphasis on CBRN Improvised Explosive Devices (IED).

The Project brought several significant enhancements to the current Modelling & Simulation (M&S) capabilities. The first enhancement was an upgrade of the presentation and projection capability from an obsolete analogue to the state-of-art digital technology.

The second enhancement was related to the computing capability. The acquired

technology and equipment allow to deploy the high performance and mobile computing capability (Pic. 1) necessary for the timely delivery of required M&S products. Moreover, it also enables rapidly assemble, depict and safely store 3D high definition terrain data.

The last, but the most important part of the Project was an explosive damage modelling (EDM) capability that integrates with the CBRN hazard prediction software currently in use by the JCBRND COE's Modelling and Simulation Section. This integrated EDM enhancement fills a known shortfall in NATO's capability to accurately and dynamically model the effects of IED containing chemical, biological or radiological agents or materials – a well-known demonstrated and aspirational terrorist weapon.

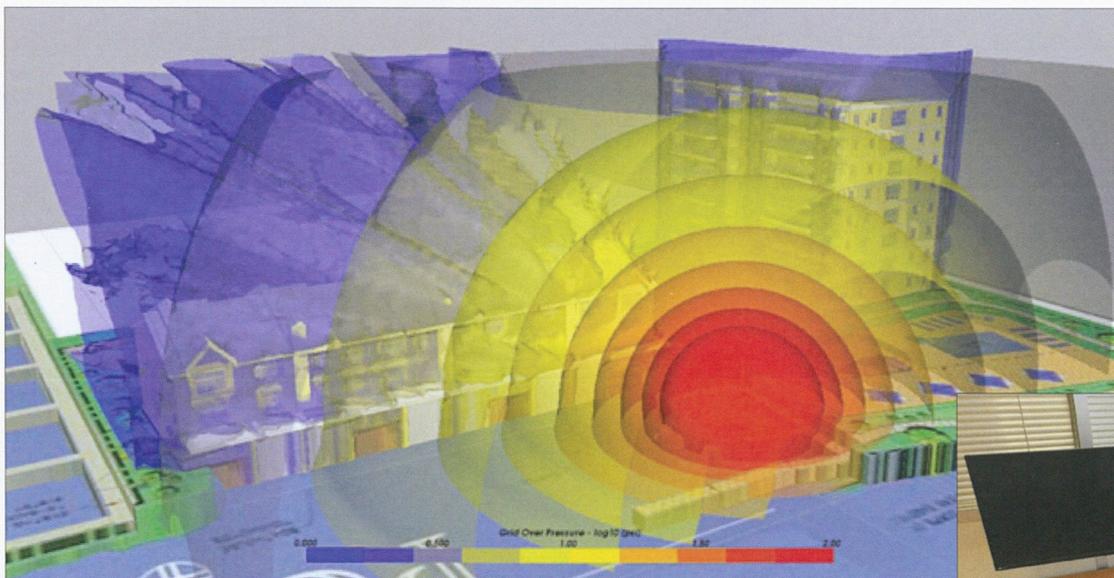
The BREEZE ExDAM (Explosion Damage & Injury Assessment Model, BREEZE Software, USA) is a sophisticated modelling program that enables JCBRND COE to assess the structural damage and personnel injury from high explosives and vapor cloud explosions at both the micro-level (such as a room) and the macro-level (such as a city). The BREEZE ExDAM fulfills the JCBRN Defence COE's NATO Reach Back requirements.

ExDAM consists of two numerical models – HExDAM for assessing the impacts of high

explosives, and VExDAM for assessing the impacts of vapor cloud explosions. The HExDAM (Pic. 2) and VExDAM models incorporate many advanced scientific methods and the latest versions have replaced those developed in the mid-1980s by a number of organizations including the Strategic Defense Command, U.S. Army Corps of Engineers, Southwest Research Institute, Facility Army System Safety (FASS) Office, the Naval Civil Engineering Laboratory, Engineering Analysis, Inc. (EAI), and BREEZE Software (Trinity Consultants, Inc.). Having been used by defense agencies around the world for decades to assess the impacts of explosions, ExDAM is a reliable, intuitive, and efficient tool that provides accurate results in a quick and effective manner.

JCBRN Defence COE will be capable to fully use BREEZE ExDAM beginning in spring 2018 in order to assess the structural damage and personnel injury due to overpressure, dynamic pressure, and impulse distributions caused by high explosive and vapor cloud explosions.

Author: LTC Aleš Mynařík (CZE A)



Picture 2 HExDAM assessment of impacts caused by an explosion



Picture 1

¹BREEZE Software, a division of Trinity Consultants, USA, provides the market-leading air dispersion, fire, explosion, and risk assessment modeling software to environmental, hazard and safety professionals in government, industry, consulting, and academia around the world.

EVALUATION PROCESS AS PART OF THE SYSTEMS APPROACH TO TRAINING (SAT)

Part 2 – Evaluation plan development

WHAT, HOW, and WHY are the cornerstones to frame the Evaluation plan development.

An evaluation plan is usually a written strategy that depicts how a course of instruction will be screened and assessed, and also how the evaluation outcomes will be utilized to improve its content. The evaluation plan elucidates how to address and describe the "What", the "How" and the "Why" for the course. Additionally, there are other, less significant elements, such as, who, where, when, how long and for how much.

Why is an evaluation plan needed?

An evaluation plan provides direction and guidance for how to reach the evaluation objectives, based on available resources, student skills and education and training priorities.

The evaluation plan is written in the context of the following framework elements:

Evaluation plan title, intended use and users, course description, evaluation focus, methods, Analysis and interpretation, use of evaluation results and findings.

These elements will foster transparency about the evaluation purpose, clarify the

evaluation outcomes acquaintances, provide understanding of the theory of change, will guide prioritization of the evaluation, describe the gathering and analysis of data and the usually neglected but critical sharing with stakeholders.

The use of evaluation standards and evaluation plan development steps enhance the quality of evaluation by preventing from potential mistakes or errors during the conduct.

Steps to develop a solid worthy and useful Evaluation plan

We usually use these standardized steps to develop a Course Evaluation plan:

1. What are we evaluating?
2. What is the function of the plan?
3. What is the evaluation objective?
4. Evaluation methods.
5. Hypothesis, criterions, questions.
6. Data collection management.
7. Data analysis, interpretation of the findings and results.
8. Sharing of the evaluation outcomes.
9. Course change management proposal.
10. Lessons Learned process.

The use of evaluation standards and evaluation plan development steps enhance the quality of an evaluation by

preventing potential mistakes or errors during its conduct.

21st century Evaluation methods and the use of New Age technologies

Direct and indirect measures, measures of performance, knowledge versus skills, measures of attitude, in-process and end-product measures, course effectiveness measures, peer-to-peer assessment, statistical models, heat maps, conditional behavior model, the Kirkpatrick model, etc are just a fraction of the evaluation models and approaches which are being used for evaluation of resident, online or blended courses. The tendency in vocational and highly specialized (as CBRN might be) education and training lean more and more towards the blended and even online methods of delivery. Those methods are fertile soil for applying New Age technologies for education and thus render the opportunities to use them for evaluation purposes as well.

Author: LTC Vladimir Hon (CZE A)



THE JCBRN DEFENCE COE IS INCREASING ITS ENGAGEMENT WITHIN THE JCBRND-CDG



The Autumn Joint Chemical, Biological, Radiological and Nuclear Defence Capability Development Group (JCBRND-CDG) meeting was held in Copenhagen, Denmark from 4th September to 7th September 2017.

The Group was open to Partner for Peace (PfP) nations, Australia and New Zealand. National representatives from 19 NATO countries, four PfP countries and representatives from different NATO bodies (IS/ESC(TU), IS/PASP (ACDC), IMS, ACO, ACT, ACT-SEE, LANDCOM, JCBRN Defence COE, JFC HQ BS, MCJSB, NSO and NSPA) gathered together for four days in NATO Only Session and Partners Session format to discuss the JCBRND-CDG assesses capability requirements and related standardisation activities.

The JCBRND-CDG's aim is to support the development of CBRN defence capabilities using all lines of development focusing on doctrine, materiel, and training as directed by the Military Committee Joint Standardization Board (MCJSB) and NATO Army Armaments Group (NAAG) guidance. It supports the development of capabilities fitting into implementing the three-pillar approach: Prevent, Protect and Recover under the NATO's Comprehensive Strategic-Level Policy for Preventing the Proliferation of Weapons of Mass Destruction (WMD) and Defending against CBRN Threats. There are seven panels subordinated to the JCBRND-CDG: Doctrine and Terminology (DTP),

Information Management Panel (IMP), Detection, Identification and Monitoring Panel (DIMP), Physical Protection Panel (PPP), Hazard Management Panel (HMP), Training and Exercise Panel (TEP) and Challenge Level Panel (CLP). All seven panels cover the wide and various spectrums of responsibilities of the JCBRND-CDG in field of the Alliance prevention of the proliferation of WMD and defending against CBRN Threats.

The JCBRN Defence COE has been a regular participant of the Group's meetings from 2007. Since the Centre's establishment in 2006, it has started to play a much more significant role.

Firstly, important JCBRN Defence COE's engagement with JCBRND-CDG started, by taking over the responsibility to provide the Doctrine and Terminology Chairperson and Secretary, in spring 2008. The Centre also was also given the Custodianship of the main CBRN Doctrine – Allied Joint Doctrine for CBRN Defence (AJP-3.8).

Secondly, in increasing support to the JCBRND-CDG was the agreement that the Centre will take over the custodianship of JCBRND-CDG Priority Assessment and Work Schedule (JPAWS) from September 2010. JPAWS is a tool, which provides the overall vision of the JCBRND-CDG and identifies requirements for a comprehensive and responsive CBRN defence capability.

Thirdly, commitment of the Centre was addressed in autumn 2011, when the Centre also provided the Training and Exercise Panel Chairperson and Secretary. Fourthly, the last major step was filling the vacancy of the JCBRND-CDG Secretary, after the announcement from the Assistant Secretary General Defence Investment of NATO HQ, that they are no longer able to support the group by providing the Secretary. The Centre offered the temporary administrative assistance until a resolution is found.

The Centre's Transformation Support Department (TSD) has been providing long term support, as approved in JCBRN Defence COE Programme of Work since 2014, by active participation of the CBRN Subject Matter Expert to each subordinated Panel. This wide participation in all panels assists in coordinating the development and implementing the same approach in different standardised documents (STANAGS, STANRECs, APs and others).

Of course, COE contributed also to reviewing CDG's procedures by hosting and chairing a workshop on restructuring CDG's working methods in Vyškov 2016. During the last JCBRND-CDG meeting, the Centre – represented by Deputy Director Colonel Volker Quante – stated the Centre will to continue the support to JCBRND-CDG. In particular, the Centre will host the Stocktaking MC 0603/1 Workshop 5–6 December 2017. In long term perspective, the DTP was tasked to develop WMD

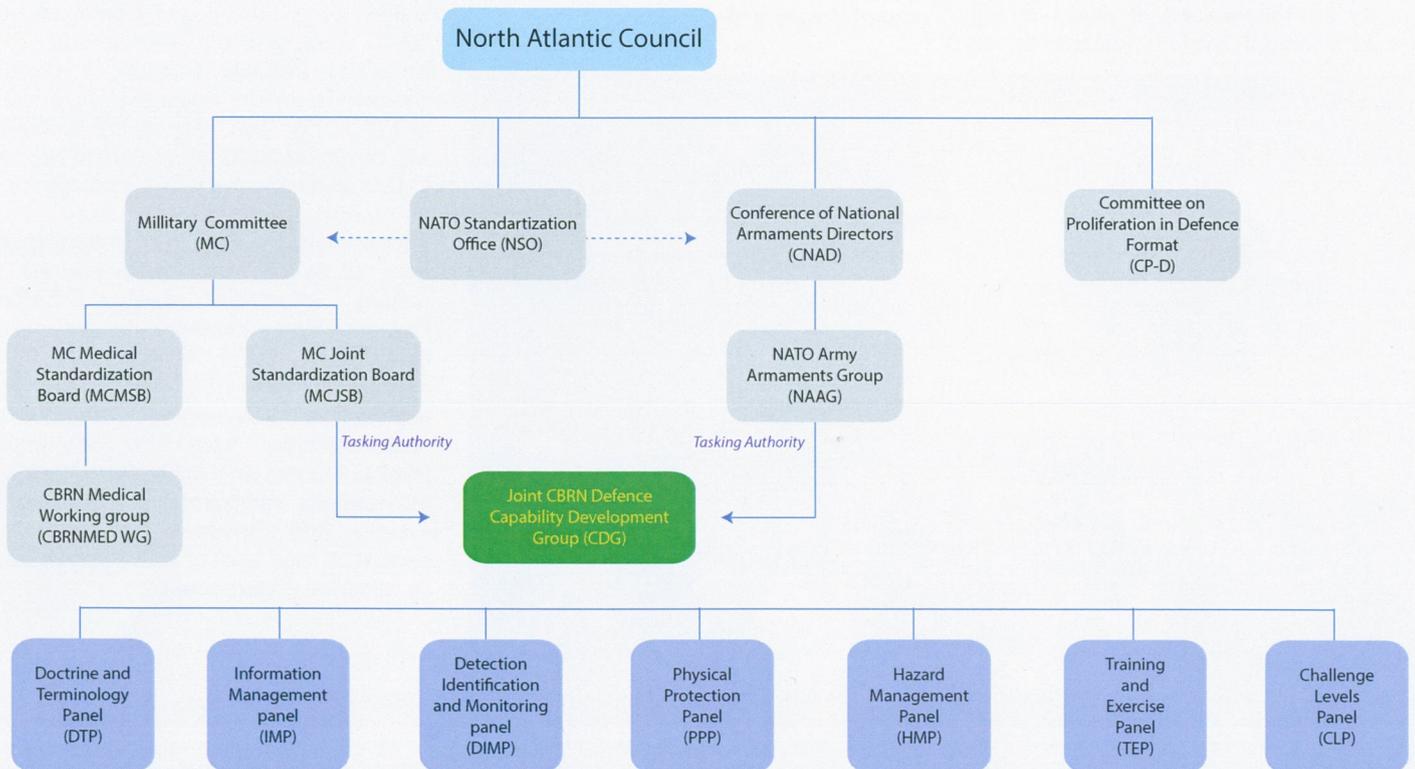
Disablement Doctrine and TEP was tasked to support HQ SACT in the development of a new Live Agent Training Concept. The Centre will be heavily involved in these two major projects. The Centre delivered the brief, which was requested in the Spring JCBRND-CDG meeting, on the COE role in Lessons Learned (LL) process and expected JCBRND-CDG role in this

process. Based on received information, the JCBRND-CDG decided that next TEP meeting will serve as a venue for LL CBRN Community of Interest Workshop, with the aim to define the Action Body and CBRN LL process.

Last but not least, JCBRND-CDG meetings offer a wide variety for net-working. An

icebreaker in Copenhagen took place at a Hard Rock Café sponsored by Austria. The next JCRBND-CDG meeting will be held in Athens, Greece on 23 – 26 April 2018.

Author: MAJ Ilona Chylikova (CZE A)



NATO'S TECHNICAL EXPLOITATION WORKSHOP

A Technical Exploitation Workshop took place at NATO HQ in BRUSSELS/BEL from 11th - 13th July 2017.

Technical Exploitation is the application of scientific methods to gain further knowledge and insight from information, materiel and captured persons. Technical exploitation supports the commander's priorities including targeting, operations, judicial proceedings, force protection and training.

Workshop primary objectives were to gather the NATO Technical Exploitation Community of Interest, to review NATO Technical Exploitation Requirements, and to survey Technical Exploitation activities in NATO.

Participating were 26 representatives from eight nations (BEL, DNK, FRA, DEU, ITA, NLD, GBR, and USA) as well as from ACO, JFC HQ BS, NSHQ, JDEAL, C-IED COE, and JCBRN Defence COE. LTC Allert attended as Section Chief/ Concept Doctrine Section/Transformation Support Department CDS/TSD, as well as Chairperson/Doctrine Terminology Panel (DTP).

Within AIntP-10 TECHNICAL EXPLOITATION Annex K describes CBRN exploitation capabilities. There are areas within C-IED and CBRN, which should be harmonized, if possible: e.g. the Exploitation System (picture 1). An

Levels of Confidence (AEP-66(A))	Identification Levels (USA)
PROVISIONAL	PRESUMPTIVE
CONFIRMED	FIELD CONFIRMATORY
	THEATRE VALIDATION
UNAMBIGUOUS	DEFINITIVE

REFERENCE: DTP Meeting in OSLO/NOR, 12 - 16 JUNE 2017

NATO UNCLASSIFIED
RELEASABLE TO THE PUBLIC

Picture 2

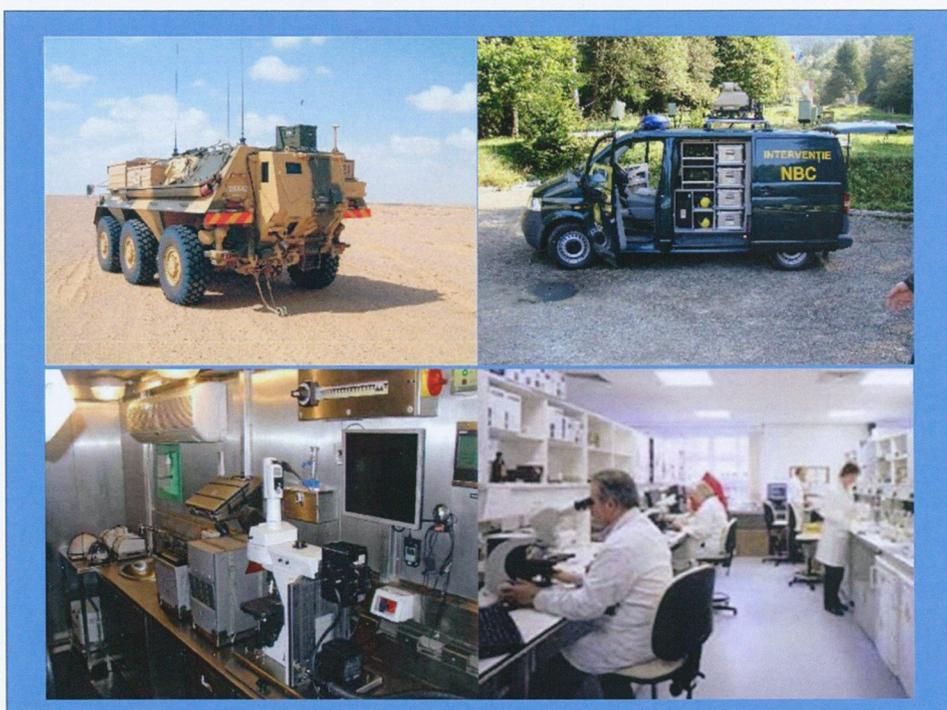
appropriate approach might be to eliminate the numbering of the levels 1, 2 and 3. In addition, USA proposed to enhance the levels of confidence (picture 2) from three to four.

However, AIntP-10 is going to be reviewed. This opens for the COE a window of opportunity to improve all CBRN Defence related chapters and annexes.

Furthermore, JCBRN Defence Centre of Excellence will host the next Technical Exploitation Workshop to be held in Vyškov, Czech Republic from 29 November – 1 December 2017. This workshop is an activity under the Emerging Security Challenges Division's Defence Against Terrorism Programme of Work (Reinforced) and will be co-chaired by the Danish Army Intelligence Centre and the NATO Headquarters International Staff Emerging Security Challenges Division Counter-Terrorism Section [NATO HQ – IS/ESC(CT)]. One aim of the workshop will be to facilitate coordination between C-IED, EOD and the CBRN community.

This workshop will be open to participants from all NATO, and seven non-NATO-nations (Australia, Austria, Ireland, Finland, New Zealand, Sweden, and Switzerland), ideally Military/Government officials of OF-2 to OF-5 level with technical exploitation capability development responsibilities, from the sub-tactical level to theatre and national level as well as weapons intelligence and intelligence experts and functional subject matter experts. A high level of active participation by attendees is expected.

Author: LTC Bernd Allert (DEU A)



Picture 1

NEWCOMER CHALLENGES

Fellow CBRN Professionals, Colleagues and Readers!

Having only joined the JCBRN Defence COE family in July 2017, I feel both privileged to be a member of the COE family, and yet perplexed by my first task to offer you my insights into our Centre's capabilities. Since I've yet to acquire any such insights myself, what I'd like to do is provide you my "New Comer" impressions of our Centre here in Vyskov.

When I was first asked to write an article for our newsletter, my initial response to my Department Chief was, "about what...a newcomer with two months experience?" Without skipping a beat, Colonel David Martinek responded by saying, "that sounds like a great topic". Thwarted by my Department Chief's superior intellect, and realizing I could not avoid writing something for the newsletter, I began thinking about the topic, which I had inadvertently chosen for myself. I'm hopeful that my insights will be of some interest to you, our readers.

Let me first introduce myself. My name is CPT Dejan Pagon, from Slovenia. Before I have joined COE family in July 2017, I worked as Deputy CBRN Coy Commander, S3 Officer in CBRN Bn HQ, CBRN Warning and Reporting Cell Chief and Platoon leader. In COE I took over the responsibilities as a Course Instructor / Deputy Chief of Training & Education

Section in Training Exercises & Education Department (TEED).

I knew that accepting a job to work abroad involved stepping out of my comfort zone, leaving my home country and facing head-on both professional and personal challenges. When I first arrived in Czech Republic, I naturally had many questions? How is it to live in Czech Republic? How difficult is it going to be to work at the JCBRN Defence COE? How different is it compared to my country? How will I be able to communicate without any Czech language skills? It was not hard to face up with these challenges because COE is a great working environment. All COE members played a big role by helping me to settle into my new environment. To answer on some questions mentioned above I need some more time, maybe I will write another article in next issue of Newsletter. For now I can say the first impression of living in Czech Republic and working in COE is great.

Living in foreign country and working in an international environment is a unique opportunity. Living abroad allows me to soak in the culture, learn a language, discover the country, make new friends etc. Working in JCBRN Defence COE allows me to challenge myself, meet CBRN experts, develop language skills and boost my CBRN knowledge. On the other side I will do my best to support my team and

COE with my knowledge, expertise and experiences.

I look forward to my next three years here in JCBRN Defence COE expanding my professional horizons as well as broadening my experiences living abroad, here in this beautiful country called Czech Republic.

Author: CPT Dejan Pagon, (SVN A)

Postscript – Colonel Andrew L. Miltner (Chief of Staff)

Captain Pagon's assignment to describe his initial impressions as a newcomer to the COE brought to mind some of my own experiences of being the latest COE Chief of Staff, prompting me to write this short postscript.

CPT Pagon's concerns about not speaking the Czech language and his ability to communicate at the COE reminded me of some of my initial communication experiences. As an American, I have come to accept that the majority of U.S. partners around the world consider me to be nearly illiterate. Not only do I speak a strange and sometimes unintelligible dialect of the English Language, but my knowledge of other languages is limited to ordering beer in Spanish, German, Italian, French and now Czech. As we are two nations separated by a common language, I expected my British cousins to criticize me for my cockney alliteration, but what I didn't expect were the sheer number of English Language Subject Matter Experts who reside at the JCBRN Defence COE and regularly remind me of my ignorance.

In writing this postscript, I hope I was able to provide the reader a bit of humour, as well as offer CPT Pagon some encouragement. Considering my limited English Language skills, I'll simply wish Dejan good luck and offer to buy him a beer for his sorrows... "pivo prosim".



Dear Readers,

In this publication of the JCBRN Defence COE Newsletter, I have decided to dedicate my portion to one of the Warrant Officers of the Non-Commissioned

Officers troops of the COE, who has previously joined the COE. He has been appointed as a Training Education and Department Head Specialist (TE&DH) of the Training, Education and Exercise Department (TEED). His responsibilities will also include CBRN Defence Course Instructor.

WO Skopal joined the Czech Armed Forces in 2001. He has studied the Military Chemistry and Technology of Chemistry at the Military High School in Vyskov.

After his graduation at the Military High School, he was assigned as Deputy Platoon Leader in the CBRN (NBC) Rapid Reaction Force Unit in Bechyně. As a

Deputy Platoon Leader/Commander, he was deployed to Kuwait for 6 months (2002-2003) as a CBRN Specialist, in charge of vehicle decontamination. Following his redeployment, he was assigned as a Deputy Platoon Commander/Squad Leader to serve and support of 42nd Mechanized Battalion in Tábor for 18 months. His next assignment was as a Chief of Guards of the Support Battalion of the Military Academy in Vyskov. His mission ended after 12 years of service and dedication there.

In 2016 WO Skopal joined the British Military Advisory Training Team (BMATT) where he was assigned as a Quarter Master of Admin Support Section. His duties were to provide logistic support and other basic necessities to students and his Czech counterparts.

*Authors: WO Pavel Skopal (CZE A)
CSM Ivan Hladik (CZE A)*

Courses:

Hand to Hand Combat Instructor (Military Combat System (MUSADO) MCS II. Grade)

Krav Maga IKMF – I. Grade

Kung Fu – Viet System
I. Grade

Airborne Course

Land and Air Control Readiness Course

“I RUN AND HELP” WAS SUPPORTED BY COE MEMBERS

On Saturday, 22nd April representatives from JCBRN Defence COE attended the non-competitive nine kilometre race through the city. They became a part of around 300 participants who were willing to assist. The main purpose of the event was to raise funds for the local charity project „I run and help“. This project was created to support the families in our neighborhood

who have to cope with difficult life situations every day and they often have to rely on financial help from others. Under the auspices of the main sponsor, the Lear Corporation, the Lear Vyškovský Charity Run takes place regularly every spring in order to raise financial support for those in need. All collected proceeds will be donated to selected families. The

first edition of the Vyškov Lear fundraising run was organized in support of Petr Holub from Rostěnice who has been disabled both mentally and physically since his birth (due to cerebral palsy). “The smallest act of kindness is worth more than the grandes intention”. Oscar Wilde.

Author: MAJ Eva Vitaskova (CZE A)



THE JCBRN DEFENCE COE SUMMER EVALUATION AND INTERNATIONAL BBQ

Dear Readers,

Twice a year the JCBRN Defence COE organizes a multi-day family event at a scenic Czech location, in order to bid farewell to departing COE members, welcome new members and show our appreciation to COE families for their support. The bi-annual events are known as the Summer and Winter Evaluations. The 2017 Summer Evaluation occurred in Vranov, at the Znojmo region of Southern part of South Moravia.

Popular scheduled events included a boat trip along the Vranov Reservoir, and series of competitive events, which

divided COE members and willing family members into four teams and a Social Evening, sponsored by the international members. The weather on the day of the competitive events was sunny and warm. All the competitors showed great heart as they endeavored to defeat the other teams in the pedal-boat relay, swimming relay, canoe relay and finally the tug-of-war. The International BBQ and Social Evening provided a fitting end to a long day of competition, where members and families enjoyed a BBQed pig and drinks, entertainment and eventually dancing.

The 2017 Summer Evaluation was a great event, which was enjoyed by all. I'd like to

offer my sincere thanks to those members who helped to organize the event. You honored the COE's tradition of excellence in CBRN Defence and honored those members and families who serve our nations and NATO so proudly.

Thank you,

Authors: CSM Ivan Hladik (CZE A)
CPT Zuzana Kralikova (CZE A)



MULTINATIONAL EXERCISE TOXIC VALLEY

From 18 to 22 SEP 2017, representatives from the JCBRN Defence COE took part in the annual multinational exercise "Toxic Valley 2017" (TOVY 2017). The two week exercise is organized by the Slovak Armed Forces in the CBRN Training and Testing Centre located in Zemianske Kostolany. The aim of this exercise is to train and evaluate Sampling and Identification of Chemical Warfare Agents/Toxic Industrial Materials (SICA) capabilities in accordance with the new NATO publication AEP-66.

The exercise was divided into two parts, with separate training objectives for each part. The objective of the first part was to train and evaluate sampling teams procedures. The objective of the second part was to train and evaluate the performance and analytical outcomes of deployable laboratories.

JCBRN Defence COE representatives participated in the first part of exercise

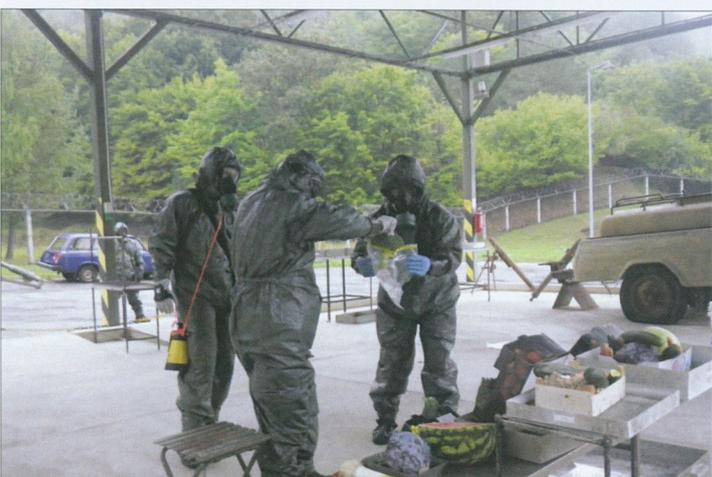
as members of a multinational evaluation team. Their primary responsibilities were to evaluate the SICA teams performances and identify and record lessons for the NATO Lessons Identified/Lessons Learned (LI/LL) process. 8 nations (BEL, CZE, FRA, HUN, POL, SVK, SVN and USA) deployed their SICA teams and 2 nations (CZE and SVN) provided their Deployable Laboratories (DLAB) to train NATO SICA procedures in compliance with NATO AEP-66 publication.

In support of first part, 7 different scenarios were developed to ensure that all major NATO sampling and laboratory requirements were met and to test whether procedures described in AEP-66 were feasible, applicable and sustainable under simulated real-world conditions. In addition, teams took advantage of their opportunity to observe their counterparts and share best practices. The second part was mainly aimed to prove quality of

results from DLAB. DLABs were tasked to carry out CBR analysis of unknown samples, to create DLAB protocols and to provide assessments for the commander. The process of drafting commander assessments in a language that is understandable by non-scientists is challenging. Establishing an assessment's relevance to ongoing operations can be even more challenging.

In the end, the TOVY 2017 was well executed and well received by the training audience. The exercise provided an important venue for validating AEP-66 and offered a great opportunity for participating nations to share best practices with one another.

Author: WO Petr Mohnacz (CZE A)



COMMITTEE ON PROLIFERATION SEMINAR 2017

The Committee on Proliferation (in Defence format) 2017 Seminar took place in SONTHOFEN and BAD HINDELANG in Germany from 30th May – 1st June 2017.

The Committee on Proliferation (CP) is the senior advisory body to the North Atlantic Council on proliferation of weapons of mass destruction (WMD) and their associated delivery systems and chemical, biological, radiological and nuclear (CBRN) defence. The CP is responsible for information sharing, policy development and coordination on the issues of prevention of and response to proliferation, bringing together experts and officials with responsibilities in this field.

The CP was created following NATO's June 2010 committee reform, replacing the Senior Politico-Military Group on Proliferation, the Senior Defence Group on Proliferation and the Joint Committee on Proliferation.

The CP meets in two formats: politico-military, under the chairmanship of the Assistant Secretary General for Emerging Security Challenges, and defence format, under national North-American and European co-chairmanship. The Committee addresses the threats and challenges stemming from WMD proliferation, as well as the international diplomatic responses to them. In its defence format, it also discusses the development of military capabilities needed to discourage WMD proliferation, to deter threats and use of such weapons,

and to protect NATO populations, territory and forces. It cooperates with other NATO bodies with competencies in the area of WMD and CBRN defence.

The CP can meet in several ways or formats: Plenary Sessions, Steering Group meetings, Points of Contact meetings, consultations with partners in 29+1 and 29+n formats.

Some of NATO's largest outreach activities take place under the auspices of the CP: the Annual NATO Conference on WMD Arms Control, Disarmament and Non-Proliferation, organized by the Committee in politico-military format, which gathers a broad range of non-NATO countries, including a number of partners across the globe from Asia and the Pacific. On average, 150 participants from more than 50 countries attend this conference every year. For the Committee in defence format, the main annual activity of this kind is the International CBRN Defence Outreach event, which has the objective of increasing engagement, exchanging views and sharing best practices on CBRN defence with a wide variety of NATO's partners.

In addition, at the end of a European Co-Chairship CP conducts a seminar in order to hand-over/take-over the Co-Chairship. Objectives of the 2017 Seminar were to discuss trends likely to shape the future WMD/CBRN strategic context; to investigate whether the key fundamentals of the policy are still "fit for purpose", to

address current WMD/CBRN threats and future challenges in light of recent operations lessons identified / lessons learned and future security challenges.

Thirteen out of 29 nations (CZE, FRA, DEU, HUN, ITA, LVA, NLD, NOR, POL, ROU, TUR, GBR, USA) were represented, as well as NATO HQ – IS/ESC, NATO HQ – IMS/NCAB, SHAPE, ACT, ACT SEE, JFC HQ BS, LANDCOM IZMIR, JCBRND COE, and NATO SCHOOL (OBERAMMERGAU).

The organisers subdivided the seminar into two parts: The first day was characterized by a static and dynamic display on small-scale WMD disablement (picture 1: Exercise "RESOLUTE SOLUTION", please see also (<https://www.youtube.com/watch?v=4qye2o0KELI>)). On the second day, the seminar itself took place. Presentations and discussions were focussed on NATO's comprehensive, strategic-level WMD Non-Proliferation/ CBRN Defence policy.

At the end of the seminar, Germany (picture 2) handed over the European Co-Chairship to the Republic of Poland.

COL Miltner represented the COE at the seminar; LTC Allert, CPT (now MAJ) Vitásková, and WO Dvořák established and maintained a static display and information booth in order to build relationships and disseminate information about the JCBRND Defence COE.

Author: LTC Bernd Allert (DEU A)



Picture 2



Picture 1

CONSEQUENCE MANAGEMENT AFTER A CBRN INCIDENT COURSE (WMD-CD-41764) SUCCESSFULLY CONCLUDED



Consequence Management After a CBRN Incident Course, 13 November - 17 November 2017, JCBRN Defence COE, Vyskov, Czech Republic

Sixteen course participants from AUS, BEL, BIH, CZE, GRC, and POL participated in the last course at the JCBRN Defence COE in 2017.

The aim of the course was to introduce and describe Consequence Management after a CBRN Incident to NATO and Partner Nation officers and civilian equivalents. The course covered the NATO Crisis Management concept, organization, systems and procedures including Cooperation and Partnership Initiatives in CBRN Crisis and Consequence Management.

To achieve this aim, the course included theoretical briefings, discussions and syndicate work. The students appreciated the extensive knowledge and expertise of speakers from different organizations such as NATO Headquarters, the ITA Observatory on Security and CBRN Defence (OSDIFE), the CZE Fire Rescue Service, the US Department of Energy (DOE) National Nuclear Security Administration (NNSA), the AUT NBC-Defence School, US Defence Threat Reduction Agency (DTRA) Europe, the NLD Civil-Military-Interaction Command, the Dynamis Inc. USA, and finally our

own Centre. The speakers shared their experience with students and were engaged in interesting discussions related to the course topic.

An indication for the positive perception of this course is provided in an article, which was published on the Dynamis website. Please see also our Centre's Training Portal for additional information about further courses organized by the JCBRN Defence COE.

Author: CPT Dejan Pagon (SVN A)

DOCTRINE AND TERMINOLOGY PANEL MEETING IN ANTALYA/TURKEY



The Republic of Turkey hosted the 29th Doctrine and Terminology Panel (DTP) meeting in Antalya from 30 OCT – 03 NOV 2017. DTP is one out of seven NATO JCBRN Defence Capability Development Group's panels (JCBRND-CDG).

Fifteen nations (AUS, BEL, CAN, CZE, DNK, FRA, DEU, ITA, NLD, NOR, POL, ESP, TUR, GBR, USA) were represented,

as well as ACO, (MCMSB) MAROPSWG, and JCBRN Defence COE. For the first time C-IED COE provided a participant. The first day was – as usually – designed as a plenary session. DTP's chairperson, LTC (DEU A) Bernd Allert, informed all participants on results, tasks and guidance provided by JCBRND-CDG. On the agenda was also informing on the Allied Joint Operations Doctrine (AJOD) working group, as well as on the current status of the CBRN Comprehensive Database, established and maintained by the COE.

During the following days all DTP members took part either in the Doctrinal or the Terminology syndicate. Main topic for Doctrinal work was study draft of the ATP-3.8.1 Volume I "CBRN DEFENCE ON OPERATIONS". During the Doctrinal Syndicate work more than 200 critical and

substantial comments were discussed. Participating nations determined the final structure and content of this important document. At the end of syndicate session it was decided that in February 2018 JCBRN Defence COE Vyškov will organize a custodian meeting in order to conclude the work on study draft 2.

The Terminology Syndicate faced some tough challenges as well. A lot of words in CBRN language need to be defined precisely to avoid future misinterpretations and to create a NATO-wide common language. The Spring 2017 meeting in Oslo/NOR was last one chaired by Ms. Anita Walker (USA). Therefore, JCBRN Defence COE provided for Antalya's meeting MAJ (CZE A) Ilona Chylikova as acting chairperson. An almost new terminology team had ambitious discussions about

new definitions like for WMD Disablement or CBRN Reconnaissance. Finally, they achieved definitions for 16 new terms. During the session USA provided LTC (USA), Alicia Masson, as the new chairperson. The CAN representative and Vice-chairperson, MAJ Chris Sullivan, introduced the meeting facilities of the 30th DTP Meeting in Kingston, Canada.

However, there were not only nice events. The DTP had to farewell LTC (NLD A) Martin van Heynsbergen, the Dutch representative. Friends called him MarTIM, due to his persistent engagement for TIM (= Toxic Industrial Materials).

Author: CPT Robert Hromada (SVK A)



COURSES 2018

CBRN ANALYSIS SUPER USER – REFRESHER COURSE 2018

This course introduces students being experienced CBRN-Analysis users to the latest CBRN-Analysis program release and provides knowledge about new and improved program functions. It will enable the students to perform as local or national Super User Contact with sufficient knowledge to assist less experience operators and to act as adviser for establishing CBRN-Analysis communication, making exercises.

TRAINING CURRICULUM COURSE 2018

The mission of the course is to familiarize the participants with the International CBRN Training Curriculum, provide the participants with the knowledge and understanding required for implementation the CBRN Training Curriculum within their own nations and ultimately enhance interoperability among first responders in an international response to CBRN events.

I-RAPTER BASIC 2018

Aim is to provide, radiation protection specialists, first responders, law enforcement, and emergency managers with practical information to effectively respond to radiological incidents and accidents. The course provides instruction through briefings, equipment demonstrations and field exercises employing a wide variety of radiation detection instrumentation, radiation sources, and personal protective equipment.

UNIT EVALUATORS COURSE 2018

The target is to prepare evaluators responsible for evaluation of CBRN Defence units for NATO Reaction Force Combined Joint Chemical Biological, Radiological and Nuclear Defense Task Force (NRF CJ CBRN D TF) to achieve common standard on field of CBRN certification.

W&R SPECIALISTS COURSE 2018

The object is to train students to be qualified in warning, reporting and hazard prediction of the CBRN incidents and strengthen the foundation for integrity, good governance and management within members of the CBRN Warning and Reporting Centre by sharing experiences, challenges, and CBRN Warning and Reporting exercises in order to enhance professionalism.

LIVE AGENT TRAINING COURSE 2018

The course is designed to provide students with knowledge, skills and abilities to work confidently in protective clothing in a toxic environment containing chemical agents, toxic industrial chemicals. Through the training, students will gain practical experience in the use of personal protective equipment, will understand and be able to apply safe work practices and will have an appreciation of the equipment and methods for detection and decontamination.

RADIOLOGICAL CONSEQUENCE MANAGEMENT 2018

The aim is to provide assessment specialists, emergency response personnel and emergency managers with the tools and techniques to develop and execute plans for responding to complex issues related to the release of radiological materials. Established strategies will be presented that cover the response elements required to respond to such events. Additionally, interaction and coordination between those response elements will be explored.

I-RAPTER ADVANCED COURSE 2018

The course builds on the I-RAPTER basic course by providing responders, law enforcement officers, radiation protection specialists, port and customs officials, and emergency managers with advanced techniques for radiological search and identification.

CONSEQUENCE MANAGEMENT COURSE 2018

The aim is to introduce and describe EU, NATO Consequence Management concept, organization, systems and procedures including Cooperation and Partnership initiatives in Consequence Management to EU, NATO and Partner Nation officers and their civilian equivalents.

<https://www.jcbrncoe.cz/>

2017 JOINT CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR DEFENCE COE'S VISITS

JANUARY

Visit of the Brigadier General (BG) James E. Bonner, the CBRN School Commandant of the US Army CBRN School and Regimental Command Sergeant Major (RCSM) Henney M. Hodgkins in Fort Leonard Wood, USA

On the 19th of January 2017 the JCBRN Defence COE was pleased to host the CBRN School at Fort Leonard Wood, BG James E. Bonner, Commandant of the US Army CBRN School, and RCSM Henney M. Hodgkins, accompanied by General Bonner's assistant Ret. LTC John Pool.

FEBRUARY

Visit of Brigadier General William E. King IV and Command Sergeant Major Kenneth Graham

On the 8th of February 2017, the US Army 20th CBRNe Command, BG William E. King IV and his CSM Kenneth Graham visited the JCBRN Defence COE. They were accompanied by LTC Michael Ricciardi and CPT Katie NISBET. They had already visited the COE before in 2016 and as a matter of that fact they were mainly focused on the COE updates of the past, current and future projects.

MARCH

Member of European Defence Agency has visited the JCBRN Defence COE

On the 28th of March 2017, EDA Representative, Mr. Shahzad Ali, visited the JCBRN Defence COE. The main aim of the visit was to share information between two bodies, EDA and COE with a view of possible future cooperation.

The Visit of the United States Air Force War College

On the 7th of March 2017, the JCBRN Defence COE hosted delegation consisted of Cadets of the US Airforce War College of the United States Air Force. The highlight of the visit was to present a comprehensive overview of the NATO JCBRN Defence COE missions, the current status of ongoing activities and future projects in support of NATO.

APRIL

Austrian Ministry of Defence visit

The 27th of April 2017, the JCBRN Defence COE hosted the delegation of the AUT MOD representatives to discuss the issue related to the development of the AUT participation in the Secondary Network of the Reachback (RBE) at the COE.

MAY

The Visit of European Union Representatives

On the 11th of May 2017, the Joint CBRN Defence COE had a pleasure to host the representative of the EU consisted of eight (8) Subject Matter Experts in their concrete fields of responsibilities. The highlights for very fruitful discussion were to find the comprehensive and common way for cooperation between the EU and COE with regards to training and the level of communication.

JUNE

The Visit of NATO Allied Command Transformation CBRN Counter-IED Experts

From 7th to 9th of June 2017, the NATO ACT CBRN C-IED Experts visited the JCBRN Defence COE to discuss the possible support of ACT C-IED Teams with creating the CBRN C-IED draft concept.



Allied Command of Operations (ACO) CBRN Work Shop (WS)



The Visit of the United States Air Force War College



Visit of Brigadier General (BG) William E. King IV and Command Sergeant Major (CSM) Kenneth Graham.



Canadian (CAN) visit to the JCBRN Defence COE

AUGUST

Canadian visit to the JCBRN Defence COE

Within a period of 28th and 30th of August 2017, the JCBRN Defence COE had a unique pleasure of hosting the visit of the Director of CBRN Defence Force Development of Canadian Armed Forces in representation of the Director, LTC Gerard Byrne and his Deputy, MAJ Randall Wayne Godfrey. The main topic of discussion was the Canadian contribution to COE and issues related to joining the JCBRN Defence COE.

SEPTEMBER

CZE Ministry of Defence Representatives Visit

Visit has been led by the Head of Delegation, Mr. Radomir Jahoda, MSc.

On the 14th of September 2017, the Deputy Director of the Section for Defence Policy and Strategy of the Czech MOD visited the JCBRN Defence COE. Their mainly focused agenda went to recognize the JCBRN Defence COE and to be familiar with its capabilities and capacities of support of NATO organization and allies.

The Visit of Socialist Republic of Vietnam (VNM) MOD

On the 19th of September 2017, the Head of the Socialist Republic of Vietnam, Major General (MG) Ha Van Cu, the Commander of the Vietnamese CBRN Forces and his team visited the JCBRN Defence COE. The main aim of the visit was to discuss the possible foreseen cooperation of VNM CBRN Forces vs. COE.

OCTOBER

Allied Command of Operations CBRN Work Shop

Within the period of the 11th to 12th of October 2017, the ACO CBRN WS took place in the JCBRN Defence COE. The aim of the meeting was to deconflict the comments provided to Reference B in order to develop the full draft of the Combined Joint CBRN Defence Task Force (CJ-CBRN-TF) CONOPS revision at expert level with Allies.

Canadian Reconnaissance Team Visit

Between the dates of the 24th and 26th of October 2017, the CAN Recce team came to visit the COE. The main issue of discussion was to provide all the necessities for support of their CAN contribution with deploying one (1) CAN officer in the COE next year, in 2018. Consequently, the CAN Medical recce team, being present from 2nd to 3rd of November 2017 as a second part of Recce, provided their exploration within their responsibilities in the surroundings of the COE, visited the Medical facilities in Vyskov's Garrison and Military Hospital in Brno in support of the medical service to be required for CAN personnel serving abroad. Personally, they dealt with the Director of the Military Hospital, COL Antonin Vodák to set all conditions for CAN representative and his family members as well.

Author: CSM Ivan Hladik (CZE A)



The Visit of NATO Allied Command Transformation (ACT) CBRN Counter-IED Experts



Visit of the Brigadier General (BG) James E. Bonner and Regimental Command Sergeant Major (RCSM) Henney M. Hodgkins.

Newsletter

Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence



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[Author(s), [name of the article]
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