# C-IED CoE Newsletter



**Counter Improvised Explosive Devices Centre of Excellence** 



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# **GENERALITIES**

The vision of the CoE plans to use a Comprehensive Approach to face up the challenge, with the support of not only military personnel, but also the contribution from law enforcement, police, intelligence community and civilians from research & technology industry and Academy. The synergy of all these elements will contribute to the identification of terrorist/insurgent networks.

The C-IED CoE is the natural venue for all C-IED issues in NATO arena. The Centre is involved in related working groups in NATO and cooperates with the European Defence Agency C-IED Project Team, in order to create synergies between both organizations.

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 IED and co-operate to increase security of Allied Nations and also all the troops deployed in theatres of operations, reducing or eliminating the threats from improvised explosive devices used or for use, in particular by terrorists or insurgents. Products and services are focused on the analysis of IED information, the investigation and development of new material and technology, and education and training.

# INDEX

- C-IED CoE Highlights
- 8 Courses and Training
- 13 Exercises
- Conferences, Seminars and Working Groups
- 20 Visits
- 21 Upcoming Events 2023



# **C-IED COE HIGHLIGHTS**

# 5<sup>th</sup> C-IED Technology Workshop

The 5th C-IED Technology Workshop was held in Hotel Cándido, Segovia from 25th to 27th October 2022 organized by the C-IED CoE. The aim of this workshop was to provide the C-IED Community of Interest a technological overview about the latest researches and developments both in international and national projects.

This workshop was focused on the following topics: Organizational Initiatives in C-IED research and development, National & COE activities and R&D projects initiatives in C-IED research and development, Technical



Exploitation for Operational Needs, Advanced Standoff Detection and Neutralization Technologies, Future C-UAS Solutions for Explosive-Laden Threats and IED Threat Mitigation-Current and Emerging Technologies. The 5th C-IED Technology Workshop 2022 (TWS22) has gathered together more than 210 delegates, coming from several national and international organizations, MoDs, Law Enforcement institutions, Research Centers, Industry and Academia in an open forum in order to provide an in-depth overview of the latest technologies supporting

the C-IED fight, and to facilitate communication among participants trying to match current and potential operational needs with technological solutions.



### STEERING COMMITTEE 2022

The CIED CoE steering committee 2022 was held the 15 & 16 of November at the CIED CoE.

The objectives of the steering committee was to inform SN about the state of the play of the new MOUs, to inform and review C-IED CoE positions current status, to inform Sponsoring Nations (SN) about the progress to date on the POW 2022, to inform SN about main activities, particularly concerning the DCB activities, support brought to exercise, achievements and projects during 2022, to approve the C-IED CoE Program of Work for 2023, to approve C-IED CoE Financial Statements for 2022, to inform SN about the execution of budget 2022, to approve the C-IED CoE Budget for FY 2023.

Also it was the time to inform SN about new nations process (Canada and Italy) of joining the centre. Other relevant matters were discussed as identified by the C-IED CoE SC.



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### 24<sup>™</sup> NATO COUNTER-IED WORKING GROUP MEETING

The 24<sup>th</sup> meeting of the Counter-Improvised Explosive Device Working Group (C-IED WG) was held in Alexandria (USA) over the period 05-09 December 2022.

Organized by the NATO standardization Office, chaired by Col KAVANAUGH (US) and supported by the CIED CoE, the aim of this meeting was to initiate the review of the STANAG 2294 (ACIEDP-01) on "Countering Improvised Explosive Devices Training Requirements, present the new concept of STANAG 2295 (AJP-3.15) on "AJD for Countering IEDs" and discuss on it, in accordance with the Allied Joint Doctrine Campaign Plan (AJDCP), review the STANAG 2623 (AMWDP-1) on "Military Working Dog (MWD) Capabilities", finalize the orientation of the Countering Improvised Explosive Devices Common Training Model (CCTM) as a training tool and support the derived activities in relationship to the Technical Exploitation Interoperability Standardization Agreement after the approval of the NATO Technical Exploitation Policy.

It was also the place to deliver the MCLSB priorities, CIED WG program of work, strengthen relationships between CIED's community after

the COVID-19 p a n d e m i c . Finally, were also presented by the CIED CoE some lessons coming from the war in Ukraine and the new concept of AJP-3.15.



24th NATO C-IED Working Group Alexandria, Virginia 5 – 9 December, 2022

# **COURSES AND TRAINING**

#### WIT Course iteration 22#1 Romania and 22#2 Hungary

The first iteration of WIT VNCF 2022 took place between 10 and 27 of May 2022 in in Ramnicu Valcea, Romania.

The course was hosted by Romanian Engineering and EOD Training Center, as part of the VNCF WIT Training 2022 Executing Agent Agreement.

The second iteration of WIT VNCF 2022 took place between 6 and 23 of September 2022 in Szentendre, Hungary.

The course was hosted by Hungarian Defense Forces NCO Academy (HDF NCO Academy), as part of the VNCF WIT Training 2022 Executing Agent Agreement.

For some of the participating nations, this type of course is an excellent opportunity to understand the NATO exploitation process and a very good source of training WIT operators and trainers, as a beginning of their national WIT capability building process.



### CSOC 22.3

From 3-7 October the C-IED Staff Officers Course (CSOC) 22.3 was conducted in the C-IED COE in Madrid.

Primarily the CSOC is designed to cover the gap between national training and training needed to work on a C-IED related job in the NATO Command Structure (NSC) or NATO Force Structure (NFS). The show up of the twenty-three students has shown that there is interest about the C-IED fight throughout the Alliance and Partners.



# COURSE 8000 "C-IED CONSIDERATIONS IN MARITIME FORCE PROTECTION", ACT 689.6, AT NMIOTC (CRETE-GRC)

NATO Maritime Interdiction Operational Training Centre (NMIOTC) is action and host Authority for the ACT's Course 8000 (C-IED Considerations in Maritime Force Protection). It took take place at NMIOTC premises in Marathi – Souda Bay, Chania, GREECE, from 19 to 30 Sep 2022.

Aim of the course is to provide a holistic and comprehensive approach in the tactical level, related to Asymmetric Threats in the maritime environment (when alongside, at anchor or operating in confined waters).

C-IED COE representative provide three lectures included in the program of the Course.

### HOMEMADE EXPLOSIVES COURSE – ADVANCED (HMEC-A)

The 20th iteration of the Homemade Explosive Course – Advanced (HMEC-A) was a training event that took place between 18 and 22 of July 2022 in the Military Training Area of Lest, Slovakia. The training consisted of both theoretical and practical training and was organized by the NATO Explosive Ordnance Disposal Centre of Excellence (EOD COE).

The trainers were from the US Department of Justice Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), the ThermoFischer Scientific Company, the Institute of Energetic Materials from the University of Pardubice and the EOD COE. For the SMEs who participated, this training was especially beneficial as they were able to acquire hands-on experience with the process of manufacturing HME, the trends that seem to be currently followed by adversaries, the identification of components used and how to process a scene.





### WIT MENTORING TEAM 2022

The 2<sup>nd</sup> iteration of the Czech national WIT Course 2022, was organized in Bechyně military base, by the Technincal and Information Support Centre of EOD at the 15th Engineer Regiment.

This course was a training event that lasted for 3 weeks and took place between 17of October and 04 of November2022 in Bechyně military base in the Czech Republic. It is a national WIT course taking place annually and both times a mentoring team from C-ED COE has been requested for support, in order to further ensure high education standards. A total of14traineesparticipated, from different backgrounds providing a diverse educational audience.

The course is structured similarly to WIT courses CIED COE organizes in Romania and Hungary. The theoretical part consists of two(2) weeks, whereas the practical phase and training scenarios take place in the final week. The Hosting Nation of the course has run the course from 2021.

C-IED COE was the only entity providing mentoring in the course. The training grounds, equipment and very high level of experience from the trainers resulted to efficient training and a good outcome overall, which is only expected to grow as the organizers continue to conduct this course.

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# **EXERCISES**

### **NEMO 22 EXERCISE**

C-IED COE and CSW COE organized C-IED trails in NATO Naval Electro Magnetic Operations 22 (NEMO 22) Trials 31 OCT-4 of NOV in Rota

Naval Base.

The trials were conducted with multiple objective. The primary objective was to identify and practice FP measures against UAS/USV in order to stop specific threats with EW and HPEM systems. The secondary objective

was to practice FP with EW for an EOD team approaching the threat, and subsequently formulate an RSP followed by level one TE. The final objective was to raise the awareness of RC IED threat in the maritime domain among the international Naval forces.



#### **ARDENT DEFENDER 2022**

The 9<sup>th</sup> iteration of Exercise Ardent Defender 2022 (EX AD22) was a training event that lasted for 3 weeks and took place between 24 September to 04 October 2022 in Camp ARGONAUT, of the Military Training Base Gagetown, New Brunswick, Canada. It is a large-scale international exercise focusing mostly on EOD teams and Technical Exploitation.

A total of 09 countries participated, most of which have been participants in past iterations. The Hosting Nation of EX AD22 remains the country of Canada, having begun EX AD in 2013 and only interrupting the annual continuation in 2020, due to the pandemic.

For the participating nations, this training was exceptional as they had the opportunity to interact with other nationalities and share expertise, compare different methods and equipment, as well as assess their national performance and efficiency.





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# CONFERENCES, SEMINARS AND WORKING GROUPS

NATO STABILITY POLICING LL CONFERENCE "STABILITY POLICING IN AFGHANISTAN: DID NATO MISS AN OPPORTUNITY? LESSONS FROM A 20-YEAR CAMPAIGN"

The NATO STABILITY POLICING LL CONFERENCE under the topic "Stability Policing in Afghanistan: did NATO miss an opportunity? Lessons from a 20-year campaign" was held the 07th of July in Vicenza (Italy) by the NATO STABILITY POLICING COE. The entire event was intended to be a place of analysis, study in order to draw concussions on how to better perform Stability Policing tasks in future fragile and/or unstable contexts, with a watchful glance at the worrisome events in Eastern Europe.

As well as on other occasions, the CIED-COE was present in this relevant event fostering relationships in this regard and providing their expertise.

## NATO Training Technology Conference (NTTC) 2022

NATO Training Technology Conference was a 3-day event that was hold in a hybrid way with a limited number of in-person attendance and on-line attendance to the morning activities. From Tuesday, 9th to Friday 12th of August, a C-IED CoE representative attended to the NATO Training Technology Conference, held in Virginia Beach (USA) and organized by ACT/JFD.

Speakers represented Academia, Industry and Government side; these three environments were as well present at each syndicate and discussion panel.

Industry representatives set stands where attendees were able to

learn about their products and discuss possibilities to apply that technology to training. These products were mainly augmented reality (AR), virtual reality (VR), learning/ training software development and metaverse applications.

This year framework topic was "Learn as a Team. The Key to Operational Readiness" and it was approached from the different previous mentioned points of view (industry, academia or Government).

Lectures were also complemented by activities offered by industry representatives where attendees were able to interact and learn about Augmented Reality, Virtual Reality or Metaverse and how these new technologies can be applied to today training.





### NATO TECHNICAL EXPLOITATION GROUP (NTEG)

The NTEG meeting was held on 14 September 2022 at NATO HQ in Brussels, Belgium. The purpose of the NTEG meeting was to provide a synchronization opportunity for the stakeholders involved in Technical Exploitation (TE), update on current reviewing status of TE related publications as well as a forum to put in common all TE activities on done, ongoing or planned for future. The NTEG aim is review progress of work under the NATO Technical Exploitation Programme of Work Implementation Plan.

### **UAS EXPLOITATION TIGER TEAM MEETING**

The UAS Exploitation Tiger Team (UAS X TT) met in person at NATO HQ on 15 September. Participating were Germany, Italy, Norway, Spain, Sweden, the United Kingdom, the United States, the C-IED COE, JFCNP and NCIA. The purpose of the UAS X TT meeting was to develop an outline for the Best Practices for TE of UAS document.

# ICDE (INTERNATIONAL CONCEPT DEVELOPMENT AND EXPERIMENTATION) 22

Since 2001, the International Concept Development and Experimentation (ICD&E) conference has been Allied Command Transformation's annual forum that provides a unique opportunity for the international ICD&E community and stakeholders to discuss the most current issues of concept development and experimentation. This year ICD&E was held from 25-27 October 2022 in Budapest, Hungary.

There were more than 250 participants from NATO Allied and Partner nations from the following fields: Concept Development & Experimentation, Research and Development, Science and Technology, Doctrine Development, Military Transformation, Battle Laboratories, Centres of Excellence, Academia, the Defence Industry and Subject Matter Experts based on specific workshops.

# NATO SCI-321 (UAV-APPLICATIONS FOR MILITARY SEARCH) — 6<sup>TH</sup> TASK GROUP MEETING, FRAUNHOFER IOSB — KARLSRUHE, GERMANY

The NATO SCI-321 Task Group had an in person meeting IOT fully set the plans for the upcoming trial for different companies. It took take place at Fraunhofer IOSB — Karlsruhe, Germany on 16-17 Nov 2022. In this meeting, the Task Group intended to put together a more detailed plan for a 2nd Demo & Trial in DRDC (Defence Research and Development Canada) Suffield Experimental Proving Ground in Canada on 5 to 16 June 2023.

Participation in the Task Group meetings allows the CIED COE to directly asses the most promising technologies in stand-off detection of IEDs and to establish further cooperation with the participating R&D entities.

The Canadian representatives and the head of the Task Group are setting the Groundwork for the Trial. The Task Group was able to come together and build a comprehensive list of potential systems that will be put to the test at the trial. As well as eliminating systems, that do not fit the desired outcome of searching for IEDs/ UXO utilizing UAS. A follow on schedule for virtual and physical meetings for the future were set as well as a hard date for the trial in Canada.

### AJP.3-18 WRITING SESSION

The 3<sup>rd</sup> Writing Session of AJP.3-18 took place between 22 June and 24 June in Piestany, Slovakia.

The session was hosted by NATO Explosive Ordnance Disposal Center of Excellence (EOD COE), under their custodian team. The Writing Session lasted for two days, and covered all the comments made on the Study Draft.



All the critical points were addressed and the participants concluded to a version that satisfied requirements and met everyone's approval. For the SMEs which participated, this session was beneficial as they were able to coordinate the edition process and under the EOD COE guidance, also better understand NATO EOD support to operations.

# IX NATIONAL CONGRESS OF R&D IN DEFENSE AND SECURITY (DESE 1+D 2022)

The General Subdirectorate for Planning, Technology and Innovation (PLATIN) of the General Directorate of Armament and Material (DGAM) from the Spanish MOD organized the IX National Congress of R&D in Defense and Security (DESE i+d 2022).

The event was hosted in Base General Morillo (Pontevedra) by the  $7^{th}$  Airbone Brigade from  $15^{th}$  to  $17^{th}$  of November.

This Congress is a forum and meeting point for all agents related to R&D in the field of Defense and Security (Industry, Academia, Armed Forces, LE) where you will have the opportunity to present and disseminate the results of the latest research and work carried out in some of the thematic areas related to Defense and Security.

C-IED COE presented its R&D projects PRINSE (Active Protecting Coating for Infrastructures) and BLADE (Reinforcement of T-Walls protection elements against IED explosions), resulting of great interest for the audience

# **VISITS**

#### AFRICAN UNION C-IED SITE SURVEY IN ALGIERS

A bilateral meeting between the African Center for the Study and Research on Terrorism of the African Union (ACSRT) and NATO HQ (ESCD Counter- Terrorism Section) took place in Algiers, Algeria, in the ACSRT facilities between 14th and 15th of November 2022.

The intent of the meeting was to promote the cooperation between both institutions on Capacity-Building issues, mainly on the fields of C-IED, Maritime Security and other aspects on Countering-Terrorism. For this purpose, C-IED CoE participated in the meeting with two staff officers in order to assess the more adequate training solutions to the ACSRT needs.

This assessment was focused on Basic IED Field Exploitation Course (BIFEC) as a training opportunity starting point and was defined previously as the C-IED CoE assess team main mission for the visit.





# **UPCOMING EVENTS 2023**

### C-IED COE courses planned for 2023

This is the C-IED COE planning for 2023 with regard to courses approved by the Steering Committee on 15 November 2022. Below dates may change due to unforeseen reasons. No rights can be inferred according to this schedule.

9	JAN	30	FEB	03	ESP	Analyst Notebook Users Course (ANUC) 23.1	15 seats available Military, Law Enforcement members & civilians analysts	5 days course Not classified No Fee
	MAR	06	MAR	17	ESP	AtN Operational Course (ATNOC) 23.1	24 seats available C-IED Staff Officers and Senior Staff Assistants	10 days course  NATO Approved  No Fee
7	MAR	07	MAR	08	ESP	Annual discipline conference		
	MAR	27	MAR	31	ESP	C-IED STAFF OFFICER COURSE (CSOC) 23.1	24 seats available C-IED Staff Officers and senior Staff Assistants	5 days course  NATO Approved  No Fee
	APR	17	APR	28	ESP	DOMEX-course 23.1	12 seats available Open to military	10 days course  NATO Listed  No Fee
	MAY	09	MAY	26	ROU	NATO Weapons Intelligence Team Course (WIT) 23.1	20 seats available OF 1-3 and OR 4-8 and	13 days course  NATO Approved  125€ (for non- VNCF) (TBC)
	JUN	06	JUN	08	ESP	LLWS		
	JUN	19	JUN	23	ESP	C-IED STAFF OFFICER COURSE (CSOC) 23.2	24 seats available C-IED Staff Officers and senior Staff Assistants	5 days course  NATO Approved  No Fee
	JUN	26	JUL	30	ESP	Analyst Notebook Users Course (ANUC) 23.2	15 seats available Military, Law Enforcement members & civilians analysts	5 days course Not classified No Fee



SEP	12	SEP	29	HUN	NATO Weapons Intelligence Team Course (WIT) 23.2	20 seats available OF 1-3 and OR 4-8 and	13 days course NATO Approved 125€ (for non- VNCF) (TBC)
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ост	16	ост	20	ESP	C-IED STAFF OFFICER COURSE (CSOC) 23.3	24 seats available C-IED Staff Officers and senior Staff Assistants	5 days course  NATO Approved  No Fee
ост		ост		ESP	Interagency Workshop		
NOV	13	NOV	17	ESP	Analyst Notebook Users Course (ANUC) 23.3	15 seats available Military, Law Enforcement members & civilians analysts	5 days course Not classified No Fee
NOV	20	DEC	01	ESP	AtN Operational Course (ATNOC) 23.2.	24 seats available C-IED Staff Officers and Senior Staff Assistants	10 days course  NATO  Approved
					NATO Weapons	12 seats available	No Fee 5 days course

#### NOTE:

- 1. This is the C-IED COE planning for 2022 with regard to courses and events. The dates and locations could be subject for changes, the C-IED COE cannot be held liable for any consequences of change of dates or locations.
- 2. The events indicated in red are identified as C-IED COE's DIAMOND EVENTS
- 3. The proper save the date and calling letter for each event will be released in advance.
- 4. The VNCF WIT-program 2022-2023 has not yet been approved by NATO HQ. In case there is no program, the mentioned courses will not be executed.

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