



Counter-Improvised Explosive Devices Centre of Excellence



Celebrating 15 years
2010-2025




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FOREWORDS

Foreword by the Minister of Defence of Spain

Spain knows what it means to face terrorism. For decades, we endured its most painful consequences, and from that suffering emerged not only resilience, but also a firm national commitment to protecting lives, our own and those of others.

This commitment is at the heart of Spain's role as the Framework Nation of the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE), whose 15th anniversary we proudly commemorate in this volume. The decision to offer NATO a multinational Centre focused on the IED threat was not simply strategic, it was deeply personal. We understood, from experience, that no nation is immune, and that the fight against those who sow fear with explosive devices must be waged collectively.

Improvised explosive devices remain one of the deadliest and most insidious tools of modern conflict. Their impact reaches far beyond the battlefield: they target civilians, hinder humanitarian work, and destabilize fragile regions. In response, the C-IED COE has become a key contributor to NATO's transformation, shaping doctrine, training, intelligence and innovation, in ways that have improved security across the Alliance and beyond.

Spain has always believed that peace and security are shared responsibilities. That is why we are active contributors to international organizations such as NATO, the European Union and the United Nations. Through the C-IED COE, we extend that commitment not only by providing infrastructure, funding and personnel, but by fostering an environment of cooperation and trust among Allies and Partners.

This Centre embodies the values of Spain's defence policy: international engagement, interagency collaboration, and technological excellence in the service of people. I want to express my gratitude to all the nations that have joined Spain in this endeavour, and to all the men and women, military and civilian, who have given their knowledge, their time, and their dedication to turning this Centre into a reference in its field.



May this anniversary be an occasion to look back with pride and forward with renewed purpose. Because in the face of terror, unity is our best defence. And because protecting lives, anywhere in the world, is always worth the effort.

A handwritten signature in black ink, appearing to read 'Margarita', with a stylized flourish at the end.

Margarita Robles Fernández
Minister of Defence of Spain

Foreword by Supreme Allied Commander Transformation

As Supreme Allied Commander Transformation, I am proud to sign this foreword to mark the 15th anniversary of the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE).

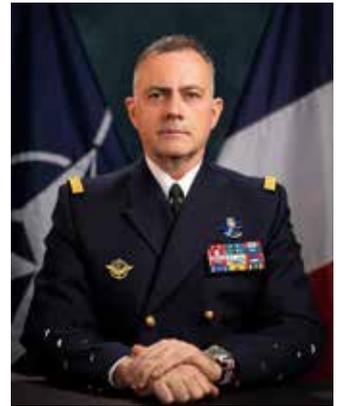
Fifteen years ago, the Counter-Improvised Explosive Devices Centre of Excellence was created to address a clear and pressing threat: the lethal effectiveness of IEDs on the battlefield. Since then, the C-IED COE has done more than respond: it has anticipated, adapted, and advanced.

As NATO faces a faster, more unstable security environment, Centres of Excellence have become essential tools. Those with a strong operational focus and a deep technical expertise, like the CIED COE, play a decisive role. The Centre directly supports Allied Command Transformation across NATO's four strategic pillars: Education, Training, Exercise and Evaluation; Analysis and Lessons Learned; Doctrine Development and Standardization; and Concept Development and Experimentation.

For fifteen years, the C-IED COE has consistently proven its operational value. It has shaped NATO's posture through its work in operations, exercises, and innovation. From developing counter-IED strategies to advising deployed forces and refining doctrine, the Centre has become a key asset in NATO's defence architecture. Its strength lies in its agility and subject-matter depth—clear proof that NATO-accredited COEs, though outside the formal Command Structure, bring the speed, expertise and adaptability needed to shape tomorrow's force.

Its strong partnership with the NATO-Ukraine Joint Analysis, Training and Education Centre (JATEC) further reinforces this impact. Through combined efforts in training evaluation and lessons learned, the C-IED COE has helped raise NATO's standards in operational readiness and performance assessment. This collaboration exemplifies how integrated expertise strengthens the Alliance at every level.

Looking ahead, ACT is guided by three strategic imperatives. First, we look to the future: we war-game, we assess emerging threats, and we build a clear picture of the operational environment to come. Then, we translate that analysis into capabilities—many of them common-funded—and



develop the concepts and doctrines that will shape NATO's force structure. Finally, we drive those developments into concrete outcomes: training, education, and readiness across the Alliance.

In this process, the C-IED COE is a key contributor. It supports projects that integrate Multi-domain effects, counter threats such as autonomous weapon systems, and strengthen NATO's collective resilience. Its role in upcoming transformation efforts—from advanced training models to rapid innovation cycles—will be critical to maintaining our edge.

This anniversary is more than a celebration—it is a reaffirmation of purpose. As Supreme Allied Commander Transformation, I commend the leadership, the staff, and the Sponsoring Nations of the C-IED COE. Your work has saved lives. It has shaped doctrine, improved training, and strengthened capabilities across the Alliance.

For fifteen years, your dedication, professionalism, and innovation have delivered results.

*Our mission continues and I look forward
to building the future force together!*



Admiral Pierre Vandier, French Navy
Supreme Allied Commander Transformation



Foreword by C-IED COE Director

Fifteen years have passed since the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE) was accredited by NATO as an international military organization. Fifteen years of tireless, rigorous and committed work in support of the security of our forces and the international community against the persistent threat of improvised explosive devices.

Since its founding, the Centre has taken on a complex challenge: integrating intelligence, technology, training and international cooperation to combat a threat that constantly evolves. The fight against IEDs is not merely technical: it is strategic, offensive and multidimensional. It involves dismantling the networks that design, finance, produce and deploy these devices. We do not fight the device alone, we fight those who enable it.

Spain, as the Framework Nation, had the foresight to offer the Alliance a solution that has become an international benchmark. It was a strategic and human success. Thanks to the collective effort of those who believed in the project from the beginning, often under challenging conditions, the C-IED COE has reached a level of maturity now recognized across NATO and beyond.

Over the years, the Centre has contributed to concepts such as Human Networks Analysis and Targeting, has trained hundreds of specialists in courses like WIT, has deployed advisory teams to Allied and Partner nations, and has driven technological projects for blast protection. These achievements are not just statistics or academic products, they are tools placed at the service of life and security for those who face danger.

Our strength lies in the combination of operational experience, doctrinal development, and a strong sense of service. The multinational and interagency nature of the C-IED COE is undoubtedly one of its greatest assets. Military and civilian personnel, security forces, intelligence services, and academia work together every day with one common goal: reducing the threat and saving lives.

Excellence, for us, is not a destination but a constant attitude. Because when human lives are at stake, doing the right thing is not enough: we must do our best. That is the mindset that defines the team behind the Centre, yesterday, today and tomorrow.



On this 15th anniversary, we pay tribute to all those who have made this journey possible: to those who believed in the project, those who led it, those who contributed behind the scenes, and to the personnel who left their mark through daily effort. This book is for them and for those who will follow.

Improvised explosive devices will remain a threat in 21st century conflicts. But so will the people and institutions, like ours, who stand ready to face them with determination, professionalism, and international cooperation.

Our deepest gratitude to all. Our commitment remains firm.



Javier Sanz Maldonado
Colonel, Spanish Army
C-IED COE Director



Introduction

Fifteen years ago, the NATO-accredited Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE) was created as a response to one of the most pressing threats to global security. Since its establishment in 2010, the Centre has grown into a multinational, interagency platform dedicated to enhancing understanding, building capabilities, and driving innovation in the fight against improvised explosive devices.

This book is a tribute to that journey.

Structured across five chapters, the following pages offer a comprehensive overview of the origins, mission, operations and future of the C-IED COE. From the initial vision and construction of the facility in Hoyo de Manzanares to its current role as a key contributor to NATO transformation, each section reflects the efforts of the people who have built this institution step by step.

Chapter I traces the foundation of the Centre, highlighting the geopolitical context, Spain's strategic offer, and the international cooperation that made the project possible. Chapter II explores the organizational structure, the evolution of its manning and leadership, and the values that guide its work. Chapter III is dedicated to operations: training, support to exercises, doctrine development, and technological projects. It showcases the Centre's operational

relevance and its ability to adapt to changing threats.

Chapter IV brings us closer to the people: the multinational and multidisciplinary team that gives the Centre its unique character. Their voices, backgrounds, and shared mission embody the spirit of unity that defines the C-IED community. Finally, Chapter V offers a look to the future: how the Centre plans to evolve in response to new challenges in a rapidly shifting security environment.

This book is not a catalogue of achievements, but a reflection of an enduring effort. It is an opportunity to recognize those who believed in this mission from the beginning, those who sustained it during uncertain times, and those who continue to drive it forward with passion and professionalism.

To all of them, and to all our partners, past and present, we dedicate these pages.

CHAPTER I: FOUNDATIONS

Background: the threat

In opposition to state actors, and from an asymmetric perspective, non-state actors (sometimes state-sponsored) have traditionally used non-conventional tactics, techniques and procedures: they include improvised explosive devices as their main weapon of choice, due to their relative low cost, easy manufacture, high impact, and flexible adaptability.

NATO defines the “IED System” as “the personnel, resources and activities necessary to resource, plan, execute and exploit an IED event”, while officially considers an Improvised Explosive Device (IED) as “a device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores but is normally devised from non-military components”.

An IED typically consists of an explosive charge, a detonating mechanism, and a triggering system, and may include additional components such as shrapnel, toxic substances, or incendiary materials. IEDs are deliberately constructed to inflict casualties, disrupt military operations, damage infrastructure, and instill fear.

Improvised explosive devices are nothing new: they are as old as the first explosive or incendiary mixtures could be. Historically linked to guerilla warfare, IEDs have provided irregular forces



with a disproportionate means of challenging conventional military superiority. For NATO countries and Spain in particular, the evolution and proliferation of the IED threat have represented a persistent tactical and strategic challenge, repeatedly encountered across multiple theatres of operation over the past decades.

Although the term "IED" gained widespread use in the 21st century, the threat itself dates back to post-World War II conflicts, when decolonization, guerrilla movements, and insurgencies emerged worldwide. In Indochina and Algeria, French forces encountered widespread use of victim-operated, roadside, and time-delayed IEDs during the 1950s and 1960s. These were often rudimentary, but deadly—designed to bleed out occupying forces and disrupt mobility.

In Vietnam, U.S. forces faced an even a more elaborate IED threat from the Viet Cong, who turned conventional munitions, agricultural tools, and unexploded ordnance into weapons. Traps, tripwires, and pressure plates became constant hazards, leading to the development of early countermeasures, route clearance units, and blast-resistant vehicles.

During the conflict in Northern Ireland, British forces were targeted by highly sophisticated IEDs deployed by the Provisional IRA. These devices included remote-controlled IEDs, tunnel-laid explosive charges, improvised rocket launchers and EFP (Explosively Formed Penetrator)-like constructs, demonstrating a new lev-

el of technical and operational complexity. The lessons from this campaign would prove valuable decades later.

Between the 1970s and early 2000s, Spain experienced sustained use of IEDs by domestic terrorist organizations, most notably ETA (Euskadi Ta Askatasuna). These devices were employed in a wide range of attacks targeting military personnel, police, political figures, infrastructure, and civilians. ETA utilized vehicle-borne IEDs (VBIEDs), time-delay mechanisms, command-detonated systems, and even victim-operated switch activated items to maximize lethality and disrupt public life. The group demonstrated a high level of technical proficiency and operational planning, adapting its tactics over time in response to counterterrorism measures. These attacks not only caused significant loss of life and economic damage, but also forced the Spanish security and intelligence services to develop advanced counter-IED strategies, many of which would later inform Spain's contributions to international operations and its leadership in the creation of the C-IED COE.

Throughout the Cold War, NATO's strategic focus remained fixed on the conventional threat posed by the Warsaw Pact. Doctrine, training, and equipment were designed primarily for large-scale, state-on-state warfare in Central Europe. However, in the post-Cold War period, NATO increasingly engaged in out-of-area operations where irregular threats became the norm. In Bosnia and Kosovo, NATO and partner forces

began to face the early signs of hybrid tactics and the legacy of explosive remnants of war—but the use of IEDs remained relatively limited.

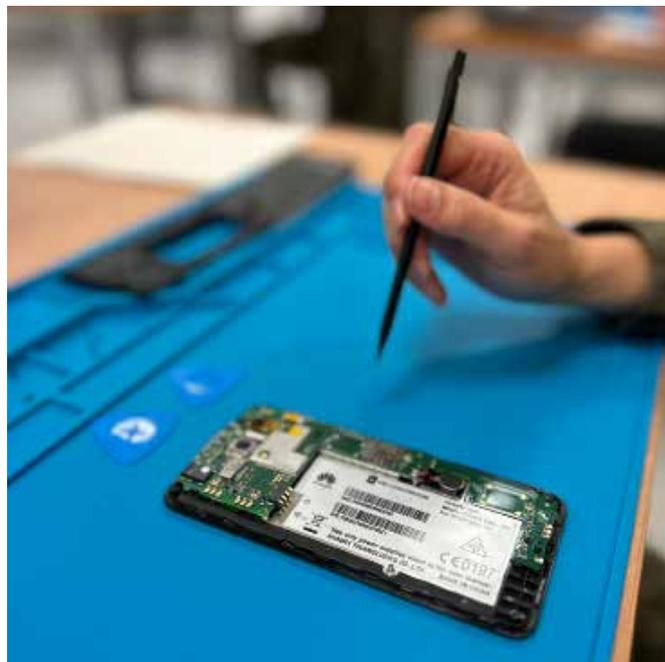
It was in the early 2000s, during the International Security Assistance Force (ISAF) mission in Afghanistan, when the full scale and effectiveness of IED warfare became apparent to NATO as an organization. The deployment of NATO-led forces in Afghanistan from 2003 onward marked a turning point. Insurgent groups across the country quickly adopted IEDs as their primary means of resistance. They used improvised landmines, command-detonated devices, vehicle-borne IEDs (VBIEDs), and other kinds of IEDs disguised as trash, rocks, or debris along patrol routes. The consequences were immediate and severe. IEDs became the leading cause of NATO casualties, outpacing small arms and conventional weapons. Forces had to adapt their movement, logistics, and even mission planning based on the daily risk of hidden explosives.

Despite the experience of individual NATO countries, there was no unified doctrine, no common technical standard, and no coordinated intelligence-sharing mechanism to counter the IED threat. By the early 2000's, it became clear the need for a structured, multinational approach to the threat—one that would allow for training, doctrine, technology, and intelligence to converge under NATO standards.

By 2007, the situation had reached a critical point. NATO forces in Afghanistan and Iraq were

suffering sustained casualties from increasingly sophisticated IEDs. National efforts, while effective in some cases, were fragmented and uncoordinated. The Alliance began to recognize that countering IEDs required more than technical solutions. It demanded a comprehensive approach, one that combined intelligence, operations, training, technology, and civil-military cooperation.

It was in this context that several NATO nations, including Spain, began promoting the idea of establishing a dedicated NATO-accredited Centre of Excellence to address the IED System threat in a coherent, multinational way.



NATO Centres of Excellence

NATO Centres of Excellence (COEs) are nationally or multi-nationally funded institutions that provide recognized expertise, advanced training and innovation to support the transformation and adaptation of the Alliance. Though they operate outside NATO's formal command structure, COEs are accredited by NATO and coordinated by Allied Command Transformation (ACT), ensuring that their efforts align with NATO priorities and fill critical capability gaps.

The concept of COEs emerged following the 2002 Prague Summit, which launched a major restructuring of NATO's military organization. In this context, ACT, created to drive transformation, developed the COE framework to leverage specialized national expertise without duplicating existing capabilities.

The first institutions to receive NATO accreditation under this model were the Joint Air Power Competence Centre (Germany) in 2005 and the Defence Against Terrorism Centre (Türkiye) in 2006. Since then, the network has grown to 30 accredited COEs (as of June 2025), covering fields ranging from cyber defence and energy security to mountain warfare and C-IED.

NATO COEs support transformation through four main functional pillars:

1. Education, Training, Exercises, and Evaluation.

2. Analysis and Lessons Learned.

3. Doctrine Development and Standardization.

4. Concept Development and Experimentation.

Each COE typically focuses on a single subject-matter domain, offering its expertise through training courses, doctrine contributions, technical publications, conferences and experimentation. Their work enhances interoperability, improves capabilities, identifies best practices, and informs NATO-wide innovation and adaptation.

Importantly, COEs do not duplicate existing NATO capabilities. They complement them by acting as catalysts for doctrinal evolution and operational effectiveness, particularly in areas where NATO needs rapid, flexible and expert-driven support.



Regarding the Collaborative Governance Model, there are three primary roles within a COE's multinational structure:

- **Framework Nation:** The lead country responsible for establishing and hosting the COE. It provides core infrastructure and staff.
- **Sponsoring Nations:** Other NATO countries that sign the Functional MoU, contribute staff and resources, and hold voting rights in the Steering Committee, which oversees the COE's strategic direction.
- **Contributing Nations:** May be NATO or non-NATO partners who provide personnel, expertise, or financial support through bilateral technical arrangements, but do not participate in governance.

This flexible participation model allows the COE network to grow inclusively, drawing on both NATO and partner-nation expertise.

The establishment of a COE typically begins with one or more nations proposing a new Centre based on a capability gap or emerging strategic need. The Framework Nation develops a concept proposal and submits it to ACT for review, identifying the domain of specialization, intended mission and how the Centre will support NATO's transformation goals.

Once approved, the COE must negotiate two key agreements:

- A Functional Memorandum of Understanding (MoU) defining the relations with NATO through ACT.
- An Operational MoU, establishing the Centre's internal procedures, personnel structure and resource model.

Final accreditation is granted by the Military Committee and the North Atlantic Council, and COEs undergo regular quality assessments by ACT to ensure continued compliance and relevance.

Today's COEs form an essential element of NATO's transformation engine. They are strategically distributed across the Alliance, aligned with national strengths and evolving threats. Each COE is a trusted platform where Allied and partner nations collaborate to test new concepts, refine doctrine and prepare leaders for the challenges of modern warfare.

In an era marked by Multi-domain operations, hybrid threats, and rapid technological change, the NATO COE network remains a proven tool for smart defence, interoperability, and strategic adaptation.

The Birth of the C-IED COE: Spain's Commitment to NATO and the Fight Against a Global Threat

In the early 2000s, NATO operations in Iraq and Afghanistan brought a harsh reality into focus: Improvised Explosive Devices (IEDs) had become the primary cause of military and civilian casualties. These low-cost, high-impact weapons, often used by insurgent and terrorist groups, challenged traditional security measures and demanded a new way of thinking. The IED was no longer just a technical problem: it was the final outcome of complex networks involving financing, logistics, propaganda and operational planning.

Spain, having endured decades of domestic terrorism and gained significant experience in explosive ordnance disposal (EOD), recognized the need to take action. This background provided not only technical expertise, but also strategic and moral foundation for a decisive offer to NATO.



On 15 September 2007, during a visit to the International Demining Centre in Hoyo de Manzanares, Spanish Minister of Defence, José Antonio Alonso, formally announced Spain's intention to create a NATO-accredited Centre of Excellence focused on Counter-IED (C-IED). This offer reflected not only the urgency of the IED threat, but also Spain's desire to contribute to international peace and security through a capability that would be useful across all current and future operational theatres.

The site selected for the Centre (home to the Spanish Army Engineer Academy and the International Demining Centre) was already a reference in national and international EOD training. It provided a strong foundation of knowledge, infrastructure and personnel, facilitating the rapid development of the C-IED COE in synergy with existing capabilities.

In 2008, NATO's Allied Command Transformation (ACT) confirmed that Spain's proposal was in line with Allied needs. The Spanish Ministry of Defence moved quickly to begin the construction of a purpose-built facility that would meet NATO's security and functional standards. At the same time, diplomatic and military channels worked to secure multinational support.

In 2009, the Spanish Joint Defence Staff (Es-

tado Mayor de la Defensa) established a provisional organizational nucleus in Madrid, led by Army colonel José Luis Labarga. This small, dedicated team laid the groundwork for what would become a NATO-accredited Centre of Excellence. Acting as the initial point of contact with ACT, the team was responsible for drafting the founding documents, including the Functional and Operational Memoranda of Understanding. It also began defining the mission, structure and areas of specialization for the Centre, all in alignment with NATO transformation goals and operational needs.

This early effort not only helped frame the conceptual architecture of the future Centre but also ensured that Spain's offer to host a C-IED COE would meet NATO's rigorous accreditation standards. At the same time, the team coordinated logistical arrangements for the Centre's permanent location at the Spanish Army Engineer Academy Base in Hoyo de Manzanares, near Madrid.

This foundational period—marked by strategic vision, diplomatic coordination and technical precision—was critical to the Centre's successful evaluation and formal accreditation by NATO in 2010.

Establishing the Centre: Structure, Partnerships and Recognition

In June 2010, the Operational Memorandum of Understanding (O-MoU) was signed by six na-

tions: Spain (as Framework Nation), Germany, France, the Netherlands, Portugal and Romania. This formalized the multinational character of the Centre. Other nations, such as Hungary, the United States, the Czech Republic, Sweden, Greece and Türkiye, joined in the following years.

Spain's Council of Ministers had already approved the creation of the Centre in October 2009. The Spanish Defence Order 960/2010 formally established the Centre nationally in April 2010 and set the conditions for its transformation into a NATO-accredited body. Spain committed to providing 50% of the expert staff and 100% of the administrative and support personnel. Additional posts were opened to contributing nations and future partners.

In October 2010, SACT conducted the final evaluation of the Centre's facilities, personnel and capabilities. On 16 November 2010, the North Atlantic Council formally accredited the C-IED COE as a NATO International Military Organization (IMO). Although the original goal of completing the process in 18 months was ambitious, the accreditation was the fastest ever completed under NATO's standard procedures at that time.

A Strategic Asset for the Alliance

Since its inception, the C-IED COE has been more than a building or a doctrine hub. It is a symbol of Spain's leadership in the fight against terrorism and asymmetric threats. Its creation

aligned with NATO's doctrine AJP 3.15 and addressed all three key pillars of C-IED strategy: Attack the Networks, Defeat the Device and Prepare the Force.

The Centre's interagency and multinational nature, combined with Spain's deep operational experience, gave it credibility from day one.

It became a platform for cooperation among armed forces, law enforcement agencies, intelligence communities and academic institutions. It also offered training, advisory missions, doctrine development, technical projects and analysis that directly support the safety of deployed troops and national populations alike.



The C-IED COE Building: Infrastructure Designed for Excellence

The C-IED COE is headquartered at the Engineers Academy Base in Hoyo de Manzanares, Madrid, Spain. It is co-located with the Spanish Army's Engineer Academy and the International Demining Centre (CID). This location was selected for its proximity to national institutions with proven expertise in explosive ordnance disposal (EOD), military engineering, and counter-IED operations, creating a setting of permanent and functional synergy.

The building itself was a strategic investment by the Spanish Ministry of Defence, purpose-built to meet NATO's rigorous standards for security, functionality, and accessibility required for COE accreditation. Completed in time for the formal NATO evaluation by the Supreme Allied Command Transformation (SACT), the facility contributed directly to the Centre's accreditation in 2010 as a NATO-recognized International Military Organization (IMO).

With its distinctive X-shaped architecture, the building offers sectorized and efficient functional zoning that supports the Centre's multinational and multidisciplinary mission.

Ground floor facilities include:

- Classrooms and seminar rooms for training and NATO-certified courses.
- A multifunctional conference room for con-

ferences, workshops, and interagency events.

- A technical lab dedicated to analysis and exploitation projects.
- IT and reprography rooms, as well as logistics, storage and maintenance areas.

The upper floor hosts:

- Dedicated wings for each of the Centre's three core branches:
 - Prepare the Force
 - Attack the Networks
 - Defeat the Device
- A separate wing for the Command Group (Director, Deputy Director, Operations, CIS and Secretariat).

All areas are equipped with electronic access control and comply with NATO security standards for the handling of classified materials.

The C-IED COE is digitally integrated into a secure, multilayered communications architecture that supports classified and unclassified operations across national and NATO systems. Key capabilities include:

- An internal NATO UNCLASSIFIED network.
- Access to the Spanish Ministry of Defence WAN PG.

- Connection to BICES (Battlefield Information Collection and Exploitation System).
- Interoperability with secure networks of Sponsoring Nations and Partners.

This configuration ensures confidentiality, resilience and mission continuity in a complex multinational environment.

In 2016, a modern military lodging was inaugurated within the Engineer Academy complex. With a capacity for 60 personnel, it supports accommodation needs during courses, international events and mobile training deployments.

The Engineer Academy also provides shared infrastructure, force protection and logistical support, allowing the C-IED COE to operate as a light, agile and mission-focused NATO body.

More than just a building, the C-IED COE headquarters represents Spain's strategic vision and leadership as Framework Nation. It reflects the Centre's values: multinational cooperation, technical excellence, discretion and adaptability.

From this facility, the C-IED COE continues to support NATO, Allies and Partners in anticipating and countering the evolving threat posed by IEDs, delivering on its mission every day, "to the left of the boom".



The Memorandum of Understanding

In the world of international cooperation, not everything is signed with legal ink or sealed with a diplomatic ceremony. Sometimes, all it takes is a document that expresses a shared will, a desire to collaborate and join forces. That document is called Memorandum of Understanding, or MoU.

An MoU is, essentially, an agreement between two or more parties who want to work together. It's not a legally binding contract, but it is a formal declaration of mutual interest. In the case of the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE), these memorandums have been essential in weaving a network of international collaborations. Thanks

to them, countries and organizations have been able to participate in activities, share knowledge and contribute to the Centre's mission without immediately becoming full members.

The Note of Joining marks the beginning of the formal process of becoming a Sponsoring Nation or Contributing Partner of the Centre. It shows the commitment to join the Centre, involving the contribution of personnel, resources and expertise, and an active participation in the life of the C-IED COE.



Frameworks for Cooperation

The Counter-Improvised Explosive Devices Centre of Excellence was established in 2010, born from a Spanish initiative that was embraced by NATO as part of its network of specialized centres. From its premises in Hoyo de Manzanares, in the Community of Madrid, the Centre has grown, not only in terms of capabilities but also in diversity. Over the years, several nations have chosen to join as Sponsoring Nations or Contributing Partners, bringing their expertise and benefiting from collective knowledge.

The functioning of the C-IED Centre of Excellence is governed by two complementary Memorandums of Understanding (MoUs): the Operational MoU and the Functional MoU. The Operational MoU regulates the internal framework among the Sponsoring Nations, covering aspects such as governance, staffing, funding and decision-making processes within the Centre. In parallel, the Functional MoU establishes the relationship between the C-IED COE and NATO's Allied Command Transformation (ACT), defining how the Centre supports NATO's transformation efforts and responds to tasking from NATO entities. Together, these two MoUs ensure coherent cooperation among nations and effective integration of the Centre into NATO's broader strategic framework.

The Sponsoring Nations of the C-IED Centre of Excellence, through their representatives in the

Steering Committee, are currently working on an update of both the Operational and Functional Memoranda of Understanding. This revision aims to reflect the evolving needs of the Centre and to ensure alignment with NATO's strategic direction. The updated versions of these foundational documents are expected to enter into force following the much-anticipated accession of Canada as a new Sponsoring Nation.

In closing, each of these accessions has been more than just a signature on paper. They represent a commitment to collaboration, excellence and a safer future. Step by step, the C-IED COE has built an international community united by a common goal: to neutralize the threat posed by improvised explosive devices and to protect lives.



Host Nation Support

Since its establishment, Spain has played a pivotal role in the success of the C-IED COE, not only as its Framework Nation, but as the primary provider of Host Nation Support (HNS). This support includes personnel, infrastructure, security, logistics and a wide range of contracted services that ensure the Centre's operability and prestige within the international community.

Personnel Contribution: A Strategic Commitment

In accordance with the Operational Memorandum of Understanding, Spain assumes responsibility for 27 out of 55 Subject Matter Expert (SME) positions, accounting for nearly 50% of the Centre's core staff, as well as for 100% of administrative and support personnel. These individuals come from different branches of the Spanish Armed Forces, national security forces, intelligence agencies and technical fields, contributing to the Centre's highly interdisciplinary character.

This human capital enables the Centre to sustain its Programme of Work, support NATO initiatives, conduct certified courses and provide operational support to Allied and Partner nations. Spanish personnel also play a key role in maintaining coherence between the Centre and national structures, facilitating institutional coordination.

Infrastructure and Logistical Support

Spain's Ministry of Defence made a strategic investment by funding the construction of a custom-designed building that fully complies with NATO security, operational and digital standards.

In addition, Spain provides six vehicles for official use, parking facilities and a dedicated lodging inaugurated in 2016, capable of hosting up to 60 guests for training activities, seminars or deployed teams.

CIS and Security Infrastructure

The Spanish Armed Forces ensure connectivity through access to the MOD's WAN PG and NATO BICES, alongside redundant internal networks compliant with classified information standards. Security accreditation, surveillance systems and emergency services are maintained under national regulation and supported through HNS contracts.

Contracted Services: Reliability and Continuity

To support day-to-day operations, Spain also ensures the provision of external services through trusted contractors, including:

- Cleaning and facility maintenance for both

the main building and lodging.

- 24/7 security services with CCTV and alarm systems.
- Concierge assistance for staff and visitors.
- IT and technical support.
- Gardening and landscaping to maintain a professional and welcoming environment.

These services enhance the Centre's readiness to host international delegations, academic partners and training audiences in a professional and secure setting.

A Platform for International Collaboration

Thanks to Spain's comprehensive support as Host Nation, the C-IED COE continues to serve as a reliable multinational platform. This support allows sponsoring nations and partner institutions to focus their contributions on expertise and innovation, while relying on the solid institutional foundation provided by Spain.

In summary, Spain's Host Nation Support goes far beyond legal or logistical obligations, it is a strategic enabler for the Centre's mission. It reflects a long-term national commitment to international security, NATO transformation and the collective fight against the IED threat.



Sponsoring Nations and Partners

In June 2010, Spain's offer took a major step forward when six nations (Spain, France, Germany, Portugal, Romania and the Netherlands) signed the Operational Memorandum of Understanding in Norfolk, Virginia. These nations became the first Sponsoring Nations (SN) and this agreement marked the official launch of the C-IED COE, establishing the foundation for its governance and operations.

Over the following years, more nations joined the effort. United States, Hungary and the Czech Republic came on board in the early 2010s, followed by Türkiye in May 2017. Greece formalized its participation by July 2020 and Sweden, which since 2016 contributed as a partner, became a full sponsoring nation in 2024. Canada is currently in the process of joining, further expanding the Centre's reach and capabilities.

Since then, Spain leads the way as the framework nation, and with the support from these twelve other countries, bring their know-how to help the Alliance tackle the threat of IEDs.

A key feature of the Centre's structure is its multinational character, built on the voluntary participation of Sponsoring Nations and, in certain cases, Contributing Partners.

Sponsoring Nations

Sponsoring Nations are NATO member states that have signed the Functional MoU. They are full participants in the governance of the Centre, primarily through their representation on the Steering Committee, the body responsible for overseeing the Centre's Programme of Work, budget, and strategic direction. Sponsoring Nations:

- Contribute personnel, expertise, and/or funding.
- Have decision-making authority within the Steering Committee.
- Can propose or shape the Centre's projects, priorities and annual programme.
- May benefit from priority access to Centre services and courses.

Spain, as Framework Nation, holds additional responsibilities such as hosting the facility and providing core administrative and logistic support.



Contributing Partners

In contrast, Contributing Partners are nations (either NATO or non-NATO) or organizations that participate in the Centre's activities through bilateral technical arrangements. They do not sign the Functional MoU and therefore:

- Do not have voting rights in the Steering Committee.
- Participate under a limited scope. For instance, by seconding experts, attending specific events, or collaborating on projects.
- May access training or contribute to doctrine, experimentation, or analysis, subject to Steering Committee approval.

This tiered participation model allows the C-IED COE to maintain flexibility and inclusiveness, while ensuring that its strategic direction remains under the collective control of its Sponsoring Nations.

The Steering Committee

Each of these nations contributes by providing valuable expertise drawn from their own military experiences. Together, they form the backbone of the C-IED COE's Steering Committee (SC), the governing body that sets the Centre's strategic direction. The SC is composed of representatives from each Sponsoring Nation and is responsible for approving the annual

Programme of Work, overseeing budget allocations, and ensuring that the Centre's activities align with NATO's broader objectives.

The Steering Committee plays a crucial role in maintaining the Centre's relevance and responsiveness. Its members bring diverse perspectives and operational insights, ensuring that the C-IED COE remains at the cutting edge of counter-IED doctrine, training and innovation. Their collaboration exemplifies the spirit of NATO itself: a collective defense built on shared knowledge, mutual trust and a commitment to peace and security.

The future is open

As of today, the C-IED COE has 13 open positions, non-bid by any of the Sponsoring Nations. In line with its multinational character, any NATO member state is eligible to request accession as a Sponsoring Nation, as recently demonstrated by Canada, which has initiated the process to join the Centre. New contributions are vital to strengthening the Centre's capabilities and expanding its community of interest. The C-IED COE warmly welcomes expressions of interest from additional NATO countries and stands ready to support their integration into its structure and mission.



C-IED COE Lodge: Logistic Support in Service of Excellence

Since its establishment, the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE) has combined technical rigor with a clear international service vocation. For its mission to be carried out efficiently, it requires a strong, flexible support structure tailored to the demands of a multinational environment. Within this framework, the C-IED COE Lodge plays a key role: a facility designed to accommodate participants in the Centre's many activities and enhance the quality of life of its permanent staff. Its name is Almirante González-Huix Fernández to honour the late Admiral, Chief of the Joint Staff.

A Functional and Welcoming Space

The C-IED COE Lodge is located within the Spanish Army Engineer Academy compound in Hoyo de Manzanares (Madrid), just 1.5 kilometers from the main building of the Centre. Nestled in a natural setting within the Manzanares Upper Basin Regional Park, the Lodge offers a peaceful, secure environment fully integrated into the daily military life of the base.

The facility offers 60 single and double rooms, all equipped with:

- Satellite television.
- High-speed Wi-Fi.
- Personal refrigerator.



- Desk and study area.
- Private bathroom with shower.
- Bed linen, towels and courtesy amenities.

Common areas include a dining and lounge room, outdoor terrace, self-service laundry and garden spaces that allow guests to relax and socialize after their workday.

Supporting the Centre’s Mission

The Lodge was inaugurated in 2016 as part of the Spanish Ministry of Defence’s commitment to strengthening the C-IED COE as a NATO-accredited Centre of Excellence. Since then, it has played a vital logistical role in the execution of numerous activities:

- NATO-certified courses (such as WIT, AT-NOC and CSOC).
- International workshops.
- Technical and doctrinal seminars.
- Multinational events and Steering Committee meetings.

The Lodge accommodates students, guest speakers, international experts and deployed staff, providing a comfortable, professional and fully operational environment without relying on external civilian lodging.

Investing in People

Beyond supporting short-term visitors, the Lodge has also enhanced the daily life of the

Centre’s permanent personnel by offering flexible housing solutions for those temporarily assigned from other cities or countries, or working on mid- to long-term projects.

In an environment where thirteen nations work side-by-side, a lodging facility designed with interoperability and wellbeing in mind becomes a critical asset, reinforcing the Centre’s cohesion, performance and international reputation.

Conclusion

The C-IED COE Lodge is more than a building. It is an extension of the Centre’s mission: to enable cooperation, host international knowledge and offer a dignified space for those who dedicate their efforts to improving the security of Allied forces and civilian populations under threat from IEDs.

In the words of many who have stayed there, the Lodge is “the first contact with excellence” upon arriving at the Centre.



CHAPTER II: MISSION, ORGANIZATION AND MANNING

Mission, vision and values

Mission

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 the security of Allied Nations and 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.

Vision

To serve as the global center of excellence for all Counter-IED (C-IED) matters, empowering the international community to effectively counter improvised explosive Systems through advanced technologies, strategic coordination, and innovative tools.

Core Values

- Excellence: Striving for the highest standards in analysis, education, innovation and operational relevance.
- Multinationality: Harnessing the strength of a diverse team from across NATO and Partner Nations.
- Integration: Fostering collaboration across military, law enforcement, intelligence, academia and industry.
- Adaptability: Continuously evolving to address the shifting character of IED threats and operational environments.
- Service: Committed to saving lives by reducing the impact of IEDs and enhancing mission success.

Organization and Manning

A Multinational Structure for a Multi-domain Mission

Since its establishment in 2010, the C-IED COE has been shaped by the complexity of the threat it was created to counter. In response to the evolving IED threat, the Centre has developed a robust organizational structure designed to deliver operational impact, foster innovation and support the Alliance through education, doctrine, analysis and multinational cooperation.

At the core of the C-IED COE's structure are its three functional branches:

- Attack the Networks (AtN)
- Defeat the Device (DtD)
- Prepare the Force (PtF)

These branches represent the three strategic pillars of NATO's Counter-IED approach and form the operational engine of the Centre. Each branch is responsible for a critical dimension of the C-IED fight: from disrupting threat networks, to enhancing force protection and technical capabilities, to delivering training and education that strengthens readiness across the Alliance.

Supporting and enabling the work of these branches are two additional organizational components: the Command Group and the Admin & Support Branch.

The Command Group provides strategic guidance, institutional leadership, and liaison with the Centre's Steering Committee, Sponsoring Nations and NATO entities.

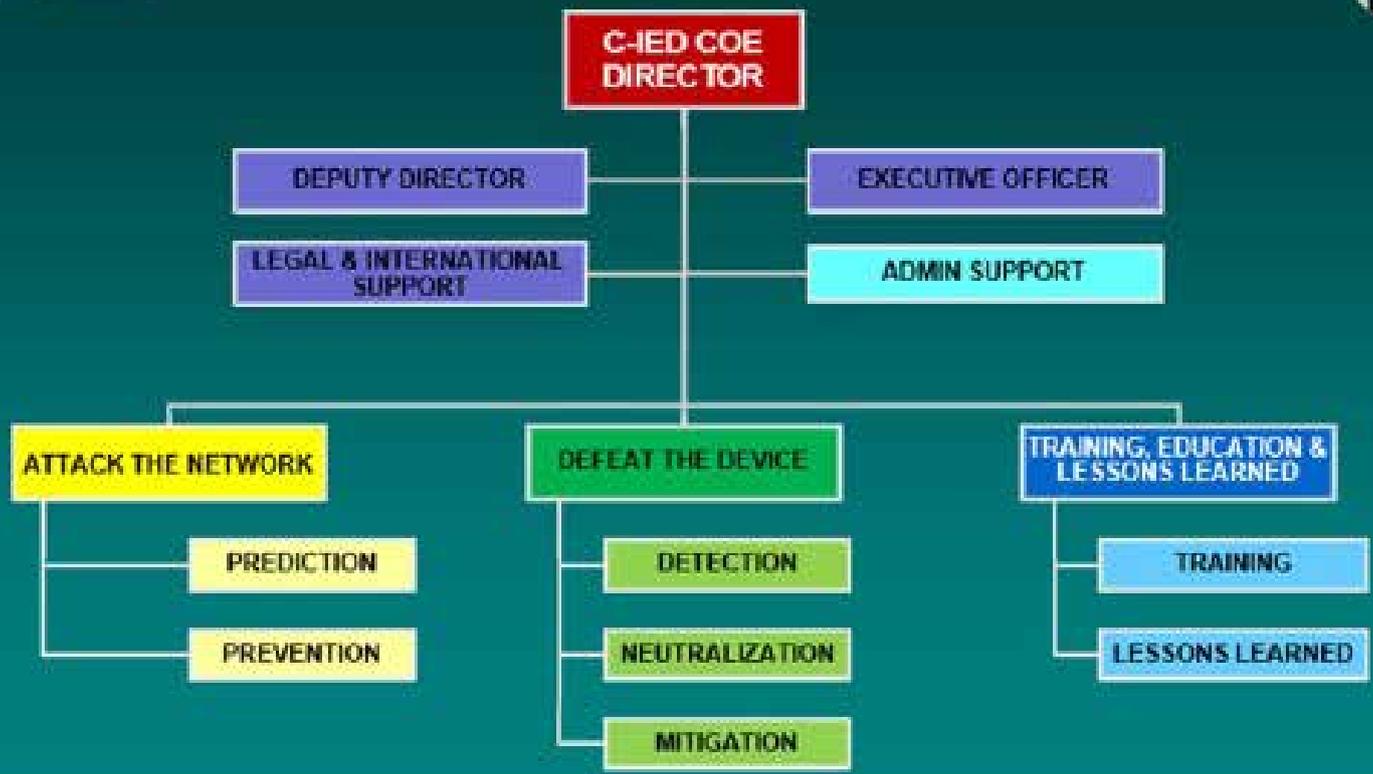
The Admin & Support Branch ensures the seamless functioning of the Centre by managing personnel administration, logistics, CIS, contracting, finances, infrastructure, and security — all of which are essential for the delivery of the Programme of Work.

The C-IED COE's strength lies in its multinational and multidisciplinary composition. With personnel contributed by more than a dozen nations and a wide range of military, law enforcement and technical backgrounds, the Centre represents a fusion of expertise that enables it to operate in joint, combined and interagency environments. Spain, as Framework Nation, provides 50% of the expert staff and all support personnel, while the Sponsoring Nations contribute the remaining Subject-Matter Experts (SMEs).

This chapter provides an overview of each of the Centre's five components. It highlights how their functions interconnect to support NATO-accredited activities, research and development, doctrine custodianship, and international cooperation. The following pages illustrate how structure, people and purpose come together to sustain the Centre's contribution to global security — one branch at a time.



C-IED COE STRUCTURE



The Command Group

Strategic Direction, Operational Oversight and Multinational Coordination

At the heart of the C-IED Centre of Excellence lies its Command Group: the leadership nucleus responsible for setting the Centre's strategic direction, coordinating its internal functions and ensuring coherence with NATO's transformation efforts. While the Centre's operational strength is delivered through its three core branches — Attack the Networks, Defeat the Device, and Prepare the Force — it is the Command Group that provides the institutional guidance and command continuity necessary for mission success.

According to the governing Memoranda of Understanding and Centre procedures, the Command Group:

- Executes the decisions of the Steering Committee and ensures alignment with the Centre's approved Programme of Work.
- Acts as the liaison and coordination point with ACT and other NATO bodies, ensuring that the Centre's efforts are integrated into the Alliance's broader transformation initiatives.
- Oversees and guides the work of the three branches, ensuring consistency, effectiveness and resource alignment.

- Provides leadership continuity and cross-national integration within a diverse and high-tempo working environment.
- Far from a symbolic layer, the Command Group is the central engine of command, coordination and leadership that enables the C-IED COE to function as a unified, effective and responsive NATO-accredited institution.

Composition

The Command Group is composed of five key positions:

- Director (OF-5, Spanish Army): Appointed by the Framework Nation, the Director is the Centre's highest authority. He provides strategic leadership, represents the C-IED COE externally, and liaises with NATO, Sponsoring Nations and Framework Nation.
- Deputy Director (OF-5, US Army): The second-in-command and principal coordinator of day-to-day activity across the Centre. The Deputy Director supervises the planning and execution of the Programme of Work and ensures that outputs align with NATO priorities.
- Executive Officer (XO) (OF-3/4, Spanish Armed Forces): A General Staff-qualified

officer, the XO supports the Director in institutional planning, internal coordination and the integration of national and NATO efforts. The XO plays a central role in synchronising the Centre's activity calendar and administrative coherence and is responsible for strategic communications and public media.

- Operations Officer 1 (OF-3, Netherlands Army): This officer supports the planning and execution of the Programme of Work,

focusing on operational planning, activity tracking and coordination with functional branches and the financial officer.

- Operations Officer 2 (OF-3, French Army): This officer assists the Director and the Deputy Director in the day-to-day management of the C-IED COE, being mainly responsible for the coordination of: operational doctrine, information knowledge management, archiving, external webpage and NATO's planning process.



The Director of the C-IED COE

Strategic Leadership in a Multinational Environment

In NATO Centres of Excellence, leadership is not merely about rank: it is about coordination, adaptability and strategic vision. At the C-IED COE, the role of the Director is pivotal in translating multinational will into actionable capabilities, while maintaining the delicate balance between doctrinal development, operational relevance and institutional identity.

The Director of the C-IED COE is always a Colonel from the Spanish Army, appointed by the Ministry of Defence of Spain, the Centre's Framework Nation. This choice reflects a deliberate and strategic design: the position does not require the Director to be an EOD expert or an engineer, but rather an experienced officer with a General Staff diploma, the only qualification formally required for the post, apart from the needed English language skills.

This distinction is significant. It highlights that the Centre is not a technical unit focused solely on device neutralization, but a multidisciplinary, joint and combined structure whose success depends on interoperability, doctrinal foresight and strategic coordination.

As such, the Director must be capable of understanding and leading across domains: military operations, intelligence, education and train-

ing, legal frameworks, innovation and capability development. The role involves supervising a multinational staff, managing institutional relationships with NATO and Sponsoring Nations, and representing the Centre at the highest levels of Allied command structures. He or she chairs internal coordination mechanisms, oversees the execution of the Programme of Work and ensures coherence across the three core branches of the Centre, the Command Group and Admin & Support branch.

Far from being a technical specialist, the Director is a strategic integrator, a leader who must bring together the diverse areas of expertise that define modern counter-IED operations. In a community composed of officers, scientists, law enforcement experts, analysts and engineers from more than a dozen nations, the Director's ability to connect perspectives and align priorities is essential.



Above all, the Director is the guardian of the Centre's purpose: to serve NATO and the international community by anticipating, understanding and helping counter one of the most persistent threats of our time. The role demands institutional credibility, operational experience, diplomatic skills and a clear sense of mission.

It is worth recognizing the unique nature of this leadership role and the professionalism of those who have held it. In an environment where the threat evolves faster than doctrine, the Director provides both continuity and momentum.

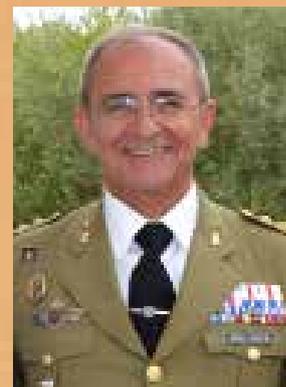
C-IED COE DIRECTORS



SANTIAGO SAN ANTONIO
JAN 2010-JUL 2013



JOSÉ ZAMORANO
JUL 2013-JUL 2015



JUAN E. GÓMEZ
JUL 2015-JUL 2018



JOSÉ A. CRUZ
JUL 2018-MAR 2022



JAVIER CORBACHO
MAR 2022-JUL 2025



JAVIER SANZ
AUG 2025

The Deputy Director of the C-IED COE: Day-to-Day Leadership in a Multinational Setting

In a dynamic, mission-oriented structure like the C-IED COE, strategic vision must be matched by operational consistency. The person who ensures that connection, who translates guidance into execution and keeps the engine running, is the Deputy Director.

The Deputy Director of the C-IED COE is traditionally a Colonel from the United States Army, representing one of the Centre's key Sponsoring Nations. As the second in command, the Deputy Director plays a critical role in maintaining institutional momentum. While the Director provides strategic guidance and represents the Centre externally, the Deputy Director is the lead executor of the day-to-day operations, supervising activity planning, coordinating across the five branches, and ensuring that the Centre delivers on its Programme of Work.

This is not a ceremonial role. The Deputy Director leads the internal battle rhythm of the Centre, manages timelines and tasking, and chairs key coordination meetings to ensure synergy between operational planning, training activities, doctrine development, and international engagement. In practical terms, this means tracking projects, maintaining situational awareness across all work strands, and enabling seamless collaboration among the multinational staff.

His or her responsibilities include reviewing concept notes, monitoring ongoing activities, liaising with external stakeholders, and preparing decision-making processes for the Director and the Steering Committee. The Deputy Director ensures that the Centre delivers with precision, credibility and agility.

Coming from the US Armed Forces (one of the NATO members with the deepest operational experience in Counter-IED), the Deputy Director brings not only technical and doctrinal knowledge, but also a culture of mission command and interagency integration. This perspective enriches the Centre's work and reinforces its role as a connector between national capabilities and multinational needs.

The Deputy Director also plays a key representational role when the Director is absent and often leads high-level visits, briefings and international coordination meetings. In short, the Deputy is both a stabilizing force and a forward driver, embodying the commitment of the United States to the C-IED mission and to multinational cooperation within NATO.

As the Centre celebrates its 15th anniversary, the contribution of its Deputy Directors, often less visible, but absolutely essential, deserves recognition. They are the officers who ensure

that vision becomes action, that plans become results, and that the Centre remains a trusted and effective part of NATO's transformation landscape.

C-IED COE DEPUTY DIRECTORS



DEREK S. SMITH
JUL 2011-JUL 2014



MICHAEL D. EVANS
JUL 2014-JUL 2017



STEPHEN KAVANAUGH
JUL 2017-JUL 2020



LAWRENCE COUSINS
JUL 2020- AUG 2023



CHRISTOPHER BARTOS
AUG 2023

Attack the Networks branch

What truly distinguishes the C-IED concept from previous efforts to mitigate the threat of Improvised Explosive Devices (IEDs) is the Attack the Networks (AtN) approach. AtN represents a proactive and anticipatory strategy conducted at the operational level. It seeks to identify, analyze and ultimately degrade the human networks—adversary, neutral, or even friendly—that enable the use of IEDs within a broader threat system.

In simple terms: if the act of using an IED is the “crime,” then Attack the Networks is the effort to prevent it before it happens.

Recognized as the main doctrinal pillar of Allied C-IED efforts, AtN integrates intelligence, operations, law enforcement and technical disciplines into a coordinated, systems-oriented countermeasure. Yet, as a relatively new and conceptually complex element, its initial development required both institutional innovation and strategic support.

Origins and U.S. Support

The early evolution of the AtN Branch benefited greatly from the support of the United States, particularly through the Joint Improvised Explosive Device Defeat Organization (JIEDDO) and its Counter-IED Operations & Intelligence Integration Center (COIC). This collaboration, beginning in 2010, catalyzed the branch’s

foundational doctrine, training design and operational focus. JIEDDO was later reorganized and renamed the Joint Improvised-Threat Defeat Agency (JIDA) in 2015 and subsequently became part of the Defense Threat Reduction Agency (DTRA) as the Joint Improvised-Threat Defeat Organization (JIDO).

In coordination with U.S. experts, the C-IED COE AtN Branch was instrumental in developing several NATO-relevant initiatives:

- Intelligence Fusion for Threat Network Analysis (IFTNA)
- Advanced Analysis Tools & Procedures (AATP)
- Attack the Networks Tactical Awareness Course (ATAC)
- Human Network Analysis and Support to Targeting (HNAT) Pilot Course
- The NATO-approved Attack the Networks Operational Course (ATNOC), now a benchmark in C-IED education

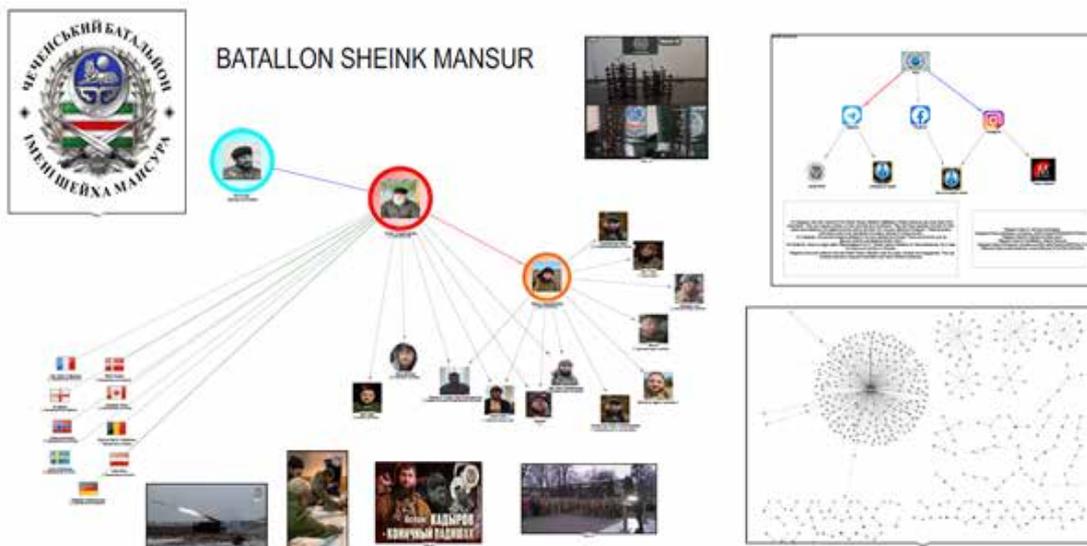
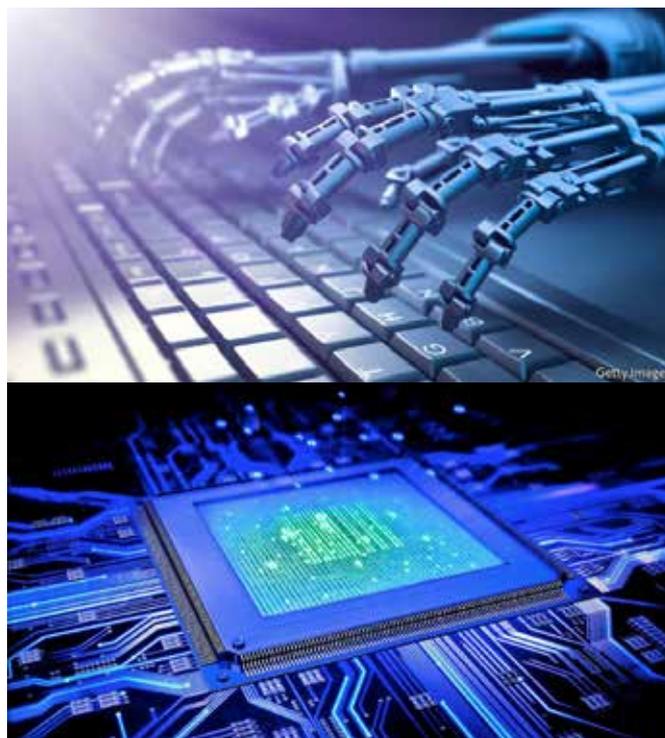
Structure and Identity

The AtN Branch is composed of a multidisciplinary team of subject-matter experts from both military and law enforcement backgrounds: Intelligence analysts, Operations/Plans officers, Explosive Ordnance Disposal technicians, Electromagnetic Warfare experts, Technical Exploitation advisors, Special Opera-

tions consultants, Military Search specialists... They represent Spain, Germany and the Czech Republic. This composition ensures the branch is truly interagency, joint and combined, consistent with the complex and cross-functional nature of the threats it addresses.

While NATO continues to refine its understanding and formal doctrine around AtN, the C-IED COE has remained at the forefront of concept development, operational experimentation and training.

As a testament to its internal strength, two former Chiefs of the Attack the Networks Branch returned to the Centre years later, each promoted to full colonel and appointed as Director of the C-IED COE. Their career trajectories reflect not only the branch's leadership role in doctrine development, but also its ability to prepare strategic thinkers who shape the future of the discipline.



Prepare the Force branch

By becoming NATO's C-IED transformation expert and the focal point for C-IED education and training for NATO and other Allies, we will reduce the operational impact of IEDs within our nations and on the battlefield.

The essential building blocks for success are, among other, targeted individual training and further education as well as the necessary reflection and analysis of (also) one's own actions as part of Lessons Learned. These closely interwoven building blocks are bundled in the NATO C-IED COE in the Prepare the Force Branch.

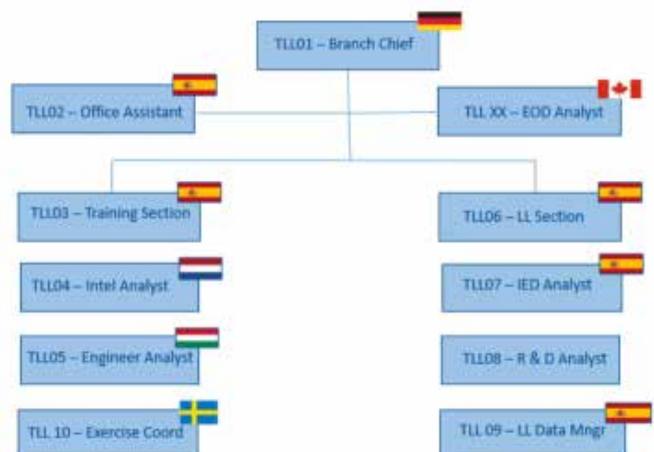
The Branch comprises two sections: C-IED Training and C-IED Lessons Learned. The Branch deals with supporting the determination of requirements and objectives within the Alliance in the matter of multinational education, training and exercises.

In the wide C-IED Community of Interest, led by HQ SACT, the C-IED COE aims to support the harmonization of Allied C-IED training activities. In coordination with HQ SACT, we also develop advanced multinational courses for C-IED experts that deal with Doctrine, Education and Training, Evaluation and C-IED Lessons Learned.

Training and Quality Assurance

Within NATO, the NATO HQ Supreme Allied

Command Transformation (SACT) is responsible for the overall management of NATO Education and Training (E&T). It is managed through the Global Programming system, which consists of a governance structure, a development methodology, as well as a production planning process and synchronization of NATO Education, Training, Exercises and Evaluation (ETEE).



The aim of Global Programming, as it relates to Education and Individual Training (E&IT), is to ensure that the right E&IT is provided to the right personnel at the right time and in the right location in the most economical manner possible.

Within the E&T management, a Requirements Authority (RA) and a Department Head (DH) are appointed for each discipline. The RA and the DH support the centralized coordination and decentralized execution of NATO E&T activities and events. The NATO C-IED COE is the formally appointed Department Head for the C-IED discipline within NATO.

In addition to its role as DH, the NATO C-IED COE also supports the NATO education and training programme to meet NATO's operational requirements by ensuring cost-effective solutions.

Due to this valuable contribution in support of the Alliance, including the use of an effective Quality Management System (QMS), the Centre received in 2016 the NATO accreditation as an E&IT provider with a Quality Assurance (QA) Unconditional Accreditation Certification.

Exercises

In addition to the support in the area of E&IT, exercise support is another part of the NATO C-IED COE commitment. The Centre's objective with exercise support is to advance the in-

stitutionalization of a common and comprehensive C-IED mindset within NATO headquarters and to close the identified C-IED gaps at the common operational level within NATO.

The support of the NATO C-IED COE for the exercises of the Trident series has successfully resulted in the activities of the C-IED network and the Counter Threat network being implemented in a comprehensive and cross-functional manner.

Lessons Learned

In order to ensure the relevance and high quality of the NATO C-IED COE products in the long term, there is a continuous evaluation of: C-IED related observations, Lesson Identified (LI), Lessons Learned (LL), knowledge, reports and other C-IED lessons and documents from missions and exercises. Once relevant C-IED LI and LL are received, they are bundled and distributed to the responsible bodies inside and outside the Centre. At a later stage, they are also incorporated into the training.

Defeat the Device branch

Defeat the Device (DtD) is a joint activity aimed at detecting, neutralizing and mitigating IEDs and IED events' effects. Its objective is to deliver the freedom to operate towards the aims of the commander, to protect the population, to provide physical security to our own forces, and to enable exploitation.

DtD Core Functions can be defined as:

- **Detection:** Identifying/assessing activities, technologies in detection, recognition and location of IED components.
- **Neutralization:** Identifying/assessing activities on destroying IEDs and neutralizing their lethal capacity, as well as fostering interoperability of ECM capabilities and C-IED systems.
- **Mitigation:** Promoting proactive, reactive activities and technology solutions to limit the effects of terrorist attacks utilizing IEDs on people, equipment and installations.

The Defeat the Device (DtD) Branch comprises of three sections whose names are coming from the DtD Core Functions. The Branch stands at the forefront of the fight against the evolving IED threat. It doesn't just track technology, it actively integrates and tests it, ensuring that NATO and partner nations stay ahead of those who seek to harm.



Its mission is as technical as it is tactical: detect, recognize and locate IED components; neutralize or destroy the device, and, whenever possible, prevent its emplacement altogether. The ultimate goal? To protect lives, safeguard infrastructure and maintain operational freedom.

To do so, the Branch maintains a constant pulse on current and emerging C-IED technologies. But it goes beyond monitoring. Through replication in controlled lab settings, it pushes these technologies to their limits, exposing weaknesses, validating strengths and refining concepts. This work feeds directly into concept development, experimentation and the definition of rigorous standards for evaluating C-IED systems. DtD Branch also contributes to research and development efforts, provides critical input to NATO's Lessons Learned process, and plays a central role in identifying operational capability

gaps. It promotes the interoperability of Electronic Counter-Measures (ECM), particularly in response to remote-controlled IEDs (RCIEDs), whose threat profile continues to evolve.

While much of its work is technical, its impact is strategic. By shaping future tactics, techniques and procedures (by helping define what comes next), it contributes to doctrinal transformation and long-term force protection.

The Branch doesn't operate in isolation. It advises on procurement policy, supports NATO's Defence Planning Process and engages across international C-IED forums. It leads from the front by hosting conferences, seminars and symposiums that bring together experts, operators and innovators to move the fight forward. In essence, DtD is where theory meets practice, and where innovation becomes defense.



Admin and Support branch: The structural enabler of the C-IED COE

The Admin and Support Branch of the C-IED COE plays a foundational role in the daily functioning and long-term resilience of the Centre. As a NATO-accredited International Military Organization, the Centre operates with multinational personnel, high-level security requirements and a demanding Programme of Work. The Admin and Support Branch ensures that all necessary conditions (logistic, administrative and technical) are in place to allow the Centre to carry out its mission effectively.

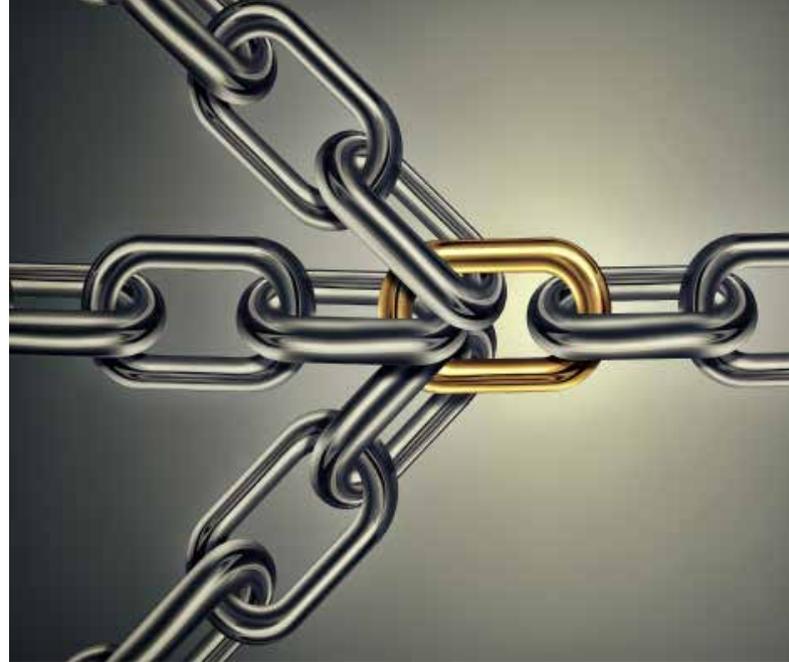
Leadership and Coordination

The Branch Chief, a senior Spanish officer, oversees the entire branch and acts as advisor to the Director on Host Nation Support (HNS), personnel matters, logistics and security. This role includes not only internal coordination but also maintaining alignment with national structures (e.g. Spanish CHOD) and NATO authorities. The Branch Chief also serves as Security Officer of the Centre, coordinating security protocols in compliance with NATO and Spanish regulations.

Personnel Management

This area manages the lifecycle of all assigned personnel, both Spanish and international:

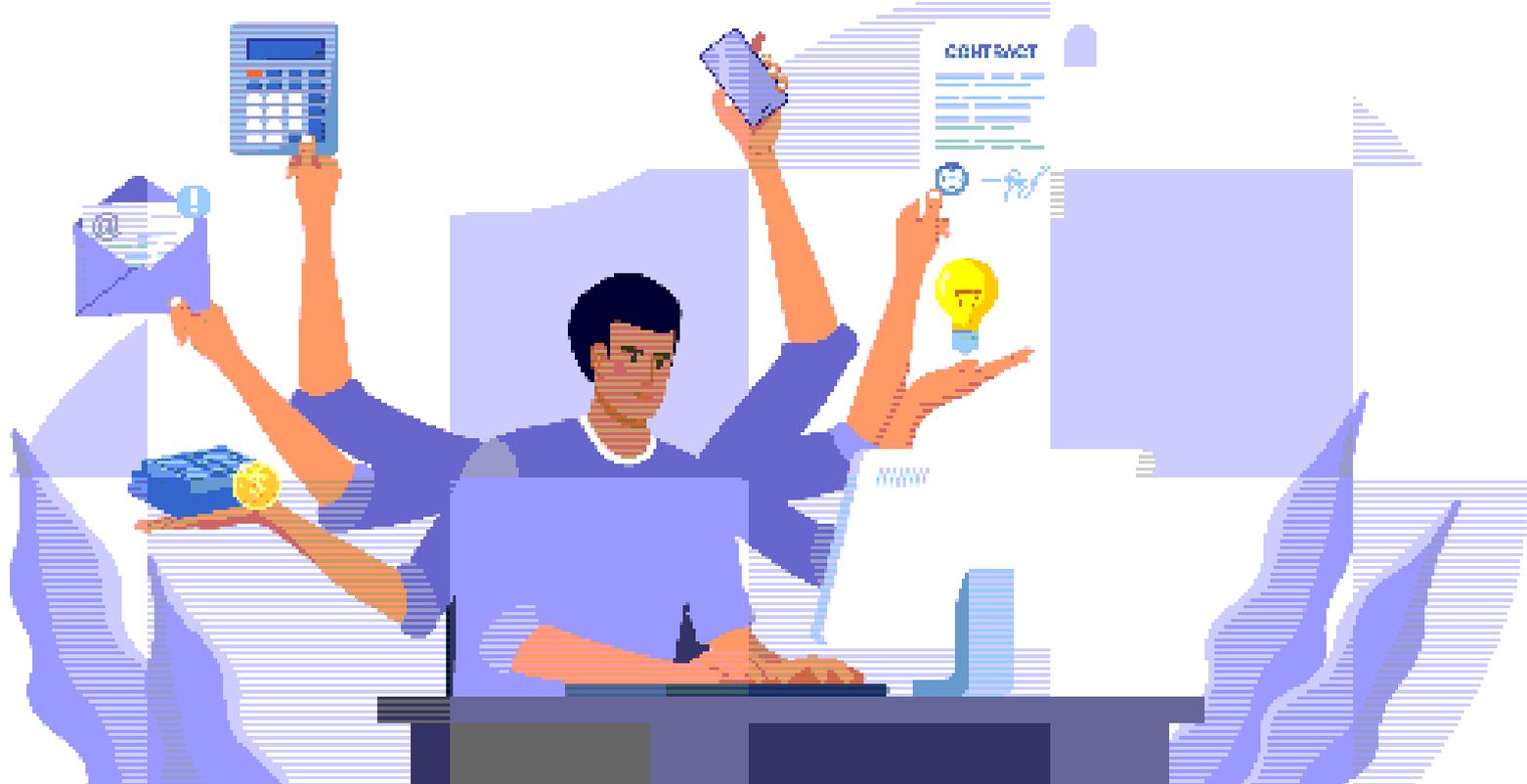
- Status of Forces Agreement (SOFA): En-



• Ensuring legal and administrative compliance under NATO SOFA provisions.

- Staff Administration: Managing leave, postings and support for both permanent and rotational personnel.
- Evaluation Reports: Coordinating national (IPEC) and international performance reports to maintain personnel records in line with NATO guidelines.
- Official Communications: Handling official mail with national and NATO authorities.

This section is essential to preserving the Centre's multinational character and ensuring smooth integration of new personnel into the team.



Travel and Mission Support

The Travel Office ensures the efficient organization of official travel for Centre staff, guest instructors and students:

- Booking and managing trips for events, exercises and Mobile Training Teams (MTT).
- Issuing orders, processing expenses and supporting external coordination.

Thanks to this service, the Centre is able to maintain high levels of participation in NATO working groups, seminars and field activities.

Infrastructure and Logistics

Supported by the Spanish Ministry of Defence under the Host Nation Support framework, this section:

- Maintains all facilities, including the NATO-accredited HQ building and the on-site military lodging (with capacity for 60 people).
- Manages Centre vehicles, ensuring mission readiness and logistical flexibility.
- Coordinates environmental compliance, in line with Spain's Joint Staff policies.

These services uphold the Centre's infrastructure and physical environment to the standards expected of a NATO body.

Security Management

The Security Area ensures the physical and information security of the Centre:

- Control of classified information, in accordance with NATO protocols.
- Security clearances for permanent staff, course participants and visitors.
- Security accreditation for events and exercises.
- Permanent liaison with Spanish Joint Staff's NATO Control Point.

This structure guarantees compliance with the highest standards of security assurance.

Contracting and Financial Oversight

The Contracts Section administers the services required to sustain operations:

- Procurement and contract execution, including cleaning, maintenance, IT, gardening and concierge services.
- Oversight of national funding, ensuring effective use of Spanish credit lines allocated to the Centre.



These functions are crucial to maintaining transparency and operational continuity.

Protocol and Administrative Support

This section supports:

- Reprographic services for courses, workshops and publications.
- Supply of materials and stationery.
- Protocol and ceremonial arrangements for official visits and events.
- Photographic documentation for institutional memory and public relations.

This team contributes to the Centre's professional image and supports its role as an international host.

CHAPTER III: 15 YEARS WORKING AT THE LEFT OF THE BOOM

15-Year Timeline of Milestones

2007

Spain formally offers to NATO the creation of a multinational C-IED Centre of Excellence

2008

NATO's Allied Command Transformation (ACT) confirms that Spain's proposal aligns with NATO COE principles

The Spanish Ministry of Defence funds the dedicated infrastructure

Coordination with ACT and NATO stakeholders begins

2009

Spanish Council of Ministers approves the creation of the national-level C-IED Centre

2010

Spanish MoD publishes Order 960/2010 establishing the C-IED COE

Final NATO accreditation was completed by the North Atlantic Council on 16 November. This was the fastest COE accreditation at the time

Memorandum of Understanding (MoU) signed by six nations: Germany, France, Netherlands, Portugal, Romania and Spain

2011

Hungary (Feb) and USA (Mar) join as Sponsoring Nations

First NATO-certified course delivered marks the beginning of the Centre's education and training programme

2013

Czech Republic joins as Sponsoring Nation

First edition of the Technology Workshop (TECHWS). Launch of a recurring forum combining technical innovation and operational feedback

2014

The Centre is named custodian of NATO's C-IED doctrine (AJP-3.15)

First modification of the MOU

2015

Türkiye joins the Centre as a Sponsoring Nation

Sweden begins participation. The process of joining as Contributing Partner starts

First WIT Course in Hungary

2016

C-IED COE gains NATO Education & Training Facility (ETF) QA accreditation

Sweden joins as Contributing Partner

2017

COE lodge facility opens, offering accommodation to 60+ students and visiting staff

2018

Hungary becomes a Sponsoring Nation

First WIT Course in Romania

2019

The Hellenic Republic becomes a Sponsoring Nation

2020

NATO Education & Training Facility (ETF) QA re-accreditation

2022

Re-accreditation inspection was conducted. ACT recommends unconditional reaccreditation

Canada starts contributing with 1 SME to the Centre upon bilateral agreement

2023

WIT TDC and Advanced DOMEX courses successfully launched as NATO LISTED courses

DOMEX T3 pilot course developed

2024

Launch of CHESSBOARD magazine, the Centre's first international publication

First Lessons Learned Workshop dedicated entirely to NATO C-IED approach

Visit by King Felipe VI of Spain

2025

C-IED COE hosts the first merged Annual Discipline Conference (ADC) for MILENG, ENSEC and C-IED

First Annual Conference (CIEDAC25) held in Málaga

Reaccreditation for NATO QA until 2030

Canada becomes Sponsoring Nation



Empowering the Allies: CIED COE in Action



Coalition of Expertise – An ongoing vision

Education and Training

Since its establishment in 2010 under NATO's Centres of Excellence framework, the C-IED COE has evolved into a premier hub of knowledge, training and innovation in the fight against IED. A cornerstone of its mission is education: equipping Allied and Partner nations with the skills, knowledge and tactics to mitigate IED threats effectively. The courses offered by the Centre are central to this mission, fostering a culture of readiness, adaptability and cooperation.

The C-IED COE provides a diverse portfolio of specialized courses tailored to the evolving nature of the IED threat spectrum. These courses are rooted in the three pillars of NATO's C-IED strategy: Attack the Networks, Defeat the Device, and Prepare the Force.

Among the most distinctive offerings is the Attack the Networks Operational Course (AT-NOC). This course is designed to develop a comprehensive understanding of threat networks, focusing on disrupting the systems, supply chains and individuals behind IED operations. It brings together personnel from intelligence, operations and law enforcement backgrounds, promoting interagency cooperation and network analysis proficiency.

In modern conflict environments, where improvised explosive devices (IEDs) remain a pervasive threat, knowledge is as crucial as



firepower. The Weapons Intelligence Team Course (WIT) equips personnel with the critical skills needed to turn IED incidents into actionable intelligence. The course is designed for military and law enforcement professionals involved in EOD (Explosive Ordnance Disposal), intelligence and forensic exploitation roles. Delivered by experienced instructors from across NATO and partner nations, the WIT Course emphasizes interoperability and interagency collaboration.

Also, the Weapons Intelligence Team Trainer Developer Course (WIT TDC) educates WIT Course Directors and Senior Instructors in WIT Course development by implementing updates on skills and standards and creating WIT related scenarios and vignettes.

The Document and Media Exploitation Series (ADOMEX & DOMEX) aim to provide essential Technical Exploitation training focused in DOMEX discipline, including Document Exploitation (DOCEX), Media Exploitation (MEDEX),

Cellular Phone Exploitation (CELLEX) and UAS Exploitation. The framework is initial collection capabilities and the use of elementary tools and software to extract information at the tactical level for integration into the Technical Exploitation system.

The aim of the Analyst's Notebook Users Course (ANUC) is to provide attendees with the theoretical and practical knowledge about the Analyst's Notebook® software as a widely used software tool by intelligence analysts. Its intent is to train Military and Law Enforcement personnel involved in network analysis processes in their respective Units, Headquarters and Organizations.

Additionally, the C-IED Staff Officers Course (CSOC) prepares planners and staff officers at the operational and corps levels. This course provides the doctrinal and conceptual grounding necessary to implement C-IED principles within NATO Command and Force structures, as well as national frameworks.

Finally, the C-IED Awareness Course, which can be delivered through Mobile Training Teams (MTTs), introduces foundational C-IED principles to a wide audience, including first responders, force protection personnel and junior officers. This course plays a key role in establishing a common C-IED baseline across NATO and Partner nations.

One of the Centre's great strengths is its ability

to tailor its courses to the needs of different nations and organizations. Mobile Training Teams are regularly deployed to deliver courses in-theatre or on-site, ensuring maximum accessibility and relevance.



The C-IED COE remains steadfast in its commitment to adaptive education. Future plans include the expansion of e-learning modules, further integration of emerging technologies such as AI and data analytics into training, and continued refinement of curriculum based on operational feedback.

The Centre's contribution over the past 15 years has gone far beyond the classroom. Its alumni now serve in key operational and strategic roles across NATO and partner nations, applying the knowledge and mindset fostered at the C-IED COE to keep people and missions safe.

In an age where asymmetric threats are increasingly complex and transnational, education remains one of the most powerful tools for security. The courses provided by the C-IED COE have played, and will continue to play, a pivotal role in building the capability, resilience and cooperation required to face the IED threat head-on.

Mobile Training Teams and lecturers

As the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE) marks its 15th anniversary, its Mobile Training Teams (MTTs) continue to reflect the Centre's operational relevance and global outreach. These deployable teams have delivered training and assessments in support of NATO and partner nations' efforts to build sustainable C-IED capabilities.

MTTs remain a cornerstone of the C-IED COE's engagement strategy. Each team is staffed with subject-matter experts from NATO nations and delivers tailored, needs-based training in support of national objectives. From tactical-level field training to high-level advisory roles, MTTs enhance the capacity of host nations to prevent, detect and respond to IED threats.

Jordan: A Model of Structured Cooperation (2017–2019)

One of the most comprehensive engagements occurred in Jordan, where the C-IED COE, alongside multinational experts, partnered with the Jordanian Armed Forces (JAF) Royal Engineer Corps (REC) to deliver 19 training activities involving 216 military and law enforcement personnel.

Key courses included:

- Weapons Intelligence Team (WIT) Course:

Seven iterations trained 10 JAF MILENG and EOD personnel in evidence collection and exploitation, forming the nucleus of Jordan's field exploitation capability.

- Basic Search & Clearance Course (BSCC): Two sessions trained 40 personnel in IED search and clearance, blending theoretical and practical instruction.

- Train-the-Trainer Course (T3): Designed to build a national cadre of C-IED instructors, equipping 15 selected personnel with both technical skills and training methodology.

- C-IED Awareness Course (CIAC): Two iterations brought together 43 experts from JAF, police, intelligence and security sectors, reinforcing interagency cooperation and NATO standards.

In addition, Mobile Advisory Team (MAT) visits in 2018 engaged senior leadership across JAF, the Public Security Directorate and the National Centre for Security and Crises Management (NCSCM). These visits highlighted the strategic importance of a national C-IED policy and a comprehensive training curriculum.

Complementary events included Jordanian participation in an Advanced Research Workshop on Explosive Detection (Italy, 2018) and a DCB Synchronization Workshop (Amman, 2018), further cementing NATO-Jordan cooperation.

Accomplishments and Strategic Outcomes

The Jordan initiative produced measurable outcomes:

- Development of a National C-IED Policy, now pending final approval.
- Mapping of a JAF C-IED Training Landscape and Curriculum.
- Establishment of a national pool of C-IED instructors.
- Enhanced interagency understanding and cooperation.
- Strong partnerships with nations such as Ireland, Spain, the U.S., Greece, Hungary and Romania, whose experts supported the training effort.

These outcomes positioned Jordan as a NATO benchmark for partner capability development.

Tunisia: A Case of Broader Capability Development

The C-IED COE conducted a site visit to the Tunisian C-IED Centre of Excellence. While the visit aimed to explore potential C-IED collaboration, the assessment identified that Tunisia's most urgent needs were focused on military engineering and EOD development, rather than C-IED specific training. The insight provided by this survey has proven essential in shaping future engagement strategies tailored to actual partner priorities.





Looking Forward: Ukraine, Georgia and Jordan

The C-IED COE is preparing future training engagements with Ukraine, Georgia, and potentially Jordan. These efforts aim to address operational needs and institutional development in dynamic threat environments:

- In Ukraine, the focus will be on battlefield forensics and field exploitation support amid ongoing conflict.
- In Georgia, planned support includes doctrinal integration and institutional training frameworks.
- In Jordan, renewed engagement would build

upon the successful 2017–2019 collaboration, aligning with the approved national C-IED strategy.

Fifteen years on, the C-IED COE's MTT efforts remain a powerful tool for global stability and resilience. Whether through targeted training, strategic engagement, or long-term partnerships, the Centre continues to build lasting C-IED capabilities: one mission, one team, one partner at a time.

Doctrine Production

Understanding Doctrine

Before delving into doctrine itself, it is important to understand what the term truly means. In a broad sense, doctrine provides structure to our thinking, offering a shared framework that guides decisions, clarifies key concepts and aligns actions toward common goals. In the military context, doctrine serves as a common foundation for both thought and coordinated action, ensuring that diverse forces understand each other, train together, plan jointly and operate in unison. Within NATO, doctrine enables the 32 member nations to conduct combined and multinational missions under a unified command, pursuing shared objectives with coherence and interoperability.

In this context, the C-IED COE plays a vital role in the development and dissemination of specialized doctrine in its area of expertise. The Centre contributes to NATO's doctrinal landscape by producing function-specific publications, handbooks and operational guidance, particularly at the subordinate level, where tactical and technical implementation is shaped. Drawing on the real-world experience and expertise of its contributing nations, the C-IED COE ensures that counter-IED doctrine remains current, relevant and aligned with NATO's evolving warfare requirements, supporting not only doctrinal coherence but also mission effectiveness across the Alliance.

How NATO Doctrine is structured

Doctrine is a key tool for NATO, ensuring member nations can collaborate efficiently to achieve shared security goals. It helps make sure all forces are ready to face a wide range of threats, from traditional to hybrid warfare and for example, countering the improvised explosive devices threat, which is the domain of excellence of our Centre.

NATO doctrine is structured across three levels: strategic, operational and tactical. These levels provide a framework for planning and integrating military activities within the operating environment, covering capstone, keystone and subordinate doctrine.

Together, these three levels ensure coherence from strategic intent to tactical implementation across the Alliance.

The role of the C-IED COE

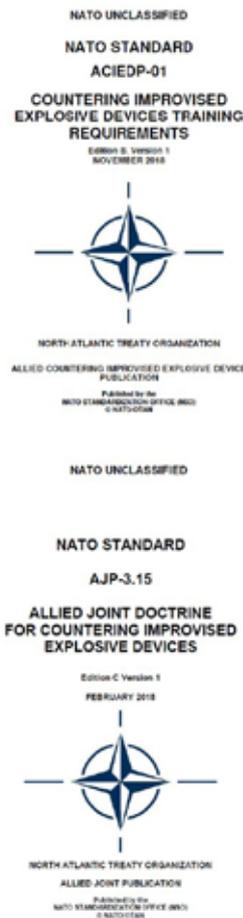
Our C-IED COE is the official custodian of two doctrine documents that are described below. This means we coordinate their production, review and management. Our experts also actively contribute to 42 additional doctrine documents at various levels, mainly in operations and intelligence fields, with a particular focus on technical exploitation and operational level.

A close-up of our documents

- AJP-3.15 (Allied Joint Publication for Countering Improvised Explosive Devices): This level 2, operational level NATO doctrine offers a practical framework for countering improvised explosive devices in joint operations. The publication covers roles, relationships and responsibilities from tactical through strategic command, including political oversight. While it is mainly intended for commanders and staff at the joint operational level, it provides guidance for all command levels and is also useful for coalition and NATO partners. The updated edition is currently in its final revision and should be officially promulgated by the end of 2025, after being ratified by member nations.
- ACIEDP-01 (Allied Publication for C-IED Training Requirements): This level 3, tactical level NATO doctrine focuses on C-IED training standards. It outlines what is needed to ensure personnel are well-prepared to counter IED threats. In particular, it details requirements for C-IED staff officer courses, which are designed to equip officers with the right skills and knowledge to lead and manage C-IED operations. The revised version is also slated for promulgation by the end of 2025.

How are doctrinal documents produced, maintained and managed?

To stay relevant, all doctrinal documents are reviewed at least every five years or sooner, if major changes occur. NATO uses a standardized seven-phase process for developing, maintaining and managing doctrine, ensuring each document meets requirements and fits seamlessly into the

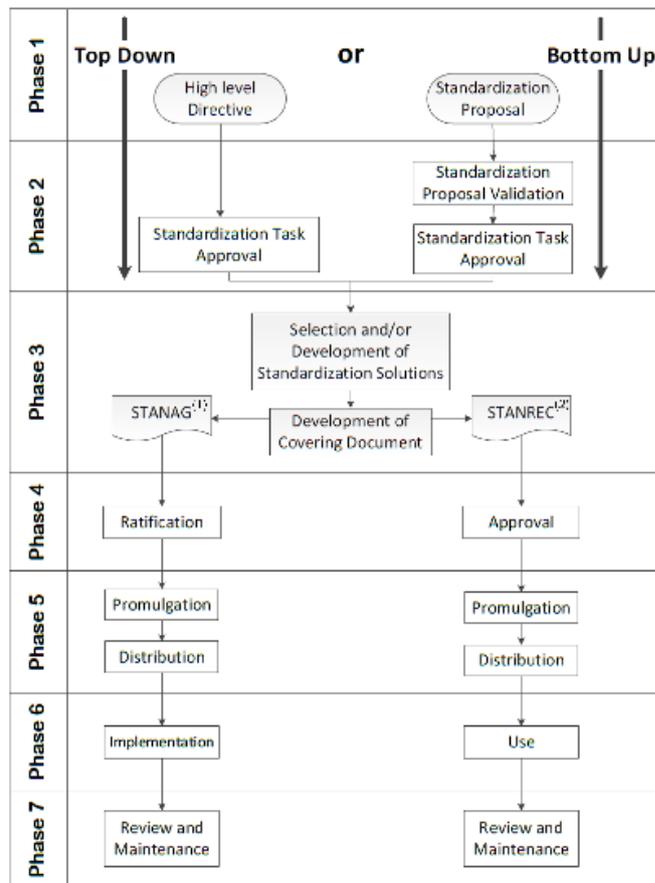


broader doctrine system. Ultimately, it is up to the member nations to ratify each document before it is formally adopted and put into use by all NATO countries.

Throughout each phase, subject-matter experts, including those from the C-IED COE play a central role in shaping these documents.

In conclusion, it is essential to emphasize the importance of a shared doctrinal foundation within NATO, which enables its 32 member nations to plan and execute missions in a cohesive and interoperable manner. Equally important is the contribution of the C-IED Centre of Excellence, which plays a key role in the Alliance’s efforts to counter the threat of improvised explosive devices.

This contribution is made possible through the expertise, commitment and knowledge of highly qualified specialists provided by its contributing nations, as well as through the strong ties and continuous exchange between the C-IED COE and the broader counter-IED community of interest. Together, these elements ensure that NATO remains capable of adapting to evolving threats with unity, precision and shared purpose.



Support to Exercises

As NATO adapts to an increasingly dynamic security environment, the integration of C-IED capabilities into exercises is not an option, it is a requirement. The Centre must contribute to the "Audacious Training" concept of ACT. IEDs are no longer the tactical weapons of choice for non-state actors alone. They are now the strategic instruments of hybrid warfare, used routinely by proxies and sponsored by state actors to achieve political, operational and psychological effects.

Yet, during many NATO exercises, C-IED is underutilized or misunderstood as a narrow tactical problem based on historical experience in Afghanistan and Iraq. This perspective risks leaving NATO unprepared for both current and future IED threats that are cross-domain, exploit emerging technologies and operate outside of traditional boundaries.

Moving Beyond a Tactical Focus

Too often, C-IED is still viewed from a limited tactical mindset, focusing on force protection, convoy security and route clearance. While those concerns remain important, they are only a portion of today's IED threat.

Today's threat environment requires NATO to reimagine C-IED as a system-level challenge, one that interacts with intelligence, cyber, electronic warfare, strategic communications

and even air and maritime defense operations.

Training exercises must reflect this complexity, enabling forces to understand and counter IED systems, not just devices, on a 360° and Multi-Domain Operations (MDO) basis.

Adapting to a 360° Threat Environment

The Alliance's 360° approach acknowledges that threats may arise from any direction and domain: land, air, sea, cyber and space. Thus, C-IED is to be included in all exercise design phases and echelons:

- Planning phases are to include the IED threat network as a dynamic actor, influencing strategic and operational decisions.
- Injects are to reflect a realistic use of IEDs to delay, degrade, or disrupt mission tempo, mimicking how adversaries utilize these weapons to create dilemmas.
- Training objectives must include intelligence fusion, technical exploitation, and attack-the-network principles, not just response and mitigation.

Short of this, NATO might be training for only half the fight.

Emerging Vectors: Unmanned Systems and State-Sponsored Proxies

IED threats are evolving rapidly. One of the most significant developments is the use of unmanned systems (aerial, ground and maritime) as delivery platforms for IEDs. These systems provide enemies with long range, plausible deniability and the ability to circumvent traditional defenses. Training that fails to mirror this trend does not properly equip NATO forces for future conflicts.

Of equal concern is the growing role of state actors that supply IED technology, training and targeting support to non-state organizations. This creates a more sophisticated, adaptive threat that blends conventional and irregular approaches. Exercises must account for these strategic forces by incorporating proxy scenarios, hybrid environments and politically sensitive use of IEDs.

Overcoming Integration Challenges

C-IED integration into exercises is not without challenges:

- There are still misconceptions. C-IED is seen as a niche capability rather than a cross-cutting function.
- **Stove-piped planning:** C-IED is dealt with late or separately from the other exercise planning cells.
- Resource constraints: there is sometimes a shortage of technical expertise or real-

ism within scenario injects.

The NATO C-IED Centre of Excellence (C-IED COE) works to address these gaps by supporting exercise design, scripting, mentoring and post-exercise analysis. Our goal is to help planners treat the IED threat as a system-comprehensive, adaptive and Multi-domain.

A Strategic Enabler, Not Just a Tactical Response

Incorporating C-IED into NATO exercises ensures that forces are training against realistic, adaptive and relevant threats. It gets commanders and staffs to consider how IEDs might be used strategically, either to interdict logistics, slow deployment timelines, erode political will, or strike critical infrastructure.

This is not about returning to Afghanistan or Iraq. It's about ensuring NATO is prepared for today's threats, whether in the High North, the Black Sea, the Sahel, or the cyber domain.

C-IED COE support to exercises

The C-IED COE has provided continuous support to NATO and Partner exercises across multiple domains and theatres:

- Strategic/Operational/Tactical level: the C-IED COE provided support to Joint Warfare Centre (JWC) in Stavanger, Norway in computer assisted exercises in the STEAD FAST series since 2016, including the last

exercise STEADFAST DAGGER 2024, STEAD DUEL 2025. At the tactical level, the Centre supported LOYAL LEDA exercise in 2023 and 2025 at Joint Warfare Training Centre in Bydgoszcz, Poland, as well as BISON COUNTER 2023.

- Maritime domain: Contributions to MARSEC COE-led maritime exercises (2023 and 2025) and NEMO (NATO Electromagnetic Operations) trials in Rota (2022) and Souda Bay, Greece (2024).
- EOD/C-IED Tactical Training: Regular participation in Northern Challenge/Northern Spirit (Identity and Intelligence) in Iceland and Ardent Defender in Canada, supporting multinational interoperability.

In 2026, at the C-IED COE, we will execute our own exercise, Northern Solution 2026, focusing on countering IED threats in 360° and Multi-domain environments.

These efforts exemplify how C-IED integration enhances training realism and ensures that NATO exercises reflect current and emerging threat trends.

Conclusion

C-IED is a strategic capability, not a support function and must be integrated across the NATO training environment. C-IED, when fully integrated into exercises, enhances situational awareness, protects operational freedom

of action and enhances the Alliance's ability to out-think and out-adapt adversaries.

To get ready for tomorrow, NATO needs to train as it will fight, not only against identified enemies, but against systems that are meant to take advantage of our seams. Incorporating C-IED across all domains and levels of planning is a key step in that process.



The projects: Partnering with universities and other institutions

Over the past fifteen years, the Counter-Improvised Explosive Devices Centre of Excellence (C-IED COE) has evolved from a foundational NATO initiative into a globally respected node for innovation, operational support and concept development. At the heart of this transformation lies one of its most significant assets: its ability to foster meaningful partnerships with a wide range of academic institutions, research bodies, and public and private organizations. These collaborations have been critical in advancing both NATO's strategic capabilities and the wider counter-IED community.

Strength through Synergy

From its inception, the C-IED COE understood that defeating the IED threat required more than just military might; it demanded intelligence fusion, technological integration, forensic science, and cross-disciplinary research. This realization prompted the Centre to seek alliances beyond traditional defense channels. The result has been a vibrant and expanding network of partners: from universities and innovation hubs to governmental agencies and private sector companies.

Some of the most notable collaborations to date include partnerships with experts from Universidad Politécnica de Madrid, Universidad de Oviedo, Universidade do Minho, Uni-



versidad de Vigo, Instituto Nacional de Técnica Aeroespacial (INTA), Instster (Oesía group), the Spanish Guardia Civil and Policía Nacional, and the Spanish International Demining Centre. These relationships have enabled joint research, training support, and capability development across a variety of operational domains.

Project Highlights

The Centre's history is marked by significant involvement in high-impact research initiatives. Some of the most emblematic past projects include:

- SAFEDRONE: A UAV-mounted Ground Penetrating Radar imaging system for the detection of buried IEDs.
- Explosively Formed Projectiles (EFP) Using Homemade Explosives (HME): A study of the evolving threat posed by non-industrial IED materials and designs.
- PRINSE: Protection of infrastructures and systems against explosions through the development of advanced protective coatings.
- AKHENATON: Advanced Kit of High ENer-

gy Absorbing and light material for side armour add-ONs.

Looking ahead, one of the Centre's most ambitious research efforts aims to develop an advanced underwater robotic platform for detecting improvised explosive devices in maritime environments. This project will represent a bold step into Multi-domain innovation and will demonstrate the Centre's forward-looking posture.

Evolving Funding Strategies and Expanded Horizons

Historically, C-IED COE projects have relied heavily on contributions from sponsoring nations or NATO-affiliated funding channels. While these sources remain vital, the Centre has recently initiated a strategic shift towards diversification and expansion of funding opportunities.

A milestone in this direction has been becoming the first NATO Centre of Excellence to be registered and authorized on the European Union's Funding and Tenders Portal, opening access to a wide range of EU research and innovation programmes.

In parallel, the Centre is building new relationships with institutions such as the Engineering School of the Universidad de Comillas (ICAI) or the Institute of Advanced Studies on Materials (IMDEA), with whom no prior collaborations ex-

isted. These new connections not only create opportunities for alternative funding, but also allow the Centre to broaden its strategic contact network and remain at the cutting edge of scientific and technological progress.

Looking Forward

As the C-IED threat continues to evolve in complexity (encompassing not only conventional IEDs but also hybrid and cyber-physical threats), what remains clear is that success in this mission does not rest on the shoulders of one institution alone. Instead, it is built on shared purpose, pooled knowledge and trusted cooperation. For fifteen years, the C-IED COE has been proud to stand shoulder to shoulder with its partners. As new challenges emerge, that spirit of collaboration will remain at its greatest strength.



Nations
13

Current member nations

Current Staff

62

Military, Law Enforcement, other agencies, civil servants & contractors

Attendees to courses and events

3710

Nations
+6

New member nations since COE creation

Since 2010
180 SME

Military and Law Enforcement subject matter experts from **13 nations** have been part of COE

Activities
237

149 Courses and multiple Events

Doctrine

 **42**

Allied Doctrinal docs, 2
under direct COE Lead



Abroad

Mobile Training Teams (MTT)
& Defence Capacity Building
(DCB) Projects
Iraq, Jordan, Tunisia, Algeria,
African Union, West Africa,
Ukraine
Africa, Middle East focus

NEW Pakistan,
Georgia

R&D
 **+15**

Coordinated 10
owned projects and
participated in
others

Accredited
2025



NATO Quality Assurance
(A) as an Unconditionally
Accredited NATO
Education and Training
Facility (ETF)

2030

Reports
1.437

Sent to provide insight
into IED threat situation
and challenges

Cyber
+1.000.000
 **/year**

Top target, with millions of
attempts. Managed 22
Cyber Incidents

Main Events

Considering current conflicts and the environment, the threat posed by Improvised Explosive Devices (IEDs) remains one of the most persistent and evolving challenges faced by military forces, law enforcement agencies and security partners worldwide. The fight against IEDs demands not only tactical proficiency on the ground but also a sustained, multidisciplinary approach that integrates technology, intelligence, training and interagency cooperation. At the C-IED COE, we are deeply committed to supporting the community through a series of targeted events, workshops and conferences.

These events are designed to foster the exchange of operational experiences, promote innovation in detection and mitigation technologies, and enhance the interoperability of C-IED efforts across national and Allied defense structures. Our events bring together a diverse range of participants, including military practitioners, technical experts, policy advisors and industry partners who share a common goal: to improve collective capabilities in countering the IED threat in all its forms.

Beyond conventional professional development, our workshops and conferences serve as mission-critical venues for advancing the state of practice and identifying capability gaps. Through scenario-based discussions, technical demonstrations and collaborative dialogue, we





aim to support the readiness and resilience of the C-IED efforts.

The main events we have organized are the Lessons Learned Workshop (LLWS), the Interagency Workshop (IAWS), the Technology Workshop (TECHWS) and the Technical Exploitation in Water Environments (TEWE) seminar.



On a biannual basis, the C-IED COE organizes the C-IED Lessons Learned workshop (LLWS), where different experts in the field meet to analyze accumulated experience and learn from past events to improve the various aspects of C-IED. The aim of the LLWS is to contribute to the NATO Lessons Learned process and to increase the knowledge of missions that different nations/agencies are conducting in countries with an IED threat to facilitate and enhance interaction in the multinational C-IED community.



Technical exploitation (TE) of Collected Exploitable Material in a maritime environment is of increasing importance for both military operations and domestic security. The TEWE seminar provides critical information to support force protection and targeting, as well as contributing to unveiling anonymity and supporting attribution.

This year, the C-IED COE decided to combine its two main events, TECHWS and IAWS, and started to organize a broader event called C-IED COE Annual Conference (CIEDAC).

CIEDAC covers broader topics including threat updates, technical exploitations, emerging and disruptive technologies, among others.

CIEDAC25 is the result of 15 years of experience in the organization of specialized events and other technical and doctrinal forums. With this new format, we bring together these efforts into a single, unified platform, one that brings

coherence, critical mass and greater strategic visibility to the work of the Centre.

This conference is designed to gather military professionals, law enforcement representatives, researchers, policy advisors and industry innovators in a collaborative space where knowledge can be shared and translated into action.



Lessons Learned.

We are a learning organization

One of the four strategic pillars guiding NATO-accredited Centres of Excellence is their contribution to Analysis and Lessons Learned. The C-IED COE embodies this responsibility not only by supporting NATO's formal processes, but also by fostering a proactive, self-improving learning culture.

At its core, this means the Centre actively collects, analyses and reports on C-IED developments worldwide, regardless of whether NATO is directly involved. This task is carried out primarily by the Attack the Networks and Defeat the Device branches, which maintain continuous situational awareness of threat actors, evolving TTPs (Tactics, Techniques and Procedures), and technological trends in the use of IEDs. This knowledge enables timely assessment of global developments that may affect NATO today or shape future operational scenarios.

This intelligence is not stored in isolation as it directly informs two other critical pillars of the COE:

- **Education and Training:** The Centre ensures that its NATO-listed and specialized courses reflect current threat trends. Participants gain not only doctrinal knowledge, but also insights on recent events, emerging technologies, and tactical adaptations, allowing them

to return to their units with relevant, actionable expertise.

- **Doctrine Development and Standardization:** The COE's contributions to NATO doctrine are grounded in reality. Its analysis feeds into doctrinal updates, ensuring that NATO procedures evolve alongside the threat.

Beyond this organic learning model, the COE also plays a formal role in the NATO Lessons Learned (LL) Process for the C-IED discipline. A designated Lessons Learned Staff Officer, assigned to the Prepare the Force branch, leads the coordination of LL tasks across the Centre's work and ensures full alignment with NATO guidance.

This officer monitors the NATO Lessons Learned Portal, reviewing Lessons, Observations and Recommendations arising from NATO operations, exercises and experimentation. These insights enrich our educational programmes and help anticipate gaps in doctrine or training.

The Centre also promotes a broader culture of learning within the C-IED community, using three key tools:

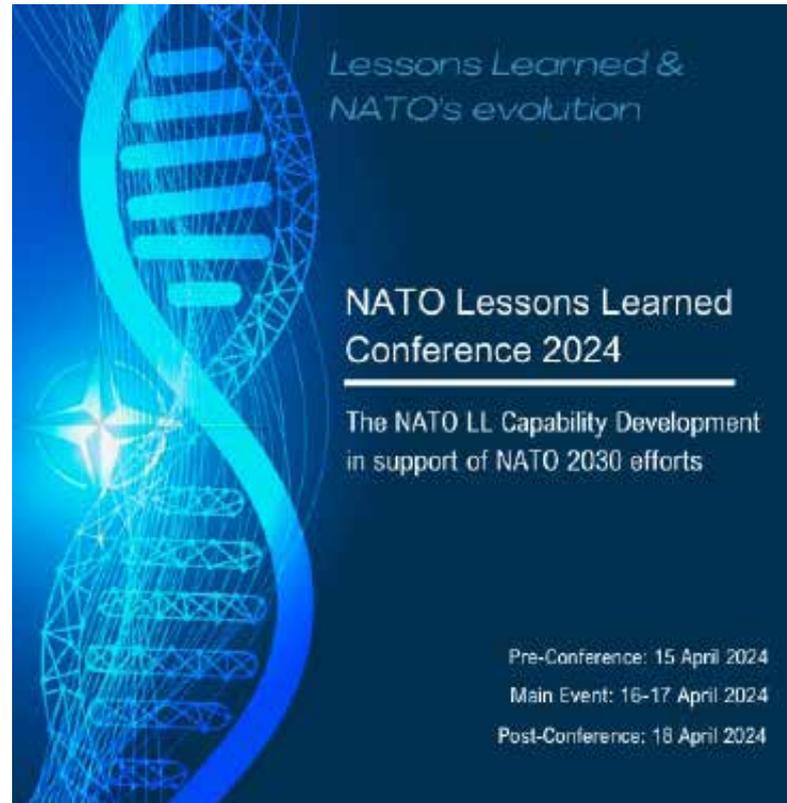
- Lessons Learned briefings are integrated into most courses to expose participants to

the process and reinforce its relevance.

- The biennial C-IED Lessons Learned Workshop brings together NATO HQs, national experts and practitioners to share findings and propose doctrinal or procedural changes. The 2024 edition (its 10th) was conducted as a live, accelerated LL cycle, with real-time contributions from strategic and tactical stakeholders.
- The COE serves as moderator of the C-IED Community of Interest hosted on the NATO LL Portal (both Unclassified and NATO Secret domains). This digital platform supports peer-to-peer exchange of reports, studies and discussions, serving as a dynamic hub for the discipline. In parallel, the COE has recently launched an internal Lessons Learned Process, formalizing self-assessment mechanisms that improve internal workflows, events and outputs.

Finally, the C-IED COE works closely with both the Joint Analysis and Lessons Learned Centre (JALLC) in Lisbon and Allied Command Transformation (ACT), actively contributing to NATO-wide LL events, products and methodology refinement. This includes participating in the Annual NATO Lessons Learned Conference, leveraging JALLC training, and aligning with ACT-led coordination of LL responsibilities across Centres of Excellence.

Through these activities, the C-IED COE stands not only as a source of subject matter expertise, but as a living example of adaptability, reflection and forward-thinking practice, hallmarks of a mature and future-ready learning organization.



preciated by the C-IED Community of Interest.

During these past years, the publishing activity of the C-IED COE experts has been mainly dedicated to reports which are not based on periodical analysis, but produced in occasion of opportunity, and covering different fields of expertise, like the following:

- Tactical and technical developments in the Ukrainian theatre of operations.
- Protection and mitigation projects and measures.
- Threat dynamics related to religiously motivated extremist violence.
- Explosive-laden unmanned vehicles.
- Trends in maritime threats.
- Online distribution of propaganda and training material.



CHAPTER IV: WAY AHEAD

The world then and now

Around 2007, when the plans to found the C-IED Centre of Excellence started, the IED-related threat was mostly based on the dynamics of adversary human networks in Afghanistan, along with the growing threat from the self-named “Islamic State in Iraq” and from the emerging self-named “Al Qaeda in the Islamic Maghreb”.

From 2010 on, in parallel with the increase of violent activities and territorial control, the on-line propaganda by both DAESH & Al Qaeda was quite intense and effective, making their global influence grow: the publication of videos, posters and digital magazines evidenced a robust media structure by the religiously motivated extremist violent organizations.

Later, the loss of territorial control by DAESH in Sham and Levant (Iraq & Syria) was followed by the spread of the “wilayats” (provinces) in Asia and mainly Africa, which have been the expansion areas of both Al Qaeda and DAESH.

From 2014, in parallel with the worrying news coming from Africa, the crisis in Ukraine allowed the penetration of elements from DAESH in Khurasan Wilayat (ISKP) inside European territory, while providing terabytes of valuable technical and tactical information to all sort of violent extremist organizations, including terrorist groups.

Although NATO considers that its main security risks come from the Russian Federation (and from China as an economic competitor), the concept of countering terrorism inside the Alliance has been persistently maintained in its strategic documents.

In 2025, the facts and estimates are evidencing that the threat from adversary human networks is still present and progressively growing. Africa is currently a favorable space for DAESH/AQ to establish a wide territorial domain (even threatening the Gulf of Guinea). From 2013 on, the attacks/plots from religiously motivated radical violent groups in Europe have increased, with worrying links to DAESH in Khurasan and DAESH Somalia. Moreover, the online activity by DAESH/AQ is not only still relevant and resilient, but also increasing their focus on promoting the use of explosive/incendiary devices and on providing instructions for the manufacture of homemade explosives and IEDs.

As a conclusion, the prospective analysis is pointing at the persistence of IEDs as future weapons of choice, which makes C-IED still valid and of course necessary in the medium term.

The IED evolution

In nature, the IED is one of the preferred weapons of choice used by guerrillas, insurgency, terrorism... during any asymmetric conflict, as an IED is a cheap, effective and sounding way of putting conventional forces under pressure.

From 2002, the evolution in the use of IEDs in Afghanistan theatre of operations went from simple incendiary devices to the use of homemade explosives, from wire command to radio controlled IEDs, from landmines as main charge to non-metallic content pressure plates, from blast effects to directional fragmentation charge (DFC), and from plastic containers filled with bulk HME to improvised munitions dropped by drones.

Later, the Iraqi theatre of operations worsened the situation regarding the threat posed by the use of IEDs by adversary human networks: the explosively formed penetrators/projectiles (EFP) were able to defeat any kind of mine-resistant ambush-protected (MRAP) vehicle, the radio control switches were progressively sophisticated and combined with other IEDs to trespass the coalition inhibitors, the main charges of explosive were increased, the multi-switched IEDs (also called “Christmas tree lights”) made the movement harder, and the roadside fragmentation IEDs were multiplied.

The raise of DAESH in Iraq and Syria also brought the development of improvised rocket

assisted munitions (military rockets modified with added improvised containers filled with explosive or incendiary substances), the use of unmanned aircraft systems as IED platforms, the modification of conventional munitions, the launching of IED barrels from helicopters, the wide use of vehicle borne IEDs (even up-armored, weaponized and/or fitted with homemade rocket launchers), and the manufacture of improvised antitank portable rocket launchers.

The development of IEDs in Africa has been mostly subject to the use of commercial-off-the-shelf (COTS) radio control devices, the simplicity but effectiveness in the IED designs, and lately, the use of explosive-laden drones as UAS vehicle borne IEDs (VBIED).

Along with that, the Ukrainian conflict is showing



how proxy forces, but also conventional forces, could make use of improvised explosive devices in the form of first-person view (FPV) UAS vehicle borne IEDs, modified conventional munitions, sophisticated victim operated switches, and 3D-printed components and complete devices.

This conflict is also proof of how tactics, techniques and procedures regarding the use of IEDs are evolving dramatically.

As a conclusion, there are currently two main sources of ideas and technical information for the manufacture and tactical use of IEDs by violent extremist organizations (VEOs):

- Ukrainian and Russian sided elements widely and openly distributing videos, pictures, tutorials, technical inputs, manuals and instructions on HME/IED manufacture and tactical use (including 3D-printing and explosive-laden drones).
- Religiously motivated violent extremist organizations (mostly DAESH, but also Al Qaeda related) social media and forums, which have evidenced an increase in the distribution of manuals and propaganda on the use of improvised explosive devices.



The challenges of Multi-Domain

1. NATO's Transformation and the Warfare Development Agenda

To maintain its military edge in an era of strategic competition, hybrid threats and rapidly evolving technology, NATO is undergoing a historic transformation. This transformation is guided by the NATO Warfighting Capstone Concept (NWCC) and the supporting Warfare Development Agenda (WDA), both steered by Allied Command Transformation (ACT). The NWCC describes the need for NATO forces to become more agile, data-driven, integrated and adaptable, and to develop new methods for understanding and outpacing adversaries. It calls for the Alliance to transition from an industrial-age command model to one characterized by decentralized execution, mission command and greater initiative at all echelons.

The WDA operationalizes this vision through five core Warfare Development Imperatives: Cognitive Superiority, Integrated Multi-domain Defence, Layered Resilience, Influence and Power Projection, and Cross-Domain Command. These imperatives address not only technological change, but the increasingly complex environments in which NATO must compete, deter, and, if necessary, fight. Although much of this transformation is in progress, the C-IED COE has anticipated and exemplified many of these concepts in its daily work for over a decade.

2. C-IED as a Strategic Enabler: Anticipating the Agenda

The NATO Strategic Concept 2022 identifies terrorism as 'the most direct asymmetric threat to the security of our citizens and to international peace and prosperity'. It affirms that NATO will 'enhance our awareness, prevention, preparedness and responsiveness to this threat, including through intelligence-sharing, training and education, and work with partners'. The NATO Secretary General's Annual Report 2024 supports this view, stating: 'Terrorism continues to pose the most significant asymmetric threat to NATO's citizens. NATO is investing in innovation and interoperability across areas such as C-IED, biometrics, battlefield evidence, and counter-UAS'.

This strategic positioning places the C-IED COE at the core of NATO's evolving posture. Through its doctrine, education, operational support and multinational exercises, the Centre ensures NATO is not only protected from IED threats, but it is also proactively shaping the environment to prevent them. The Capstone Concept recognizes that strategic advantage will come not just from superior firepower, but from superior thinking, a principle central to the C-IED approach.

3. Multi-domain Operations and C-IED

NATO defines Multi-domain Operations (MDO) as the ability to conduct synchronized actions across all operational domains (land, air, maritime, cyber and space) and in coordination with the information and cognitive dimensions. These operations aim to deliver effects that shape the strategic environment, contest adversaries' actions, and prevail in conflict. According to the NATO Warfighting Capstone Concept (2021), MDO enables the Alliance to act with speed, scale and precision in an integrated manner, ensuring that the Military Instrument of Power contributes to deterrence and defence in concert with other instruments of power.

The Counter-IED mission aligns naturally with the MDO concept. Since its inception, C-IED has operated across domains and actors:

- IEDs may be emplaced in physical terrain but are planned in cyberspace, funded through financial systems and often inspired via digital propaganda.
- Counter-IED responses integrate intelligence, engineering, cyber, legal and psychological tools, often combining civil and military capabilities.
- The 'Attack the Networks' approach anticipates the core of MDO: integrated, anticipatory and cross-domain decision-making.

Thus, the C-IED COE offers NATO a mature operational model of MDO implementation. Its experience in synchronizing across domains

and actors makes it not just a supporting tool but a pathfinder in NATO's Multi-domain transformation.

4. C-IED and the Warfare Development Agenda

The C-IED COE actively supports all five imperatives of the WDA:

- Cognitive Superiority: The Centre's Human Network Analysis and Targeting (HNAT) and OSINT capabilities help NATO gain understanding and decision advantage. This is foundational to disrupting the IED system before it manifests. From a doctrinal standpoint, the AtN approach integrates the key blocks of NATO's cognitive warfare concept: awareness (sensing), understanding (sense-making) and advantage (acting).
- Integrated Multi-domain Defence: The C-IED COE was operating in a Multi-domain, inter-agency environment well before MDO became a formal NATO priority. It fuses actions across land, air, maritime and cyber domains (plus the cognitive dimension of operations) and engages with civil, police, legal and intelligence sectors. Military and non-military activity synchronization (often termed 'interagency') is a fundamental attribute of C-IED work.
- Layered Resilience: IEDs target movement, confidence, governance and operational tempo. The Centre supports resilience by prepar-

ing friendly human networks, delivering C-IED training, supporting DCB engagements and generating tools that protect institutions and populations from disruption.

- **Influence and Power Projection:** C-IED is inherently offensive in its effect. By dismantling IED production chains and exposing malign actors, the Centre shapes conditions that enable deterrence and power projection. Its support to NATO missions in Iraq, Ukraine and Jordan are real-world examples.
- **Cross-Domain Command:** By developing doctrine like AJP-3.15, facilitating multinational C-IED exercises and supporting HQ-level planning, the COE strengthens commanders' ability to operate in complex threat environments. This reflects the Capstone Concept's call for cross-domain synergy, initiative-based leadership and dynamic targeting cycles.

5. Strategic Impact and Future Alignment

Fifteen years ago, this Centre was established in response to one of the most persistent and lethal threats to NATO forces: Improvised Explosive Devices. Since then, the C-IED COE has evolved from a focused capability centre into a strategic enabler of NATO's transformation, embodying the spirit of innovation, cooperation and resilience that our Alliance demands.

As NATO continues to adapt to a rapidly changing and unpredictable security environment,

the role of Centres of Excellence—particularly those like the C-IED COE with deep operational relevance and technical mastery—has never been more essential. The Centre's work directly supports ACT's mission and the four pillars of NATO's transformation:

- Education, Training, Exercise and Evaluation (ETEE)
- Analysis and Lessons Learned
- Doctrine Development and Standardization
- Concept Development and Experimentation

Over the past decade and a half, the C-IED COE has consistently demonstrated its value through contributions to NATO operations, exercises and innovation efforts. From developing cutting-edge counter-IED strategies to advising NATO missions and refining doctrinal concepts, the Centre has become a cornerstone of NATO's defensive posture. Its operational flexibility, combined with rigorous subject matter expertise, exemplifies how NATO-accredited COEs—operating outside the formal Command Structure—can deliver agility, speed and depth of knowledge that help shape the future force.

ACT is guided by three strategic imperatives:

1. Shaping how NATO fights and contests.

2. Delivering interoperable capabilities on time.
3. Analyzing future threats through evidence-based foresight.

In this context, the C-IED COE is well-positioned to support projects that integrate Multi-domain capabilities, counter emerging threats like autonomous weapon systems, and enhance NATO's collective resilience. Its active role in supporting upcoming transformation initiatives, such as advanced training concepts and rapid innovation sprints, will be vital to maintaining our edge.

6. Looking ahead

Looking forward, the continued relevance of the C-IED COE lies not only in its operational adaptability, but in its conceptual foresight. As NATO sharpens its focus on the imperative of Cognitive Superiority, the Attack the Networks approach offers a tested framework to operationalize awareness, understanding and decision advantage. However, as emphasized in the Warfare Development Agenda, the full realization of cognitive advantage remains hindered by enduring challenges in intelligence collection and processing, areas where Allied investment has lagged since early operations in Afghanistan and Iraq.

The COE's Multi-domain expertise positions it to influence emerging concepts, such as Cognitive Warfare, which blends cyber, information-

al and psychological tools to shape perception and behavior. Likewise, the notion of Layered Resilience, often viewed through a civil preparedness lens, gains new meaning through the C-IED lens: by preparing and protecting friendly human networks, and degrading those of the adversary, the Centre contributes to the Alliance's institutional strength.

In essence, the C-IED COE embodies a living model of NATO's Multi-domain and interagency aspirations, not only reacting to IED threats but actively shaping the doctrinal and conceptual landscape in which NATO will fight and prevail.

Adapting to the Future: Possible Paths for the Evolution of the C-IED COE

Since its accreditation in 2010, the C-IED COE has been a unique instrument in NATO's toolbox. Created with the mission of supporting the Alliance, its partners, and the international community in the fight against improvised explosive devices and the threat networks that employ them, the Centre has delivered tangible results for more than fifteen years. By supporting operations, it has helped reduce casualties, protect freedom of movement, and strengthen multinational interoperability in asymmetric environments.

Fifteen years on, the security landscape in which the C-IED COE operates is changing at an accelerated pace. The type of threat once centered almost exclusively on land-based IEDs has now evolved into new, more complex manifestations across the physical domains: unmanned systems carrying explosives, improvised weapon systems built with commercial components, or hybrid networks blending criminal, insurgent, and state-backed actors. Moreover, the operational environment is no longer restricted to physical battlefields—it now encompasses the cyber domain as well—considering also the cognitive warfare as one of the most significant factors, where influence, disinformation, and disruptive technologies also play decisive roles.

In this context, the Centre is confronted with a crucial question: how should it adapt to remain relevant and effective in the future strategic environment? The answer is not a single path, but rather a set of possibilities currently under reflection. No final decision has been made, but discussions within the Centre, with Allied Command Transformation (ACT), and among Sponsoring Nations are pointing toward several avenues of adaptation.

Structural Adaptation: From Three Pillars to Four

The current three-pillar structure of the C-IED Centre of Excellence does not align with the standardized framework of NATO's Centre of Excellence (COE) program, as defined by Allied Command Transformation (ACT). This misalignment limits the Centre's flexibility and resilience, reducing its ability to effectively contribute to Warfare Development and meet the evolving requirements of the Alliance in a complex, multi-domain operational environment.

In an era defined by rapid change and emerging threats, NATO COEs must continuously evolve to remain relevant and mission effective. To serve the Alliance optimally, COEs are expected to deliver recognized expertise and operational value within clearly defined sub-

ject matter areas, structured around the four foundational pillars of NATO's COE program: Education, Training, Exercises and Evaluation; Analysis and Lessons Learned; Concept Development and Experimentation; and Doctrine Development and Standardization.

We need to remove the “Stigma of the Past” where C-IED capabilities are often narrowly perceived—both within the Alliance and beyond—as tools primarily designed to counter Terrorism, Insurgencies, or Violent Extremist Organizations (VEOs). This legacy view overlooks the broader applicability of C-IED in high-intensity, peer-conflict scenarios, particularly within Multi-Domain Operations (MDO) under Article 5 conditions. By realigning the COE's organizational structure with current NATO guidance and MDO-focused direction, the Centre will position itself for broader relevance and increased acceptance across the Alliance. This transformation will enable more effective support to exercises, doctrine and standardization efforts, concept and capability development, and education and training initiatives—ensuring C-IED remains a vital enabler in future warfare.

Expanding the Mission: Beyond Counter-IED

With the new structure established, a comprehensive assessment will be undertaken to ensure the C-IED COE remains aligned with NATO's evolving priorities and future operational

requirements. Identifying potential enhancements to the Centre's mission and expertise, including the integration or expansion of complementary activities such as Technical Exploitation, Battlefield Evidence, and Emerging Threats — strengthens the Centre's relevance across the broader spectrum of C-IED operations.

Modern conflicts are demonstrating that the technical exploitation of materials, the analysis of battlefield evidence and the integration of these findings into operational and strategic decision-making are as critical as the neutralization of the devices themselves. The Centre could become NATO's reference institution for both the C-IED and Battlefield Forensics disciplines.

A New Identity?

If these structural and mission-related adaptations are pursued, even the name of the Centre should evolve. One of the ideas already discussed in the C-IED community of interest is the possibility of becoming the Counter Improvised Explosive Systems and Battlefield Forensics Centre of Excellence (C-IES&BF COE). Such a change would better reflect the broader spectrum of threats and the expanded skill set encompassed within the Centre. However, it is important to stress that this remains a proposal under study, not a decision. This identity shift is essential to ensure the COE remains future-ready, interoperable, and aligned with

NATO's evolving warfare development agenda.

Looking Ahead

While the future will undoubtedly present new challenges, the C-IED COE stands resolute in its commitment to readiness. Its deep expertise in human network analysis, targeting, intelligence fusion, and interagency cooperation forms a robust foundation for any path forward. Whether through alignment with NATO's four-pillar framework, an expanded mission encompassing battlefield forensics, or the evolution of its name and identity, the Centre remains agile and forward-looking—poised to maintain its relevance and reinforce Allied and Partner security in an ever-changing threat landscape.

This anniversary marks not only a celebration of the Centre's fifteen years of meaningful impact, but also a pivotal moment to consider the pathways for its future evolution. Whatever direction is ultimately chosen, one guiding principle will remain unwavering: to ensure that the C-IED COE continues to serve NATO, its member nations, and partners as a trusted nexus of expertise, innovation, and collaboration in countering ever-evolving threats.

CHAPTER V: THE HUMAN SIDE

A multi-cultural team

In the scenic foothills of the Sierra de Guadarrama, the C-IED COE stands as a hub of operational knowledge, strategic insight and technical innovation. But beyond its doctrinal outputs and training programmes lies a deeper and more resilient force: the people. Thirteen nations. One team. And a mission forged not only in theory, but in loss, sacrifice and shared determination.

Every nation represented at the C-IED COE—Spain, Canada, the Czech Republic, France, Germany, Greece, Hungary, the Netherlands, Portugal, Romania, Sweden, Türkiye, and the United States—has felt the impact of IEDs. These nations have lost soldiers and civilians in theatres like Afghanistan, Iraq, Mali, Lebanon and beyond.

Their contingents have endured roadside bombs, suicide attacks and complex ambushes using improvised devices, tactics that exploit the very fabric of human vulnerability and disrupt the moral and operational tempo of entire missions.

This collective experience is not theoretical. It is personal. Many of those who serve here have been deployed abroad. Some have lost comrades. Others carry invisible scars. All of them understand that the fight against IEDs is not just technical: it is emotional, political and human.

In this context, the presence of a multinational team is more than a formality. It is a necessity. The C-IED COE is powered by a rotational team of experts from thirteen NATO nations, who typically serve for three years. These are not just liaison officers or observers: they are active contributors, embedded in planning, analysis, training and innovation. They bring their national doctrines, lived experiences and cultural perspectives into a shared framework, constantly enriching the Centre's collective knowledge.

This mosaic of backgrounds fosters not only operational creativity but also empathy. When someone speaks of IEDs in Afghanistan, Lebanon, or the Sahel, the person next to them often responds not with theory, but with firsthand experience.

Culture as a bridge, not a barrier

Beyond the mission, life at the C-IED COE embraces the richness of cultural exchange. Throughout the year, the Centre celebrates 13 International Days, where each nation hosts a festive event featuring its national cuisine, music and traditions. These moments offer more than entertainment. They build mutual respect and understanding, reinforcing the idea that our differences are strengths, not obstacles.



Based in Spain, working all over the world

For fifteen years, the Counter-Improvised Explosive Devices Centre of Excellence has operated from Spanish soil, yet its influence extends far beyond Europe's borders. From its headquarters in Hoyo de Manzanares, the C-IED COE has projected expertise and support to every corner of the globe where NATO and its partners face the evolving IED threat. Our teams have contributed to working groups at NATO headquarters in the United States and Europe, advised Defence Capacity Building efforts in Africa and the Middle East, and delivered conferences, workshops, and courses all over the world. Wherever the Alliance or other institutions require our presence, the Centre is ready to deploy knowledge, skills, and people.

The comprehensive approach we apply—blending intelligence, training, technology, and doctrine — begins in Spain but reaches far beyond its borders. The C-IED COE delivers expertise with tangible impact. Through a continuous projection of knowledge and support from Spain to the world, enhancing the readiness of forces and, above all, saving lives.

Life at the C-IED COE is uniquely international. As foreign professionals working in Spain within a NATO-accredited institution, we live in a global environment while remaining firmly rooted in our host nation. Our daily work involves crossing borders, both physically and intellectually,





to engage with diverse partners, strengthen cooperation, and represent the Centre in multinational initiatives. These engagements — whether advising senior leaders, contributing to doctrine development, or supporting operational cooperation — reinforce the importance of collective effort in addressing complex threats.

Spain provides an ideal base for this mission. Its strategic location, long-standing commitment to international security, and welcoming environment make it a natural platform for global outreach. After every mission abroad, returning to this stable and supportive setting allows our staff to sustain balance and continuity, which is crucial for long-term effectiveness.

The Centre's true strength lies in its multinational character. Over the years, the C-IED COE has brought together more than a dozen NATO and partner nations, represented by subject matter experts from armed forces, law enforcement, and intelligence services. This diversity fosters creativity, adaptability, and a global perspective — all indispensable qualities for countering a threat that is constantly evolving.

Being a foreign officer or civilian serving in Spain while contributing to global missions captures the essence of modern international service. It requires adaptability, cultural awareness, and commitment to a shared purpose. Our Spanish colleagues, who stand alongside us every day, embody this same spirit of cooperation and reinforce Spain's vital role in global security.

Spain is, and will remain, our home base. Yet our mission is without borders. As we look to the future, we remain determined to continue extending our reach — from classrooms in Europe to capacity-building missions in Africa, from multinational forums in Brussels to operational support in conflict zones. The C-IED COE is not only Spanish or European; it is truly global in its vision, partnerships, and impact.

The Memory Tree

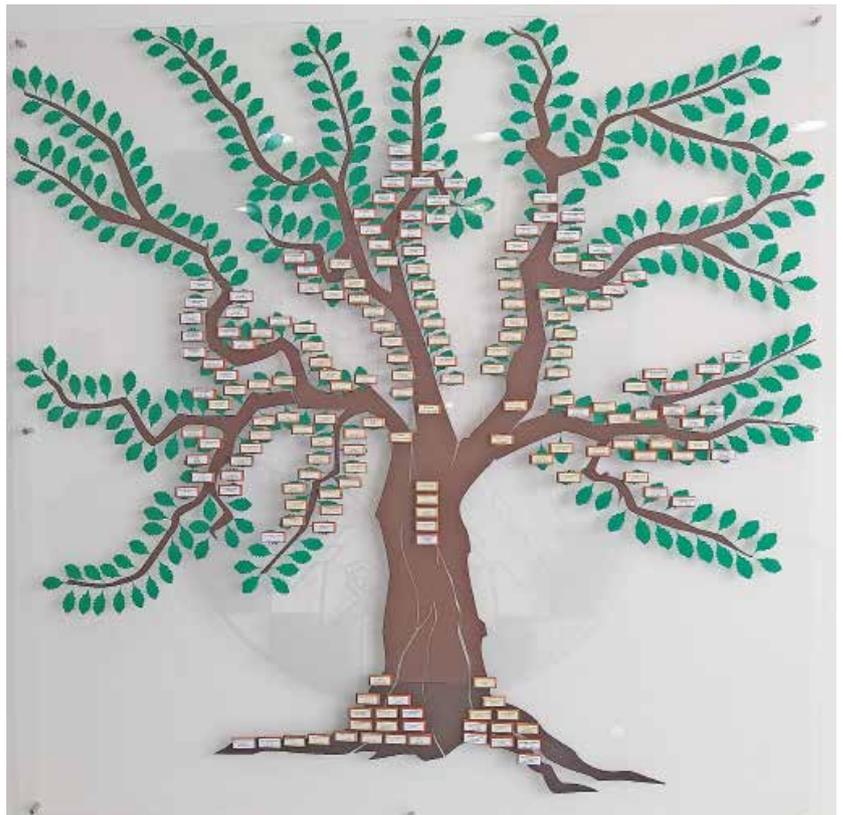
In a quiet hallway of the C-IED COE, a tree grows, not in soil, but on a wall. This tree, though made of wood and acrylic, carries something far deeper than leaves: it carries memory, service and the spirit of continuity.

The Memory Tree is one of the most heartfelt traditions within the Centre. Whenever a staff member completes their tour and prepares to leave the COE, a small ceremony is held in their honour. Before their colleagues, friends and leadership, their name and years of service are placed on the branch that corresponds to their section. Indeed, in the branch of the Branch.

The Director and the Branch Chief offer a few words, highlighting the departing individual's contribution to the mission and the team. Then, the departing member shares final remarks: personal, reflective and often emotional. It is a moment that transcends ranks and nationalities, reminding everyone that behind doctrine and procedures are people who shape the Centre with their presence, ideas and commitment. This symbolic act is more than a farewell. It is a way to preserve legacy. Each name is a leaf in the canopy of our collective memory, and each individual who has served leaves a

mark on the tree and on the organization itself. Their work nourishes what comes next. Their lessons learned help others grow. It is a living metaphor: just as a tree grows by building upon its previous rings, the COE expands by standing on the foundations laid by those who came before.

Over time, the tree has grown more dense, more diverse and more symbolic. Every branch bears testimony to years of multinational coop-



eration, dedication and quiet excellence. In its roots lie the names of the early contributors; in its newer leaves, the promise of the future. This is how the C-IED COE honours its people: not only through ceremony, but through conti-

nunity. The Memory Tree reminds us that no one truly leaves the Centre—they remain, in the roots, branches and leaves of a mission that continues to grow, together.

