DEFENCE AGAINST TERRORISM

EXECUTIVE LEVEL SEMINAR

REPORT

Centre of Excellence Defence Against Terrorism (COE-DAT)

November 8-9, 2023

Disclaimer

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INTRODUCTION

The Centre of Excellence Defence Against Terrorism presents the comprehensive report on the Defense Against Terrorism Executive Level Seminar, a significant intellectual undertaking hosted by the Centre in Ankara, Türkiye, on the 8th and 9th of November 2023.

The overarching theme of the seminar, 'Emerging Threats in Counter Terrorism,' brought together a diverse array of experts and executive level attendees from around the world. Their contributions, spanning a myriad of critical topics, have illuminated the evolving landscape of counter-terrorism efforts.

On the first day, the discussions were enriched by the insights of esteemed scholars such as Dr. Afzal ASHRAF from Loughborough University, shedding light on NATO Strategic Commands' Perspective on Counter-Terrorism. Mr. Gabriele CASCONE and Col. Stefan LINDELAUF provided invaluable perspectives on the strategic plans and policies in this critical area.

The exploration of emerging disruptive technologies, including cyber threats and drones, became a focal point for the first day of the seminar. Notable speakers such as Col. Eric Hartunian and Prof. Alexis Henshaw delved into the intricacies of these technologies and their implications for defense against terrorism. The day concluded with a thought-provoking roundtable discussion.

The second day of the seminar shifted the focus to 'Climate Change and Terrorism.' Mr. Diego F. OSORIO examined the linkages, narratives, and potential action paths in addressing the complex relationship between climate change and terrorism. Assoc. Prof. Senem ATVUR emphasized the critical aspect of climate security, focusing on vulnerabilities and inequalities.

The seminar extended its global perspective to Africa, delving into 'Conflict, Fragility, and Instability in Africa with a look on the Sahel.' Ms. Toulu AKERELE, provided insights into terrorism and counter-terrorism in Africa while Assoc. Prof. Elem Eyrice TEPECİKLİOĞLU navigated the intricacies of security dynamics in West Africa and the Sahel.

This report encapsulates the wealth of knowledge shared during the seminar, highlighting the multidimensional nature of the challenges we face in the realm of counter-terrorism. The Centre

extend its sincere gratitude to all participants, contributors, and organizers for making this event a resounding success.

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Opening Remarks

Col. Bülent AKDENİZ, Director, Center of Excellence Defence Against Terrorism

Generals,

Ladies and gentlemen,

Distinguished participants and lecturers,

I am Colonel Bülent AKDENIZ, the Director of the Center of Excellence Defence Against Terrorism.

It is an honor and a great pleasure to welcome such a distinguished audience to our annual flagship event, the Defense Against Terrorism - Executive Level Seminar.

For those of you who are not familiar with our Centre of Excellence, please let me briefly introduce the center to you.

A NATO Centre of Excellence is an entity offering specialized expertise for the benefit of the Alliance, especially in support of transformation. In 2005, COE-DAT was inaugurated as the second Centre of Excellence among the other 29 that have since been established.

The COE-DAT mission, vision, and comprehensive efforts towards Alliance transformation directly support NATO's three declared core tasks of Deterrence and Defense, Crisis Prevention and Management, and Cooperative Security.

The latest NATO Summit in Vilnius emphasized that Terrorism is a threat to the Alliance. To address that threat, COE-DAT strives to be the hub of a wide network – a community of interest – on Counter-Terrorism expertise for NATO, and to provide key decision-makers a comprehensive understanding of terrorism and counter-terrorism challenges, in order to transform NATO and nations of interest to meet future security challenges.

COE-DAT offers training not only to NATO member countries, but also to Partnership for Peace, Gulf Cooperation, Mediterranean Dialogue, Istanbul Cooperation Initiative, and other global partners. This is one of our Centre's unique contributions to NATO.

COE-DAT has established and maintains relationships with a wide community of interest and collaborates with many other institutions, such as academia, international organizations, other centres of excellence, and military academies in order to build a common understanding of

Terrorism and Counter Terrorism. You will see this reflected in this seminar's outstanding lineup of speakers who will be presenting their valuable perspectives.

Defense Against Terrorism-Executive Level Seminar is a premier opportunity to enhance cooperation, networking and information sharing on terrorism and counter-terrorism matters at a strategic level, between executive level attendees, coming from the Allied and Partner Nations.

The seminar will consist of two days of presentations, panels and discussions. We designed the seminar program to foster debate and the exchange of views among the participants.

We have academic freedom on this venue. As will be expressed generously in our disclaimers, ideas and opinions that are expressed here belong to the speakers and not necessarily represent that of COE-DAT, NATO or Nations.

If you have a different perspective on certain content, you will have an opportunity to express your opinions.

We hope that you will find the seminar informative, engaging, and valuable.

Before we commence the first session, I would like to express my gratitude to our academicians and partners for their tremendous support and participation.

 I would also like to congratulate our entire team for their hard work and dedication.

Finally, a warm welcome to all of the speakers and attendees who have traveled long distances or had to postpone other commitments in order to attend our event, for which I am very grateful!

I hope you will enjoy the seminar and I look forward to hearing your thoughts and feedback throughout the conference.

Thank you for your attention!

DAY I

The first day of the seminar started with a welcoming speech by the seminar director Col. Marcel Horia ARAMĂ outlining the plan of the two days long seminar, which are mainly security challenges, capacity-building efforts, and emerging threats posed by emerging disruptive technologies in both physical world and cyber domain. Specific topics to be covered in the seminar were emerging threats in counter terrorism, emerging disruptive technologies as in cyber and drones, climate change, and conflict, fragility and instability in Africa. It was followed by COE-DAT director Col. AKDENİZ's remarks on NATO reiterating terrorism as a key threat to the alliance in the summit held in Vilnius, on July 2023. In order to come stronger to stand against such a multi-dimensional threat, he highlighted the significance of collaboration with scholars, international organizations, military academies, and other Centre of Excellence. For that very reason, Col. AKDENIZ indicated that panelists with various backgrounds have been brought together in this seminar to exchange views and, by doing so, to foster debate.

SEMINAR OVERARCHING TOPIC: EMERGING THREATS IN COUNTER TERRORISM

Dr. Afzal ASHRAF, Loughborough University, United Kingdom

Focusing on emerging threats in counter-terrorism, Dr. Afzal ASHRAF, who is the academic advisor of the seminar, has paved the way for the next speakers and panelists by talking about tactical and operational capability, the role of strategic miscalculations and generalship in war failures, and the element of a *can-do* attitude in successful warfare. As a simple fact, he reminded audience that militaries are designed, optimized, and configured to apply force for coercion and deterrence. Therefore, it is vital to have and keep that attitude going during wartime as assessing what they cannot do. He also touched upon that terrorism and counter terrorism have shifted from a mostly local and a national threat to an international problem and, in becoming so, terrorism has emerged as more state-sponsored, state-supported and state-exploited, which eventually means that terrorism and counter-terrorism are more inseparable now than before. Importantly, he raised the notion that failure at the grand strategic level cannot be corrected at the operational and tactical level. As a suggestion, he put forward that it needs to be pondered how important it is to develop policy and strategic formulation, and mutual supportive relationship at the grand strategic level as well as geopolitics of state and terrorist

groups need to be studied. He elaborated that policy and strategy should be the key actors to understand and deal with a reality of the situation, yet should not be oriented by the political narratives. As narrative dominance is essentially political, it should not overshadow policy and strategy formulation efforts. Towards the end of his speech, Dr. ASHRAF encouraged the audience to regard this seminar as a safe space to benefit from speakers and challenge them whenever deemed necessary.

NATO Strategic Commands Perspective on CT

Mr. Gabriele CASCONE (ITA), Head of Counter-Terrorism Section, Emerging Security Challenges Division, NATO HQ BRUSSELS

In his the presentation delivered remotely, Mr. CASCONE addressed three points; **the evolution of terrorist threat**, **NATO's role in the fight against terrorism**, and **summary of key NATO counter terrorism initiatives underway**. He analyzed three elements illustrating a change in the nature of terrorist threat; firstly, to advance their agenda, terrorists have been exploiting technology. Secondly, terrorist attacks started to become more of a lone wolf type in comparison with massively organized and well-prepared terror attacks such as 9/11, Paris attacks in 2015, and Brussels attacks of 2016. Mr. CASCONE pointed out the challenges it would pose for law enforcement authorities as they can only neutralize the perpetrator after the attack has been conducted. Thirdly, terrorism does not only disappear from the regions and countries it has manifested itself in, but it emerges in new areas. In this respect, Mr. CASCONE raised the reality that terrorist activities have started to take place in the Sahel region more often. From NATO perspective, he mentioned the importance of working with partners in need to help them establish capacity building.

Moving with the second main point of his presentation, Mr. CASCONE stated that terrorism is seen as an area that cuts across the three core tasks of NATO that are collective defense, crisis management, and cooperative security. In Vilnius summit, leaders also tasked the update of two key NATO documents on countering terrorism; policy guidelines which has not been changed since 2012 and the action plan that usually is updated every year.

As the last part of his presentation goes, Mr. CASCONE mentioned few key NATO counter terrorism initiatives. One he elaborated on was developing capabilities for allies especially to

counter terrorists 'misuse of technology. One of the significant example came across as NATO's recent substantial efforts on countering unmanned aerial vehicles, especially the commercially modified ones. He also brought up the use of crypto currencies and 3D printers to obtain necessary measures to perpetrate a terrorist attack. Mr. CASCONE underlined NATO's efforts on battlefield evidence and technical exploitation to counter terrorist attacks. How allies and partners share information, data, and material they collect on the battlefield is vital for both mission success and law enforcement agencies in bringing terrorists to justice. Concluding his presentation, Mr. CASCONE stated his belief in future policy guidelines to continue to reaffirm the danger terrorism poses both in real life and cyber domain.

Col. Stefan LINDELAUF (BEL SOF), NATO ACT, Strategic Plans and Policy Branch Head

As the second speaker lined up under the theme of NATO Strategic Commands Perspective on Counter Terrorism, Col. Stefan LINDELAUF said that recent terrorist attacks, should not come as a surprise for the audience, but perhaps should stand out as a reminder for the need to be vigilant of terrorism at all times.

Col. LINDELAUF commended the work COE-DAT delivers to keep the issue of terrorism current by sharing knowledge and experiences, and reaffirmed that topics covered in the current seminar are relevant to the threats that terrorism has been most recently posing.

Moreover, Col. LINDELAUF presented NATO Allied Command Transformation (ACT) strategic overview. He discussed the role of NATO HQ ACT with respect to the Centre of Excellence Defense Against Terrorism. He stated that ACT has the privilege of being the champion for the COEs within NATO. He mentioned that ACT regularly promotes COE-DAT to senior leadership both in the US and in Belgium. In addition to that, he stressed that NATO ACT has one of the few offices within NATO that is dedicated to counter terrorism issues full time with Subject Matter Experts (SME). He also said that NATO ACT's responsibilities involve providing all NATO Counter Terrorism Policy, Strategy and Plans with relevant input. Col. LINDELAUF mentioned that his branch is leading the effort to draft the Military Instrument of Power (MIoP) and the assessment for NATO counter terrorism policies. On top of that, NATO ACT has volunteered to lead a few other related counter terrorism efforts.

In the last part of his speech, Col. LINDELAUF has put forward a few strategic observations, and why it is important for them to be covered in this executive level seminar. He argued that

NATO's current counter terrorism policies have been same since the 9/11 terror attacks, which came as a complementary remark to Mr. Gabriele CASCONE'S presentation. The colonel added that NATO has recently struggled to clarify which elements of terrorism are considered critical to the alliance, and this slows down the process of amending counter terrorism policies as well as the bureaucracy and long decision-making process. Whilst NATO takes its time to recognize emerging threats and consider policy changes, Col. LINDELAUF stressed that terrorism itself continues to evolve given technological advancements and terrorist groups' effective use of them. In that respect, cyber security is an area which requires to be addressed carefully within NATO framework. Col. LINDELAUF finalized his speech highlighting the need for collaboration to prevent future acts of terrorism rather than respond to their consequences.

Emerging Disruptive Technologies and Cyberspace

Emerging Technologies for the Terrorist Threat Landscape

Col. Eric HARTUNIAN, Director, Strategic Research and Analysis Department Strategic Studies Institute, U.S. Army War College

The first panel of the seminar focused on emerging disruptive technologies and was held by Col. Eric HARTUNIAN and Dr. Alexis HENSHAW. As the first panelist, Col. HARTUNIAN aimed to elevate the discussions about how emerging threats can be assessed. He analyzed emerging threats under three themes that go as **size of the emerging threats**, **accessibility of them**, and **attribution**. He discussed that the smaller the emerging threats are, the deadlier they can get, and how worrisome is the idea that terrorists may possibly obtain nuclear weapons or some kind of weapons of mass destruction one day, that would happen thanks to the very small yet highly sophisticated objects. Since nuclear weapons continue to remain under the domain of states, they have been inaccessible to terrorists so far. Previous fears of terrorists obtaining nuclear weapons did not yet materialize. Given the size of these weapons, transfer of them for deployment seems impractical and attribution to perpetrators are relatively easy. However, for other emerging threats ability to attribute has decreased and anonymity emerged as a game changer.

Afterwards, Col. HARTUNIAN presented several threat scenarios that are **invisible extinction**, **unmanned killing machines**, **virtual becoming reality**, and **biological threats**. In the first threat scenario oriented around an invisible extinction, he talked about hypothetical weapons designed to attack groups and/or individuals with the purpose of manipulating body or mind and even changing one's DNA. In the presented scenario, such weapons would be so small that they could blend in anything and that it would be almost impossible to spot the attacker or the venue. He also stressed that scale of such potential attack would be immense and this type of technology is believed to be highly targetable. In the second scenario that was about unmanned killing machines, Col. HARTUNIAN mentioned how drones are getting cheaper, easier to fly, and more accessible. According to him, any internet connection would suffice to fly them and it will get easier to weaponize drones. Considering how drones and self-driving vehicles loaded with explosives or chemical/biological weapons can be used to target crowds, critical infrastructure, and destroy crops, it affords terrorists new and more destructive capabilities. Col. HARTUNIAN also stressed the way these drones can be combined with other technological

advancements such as Artificial Intelligence (AI), and in becoming so they can serve different purposes than their intended use. The third scenario presented was about the concept of virtuality becoming reality. Col. HARTUNIAN discussed the ability to harvest AI generated material from social media postings of users where real physical markers are explicitly shown. Through such material, terrorists 'recruitment of vulnerable individuals and online radicalization can be easily organized since that relevant material generally is very accessible, free online, come ready, and not regulated in most countries. In order to exemplify, Col. HARTUNIAN displayed a video where a young man is directed through his glasses by the hologram of a group leader to conduct a terrorist attack in a public place. That propaganda video turned out to be an AI generated one that did not require any special skills and cost no more than 20$ as claimed. He concluded the third threat scenario showing the potential of AI and unmanned reality. In the fourth and last threat scenario, Col. HARTUNIAN covered biological threats and did not forget to mention that there is nothing new about biological threats as they are the most expected type of danger among all emerging disruptive technologies. He discussed it will be easier for malevolent actors to scale the production of biological materials as technology lowers the barriers to access and training needed to handle the material. The colonel also highlighted that detection will most likely become more difficult; increasing probability that perpetrators will successfully acquire the biological materials they are after mainly because of a lack of regulation.

Before concluding his session, Col. HARTUNIAN put forward a few suggestions on what needs to be done to mitigate those discussed threat scenarios. He highlighted the importance of a regulatory framework and he argued that for it to function effectively it needs to be integrated beyond borders. He also pointed out that NATO policies and relevant documents need to be updated. In order to take new and effective measures, fundamental documents should be amended accordingly yet it takes a long time within the organizational dynamics. The speed terrorists are expanding exceeds the way such documents are updated to address the emerging threats. In this respect, Col. HARTUNIAN said that policy makers themselves need to become technologically advanced so they might identify the requirements and develop a strong set of policies. He also focused on cyber resilience and stressed that civilian organizations should be as involved in it as militaries and governments. Lastly, Col. HARTUNIAN argued that the idea of imagination needs to be brought into the picture in order to mitigate possible threat scenarios. Some of the tools, which terrorists have been exploiting to further their cause, were not originally designed as weapons. If terrorists are capable of using imagination to turn such tools

into weaponry the same method needs to be acquired and implemented in a similar fashion to counter it.

Discussion

Afterwards, Col. HARTUNIAN started the Q&A session. He was asked about **deep-fake as a threat factor** which he answered with a clarification that there is nothing illegal about deep-fake as of yet. When it comes to long term vs short term uses and effects of it, he said terrorists can run a perspective between taking an immediate action resorting to deep-fake or preferring its prolonged effects by creating information campaign and videos that can further their purposes. It would not come across as a car bomb terrorist attack; rather it would play out over time by planting sympathy yet not being so noticeable. Another question was raised about **Artificial Intelligence (AI) as a threat factor**. Col. HARTUNIAN put out that AI has not been designed as a threat tool, however given that AI constantly matures and is already mature enough to be misused very easily with almost no training and at a very low cost it appears to be a fascinating threat factor. He also brought up an essential aspect of AI reality: how do we trust it, and how do we know if AI-driven solutions are reliable, not machine distorted measures? Therefore, in his view, there must be a human in the loop to alleviate the reliability problem. Additionally, he suggested that data fluency must be considered in case AI is believed to provide erroneous suggestions. Among a few other threat components, Col. HARTUNIAN was also asked about CBRN and the high yield explosives as a threat factor. He acknowledged the effectiveness of those capabilities and mentioned that technologically advanced means to deliver them would expand their effects. From a counterterrorism standpoint, we should be concerned if those capabilities become accessible to non-state actors through various channels. It would not be so unusual to think that some already available weapons could be mixed up with emerging technologies, making them more effective.

Cyberspace and Defense Against Terrorism
Prof. Alexis HENSHAW, Troy University, USA

Col. HARTUNIAN was followed by the next panelist Dr. Alexis HENSHAW. She concentrated on cyber space and defense against terrorism. Her presentation stood out because it was the only session which brought up the gender aspect of terrorism in DAT Executive Level Seminar of 2023. When it comes to terrorists 'use of cyberspace, Dr. HENSHAW argued that trends demonstrate the decentralization of extremist and/or terrorist threats, as they have been

moving away from mainstream social media platforms. She introduced the concept '*The Manosphere*' suggesting the spread of extremism within the Internet in a way to celebrate men's interests and masculinity. Red pill communities and misogynistic terror attacks such as March 2021 spa shootings in Atlanta targeting women of Asian community were discussed to be the examples of such a reality. 'The manosphere' has been created and maintained through online forums, blogs, channels, and websites. When we look at the common themes of all relevant materials that have been shared and circulated online, it suggests that men and boys are portrayed as the true victims of oppression. Moreover, legal and governmental bodies are believed to be biased against men and boys, and for that reason, masculinity comes under threat. Women and feminists are also seen as central to conspiracy beliefs.

Furthermore, Dr. HENSHAW explained **how terrorists have used the digital platforms with the purpose of recruitment, fundraising, and decentralization**. In order to recruit, terrorists and extremists have been moving towards their offshore media platforms where free speech platforms allowing far-right opinions to be voiced without any censorship. She touched on one of the problems that is likely to occur when they move towards extremist offshoots; it happens passively and in plain sight. She also discussed that users are pushed to more extremist content that is often aided by algorithmic processes, the actual architecture of the social media itself. Dr. HENSHAW then discussed how terrorists and extremist groups use technology for misinformation and disinformation. Citing her own study and analysis, she argued that men's interests embraced in manosphere sites became a repository for QAnon, COVID-19 and vaccine-related conspiracy theories, and election-related conspiracies that started to occupy online platforms after the 2016 US presidential elections. According to the study Dr. HENSHAW has conducted, COVID-19 and vaccine-related conspiracies accounted for 23.3% discussions in manosphere in 2021. Central bank / anti-Semitic conspiracies by 15.1%, anti-Islamic / religious conspiracies by 14.8%, anti-immigrant / white supremacist by 8.9%, QAnon/ Save the Children by 3.9% have followed it. What was also worth noting in Dr. HENSHAW's research is that explicit calls for anti-state violence constituted 6.2% of cross-conspiracy discussions in 2021, on sites included in the study. Moving with terrorists and extremist groups 'use of technologies for fundraising, she stated that past studies and reports show they have been resorting to crypto currencies and blockchain to raise funds, however with the emergence of new technologies it goes further than that. Dr. HENSHAW said some extremist communities are looking at an entrepreneurial way of decentralizing finance and, therefore, experimenting with Non-Fungible Tokens (NFTs) too. As the last element in her presentation

that terrorists and extremist groups aim to obtain using the Internet and new technologies, decentralization suggested that extremist conversations across the Internet does act as real entrepreneurs in their use and navigation of technology as well as capitalizing it. Decentralization prompts the need to reconsider the role of big tech companies vs. others in content moderation.

Before wrapping up her presentation and paving the way for the Q&A session, Dr. HENSHAW presented a few policy solutions. She discussed that outreach to smaller platforms and start-ups should be on the agenda to help them capacity building as they might not have the full linguistic ability to check and regulate the content. She also highlighted the role of diversification in the cybersecurity sector with a dire need to include civil society actors in cybersecurity planning. Taking the concept of manosphere into consideration, Dr. HENSHAW stressed the importance of having more women involved in cybersecurity discussions as the statistics demonstrated that only 9 out of 52 EU cybersecurity plans mention the underrepresentation of women in cybersecurity sector. As a part of her recent study focusing on critical perspectives on cybersecurity, she referred to Pegasus spyware as a cautionary tale. Deployment of Pegasus cyber weapons with counter terrorism purposes was generally seen as desirable. However, deployment of Pegasus against civil society actors, including women's rights activists, shows the challenge of cyber weapons containment.

Discussion

During the Q&A session, Dr. HENSHAW was asked if extremists revolved around the big tent conspiracies come together from different backgrounds and if this is a temporary situation or more like a long-term case. She responded saying that cross-pollination is more likely to be a long-term case as policies to counter are not necessarily keeping up. She said some groups adapt very quickly such as COVID-19 related conspiracy discussion that were taken to different platforms and spread wildly in a short period. She suggested policy-making initiatives need to be more adaptable. The next question was if there is any data showing how many online conspiracy posts converted into real life attacks. Dr. HENSHAW said there is no full list of extremists ending up with conducting real life attacks. However, it is known that a number of terror attacks were held by those extremists who went online and oriented by misogynist discourses in multi-national platforms, and more than 50 people died in both the US and Canada as a reason. She also stated that it is very hard to identify them as they are often branded as a lone wolf, which is not necessarily the case. Another question was raised about transnational nature of cybercrimes and what law enforcement can do about it. She argued there is a data

problem with respect to that. Some incidents are labelled as a cybercrime instead of an extremist attack, which brings different authorities to solve the crime than who actually should be dealing with it. As a policy solution to it, Dr. HENSHAW suggested that how to create a more effective collaboration between law enforcement mechanisms and security agencies should be addressed. Lastly, she was asked about algorithmic processes pushing users to more extremist content and if social media platforms can/should ban such content. She responded saying that in terms of regulation and addressing the problem, a few social media platforms are experimenting with countering speech and trying to foster counter speech, which often leads to more extremist content to be disseminated in sub-platforms. She also discussed an important aspect that is many conversations take place in languages other than English. Therefore, Dr. HENSHAW concluded that having language experts involved in this matter is essential.

Emerging Disruptive Technologies—Drones and CT

Disruptive and Emerging Technologies: A Second Drone Age

Prof. Caroline KENNEDY PIPE, Loughborough University, United Kingdom

The last panel of the first day has been held by Prof. Caroline Kennedy-Pipe and Assoc. Prof. Sıtkı EGELİ on drones and counterterrorism with respect to the emerging disruptive technologies. As the first panelist, Prof. KENNEDY-PIPE has given a brief history of drones and its role in terrorism as well as counterterrorism in a way that has changed the nature of battlefield. She presented the first drone age that covers the period between the end of the Second World War and the aftermath of the Gulf War where the evolution of air power and technology comes forward as the most important aspect of the evolution of warfare throughout the 20th century. The professor specified the first American use of drones in the war on terror was to try, find and eliminate the members of Al Qaeda after the invasion of Afghanistan. However, when we look at the evolution of the use of drones, in an era of American supremacy, Americans had a preponderance and a hegemonic grasp of this type of technology. She stated that the ethical, moral, and technical implications of the first drone age really came into prominence when Barack Obama became the US president in 2009 in its fight against Al Qaeda and the general problem of terrorism across the Middle East, although it started to indicate itself during George Bush's presidency. She discussed that drones have changed the nature of the battlefield and gave the examples of wars in Iraq and Afghanistan where drones are not only used for surveillance but also for precision targeting. Considering the utility of systems such as principle of proportionality and collateral damage, the professor argued there was a wishful thinking that we could move into a risk-free war to reduce fatalities on both sides of the war. During the Obama administration, huge efforts were made to reduce the boot print in those countries in the Middle East, not just to save lives on our side but also to try and instigate a different form of counter-insurgency strategy. When we look at the advantages of deploying drones in the fight against terrorism, Professor KENNEDY-PIPE explained that it can take the place of a human especially in dangerous frontlines and it can deliver packages over distance and in wild terrains. Moreover, surveillance of the enemy becomes easier through drones. Precision targeting, suspect identification and enemy neutralization, are among the other benefits of having drones involved in warfare. From a counter terrorism perspective, the professor said that it can help to demoralize the enemy forces, the insurgents, by finding and

eliminating terrorists groups in dangerous terrain, as it has been the case with members of DAESH. Drones have an appealing benefit for states looking to reduce the cost of war through their deployment. However, she also pointed out that the enemy will always find a way to exploit the nations' vulnerability to drone attacks. The fact that currently at least 65 armed groups around the globe are able to deploy drones demonstrates it. We need, therefore, to look into how to implement defenses and resilience to rebuke an enemy involved in drone attacks, spoofing, sworn attacks, etc. and how these could be countered technologically.

Professor KENNEDY-PIPE later presented the second drone age and identified that targeting of economic infrastructure through drones was one of the main characteristics of this age. Disruption of oil production sources and high-profile assassinations have also become prominent in the second drone age. Professor talked about drones employed by terrorist groups and non-state actors to have long range, large war heads, air burst explosive capacity, and possible proximity fuse. She also mentioned that we have seen them used in places like Yemen. Moreover, she explained that those drones with GPS transmitter technologies are ever-more sophisticated and frequently used. She then referred to continued strikes on Western and allied targets in the recent years. She added that "one-way drones" were commonly used on attacks on international shipping, capital cities, industrial areas where oil pipelines and airports are located, US bases and diplomatic sites where American and Western assets are based in. To exemplify, professor briefly mentioned the latest Hamas attack on Israel adapting commercial quadcopter drones to drop explosives that disabled surveillance towers along the border fence.

Before concluding her presentation, Professor KENNEDY-PIPE put forward a few possible solutions such as drone technology and control regime (DTCR) on prohibition of the use of drones, limiting global proliferation of the next generation of weaponized drones, additional tariffs, licensing, quotas, tracking and focused border checks. She also suggested close monitoring of maritime drones in the North Atlantic as well as in the Arctic since oil, gas and rare earth minerals lying there. Lastly, the professor touched upon the space as one of the emerging threats and raised an important question about how space will be weaponized in near future.

Emerging and Disruptive Technologies

Assoc. Prof. Sıtkı EGELİ - İzmir University of Economics, Türkiye

Before the Q&A session of the last panel, Assoc. Prof. Sitki EGELİ took over the stage and gave an extensive talk on emerging disruptive technologies (EDT). He began his presentation highlighting that emerging disrupting technologies is a term that was originally used in nuclear strategy and EDT was closely associated with the strategic realm of it. However, in the last ten years, there has been a **paradigm shift** as the concept has been moving from nuclear to the conventional realm, and even to the realm of non-state actors. The term EDT entails those technologies to have progressed significantly in recent years and could be rapidly developed further in the near future with a potential to alter nuclear operations, nuclear order, stability, deterrence, arms control, escalation and crisis management functions. Prof. EGELİ brought up the challenges surrounding EDTs. Among them were the **definitional problem**, their **dual-use nature**, and the capabilities falling in this category being mostly **intangible**. He said it is not quite clear what is emerging, what is new and what is not new. For instance, cyber is seen as EDT, but it is not a recently emerged "phenomenon". In addition, what is disruptive and what is beneficial are not perfectly clear either. As examples of beneficial aspects, he specified AI and mentioned that military personnel are employing it for constant surveillance, big data exploitation, and pattern detection. However, it could equally become disruptive when for example AI is combined with deep fakes, or it used to augment cyberattacks, or else it could further enhance autonomous weapons hence become worrying. In fact, Assoc. Prof. EGELİ contended that, **AI acts more as an enhancer** of other technologies instead of standing out as a separate category all by itself. The professor elaborated on the definition problem with emerging disruptive technologies by comparing the list of EDTs found in recently published papers and reports. Among them were FAS Special Report of 2018, NATO STO Report of 2020, EUNPDC Paper of 2021, KLV- Weapons of Mass Distortion of 2021, and IFSH Research of 2022. And his conclusion is that there is no consensus on which capabilities should be categorized as EDTs. He also explained the complexity of EDTs because they are mostly dual use. In addition to entering the conventional domain, EDTs are now included in the commercial sector's domain, which creates many challenges for states, militaries, arms control and law enforcement authorities, mainly because there cannot be effective regulation over something that those actors have very limited control over. Assoc. Prof. EGELİ also argued that bureaucracies could not catch up with the pace of technological development. By the time they manage devising their oversight and controls, there would be a new version of that technology,

product or solution in the market already. Moreover, EDTs held by privately owned entities and individuals could be spreading towards non-state actors and lone wolves, which would leave states incapable of regulating the latter's actions and catch up with the news challenges. He continued by stating another reason why EDTs are perceived as problematic: they are mostly intangible, not like tanks or artillery pieces. EDTs are not readily quantifiable, measurable, distinguishable, and/or verifiable. At this point, where arms control is being rapidly outpaced, Assoc. Prof. EGELİ emphasized a need for paradigm shift from a material-based to a behavior-based arms control. He also brought up the gap between the natural scientists who build and develop such technology and the social scientists who are inclined to deal with it at the policy-making level. He argued that not having a minimum degree of understanding leads to exaggeration, fantasizing and the consequent alarmism, especially when the media is involved.

The professor made a distinction between some of the EDTs confined to state actors such as hypersonic weapons, Anti-Satellite/ Rendezvous and proximity operations (ASAT/RPO), hi-energy lasers and AI-assisted C4ISR; and those within the easier reach of non-state actors, e.g. cyberattacks, deep fakes, drone swarms, layered manufacturing, and synthetic biology. Additionally, he stated that we do not expect non-state actors to become involved in some of the EDTs currently under the authority of state actors. However, certain EDTs are already in the possession of malicious groups, terrorist organizations, and even private individuals.

Drawing examples from the ongoing conflict between Russia and Ukraine, Assoc. Prof. EGELİ illustrated that the Russia-Ukraine War is a suitable case study for analyzing the role of EDTs in modern, state-on-state conflicts. Focusing on cyber warfare, he discussed that both sides have used it extensively. Russia launched large scale cyber-attacks against Ukraine and Ukraine successfully countered those attacks, with the support of its western allies. U.S admitted supporting Ukraine with cyber on both offensive and defensive measures. Additionally, he stated that we do not expect non-state actors to become involved in some of the EDTs under the authority of state actors. With regards to the Russia-Ukraine War, the professor said another EDT to have been employed was counter-space, whereby satellites have been targeted. Russia targeted services of commercial satellites owned by third parties through cyberattacks, and also put pressure on commercial operators to deny services to Ukraine. He also made a warning that we should expect the satellites to become the target of cyberattacks launched by non-state actors. In the last part of his presentation, Assoc. Prof. EGELİ focused on drones that he characterized as uninhabited air and sea vehicles. He pointed out that in Russia-Ukraine War; besides the well-known and established UAVs, we have seen effective and extensive use of

three categories: one-way "suicide" drones, small hobby drones, and maritime drones. For suicide drones, he said they were introduced as missile substitutes as they are cheap, easier to mass-produce, and capable of overwhelming conventional air defenses. Both sides have been using them rather extensively as a substitute of cruise missiles. Yet, before Ukraine, Houthis are known to have deployed them in Yemen. It is also a fact that such suicide drones are already in the hands of non-state actors and terrorists. As another category of drones, the professor argued that small hobby drones might come across as a major threat because it is possible to produce them by using commercial, off-the-shelf components and technologies. For example, GPS-based navigation that is embedded in smart phones is sufficient to guide such drones to their targets. Lastly, he explained how maritime drones are seen as a major threat for large vessels, maritime and naval facilities, and infrastructure. Non-state actors in and around Yemen had already used maritime suicide boats, what we see now in the Black Sea are the drone derivatives. Considering all the characteristics of EDTs and specific ones that are known to have been deployed by non-state actors to further their causes, those EDTs to benefit terrorists and insurgent groups include augmented reality, cyberattacks, drones, use of space for intelligence, and counterspace in the form of cyberattacks, deep fakes, synthetic biology, and additive manufacturing. However, Assoc. Prof. EGELİ argued that EDTs could also be beneficial for counter terrorism. He has identified certain EDTs that could benefit counter terrorism. Among them are:

- the big data when combined with AI, for exploitation, pattern detection, cyber-based surveillance and intelligence,
- drones and surveillance of large areas whereby reducing the room for maneuver for terrorists, overhead persistent sensing,
- quantum technologies to break code and cryptography in the near future,
- non-lethal directed energy for precision targeting by minimizing collateral damage.

Discussion

In the Q&A session of the last panel, Prof. Kennedy-Pipe and Assoc. Prof. EGELİ jointly answered questions, as there was not a separate discussion part held right after Prof. KENNEDY-PIPE'S presentation. There was a question raised about how successful Russian use of drones against Ukraine is and what were the basic tactics employed in that. There was also a question about whether drones' role was exaggerated or not in the battlefield, in the presence of a well-coordinated air defense, as drone tactics are not as successful as they used

to be once, in the participant's view. Prof. KENNEDY-PIPE responded that drone effectiveness should be discussed at tactical and strategical level separately. She said having the capability of deploying drones were important in the states like the UK, which holds hegemonic presence. However, according to her, for countries like Russia and Ukraine it is far less important at the strategic level although it might be more important for tactical level. Prof. EGELİ demonstrated the effectiveness and value of drones on the outcome of the conflict, provided they are employed in an integrated and clever manner in line with a good appreciation of the surrounding circumstances, already proven in Nagorno-Karabakh and few other recent conflicts. He added that the reason for the excitement over drones is that the footage they send back is immediately shared on social media. Afterwards, Prof. KENNEDY-PIPE emphasized that drones are regarded as game changer for the civil society, as they make people feel that they are part of that defense and get a society mobilized. Another question was posed about paramotors or motorized paragliders and their role as an EDT. Prof. EGELİ answered that it is not a new technology as Israelis have been dealing with that risk for decades. He added, although it is seen as a challenge, such devices are very vulnerable, require good weather and cannot fly long distances. If one has well planned their usage, they can come out quite successful. Prof. KENNEDY-PIPE similarly responded that we will be facing more of these kind of threats along the borders in the near future. How effective paramotors/ motorized paragliders would be for the ones deploying them depends on how close they could approach undetected a border. One last question was put forward about a technological regress in the use of drones and if regulations or simple techniques to prevent the asymmetrical use of drones can be applied. Prof. KENNEDY-PIPE went first and said yes, considering the nature of contemporary terrorism, when terrorist groups are under threat they suddenly tend to regress to primitive, basic targeted attacks usually on civilian infrastructure. However valiant terrorist groups may become, if they are amateur, lack funding or resources they can be expected to revert to primitive targeted attacks. On the other hand, sophisticated terrorist groups tend to think that they are more than just terrorist groups, they regard themselves proxies for states. Assoc. Prof. EGELİ took the turn and told the audience that he does not believe production, sales and use of drones can be regulated, especially the hobby drones. In his view, the technology and components at stake are so widely available via commercial, off-the-shelf channels that it has become virtually impossible to restrain their spread or employment for certain malicious ends. Given the very nature of drones, monitoring and trying to keep them under control fall on the shoulders of law enforcement authorities and intelligence services.

Roundtable Discussion of the DAY I

Wrapping up the first day of the seminar in roundtable discussion, Dr. Ashraf took the audience through one of the main points that has come out during the panels, which is that establishing and implementing counter-terrorism regulations and adaptation measures in NATO takes time . He said it stems from what is known as OODA loop cycle that suggests to observe, orient, decide, and to act. Moreover, he added that this is the greatest strategic threat we face in counter terrorism. Although the changes were much slower in the Cold War days, the recent changes in technological advancements happen within weeks or months. He discussed that the ability to react to the measures terrorist groups might come up with requires far more agility as the decade-long conflict in Syria illustrates. Dr. ASHRAF also recommended that one needs to think about technology in a broader fashion and try to look at it from a threat point of view. It is the point where, he added, social sciences should be interacting with natural sciences, as when we think about technology we tend to think in a linear pattern. However, it advances in a collisional way, and the collision of technology should occur in a way which AI meets real intelligence. That can help bridge the gap between social and natural sciences by creating a real explosion of technology and knowledge.

Following Dr. ASHRAF's comments and concluding remarks of the first day of the seminar, there have been several questions asked by the audience where all panelists had a chance to take turns and respond. The first query concerned the necessary framework and countermeasures to prevent terrorist organizations and extremists from misusing various technological advancements. Prof HENSHAW volunteered to answer first, and mentioned that the questions she was asked after her presentation had also a lot to do with this angle of threat and cyber. When it comes to such technological advancements, she argued there must be balance of uses between national and international level, civil and military zone, and elite vs non-elite. Social media, artificial intelligence (AI) technology, and use of drones are the concepts that some kind of balance should be applied to. She also discussed the role of institutions, if they are more effective than academics, and if so, which institutions have the capability to deal with this sort of threat. She also pointed out the need for a paradigm shift from trying to regulate such technologies to admitting that they are already out there. Prof. KENNEDY-PIPE suggested operating in a multi-domain environment can be a starting point to help institutions and relevant organizations be on top of any technology-related agenda. Col. HARTUNIAN discussed that NATO does have a role in forming and articulating a unifying

position how member states should regard technologic innovations in the battlefield. However, he also emphasized his concerns about a potential role of NATO into expanding into a regulating role. Assoc. Prof. EGELİ stated he is not optimistic about setting a supportive regulatory framework for drones but he also iterated that it does not mean we should stop trying either. He also discussed how hard the EU is trying to contain the misuse and build a regulatory framework for such technologies. Summarizing the answers of panelist to that question, Dr. ASHRAF discussed it might start happening right there and that very day. He said after these takeaways, it is clear that this is one of the greatest threats to respond on time. He added, although it is not for NATO but for international regulatory work, it can include people from outside which has the effect of sharing those concerns.

One of the participants shared his observations with audience and panelists, arguing that due to "**data jealousy**," work done on the national levels do not support the work done within NATO as nations refrain from releasing the information and intelligence they collected through national assets to the benefit of the Alliance. He further discussed that the information used to connect the dots by intelligence mostly becomes a national asset, and, therefore, is not shared with any other security organizations. He said it is a fact that data comes from national security forces and states are not willing to share them. However, he iterated there could be a coordination among those bodies that can benefit intelligence sharing on a better understanding. After all, this is a multi-domain world and it requires cross-communication.

Next question was about narrative dominance. The participant said state institutions and civil society play different roles and asked what role military can play in narrative dominance. Dr. ASHRAF took the first round and responded that fighting the ideology behind a terrorist group is often thought to be answer, cannot justify addressing narrative dominance. He said some groups employ terrorism depending or their ideology, while others might be driven by grievance. However, he highlighted that terrorism is used primarily by states. He also said terrorism and ideology can be conflated, but **we cannot win this war trying to fight the ideology of terrorist groups**. Col. HARTUNIAN followed and said what it requires is **compelling and authentic narrative**. He added that the role the military can play in achieving narrative dominance would engage the strategic level of that narrative, and ability to do those outpaces in the diplomacy of countering insurgency. In so doing, we would be creating conditions that leads to a counterproductive success, as was the case in the Middle East, Col. HARTUNIAN included in his answer. Prof. Kennedy-Pipe argued that it is not something modern populations can quite make sense of. Narrative dominance should come under the

domain of politicians to deal with, and explain why we need to deploy troops. However, looking into Afghanistan, the military should use only specific narratives, such as those meant to win the 'hearts and minds' of the local population, a goal integral to the civil-military endeavor within the operation. She also discussed on how the civil society's internal opposition to the Vietnam War was the decisive element that got decision-makers put an end to waging the war and withdraw. The narratives are being used in two ways, one is to make a case for war and the second is to sustain support for the war which technically became more sophisticated. Col. HARTUNIAN took another turn answering this question and told there must be two different narratives that need to be compelling and authentic, one narrative validating their grievance in a different way and a domestic narrative that creates the political will and justification for a military campaign. Dr. ASHRAF compiled panelists 'answers that ethics and morality are very important elements in narrative dominance but it is debatable to what extent they are functional. He added that it is a threat and disrespect to others if we are believed to be dominating through a certain narrative. Therefore, it is a pattern for extremists to successfully manage to identify within the community than outsiders.

Another question put forward for panelists to discuss was about prioritization of emerging and disruptive technologies. Assoc. Prof. EGELİ went first and told that there is no standard applying to all countries from terrorism point of view. He assessed that the cyber already receives priority for most of the nations. Naval drones have a huge potential, too. Underwater and maritime drones are rapidly becoming more relevant and significant for nations like the UK, The Netherlands, or Denmark, given the risks and vulnerabilities related to their offshore wind farms, power grids, fiber optic cables and pipelines laid over the seabed. Prof. HENSHAW took the turn and explained that we should rethink the whole philosophy of how we engage with technology and for what purposes without singling out any technology. What we should assume and prioritize, in Prof. HENSHAW's view, is the exact way we engage with technology. When developing new technologies, we must anticipate that they could end up in the wrong hands one day. She also questioned the current pace of regulations implementation. She said that by the time we finish regulating certain technologies, they will already be accessible to a large segment of the society. Professor KENNEDY PIPE argued that the COVID-19 epidemic should be given priority because it has had a greater impact on economies than any military intervention. Col. HARTUNIAN discussed how concentrating on one work at a time until it is completed could result in neglecting other important areas that we cannot afford to ignore for too long. He also referred to the concept of data jealousy raised by one of the participants

during roundtable discussion and argued that the lack of information sharing is what sometimes paralyzes militaries to take effective actions when something happens. Focusing on what needs to be prioritized, Dr. ASHRAF had more than one concrete answer. He argued that we have to challenge the assumptions that wars are lost at strategic level and not at tactical or operational level. Therefore, one needs to ask whether a threat is strategic and if it is strategic how much of a threat it is, and here is where experience and judgement comes into play. In addition, he said that based on our military culture we tend to believe that technology is the sign of our superiority of power. However, in Vietnam there was a technological asymmetry and it was the less technological side that won. The asymmetry grew more divergent in Afghanistan, and it was the low-tech side that won. Terrorism, it is known that it goes hi-tech until hi-tech countermeasures come into play, which is when it goes back to completely low-tech to counter those measures. Therefore, in a dynamic situation where the war changes in 5 years or less, it makes it difficult for us to set priorities for the next 10 -15 years. This brings us to the point that in NATO, as well in our nations, since we have long term budgets, priorities need to come out of a framework of structured thinking that would permit us to measure the effectiveness of our strategies.

One last question was posed by a general officer from the audience expressing a Middle East perspective that although all kinds of elements are out there since 9/11 terror attacks in 2001, why we could not eliminate the terrorist threat and world is not a safer place than before. Col. HARTUNIAN chose to answer this question from a narrative dominance point of view. He gave an example from a US campaign designed to use respected local community members to tell our narrative through o credible voice of their community. Yet it failed, the narrative was perceived as non-authentic mainly because the military is not always well suited to deliver messages. Prof. KENNEDY-PIPE based her answer on the concept of balance of power that was an outcome of Westphalian state system. In the modern world, she said Russia's Putin has managed to achieve this balance in an alliance with China against NATO. But on the other hand, it created a situation where one cannot clearly point out the global values and interpret them as global for the rest of humanity. Coming to the end of roundtable discussion, Dr. ASHRAF responded to the general officer's question by mentioning the story of a fictitious character, Faust, created by the German writer Goethe, a man who made a pact with devil in exchange for wealth and pleasure, however no progress was promised. This was Goethe's attempt to come to terms with the separation of principles and power following the separation of Church and state. This idea that power has primacy over principles has entered the Muslim

world in the same way as in the West. This is despite Muslims being commanded by God to act with absolute justice, beneficence and altruistic love. Dr. ASHRAF concluded that religion provides no justification whatsoever for attacking innocent people but he doubted that most Muslim religious scholars will have the credibility to make that argument unless they do so independently of state power. Having had a fruitful discussion at the end of the first day of the seminar, he concluded with a promise to enlighten more current concepts threatening human security and how terrorists weaponize these concepts through the panel discussions under such topics as Climate Change and Terrorism; Fragility and Instability in Africa in the upcoming day.

DAY II

CLIMATE CHANGE

Climate Change and Terrorism: Linkages, narratives, and possible action paths

Mr. Diego F. OSORIO - Harvard Weatherhead Foreign Policy Fellow, Thematic Expert, Academic Researcher, Canadian public servant, Senior Advisor in Climate Security, Canada

In his speech, Mr. Diego F. OSORIO emphasized the importance of taking climate change's effects on security into account as a field that bridges different fields of study and application. He emphasized that the introduction of these new fields into the realm of security requires that methods of analysis must adapt to a more complex reality, pushing away from reductionism.

In addressing the complex interplay of climate change and security, Mr. OSORIO advocated for a holistic and interdisciplinary approach, stressing the importance of considering the urgency of the matter and adopting systems thinking to address the challenges posed by climate change effectively.

The speaker made the argument that the systemic structures and analytical techniques used today are inadequate for fully comprehending and analyzing the effects of climate change. In a similar vein, he said that conceptual and institutional frameworks that could address the damaging effects of climate change have not yet been fully established. According to Mr. OSORIO, conflict management tools and resources have not been sufficiently developed to deal with this new issue. Similarly, he made the point that there isn't presently a modern, strong, and all-encompassing political response in terms of policymaking to deal with this threat. The reasons for the delay or the inability to implement effective policies in this regard could be attributed to a confluence of factors, among those substandard global governance, short termism, lack of focus, lack of true interdisciplinarity and fragility.

Mr. OSORIO stated that the prevalent trends in how we tackle these challenges are highly normative and prescriptive, and shaped by the impact of disciplinary silos. Our approaches tend to remain over focused on an elusive search for a precise causality instead of focusing on a systemic perspective. When this is applied to geopolitics, climate change and security, it means that states and other relevant stakeholders address these issues narrowly through institutional/political means and based on analytical premises that are missing a great deal of the full picture. Consequently, we are defining the challenge in a way that does not fully meet the reality on the ground, and we are perilously ignoring this deficit. Moreover, our conflict prevention, conflict, and post-conflict frameworks cyclically borrow from concepts that have yielded, at best, mixed and disappointing results. Based on his research of these operations, as well as his numerous deployments to assistance, political, and post-conflict missions in Afghanistan, Haiti, Iraq, Liberia, and other regions, he concludes that ineffectual formulae are routinely used with different degrees of effectiveness. Positive outcomes are difficult to accomplish since, even with improvement using the same means, a downward trend persists, particularly in unstable states. Introducing the climate and security dimensions in this setting becomes extremely difficult.

Mr. OSORIO stressed that, while climate change is not totally solvable, its consequences can be mitigated. The speaker asserted that combating climate change is essentially a state obligation, supported by the appropriate knowledge and competence. Despite having plans and the ability to act, there is a noticeable lack of implementation, and the problem worsens steadily without a prompt response. The speaker highlighted a level of legal and political preparation, as well as accessible resources, financing, and planning; however, implementation falls short and without the degree of urgency required, portraying climate change as an extremely delicate and challenging topic.

Climate change is considered a risk multiplier. This is correct, but this lens falls short of providing an explanation for causality (ies), and does not suggest clear paths to action, and, as previously stated, it struggles to fully answer the wrong question. In the context of climate change, the starting and ending points, as well as the trajectory and rate of development, are all uncertain, which will become even more so if the analytical toolkit is not expanded. Pragmatically, however, it is critical to strengthen the capacity to act and respond effectively to a new and unprecedented security challenge. Mr. OSORIO emphasized that resilience building is the most important tangible step toward achieving readiness to address the short and long-term effects of climate change on security.

The speaker emphasizes the relationship between the concepts of social fragility and resilience and terrorism. States and international institutions should carefully examine the fragility of societal systems as well as ecosystems. It is critical to reduce the negative effects of climate change on these vulnerable populations. Facing life threatening circumstances, extremist ideologies and groups offer what appear to be viable alternatives, and this must be countered.

Effective resource management and governance capacity are critical for societal resilience. For example, when looking at the context of Afghanistan and its reconstruction effort, the primary focus was on establishing a secure and stable political and institutional setting, and reconstruction plans and conferences relied heavily on security factors, political constructions, and a political-driven understanding of power and society. Climate change effects were viewed as a development issue during nearly two decades of efforts in the country. However, it is now apparent that if the effects of climate change had been taken more seriously, and recognized also as a significant security concern, planning, sequencing, and implementation of the entire aid and stabilization package would have been very different. He also discussed the challenges faced by Central America's dry corridor, emphasizing the effects of climate change on agriculture and the economy, which is stress testing societal resilience to levels beyond their capacity to manage. This, in turn, contributes to significant migration movements, which are the most obvious consequence, but there are a slew of other effects on security and stability. Furthermore, it is critical to see and understand this crisis not only on a national level, but also in the context of the entire Central American-North American region.

Regarding NATO, Mr. Osorio acknowledged that it cannot respond to every threat. He also stated that NATO cannot address the already deteriorating effects of climate change. However, NATO will be called upon to address the security implications of this complex phenomenon, so it is critical to develop the most interdisciplinary understanding of how climate change will affect security parameters in the future, both within and outside the alliance's operational space. In this regard, NATO's centres of excellence are called upon to play a critical role in encouraging experts, academics, and other key interlocutors to ask comprehensive and relevant questions and contribute to the development of answers. Mr. Osorio, for example, expressed his desire to see integrated collaborations between NATO COEs, the Stavanger JWC Joint Warfare Centre, global and regional multinational actors such as the UN, World Bank, and AU, as well as supporting states, in launching climate security-focused multidimensional simulations aimed at not only NATO political/military actors but also key decision makers and

influencers. NATO has the unique ability to provide global governance mechanisms with insight into the complex dynamics of this global security threat. There's no time to waste.

Climate Security with the Focus on Vulnerabilities and Inequalities
Assoc. Prof. Senem ATVUR, Akdeniz University, Türkiye

In her comprehensive presentation, Assoc. Prof. Senem ATVUR delivered a speech, shedding light on the environmental security dimensions of climate change and contextualizing it within the realms of national, human, and ecological security. Her analysis delved into climate vulnerabilities, encompassing economic, political, social/human, and ecological dimensions.

Assoc. Prof. ATVUR contended that the direct cause of security problems is not climate change itself but rather vulnerabilities. She framed vulnerable segment by referring to groups directly exposed to the effects of climate change. In parallel to this argument, she emphasizes that climate vulnerabilities lead to inequality.

Assoc. Prof. ATVUR highlighted the increasing impacts of climate change, noting that many countries experienced their highest temperatures in 2022 since the early days of detecting global temperatures. However, as we reach 2023, she expressed that we are facing the highest temperatures since the 1940s. This drastic temperature rise brings about various disasters, affecting not only people but also animals, ecosystems, and all sources of income derived from nature. This illustrates how climate change reverberates into the economic domain.

She underscores that since the 1980s, ecological degradation has been recognized as a security issue. *Environmental security* asserts that climate change will have significant effects on conflict and migration. In the 1990s, with the conceptualization of the *human security* concept, this issue began to be approached more comprehensively, encompassing the reflections of climate change on individuals and addressing its social and economic dimensions. The human security dimension also comes into play as it enters the realm of states' security concerns regarding climate change. As citizens directly bear the consequences, addressing human security in the context of climate change becomes imperative for states grappling with the multifaceted implications of this crisis.

The global climate crisis has given rise to intertwined political and socioeconomic problems, creating a new realm of challenges where different crises intersect. Contrary to the prevailing belief, Assoc. Prof. ATVUR acknowledged that not only underdeveloped or less developed

countries but also developed nations are profoundly affected by this global climate crisis. The resulting risks are multidimensional, encompassing both foreseeable and unpredictable elements.

In this context, there are foreseeable and predictable risks such as damage to state infrastructure, economic burdens, social grievances, inter-state or intra-state conflicts, migration waves, and health issues. These health concerns range from limited access to healthcare services to the inability of these services to meet the general needs of the population, leading to issues like casualties or deaths. The global climate crisis, therefore, manifests itself as a complex challenge with far-reaching consequences across various sectors of society and geopolitics.

Assoc. Prof. ATVUR highlighted that in volatile regions, climate change acts as a threat multiplier, triggering instability. Therefore, numerous international institutions, including NATO, recognize climate change as a security issue. She reminded the audience of NATO's 2021 Climate Change and Security Action Plan, where it is stated, "*Climate change is one of the defining challenges of our times. It is a threat multiplier that impacts Allied security, both in the Euro-Atlantic area and in the Alliance's broader neighbourhood.*" This underscores the acknowledgment of the profound impact of climate change on security dynamics and the importance of strategic planning by influential international organizations to address these challenges.

Assoc. Prof. ATVUR also pointed out that violent extremist groups exploit the disruptive effects of climate change, attempting to capitalize on the grievances of individuals or groups. These organizations can leverage personal or collective grievances to fuel recruitment strategies, taking advantage of people's hardships as a recruitment tool for violent extremism. In this way, climate change not only poses direct environmental challenges but also becomes a factor intertwined with security concerns, providing an exploitable landscape for extremist groups seeking to advance their agendas. Indeed, by crafting a narrative that emphasizes the inadequacy of government capacity in addressing the challenges posed by climate change, these groups may attempt to present themselves as providers of alternative solutions for individuals and communities. In doing so, they seek to position themselves as seemingly viable alternatives, striving to establish legitimacy for their actions. The speaker conveyed that terrorist organizations can challenge states by asserting themselves in the realm of access to resources and resource management. Particularly, when local and central governments lack robust governance capabilities, these organizations can exploit the grievances arising from climate change. By doing so, they position themselves to gain more space and human resources. The

insufficient governance capacity of governments creates a vacuum that these groups seek to fill, using climate change-induced grievances as a means to attract support and expand their influence.

In examining the nexus of climate change and terrorism, Assoc. Prof. ATVUR identified structural causes such as climate variability, lack of good governance leading to state fragility, globalization, climate pressure, high/rising levels of distributive inequality, poor climate adaptability, and resource scarcity/abundance, among others. Additionally, she detailed enabling causes to include resource competition, lack of opportunities (e.g., unemployment), climate-related migration, elites' exploitation of resources, alienation, and abandonment. Motivational causes encompassed livelihood loss, absolute and relative deprivation, lack of resilience, ethno-cultural tensions, environmental degradation, and climate-related displacement. Finally, triggering causes were outlined, ranging from climate shock, economic shock, and environmental destruction to the rising cost of living (e.g., food), climate adaptation policies and practices, resource conflict, and exclusion and marginalization.

In conclusion, Assoc. Prof. Atvur stressed that climate change can evolve into an existential threat through vulnerabilities and inequalities. She highlighted those human activities not only amplify the impacts of climate change but also escalate the risk of conflicts arising from emerging disparities. While the nexus between conflict and climate change is a reality, it is not entirely inevitable. She emphasized the need for concerted efforts to be undertaken, suggesting that through such endeavors, undesirable outcomes can be avoided.

Assoc. Prof. Senem ATVUR's presentation provided a comprehensive framework for understanding the intricate relationship between climate change and security issues. She urged for a nuanced approach that delves into the root causes of these challenges and promotes sustainability across various dimensions. By considering sustainability beyond mere economic growth, it becomes possible to mitigate the destructive impacts of climate change and pave the way for a more resilient and harmonious future.

Discussion

The discussion section raised the question of how the panelists assess the activities of developed and wealthy nations to mitigate the impacts of climate change, considering their ability to mitigate these effects with the resources at their disposal. The panelists emphasized the need to

examine the interactions between political and economic systems, suggesting that addressing this common problem in a multi-actor context requires a comprehensive evaluation.

In assessing risks, the panelists considered measurable aspects, including political and financial systems, emphasizing that the answer to how we respond to this shared problem depends on the context and what issues are perceived as risks in different scenarios. Mr. Diego OSORIO cited the example of Afghanistan as one of the most significant illustrations of these interactions in which the prioritization of risks and solutions to them very differ.

The panelists acknowledged that, despite ongoing discussions about climate change, the true scale of the issue is still not fully visible. Migration, domestic concerns, and other factors often take precedence differently. They underscored the importance of the responsibility of wealthier states, pointing out that the risks posed by climate change have been exacerbated by the activities of these nations, and now less developed countries are grappling with the consequences. The panelists stressed that developed countries have a financial responsibility in this regard, even though convincing them to act remains a challenge. The financial burden, they emphasized, extends beyond the direct cost of assistance. Furthermore, the role of citizens in influencing policymakers was deemed crucial. To draw the attention of decision-makers to these issues, there was a call for proactive actions that underscore the importance of the matter, aiming to compel radical actions. The panelists emphasized that the global impact of such actions has a bearing on global peace.

The question posed to the panelists centered around how to cope with the destructive impacts of climate change in the absence of a comprehensive awareness of the threats it poses. The inquiry, particularly in the context of ordinary citizens, emphasized that individuals often focus on immediate concerns related to their local environment and daily economic needs.

The panelists responded by acknowledging that while various aspects of climate change are being examined, there is still a lack of holistic awareness, especially among ordinary citizens. They pointed out that people and governments tend to concentrate on more visible threats and ongoing conflicts, indicating a relative lack of attention from world leaders toward climate change.

The panelists emphasized that climate change is a crucial issue for humanity, but there is a gradual adjustment to its significance. They noted that while there is attention to specific aspects of climate change, the overarching theme is not always recognized. The changing of governments was highlighted as a factor influencing policy shifts, emphasizing the need for

long-term policies related to climate change. Furthermore, the panelists acknowledged that climate change is not solely a concern for future generations; its effects have been observed for years. They noted that economic priorities take precedence for common people who are primarily focused on finding jobs, providing for their families, and meeting basic needs. The panelists suggested that addressing economic and social problems could potentially redirect attention toward future risks, including more destructive ones. By resolving current challenges, individuals and societies can develop a perspective that extends to the distinct problems faced by future generations.

In response to the last question about the positive and negative aspects of technological advancements, specifically related to climate change and the positive use of technology, NATO's role was discussed. It was noted that NATO has a role in shaping and articulating positions on how member states view these technologies, especially in the context of the battlefield or counterterrorism efforts. Emphasizing that NATO is both a political and military defense organization, the importance of experience sharing and the organization's core mission of collective defense were highlighted. Additionally, it was mentioned that NATO is actively exploring its boundaries and engaging in the sharing of best practices.

Conflict, fragility and instability in Africa

Conflict, Fragility and Instability in Africa with a look on the Sahel

Ms. Toulu AKERELE - CEO of T.A.A.S Ltd. Consultant in counter-terrorism, cybersecurity and data protection, United Kingdom

Ms. Toulu AKERELE shared insights into the complex dynamics of conflict, fragility, and instability in Africa, with a particular emphasis on the Sahel region, during her panel speech. Africa, in its journey towards independence in the mid-20th century, witnessed a wave of newfound political autonomy. However, the promise of self-governance was often met with the harsh reality of post-colonial government failures. This ushered in a troubling era of international conflicts, with the unsettling trend of coups looming over the continent since the 1950s.

Ms. AKERELE emphasized that 45 out of 54 African countries have faced at least one coup attempt, with 109 instances resulting in successful coups. The motivations behind these power shifts are diverse, ranging from resource nationalism driven by the pursuit of precious metals, diamonds, minerals, oil, and natural gas to political ideologies that often struggle to find a unified path.

The struggle to forge a cohesive political ideology creates a vacuum, a space that all too often becomes fertile ground for terrorism. The goals of resource nationalism, while rooted in the desire for economic autonomy, can inadvertently fuel conflicts, further contributing to the fragility of states. As Ms. AKERELE highlighted, fragility extends beyond political turbulence. It encompasses the fragility of state authority, the capacity to maintain control over violence, and the legitimacy that a government holds in the eyes of its citizens.

In the Sahel region, where these dynamics are particularly pronounced, understanding the layers of conflict, fragility, and instability becomes imperative. It is within this context that we delve deeper into the insights shared by Ms. AKERELE, seeking not only to comprehend the challenges but also to identify avenues for sustainable solutions and a more resilient future for the people of the Sahel and Africa as a whole.

She highlighted the intricate affiliations among terrorist groups such as Al-Qaeda, DAESH, and Boko Haram and their affiliates in the Sahel region, shedding light on their financing methods

and emerging trends. Additionally, Ms. AKERELE discussed the widespread distrust of leaders in the region and the perception that these deficiencies could fuel terrorism, emphasizing the importance of winning the hearts and minds of the local populace as a counter extremism measure.

Examining the distribution of terrorist organizations across the Sahel region, Ms. AKERELE discussed the impact of religiously motivated terrorism, particularly in northern Nigeria with the introduction of Sharia law in 1999. She detailed the affiliates of Al-Qaeda, such as Al-Qaeda in the Islamic Maghreb (AQIM) and Jama'at Nusrat al-Islam wal Muslimeen (JNIM), illustrating their anti-western ideologies and goals. Additionally, she explored the relationship between AQIM and Boko Haram, noting former instances of cooperation and shared resources.

Focusing on Boko Haram, Ms. AKERELE provided historical context and outlined the organization's affiliations. She highlighted the decentralization of the group, pointing out varying ideologies, recruitment methods, and goals among its factions. The discussion extended to splinter groups like Ansaru, which not only engages in terrorism but also provides municipal services, showcasing the multifaceted nature of these organizations. Ms. AKERELE then delved into DAESH and its affiliates, such as (Islamic State in the West African Province) ISWAP and (Islamic State in the Greater Sahara) ISGS, outlining their activities, ideologies, and operational similarities.

Ms. AKERELE explained the motivations behind attacks of those groups on the "far enemy" (France) and "near enemy" (Sahel States). She underscored the role of terrorism as a business, with financing derived from external and internal sources, and touched upon the ease of criminal funding through activities like kidnapping for ransom and narco-terrorism. The conflict dynamics vary, with groups occupying small areas of land versus broader Africa-wide crises, each presenting unique challenges.

The presentation explored emerging trends and posed critical questions about arms deals, the need for closer scrutiny, and the potential development of a U.S. perspective to counter China's commercial activities in the region.

One key observation is the regional states' limited skill set in urban warfare, prompting certain groups to exploit urban areas for both economic gains through taxes and valuable intelligence. The semi-territorial presence of these groups further complicates the security landscape.

Addressing these challenges requires a combination of political will and enhanced security measures. Recognizing that these groups often emanate from local contexts, addressing recruitment and strategy becomes crucial. Moreover, the convergence of various groups based on shared grievances highlights the importance of fundamental governance reforms as a means to mitigate the root causes of conflict.

Ms. AKERELE underlines the detrimental impact of military coups on democratic transitions. The imposition of sanctions may inadvertently contribute to economic poverty, further fueling instability and fragility. It becomes imperative to find alternative approaches that encourage stability without exacerbating economic challenges.

Foreign influence, while potentially positive, presents its own set of challenges. The counterbalance of arms, financial dependency, resource exploitation, and military support raises questions about the true nature of foreign involvement. Striking a delicate balance and ensuring that external actors contribute positively to local stability without perpetuating dependency is crucial.

In essence, the path to resolving conflicts in the Sahel and Africa at large lies in a comprehensive approach. This involves political will for governance reforms, strategic security measures, careful consideration of the impacts of sanctions, and a nuanced understanding of foreign influence. Ultimately, the battle for hearts and minds, coupled with counter-narratives, emerges as a powerful strategy to address the root causes of conflict, and build a more stable and resilient future for the region.

In conclusion, Ms. AKERELE's insightful presentation shed light on the multifaceted challenges facing the Sahel region and Africa as a whole, emphasizing the intricate interplay between conflict, fragility, and instability.

Navigating Instability: Security Dynamics in West Africa and the Sahel

Assoc. Prof. Elem EYRİCE TEPECİKLİOĞLU, Department Head of Area Studies, Department of African Studies, Social Sciences, University of Ankara, Türkiye

Assoc. Prof. Elem EYRİCE TEPECİKLİOĞLU delivered a speech titled "Navigating Instability: Security Dynamics in West Africa and the Sahel," addressing critical aspects of security challenges in Africa. Her comprehensive analysis covered various dimensions,

including regional and international efforts to tackle these challenges, and an examination of the factors limiting the success of these endeavors.

The speaker touched upon cross-border security threats in Africa which have become increasingly complex, marked by a range of interconnected challenges:

- ***Ethnic tensions and Marginalization***: The region grapples with persistent ethnic tensions and the marginalization of certain ethnic groups, contributing to social unrest.
- ***Violent Extremist Organizations*** (VEOs): The presence of VEOs is closely linked to the absence of functioning states and governmental institutions. This vacuum provides fertile ground for extremist activities.
- ***Transnational Trafficking***: Illicit activities such as transnational trafficking in people, drugs, small arms, light weapons, and other contraband goods pose a significant threat to regional stability.
- ***Private Armies***: The emergence of private armies adds another layer of complexity to the security landscape, challenging the authority of formal state security forces.
- ***Human Rights Violations***: Governments, state security forces, and private military companies are implicated in human rights violations, further eroding trust in established institutions.
- ***Demographic Growth and Environmental Challenges***: Rapid demographic growth exacerbates environmental challenges, leading to heightened ethnic rivalries as communities compete for limited resources.
- ***Maritime Piracy***: The Gulf of Guinea experiences maritime piracy and armed robbery, affecting not only economic activities but also regional security.
- ***Weak Governance and Political Instability***: Weak governance, coup d'états, and political instability create an environment where security structures struggle to maintain order, leaving a power vacuum exploited by various actors.
- ***Humanitarian Crisis***: The culmination of these factors results in a humanitarian crisis, marked by internal displacement and migratory flows as people seek refuge from conflict and instability.

The intricate web of cross-border threats underscores the need for comprehensive and collaborative strategies to address the multifaceted challenges facing the African continent.

Assoc. Prof. TEPECİKLİOĞLU scrutinized key missions such as MINUSMA (The United Nations Multidimensional Integrated Stabilization Mission in Mali), Operation Serval (2013)

and Operation Barkhane (2014) led by France, Takuba Task Force (2020) as a European initiative, The EU's Training Mission in Mali (EUTM Mali) in 2013, and EU Capacity Building Mission in Sahel (EUCAP) in 2014.

She underscored the impact of great power competition, misinterpretation of the root causes of internal conflicts, and the involvement of private military companies, emphasizing how these factors further complicate the security situation in Africa. Assoc. Prof. TEPECİKLİOĞLU emphasized that one of the significant challenges faced in the region is the lack of sufficient political will to address instability. The increasing trend of terrorist organizations providing social services and behaving like proto-states complicates counterterrorism efforts. The discussion brought attention to the problematic nature of external aid in achieving stability, hindered by the lack of governance that impedes the equal distribution and effective utilization of aid, with corruption identified as a significant obstacle.

Regional efforts, including ECOWAS (Economic Community of West African States), Multinational Joint Task Force (MNJTF), G5 Sahel Joint Task Force, and African Union, were also discussed. However, limited international success was attributed to an inability to identify the root causes of the conflict, anti-French sentiments, and external support towards coup plotters. In the African context, the limitations in security measures and aids can be attributed to a combination of factors. The absence of a common strategy and diverging priorities among member states within ECOWAS has impeded effective cooperation. Additionally, the limited military resources of ECOWAS have constrained the organization's ability to comprehensively address regional challenges. The lack of support from the African Union (AU) in response to the recent coup d'état in Niger has further hindered ECOWAS initiatives.

Issues such as support towards coup plotters and the recurrence of military coups have exacerbated instability within the region, contributing to a challenging security environment. Disparities in the capabilities and priorities of regional governments, coupled with funding problems, diverging commitments, and structural limitations, present significant obstacles.

Scarce resources, including military equipment, skilled personnel, and training opportunities, limit the capacity for robust security measures. Dependency on foreign aid and military support makes regional entities prone to external intervention, often overlooking local needs and realities due to external interests and rivalries.

Heterogeneity within regional armed forces, along with the lack of standardization, complicates collaborative efforts and undermines the efficiency of security initiatives. The complexity and ever-changing nature of the conflict environment add another layer of challenge.

The perceived illegitimacy of regional governments, combined with the inappropriate use of violence by their security forces, erodes trust and cooperation. Shortages in resources, limited military capacity, and the withdrawal of forces further underscore the multifaceted limitations faced in implementing effective security measures across the African region.

The speech concluded by pointing out actor and policy differences among Africa Union, Russia, China, USA, and the EU, creating a complex dynamic that lacks a common stance. The presence or absence of France was noted to pose challenges, and the root causes of regional conflicts were explored, raising questions about the power vacuum and the challenges ahead in terms of leadership and direction in the region.

Discussion

The panelists were asked about China's role in Africa and its contributions or detriments to regional instability. The panelist responded that China is often overlooked, despite having significant commercial interests and being among the largest trade partners to countries in Africa after those in the EU. China is making a deliberate effort to engage with the region, particularly on an economic level. It is deeply involved in and actively contributes to the development of infrastructure, establishing itself as an indispensable partner for the region. However, the panelists did not provide a clear answer regarding whether China can exist militarily in the region or whether it is developing such a policy.

On the other hand, in response to a question about the contributions of local and foreign actors to the reduction of instability in the region, particular attention was drawn to the potential counterproductive impact, especially in the context of terrorist organizations and extremism leading to violence. This is emphasized due to the fragmentation among communities and actors in the region, significant enough to trigger grievances that could exacerbate instability.

Roundtable Discussion of DAY 2

In the Roundtable Discussion on DAY 2 moderated by Dr. Afzal ASHRAF, the first question addressed the increasing vulnerabilities in regions worldwide where population growth outpaces the ability of resources to respond adequately. It was emphasized that these vulnerabilities, particularly exacerbated by climate change, are evolving in a detrimental direction. The panelists were then asked whether these regions are now perceived as the starting point for resource conflicts or crises and how authorities should approach this situation.

The panelists expressed that addressing climate change requires challenging measures and the development of robust foreign policies. In this context, legitimate authorities need to enhance their strategies. They added that there are different institutions in the international context that can provide opportunities for states. Instead of changing their systems, the panelists underscored the importance of deciding how solutions to crises arising from climate change would integrate into existing systems of states and international organizations. This perspective highlights the need for authorities to navigate the complexities of climate-induced crises by determining how solutions can harmonize with their existing structures rather than wholesale systemic changes.

The assessments by the panelists recognized population growth as a crucial issue. While it may not be the primary element in the onset of conflicts, the main problem lies in the distribution and access to resources. The connection between conflict and the control of resources, including who uses them and who holds control, was emphasized. Therefore, a governance principle of equality regarding resources should be pursued, and vulnerabilities should not be exacerbated. This perspective suggests that the issue should be evaluated not only from a socio-economic standpoint but also in a manner that encompasses concerns within the realm of human security. By considering factors that fall within the spectrum of human security concerns, such an evaluation can provide a more comprehensive understanding of the challenges at hand.

Panelists highlighted that the Sahel region is witnessing the most significant competition and crises in the management of resources. Particularly, there was a specific emphasis on the need for a more responsible evaluation of China's activities in the region concerning resource management. The focus, especially on China's interest in mining, was underscored as something that other stable actors in the region should carefully examine. On the other hand, it was emphasized that Sahel countries need to be supported in managing these resources on their own and encouraged to ensure their economic development independently. This underlines the

importance of empowering Sahel nations to take charge of resource management and drive their economic progress autonomously.

Panelists emphasized that a significant portion of conflicts in Africa is driven by competition over scarce resources. They noted that terrorist organizations in the region are acutely aware of this situation and seek to exploit these resources to enhance their influence. The panelists highlighted that these groups aim to seize control of resources, not only to accumulate income but also to provide services that the state fails to deliver, thus aiming to gain legitimacy in the region. This approach allows these organizations to leave a positive impression and attract more recruits to their cause.

When combined with population growth, the situation becomes even more complex. However, the panelists emphasized that population growth should not be viewed solely as a problem. They highlighted that a young population can be seen as the "engineers of development." This perspective holds true in scenarios where education is taken seriously by the state. The acknowledgment of the positive potential of a growing and youthful population, especially when education is prioritized, suggests that addressing the challenges associated with population growth involves considering not only the potential issues but also the opportunities it presents for development.

Panelists stressed the importance of building the security sector, particularly for African countries. However, they also emphasized the need for capacity building, especially in terms of digital infrastructure. They highlighted that understanding the socio-economic dynamics on the continent is crucial, and addressing the problems within these dynamics requires a multidimensional approach. While it is essential to examine and alleviate specific issues related to socio-economic challenges, the complex and general nature of the problems necessitates comprehensive and multifaceted understandings and solutions.

Moderator Afzal ASHRAF pointed out that NATO may not have the capacity to address root causes directly, but it becomes crucial in dealing with the consequences. He suggested that NATO could play an active role among its allies in fostering an understanding of how they can contribute to prevention. In this regard, NATO should take the lead in developing dialogue, as it recognizes its own limitations in preventing conflicts within its mission and authority. By initiating dialogue and fostering collaboration among allies, NATO can contribute to a collective and effective approach to conflict prevention, Dr. ASHRAF concluded.

Panelists addressed the question of which terrorist groups with different motivations could pose a more intense threat in the next five years and were asked to evaluate the strengths and weaknesses of these groups. One of the panelists suggested that extremist threats stemming from governance deficiencies would likely become more prominent and explained that these groups are attempting to fill the governance void by providing essential needs such as food and medicine to the region. Additionally, especially in the sense of the Sahel Region, the panelists acknowledged that these groups do seek to provide a partial sense of so-called security to the people in the areas they operate. The focus on addressing governance issues reflects an understanding that groups exploiting these deficiencies might intensify their activities in the coming years.

The discussion highlighted that if the destructive impacts of climate change are not effectively addressed, states risk losing their credibility, and alternative governance models may emerge. While states bear responsibilities towards their people, these non-state groups operate without such responsibilities. However, when these groups can offer alternatives, they find space in society. Therefore, developing scenarios to combat these terrorist organizations by identifying grievances and preventing them from exploiting these grievances is crucial. By addressing the root causes and grievances, it becomes possible to create a counter-narrative that denies these groups the space to offer alternative solutions in the minds of the people. This approach is instrumental in countering the appeal and influence of such groups in society.

One of the participants shared an observation that terrorist organizations are always one step ahead compared to states. Drawing on the example of Colombia and the activities of FARC, the participant noted that the tactics of these groups are constantly evolving, and the counter-terrorism efforts need to adapt accordingly. The listener highlighted the existence of power vacuums in some regions, stating that areas with no authority provide opportunities for organizations to fill these gaps. Such areas were described as *"hybrid areas."* Emphasizing that these spaces offer maneuverability for terrorist organizations, the participant pointed out the importance of anticipating how counter-terrorism efforts will need to change in the future. The participant underscored that, generally, states are not adequately prepared for these shifts. This perspective emphasizes the dynamic and adaptable nature of terrorist organizations, requiring a continuous reassessment and adaptation of counter-terrorism strategies.

One of the participants emphasized the importance of training in counter-terrorism efforts and inquired about how developing training programs that encompass law enforcement bodies would impact resilience especially in the context of Africa. The panelists emphasized the

significant role of law enforcement bodies in counterterrorism efforts. They highlighted that, alongside the involvement of law enforcement bodies, good governance is equally crucial. Even though security may be established in the immediate term, there are deep concerns about maintaining security and stability in the long run. One of the reasons for this is the prevalent issue of corruption in the region. The panelists pointed out that the high level of corruption poses a substantial challenge, especially in conflict-prone regions in Africa, making it extremely challenging for states to have full control over governance. Particularly in the context of the relationship between law enforcement and corruption, the discussion acknowledged that individuals performing these duties are human beings with families to support. It was argued that these individuals are also affected by the same grievances in their context, and efforts should be made to protect them from being corrupted.

Another question delved into how terrorist organizations perceive multidomain operations. The panelists expressed that terrorist, even when conducting comprehensive multidomain operations, tend to focus on finding the weakest point among the domains or within any specific domain of the operations. On the other hand, the panelists highlighted that terrorist organizations always attempt to establish connections with local people and continue their activities to win the hearts and minds of the population. Therefore, even if counterterrorism operations are conducted in a multidomain manner, the panelists added that there is still a possibility of vulnerability in the aspect of the organization's potential to establish connections with the local population. The panelists contended that the current terrorist organizations are less conventional. They are not solely focused on carrying out attacks; they also have a goal of providing services. This is not something we have frequently encountered before.

As a last perspective, the panelists touched upon the foreign aid supplied to African countries. When external support is mentioned, military assistance is typically the initial consideration. However, there are different dimensions to this, especially when evaluated in the context of Africa, the panelist concluded. Since the 1960s, African countries have been the largest recipients of foreign aid. Despite all efforts, these aids have not delivered the expected outcomes. The panelists highlighted that financial aid is also highly problematic. Due to the insufficient stability of authority and governance in the region, they pointed out that the distribution of aid to these areas is poorly executed and does not reach other parts of the countries. The panelists emphasized the need for a more meticulous and accurate tracking and distribution of this aid.

Closing Remarks

Col. Bülent AKDENİZ, Director, Center of Excellence Defence Against Terrorism

Your Excellences, General, Ladies and gentlemen,

Dear distinguished guests and academicians,

We have come to the end of our Defense Against Terrorism Executive Level Seminar. I hope you have enjoyed it as much as I have. It has been a great pleasure and privilege to host you here in Ankara.

We have conducted two days of productive discussions and exchanges on many terrorism-related themes. We learned from our speakers' and panelists' experiences and research. We also looked at the current trends and challenges associated with counter-terrorism. In addition, we recognized certain gaps and potential for future collaboration and action. I am confident that we now know more about the "unknowns" than we did previously, which is a very positive thing.

I would like to thank all the speakers and panelists for their excellent presentations and contributions. You have enriched our knowledge and common understanding on terrorism. You have also provided us with valuable insight and recommendations for improving our policies and practices.

I would also like to thank all of you, the distinguished participants, for your active involvement and engagement. You have brought diverse perspectives and expertise to the seminar. You have also raised important questions and comments that stimulated further debate and reflection.

I hope that this seminar has been beneficial for you in terms of learning new information, exchanging ideas, expanding your network, and to creating a shared understanding. And, we cannot underestimate the value of coffee breaks for the side bar discussions and interaction.

I also hope that you have enjoyed meeting new people, making new friends, discovering new places, and experiencing new cultures. I hope that you will keep in touch with each other and with us.

Before we adjourn, I would like to thank our academicians once more for helping with the event's preparation and execution, as well as the J.W. Marriott for hosting us in such an amazing facility. I would also like to thank our staff for their efforts and dedication.

Finally, I would like to thank all our distinguished participants for being part of this seminar.

I wish you a safe journey back home, and I hope to see you again at future events.

With this, allow me to officially declare the DAT Executive Level Seminar closed.

Thank you very much!