



**CENTRE OF EXCELLENCE  
DEFENCE AGAINST TERRORISM**

**GOOD PRACTICES IN  
COUNTER TERRORISM IN  
MARITIME DOMAIN  
SEMINAR REPORT**

**COE-DAT**  
Centre of Excellence Defence Against Terrorism

2022



**GOOD PRACTICES IN COUNTER  
TERRORISM IN MARITIME DOMAIN  
11-12 October 2022  
COE-DAT  
İstanbul, Türkiye**

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IN MARITIME DOMAIN  
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**CENTRE OF EXCELLENCE  
DEFENCE AGAINST TERRORISM**

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## Preface

Maritime security is a general term for the protection of vessels both internally and externally. The areas from which ships and maritime operations need protecting include terrorism, piracy, robbery, illegal trafficking of goods and people, illegal fishing and blue economy.

From an analytical stand point, maritime security has three dimensions. First, an inter-state dimension, which ranges from questions of power projection, the sea power discourse, to inter-state disputes over boundaries, territories and resources and grey zone warfare operations. Second, maritime terrorism; that is, threats from non-state actors with political objectives, which might attack ships or maritime installations; and thirdly, blue crime, that is threats from non-state actors that pursue private economic objectives and engage in activities such as piracy, smuggling or illicit fishing.

After deciding to execute a seminar about “Good Practices in Counter Terrorism in Maritime Domain”, instead of focusing mainly maritime terrorism, which is sub-dimension of maritime security, we preferred evaluating maritime security in different aspects such as legal, sociological, economical, technological and etc. As COE-DAT, we considered that the first activity needs more holistic approach and must handle distinct features of maritime security. Additionally, we touched upon critical infrastructures like ports, and port security; however, considerable attention was also paid to maritime terrorism, with some of the links and similarities between piracy and certain naval strategies being highlighted.

Good Practices in Counter Terrorism in Maritime Domain Seminar was held in 11-12 October 2022 in İstanbul/Türkiye. The maritime domain is very significant for many reasons and is generally overlooked in regards to terrorism. Because of this, COE-DAT was partnering with the USAWC SSI, MARSEC, and İstanbul Aydın University to conduct a two-day seminar in Istanbul from 11 to 12 October 2022.

First, I would like to extend my sincere thanks to our sister COE MARSEC and its precious Director Capt.(N) Sümer KAYSER for their never-ending support which enabled the successful conduct of the seminar.

I also would like to express my special thanks to Deputy Director of COE-DAT, Col. Shawn V. Young for her guidance, support and understanding.

One more special thanks to Ltc Col.Uwe BERGER for his undeniable support from beginning of the preparation.

Mrs. Mge MEMİŐOĐLU AKAR as an indispensable seminar director, in her capacity as the Seminar Director, is entitled to have great appreciation for the amazing job.

Last but not least, I would like to express my deepest appreciations to the distinguished speakers and participants.

OĐuzhan PEHLİVAN (PhD)  
Colonel (OF-5, TR A)  
Director, COEDAT

## Acknowledgements

The Center of Excellence – Defence Against Terrorism (COE-DAT) is proud to present the final report from a seminar we conducted in October 2022 with our co-hosts, Maritime Security COE (MARSEC COE), in Istanbul, Türkiye. “Good Practices in Counter-Terrorism, Maritime Domain” was a cooperative venture, conceived in 2021 as our inaugural effort to address a multitude of issues in maritime terrorism and counter-terrorism.

This publication would not have been possible without the efforts of the contributing lecturers and the staffs of both COE-DAT and MARSEC.

First and foremost, I would like to express our deep and sincere gratitude to the lecturers whose work provided the foundation upon which the entire seminar rested. Fourteen academicians and military officers from seven countries gathered in Istanbul’s impressive Multinational Joint Warfare Center for two days to speak on a sweeping range of topics centered on maritime security, piracy, critical infrastructure, and energy security in the maritime domain. These speakers brought not only expertise, but also a genuine interest in finding lasting solutions in maritime counter-terrorism. Together, they created an event so successful that COE-DAT and MARSEC are already planning a follow-on event to be held in Ankara in 2023.

As the COE-DAT’s Deputy Director and a person fortunate enough to score a front-row seat for this seminar, I owe a special thanks to the Seminar Director, Mrs. Müge MEMİŞOĞLU AKAR, as well as the excellent on-site team supporting her: Seminar Assistant Ms. Aslihan AKYOL KEMER, Budget and Finance expert Mr. Savaş KEMER, and contracted Rapporteur Dr. Murat JANE. Additionally, the contributions of MARSEC COE cannot go unnoticed – the Director of that Centre, Captain Sümer KAYSER (TUR-N), not only provided the location for the seminar and two of his own staff to deliver extremely well-received lectures, but personally took time out of his busy schedule to see to it that our advance team was taken care of in style. We at COE-DAT look forward to a very happy working relationship with the staff of MARSEC COE for many years to come.

Last but not least, we are highly indebted to all the members of COE-DAT. Their expertise in all things educational, as well as their patient, critical reviews and passion for the Centre’s mission, provided inspiration at every turn.

Shawn V. YOUNG  
Colonel (USAF)  
Deputy Director, COE-DAT



## GOOD PRACTICES IN COUNTER TERRORISM: MARITIME DOMAIN SEMINAR

“Good Practices in Countering Terrorism:Maritime Domain”

(11-12 October 2022, Multinational Joint Warfare Center, İstanbul/TÜRKİYE)

### Objectives:

1. Aim of the project is to identify the current and future potential terrorism threats in the maritime domain.

Time (local GMT+3)	Day One (11th October)	
09:00 – 09:30	Registration	
09.30 – 09.40	Welcome address	COEDAT Director
09.40 – 10.00	Administration Briefing	Seminar Director
	<b>Panel 1 “Maritime Security”</b>	
10.00 – 10.30	<i>Maritime Security History and Perspective of MARSEC COE</i>	Capt(N) Sümer KAYSER
10.30 – 11.00	<i>NATO’s Active Endeavour Maritime Security Operation in the Mediterrenean Sea:A best Practice Case of Countering Terrorism in a Maritime Context</i>	Prof Dr.Oktay TANRISEVER (ODTÜ)
11.00– 11.30	Port Security	Ms.Susan SIM (Soufan Group)
11.30– 12.00	Legal Aspects of Maritime Terrorism	Prof.Dr.Funda KESKİN ATA (Ankara University)
12.00 – 13.00	Lunch Break	
13.00 – 13.30	Socio-political Dimensions of Maritime Terrorism	Dr.Baturay YURTBAY ( İstanbul Aydın University)
13.30– 14.00	Piracy and Countering Measures	Ms.Lydelle Joubert (Researcher Global Maritime Piracy and Transnational Organized Crime at Stable Seas)

14.00 – 14.30	The promise of NATO in Non-Article 5 Missions: From Peacekeeping to Narco Terrorism”.	Prof.Dr.Tarık OĞUZLU (İstanbul Aydın University)
14.30. – 15.15	Hot wash-up’ of day 1 discussions	Mr.Fatih CEYLAN (Ret. Ambassador) Moderator
15.30-22.00	<b>Boat Tour and Official Dinner (For Speakers)</b>	Host by COEDAT
<b>Day Two (12<sup>th</sup> October)</b>		
	<b><i>Panel 2 “Critical Infrastructure and Energy Security on Maritime Domain “</i></b>	
09.30 – 10.00	Critical Maritime Energy Infrastructure Protection From Terrorist Attacks and Usage of Unmanned Port Protection	Cdr. Francisco Jose DE BRITO PEREIRA (MARSEC COE)
10.00 – 10.30	Critical Infrastructure in Maritime Domain	Dr.Carol EVANS (US War College)
10.30 – 11.00	Critical Infrastructure Protection for Communication Systems	Mrs.Kristen KUHN, PhD (Coventry University,Research Fellow)
11.00– 11.30	NATO Maritime Security Capacity Building Efforts and EXER MARSEC-23”	Lt.Alexandru C. HUDIȘTEANU (MARSEC COE)
11.30 – 12.00	Challenges and Opportunities to Maritimes on Global Energy Security’	Dr.Filiz KATMAN (İstanbul Aydın University)
12.00-13.30	Lunch Break	
13.30 – 14.00	Securing the World’s Busiest Port: Lessons from Singapore	Ms.Susan SIM (Vice President for Asia at The Soufan Group)
14.00 – 14.30	Public and Private Partnership in Maritime	Dr.Carol EVANS ((US War College)
14.30-15.30	Hot wash-up’ of day 2 discussions	Dr.Heather GREGG- Moderator (US Army War College)
15.30 – 16.00	Closing Remarks	COEDAT Director

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GOOD PRACTICES IN COUNTER TERRORISM:  
MARITIME DOMAIN SEMINAR  
11-12 OCTOBER 2022  
İSTANBUL, TÜRKİYE

## BIOGRAPHIES OF SEMINAR SPEAKERS

### Sümer KAYSER



Sümer Kayser was born in İzmir in 1969. He graduated from Naval Academy in 1990.

He assumed a variety of duties during his sea tour in period 1990-2002. He was Communication Officer of TCG GELİBOLU, CIC officer of TCG TURGUTREİS, navigation officer and operational officer of TCG BARBAROS. As a navigation officer and observer, He joined Flag Officer Sea Training (FOST) at Plymouth/UK.

During his sea period he joined Operation Sharp Guard and Standing Naval Force Mediterranean Staff Officer.

Shore appointments have included CIC Training officer and staff duties in HQs.

After his sea period, he has assigned to Turkish Naval HQ-Ankara. Between 2002-2008, he served as CBRN Defence Officer, Between 2008-2011 he served chairman of the NTG CBRN Defence Training-Naval Sub Group (WT-2) Chairman, between 2008-2010, he served as C4ISR Project Officer. He served as a Maritime Security Branch Chief of the Turkish Navy between 2010-2012.

He worked in Multinational Maritime Security Centre of Excellence-MARSEC COE as a Head of Transformation Department between September 2012-May 2013 and as a Deputy Director between May 2013-March 2017. Currently he is working at MARSEC COE as Director.

He was member of the NATO Naval Cooperation and Guidance for Shipping (NCAGS) WG and Contact Group on Piracy off the Coast of Somalia (CGPCS) – Working Group-1.

His decoration include, NATO Medal (Kosovo and Former Yugoslavia).

Sümer KAYSER is married with two children and speaks English.

## **Oktay F. TANRISEVER**



Prof. Oktay F. Tanrisever is the Chairperson of the Center for Black Sea and Central Asia (KORA), and a Full Professor of International Relations at the Middle East Technical University (METU), Ankara-TURKEY. Previously, he served as the Chairperson of the International Relations Department, the Vice-Dean of the Faculty of Economics and Administrative Sciences and Chairman of the Area Studies as well as Eurasian Studies Programs of Social Sciences Institute at METU. He served as the Chairperson of Energy Diplomacy Working Group at the World Energy Council Turkish National Committee (WECTNC) between 2017-2019. He has specialized in Transnational security issues of migration, terrorism and cyber space; Energy, water and environmental diplomacy; Regional security and peace-building in Eastern Europe, Eurasia and Asia; and International negotiation. He has published numerous publications and taught several courses on these topics at METU at the PhD, graduate and undergraduate levels.

## **Susan SIM**



Susan Sim is a Senior Research Fellow at The Soufan Center. She is Vice President for Asia at The Soufan Group and has worked in various capacities in the Singapore government—in law enforcement, intelligence analysis, and diplomacy—and was a journalist based in Indonesia in the 1990s. In 2009, she founded Strategic Nexus Consultancy, a boutique research firm specializing in home-front security and counterterrorism issues, in which capacity she led several commissioned research projects studying the terrorist landscape and government responses in Southeast Asia. In December 2010 she joined The Soufan Group, combining her local knowledge with the expertise of TSG's international team to design training programs for government clients.

A graduate of the University of Oxford, she started her career in the Singapore government as a probationary police inspector. Posted to the Internal Security

Department as an intelligence analyst heading the counterterrorism and counter-espionage research units, she transitioned to journalism. After a stint on the political desk of *The Straits Times*, she was posted to Jakarta as Indonesia Bureau Chief, where she covered the events leading to and following the fall of President Suharto.

She was then recruited by the Singapore Foreign Service and deployed to Washington, DC, as Deputy Chief of Mission. Currently Adjunct Senior Fellow at the S. Rajaratnam School of International Studies at the Nanyang Technological University in Singapore, she was a Visiting Fellow at the Institute of Southeast Asian Studies in Singapore and the Southeast Asia specialist for the Qatar International Academy for Security Studies (QIASS) Global Study on Countering Violent Extremism. She has been a speaker at the NATO Centre of Excellence— Defense Against Terrorism in Ankara, Turkey, since 2008, as well as a consultant to the Home Team Academy (Singapore).

Appointed Editor of the Home Team Journal in July 2018, she is also on the Editorial Board of the international journal *Police Practice & Research*. She is the author of *E W Barker: The People's Minister* (Straits Times Press, 2016), a biography of independent Singapore's first law minister, which won the 2017 Singapore Book Award for Best Non-Fiction Title. Her first book, *Making Singapore Safe: Thirty Years of the National Crime Prevention Council* (Marshall Cavendish, 2011), was described by the Prime Minister of Singapore as “a fitting tribute to the Council's critical role in preventing crime.” She also conceptualized, edited, and co-wrote (with Francis Chan) the Singapore Police Force's tribute to its pioneers, *Setia dan Bakti: 50 Stories of Loyalty and Service* (SPF, 2015). Her book on crime prevention campaigns in Singapore, *The Ostrich, the Ah Long, the Con Woman and the Creepy Guy* (co-written with chief police psychologist Majeed Khader), was launched in July 2017 by Home Affairs Minister K. Shanmugam. Susan's other publications include contributions to the NATO's Centre of Excellence-Defence against Terrorism's *Good Practices in Counter Terrorism* (2021), *The Routledge Handbook of Asian Security Studies*, 2nd ed. (Routledge, 2018), *Homeland Security and Terrorism* (McGraw-Hill, 2013), *Trends in Corrections: Interviews with Corrections Leaders Around the World* (Taylor & Francis, 2015), *Trends in Policing: Interviews with Policing Leaders Around the World Vols 5 & 6* (Taylor & Francis, 2016 & 2021), and the *Pearls in Policing 2012* report. She has also written on suicide bombing and terrorist rehabilitation for the NATO Science for Peace and Security Series.

Susan was on the board of the National Crime Prevention Council of Singapore for nine years and in 2018 was awarded the Public Service Medal (Singapore National Day Awards).

### **Funda KESKİN ATA**



Funda Keskin Ata is a professor at the Faculty of Political Science of Ankara University, Turkey, from where she also holds a Ph.D. She researches and teaches on the use of force, international organisations, and protection of human rights in international law. Besides journal articles and book chapters, she published three books in Turkish titled War and Intervention in International Law (1998), United Nations and Turkey: Issues Related to International Peace and Security (2005), European Union and the Protection of Human Rights (2013).

### **Baturay YURTBAY**



Baturay Yurtbay is member of Political Science and International Relations Department in İstanbul Aydın University. Dr. Yurtbay got Bachelor Degree from Yeditepe University Political Science and International Relations Department with Honour Degree and from Sociology Department with high honour degree. Besides Dr. Yurtbay got Erasmus Exchange experience in The Hague University of Applied Sciences, Den Haag in Netherlands. Dr. Yurtbay got Msc in King's College War Studies with "Solution or Stalemate: Peace Process in Turkey" titled thesis. Yurtbay got Phd. From Yeditepe University with "States' institutional responses to international terrorism and victims' perceptions: Cases of Istanbul 2003 and London 2005 attacks" titled thesis. Dr. Yurtbay got many certificates and trainings including University of Oslo, Oslo Summer School in Comparative Social Science Studies, University of Oxford, Harris Manchester College, The Centre for the Resolution of Intractable Conflict (CRIC) (March 2019) and University of Oxford NVivo: Data analysis – professional practice (2019), NVivo: Up and running (2019).

### **Lydelle JOUBERT**



Lydelle Joubert is a researcher at Stable Seas on global piracy and counter-piracy, transnational organized crime, and maritime terrorism. Her experience includes time in civil society, the private sector, the South African military, and as a volunteer at the National Sea Rescue Institute. She holds an MA in International Relations from the University of Pretoria, South Africa.

### **Tarik OĞUZLU**



Prof. Dr. Tarik Oğuzlu is currently a faculty member of the Department of Political Science and International Relations at Istanbul Aydın University and an advisor to the Rector. He served as the Chair of the Department of Political Science and International Relations and Director of the Center for Social, Economic and Political Research (SEPAM) at Antalya Bilim University between 2012 and 2020. He was a faculty member of the Department of International Relations at Bilkent University between 2004 and 2011. He got his Ph.D. degree in International Relations at Bilkent University in 2003. He got his Master of Science degree in International Relations at The London School of Economics and Political Science in 2000 and his Master of Arts degree in International Relations at Bilkent University in 1998. He was granted the Jean Monnet Scholarship of the European Commission in 1999.

He has academic articles published in such journals as *Political Science Quarterly*, *Washington Quarterly*, *Middle East Policy*, *International Journal*, *Security Dialogue*, *Middle Eastern Studies*, *Turkish Studies*, *Cambridge Review of International Affairs*, *European Security*, *International Spectator*, *Contemporary Security Policy*, *Mediterranean Politics*, *Australian Journal of International Affairs*, *Journal of Balkans and Near Eastern Studies*, *Insight Turkey* and *Uluslararası İlişkiler*, etc.

## **Fatih CEYLAN**



Born in Bursa in 1957. Joined the Turkish Foreign Ministry in 1979. Served in Turkish posts and missions in Islamabad, Deventer, NATO, Brussels and the EU.

Appointed to Khartoum and Turkish Delegation to NATO as Ambassador. Last appointment in Ankara was Deputy Undersecretary in charge of bilateral affairs.

He received state orders from Sudan and Kazakhstan respectively for his contributions to improving the bilateral ties between Türkiye and those two countries.

He is the President of Ankara Policy Center, a well reputed think tank located in Ankara.

He writes articles on different aspects of Turkish foreign and security policies, focusing on NATO and European security.

Retired from the Ministry in 2019 February.

## **Carol V. EVANS**



Carol V. Evans is Director of the Strategic Studies Institute and the US Army War College Press at the U.S. Army War College, in Carlisle, Pennsylvania. SSI is the U.S. Army's leading think tank for geostrategic and national security research and analysis. Dr. Evans brings 30 years of expertise in the areas of mission assurance, crisis & consequence management, asymmetric warfare, terrorism, maritime security, homeland security.

Since 2014 Dr. Evans has been a Lecturer at NATO, Center of Excellence-Defense Against Terrorism (COE-DAT) in Ankara, Turkey, where she teaches in COE-DAT's Critical Infrastructure Protection Against Terrorist Attacks training program. She holds a Master of Science (M.Sc.) degree and a Doctor of Philosophy (Ph.D.) degree from the London School of Economics.

### **Kristen KUHN**



Kristen Kuhn is a Research Fellow at the Institute for Peace and Security at Coventry University in the United Kingdom. Kristen specializes in security, risk and decision-making. Her research is focused on cybersecurity for decision-makers in the maritime domain and, more recently, protective security in publicly accessible locations (e.g. cruise ships). Kristen has over eight years of experience in international affairs and four years of top-level management at non-governmental organizations. Her research has been funded by the UK National Counter Terrorism Security Office (NaCTSO), the UK National Cyber Security Centre (NCSC), and Lloyds Register Foundation.

### **Alexandru HUDIȘTEANU**



Lt. Hudișteanu was born 14 December 1987, in Prahova County, Romania. LT. HUDIȘTEANU is the Exercise Staff Officer at NATO MARSEC COE since December 2020 and in this capacity has coordinated the creation and conducting of EXER MARSEC-21, the hallmark-training event of MARSEC COE of 2021 and part of the Maritime Security dedicated exercise series. Currently, he is involved with the next iteration of the exercise to take place in 2023, along other projects in MARSEC COE. In 2021, he took part in exercise CORE20 in Odesa, Ukraine as a lecturer and facilitator for the Maritime Security syndicate.

LT HUDIȘTEANU has over 11 years of experience as a naval officer, his first commission being on the Romanian Tetal II class corvettes as an above water warfare officer. He climbed through the ranks to further hold commissions as Weapons and Sensors Officer, Principal Warfare Officer and Executive Officer on the same class of ships before his 6th year in the Navy. He then proceeded as a naval training instructor in the Romanian Naval Forces Training School for 3 years, before his posting to NATO MARSEC COE.

He attended military high school and following the navy officer program in the Naval Academy in Romania and he also holds a MA in the field with a subject in cooperation in maritime security. He holds extra master's degree studies in security and diplomacy, a professional course on anti-submarine warfare in San Diego Fleet Training Centre, USA, a post-graduate course in security policy making, and he is currently a Military Sciences PhD candidate at the Carol I National Defence University in Romania.

During his career, he took part several times in various multinational and national exercises (SEA SHIELD, MAVI BALINA, EXER MARSEC etc.), cooperation programs and initiatives (BLACKSEAFOR, US-Romania training under the Tailored Forward Presence), NATO SNMGs activations, and in Operation Sea Guardian.

He is deeply interested into security and international relations subjects, he holds a special interest in history, and he is passionate and dedicated about his work. He is naturally curious, bolsters his work with creativity, and believes deeply into the multi-disciplinary approach to problem solving.

### **Filiz KATMAN**



Assistant Professor Dr Filiz Katman holds a BA in Economics (in English) from Istanbul University, an MA in Political Science and International Relations (in English) from Marmara University, a PhD in International Security and Terrorism from National Defence University (formerly Turkish Military Academy), certificates from Harvard University Humanitarian Assistance in Conflict and Disaster Program, Oxford University Pembroke College Changing Character of War Programme, Yale University Program on War, Conflict and Order, NATO International School, and NATO Centre of Excellence on Defence Against Terrorism. Currently, Dr Katman is Executive Board President at the Energy Politics and Markets Research Centre (EPPAM) since 2010 (founder of the first research centre on energy politics in Türkiye), Editor-in-Chief at EPPAM Policy Brief, and Erasmus+ Coordinator of Department of Political Science and International Relations (in English) at Istanbul Aydin University. She is Senior

Fellow at Centre for Syrian Studies and peer reviewer at Journal for Terrorism Research at University of St Andrews and also Management Committee Member of CA18228-Global Atrocity Justice Constellations COST Action representing Türkiye and also member of working groups in COST Actions of the European Union titled CA16232-European Energy Poverty Agenda Co-Creation and Knowledge Innovation COST Action Working Group 1: Integration - Transformation the state of the art and Working Group 2: Indicators – Developing an operational European energy poverty framework; CA17135-Constitution Making and Deliberative Democracy COST Action Working Group 2: Minority Groups and Deliberative Democracy, Working Group 3: e-Deliberative Democracy, CA19126-Positive Energy Districts European Network COST Action Working Group 1: PED Mapping, Characterisation and Learning, Working Group 2: Guides and Tools, CA18236-Multi-Disciplinary Innovation for Social Change (SHIINE) COST Action and CA15212-The Citizen Science COST Action, CA20107 - Connecting Theory and Practical Issues of Migration and Religious Diversity Working Group 1: Meta-study on the intersection between Religion and Migration, Working Group 2: Narratives of Migration through the Lenses of Religious/Non-Religious Beliefs, Working Group 3: Design of Practice-Oriented Research Projects, Working Group 4: Migration and Religious Diversity through the lenses of Gender and Age, Working Group 5: Communication and Dissemination, CA20109 -Modular Energy Islands for Sustainability and Resilience, CA20138 - Network on Water-Energy-Food Nexus for a Low-Carbon Economy in Europe and Beyond. She is recipient of several awards and scholarships in both the domestic and international arenas, and has published several articles and books on terrorism, security, political violence, cyber threats, cyber security, countering terrorism financing, energy policy, energy security, Syria, Eurasia and NATO. She is regularly consulted by BBC World News due to her expertise, and is Editor for National Security and Physical Geography at Editorial Advisory Group of Cambridge Scholars Publishing, a Member of TUBITAK Academic Research Funds as Observatory Panelist, TOBB (The Union of Chambers and Commodity Exchanges of Türkiye) Istanbul Women Entrepreneurs Council, Executive Board of Energy Business Council at Foreign Economic Relations Board-DEIK and Honorary Advisory Board Member at Foreign Energy Investors Council.

**Heather S. GREGG**

Heather S. Gregg is a professor at the U.S. Army War College's Strategic Studies Institute (SSI). From 2006-2019, she was an associate professor at the Naval Postgraduate School's Department of Defense Analysis, where she worked primarily with Special Operations Forces. Prior to joining NPS, she was an associate political scientist at the RAND Corporation. In addition to her academic experience, she has spent time in several regions of conflict including Palestine/West Bank and the former Yugoslavia.

Dr. Gregg earned her Ph.D. in Political Science in 2003 from the Massachusetts Institute of Technology. Her dissertation work was on historic and contemporary causes of religiously motivated violence. Dr. Gregg also holds a Master's degree from Harvard Divinity School, where she studied Islam, and a B.A. in Cultural Anthropology from the University of California, Santa Cruz.

Dr. Gregg is the author of *The Path to Salvation: Religious Violence from the Crusades to Jihad* (Potomac, 2014) and *Building the Nation: Missed Opportunities in Iraq & Afghanistan* (University of Nebraska Press, 2018). She also has published articles and book chapters on Al Qaeda, including "Fighting the Jihad of the Pen: Countering Al Qaeda's Ideology" (*Terrorism and Political Violence*, 2010) and "Crafting a Better Grand Strategy to Fight the Global War on Terror: Lessons from the Early Years of the Cold War" (*Foreign Policy Analysis*, 2010), in addition to co-editing and contributing to *The Three Circles of War: Understanding the Dynamics of Modern War in Iraq* (Potomac, 2010).

### **Main Outcomes and Common Points of Seminar**

- The multidimensional security structure of the post-Cold War era also applies to maritime security. Multidimensional security structure is related to new threats to international system. Maritime security is affected by these new threats as well.
- NATO engages in counterterrorism activities through operations such as Active Endeavour and Sea Guardian. These operations indicated that NATO prepared for new threats after the Cold War. Besides, operations like Active Endeavour and Sea Guardian prove that NATO can adapt itself in new conditions.
- Port and maritime route security is not only about security problems about maritime domain but also relates to energy security, critical infrastructure security and global trade's efficiency. It's understood that maritime security. Hence cyber security, energy security, port security and critical infrastructure security are parts of maritime security eco-system.
- Maritime terrorism and Maritime security also have sociological dimensions. Because space is not only constructed by states and international organizations, the historicity of the regions in question, their sociological background and the perceptions of the people in the region about maritime security and terrorism are also important because people are exposed to security problems. Therefore, maritime security and terrorism have a meaning beyond the classical-traditional realist and liberal security approaches.
- Public-Private cooperation is vital for maritime security. In addition to public-private sector cooperation; civil-military, academy-private sector, state-society cooperations should be also taken into consideration. Because while maritime security problems are multidimensional, solutions for maritime security problems are either.
- Although there are legal texts such as UNCLOS and IMO Convention in international law for Maritime Security, the international legal dimension of maritime security needs to be expanded like in common definition and scope of terrorism.

**GOOD PRACTICES IN CT IN MARITIME DOMAIN SEMINAR  
DIRECTOR'S OPENING REMARKS**

**(11 OCTOBER 2022)**

Ladies and gentlemen, distinguished participants,

I express my warm welcome, and articulate that it is our privilege to see you in this seminar. I cannot use the term “to host” because as COE-DAT, we are also visitors in İstanbul currently. However, our sister COE MARSEC provides us this opportunity and by this way we are able to execute this event. In this seminar, besides MARSEC, we will be in close touch with USAWC SSI and İstanbul Aydın University. On behalf of all COE-DAT staff, which is the leading locomotive of this seminar, I appreciate the endeavors of all these organizations.

As stated in NATO Strategic Concept 2022, terrorism, in all its forms and manifestations, is the most direct asymmetric threat to the security of our citizens and to international peace and prosperity. Terrorist organizations seek to attack or inspire attacks against Allies. They have expanded their networks, enhanced their capabilities and invested in new technologies to improve their reach and lethality. Non-state armed groups, including transnational terrorist networks and state supported actors, continue to exploit conflict and weak governance to recruit, mobilize and expand their foothold.

There are two main approaches in the global war on terrorism (GWOT). On the one hand, the hard approach entails physical engagements that thwart destructive plans by terrorists, such as bombings. Through the legislative, judiciary and executive arms of the state, the modern state uses methods such as arrest, surveillance, intelligence and detention to cripple damaging terrorist initiatives. The soft approach, on the other hand, attempts to debase terrorist ideology through a counter-ideology discourse against radical ideologies that encourage political violence.

Neither approach can be defined as the best solution for global war on terrorism. COE-DAT believes that we need to develop a holistic approach by considering both, an approach that will be a valuable tool in our fight against terrorism. Therefore, COE-DAT is searching for new areas and academic disciplines in order to end terrorism and terror incidents. This seminar is a product of that approach, and last year we decided to focus on maritime domain.

In today's global environment, transnational security challenges—so-called grey-area phenomena—pose serious and dynamic challenges to national and international stability. These dangers, which cannot be readily defeated by the traditional

defenses that states have erected to protect both their territories and populaces, reflect the remarkable fluidity that currently characterizes world politics—a setting in which it is no longer apparent exactly who can do what to whom with what means. The maritime realm is especially conducive to these types of threat contingencies given its vast, largely unregulated, and opaque nature.

Today all the warning signs indicate the highest states of alert for terrorist attacks against the maritime sector worldwide. Military and commercial ships of varying sizes are prone to terrorist threats, while critical infrastructure such as ports and open sea oil platforms are still vulnerable to possible attacks. Recent leakage in Nord Stream 1 and 2 reveal this reality one more time when we consider the high possibility of sabotage or terrorist attack.

Terrorists use waterways for smuggling and human trafficking. Weapons of mass destructions are currently potential targets for any state, and each of these states is anxious to capture the terrorist-chartered sea vessels carrying these weapons. Finally, legal gray areas are also tying our hands in the mutual and bilateral cooperation efforts attempting to solve these problems.

In this seminar, the precious scholars from different parts of the world share their ideas on this topic. I hope the discussion environment will enhance the capacity-building of COE-DAT and present us new opportunities for defence against terrorism.

I wish you prolific and productive seminar. Thanks.

Oğuzhan PEHLİVAN  
Colonel (OF-5)  
Director of COE-DAT

“Good Practices in Countering Terrorism: Maritime Domain”  
(11-12 October 2022, İstanbul/TÜRKİYE)

**SEMINAR REPORT**

Day 1- Panel 1 (Maritime Security)

Maritime Security History and Perspective of MARSEC COE -  
***Capt.(N) Sümer KAYSER***

The first day of the seminar titled “Good Practices in Countering Terrorism: Maritime Domain” held at the National Defense University between 11-12 October 2022 started with the opening speeches, and the speaker of the first panel was MARSEC COE Director Marine Colonel Sümer KAYSER. Col. KAYSER made presentation titled “Maritime Security History and MARSEC COE”. Col. KAYSER brought forward that Maritime Security is one of the best buzzwords in international discipline. In the otherwords, there isn’t any consensus over definition of maritime security. Therebeside security concept in international relations have also many dimensions and approaches with regards to theoretical abundance. General questions about security related to theories are like “What is threat?”, “Whose security is worth protecting?” and Who/What is the legitimate security?”. IR theoreticians like John Baylis and Ole Waever defined security in different aspects. For instance according to John Baylis security can be defined as “absence of threat”. Absence of threat contains different analysis level on security as individual, national and international. Maritime security has these dimensions as well. Maritime security is also deeply concerned with sea power. In geopolitical sense Alfred Mahan put forward the importance of sea power. In other saying Mahan affected geopolitic studies in terms of creating a theory of sea power. Mahan’s approaches on geopolitics were like a breaking poing on war history via justifying and grounding the Britain’s determination. Not only Mahan’s ideas influenced USA’s sea power vision but also France, Russia, Japan and especially rising power of international system Germany under the command of

Admiral Alfred Von Tirpitz. Understandably, Mahan established a naval approach adopted by the military and political elites. According to Mahan, naval power depends on the geographical structure of a state (being a land state or sea state) the place of naval policy in national politics and overseas bases.

As can be seen above, Mahan's maritime theory was based on hard power and pure classical geopolitics. Especially dimensions of security concept began to broaden after end of the Cold War. As Barry Buzan put forward that security has political, economic, social, environmental and military dimensions. Within this frame, new dimensions of security such as hard power, food, climate change and cyber environment are all about and related to Maritime Security. It was talked about Maritime security but difference between safety and security concepts must be mentioned regarding to linguistic point of view. Safety can be defined as state of being away from dangers by natural forces, obstacles and human errors. Security is about state of being away from the dangers created by human being consciously. So "Blue Economy" concept can help for better understanding of maritime security in broad sense. Because Blue Economy is about governance of maritime security in globalization period whose impacts can be observed in post-Cold War period. Blue economy, as a comprehensive point of view on maritime security, is sustainable use of ocean resources for economic growth, improved livelihoods and jobs and ocean ecosystem health in World Bank's definition. Blue economy contains renewable energy, fisheries, maritime transport, tourism, climate change and waste management. Within this frame, blue economy is vital for World economy. For instance over %80 of international goods traded are transported by sea, ocean and coastal tourism bring along with new job opportunities and economic growth and sustainable fisheries contribute to global GDP. Importance of blue economy was understood after COVID-19 pandemic. Global economy faced important challenges after COVID-19 and maritime trade was also affected as well.

According to Christian Bueger, Blue Economy is related to Maritime Security. Bueger put forward in his article titled "What is maritime security?" that maritime security can be understood with other related concepts. Aforementioned related concepts are depicted in Maritime security matrix which are national security, human security, marine environment, economic development, marine safety, seapower, resilience and blue economy. So all threats against maritime security like accidents, pollution, smuggling, piracy, terrorism, illegal, unreported and unregulated (IUU)

fishing in which are seen in maritime security matrix are related to blue economy. In the meanwhile, food security, resilience of coastal populations and sustainable livelihoods which are related to blue economy phenomenas also encompass human security.

Col. KAYSER emphasized importance of some documents and events such as “The Ocean Our Future”, Operation Active Endeavour, The International Ship and Port Facility Security (ISPS) code, establishing MARSEC Working Group, establishing Oceans and the Law of the Sea in the General Assembly of the UN, NATO Maritime Strategy in 2011, NATO Maritime Situational Awareness (MSA), collaborative security concept in which was approached in NATO Strategic Concept in 2010, The European Union Maritime Security Strategy (EUMSS) accepted in 2014, EU-NATO cooperation in marine field in 2016 and last security concept accepted in 2022 in which maritime security is regarded as key to NATO’s peace and prosperity.

### **NATO’s Active Endeavour Maritime Security Operation in the Mediterranean Sea: A best Practice Case of Countering Terrorism in a Maritime Context - Prof. Dr. Oktay TANRISEVER (ODTÜ)**

After Colonel KAYSER, Prof. Dr. Oktay TANRISEVER who is member of METU Political Science and International Relations department made presentation titled “NATO’S Active Endeavour Maritime Security Operation in the Mediterranean Sea: A Best Practice Case of Countering Terrorism in a Maritime Context”. Prof. TANRISEVER aimed to clarify increasing importance of maritime domain to fight against terrorism in the aftermat 9/11 terrorist attacks, explore NATO’s Active Endeavour Maritime Security Operation in the Mediterranean Sea and emphasize on importance of aforementioned operation in countering global terrorism on the period between 2002-2016. According to Prof. TANRISEVER; NATO’s Active Endeavour Maritime Security Operation in the Mediterranean Sea could be considered as a best practice case of countering terrorism in the maritime contexts, aforementioned Operation has implications for the broader fight against global terrorism in the post-9/11 world and several lessons were learned from NATO’s Active Endeavour Maritime Security Operation (MSO) for future operations for countering terrorist threats in the maritime contexts.

Maritime domain was neglected aspect of counter terrorism strategy until 9/11 terrorist attacks of which were among indicators global terrorism. So global terrorist threats gained importance after 9/11 attacks. But terrorism and terrorism studies as an academic field concern about terrorist attacks. But ports, chokepoints and critical infrastructures such as pipelines and tankers gained importance for globally networked terrorists. In other words, terrorist benefited from developed IT Technologies and globalization in maritime security domain. Active Endeavour MSO was was one of eight initiatives taken by NATO to support the USA correspondingly. Thus Many important tools have been used, including AWACS. Although Operation was about maritime security, the use of AWACS shows the multidimensionality of Active Endeavour MSO. It also depicts that the operation, in which was commanded and conducted from Maritime Command Headquarters Northwood United Kingdom until 2013, consisted of surface units, submarines and maritime patrol aircraft. The operation evolved from a platform-based to a network-based operation, using a mix of on-call units and surge operations instead of deployed forces. It also depicts vital geopolitical position of Mediterranean Sea which includes important strategic chokepoints like Gibraltar Strait and Suez Canal. So except visible effects on security and stability like deterring terrorist and counter-terrorism activities, Operation Endeavour also contains trade and economic activities such as securing busiest trade routes in the World. As it is understood, maritime security in Mediterranean sea could cause a global problem. Therefore, despite Active Endeavour MSO was initially article 5 operation, NATO has got supports to deter terrorist activities such as proliferation and smuggling of weapons of mass destruction in Mediterranean Sea from non-NATO states and civilian agencies since 2004. NATO Allies decided to enhance scope of Operation Active Endeavour via welcoming non-NATO member partner countries.

Objectives and functions of Operation Active Endeavour are keeping seas safe, protecting shipping, tracking and controlling suspect vessels, closer cooperation with partners including Morocco, Israel, Russian Federation, Ukraine, Egypt and other unexpected benefits such as rescuing civilians on stricken oil rigs, sinking ships and securing global sports events like 2004 Olympic and Paralympic Games in Greece. Task Force Endeavour gave support to Greece with surveillance, presence and complaint boarding operations in international waters around Greek peninsula.

Operation Active Endeavour was as dynamic as NATO with regards to adapting itself to new conditions. Operation shifted from platform-based to network-based structure in accordance with new operation plan. And changes have proceeded with

NATO's new Maritime Strategy adopted in January 2011 in which Operation Active Endeavour fulfilled 4 roles outlined this strategy. They were deterrence and collective defence, crisis management, cooperative security and maritime security. Important change was about headquarter of Active Endeavour in 2013 from Northwood to Naples. After these changes, Operation Active Endeavour termination decision was taken by Allies in Warsaw Summit held in 2016 to create a broader maritime operation in Mediterranean Seas.. After this decision of Allies, Operation Sea Guardian became operational. Sea Guardian is a flexible maritime operation that is able to perform the full range of maritime security tasks, if so decided by the North Atlantic Council. It is currently performing three tasks in the Mediterranean Sea: maritime situational awareness, counter-terrorism at sea and support to capacity-building.

After these general and comprehensive analysis, Prof. TANRISEVER clarified conclusion of presentation within frame of lessons learned and recommendations for future policies. According to Prof. TANRISEVER; maritime domain should be integral part of any counter terrorism strategy, closer cooperation mechanisms should be developed between military counterterrorism bodies and civilian maritime actors, greater international cooperation should be developed to enhance the effectiveness of counterterrorism operations in the maritime contexts and Greater intelligence sharing should be developed in order to prevent the potential terrorist attacks in and through the maritime contexts. And Prof. TANRISEVER underlined the importance and contributions of Operation Active Endeavour in NATO's counter-terrorism activities.

### **Port Security - Ms.Susan SIM (Soufan Group)**

Ms. Susan SIM who is member Soufan Group made presentation titled "Port Security" after Prof. TANRISEVER's presentation. Ms. SIM discussed port security as securing the maritime ecosystem. Extensive maritime ecosystem comprises offshore/marine engineering, shipping, maritime services and ports. According to Ms. SIM, port security encompasses security security and law enforcement measures to safeguard a sea port from terrorism and other unlawful activities, measures employed to ensure international codes and treaties are enforced and security of commercial areas in and around ports, coast lines, and beaches. Threats related to port security consist of piracy, human smuggling, security of commercial ports, coastlines and beaches. By the way economic scope of port security should not be neglected as seen in Suez canal blockade. As Ms. SIM quoted from business reporter of BBC Justin

Harper Suez blockage by mega container Ever-Given costs \$ 9. 6 billion loss per day for global economy. Besides this fact, Suez Canal is one of busiest trade routes in the World about % 12 total global trade moving through it. Of course port security can't be reduced on trade routes. Some threat scenarios were hypothesized by some scholars. Using commercial Cargo containers to smuggle terrorists, nuclear, chemical or biological weapons, using a "Trojan Horse" in some ships, seizing control of a large commercial cargo ship and using it as a collision weapon for destroying a bridge or refinery located on the waterfront, hijacking a vessel and holding it for ransom to support a political violence campaign, sinking a large commercial Cargo ship in a major shipping channel to block port traffic, attacking US Navy ships in an attempt to kill US military personnel, damaging or destroying a valuable US military assets are among aforementioned threat scenarios. Some of these scenarios related to port security materialized like Attack on the USS Cole in Port Aden on October 12, 2000. On October 12, 2000 two suicide pilots engaged with Al-Qaeda attacked to USS Cole in Port Aden, Yemen during refueling stop. 17 people (including 2 Al-Qaeda militants) died, 37 people were injured after this attack.

Another example related to port security is Mumbai Attacks on November 26-29, 2008. Mumbai Attacks made by Lashkar-e Taiba terrorist organization were multidimensional because attacks involved Taj Hotel, CS Terminus, Trident Hotel, Colabai Ville Parle, Jewish Cultural Centre, Santa Cruz Airport and some hospitals. 10 militants of Lashkar-e Taiba conflicted with security forces and 9 out of 10 were killed during conflict which lasted 60 hours. Despite these important attacks, terrorists rarely choose maritime way because of limited sources and capabilities. Except source and capability problem, terrorists choose buses, subways and trains because these vehicles attract attention of media comparing to maritime vehicles and they are easy targets. Besides marine transportation is not usually first choice or major source of transportation for most people. Despite all those reasons, maritime transports aren't "iconic targets" in accordance with general aim of terrorism including propaganda and resounding purposes.

Maritime ways are not generally first choice of terrorists but digital transformation expanded the scope of security so port security is affected by this reality. As Ms. SIM put forward, digital transformation of ports leads to increased cyber attacks. Antwerp attack on June 2011 based on malware infiltration to port system, Rotterdam attack on June 2017 related to collateral damage from a large-scale contagion, Long Beach attack in 2018, Barcelona attack in 2018 related to contamination of internal IT systems, highly

sophisticated cyberattack to San Diego in 2018, cyberattack amidst geopolitical conflict in Shadid Rajae on May 2020 were among these cyber attacks influence port security.

Within frame of aforementioned developments related to port security, it's understood that necessity to achieve ever higher standards of efficiency and sustainably is uncloaked. Because, future attacks on the maritime transportation system will multi-modal including both cyber and physical component. It's clearly understood that developments in technology change all dynamics of port security which is about finding the balance between security and facilitation of trade as Ms. SIM put forward.

### **Socio-political Dimensions of Maritime Terrorism - *Dr. Baturay YURTBAY (İstanbul Aydın University)***

After Ms. SIM's presentation, Assistant Professor Dr. Baturay YURTBAY who is member of İstanbul Aydın University Political Science and International Relations Department made his presentation titled "Socio-political Dimensions of Maritime Terrorism". According to Dr. YURTBAY, Maritime Security should be discussed within scope of sociology. So, Maritime Sociology or Sociology of Maritime should be taken into consideration. Maritime Sociology was firstly analyzed by German Sociologist Ferdinand Tönnies in 1896. Tönnies analyzed the working conditions and wages of different maritime professions in example of major strike 1896-1897 in Hamburg. Therefore Tönnies was regarded as founder of Maritime Sociology. After Tönnies approach, Sociology of oceans spotlighted scholars and researchers in social sciences. Sociology of oceans, which is a linkage between environmental sociology and traditional maritime studies, was begun to be studied by cultural theorists, legal scholars and historians. As it's understood, oceans should not not be seen as an entity that only needs to be focused on, connecting multiple regions to each other. Maritime has its own historical background, culture and norms. It also contains the potentials that contain the future. So, maritimes as a social space like lands. Social space should be thought as space of society containing sea and land. But place of sea in world history is neglected most of the time. Sea is thought as minor intermediary role in world history. But the seas are at least as important as the lands. As the idea that the seas are at least as important as the land.

The important question put forward by Dr. YURTBAY is "Why Maritimes are so important?". In the first glance, Maritime is part of global economy, petroleum

and energy facilities. So maritime terrorism can be understood as threat against these phenomenas either. But results of terrorism are not only political but humanitarian. So terrorism has to be assessed with its political, social and human perception dimensions. According to Dr. YURTBAY, 2005 London terrorist attacks could be a good and comprehensive example about multidimensional nature of terrorism. While short-term institutional responses of the United Kingdom were emergency services, communication, short-term actions of the Casualty Bureau, long-term institutional responses and counterterrorism strategies of the United Kingdom were about institutions and counterterrorism, national security strategy, counterterrorism strategy, socio-psychological drivers of terrorism, intelligence and counterterrorism funding. On the other hand, victims of terrorist attacks in London had also short and long-term responses in terms of perceiving institutional responses. Fear, panic, perceptions of emergency services and economic concerns were among short-term; criticisms of intelligence, low trust of foreign policy, diffusion of support, awareness (both political and personal senses) and post-traumatic stress order like revictimization were among long-term institutional responses of victims.

Victim perceptions in abovementioned London example is not same in every society and country. İstanbul was also exposed to terrorist attack in 2003. However Turkish and British victims' responses differed in some way. For instance while Turkish victims were getting used to terror, British victims got political and personal awareness or while Turkish victims didn't have unified identity, British victims has collective politicized identity like "survivors". As understood that cultural, economic and political causes that affect the connection between institutional responses and societies' perceptions of institutions. So responses aren't same in every society.

Like these two examples above, maritime security concept is under domination of two mainstream arguement as maritime domain is anarchial and should be assessed in terms of international order rather than individual perspective. But ontological security approach transcend traditional securtiy approach especially in maritime domain. Complexity of problems in the maritime domain demands equal consideration of different security issues at the ontological level. So this approach brings along with heterogenous point of view on maritime security which is there must be security of "us" and "other" together to prevent alienation, stigmatization and polarization. NATO also works on focussing improving awareness of threat, developing capabilities to prepare and respond, enhancing engagements with partners and NATO tries to use multi-dimensional problem-solving methods.

As a result according to Dr. YURTBAY, for main issues must be taken into consideration in maritime security. They are maritime terrorism, sociology of maritime which is about social space and politics-society interaction, importance of maritimes without neglecting humanitarian dimension and solutions. According to Dr. YURTBAY, solutions should be based on governmental responses and initiatives but societal approach containing demands of society and government-society interaction should be taken in equal consideration of politics and society. So interdisciplinary way of thinking and accepting ontological turns in security are indispensable parts of solution.

### ***Piracy and Countering Measures - Ms. Lydelle JOUBERT (Researcher Global Maritime Piracy and Transnational Organized Crime at Stable Seas)***

After Dr. YURTBAY's presentation, Ms. Lydelle JOUBERT who is researcher of Global Maritime Piracy and Transnational Organized Crime at Stable Seas made presentation titled "Piracy and Countering Measures". Ms. JOUBERT made a distinction between piracy and terrorism despite they have often common roots. Terrorism is also defined as the unlawful use or threatened use of force or violence, instilling fear and terror, against individuals or property in an attempt to coerce or intimidate governments or societies, or to gain control over a population, to achieve political, religious or ideological objectives. Piracy is limited to acts outside the jurisdiction of the coastal waters of a State and has private ends or financial motivations. If it's mentioned about political aims, this will be defined as terrorism.

In 2021, 171 incidents against commercial ships and 57 against small vessels were occurred globally. For example 77 crews were kidnapped from commercial vessels during 11 incidents in Gulf of Guinea and occurred important incidents in Singapore Straits. In Gulf of Guinea example, UN took resolutions about piracy and terrorist activities such as S/RES/2018 (2011), S/RES/2038 (2012), S/RES/2634 (2022) which are about call for strengthened regional cooperation in fighting piracy and armed robbery, call on states to implement recommendations of assessment mission on piracy and Call on states in region to criminalize piracy and armed robbery at sea under their domestic laws, and to investigate, and to prosecute or extradite, in accordance with applicable international law respectively. 37 Accidents in Singapore has also been observed in 2022 as well. Besides these events, piracy and terrorist activities are very high in Malacca Strait, Somalia, Morocco and Sri Lanka besides Singapore and

Gulf of Guinea. Kidnapping crews, hijacking ships for Cargo, theft of cargo, cash and protection fees are among activities of pirates and terrorist in seas. Among these states and straits, Somalia attracts a lot of attention with high ransom money in which \$339 to \$413 million in ransom payments to pirate groups. In the meantime, pirates has financial arrangement with Al-Shabaab terrorist organization to anchor hijacked vessels off Harardheere, in which the official pirate stock exchange was founded in 2009, from 2010 to early 2013. A crucial example of piracy-terrorism cooperation was Al-Shabaab ransom share approximately \$ 1.3 million \$ out of \$ 20 million in between 2010 and 2011. United Nations took resolutions such as S/RES/1816 (2008), S/RES/1838 (2008), S/RES/1851 (2008), S/RES/1918 (2010), S/RES/1976 (2011), S/RES/2015 (2011) after piracy and terrorist activities in Somalia.

Besides Al-Shabaab, Ahlu-Sunnah Wa-Jama (ASWJ) and Abu Sayyaf Group (ASG) are examples of terrorist organizations in the seas. Cabo Delgado experienced violence since October 2017 with maritime dimension added to conflict since 2020 by ASWJ. ASWJ also robbed small vessells for food mostly. ASG uses kidnapping for ransom method to gain benefits. Kidnap for ransom used to fund terrorist operations, but terror is also used to extend ASGs criminal agenda by extorting Money. ASG gained at least US\$ 14 million from kidnappings from vessels since 2014 despite unsuccessful random gaining activities on April 11, 2004 via kidnapping 3 crews of tugboat East Ocean 2 off Taganak Island in the Sulu Sea.

Against abovementioned piracy and terrorism activities, many international law texts, agreements and conventions have been prepared such as International Convention for the Safety of Life at Sea (SOLAS), United Nations Convention on the Law of the Sea (UNCLOS), The Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA), International Convention Against the Taking of Hostages (1979), International Convention for the Suppression of the Financing of Terrorism (1999), United Nations Convention Against Transnational Organized Crime, (UNTOC, Palermo Convention) (2000). Besides these conventions, some important regional maritime security instruments like Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP), Djibouti Code of Conduct and Yaoundé Code of Conduct are contributing to fight against piracy and terrorism. Aforementioned international and regional conventions should be supported by naval response operations. European Union: Operation Atalanta, CMF - Multinational Task Force-151, MSCHOA, SHADE, Naval response Gulf of Guinea and Malacca Strait Patrols are among vital naval responses against piracy-terrorism

cooperation. These naval responses should also been supported by private sector like UKMTO, MDAT-GoG and private armed security teams to get more benefit. Beside private sector contribution to struggle against piracy and terrorism, capacity building and coordination programs such as Contact Group on Piracy off the Coast of Somalia (CGPCS), MASE Program, EUCAP Somalia and CRIMARIO must not be overlooked. As it's understood, piracy and terrorism have often same roots. In both cases, developing maritime capacity, best management practices, maritime domain awareness, capacity building and coastal development are essential to struggle against piracy and terrorism. Beside these necessity, it has to be taken into consideration land dimension of piracy because piracy is ultimately land based and pirates need safe bases on land and often support of community.

**The promise of NATO in Non-Article 5 Missions: From Peacekeeping to Narco Terrorism - Prof.Dr.Tarık OĞUZLU (İstanbul Aydın University)**

After Ms. JOUBERT's presentation, Prof. Dr. Hızır Tarık OĞUZLU, who is member of İstanbul Aydın University Political Science and International Relations Department, made his presentation titled "The Promise of NATO in Non-Article 5 Missions: From Peacekeeping to Narco Terrorism". According to OĞUZLU, some new threats emerged in the international system in the post-Cold War period. NATO aimed to take the initiative in the solution process of new threats such as global terrorism, micronationalism, environmental problems, proliferation of weapons of mass destruction and narco terrorism. Within this framework, NATO's basic missions include territorial security/defence, crisis management and comprehensive and cooperative security. Parallel to these aims, NATO carried out operations beyond its jurisdiction (out of area) in Yugoslavia and Afghanistan. Especially Afghanistan operation has been beneficial in terms of preventing narco terrorism. To prevent Narco terrorism and other new threats, relations between the USA and European NATO members must be good. However, it is seen that the relations between the Euro-Atlantic Bloc are strained from time to time and this situation is reflected in NATO's effectiveness. For example, while the USA is dissatisfied with the performance of European NATO members within the organization especially based on military expenditure for NATO, European members are also uncomfortable with the use of NATO as a legitimator in USA foreign policy. However, especially the challenges of China and Russia and the Ukraine Crisis united the allies in NATO and led them to cooperation rather than

competition. Especially the Ukraine crisis has brought the importance of European geopolitics to the agenda again in terms of alliance strategies. Alongside European security and NATO's challenges to Russia and China, the possibility of NATO's future expansion into East Asia is discussed. In this framework, NATO should also be able to build bridges with non-Western actors. Because a more chaotic international system is foreseen in the future. As it's understood, Crisis management and other non-article missions are now included in NATO's toolbox in great power competition and Prof. OĞUZLU highlighted that fighting against terrorism of all kinds matter is something more than fighting against terrorism of all kinds.

### **Hot wash-up' of day 1 discussions - *Mr.Fatih CEYLAN (Ret. Ambassador) Moderator***

After presentation of Prof. OĞUZLU, which was the presentation of first day, Ret. Ambassador Mr. Fatih CEYLAN made hot wash-up of day 1 discussions. Mr. Ceylan highlighted that 2 crucial aspects came to the forepoint which they were counter-terrorism and maritime security. Counter-terrorism is obvious but definition of maritime security is very important. As Mr. Ceylan put forward that hard power and soft power must use for maritime security because it's highly related to global economy and human security. Thereby, it must be focussed on how to robust maritime ecosystem in international, regional and individual level. Operation Active Endeavour is good example about striving for secure maritime domain.

Mr. Ceylan also highlighted last adopted security concept of NATO in 2022 with regards to Russia is considered as most important rival of NATO and most important asymmetric threat is considered as terrorism. Hence maritime terrorism is also important for NATO, as well. Besides last security concept of NATO, NATO 2030: Making a Strong Alliance Even Stronger vision is worth focussing because emphasizes importance of artificial intelligence, cyber space and defence against hybrid warfare which are crucial for maritime domain. Mr. CEYLAN also highlighted importance of resilience about maritime security and fight against terrorism. Resilience is vital for both NATO and non-NATO states. Moreover resilience is not only about hard power but also considered in broader sense like security concept. Lastly Mr. CEYLAN pointed common phenomenons emphasized in all presentations in first day which were civil-military, academy-private sector and state-society relations.

## Day 2- Panel 2

(Critical Infrastructure and Energy Security on Maritime Domain)

### **Legal Aspects of Maritime Terrorism - Prof.Dr.Funda KESKİN ATA (Ankara University)**

Second day of seminar began with presentation titled “Legal Aspects of Maritime Terrorism” which was made by Prof. Dr. Funda KESKİN ATA who is member of Ankara University International Relations department. Prof. KESKİN ATA expresses that terrorist attacks at sea have been very small proportion comparing to other terrorist attack domains. But possible consequences of a successful terrorist attack on maritime domain could bring along with huge economic and political effects. As Prof. KESKİN ATA stated that Maritime terrorism was relevant for making of weapons of mass destruction not to end up in the hands terrorist organizations and/or rogue states as well. Except possible results of maritime terrorism, defining maritime terrorism is also important. For instance, International Maritime Organization (IMO) defined maritime terrorism as the systematic use or threat to use acts of violence against international shipping and maritime services to induce fear or intimidation to achieve political ambitions or objectives. The Maritime Co-operation Working Group of the Council for Security and Co-operation in the Asia-Pacific (CSCAP) determined criterias about maritime terrorism which were accruing within the marine environment, using or against vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel and against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities. Besides aforementioned criterias and definitions of maritime terrorism, UN Secretary General defined maritime terrorism within frame of major threats to maritime security. According to UN Secretary General, possible targets about maritime security are vessels, infrastructure, oil-gas facilities on the sea, submerged pipelines and communication cables, commercial interests. Methods threatening maritime security environment are small boats packed with explosives, ships as a targets and ship using as weapon to inflict damage on possible targets, hostage taking and missiles.

Besides definition and threats against maritime security, it has to be clarified rules of international law applying maritime terrorism. UNCLOS, despite not having

any reference to terrorism, it sets jurisdictional powers of states at sea. Article 110 of UNCLOS Article 110 of the Convention provides for the right of warships to board vessels on the high seas only if they are suspectedly engaged in certain activities such as piracy, slave trading, unauthorized broadcasting, absence of nationality of the ship, the ship is of the same nationality as the warship. According to article 101 of same convention, piracy is defined as a criminal act exercised by passengers or crew of the ship against another ship when both are at the high seas. It must also be committed for private ends.

SUA Convention adopted in 1988 define “offences” and “unlawful acts” rather than terrorism because terrorism has no general definition. Unlawful acts are classified in article 3 of SUA Convention as seizure or exercise of control over a ship by intimidation, violence against a person on board a ship if the violence has potential to endanger the safety of navigation of the ship, destruction or damage of a ship or its cargo, placing a device or substance to destroy or damage a ship or its cargo, destruction, damage and interference to navigational facilities and endangering a ship by communicating false information. Article 6 of SUA Convention regulates jurisdiction of the states over about offences. States have jurisdiction when the offence is committed against or on board a ship flying the flag of the State at the time the offence is committed, in the territory of that State, including its territorial sea or by a national of that state. A State Party may also establish its jurisdiction over any such offence when it is committed by a stateless person whose habitual residence is in that State; or during its commission a national of that State is seized, threatened, injured or killed; or it is committed in an attempt to compel that State to do or abstain from doing any act. Amendments to the SUA Convention (2005) enhanced the scope of offence category. 3 category of offences added with Amendments are acts of maritime terrorism such as using a ship as a weapon or as a means to carry out a terrorist attack; non-proliferation offences that are intended to strengthen the international legal basis to impede and prosecute the trafficking by commercial ships on the high seas of WMD, their delivery systems and related materials; offence to transport by sea any person who has committed an offence under the 2005 SUA Convention or its 2005 Protocol or any of the other UN counter-terrorism conventions. Article 8 of the 2005 SUA Convention allows states parties to board the vessels of other states parties outside the territorial sea of any state.

Despite abovementioned law regulations, grounds for intervention on the high seas in case of a suspected terrorist activity such as consent of the flag state, hot

pursuit after a terrorist attack self defence and resolutions of UNSC like Resolution 1373 which described any act of international terrorism as a threat to international peace and security under article 39 of the Charter. It decides that all states to take necessary steps to prevent the commission of terrorist acts, deny safe haven to those who finance, plan or support terrorist acts and ensure that any person who participates in terrorist acts is brought to justice.

Maritime terrorism is the intersection between the law of the sea and terrorism. Lack of a definition of terrorism led states to describe certain acts as offences under relevant counter-terrorism conventions. According to Prof. KESKİN ATA, industry and private sector could be used for deterring piracy; establishing common international standards for maritime security even it's not easy to launch; high-end security measures such as the utility of special operations forces, specially maritime task groups which are going to visit, board, search and seizure vessels, carry out hostage rescue operations and evacuation operations. But most important point about what more can be done is to operate in accordance with international law. Honestly seizure and using jurisdictional power would be problematic here, but still constitute a step forward in terms of the right to visit, board and search.

### **Critical Maritime Energy Infrastructure Protection From Terrorist Attacks and Usage of Unmanned Port Protection – *Cdr. Francisco Jose DE BRITO PEREIRA CAVACO (MARSEC COE)***

After comprehensive presentation of Prof. KESKİN ATA, Cdr. Francisco Jose De Brito Pereira CAVACO made presentation titled “Critical Maritime Energy Infrastructure Protection from Terrorist Attacks and Usage of Unmanned Port Protection”. Cdr. CAVACO focussed on the usage of maritime unmanned systems (MUS) in support of energy and port security. As Cdr. CAVACO quoted that NATO’s Maritime Security Operations are defined as supporting maritime situational awareness, contributing to maritime security capacity building, supporting maritime counter terrorism, upholding freedom of navigation, fighting against proliferation of weapons of mass destruction, protection of critical infrastructure and maritime interdiction operations. Security of critical infrastructures are vital for maritime security and usage of MUS. According to NATO MUS Initiative defined MUS as “all unmanned systems able to support maritime operations”. These systems are multi-domain and joint nature of these systems are useful. As it’s understood

that functions of MUS are crucial for maritime security. MUS are being used for maritime security operations to prevent terrorist attacks and sabotages. Within framework of critical infrastructures' importance; ports, checkpoints, energy routes are vital for maritime security. For instance, approximately %80 of global trade is being carried out by maritime routes. It includes port, vessels, energy, national, economic and global trade security and all of these facts are directly related to critical infrastructures. Terrorist attacks are being the first place, all threats to critical infrastructures including natural disasters, criminal activities and other malicious behaviours can't be prevented by one state or alliance. Beside these lacks of states and alliances, technological and IT dimensions of critical infrastructures bring along with lack of analog methods regarding to provide maritime security. Therefore MUS can be used for reducing human workload and providing persistency. Regarding the support of maritime critical infrastructure MUSs can extend the defensive perimeter and as Cdr. CAVACO put forward that MUS may contribute to counter terrorism at sea by conducting patrolling missions to prevent maritime terrorism; they can be used to stop or slow hostile vessels prior to boarding by (also) means of using internationally recognized signals. As Cdr. CAVACO stated that MUS can be classified as fixed-wing unmanned aircraft system, rotary wing aircraft system and unmanned surface system and unmanned underwater system. As it's understood that Maritime Unmanned Systems may operate in the air, surface or sub-surface. The unmanned aerial, surface and underwater systems may be organic or non-organic, that is to say they may operate from a mother-ship or from a ground control station.

Despite these necessities, MUS have advantages and disadvantages. According to Cdr. CAVACO, while reducing human workload and persistency are advantages of MUS, weather conditions and legal issues are disadvantages of MUS. With regards to weather conditions, small MUS are hampered by wind and sea state. Legal issues are another operational obstacles of MUS. The Component Craft status (Adjunct Craft status) is the only one solid legal concept that entitles certain MUS to perform Maritime Security Operations (MSO) tasks. It is possible that some unmanned systems, those deployed by a warship could be considered as an adjunct or component of this warship. In this case an unmanned system launched from a warship could be seen as a system of that ship and share its status rather than having an independent one. Another legal issue is about UNCLOS. UNCLOS, adopted in 1982, which lays down a comprehensive regime of law regarding to seas and oceans of world, don't regulate the use of MUS involving the use of force or

threatened use of force. For instance, article 11 of UNCLOS regulated hot pursuit right but it's not clear that a warship can pursue an unmanned system or can't or an unmanned system can pursue an unmanned system or can't. Another example can be seen in terms of terrorism. It's not clear that destroying an unmanned system involved in illegal activities is lawful or not. One possibility about operating MUS is Operational Experimentation. Operational Experimentation involves the integration of a set/collection of discrete experiment events into real (or near-real) operational environments to provide levels of information and insight not available from other traditional means such as operational research, joint analysis, or lessons learned from operations, exercises and training. Experimentation as a tool to validate new capabilities is an essential part of NATO transformation. Dynamic Messenger 2022 was a large scale operational experimentation exercise example.

To sum up; with regards to critical infrastructure, no state or alliance has capacity and capability to establish and maintain maritime security alone, critical infrastructure damages affect have not only technological dimension but societal and economical, terrorist attacks are one of the main challenges stemming from energy security in maritime domain and ports are inviting targets for terrorist attacks and sabotage. With regards to MUS; MUS are enhancing situational awareness, reducing human workload, improving mission performance, providing persistence, versatility, survivability, reducing risk to human life and enabling port protection.

### **Critical Infrastructure in Maritime Domain - *Dr. Carol EVANS*** **(US War College)**

After presentation of Cdr. CAVACO, Dr. Carol EVANS from US War College made presentation titled "Critical Infrastructure in Maritime Domain". Dr. EVANS highlighted maritime critical infrastructure, threats to maritime critical infrastructure and measures to build resiliency. As Dr. Evans put forward that important points like ports, waterways, chokepoints, global commercial shipping, cruise ship industry, naval and commercial shipbuilding yards, undersea cables, GPS/Space based systems, maritime navigational systems, MDA systems and co-located energy infrastructure are among important maritime critical infrastructures. Importance of maritime critical infrastructures can be clarified via global maritime trade and communications percentage of all. % 90 of total transport volume is being done via maritime trade and % 90 of global communications (voice, data, banking, ...

etc) are being conveyed by undersea cables. In addition to these, roughly 61% of the world's total petroleum and other liquid energy supply is moved through sea-based trade. Protecting maritime critical infrastructures are important because sea lines of communication (SLOC), being nexus of intermodal transportation, sustainability of global trade, energy, digital communications, of importance to domestic economy, of strategic importance dual use ports and sustainability of supply chains.

Dr. EVANS classified threats to maritime critical infrastructure as natural and man made disasters. While Indian Ocean Tsunami (2004), Hurricane Katrina (2005), Fukushima Nuclear Catastrophe (2016) and Tonga Volcano Eruption (2022) are examples of natural disasters, Port Beirut Explosion (2020), Deepwater Horizon Oil Spill in the Gulf of Mexico (2010) and EverGiven grounding and blockage of the Suez Canal (2021) are examples of man made disasters. There were various affects of these disaster. For instance after Fukushima Nuclear Catastrophe, 150000 people became displaced due to the radioactive contamination and unknown health effects of radiation contamination to the population and impact on agriculture and water infrastructures were expected. Port Beirut explosion was another example. Port of Beirut is Lebanon's main seaport and one of the busiest ports in the Eastern Med. The port is a hub for Jordan, Syria, Iraq and the Persian Gulf states. One of the most lucrative sources of income in Lebanon with an estimated 300 million dollars in annual revenue. Hazardous ammonium nitrate 2750 tons off loaded Moldavian flagged Rhosus in Sept 2013 and was then warehoused at the port. Fire set of by welding repair trigged a fire then the massive explosion and turn much of the city of Beirut into ruin. Besides man made disaster Port of Beirut, volcano eruption in Tonga was another interesting natural disaster example. Tonga was all but cut off from the world after an undersea communications cable was severed following the massive eruption of a volcano on January 15 2022. The blackout caused major disruption to aid efforts following the disaster. EverGiven blockade of the Suez Canal was among most recent man made disaster impacted on global trade. Ever Given blocked the Suez Canal for six days in March 2021. 369 ships stuck in a tailback waiting to pass through the 193 km canal on either side of the blockage. Ever Given's blockade costed \$ 9. 6 billion on global trade. It means \$ 400 million loss per an hour in global trade.

Besides aforementioned disasters, piracy examples like in Horn of Africa and Gulf of Guinea of which one of example was hijacking of the U.S.-owned Maersk Alabama container ship by Somali pirates in 2009; terrorist threats like 2000 USS Cole Attacks, 2002 Limburg attack which caused the short-term collapse of

international shipping in the Gulf of Aden and as a result, cost Yemen \$3.8 million a month in port revenues, 2008 Mumbai Attacks, 2004 SuperFerry bombing and 2019 Jojo Cathedral Attack; insurgencies and military actions like Yemeni Houthi rebel attacks to Saudi Navy vessels, oil tankers in Red Sea, Jeddah port oil facilities, Greek tanker in the port of Shuqaiq and Iranian seizure of the UK flagged tanker in the Strait of Hormoz in 2019; cyber attacks like 2018 Maersk/NotPetya, 2020 Iran port at Shadid Rajae, 2020 US tugboat attacks and 2022 Euro oil facilities at ports like Antwerp and Rotterdam are examples of threats to maritime critical infrastructures (CI). As is understood, cyber attacks also had important impacts on CIs. For instance, Maersk/NotPetya Attack, which was Russian cyber attack via using malicious malware in Ukraine, is the largest cyber attack in history. This malicious malware spread globally after Ukraine and its damage was estimated total \$ 10 billion. In another example, all shipping traffic at the Shahid Rajae port terminal in Iran in the coastal city of Bandar Abbas on the Strait of Hormuz came to an abrupt halt. Foreign hacker knocked the port's computers that regulate the flow of vessels, trucks and goods were knocked offline simultaneously. It led to massive congestion on waterways and roads leading to the terminal that lasted several days.

Beside these threats, maritime CIs could be affected by Belt and Road, hybrid warfare like blockade, jamming, spoofing GPS and pandemics like COVID-19 which are non-traditional issues. Russia-Ukraine tension in 2018 can be example of hybrid warfare. Russia sinks ship to block Ukrainian navy entry to Black Sea and Kertch Strait incident in 2018. As they neared the bridge, Russian authorities placed a large cargo ship under it, blocking their passage into the Azov Sea. The Ukrainian ships remained moored in the strait for eight hours, before turning back to return to port in Odessa. The Russian coast guard pursued them as they left the area, and later fired upon and seized the vessels in international waters off the coast of Crimea.

As Dr. EVANS quoted that Maritime CI requires extensive coordination among government, military and private sector stakeholders, at the domestic, regional and international levels. Dr. EVANS highlighted that NATO built measures to provide resiliency via Emphasis on maritime security strategy & concepts: 2010 Alliance Maritime Strategy and 2011 Maritime Security Operations Concept, Maritime security operations like Active Endeavour, Operation Ocean Shield, Sea Guardian, establishing NATO Shipping Centre and accrediting NATO MARSEC COE in 2020. In addition to NATO's efforts; intelligence and information sharing mechanism, maritime domain awareness/maritime operations centers, US Department of

Homeland Security Global Maritime Operations Threat Response Coordination Center (GMCC) for crisis response, partnership building and capacity, port protection via private-public partnerships, cyber security investments and investing in building redundancy and supply chain diversification can contribute to build resiliency against threat towards CIs. Beside these efforts, multilateral exercises like Blue Dot Initiative conducted by US, Japan and Australia, Global Gateway Strategy conducted by EU should be organized; cyber security investments, investments for supply chain diversification is also important for measures to build resiliency.

**Critical Infrastructure Protection for Communication Systems - Mrs. Kristen KUHN, PhD (Coventry University, Research Fellow)**

After Dr. EVANS's presentation Dr. Kristen KUHN who is research fellow in Coventry University made presentation titled "Critical Infrastructure Protection for Communication System". Dr. KUHN highlighted vital importance of critical infrastructures for maritime security but Dr. KUHN focussed on communication systems. Communications systems are integral to the economy as they cut across the operations of businesses, public safety organizations, and governments. Since these systems provide an "enabling function" across all infrastructure sectors, the communications sector is critical. As Dr. KUHN put forward that the communications sector has critical interdependencies with other sectors, including maritime. As Dr. KUHN quoted that while goals of digital data communications in maritime are to address user requirements and to support safe, efficient, and pollution free shipping, challenges are latency, bandwidth and channel capacity and life cycle costs. Hence new technology brings along with new risks.

So aforementioned interdependency between communication sectors and other sectors can cause cyber risks and terrorist threats. Possible cyber risks can affect on national security and interests of private sector. Therefore public-private partnerships, role of militaries and NATO and best practices involving maintaining situational awareness, guidance and coordination are indispensable points for critical infrastructure security in communication systems in maritime domain. According to Dr. KUHN; enterprising system modernisation, rethinking the approach to standards, constructing a model to support digital communications in the maritime industry, merging blockchain and maritime communications and building smart power-based future must be done for critical infrastructure protection for communication systems.

## **NATO Maritime Security Capacity Building Efforts and EXER MARSEC-23 - Lt. Alexandru C. HUDIȘTEANU (MARSEC COE)**

After presentation of Dr. KUHN, Lt. Alexandru C. HUDIȘTEANU from MARSEC COE made his presentation titled “NATO Maritime Security Capacity Building Efforts and EXER MARSEC-23”. Maritime Security Capacity Building Molecule comprises of developing human resources, individual skills and organizational cultures, efficiently, effectively and under best practices; generating knowledge of the sea, producing epistemic approaches for sea knowledge and wisdom; prompting and encouraging regional systemic approaches, building regions/regionally; building networks among stakeholders; constructing, supporting and influencing ownership, approaching holistically and selling comprehensiveness; approaching both formally and informally, thinking innovatively and translating measures into maritime security governance reforms and programs. Besides, key focus areas of capacity building efforts are maritime situational awareness, security governance and collaborative efforts. As Lt. HUDIȘTEANU emphasized that NATO has a stance on capacity building based on close cooperation and relationship between NATO and NATO’s partners including scaling up the size and scope of security, capacity-building assistance to vulnerable partners for strengthening their preparedness, resilience, boosting their capabilities in NATO 2022 Strategic Concept article 38. EXER MARSEC-23 is among these capacity building initiatives. EXER MARSEC-23 is conducting an MSO with an already existing maritime security architecture in AOI/JOA in conjunction with an out-of-region multinational force. EXER MARSEC-23 is including features like to train the establishment and employment of regional cooperation and cooperative actions in JOA; train establishing and maintaining initiative and pro-active approach to addressing maritime security; exercise CMI/CIMIC; train building and operationalizing MSA; exercise usage and impact of narrative primacy; train contributions to maritime security and decision-making processes and engagement and increasing awareness to space-based MSA support.

## **Challenges and Opportunities to Maritimes on Global Energy Security - Dr. Filiz KATMAN (*İstanbul Aydın University*)**

After Lt. HUDIŞTEANU's presentation Dr. Filiz KATMAN, member of İstanbul Aydın University Political Science and International Relations Department, made her presentation titled "Challenges and Opportunities to Maritimes on Global Energy Security". According to Dr. KATMAN; national security, economic security and energy security serve the same aim. Therefore these concepts are inseparable. Related to subject of presentation, energy security defined as uninterrupted availability of energy sources at an affordable price. This definition contains both security of demand and supply as a part of national security. While security of supply is defined as a flow of energy to meet demand in a manner and at a price level that does not disrupt the course of the economy in an environmental sustainable manner, security of demand is defined as securing the demand for energy. As a matter of course, security should be taken consideration into threat perception and threats. While threats can be based on hard and soft or conventional and contemporary, threat perception is based on threat's reality or threat's imaginative dimension. Regardless of reality or imaginative dimension and conventional or contemporary, threats are inseparable parts all types of security. As Dr. KATMAN quoted that energy security intersects between national, economic and environmental security. In parallel of this point of view, maritime transport is the backbone of international trade and the global economy because nearly % 80 of global trade by volume, % 70 of global trade by value are made via maritime ways. Thus, some important chokepoints and maritime routes in terms of oil trade like Strait of Malacca, Strait of Hormuz, Danish Straits, Turkish Straits, Bab-el-Mandeb Straits, Gibraltar and Panama Canal could face some threats like piracy, armed robbery, terrorism, drug smuggling, people trafficking, cargo theft, illegal fishing, environmental damage, irregular migration and cyber security so need for cooperation against contemporary threats must be always taken into consideration for maritime security. Besides these threats, maritime routes gained importance after COVID-10 pandemic because of lack of land transportation. Despite aforementioned global problems threatening maritime routes, power struggles among actors in international system can be observed. Russia's sea power position after melting Arctic Region step by step because of climate change, China's aim to establish alternative routes via Belt and Road initiative or power struggle in Eastern Mediterranean Sea can be examples of power struggles of states on maritime routes. To sum up, according to Dr. KATMAN cooperation among actors in international system is vital against contemporary threats for providing global energy security in maritime routes.

## **Securing the World's Busiest Port: Lessons from Singapore - *Ms. Susan SIM (Vice President for Asia at The Soufan Group)***

Ms. Susan SIM made her second presentation titled “Securing the World’s Busiest Port: Lessons from Singapore” after Dr. KATMAN’s presentation. As SIM said, Singapore was British trade post. According to Ms. SIM, Singapore has some advantages among important ports like Singapore’s value proposition is that of a “catch-up port” that offers shorter transit times and enables vessels to make up for delays upstream; delivering efficient service in an optimum manner helps shipping lines reduce costs and Singapore has continually invested in technology and innovation to extract productivity gains and enhance its competitiveness. Singapore port is special because it’s world’s busiest container transshipment hub, has more than 5000 maritime establishments, approximately 1000 ships can dock in the port at any one time and has the world’s top 5 largest ship registries which is The Singapore Registry of Ships (SRS). Year of 2011 is important turning point for Singapore maritime policy. National Maritime Security System and Singapore Maritime Crisis Centre (SMCC) were established in 2011. SMCC was established in 2011 for a whole of government approach to detect and deter maritime security threats (MARSEC). The SMCC comprises personnel from national MARSEC agencies such as the Republic of Singapore Navy, Singapore Police Force, Maritime and Port Authority of Singapore, Immigration and Checkpoints Authority, Singapore Customs and Singapore Civil Defence Force. As Ms. SIM conveyed that SMCC serves to tighten linkages between the national maritime security agencies in the areas of sense-making and threat assessment, doctrine and operations planning, conduct and monitoring of current and future operations, capability development and conduct of training and exercises. Besides these, Singapore helps regional MARSEC Initiatives such as Information Fusion Centre, which is a regional MARSEC Centre hosted by Singapore Navy, whose aims to facilitate information-sharing and collaboration between its partners to enhance MARSEC; The Malacca Straits Patrol Framework which puts in order a set of practical cooperative measures undertaken by Indonesia, Malaysia, Singapore and Thailand to ensure the security of the Straits of Malacca and Singapore and comprises the Malacca Straits Sea Patrol, the “Eyes-in-the-Sky” (EiS) Combined Maritime Air Patrols, the Intelligence Exchange Group. And Singapore is the first country to comply with the ISPS code. Besides being the first country to comply with the ISPS code, Singapore has implemented “Enhanced Maritime Security Measures”. They are movement near critical installations are

controlled, routing for ferries, crew movement from anchorages to shore and security measures for smaller vessels. Beyond ISPS code framework, Singapore has sensitive vessel movement including monitoring chemical tankers, LNG and LPG carriers in port waters; Accompany Sea Security Teams (ASSETs) in Port including vessels entering or leaving the Singapore port waters and assessment of possible threats in preventing ships transiting in Singapore port waters like hijacking. Next Generation Port 2030 Initiative: Tuas, an Intelligent and Sustainable Port is important project for Singapore. Tuas Port, when fully developed in four phases, will be the world's single largest container port capable of handling up to 65 million TEUs annually. From planning to implementation, Tuas Port will be a resilient port. It provides a single consolidated location for Singapore's container activities, which significantly reduces inter-terminal haulage operations and GHG emissions. Finger-piers with caisson quay wall were adopted to maximise limited land and sea space while creating 115 hectares more land. Coupled with long linear berths and design depth of -23m at Chart Datum, it can accommodate mega container ships exceeding 450m in length. Above Ground Space will also be introduced, adding 240ha of space for port-related uses. As it's understood that Tuas Port Project is vital for sustainability, environmental protection, technological development and efficiency of use.

### **Public and Private Partnership in Maritime - *Dr. Carol EVANS*** **(US War College)**

Last presentation of seminar was made by Dr. Carol EVANS titled "Public and Private Partnership in Maritime". Dr. EVANS began to discuss importance of maritime security environment with US example. As Dr. EVANS put forward that Maritime environment in the U.S. consists of more than 95,000 miles of coastline, 361 ports, more than 25,000 miles of waterways and intermodal land-side connections that allow the various modes of transportation to move people and goods to and from the water. Hence maritime security of US is related to comprising of ships, ports and terminals shipping lines, shipbuilders, intermodal transport operators, cargo and passenger handlers, vessel traffic control, maritime administrators, etc. In addition to these, Department of Homeland Security (DHS) United States Coast Guard (USCG), and Customs and Border Protection are responsible for maritime security. Maritime security is important for US either. For instance 70% of all imported goods and 76% of all US exports are shipped via water. Disruptions in port operations impose

significant financial costs and cascading economic effects borne by government, insurers, investors, and companies for US economy. Importance and vitality can be seen in dual-use ports in US Port of Virginia (Hampton Roads) also contains the world's largest naval base, the largest shipbuilding and repair industrial base. Thereby Port of Virginia can be used in both civil and military aims. Port of South Louisiana, Port of Houston, Port Newark, Port of Beaumont, Port of Long Beach, Port of New Orleans, Port of Corpus Christi, Port of Greater Baton Rouge and Port of Los Angeles are important ports for US economy and security.

Ports as a important part for maritime security can be expose to terrorist attacks and cyber attacks. Using of container and passenger ships, fishing vessels, tugs to smuggle terrorist, nuclear, radiological, chemical, or biological weapons, components or dangerous materials into the United States, using all of the above as a sea-borne IED (plus LNG, LPG and oil tankers) to destroy bridges, intermodal transport networks, ports, and co-located energy storage, transshipment, and refinery facilities, sinking a large container vessel at a major port/adjacent channel blocking global shipping traffic, seizing and hijacking a passenger cruise ship or ferry threatening a mass casualty event and attacking dual use civil-military ports with the intention of interfering with deployment operations are among examples of terrorist attacks. In addition to terrorist attacks, cyber security threats have to be taken into consideration. In the first few months of 2020 cyber attacks targeting maritime information systems rose 400%, so this high percentage indicates vital dimension of cyber security threats. Cyber security threats contains attacking on ports related to information and communications technology (ICT), industrial control systems (SCADA), Positioning, navigation and timing (PNT) systems and ransomware attacks. Cyber security threats are not limited only ports. Directly attacking on ships, social engineering on human targets are also part of cyber security. There are many examples of cyber threats. For example, Drug traffickers conducted cyber ops against the Port of Antwerp 2013-2015, 2021 Maersk vessel lost 260 containers overboard when its propulsion was jammed for less than four minutes in heavy seas, World's largest maritime shipping companies – AP Moller-Maersk, COSCO, Mediterranean Shipping Company- have all been hit by significant cyberattacks since 2017, Cyber intrusions targeting shoreside OT energy networks during the 2017 Saudi ARAMCO hack and Port of Shanghai suffered undetected GPS spoofing – 300 cases on one day in July 2019.

These threats can't be easily overcome by only states. Dr. EVANS highlighted that security of global trade, civil and military ports can be provided better by public and private partnership (PPP) in maritime domain. Maritime Information & Analysis Center (M-ISAC), Maritime Transportation System Information & Analysis Center (MTS-ISAC), Maritime Port Security-Information Sharing Analysis Organization (MPS-ISAO), Maritime Security Resilience Alliance and Area Maritime Security Committee (AMSC) are good examples of PPPs. These partnerships provide security especially fight against terrorism, cyber threats, physical security problems and global threats.

**Hot wash-up' of day 2 discussions - *Dr.Heather GREGG-Moderator (US Army War College)***

Seminar ended with hot wash-up of day 2 discussions moderated by Dr. Heather GREGG who is from US Army War College. Captain Nikolaos ASIMAKOPOULOS emphasized the importance of maritime area rather than maritime domain. Then Ret. Ambassador CEYLAN highlighted the importance to focus on maritime domain rather than maritime area to converge all interests of NATO members. Prof. TANRISEVER also offered a new point of view about focussing on systemic dynamics for global aims from maritime security. Systemic approach also benefit for global expectancies on maritime security. Col. KAYSER underlined broader cooperation between COEDAT and MARSEC. Cooperation can be beneficial but it has to be taken into consideration that MARSEC consists of 4 states, COEDAT consists of 7 states. Aim of these states must be converged. And according to Col. KAYSER, exercises with GoG states could be beneficial. Dr. EVANS said that US Navy College can support the recommendation of Col. KAYSER related to broader cooperation between COEDAT and MARSEC. Lt. Col. Uwe BERGER offered that shareholders from industry should be invited to seminars. Cdr. CAVACO shared same ideas with Lt. Col. Uwe BERGER but added that some points should be cleared and determined. Lt. HUDIȘTEANU added these approaches that private sector could want to sell their products so it's good idea. Captain ASIMAKOPOULOS asked Ms. JOUBERT that was damage suffered and exposed by Greece related to terrorism or piracy in terms of law terminology after emphasizing productivity of NATO in maritime. Ms. JOUBERT answered as it's conflict related incident.

**Good Practices in Countering Terrorism in Maritime Domain**  
**COE-DAT Director's Closing Remarks**

Dear Distinguished lecturers and participants,

Ladies and Gentlemen,

After two days of hard work during the seminar, it is time to close Good Practices in Counter Terrorism in Maritime Domain Seminar.

I am happy to be able to do face-to-face activities again while leaving the Covid pandemic behind.

In the past two days, we have mutually found a chance to exchange valuable information and expertise. Your contribution and active participation ensured the success of this event. I would like to express my sincere thanks to all of you. With you, we have learnt a lot. Special thanks to also MARSEC COE Director Capt. Sumer KAYSER and MARSEC COE staff. Both as a speaker and their admin support to give us at home. I would like to thank I would also like to thank all of to my COE-DAT Staff.

It's been an honor to host such accomplished individuals and to be able to learn from your knowledge and perspective. We know terrorism but now we also start to learn maritime aspect of terrorism. We would like to continue to improve the already-existing cooperation and coordination in our future events, so we will be able to construct a common understanding about terrorism and counter terrorism related issues. Additionally, we can secure the critical infrastructures, which are the life veins of our countries that also connect us to each other both physically and mentally.

Thank you very much once again for all your valuable contribution and active participation, and wish you a safe flight.





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