

# 25<sup>TH</sup> APPSMO

## ASIA-PACIFIC PROGRAMME FOR SENIOR MILITARY OFFICERS

13 - 17 OCTOBER 2024  
SINGAPORE

**COMMEMORATIVE REPORT**

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# **25<sup>TH</sup> APPSMO**

## **ASIA-PACIFIC PROGRAMME FOR SENIOR MILITARY OFFICERS**

APPSMO@25:  
NAVIGATING COMPLEXITY IN  
GEOPOLITICS TODAY

**Organised by**

*S. Rajaratnam School of International Studies (RSIS),  
Nanyang Technological University (NTU), Singapore*

*13 - 17 October 2024*

*Grand Copthorne Waterfront Singapore*

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# SUMMARY OF 25<sup>th</sup> APPSMO

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The 25<sup>th</sup> Asia-Pacific Programme for Senior Military Officers (APPSMO) organised by the S. Rajaratnam School of International Studies (RSIS) was held at the Grand Copthorne Waterfront, Singapore, from 13 to 17 October 2024. Since its inception in 1999, APPSMO has served as a vital platform for military officers and defence analysts to network and exchange views on subjects related to regional and international security. Continuing this tradition, the 25<sup>th</sup> APPSMO (also known as APPSMO 2024) brought together 43 military officers and defence planners from 21 countries representing Asia, Oceania, North America, and Europe, promoting dialogue and strengthening defence diplomacy.

During the week-long programme, participants engaged in seminars and discussions featuring experts from the academic, policy, and military communities. The theme for APPSMO 2024 was “APPSMO@25: Navigating Complexity in Geopolitics Today”. Key discussions centred on challenges to the regional security architecture, the military’s role in humanitarian emergencies, emerging technologies in warfare, competing norms and strategic implications, the Association of Southeast Asian Nations (ASEAN), and power dynamics in the region.

As part of the programme, the participants visited the Regional Humanitarian and Disaster Relief Coordination Centre and the Singapore Navy Museum. APPSMO 2024 received positive feedback from both speakers and participants, reinforcing its role as a conduit for networking within the Asia-Pacific region and beyond.

## WELCOME REMARKS

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### **Ambassador Ong Keng Yong**

*Executive Deputy Chairman, RSiS; and Director, IDSS*

Ambassador Ong Keng Yong began by warmly welcoming all participants to APPSMO 2024. He highlighted that 2024 marked the silver jubilee of APPSMO, celebrating 25 years since its inception. Established by the late Mr S. R. Nathan, sixth President of Singapore and inaugural director of the Institute of Defence and Strategic Studies (IDSS), APPSMO began as a “summer camp” aimed at bringing senior military officers together to address challenges in military leadership. Over the years, this annual gathering, hosted by RSiS, has evolved into a premier platform for professional development and fostering camaraderie among senior military personnel.

Amb Ong shared that APPSMO 2024 was themed “Navigating Complexity in Geopolitics Today” to reflect the increasingly intricate nature of geopolitical issues. Following his welcome remarks and the keynote address by Mr Zaqy Mohamad, Senior Minister of State, Ministry of Defence and Ministry of Manpower, Singapore, Mr Peter Ho, a prominent figure in government service known for his contributions to Singapore’s strategic foresight initiatives, will start the conference with his scene-setting lecture. Amb Ong said Mr Ho’s insights into complex and strategic futures will set the stage for the week’s discussions and professional development sessions.

Providing an overview of the programme, Amb Ong said that RSiS organised three panels focused on key issues within today’s complex geopolitical landscape to address the theme’s challenges. Each panel will aim to unpack fundamental issues and explore actionable solutions. The discussions will culminate with a closing panel led by notable experts Dr Zack Cooper, Professor C. Raja Mohan, and Professor Ken Jimbo, who will tackle the critical “So what?” questions – aimed at distilling practical implications from the week’s discussions.

Aside from the panels, two distinguished speakers, Professor Jia Qingguo from Peking University in China and Dr Yose Rizal Damuri from the Centre for Strategic and International Studies in Jakarta, will provide insights on the pressing issue of “Rising Geopolitical Competition: Implications for Asia-Pacific and Southeast Asia” and on “Complexity of Global Economy and Geopolitical Dynamics” respectively.

Amb Ong was pleased to announce that as APPSMO celebrates its 25<sup>th</sup> year, it remains a cornerstone of RSIS’s commitment to creating dialogue and collaboration opportunities for senior military officers. This year’s programme continues to build on its tradition of fostering critical thought and encouraging action among military leaders.

Amb Ong closed his remarks by welcoming and encouraging attendees to engage in meaningful discussions and collaborations throughout the week, maximising the opportunities provided by APPSMO 2024.

## KEYNOTE ADDRESS

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### **Mr Zaqy Mohamad**

*Senior Minister of State Ministry of Defence & Ministry of Manpower Singapore*

Mr Zaqy Mohamad opened his keynote address by noting that the 2024 iteration is a significant milestone for APPSMO. Now in its 25<sup>th</sup> year, APPSMO continues to provide a global platform for defence professionals to exchange ideas on security and geopolitical developments.

Initiated by Singapore's sixth president, the late Mr S. R. Nathan, APPSMO has seen steady participation from over 40 countries including those from North America, the Middle East, and Africa, with its network broadening over the years since the first edition in August 1999. Even during the COVID-19 pandemic, APPSMO maintained its presence by transitioning to a virtual format in 2021, showcasing its adaptability and enduring relevance.

Mr Zaqy said that APPSMO remains a valuable platform for exploring complex issues. Its mandate encourages open discussion on pressing security challenges such as the US-China competition, the war in Ukraine, and regional hotspots like the South China Sea. The programme has also consistently addressed non-traditional threats, from humanitarian assistance to hybrid warfare and the impact of emerging technologies. This year's theme, "Navigating Complexity in Geopolitics Today", continued to align with APPSMO's tradition of tackling contemporary, critical issues impacting the defence community.

Mr Zaqy highlighted that a core focus of APPSMO is building mutual understanding and trust among leaders. These relationships are crucial for promoting peace in today's polarised world. APPSMO emphasises informal relationship-building, allowing participants to bond over shared experiences in Singapore's multicultural environment. This trust-building model mirrors the founding principles of ASEAN



in 1967, where informal connections among leaders facilitated regional cooperation amidst Cold War tensions.

He shared that in complex times, small steps towards engagement are vital. APPSMO encourages incremental progress, as seen in recent efforts to reopen dialogue channels between the US and China. Such steps lay the groundwork for further engagement, helping reduce risks of miscalculation and conflict. APPSMO's informal gatherings, shared experiences, and excursions within Singapore are pivotal in fostering understanding and reducing barriers, reinforcing the idea that personal connections are instrumental in diplomacy.

APPSMO serves as the conduit for promoting a collaborative approach to addressing technological and security challenges. Recognising the transformative impact of artificial intelligence (AI) and other technologies, APPSMO advocates the development of frameworks to manage these advancements responsibly.

As global challenges evolve, platforms like APPSMO are increasingly essential. Mr Zaqy encouraged participants to leverage this conference for open exchanges and to build lasting friendships, supporting shared security goals across regions.

## COMMEMORATING THE 25<sup>TH</sup> APPSMO



*From left to right: Mr Peter Ho, Mr Zaqy Mohamad, Prof Kumar Ramakrishna, Amb Ong Keng Yong*

Mr Zaqy, Mr Peter Ho, Senior Advisor to the Centre for Strategic Futures, Amb Ong, and Professor Kumar Ramakrishna, Dean of RSIS, led a cake-cutting ceremony, celebrating the long-standing history of APPSMO.

In its 25<sup>th</sup> year, Mr Zaqy views APPSMO as a useful platform for defence organisations in Asia-Pacific and beyond. The ceremony was witnessed by the participants and guests present.

# SCENE-SETTING LECTURE

## **NAVIGATING COMPLEXITY IN A RAPIDLY EVOLVING GEOSTRATEGIC ENVIRONMENT**

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*From left to right: Mr Peter Ho and Prof Kumar Ramakrishna (chair)*

### **Mr Peter Ho**

*Member, RSIS Board of Governors; and Senior Advisor, Centre for Strategic Futures, Prime Minister's Office, Singapore*

Mr Ho's presentation focused on three main themes: (i) understanding complexity; (ii) its implications for government policy; and (iii) addressing challenges in a complex world.

He began by explaining the concept of complexity, highlighting "emergence", where interconnected elements create unpredictable outcomes. This unpredictability heightens the likelihood of strategic surprises known as "black swan" events, such as the fall of the Soviet Union and the September 11 attacks. Recent events such as the COVID-19 pandemic and the Russia-Ukraine conflict have further illustrated how unforeseen disruptions impact global stability.

In discussing complexity's impact, Mr Ho noted the accelerated pace of change since World War II, reflected in GDP growth, technological advancements, and climate challenges. He explained that rapid changes force policymakers into shorter decision-making cycles, often impacted by human biases. The Observe-Orient-Decide-Act loop exemplifies this compressed process, leaving less time to interpret data, make informed decisions, and act effectively. Past strategic surprises, such as the Pearl Harbor attack and recent cyberattacks, highlight these challenges.

Technological advancements have also intensified complexity. Mr Ho highlighted cyber, hybrid, and quantum warfare as new threats, citing cyberattacks on critical infrastructure as examples. He discussed how Singapore's Digital and Intelligence Service and the US Space Force are examples of organisations addressing emerging challenges in cyberspace and beyond.

To navigate complexity, Mr Ho advocated for innovative, adaptable frameworks within organisations. He emphasised that innovation should be paired with transformation, which restructures organisations to incorporate new technology effectively. Historical examples include the German military's blitzkrieg tactics and Singapore's efforts to create its fourth-generation armed forces. Mr Ho highlighted Singapore's whole-of-government approach and total defence strategy, which integrates military, economic, social, digital, civil, and psychological defences.

## REGIONAL BACKGROUND

# NAVIGATING REGIONAL UNCERTAINTY: CONTINUITY AND CHANGE IN THE ASEAN WAY



### **Professor Mely Caballero-Anthony**

*President's Chair in International Relations and Security Studies;  
Associate Dean (International Engagement), and  
Head, Centre for Non-Traditional Security Studies, RSIS*

Professor Mely Caballero-Anthony presented on two pressing global challenges: (i) the resurgence of armed conflict and (ii) the need to uphold the rules-based international order (RBIO). She highlighted the impact of ongoing conflicts and geopolitical shifts on regional and global stability, particularly in Southeast Asia. Her analysis underscored ASEAN's critical position in maintaining regional security and its relevance amid intensifying competition between global powers.

Prof Mely noted that recent conflicts, such as those in Ukraine and Gaza, reveal the complexities of modern warfare, marked by advanced military technologies that blur lines between traditional and unconventional warfare. These conflicts demonstrate how local disputes can become entangled with the strategic interests of external actors, leading to an increase in proxy wars and risks associated with geopolitical fragmentation. The conflicts' humanitarian toll, especially disruptions in food supplies affecting millions globally, highlights the instability in the international order and the fragility of RBIO. This is further emphasised by the expansion of nuclear capabilities by states like North Korea and the decline of global arms control agreements.

Against this backdrop, the Indo-Pacific region has become a significant arena of competition, particularly between the US and China. Southeast Asian nations, anchored in a US-led security framework yet wary of aligning too closely with any single power, face a dilemma. China's assertiveness, particularly

in the South China Sea, challenges regional sovereignty and tests ASEAN's unity. Emerging minilateral alliances like the Quad and AUKUS reflect alternative security frameworks that could potentially undermine ASEAN's role in the regional security landscape.

The US-China rivalry has extended into economic domains, impacting ASEAN through disruptions in trade and technology supply chains. While regional economic fragmentation has exposed ASEAN's vulnerability, some member states have capitalised on shifting global supply chains. Nonetheless, ASEAN's economic unity and centrality remain essential as it strives to maintain a balanced approach in its relations with both powers.

Prof Mely emphasised the need for ASEAN to reclaim its centrality by reinforcing ASEAN-led mechanisms that promote regional security and cooperation. The East Asian Summit and security-oriented forums, such as the ASEAN Defence Ministers Meeting (ADMM) and ADMM-Plus, offer platforms for ASEAN to tackle security issues like cybersecurity and nuclear proliferation. In terms of functional cooperation, ASEAN should focus on health and economic security, while operationalising frameworks that encourage collaborative security across diverse political domains.

ASEAN's commitment to comprehensive security extends to areas such as climate change response and post-COVID recovery, as demonstrated by initiatives like the Regional Comprehensive Economic Partnership. Additionally, ASEAN's continued relevance will be determined by how it addresses issues such as Myanmar's crisis and energy security. As the next ASEAN Chair, Malaysia will prioritise resolving the Myanmar crisis, capitalising on digital technology, and enhancing ASEAN connectivity.

# MINDEF PRESENTATION

## **SINGAPORE'S DEFENCE POLICY**

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*From left to right: COL Alan Tan and Dr Ong Wei Chong (chair)*

### **Colonel Alan Tan**

*Director (International), Defence Policy Office,  
Ministry of Defence, Singapore*

Colonel Alan Tan's presentation examined Singapore's defence strategy through three main themes: (i) history; (ii) defence policy principles; and (iii) the changing geopolitical context.

COL Tan traced Singapore's strategic history back 700 years to its role as a trading hub, connecting China, India, and the Spice Islands. This historical foundation established Singapore as a diverse, multi-ethnic meeting point for traders. The surrender of the British Forces in Singapore to the Japanese forces on 15 February 1942 marked a turning point in Singapore's defence history. This date is now commemorated as Total Defence Day, underscoring the importance of self-reliance in national security. Singapore began building its defence capabilities after independence, initially dedicating around 10% of its GDP to defence spending. This figure has since stabilised at around 3%.

He went on to outline Singapore's defence approach through two main principles: (i) People and People-Plus and (ii) Partnerships and Partnerships-Plus.

#### People and People-Plus

Singapore's defence relies heavily on human resources due to its limited natural resources. This has led to the establishment of National Service, a conscription programme that serves as a societal unifier and

maintains a robust, citizen-based army. The Singapore Armed Forces (SAF) has also adopted a “Total Defence” strategy, inspired by Finland and Sweden, integrating military, civil, social, economic, psychological, and digital resilience. The SAF has been prioritising technological advancements, particularly through the Defence Science Organisation and the establishment of the Digital Intelligence Service, to better equip Singapore’s military for the challenges and complexities of hybrid warfare.

#### Partnerships and Partnerships-Plus

Singapore’s defence partnerships extend globally. Key regional partners include Malaysia, Thailand, Brunei, and New Zealand, where Singapore conducts training exercises. Australia also provides critical training space for large-scale military drills. The US is a significant partner, offering logistics support and hosting Singapore’s military personnel for training exercises, including those involving the High Mobility Artillery Rocket System. Singapore also engages with China through joint exercises and educational exchanges. Partnerships-Plus emphasises multilateralism and Singapore’s commitment to RBIO, facilitated through ASEAN mechanisms and the Shangri-La Dialogue.

Technological advancements, particularly in AI and space technology, introduce new security complexities. AI’s deployment poses control challenges, while dual-use space technologies raise security concerns for both military and civilian sectors. COL Tan closed his presentation stating that in response to these challenges in a multipolar world, Singapore will continue to diversify its defence partnerships, even with geographically distant states.

# PANEL PRESENTATION I

## COMPLEXITY IN GREY ZONE ISSUES AND HYBRIDITY IN THE MARITIME DOMAIN



From left to right: Assoc Prof Charmaine Misalucha-Willoughby, SNR COL (Ret) Zhou Bo, Assoc Prof Nguyen Thi Lan Anh, and Dr Collin Koh (chair)

### **Associate Professor Charmaine Misalucha-Willoughby**

*Chair, Department of International Studies,  
De La Salle University, The Philippines*

Associate Professor Charmaine Misalucha-Willoughby's presentation consisted of three key segments: (i) the current context of the Philippines' experience with grey zone conflicts; (ii) breaking down the concept of "grey zone"; and (iii) how to better position the Philippines in addressing grey zone challenges.

#### Context of the Philippines' Experience with Grey Zone Conflicts

Assoc Prof Willoughby explained that the Philippines faces ongoing grey zone conflicts where hostile vessels regularly operate within its waters. Despite the country's protests, limited resources constrain its responses. The Marcos administration's "assertive transparency" policy calls out foreign powers engaging in grey zone operations within Philippine waters, aiming to increase awareness of these incursions.

#### Breaking Down the Concept of Grey Zone Conflicts

The "grey zone" encompasses tactics like economic coercion, information warfare, and the use of proxy forces, all operating below the threshold of war. Methods such as maritime militias and economic sanctions leave the Philippines vulnerable, as they are difficult to counter effectively. China has gradually achieved strategic gains in the region through this "salami slicing" approach.

Assoc Prof Willoughby highlighted two key periods illustrating shifts in China's approach. In the 1990s when geopolitical costs were lower, China employed militarised actions such as the occupation of Mischief Reef. From 2007, as geopolitical costs rose, China shifted to non-militarised coercion through measures like economic sanctions on the Philippines and naval blockades.



## How to Better Position the Philippines in Addressing Grey Zone Challenges

To strengthen the Philippines' position, Assoc Prof Willoughby suggested three strategies: (i) transparency; (ii) credible deterrence; (iii) and whole-of-nation approach.

Firstly, Assoc Prof Willoughby emphasised the need for transparency in drawing attention to coercive activities as they happen. This will increase costs for hostile behaviours, reducing their recurrence. This aligns with President Marcos's approach of reinvigorating ties with allies, particularly the US.

Secondly, she said that military modernisation and partnerships with like-minded nations is essential in creating credible deterrence capabilities. The Philippines has already upgraded some bilateral relationships, enhancing its capacity through joint exercises and skill-building.

Lastly, a whole-of-nation approach with clear, consistent messaging on national interests is vital. Assoc Prof Willoughby emphasised the importance of maritime security, linking it to broader issues like illegal fishing, environmental costs, and regional stability in Southeast Asia.

### **Senior Colonel (Ret) Zhou Bo**

*Senior Fellow, Centre for International Security and Strategy,  
Tsinghua University, China*

Senior Colonel (Ret) Zhou Bo's presentation was divided into the following segments: (i) his views on the grey zone and China's strategies in the South China Sea; (ii) the dispute between China and Philippines; (iii) challenges of third-party elements in the China-US relationship; and (iv) the usage of nuclear weapons in the Taiwan Strait.

#### Grey Zone and China's South China Sea Strategies in the South China Sea

SNR COL Zhou asserted that the concept of a "grey zone" is mischaracterised, as all parties are aware of each other's positions. He noted that China's maritime affairs are overseen by various agencies, including the maritime militia, which he defended as a historically rooted and preferable approach to using military forces in disputes.

#### China-Philippines Dispute

SNR COL Zhou highlighted China's restraint in South China Sea disputes despite being portrayed as aggressive due to its size. He referenced incidents involving the Philippine Coast Guard where Chinese lives were lost and stated that Chinese authorities have sought to avoid similar confrontations. He attributed escalating tensions to the Philippines' efforts to fortify the Second Thomas Shoal, which China finds unacceptable. He emphasised that China prefers the natural degradation of the grounded BRP Sierra Madre over the use of force, asserting that recent actions by the Philippines at Sabina Shoal are attempts to replicate past strategies that China intends to prevent.

## Third-Party Complications in China-US Relations

SNR COL Zhou described the Philippines' recent pro-American shift as complicating US-China relations, driven by US interests to leverage allies in regional influence. He expressed confusion over the Philippines' policy shift from previous cooperation with China, attributing it to current leadership's political leanings and historical factors.

## China-US Relationship

While he noted recent high-level dialogues as positive developments, SNR COL Zhou was still sceptical of US-proposed "guardrails", citing power imbalances. He advocated for trust-building in cyberspace, AI, and space, drawing parallels with Cold War nuclear arms control to suggest pathways for strategic stability.

## Nuclear Weapons in the Taiwan Strait

Expressing alarm at minority US advocacy for nuclear weapon use in the Taiwan Strait, he reaffirmed China's no-first-use policy and urged modest nuclear parity for credible deterrence without provocation. He deemed the use of nuclear weapons in Taiwan unimaginable given the shared heritage across the strait.

## **Associate Professor Nguyen Thi Lan Anh**

*Director General, East Sea Institute,  
Diplomatic Academy of Vietnam*

Associate Professor Nguyen Thi Lan Anh structured her presentation into these sections: (i) defining and conceptualising grey zone and hybridity; (ii) grey zone and hybridity in the South China Sea; (iii) motivations and impact of grey zone and hybridity operations; (iv) alternatives to grey zone and hybridity operations; (v) enhancing resilience against grey zone threats; and (vi) future trends and actions.

## Defining and Conceptualising Grey Zone and Hybridity

Assoc Prof Nguyen introduced two definitions of the grey zone, describing it as a space where states pursue objectives below the threshold of open conflict. Grey zone activities use non-military tools and exploit legal ambiguities, making responses challenging. She explained its multidimensional nature, spanning physical and virtual spaces, often blending legal, illegal, conventional, and unconventional means.

She also shared the concept of hybridity, which incorporates both conventional and unconventional methods, offering flexible responses to complex security challenges. This approach integrates innovation, enhancing maritime security by adapting to evolving threats through a combination of traditional and novel tactics.

## Grey Zone and Hybridity in the South China Sea

Her presentation went on to illustrate how these concepts manifest in the South China Sea through coast guard patrols, maritime militias, and island militarisation. Technologies like balloons and autonomous vehicles add complexity by enabling surveillance without overt aggression. She noted that these activities occur in multiple domains, complicating the strategic landscape.

## Motivations and Impact of Grey Zone and Hybridity Operations

She continued by highlighting motivations behind grey zone strategies, including cost-effectiveness and reduced risk of escalation. Inspired by Sun Tzu's principles, these tactics aim to achieve goals subtly.

Short-term advantages include incremental control without provoking conflict, but long-term reliance could erode trust, increasing the risk of miscalculations and potential conflict.

### Enhancing Resilience Against Grey Zone Threats

Assoc Prof Nguyen emphasised capacity building, international partnerships, and legal reform to counter grey zone threats. She advocated for collective action and alliances to deter aggressors and distribute response responsibilities. She highlighted the need to clarify legal ambiguities, strengthen enforcement mechanisms, and establish norms to guide state behaviour, thereby reducing the appeal of grey zone activities. These strategies would enhance resilience and improve state responses to unconventional threats in the maritime domain.

### Alternatives to Grey Zone and Hybridity Operations

Emphasising diplomatic channels and transparency to reduce grey zone threats, she proposed building resilience through capacity-building, alliances, legal clarifications, and strengthening international norms to reduce the appeal of grey zone tactics.

### Future Trends and Actions

Future grey zone operations may leverage AI and quantum computing, enhancing covert capabilities. Assoc Prof Nguyen stressed a balanced approach combining deterrence and diplomacy, international cooperation, and adaptive strategies to navigate the complex geopolitical landscape of the South China Sea.

## PANEL PRESENTATION II

# COMPLEXITY FROM NON-TRADITIONAL SECURITY ISSUES IN CLIMATE CHANGE IMPACTS ON THE ARMED FORCES



From left to right: Dr Florian Krampe, Assoc Prof Pichamon Yeophantong, and Dr Alistair Cook (chair)

### Dr Florian Krampe

*Director, Peace and Development Studies, and  
Director, Climate Change and Risk Programme,  
Stockholm International Peace Research Institute, Sweden*

Dr Florian Krampe explored the need to rethink security in the face of climate change. He structured his presentation titled “Rethinking Security in a Warming World – A European Perspective” into two parts: (i) the current security space and (ii) climate-related security.

#### Current Security Space

Dr Krampe introduced the Stockholm International Peace Research Institute (SIPRI) Security Space Framework, emphasising the interconnected nature of national, human, and ecological security. He discussed how military operations contribute to climate change and create long-lasting impacts that extend beyond immediate timelines. To address this, he advocated for a holistic, 360-degree approach that balances military readiness with environmental responsibility. He highlighted the growing involvement of militaries in climate mitigation, citing NATO’s policy integration of environmental factors as an example. However, this role presents logistical challenges, requiring militaries to maintain operational preparedness while reducing environmental impacts. Additionally, Dr Krampe noted that climate change and ecological crises are reshaping security and conflict dynamics, prompting the need to reconsider traditional approaches to security as climate-related issues increasingly drive conflicts. This evolving landscape underscores the importance of collaborative and cross-sector strategies in addressing security and environmental sustainability.

#### Climate-related Security

He brought up how climate change is deeply intertwined with security, impacting livelihoods, societal stability, and global dynamics. He highlighted four pathways through which climate change affects security:

(i) deteriorating livelihood conditions leading to local conflicts; (ii) migration due to seasonal livelihood shifts; (iii) armed group recruitment exploiting land loss; and (iv) resource mismanagement that destabilises societies. These factors increase regional tensions and complicate security dynamics, especially as displaced populations relocate.

On a global scale, Dr Krampe noted that while multilateral efforts could mitigate climate impacts, current security issues often hinder cooperation, potentially leading to regional migration and more conflicts. However, he also suggested that the climate crisis might drive states toward greater international collaboration to address these challenges.

Dr Krampe concluded by emphasising that climate change is reshaping our concepts of peace and security, necessitating innovation across military, diplomatic, and financial sectors to achieve integrated, collaborative solutions.

## **Associate Professor Pichamon Yeophantong**

*Head of Research, Centre for Future Defence and National Security,  
Deakin University, Australian War College*

Associate Professor Pichamon Yeophantong presented on “The Security Implications of Environmental Great Powers” and structured her discussion into three parts: (i) geopolitical dynamics of climate change; (ii) the concept of environmental great powers; and (iii) security implications for smaller states.

### Geopolitical Dynamics of Climate Change

Assoc Prof Yeophantong highlighted the complex geopolitical challenges posed by climate change, describing it as a “wicked problem” that requires global cooperation. She emphasised climate change as a threat multiplier, aggravating issues like resource scarcity, migration, and conflict.

For instance, rice prices could rise by 29–37% by 2050, and climate change may displace up to 143 million people in vulnerable regions. She cited the US National Security Strategy, which identifies climate change as a national security threat, and referenced the 2021 Intergovernmental Panel on Climate Change report, which warned of a “code red for humanity” and stressed the urgent need for action.

### The Concept of Environmental Great Powers

Assoc Prof Yeophantong introduced the idea of “environmental great powers”. They are countries with substantial influence on global environmental outcomes defined by three attributes:

- i. Capability – The resources, technology, and institutions to impact global environmental outcomes, including climate change adaptation.
- ii. Culpability – The extent to which a state contributes to environmental degradation, which is a contentious issue for major polluters.
- iii. Identity – A state’s self-recognition and external acknowledgment as an environmental great power.

She examined the evolving roles of the US and China, noting their transition from obstructing climate action (e.g., Kyoto Protocol and UNFCCC negotiations) to emerging leaders in climate governance, capable of significantly shaping global environmental policies.

## Security Implications for Smaller States

Assoc Prof Yeophantong went on to examine climate change's security implications for smaller states, emphasising three areas:

- i. Resource scramble – Climate change has increased the competition for resources, challenging sustainability in Southeast Asia, Africa, and Latin America.
- ii. Supply chain disruptions – Climate challenges are disrupting global supply chains, especially for critical minerals such as nickel, which is extensively extracted in Indonesia, often undermining local sovereignty and political stability.
- iii. Domestic instability – Climate-induced migration and environmental degradation are exacerbating conflicts, with non-state actors exploiting these vulnerabilities. This is evident in the Democratic Republic of Congo where armed groups control mineral extraction, depriving local communities of economic benefits.

She highlighted the Mekong River as a case where climate solutions, like dams, can strain upstream-downstream relations. To address these issues, she advocated for stronger governance, strategic partnerships, and binding agreements to foster global climate action, emphasising the urgency of achieving net-zero emissions by 2050.

Concluding with the words of Lourd Nelson, “Let us be clear, the task ahead is not easy... it is our duty, we cannot fail,” Assoc Prof Yeophantong emphasised the urgent need for collaborative and systematic efforts to address the climate crisis.

Dr Alistair Cook, panel chair, wrapped up the discussion by summarising key points raised by the panellists:

- i. Dr Krampe highlighted the concept of “greening the military”, emphasising the increasing role of militaries in addressing climate-related security challenges.
- ii. Assoc Prof Yeophantong discussed the evolving security context, stressing the overlapping and broad-reaching implications of climate change on security dynamics.

Dr Cook also noted how climate change is now being integrated into defence white papers, particularly in ASEAN and the wider Asia-Pacific region, focusing on how countries are operationalising climate change within their security and operational frameworks.



# SPECIAL LECTURE

## **RISING GEOPOLITICAL COMPETITION: IMPLICATIONS FOR ASIA-PACIFIC AND SOUTHEAST ASIA**

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*From left to right: Prof Jia Qingguo and Amb Ong Keng Yong (chair)*

### **Professor Jia Qingguo**

*Former Dean, School of International Studies,  
Director, Institute for Global Cooperation and Understanding, and  
Director of Global Governance,  
Peking University, China*

Professor Jia Qingguo in his special lecture highlighted that geopolitical tensions have become the dominant feature of international relations as the world enters the second decade of the 21<sup>st</sup> century. The trend of development bodes ill for the region and it was important to encourage re-engagement and cooperation between China and the US.

He highlighted four factors that contributed to the rise of geopolitical tensions which have brought negative changes in the security architect of the Asia-Pacific region: (i) rise of China and difficulty in adaption; (ii) increasing gap in industry efficiency; (iii) domestic politics; and (iv) mutual suspicion and poor management of relations.

#### Rise of China and Difficulty in Adaption

Prof Jia discussed the rise in global geopolitical tensions, highlighting conflicts such as the Russian invasion of Ukraine, conflicts in the Middle East, and military manoeuvres in the Taiwan Strait and South China Sea. This escalation has spurred an increase in global defence spending, reaching \$2.443 trillion in 2023, marking a 6.8% year-on-year increase, the highest recorded by SIPRI. Nations are also strengthening alliances, including NATO, AUKUS, and US-Japan-South Korea, potentially leading to parallel and confrontational security structures.



He noted the securitisation of high-tech sectors, with export controls and friend-shoring to secure supply chains. Additionally, people-to-people exchanges face restrictions, from sanctions on individuals to travel warnings. These developments stem partly from challenges in adjusting to China's rapid rise. The US struggles with a mix of admiration and fear toward China, while China's confidence and sensitivity to criticism complicate the establishment of reciprocal international relations.

### Increasing Gap in Industry Efficiency

Prof Jia highlighted the growing competitiveness gap between US and Chinese companies, attributing the decline in US competitiveness to its protectionist measures, domestic politics, and waning industry capabilities. In contrast, Chinese companies have strengthened due to limited subsidies, international subsidies awareness, and strong internal competition. The US trade policy has evolved over time, shifting from a focus on free trade to fair trade, and now towards protectionism.

### Domestic Politics

According to Prof Jia, ideological and political system differences, industrial competitiveness gaps, and increasingly balanced capabilities between the US and China create opportunities for political manipulation. Politicians, especially in the US, find it advantageous to project toughness towards China. Similar, though less intense, competition occurs in China regarding the US. This dynamic pressures policymakers to avoid appearing weak in their interactions, which ultimately harms bilateral relations.

### Mutual Suspicion and Poor Management of Relations

He further noted that US-China distrust peaked during the Trump administration, with misinformation becoming a political tool. Although the Biden administration reduced such practices, it retained many of Trump's policies, including high tariffs on Chinese imports for domestic political reasons. Communication between the two countries has been challenging. Despite attempts to re-engage, such as the 2022 meeting in Bali during the G20 summit between Presidents Xi Jinping and Joe Biden, mutual suspicion and distrust remain high.

Professor Jia moved on to discuss the implications of rising geopolitical tension for the Asia-Pacific region and Southeast Asia. He warned that the region faces a higher risk of tension and even military conflict, particularly in areas like the South China Sea, Taiwan, and North Korea. The regional security architecture has shifted; while previously US-centered and cooperative on issues like nonproliferation and maritime safety, it now increasingly excludes China and Russia, causing a rise in US-China confrontation. Multilateral security mechanisms are weakening, leaving the region less secure. Countries, particularly those facing pressure from the US to align against China in areas such as high-tech trade and human rights, risk sanctions for refusal. However, Prof Jia noted that Southeast Asian nations could leverage their neutral stance to gain bargaining power with both superpowers, potentially turning this crisis into strategic opportunities if well-managed.

Prof Jia concluded his lecture by suggesting steps to ease US-China tensions, advocating for both countries to engage pragmatically to address their differences and shared interests, such as nonproliferation, climate change, and the fentanyl crisis, to prevent escalation and conflict. He advised other countries to avoid taking sides or exploiting US-China rifts and instead encourage constructive engagement, like setting up guardrails. Additionally, he emphasised the need to revitalise regional security mechanisms – like the East Asia Summit, ASEAN Plus Three, and the China-Japan-South Korea Summit – to prevent a divided security landscape with US allies on one side and China, Russia, and North Korea on the other.

## PANEL PRESENTATION III

# COMPLEXITY FROM TECHNOLOGICAL CHALLENGES IN GEO-ECONOMIC COMPETITION



*From left to right: Mr Chris Leck, Prof Zeng Jinghan, and Dr Kaewkamol Pitakumrongsit (chair)*

### **Mr Chris Leck**

*Group Chief Technology Officer,  
Prime Minister's Office, Singapore*

Mr Chris Leck's presentation delved into the vital role of technological innovation in tackling global issues, particularly highlighting advancements in space and quantum technologies amidst increasing geopolitical and geo-economic competition. He discussed how geo-economic fragmentation impacts technology and trade but stressed that innovation remains essential to address major global challenges, such as climate change, poverty, and disease.

### Space Technologies

By 2035, the space sector is expected to be valued at \$1.8 trillion, tripling from the current \$630 billion. Originally defence-driven, it now comprises around 60% commercial activity. Traditional space applications include global navigation satellite systems and satellite communication, with technologies also aiding Earth observation for disaster management, climate monitoring, security, and supply chain oversight.

Space technology has broad everyday applications, and advancements like commercial space stations and reduced costs for space travel promise transformative impacts. A number of emerging areas are being pursued by countries like the UK, US, and China. These include space tourism, manufacturing, R&D (e.g., microgravity for pharmaceuticals), moon and asteroid mining, and space-based solar power. A growing commercial presence includes over 30 planned lunar missions, marking space as an increasingly commercialised domain.

## Quantum Technologies

Quantum technology, valued at \$0.9 to \$2 trillion, extends beyond data encryption to include quantum communications and sensing. With \$42 billion in national investments globally, quantum applications span numerous sectors. In finance, Singapore is exploring fintech uses, while in life sciences, quantum technology accelerates molecule and drug R&D beyond traditional trial methods, especially when combined with AI.

Quantum computers aid transport and logistics by optimising operations. Quantum sensing, useful for bioimaging, environmental and infrastructure monitoring, and underground mapping, offers advanced resolution, essential for projects like underground facilities in Singapore.

## Problems and Approaches

Technological innovation, especially in deep tech, is progressing too slowly to address global challenges. This lag stems from a siloed, discipline-specific approach to R&D, lacking the interdisciplinary, systems-based methods needed. Deep tech remains underfunded and misunderstood, with inadequate Science & Technology (S&T) policies hindered by political and budgetary factors.

International collaboration is also limited due to the securitisation of S&T. Rising geo-economic forces have increased trade and investment distortions since 2018, leading to trends in re-shoring, deglobalisation, and additional compliance costs. Addressing these issues requires refining policy, fostering interdisciplinary innovation, and enhancing global collaboration.

Major powers such as the US, China, Japan, and the EU are advancing geo-economic strategies centred on three “Ps”: Promote, Protect, and Partner.

- i. Promote – Industrial policies are strengthening key sectors domestically, with large investments, especially in semiconductors.
- ii. Protect – Governments are implementing investment screening, export controls, and anti-coercion tools to shield against economic pressures.
- iii. Partner – New alliances are forming to foster economic collaboration.

Additionally, semiconductor exports have dropped for the US, China, and EU, while countries like the US and the UK have restricted Huawei. Many companies are now diversifying away from China, benefiting other regions.

There are also potentially systemic costs to this schism as observed in the following points:

- i. It potentially hinders technological innovation, as restrictions continue to be increasingly placed on access to technology and talent, on cross-border capital flows, and scientific collaborations. Furthermore, governments and companies are increasingly diverting their resources as part of de-risking efforts.
- ii. It potentially hampers economic growth, with trade restrictions resulting in lower economies of scale and efficiency gains from specialisation. De-risking efforts arising from this could in turn lead to higher costs and inflation.
- iii. It makes the green transition even more difficult, as restrictions on trade in commodities and tariffs on green goods are implemented. Adoption is slowed down.
- iv. It exacerbates supply chain challenges already amplified by crises and disruptions. Supply chains further lengthen, which has implications on costs.

- v. It makes it harder to tackle global challenges that transcend boundaries.

Mr Leck concluded by sharing that studies confirm that technological decoupling imposes high costs, noting that many new policies are strengthening research security worldwide. While national security measures are justified, countries must strike a balance to protect both security and valuable scientific cooperation.

## **Professor Zeng Jinghan**

*Professor of China and International Studies, and Director, Confucius Institute, Lancaster University, United Kingdom*

Professor Zeng Jinghan's presentation focused on AI and its implications for international security and the security dilemma. He highlighted that AI is driving a new military revolution, the third in history, following the advent of gunpowder and nuclear weapons.

AI is transforming warfare through technologies like unmanned aerial vehicle drones, unmanned submarines, autonomous tanks, and advanced command and control systems. The integration of AI into military operations raises questions about the future of naval warfare, AI's impact on battlefield tactics, and which nations will lead in AI military capabilities. With Russia, China, and the US vying for AI supremacy, concerns about a global AI arms race emerge, posing risks of unintended conflict.

### The Security Dilemma Spiral

Prof Zeng introduced the "security dilemma spiral" concept, where mistrust between two countries leads to escalating arms build-ups as each side interprets the other's actions as threats. This dynamic mirrors a growing "AI security dilemma" in which advancements in AI by one country, especially for defence, prompt other nations to build their own AI capabilities in response, escalating tensions.

Strategic anxiety about losing the AI race, particularly between the US and China, has translated into real-world actions, such as US President Biden's containment strategy and the restriction of AI-related technologies. China also feels the urgency to catch up in the AI race, driven by the belief that the US already has a strategic advantage.

This competition fits the AI security dilemma model, where advancements, even in civilian AI, are seen as threats by adversaries, resulting in a cycle of escalating tensions. As nations invest in AI-enabled weapons and countermeasures, the pace of military actions may increase, raising the risk of accidental escalation. The lack of transparency in AI systems further complicates the situation, leading to strategic instability. Additionally, AI's role in strategic deterrence could either reduce aggression or heighten escalation risks, making it a double-edged sword.

### Possible Solutions

Prof Zeng said that to mitigate the AI security dilemma, several solutions can be implemented:

- i. Bilateral and multilateral confidence-building measures, including communication channels, transparency agreements, and AI crisis management centres.
- ii. Global norm-building and rule-making to establish responsible AI use and safety standards, with all key stakeholders involved.

- iii. AI arms control agreements to limit or ban certain AI weapons, alongside regulations for AI in command and control systems.
- iv. Joint research initiatives and Track 2 dialogues to foster collaboration.
- v. Addressing structural drivers of the security dilemma by reducing mistrust and perceptions that AI advancements lead to a zero-sum game, promoting strategic stability.

## DISTINGUISHED SPEAKER'S LECTURE

# COMPLEXITY OF GLOBAL ECONOMY AND GEOPOLITICAL DYNAMICS

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*From left to right: Dr Yose Rizal Damuri and Mr Adrian Tan (chair)*

### **Dr Yose Rizal Damuri**

*Executive Director,  
Centre for Strategic and International Studies, Indonesia*

Dr Yose Rizal Damuri highlighted the importance of economic issues in security, noting that while economic interdependence has grown, countries have not hesitated to use economic tools to advance foreign policy and security goals.

Since the 1980s, the global economy has transformed. The end of the Cold War stabilised geopolitics and fostered globalisation through trade, supply chains, FDI, and reduced tariffs, which lowered technology costs. However, a backlash against globalisation has emerged as developed economies feel they are losing benefits, while developing nations call for more inclusive global governance that better aligns with their interests.

Dr Yose outlined four key complexities in today's global economy: (i) rapid development of emerging economies; (ii) rapid technological progress; (iii) climate and environmental challenges; and (iv) geopolitical tensions.

He focused on the last two complexities, emphasising climate finance's shortfall: only \$650 billion has been raised versus the \$3.5 trillion needed. Disagreements persist, as smaller countries demand greater contributions from high-emission economies.

Additionally, security has become a central theme in economic policy, with nations increasingly framing strategic areas – like R&D, supply chains, minerals, digital connectivity, and infrastructure – as security concerns. This shift is evident in recent G7 documents, reflecting growing alignment between economic and security priorities.

Dr Yose highlighted a significant shift from globalisation toward economic fragmentation, as nations increasingly prioritise unilateral policies to secure national interests. For instance, the US CHIPS Act exemplifies re-industrialisation, and trade restrictions like tariffs are on the rise globally. Economic measures are weaponised to influence partners and rivals, as seen in the US-China trade war and India's 2019 palm oil embargo on Malaysia. This trend erodes the international economic order, challenging institutions like the World Trade Organization (WTO).

Fragmentation occurs through technological decoupling, supply chain realignment, financial reform, and regionalism, causing inefficiencies, higher costs, and reduced innovation. This fragmentation threatens the "peace dividend" that defined post-Cold War globalisation, sparking fears of renewed great-power competition, not only in security but also in economic arenas, particularly in technology and finance. The outcome may include increased proxy conflicts or cyberwars, reminiscent of the instability before WWII, though unlikely to lead to a full-scale global conflict.

Dr Yose identified a deepening feedback loop between fragmentation and geopolitics across four key areas. First, the risk of conflict is heightened as Taiwan's semiconductor dominance intensifies US-China tensions, and the South China Sea's critical resources fuel maritime disputes. Second, the lack of international norms in AI governance increases the risks of technological warfare, potentially escalating cyber conflicts. Third, rising nationalism and protectionism to safeguard critical industries may deepen geopolitical divides, undermining global cooperation. Finally, weakened global governance is evident in frequent UN diplomatic deadlocks and the rise of economic blocs as weaponised economic policies create further geopolitical fractures.

Dr Yose concluded by discussing Southeast Asia's role amidst economic fragmentation. The region could benefit from companies de-risking from China and relocating supply chains to Southeast Asia, yet it may face rising costs due to fragmented supply chains. Additionally, geopolitical tensions could challenge ASEAN's unity and centrality, making it a focal point for great power influence. However, ASEAN has opportunities to navigate this complex environment through engagement mechanisms like the East Asia Summit. New leadership, such as Singapore's Lawrence Wong and Indonesia's Prabowo Subianto, may bring fresh perspectives and strategies to address economic fragmentation and mitigate political tensions.

## CLOSING PANEL PRESENTATION

# **WHITHER STRATEGIC COMPLEXITY?**



*From left to right: Dr Yose Rizal Damuri and Mr Adrian Tan (chair)*

### **Professor Ken Jimbo**

*Professor of International Studies, Keio University; and  
Managing Director, International House of Japan*

Professor Ken Jimbo discussed the evolution of a “lattice-like” security architecture in Asia, which emerged during the Biden administration, as a shift from the traditional hub-and-spoke system. Originally, the US served as the central security provider for its Asian allies during the Cold War, establishing bilateral alliances with countries like South Korea, Taiwan, and the Philippines to counter the Soviet Union. This system responded to specific crises, like the Korean War and the Taiwan Strait crisis, solidifying the US’ presence in Asia.

Unlike Europe, Asia’s diverse political landscape prevented the formation of a unified NATO-style structure. Asian nations lacked a shared threat, had distinct security needs, and preferred individual defence agreements, especially as they navigated relations with China. With China’s rising influence, the US sought a more adaptable approach to security, focusing on “latticework” partnerships that emphasise regional cooperation and joint military exercises.

The US has reinforced its presence through traditional allies (Japan, South Korea, Australia, the Philippines, Singapore) while fostering maritime security and capacity-building with ASEAN. Agreements for regional base access, like the Status of Forces or Reciprocal Access Agreements, have also been prioritised. Prof Jimbo concluded that this evolving framework is crucial for addressing Asia’s complex dynamics, including North Korea’s nuclear threats and China’s maritime ambitions.



## **Dr Zack Cooper**

*Senior Fellow,  
American Enterprise Institute*

Dr Zack Cooper discussed the US approach of using minilateral security arrangements to address diverse security needs in the Indo-Pacific. He agreed that a NATO-style collective defence system is unsuitable for Asia, where countries lack a unified threat and face distinct security challenges – Japan in the East China Sea, Taiwan in the Taiwan Strait, and the Philippines and Vietnam in the South China Sea. Unlike the Cold War in Europe, the region's complexity and varied interests limit collective defence.

In response, the Biden administration has sought adaptable partnerships with small groups of like-minded countries, a necessity given China's rise. Dr Cooper described the current landscape as a "fragmented multipolar world," where nations shift alignments based on circumstances. Minilateral initiatives like AUKUS, the Mineral Security Partnership, and Japan-Netherlands cooperation on semiconductors have proven effective among nations most concerned about China. However, several regional countries remain hesitant to align explicitly with the US, complicating a unified strategy.

Dr Cooper emphasised that the US should focus on specific objectives for these partnerships, avoiding unnecessary expansion without purpose. He also noted the importance of redefining US relations with Southeast Asia, particularly with nations hesitant to choose sides in US-China competition.

## **Professor C. Raja Mohan**

*Visiting Research Professor,  
Institute of South Asian Studies,  
National University of Singapore*

Professor C. Raja Mohan outlined five key drivers of global conflict and instability: (i) the end of great power harmony; (ii) deglobalisation; (iii) demographic changes; (iv) rapid technological advancements; and (v) the breakdown of multilateral institutions. He emphasised that the economic cooperation that benefited Asia post-Cold War has faded, replaced by "economic security" concerns, where trade policies increasingly intersect with national security, as seen in G7 priorities.

Demographic changes, with slowing population growth worldwide, present long-term social and economic challenges. Technological advancements are reshaping societies at a pace that is difficult to manage or predict. Meanwhile, multilateralism's breakdown, particularly the declining effectiveness of institutions like the WTO, has spurred minilateral coalitions – smaller groups focused on specific issues like climate and regional security.

Prof Mohan cautioned against assuming that global structures, such as globalisation, will persist unchanged, stressing that rapid shifts characterise the current era. He noted that while China's growth has slowed, the US retains strong influence over global narratives. Additionally, he highlighted that domestic political pressures in both the US and China are increasingly shaping their international policies, underscoring the need to understand internal dynamics to anticipate shifts in global strategy.

# CONFERENCE PROGRAMME

## Sunday, 13 October 2024 (Day 0)

0900 - 1500 hrs	<b>Arrival and Registration of Participants</b>
1600 - 1800 hrs	<b>Local Area Guided Tour</b>
1900 - 2100 hrs	<b>Welcome Dinner</b>

## Monday, 14 October 2024 (Day 1)

0930 - 0935 hrs	<b>Welcome Remarks</b>  <b>Ambassador Ong Keng Yong</b> Executive Deputy Chairman, RSIS; and Director, IDSS
0935 - 0950 hrs	<b>Keynote Address</b>  <b>Mr Zaqy Mohamad</b> Senior Minister of State, Ministry of Defence and Ministry of Manpower, Singapore
0950 - 1000 hrs	<b>Cutting of Commemorative Cake: Celebrating 25 years of APPSMO</b>
1000 - 1030 hrs	<b>Group Photo-taking and Tea Break</b>
1030 - 1200 hrs	<b>Scene-setting Lecture</b>  Topic: Navigating Complexity in a Rapidly Evolving Geostrategic Environment  Speaker: <b>Mr Peter Ho</b> Member, RSIS Board of Governors; and Senior Advisor, Centre for Strategic Futures, Prime Minister's Office, Singapore  Chairperson: <b>Professor Kumar Ramakrishna</b> Provost's Chair in National Security Studies, and Dean, S. Rajaratnam School of International Studies
1200 - 1330 hrs	<b>Lunch</b>
1330 - 1500 hrs	<b>Regional Background</b>  Topic: Navigating Regional Uncertainty: Continuity and Change in the ASEAN Way  Speaker: <b>Professor Mely Caballero-Anthony</b> President's Chair in International Relations and Security Studies, Associate Dean (International Engagement), and Head, Centre for Non-Traditional Security Studies, S. Rajaratnam School of International Studies  Chairperson: <b>Assistant Professor Sarah Teo</b> Regional Security Architecture Programme, Institute of Defence and Strategic Studies, S. Rajaratnam School of International Studies

1500 - 1530 hrs

**Tea Break**

1530 - 1630 hrs

**MINDEF Presentation**

Topic: Singapore's Defence Policy

Speaker: **Colonel Alan Tan**  
Director (International), Defence Policy Office,  
Ministry of Defence, Singapore

Chairperson: **Dr Ong Wei Chong**  
Senior Associate Fellow and Head, National Security Studies Programme,  
S. Rajaratnam School of International Studies

1900 hrs

**Opening Dinner**

Guest of Honour: **Vice Admiral Aaron Beng**  
Chief of Defence Force,  
Singapore Armed Forces

**Tuesday, 15 October 2024 (Day 2)**

0830 - 1000 hrs

**Introduction by Participants**  
(Australia, Cambodia, Finland, France, Germany, Indonesia)

1000 - 1030 hrs

**Tea Break**

1030 - 1200 hrs

**Panel Presentation I**

Topic: Complexity in Grey Zone Issues and Hybridity in the Maritime Domain

Speakers: **Associate Professor Charmaine Misalucha-Willoughby**  
Chair, Department of International Studies,  
De La Salle University, Philippines

**Senior Colonel (Ret) Zhou Bo**  
Senior Fellow, Center for International Security and Strategy,  
Tsinghua University, China

**Associate Professor Nguyen Thi Lan Anh**  
Director General, East Sea Institute,  
Diplomatic Academy of Vietnam

Chairperson: **Dr Collin Koh**  
Senior Fellow, Institute of Defence and Strategic Studies, and Coordinator  
of Projects (Naval/Maritime Affairs),  
S. Rajaratnam School of International Studies

1200 - 1330 hrs

**Lunch**

**Syndicate Discussions**

1030 - 1200 hrs

**Panel Presentation II**

Topic: Complexity from Non-Traditional Security Issues in Climate Change Impact on the Armed Forces

Speakers: **Dr Florian Krampe**  
Director, Peace and Development Studies, and  
Director, Climate Change and Risk Programme,  
Stockholm International Peace Research Institute, Sweden

**Associate Professor Pichamon Yeophantong**  
Head of Research,  
Centre for Future Defence and National Security,  
Deakin University, Australian War College

Chairperson: **Dr Alistair Cook**  
Senior Fellow and Coordinator, Humanitarian Assistance and Disaster Relief Programme,  
Centre for Non-Traditional Security Studies,  
S. Rajaratnam School of International Studies

1500 - 1530 hrs

**Tea Break**

1530 - 1700 hrs

**Special Lecture**

Topic: Rising Geopolitical Competition: Implications for Asia-Pacific and Southeast Asia

Speakers: **Professor Jia Qingguo**  
Former Dean, School of International Studies,  
Director, Institute for Global Cooperation and Understanding, and  
Director of Global Governance,  
Peking University, China

Chairperson: **Ambassador Ong Keng Yong**  
Executive Deputy Chairman,  
S. Rajaratnam School of International Studies, and  
Director, Institute of Defence and Strategic Studies

**Wednesday, 16 October 2024 (Day 3)**

0830 - 1000 hrs

**Introduction by Participants**

(Japan, Malaysia, Myanmar, New Zealand, Oman, Philippines, Singapore)

1000 - 1030 hrs

**Tea Break**

1030 - 1200 hrs

**Panel Presentation III**

Topic: Complexity from Technological Challenges in Geo-Economic Competition

Speakers: **Mr Chris Leck**  
Group Chief Technology Officer,  
Prime Minister's Office, Singapore

**Professor Zeng Jinghan**  
Professor of China and International Studies, and  
Director, Confucius Institute,  
Lancaster University, United Kingdom

Chairperson: **Dr Kaewkamol Pitakdumrongkit**  
Senior Fellow and Head, Centre for Multilateralism Studies,  
S. Rajaratnam School of International Studies

1200 - 1330 hrs	<b>Lunch</b>
	<b>Syndicate Discussions</b>
1330 - 1500 hrs	<b>Distinguished Speaker's Lecture</b>
	Speakers: <b><i>Dr Yose Rizal Damuri</i></b> Executive Director, Centre for Strategic and International Studies, Indonesia
	Chairperson: <b><i>Mr Adrian Tan</i></b> Executive Coordinator of Policy Research, Head of Special Projects, and Deputy Director, Institute of Defence and Strategic Studies, S. Rajaratnam School of International Studies
1500 - 1530 hrs	<b>Tea Break</b>
1630 - 1830 hrs	<b>Visit to SAF Changi Regional HADR Coordination Centre and Singapore Navy Museum</b>
1930 - 2130 hrs	<b>Seafood Dinner</b>

#### Thursday, 17 October 2024 (Day 4)

0830 - 1000 hrs	<b>Introduction by Participants</b> (Sri Lanka, Sweden, Switzerland, Thailand, United Kingdom, United States)
1000 - 1030 hrs	<b>Tea Break</b>
1030 - 1200 hrs	<b>Closing Panel Presentation</b>
	Topic: Whither Strategic Complexity?
	Speakers: <b><i>Dr Zack Cooper</i></b> Senior Fellow, American Enterprise Institute
	<b><i>Professor C. Raja Mohan</i></b> Visiting Research Professor, Institute of South Asian Studies, National University of Singapore
	<b><i>Professor Ken Jimbo</i></b> Professor of International Relations, Keio University; and Managing Director, International House of Japan
	Chairperson: <b><i>Dr Sinderpal Singh</i></b> Senior Fellow and Assistant Director, Institute of Defence and Strategic Studies, S. Rajaratnam School of International Studies
1200 – 1400 hrs	<b>Certificate Presentation and Farewell Lunch</b>

## **SPEAKERS** (in chronological order of speaking)

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### **Mr Peter Ho**

*Member, RSIS Board of Governors; and Senior Advisor, Centre for Strategic Futures, Prime Minister's Office, Singapore*

### **Professor Mely Caballero-Anthony**

*President's Chair in International Relations and Security Studies; Associate Dean (International Engagement), and Head, Centre for Non-Traditional Security Studies, S. Rajaratnam School of International Studies*

### **Colonel Alan Tan**

*Director (International), Defence Policy Office, Ministry of Defence, Singapore*

### **Associate Professor Charmaine Misalucha-Willoughby**

*Chair, Department of International Studies, De La Salle University, Philippines*

### **Senior Colonel (Ret) Zhou Bo**

*Senior Fellow, Center for International Security and Strategy, Tsinghua University, China*

### **Associate Professor Nguyen Thi Lan Anh**

*Director General, East Sea Institute, Diplomatic Academy of Vietnam*

### **Dr Florian Krampe**

*Director, Peace and Development Studies, and Director, Climate Change and Risk Programme, Stockholm International Peace Research Institute, Sweden*

### **Associate Professor Pichamon Yeophantong**

*Head of Research, Centre for Future Defence and National Security, Deakin University, Australian War College*

### **Professor Jia Qingguo**

*Former Dean, School of International Studies, Director, Institute for Global Cooperation and Understanding, and Director of Global Governance, Peking University, China*

### **Mr Chris Leck**

*Group Chief Technology Officer, Prime Minister's Office, Singapore*

### **Professor Zeng Jinghan**

*Professor of China and International Studies, and Director, Confucius Institute, Lancaster University, United Kingdom*

### **Dr Yose Rizal Damuri**

*Executive Director, Centre for Strategic and International Studies, Indonesia*

### **Professor Ken Jimbo**

*Professor of International Relations, Keio University; and Managing Director, International House of Japan*

### **Dr Zack Cooper**

*Senior Fellow, American Enterprise Institute*

### **Professor C. Raja Mohan**

*Visiting Research Professor, Institute of South Asian Studies, National University of Singapore*

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**Dr Alistair Cook**

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## ABOUT THE COORDINATOR OF APPSMO

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## ABOUT THE S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES

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