

UNDERSEA CABLES, GEOECONOMICS, AND SECURITY IN THE INDO-PACIFIC

RISKS AND RESILIENCE

October 26–27, 2023



UNIVERSITY of HAWAI'I at MĀNOA
CENTER for INDO-PACIFIC AFFAIRS

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慶應義塾
Keio University

جامعة خليفة
Khalifa University

Undersea Cables, Geoeconomics, and Security in the Indo-Pacific: Risks and Resilience

University of Hawai'i at Mānoa
Imin Conference Center, Tagore Room
1777 East-West Rd, Honolulu, HI 96848
October 26–27, 2023

Agenda

How are threats to undersea cable networks evolving in the Indo-Pacific? How do national perspectives differ, and what country-specific challenges exist that may require the cooperation of additional partners? How can the US, Japan, and other countries that have significant expertise with undersea cable technology cooperate with other state and non-state actors to ensure the resilience of this critical infrastructure? How are undersea cables connected to larger discussions about strategic competition, technology, economic security, cybersecurity, maritime security, critical infrastructure, and other issues in the Indo-Pacific?

This conference will be held under the Chatham House Rule. Participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

Thursday, October 26, 2023

- 9:00 am** **Conference Check-In and Coffee with Refreshments**
- 9:30 am** **Opening Remarks, Self-Introductions, and Group Photo**
- 9:55 am** **Overview of Initial Project Themes and Framework**
Kristi Govella, University of Hawai'i at Mānoa

10:10 am Session 1: History, Security, and Critical Infrastructure

Speakers

- The Historical Context of Undersea Cable Development
Motohiro Tsuchiya, Keio University
- Critical Maritime Infrastructure Protection in the Indo-Pacific
Christian Bueger, University of Copenhagen
- Underwater Surveillance Technology: Lessons from the Past, Implications for the Future
Mizuho Kajiwara, Keio University Global Research Institute

Discussants

- *Denny Roy, East-West Center*
- *Christian Bueger, University of Copenhagen*
- *Mizuho Kajiwara, Keio University*
- *Motohiro Tsuchiya, Keio University*

11:40 am Lunch for All Participants
Makana Room, Imin Conference Center

12:45 pm Session 2: The Quad Countries

Speakers

- India's Pointed-Alignment Strategy on Underseas Cables
Jagannath Panda, Stockholm Center for South Asian and Indo-Pacific Affairs
- Can Government Connect with Business over Cables? Improving Public-Private Partnerships on Undersea Cables in the Pacific
Hayley Channer, United States Studies Centre, University of Sydney
- The Quad's Trust Deficit and Protecting Undersea Communication Cables in the Indo-Pacific
Brendon J. Cannon, Khalifa University

Discussants

- *Akhil Ramesh, Pacific Forum*
- *Brendon Cannon, Khalifa University*
- *Hayley Channer, United States Studies Centre, University of Sydney*
- *Jagannath Panda, Stockholm Center for South Asian and Indo-Pacific Affairs*

2:15 pm Coffee Break with Refreshments

2:45 pm Session 3: Southeast Asia and the Pacific Islands

Speakers

- Southeast Asian Approaches to the Security of Submarine Cables: Problems and Prospects for Cooperation
Tara Davenport, National University of Singapore
- Southeast Asia Amid Regional Undersea Cable Competition
Elina Noor, Carnegie Endowment for International Peace
- Resilience and Security of Communications in Pacific Island States: The Role of Cables
Amanda H. A. Watson, Australian National University

Discussants

- *Tarcisius Kabutaulaka, University of Hawai'i at Mānoa*
- *Tara Davenport, National University of Singapore*
- *Elina Noor, Carnegie Endowment for International Peace*
- *Amanda H. A. Watson, Australian National University*

4:15 pm Day 1 Wrap-Up Comments

Kristi Govella, University of Hawai'i at Mānoa

4:30 pm Day 1 Concludes

Friday, October 27, 2023

10:00 am Coffee with Refreshments

10:30 am Session 4: Cyber and Emerging Technology

Speakers

- The Rise of Cyber Power in the Indo-Pacific Area: The Case Study of Submarine Cables
Luigi Martino, University of Bologna
- Emerging Technology and Undersea Cable Resilience in the Indo-Pacific
Ash Rossiter, Khalifa University
- Indo-Pacific Cable Protection: Bolstering Internet Resilience and Security
Justin Sherman, Atlantic Council

Discussants

- *Kristi Govella, University of Hawai'i at Mānoa*
- *Luigi Martino, University of Bologna*
- *Ash Rossiter, Khalifa University*
- *Justin Sherman, Atlantic Council*

12:00 pm **Lunch for All Participants**
Makana Room, Imin Conference Center

1:15 pm **Session 5: Project Framework Discussion**

This session will begin with comments from Kristi Govella outlining some of the main findings and themes that have emerged from the previous four sessions. Senior advisors will then be invited to share their overarching impressions and feedback from government and private sector perspectives. After these opening thoughts, the discussion will be opened up to all participants to solicit ideas that should be incorporated into the overarching project framework that will inform both the policy briefs and the planned special issue of a scholarly journal.

2:30 pm **Coffee Break with Refreshments**

2:45 pm **Session 6: Project Framework Discussion Wrap-up and Next Steps**

This session will wrap-up any remaining discussion items from Session 5 and conclude with announcements regarding next steps for the project participants in terms of revisions and publication.

3:45 pm **Concluding Remarks**
Kristi Govella, University of Hawai'i at Mānoa

4:00 pm **Conference Concludes**

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List of Participants

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Abstracts

(alphabetical by author)

Critical Maritime Infrastructure Protection in the Indo-Pacific

Christian Bueger, University of Copenhagen

Journal Article

This paper starts out from the observation that the subsea cable data system is increasingly embedded in other maritime infrastructures, such as undersea electricity cables, wind farms, and within fishery and navigational zones. In consequence it is part of an increasingly dense system of infrastructures and addressed by an expanding agenda of critical maritime infrastructure protection (CMIP). Maritime infrastructure building has profound consequences for the political geography of maritime regions. In a first step of analysis I discuss how investments in maritime infrastructures reconfigure the Indo-Pacific and its strategic priority areas. I then discuss threats to critical maritime infrastructures, arguing that these threats imply new political convergences. This is followed by an exploration of institutional set ups through which CMIP can be strengthened and organized.

The Quad's Trust Deficit and Protecting Undersea Communication Cables in the Indo-Pacific

Brendon J. Cannon, Khalifa University

Journal Article

Australia, Japan, India, and the U.S. are coordinating security activities as the Quad. From maritime domain awareness to space exploration, the Quad seems to be doing a little bit of everything. But when it comes to sensitive undersea cable networks over which 95% of the world's communications travel, it has only recently made statements. After outlining the proliferating security threats to undersea communication cables in the Indo-Pacific, the article defines the strengths and weaknesses inherent in the Quad and how these will impact its collective will and capabilities to protect undersea cable networks. Building on theories of informality in intergovernmental organizations and data collected via expert interviews, policy prescriptions are outlined for both individual state members and the collective Quad. The findings show that cables have been securitized by governments fearful of sabotage by malicious state actors. Yet, the catalog of cable sabotage is thin while concerns about espionage form a leitmotif that should not be ignored. Pooling resources will be difficult given the complexity of cable networks and the host of private/public entities. Regulatory and legal regimes also present barriers. While less sensitive areas such as the purchase and deployment of cable repair ships could lead to Quad cooperation, they may be less-than-effective, highly

expensive, and complicate what are currently efficient repairs already undertaken by private actors. Updating and syncing legal and regulatory regimes is also complicated given different interpretations of UNCLOS and regional sensitivities. Prioritizing ICPC as a standard setting agency would be a prospect that the Quad could agree on and possibly use as a venue for engagement with China.

**Can Government Connect with Business over Cables?
Improving Public-Private Partnerships on Undersea Cables in the Pacific**

Hayley Channer, United States Studies Centre, University of Sydney
Policy Brief

As strategic competition between the United States and China intensifies, sub-sea cables are emerging as a key battleground. Undersea cables are ripe for competition as they combine elements of controlling communications and data, the potential for espionage, the geopolitics of development assistance, and government interference in commercial business interests. More secure access to the internet and telecommunications is of particular concern to Pacific Island countries as many rely on a single lifeline cable connecting them to regional hubs. Disruptions to undersea cables can cut internet and mobile services to islands for months, as has been the case for Tonga and Solomon Islands. Since the announcement of its Digital Silk Road in 2015, China has been increasing its technology investment in the Pacific. Over a similar timeframe, the United States, working trilaterally with Australia and Japan and via the Quad with India, have established their own rival cable projects. Thinking longer-term, undersea cables cost multiple millions to establish and maintain, meaning the cost of remaining in the sub-sea cable business is high. The capacity of the US and its allies to forge public-private partnerships to manufacture, lay, connect, and maintain cables will determine their scope to secure this critical strategic asset in the Pacific. This report assesses the appetite within the Australian and Pacific private sectors to partner with the Australian, US and other governments on undersea cables and provide secure telecoms to the Pacific.

**Southeast Asian Approaches to the Security of Submarine Cables:
Problems and Prospects for Cooperation**

Tara Davenport, National University of Singapore
Journal Article

Southeast Asia's digital economy is growing rapidly and is estimated to reach \$1 trillion by 2030. It is reported that 25 cable systems transverse Southeast Asian waters, with more submarine cable systems set to be built to support Southeast Asia's demand for capacity. While the majority of incidents to submarine cables have been accidental, recent instances of cable damage have highlighted the possibility of deliberate acts of sabotage against cables and related infrastructure by state and non-state actors. There is also growing recognition of

the risk of cyber-attacks against the remote network management systems that manage submarine cable systems. Given the importance of submarine cables to Southeast Asia, the risk of disruption of communications and accompanying political, security and economic ramifications, ensuring the security of submarine cable systems has gained increased significance. To date, Southeast Asian States have not paid much attention to the security of submarine cables, and national legal and policy frameworks have not kept up with the exponential growth in the digital economy and the need to protect the physical infrastructure that underpins it. Moreover, regional cooperation on ensuring the security of submarine cables within the Association of Southeast Asian Nations (ASEAN) remains limited. To this end, this article examines existing practices of Southeast Asian States on the protection of submarine cables from national and regional perspectives, identifies gaps and makes recommendations on what Southeast Asian States should do individually and within ASEAN to ensure the resilience of this critical infrastructure.

Underwater Surveillance Technology: Lessons from the Past, Implications for the Future

Mizuho Kajiwara, Keio University

Policy Brief

During the Cold War, the United States enjoyed an overwhelming advantage after it succeeded in building an undersea cable network with passive sonar called Sound Surveillance System, or SOSUS, in the Arctic, Atlantic, and Pacific Oceans as a result of decades of R&D and operational experience to detect and contain the erstwhile Soviet submarines. These networks played a significant role in ending the Cold War and entrenching the United States' supremacy in the underwater domain, which continues to date. The history of the so-called "secret weapon" reveals that such a global network would not operate effectively enough without managing operations intimately based on shared signal intelligence with its allies such as U.K, Canada, Norway, Denmark in the Barents Sea, and Japan in the Sea of Okhotsk against Soviet's bastion strategy. Emerging technologies pose some crucial challenges in the Indo-Pacific Ocean today, with more countries operating submarines, seeking stealth, mobility, and durability, and developing AI-equipped smaller and deployable UUVs (Unmanned Underwater Vehicles). With its allies, Japan would be key to building capabilities for advanced surveillance platforms to secure long existing or newly placed seabed cables, monitor several choke points, and reduce vulnerability to counter potential competitors for rule-based maritime order.

The Rise of Cyber Power in the Indo-Pacific Area: The Case Study of Submarine Cables

Luigi Martino, University of Bologna

Journal Article

Cyberspace has become the fifth domain of political and military dynamics in the 21st century. Submarine cables play a crucial role as the backbone of the entire digital environment, with 97% of daily information exchanged on the internet relying on their usage. This makes them "critical infrastructures of critical infrastructures," implying both technical and political significance, with geopolitical implications on power detection and geographical extension. One particularly important and sensitive area is the Indo-Pacific chokepoint region, subject to rapidly evolving dynamics and varying national power perspectives. State actors such as China, Japan, South and North Korea play relevant roles as regional actors with contrasting agendas in terms of military, economic, technological, and political powers. Moreover, international actors like China and the US confront each other in the Indo-Pacific, leading to geopolitical consequences on ownership, safety, security, and confidentiality of submarine cables and their information content. To ensure the resilience of these critical infrastructure, the United States, Japan, and like-minded countries must reshape their collaborative approach, moving from leniency to containment of competitor actors such as China and its state-like-minded allies. Effective public-private partnerships between state and non-state actors are necessary to align divergent interests and agendas. There is also a crucial question regarding the validity and applicability of existing international law in the context of submarine cables. Who is responsible for protecting these cables in international maritime areas? Are these cables considered extensions of state jurisdiction when implemented by private actors? This research paper employs a Qualitative Comparative Analysis (QCA) methodology, combining quantitative methods to collect and analyze data, and provide empirical evidence on state and non-state actors' posture concerning cyber power exercised within the context of submarine cables. The interconnections between undersea cables and broader discussions on strategic competition, technology, economic security, cybersecurity, maritime security, critical infrastructure, and other Indo-Pacific issues are vital for understanding cyber power competition dynamics. The Indo-Pacific region serves as a significant case study to address threats, challenges, and opportunities related to submarine cables.

Southeast Asia Amid Regional Undersea Cable Competition

Elina Noor, Carnegie Endowment for International Peace

Policy Brief

Discussions around undersea communication cables in Southeast Asia are typically framed in economic, investment, and commercial terms. For industry and policy stakeholders in the region, the main driver for access to these cables and their landing stations is to amplify digital technology as a growth and development lever. Despite rising tensions around undersea cables

as another focal point of US-China competition and despite reports of Southeast Asian companies increasingly being forced to make difficult decisions, there is little discourse in the region about the implications of such pressures for the region. This paper will examine the following questions for Southeast Asian public and private sector players as well as the populations at the user end of the undersea cable value chain: What are Southeast Asia's stakes in undersea cable networks? What types of security – physical and cyber/data-related – risks do the region's stakeholders face that are inherent in these networks and that may be amplified by Sino-American competition? What mitigating measures are being taken? How do national perspectives converge and diverge, and where do they land at the Association of Southeast Asian Nations (ASEAN) level? How have extra-regional partners such as the United States, Japan, and others played a role in either alleviating or exacerbating challenges for Southeast Asian stakeholders? Moving forward, how might Southeast Asian states assert their agency in a meaningful way to secure their use of subsea cables? Relatedly, what are the broader implications of these approaches for stakeholder decisions on technology, economic security, cybersecurity, maritime security, and critical infrastructure writ large?

India's Pointed-Alignment Strategy on Underseas Cables

Jagannath Panda, Stockholm Center for South Asian and Indo-Pacific Affairs

Journal Article

As a major player in the Indian Ocean Region (IOR), and now the Indo-Pacific, underseas cables are of the utmost strategic importance to India, in terms of both economy and national security. Undersea cables not only enable high-speed data transfer for the private sector, but are also critical to national communication networks, intelligence operations, and military activities in the IOR. Their security and resilience against disruptions, damages, or cyberattacks is hence a crucial aspect of India's defense strategy. This necessitates high maritime domain awareness capabilities, which requires working with like-minded countries. Through strategic partnerships on securing undersea cables, like the India-France Synetique cable system, India participates in intelligence sharing and maintenance activities and coordinates responses to incidents. Sharing information on cable locations helps enhance digital connectivity and resilience in the IOR. In terms of maintenance too, India pools its resources and expertise with regional like-minded partners to lay new cables and upgrade existing ones. New Delhi's participation in IOR-centric regional forums offers a platform for such coordination. Increasingly, India has been shifting to a pointed alignment strategy, wherein it pursues focused engagement with certain strategic like-minded powers; considering the vital importance of undersea cables to India's overall security, New Delhi is implementing a similar strategy on this issue.

Emerging Technology and Undersea Cable Resilience in the Indo-Pacific

Ash Rossiter, Khalifa University

Journal Article

It has long been observed that technological advances in the national security realm are subject to an intense dialectical relationship. Any new source of the means to harm somebody or something of value inevitably stimulates efforts to undercut, blunt, or negate it. This paper looks at how developments across a range of technology areas is affecting the balance between would-be attackers of undersea cable infrastructure and those defending it. In particular, it asks examines which emerging technology is likely to be a boon for the former and which for the latter in years ahead. In order to shed light on this broad issue – and to reach some judgements about the overall evolving resilience of the undersea cable network – the paper delves into these key technological interactions: detection versus avoidance; attack vectors versus shields; and damage infliction versus repair. The conclusions drawn from this paper will better arm policymakers and other interested parties to draw upon emerging technologies to enhance the resilience of this essential infrastructure.

Indo-Pacific Cable Protection: Bolstering Internet Resilience and Security

Justin Sherman, Atlantic Council

Policy Brief

Submarine cables carry over 95% of intercontinental internet traffic yet remain underappreciated by policymakers around the world. The Indo-Pacific region is an important zone for subsea cables across investments, development, maintenance, and technological innovation. Data centers and cloud infrastructure in the region further increase these cables' importance to surrounding countries and the globe. This paper will evaluate submarine cable security and resilience in the Indo-Pacific region, including by examining major investment and development trends in the region; the cable licensing and security review mechanisms in Japan, the Philippines, and other countries; and the region's strategic and policy discussions of submarine cable security and resilience. It will conclude by offering recommendations for the Indo-Pacific, including in cooperation with the US and other partners, to improve the physical security, cybersecurity, and resilience of this vital internet infrastructure.

The Historical Context of Undersea Cable Development

Motohiro Tsuchiya, Keio University

Journal Article

In the 19th century, the British Empire extended a network of undersea cables, known as the "All Red Line," to its colonies around the world to expand trade and colonial rule. Countries competed to lay undersea cables, but as of the beginning of the 20th century, 66% of the

undersea cables were owned by the British government and British companies. In the Pacific Ocean Japan, which was rapidly emerging after the Meiji Restoration of 1868, connected undersea cables to Okinawa, the Korean Peninsula, Taiwan, the Ogasawara Islands, and Sakhalin to rule its oversea territories. On the other hand, the United States took the opportunity of the Spanish-American War of 1898 to annex the Kingdom of Hawaii in order to prevent the British Empire from connecting cables in the Pacific Ocean, and succeeded in connecting undersea cables across the Pacific Ocean from the US west coast to Hawaii, Guam and the Philippines. Undersea cables were extended to govern overseas territories in the 19th and 20th centuries. After World War II, for a time satellites took over the leading role in international communications, but with the advent of optical undersea cables, the geopolitics and geoeconomics of cables are once again attracting attention.

**Resilience and Security of Communications in Pacific Island States:
The Role of Cables**

Amanda H. A. Watson, Australian National University
Journal Article

Building upon earlier work that mapped the undersea cables for Pacific Island nations, this project would assess the resilience of access to telecommunications and the internet in those countries. The number of cables connected to states varies from zero to more than two. The importance of cables comes to the fore on occasions when they are damaged, thereby reducing communication access for residents and businesses. The most notable outage was when a volcanic eruption damaged Tonga's sole cable in January 2022. Other recent disruptions have been caused by an earthquake north of Papua New Guinea in September 2022 and a ship's anchor in Solomon Islands in May 2023. In addition to the use of cables for the transmission of telephone signals and internet data, telecommunication companies and state-owned entities in Pacific Island countries avail themselves of satellite technologies as an alternative source of connectivity. With the emergence of low earth orbit satellites, a complex mapping exercise is necessary to ascertain existing connectivity options and their resilience. The project will aim to identify risks to the resilience and security of communications in Pacific Island states. Given that Pacific states are typically small in terms of population size and economic turnover, the project may help to identify opportunities for development partners to assist with improving the resilience of communication systems.

Participant Biographies

(alphabetical)



Christian Bueger is a Professor of International Relations with a research focus on global governance and international organization, the oceans and maritime security, international relations theory, and sociology of expertise. In his current work Christian Bueger is studying political responses to maritime insecurity and the knowledge, resources, and technologies required to govern the oceans. He is an Honorary Professor at the University of Seychelles, a research fellow at the University of Stellenbosch and an honorary fellow at Cardiff University. He is also one of the directors of the SafeSeas network of maritime security research. Before joining Copenhagen in 2018 he was a professor at Cardiff University and visiting fellow at the National University of Singapore, the University of Stellenbosch, and a Leverhulme Fellow at the Greenwich Maritime Institute. He holds a Ph.D. from the European University Institute.



Brendon Cannon is an Assistant Professor of International Security at Khalifa University. His research is at the nexus of international relations, security studies, and geopolitics. He has published on topics related to regional security and geopolitics, the arms industry, and shifting distributions of power across the Indo-Pacific. Cannon's articles appear in *Defence Studies*, *Small Wars and Insurgencies*, *Asian Security* and *Third World Quarterly*. His new book, edited with Kei Hakata, is *Indo-Pacific Strategies: Navigating Geopolitics at the Dawn of a New Age* (Routledge, 2021). He holds a Ph.D. in Political Science from the University of Utah.



Hayley Channer is the Director of the Economic Security Program with the United States Studies Centre at the University of Sydney. Hayley brings an interdisciplinary lens to her analysis, having worked as an Australian Government official, Ministerial adviser, think tank analyst, and represented global non-profit organizations. Prior to her current role, Hayley was a Senior Policy Fellow with the Perth USAsia Centre and a Department of Defence official working mainly across the Strategy, Policy and Industry Group as well as with Defence Science and Technology (DST). In 2022, Hayley was awarded the Fulbright Australia Coral Sea Scholarship (Business/Industry) to examine alternative infrastructure offerings to China's Belt and Road Initiative including Australia-US-Japan trilateral cooperation in Southeast Asia and the Pacific. Hayley holds a Master of International Relations from the University of Queensland and a Certificate in Public Policy from the London School of Economics.



Sungmin Cho is a Professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI APCSS). His area of research interests covers China-Korean Peninsula relations, North Korea's nuclear program, Korean unification, and the US alliance in East Asia. He also closely follows the domestic politics of China and North Korea. Prior to arriving at APCSS, he was a lecturer for the Asian Studies Program at Georgetown University. He has published articles on the politics and security affairs of Northeast Asia in peer-reviewed journals, including *World Politics*, *Journal of Contemporary China*, *The China Journal*, *Asian Security*, *Journal of Indo-Pacific Affairs*, and *Korea Observer*. His policy analysis has also appeared in *Foreign Affairs*, *The Washington Quarterly*, and *War on the Rocks*, among others. He holds a Ph.D. in Government from Georgetown University.



Tara Davenport is the Deputy Director of the Asia-Pacific Centre for Environmental Law, an Assistant Professor at the Faculty of Law, National University of Singapore (NUS) and a Senior Research Fellow at the Centre for International Law (CIL) at NUS. She is a qualified Advocate and Solicitor in Singapore. Her current research interests are public international law, law of the sea and international dispute settlement. She has written on the South China Sea disputes, submarine cables and deep seabed mining. She is a member of the Legal Working Group on Liability for Environmental Harm from Activities in the Area convened by the Centre for International Governance Innovation (CIGI), the Commonwealth Secretariat and the Secretariat of the International Seabed Authority. She is also the Rapporteur for the International Law Association Study Committee on Submarine Cables and Pipelines. She holds an LLB from the London School of Economics, an LLM in Maritime Law from NUS, an LLM and JSD from Yale Law School.



Simon Fletcher is the Managing Director of Prima Limited and VerdiCore Limited. He founded several telecommunications and major ICT projects in Vanuatu such as Pacific Data Solutions (a satellite earth station and data center acquired by Digicel in 2006), Wantok (a 4G Telecommunications network retailer sold in 2012) and Interchange Limited (Vanuatu's first subsea telecommunications cable system).



Kristi Govella is the Director of the Center for Indo-Pacific Affairs and an Assistant Professor of Asian Studies at the University of Hawai'i at Mānoa. She specializes in the intersection of economics, security, and governance in international relations, with a particular focus on the Indo-Pacific region and Japan. Her research has examined topics such as economic statecraft, trade, investment, government-business relations, regional institutional architecture, military alliances, and the governance of the global commons. She has published over 30 articles, book chapters, and opinion pieces, and she is the co-editor of two books, *Linking Trade and Security: Evolving Institutions and Strategies in Asia, Europe, and the United States* (2013) and *Responding to a Resurgent Russia: Russian Policy and Responses from the European Union and the United States* (2012). She also serves as an Adjunct Fellow at the East-West Center and Pacific Forum and as Editor of the peer-reviewed journal *Asia Policy*. Dr. Govella was previously Senior Fellow and Deputy Director of the Asia Program at The German Marshall Fund of the United States, a Postdoctoral Fellow at Harvard University, and an Associate Professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies. She holds a Ph.D. in Political Science from the University of California, Berkeley.



April Herlevi is a Senior Research Scientist in Indo-Pacific Affairs at CNA and a Nonresident Fellow at the National Bureau of Asian Research. She is an expert on the PRC foreign and security policy, economic statecraft for technology acquisition, and the increasing role of PRC commercial, economic and military actors globally. Her research focuses on PRC technology and innovation, global infrastructure development, and the People's Liberation Army (PLA). Herlevi has published research on port operations along China's Maritime Silk Road, PLA views of Oceania, and China-Middle East relations, and she continues to research PRC technological upgrading. Prior to joining CNA, Herlevi served in the federal government, holding positions with the Department of Defense and U.S. Agency for International Development. She holds a Ph.D. in international relations and comparative politics from the University of Virginia.



Declan Ingham represents the Infrastructure and Telecommunications Branch in Australia's Department of Foreign Affairs and Trade. He leads the Department's undersea cables policy and oversees a number of key government telecommunication investments including the Coral Sea Cable System. He previously worked on Indo-Pacific economic and development issues at Australia's Department of Treasury. He holds a M.Sc. in International Business from Maastricht University.



Tarcisius Kabutaulaka is an Associate Professor in the Department of Pacific Islands Studies at the University of Hawai'i at Mānoa. He is a political scientist and has published extensively on the Solomon Islands civil unrest and the Australian-led regional intervention, the forestry industry in Solomon Islands, China in Oceania, and governance issues in the Pacific Islands. He was Director of the Center for Pacific Islands Studies from 2018 to 2021. Prior to joining the University of Hawai'i at Mānoa, he was a Research Fellow at the East-West Center's Pacific Islands Development Program and taught at the University of the South Pacific. He is the editor of the Pacific Islands Monograph Series (PIMS), the founding editor of *Oceania Currents*, and a member of the editorial board of *The Contemporary Pacific*. Kabutaulaka has done consultancy work for governments, regional and international organizations and NGOs in the Pacific Islands. In 2000, following two years of conflicts in Solomon Islands, he participated in the peace talks in Townsville, Australia, as one of the chief negotiators. Kabutaulaka comes from the Weather Coast of Guadalcanal in Solomon Islands. He holds a Ph.D. in political science and international relations from the Australian National University.



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