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Malicious Cyber Operations: Countermeasures in International Law and their Role in Cyberspace

This session provides an overview of the concept of countermeasures that exists under customary international law. Countermeasures are responses to violations of international law whose wrongfulness is precluded by the prior breach. They are available to states directly injured by the breach as a selfhelp measure, and thereby, in a manner of speaking, serve to enforce the international law obligation in question. The nature and development of information and communication technologies give rise to questions as to how and when countermeasures can be used in cyberspace, particularly in response to malicious cyber operations or cyber threats.

The discussion will review:-

- the conditions and circumstances under which a countermeasure may be taken;
- questions relating to the application of countermeasures in response to a malicious cyber operation given the nature of information and communications technologies and associated operational considerations;
- the ongoing debates as to the existence, extent and application of a right to take “collective countermeasures”; and
- state practice and articulated national positions of States on the availability and application of countermeasures (and collective countermeasures) in the cyber context.

Short Bio



Danielle Yeow leads the cyber law and governance programme at the Centre for International Law, National University of Singapore (CIL).

She is responsible for leading CIL's international law in cyber research, thought leadership and capacity building programs. This includes:-

- the Annual Symposium on Cyber & International Law organised by the American University Washington College of Law in partnership with the CIL and other institutional partners;
- Roundtable on *Developing National Positions on International Law in Cyberspace*, (closed door, by invitation only event) hosted and supported by the CIL as part of the “Handbook on Developing a National Position on International Law in Cyberspace: A Practical Guide for States” project led by Principal Investigator Prof. Kubo Mačák (Professor of International Law, University of Exeter) and Co-Investigators Dr Ágnes Kasper (Head of Law Branch, NATO Cooperative Cyber Defence Centre of Excellence) and Dr Talita Dias (Senior Research Fellow, International Law Programme, Chatham House).
- US-ASEAN Cyber and Digital Dialogue Series, jointly hosted by the CIL, Columbia University's School of Singapore and Public Affairs and the Centre of Excellence for National Security, S. Rajaratnam School of International Studies.

The CIL is an accredited observer to the UN Open-Ended Working Group on security of and in the use of information and communication technologies (2021-2025) on issues related to information security

in the context of international security. Danielle participates in these discussions as CIL's representative.

Danielle has moderated and spoken widely on panel dialogues on cyber law and governance including at the Singapore International Cyber Week 2023 and 2024 and more recently on the sidelines of the OEWG meetings. In May 2024, she was invited by the Chair of the OEWG (2021-2025) to brief delegations on the topic of international law at the UNHQ, New York. She has also trained government officials on questions of the applicability of international law in cyber to government officials under the UN-Singapore Cyber Fellowship programme and the UNODA Sponsorship programme - Introduction to International Law: Approaches to Applicability to Cyberspace.

In her former role as the Deputy Director General of the International Affairs Division of the Singapore Attorney-General's Chambers, she advised and represented the Singapore Government on public international law issues ranging from international security including cyber, trade and investment, law of the sea, environment and climate change.

Danielle is admitted as an Advocate & Solicitor (Supreme Court of Singapore) and Barrister-at-Law (England & Wales) (Middle Temple).