## CIL Seminar on Protecting Critical Maritime Infrastructure 13 July 2023



## Comments by **Prof Robert Beckman**



## Part 1

# Threats to Cables and Pipelines

## **Nord Stream Pipeline**



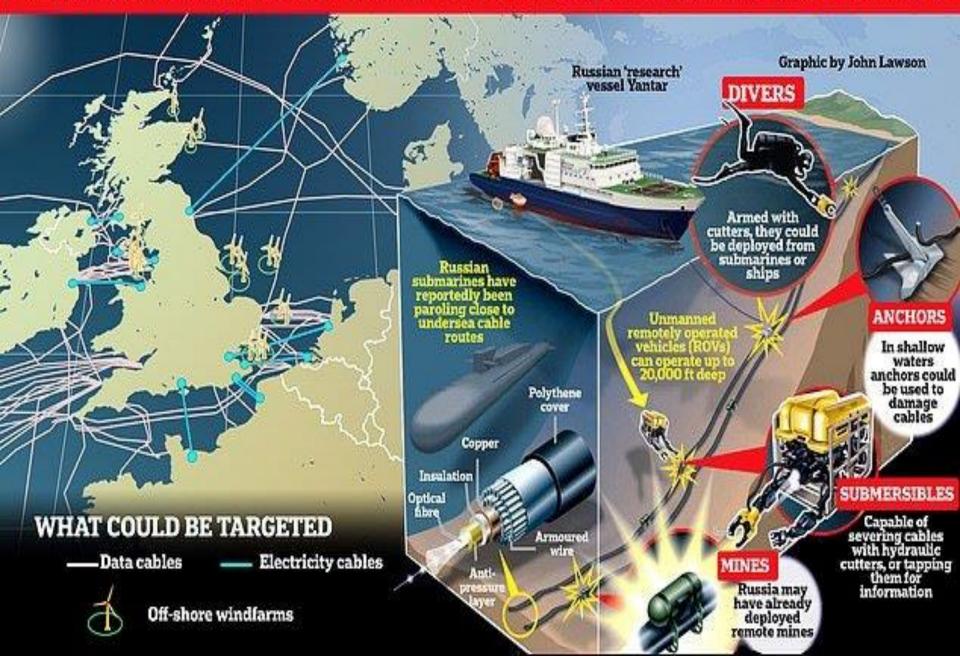
#### Nord Stream pipelines from Russia

Leaks detected on both pipelines near Bornholm





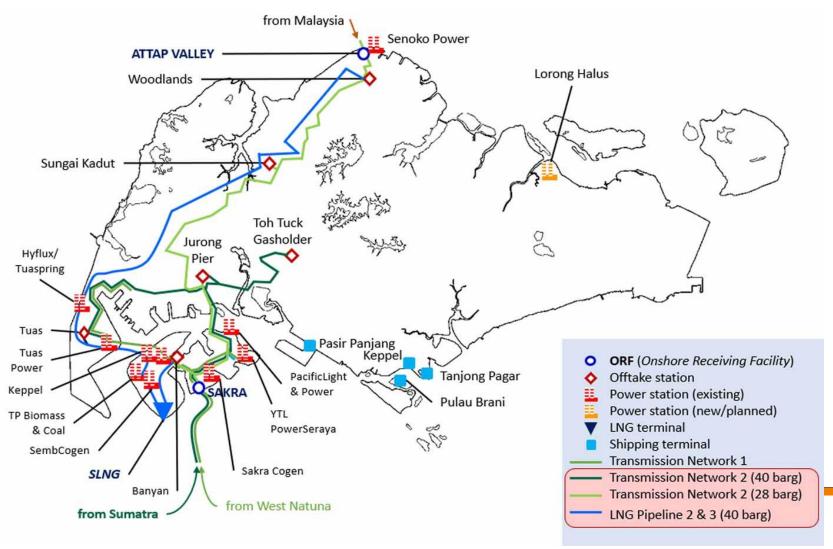
#### HOW RUSSIA COULD TARGET BRITISH ENERGY CABLES, DATA CABLES AND WINDFARMS



## **Pipeline Network Map**

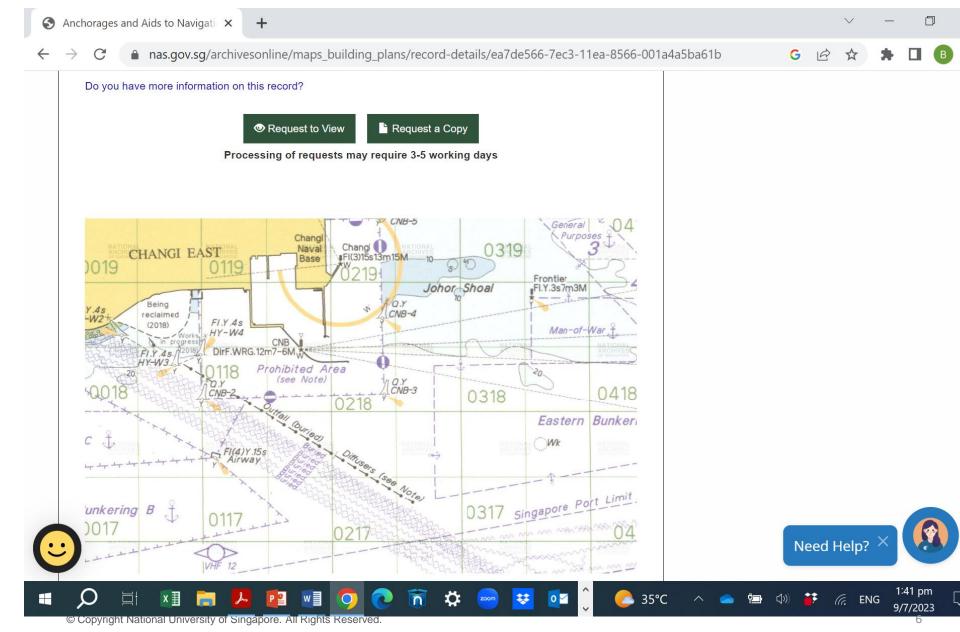
https://www.gassupply.com.sg/what-we-do/useful-info/pipeline-network-map/





## **Cables on Navigation Charts**

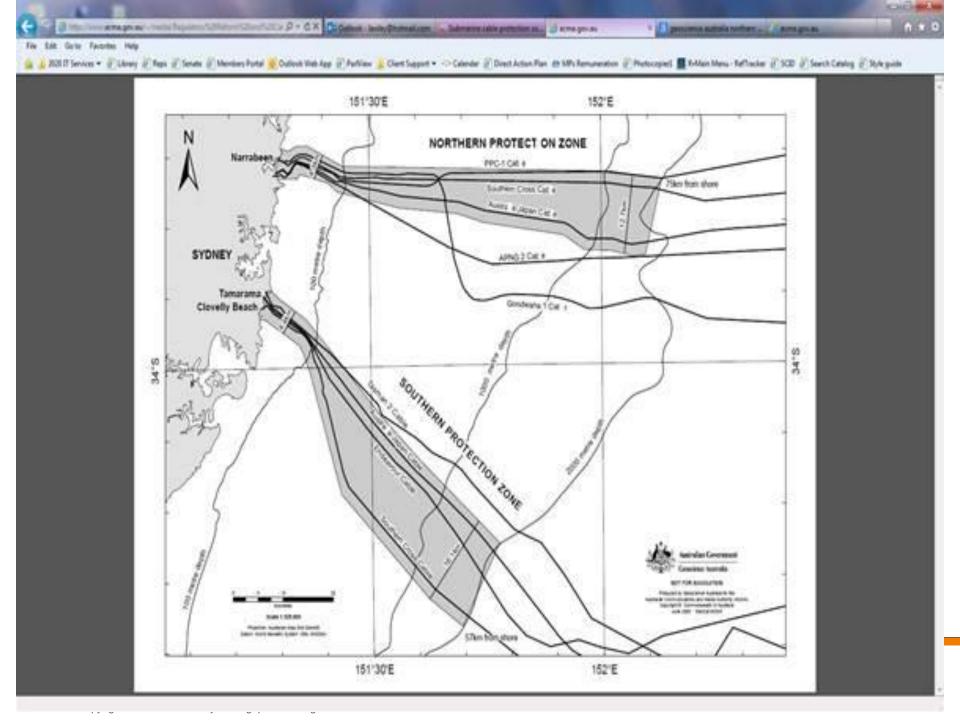






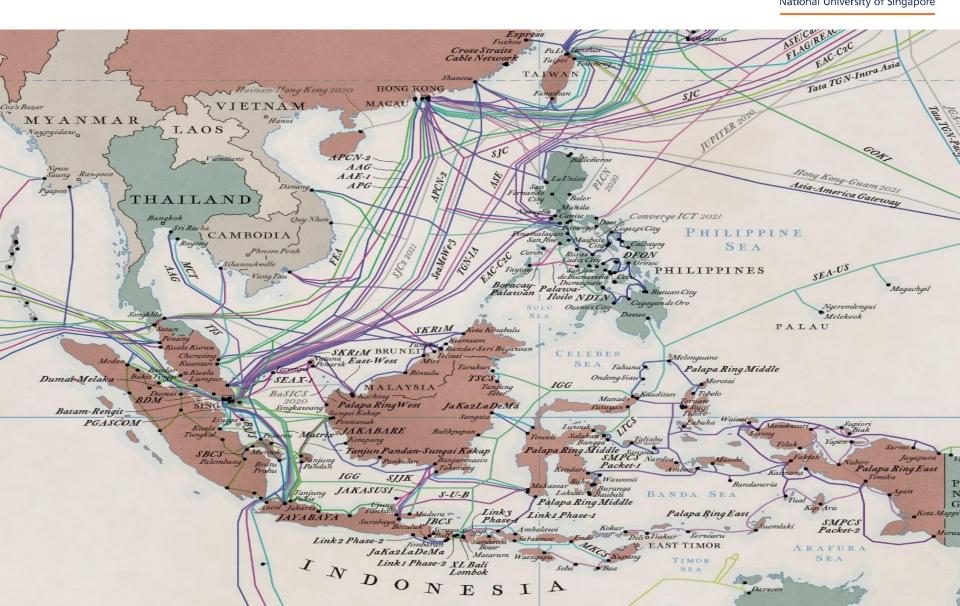
## Part 2

## Trends in Laying & Repair of Submarine Cables



#### **Cables in Southeast Asia**





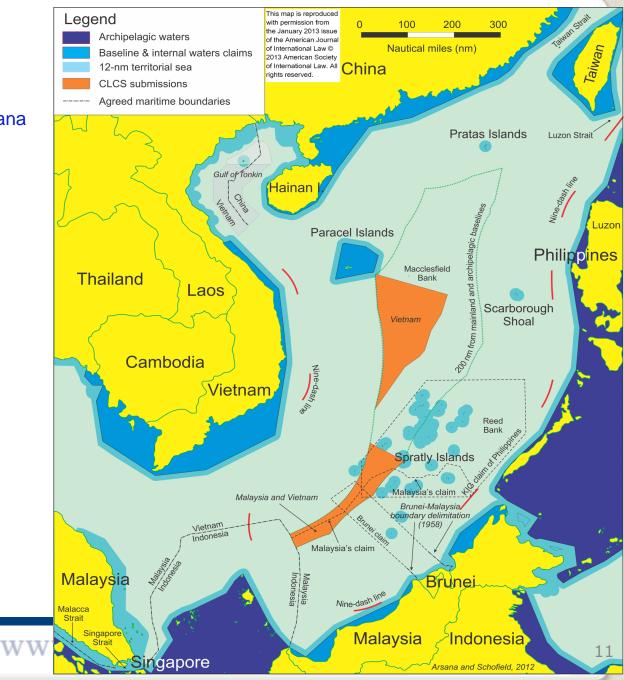
#### **New Cables from SE Asia to US**

https://www.csis.org/analysis/securing-asias-subsea-network-us-interests-and-strategic-options





- Map on CIL Website
- By Clive Schofield & Andi Arsana







## Part 3

# International Law & Global Institutions

### History of International Law on Submarine Cables



- 1884 Convention for Protection of Submarine Telegraphic Cables
- 1958 Geneva Conventions on the High Seas, Territorial Sea and Continental Shelf (Age of telegraphic & telephone cables)
- 10 Dec 1982 UN Convention on the Law of the Sea adopted
- 1 Jan 1983 Official Birthday of the Internet
- 1989 Launch of the World-Wide Web and new technologies for fibre optic submarine cables
- Problems:
  - 1. The law in the 1982 Convention is basically the same as that set out in the 1884 Convention
  - 2. It is almost impossible to amend 1982 UNCLOS

#### **Global Bodies**



- No UN Specialized Agency Responsible for Submarine Cables
- UN General Assembly Annual Resolution on Law of the Sea
  - Total of 393 Paragraphs
  - 4 Paragraphs on laying and repair of cables
  - 4 Paragraphs exactly the same for more than 10 years
- How many government officials know about the paragraphs or have read them?

## International Cable Protection Committee (ICPC)



- ICPC is a submarine cable protection non-profit organization.
- Goal is to promote submarine cable protection
- The ICPC represents 97% of the world's subsea telecom cables.
- The ICPC has more than 180 MEMBERS in over 60 Countries
- It provides a forum for the exchange of technical, legal, and environmental information about submarine cables and engages with stakeholders government
- Governments members of ICPC include Australia, France, Japan, Netherlands, Singapore (IMDA) & USA (US Navy)
- Seven companies from Singapore are members

### ICPC Recommendations on Protection of Cables



- 1. Government Best Practices for Protecting and Promoting Resilience of Submarine Telecommunications Cables (Version 1.2)
- 2. ICPC Recommendation #5, Recommendation for Common Format for Cable Awareness Charts, Issue 9A, 10 December 2019
- 3. ICPC Recommendation No. 6 Recommended Actions for Effective Cable Protection (Post Installation)



# Part 4 The Challenges

## **Government Agencies In "Silos"**



- In most States the Ministry in charge of submarine cables is the Ministry of Communications or Telecommunications
- It deals with the licensing and regulations of telecoms companies
- It usually has no responsibility for the "security" of cables
- Cables and Landing Stations have not been designated as "Critical Communications Infrastructure" in most States
- Some States have created a new government agency for Cyber Security, but it does not deal with physical security of cables
- Guidelines adopted in 2019 by ASEAN Telecommunications and Technology Ministers (TELMIN)

## The Challenges



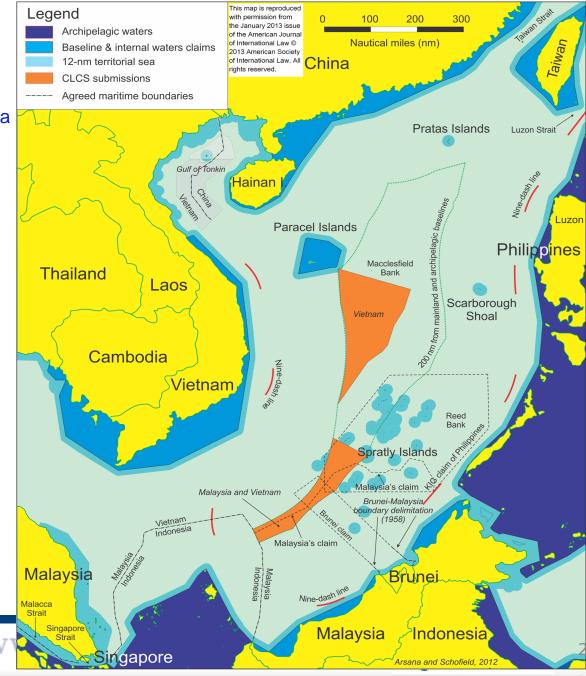
- Requires unprecedented level inter-agency coordination and cooperation at the National Level
- Requires unprecedented level of cooperation between Government and Industry at National Level
- Requires unprecedented level of cooperation between agencies the Regional Level

#### Recommendation



- Governments and Cable Industry have common interest in protecting submarine cables
- Currently they often treat each other as adversaries rather than as partners with common interests
- Ways and Means should be explored to enhance communication and cooperation between them with the objective of establishing working Private Sector – Public Sector Partnerships

- Map on CIL Website
- By Clive Schofield & Andi Arsana





## Thanks for your attention!

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