

INTERNATIONAL LEGAL ISSUES ON INTERCONTINENTAL SUBMARINE COMMUNICATIONS CABLES (MALAYSIA & THE UNITED STATES)

Introduction

Intercontinental Submarine Cables, or subsea cables are a vast network of undersea cables which form the internet's backbone, handling nearly all global data transmission and enabling seamless, real-time communication which drives our interconnected world.

Responsible for **95% of the world's data transfer**,^[1] subsea cables are designed for minimal latency and high capacity, meeting the ever-growing demands of our digital economy. While satellites offer connectivity in remote areas and are easier to deploy, their higher latency and lower bandwidth make them less suitable for high-speed, large-scale tasks like video streaming, cloud computing, and financial transactions. Subsea cables remain unparalleled in efficiency and reliability, making them indispensable for modern life.^[2] Without this critical infrastructure, the instant communication and global information-sharing would be impossible.

History

The global usage of subsea cables today can be traced back to Malaysia, known as Malaya at the time, which played a pivotal role in the early days of this transformative technology. **Malaysia's history with the subsea cable industry highlights its significant contribution to global connectivity.** It all began with Samuel Morse, the renowned American inventor, who utilised a natural rubber sourced from Malaya — as an insulator for undersea cables.^[3] This groundbreaking innovation greatly improved the cables' durability, strength, and waterproofing, representing a critical milestone in the advancement of submarine communication technology and laying the foundation for the global network we rely on today.

Development

Today, Malaysia continues to play a crucial role in the global subsea cable network. The

nation currently operates **six (6) cable landing stations** and is connected to **29 submarine cable systems**, including those under construction.[4] These networks form a critical component of Malaysia's digital infrastructure, supporting high-speed data transfer and facilitating its integration into the global digital economy. Notably, the Asia-America Gateway ("**AAG**") Cable System, a 20,000-kilometer-long undersea cable linking Southeast Asia to the United States through Hong Kong, is co-owned by a Malaysian company and several major stakeholders, including AT&T.

Looking forward, the MyDIGITAL Blueprint sets an ambitious goal for Malaysia to become the country with the highest number of subsea cable landings in Southeast Asia by 2025. This initiative is expected to significantly enhance Malaysia's connectivity and drive economic growth, with projections estimating a 6.9% increase in GDP per capita.[5] Considering this, Malaysia has announced a new project in collaboration with the United States named **MYUS Project**.[6] It is a submarine cable spanning 19,220 kilometres from Oregon, USA to Sedili, Malaysia with numerous other landing points around Southeast Asia Region. Achieving this milestone would solidify Malaysia's position as a digital hub in the region and attract further investments in technology and innovation.

Legal Issues

Realising these ambitions comes with significant challenges, as submarine cables involve multiple stakeholders from various regions. Malaysia must address international concerns, including cable damages, national security risks, and jurisdictional complexities. Ensuring the reliability, security, and efficiency of these networks requires coordinated efforts on many fronts.

Cable damage remains one of the most prevalent and challenging issues faced by subsea cable networks. As these cables are laid beneath the sea, preventing damage from natural elements or human activities such as fishing, anchoring, or even dredging, becomes a difficult task. The stakes are even higher when considering the complexities involved in the repair and maintenance of these cables to ensure continuous and reliable service. According to statistics, approximately seventy percent (70%) of subsea cable faults are attributed to human activities, underscoring the vulnerability of this critical infrastructure.[7]

A notable example of such damage can be found in the case of ***Thai Long Distance Telecommunication Co. Ltd. & Others v. Malaysian Maritime Dredging Corporation Sdn. Bhd.* [2010] MLJU 1893**. This case involved a dredging vessel owned by a Malaysian entity, which allegedly caused damage to a subsea cable running between Thailand and Malaysia, highlighting the challenges of maintaining these underwater systems.

Beyond accidental damage, there are more sinister causes for cable disruption. In some cases, cables are intentionally damaged, which can result from a range of factors including piracy, geopolitical manoeuvres, espionage, or outright sabotage. Subsea cables are integral to a nation's communication systems, carrying the bulk of data transfers for governments, businesses and individuals. As such, damage to these cables

can have devastating consequences, including the disruption of vital communication networks and severe economic impacts. For example, in 2007, cable theft in Vietnam's Exclusive Economic Zone (“**EEZ**”) resulted in a significant cut-off from international communication, showcasing the risks posed by deliberate acts of interference.

In addition to these challenges, there is the complex issue of accountability — who is responsible for not only the damage, but also the repair of these subsea cables? The legal complexities surrounding subsea cable damage are important, particularly when considering the jurisdictional differences that arise between countries. These issues are especially pronounced in areas like the EEZ and international waters. While the United Nations (“**UN**”) has developed broad guidelines to address such incidents,[8] these frameworks do not always resolve the nuanced disputes that arise concerning the responsibility for repairs, the scope of jurisdiction, and the financial implications involved in such operations.

The situation becomes even more complicated when we turn our attention to regions fraught with geopolitical tensions, such as the South China Sea. The territorial disputes in this area have significantly affected the installation and maintenance of subsea cables. The differences in national jurisdictions have led to delays and increased risks for companies involved in the subsea cable industry. For example, the construction of the SJC2 cable, which was intended to connect Japan and Singapore, has faced significant hurdles due to the conflicts in the South China Sea, causing considerable loss to stakeholders.[9]

In response to these concerns, the International Cable Protection Committee (“**ICPC**”) has strongly recommended that nations adopt a neutral, impartial approach when dealing with issues surrounding subsea cables, whether the parties involved are domestic or foreign.[10] This recommendation is crucial to ensure that subsea cables remain secure, well-maintained and accessible, allowing for uninterrupted global communication and data transfer.

Malaysia's planned MYUS Project's success still hinges on the collaboration and understanding of the countries that are involved with the project, which will serve as key landing points for the cable. In these instances, diplomatic cooperation and clearly defined agreements regarding cable maintenance, repair responsibilities, and dispute resolution are essential to mitigate risks and ensure that such projects proceed smoothly.

Conclusion

To conclude, intercontinental submarine cables are essential to modern global communication, enabling vast data exchange and connecting continents. From their historic beginnings to today's high-capacity networks, they reflect humanity's drive for innovation.

While Malaysia's ambitious projects, like the MYUS cable and MyDIGITAL Blueprint, position Malaysia as a leader in Southeast Asia's digital transformation, challenges still

persist. Overcoming these challenges requires international cooperation, technological innovation, and strong legal frameworks. By addressing these issues, Malaysia and the global community can safeguard this critical infrastructure, ensuring secure and efficient connectivity for future growth.

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