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The Struggle for Subsea Cable Supremacy in Southeast Asia: **ASEAN Relying on Diverse Suppliers**

Cha Hae Won*



Visitors watch a deep-sea cable-laying robot at the 2024 World Industrial Design Conference (WIDC) in Yantai, China, on 20 September 2024. (Photo by CFOTO/NurPhoto/NurPhoto via AFP).

* Cha Hae Won is Research Officer in the Regional Strategic and Political Studies Programme, ISEAS – Yusof Ishak Institute.

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EXECUTIVE SUMMARY

- The subsea cable infrastructure has become a key arena for US-China geopolitical rivalry. China has, with its strong presence in subsea cable projects in Cambodia and Indonesia, expanded its influence in the subsea cable industry through competitive pricing and self-sufficiency in cable technology.
- China has also sought to prevent foreign companies from installing new cables in the South China Sea, leading to project delays, rerouted cable paths, and increased costs. Concerns also persist that China could leverage its control in the South China Sea to disrupt communication networks of other states during periods of conflict.
- Beyond the US and China, Southeast Asian countries have engaged multiple players, particularly Japan, France and Germany, in developing their subsea cable networks. The significant presence of these third countries defies the binary US-China narrative in developing the region's subsea cable infrastructure.
- However, the US and its allies are increasingly turning to exclusive minilateral partnerships to counter China's influence in the subsea cable industry. Subsea cable companies from the US and its allies are collaborating to deliberately exclude Chinese firms, aided by political pressure from the US government and partner countries to limit Chinese companies' involvement in future subsea cable projects.
- As a result, the subsea cable industry is expected to become more bifurcated, pushing the region to navigate an increasingly polarised subsea cable landscape.

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INTRODUCTION

In February 2022, America's SubCom was awarded the contract to construct the Southeast Asia-Middle East-Western Europe 6 (SeaMeWe-6) subsea cable project. While it might appear as a straightforward business deal, it actually underscores the escalating technological rivalry between the US and China; with diplomatic pressure on executives of foreign telecom companies by American ambassadors and senior diplomats, potential sanctions on HMN Technologies by the US which could render the cable "worthless", and nearly US\$4 million in training grants, the subsea cable contract ultimately slipped through HMN Technologies' grasp and was awarded to SubCom.¹ The struggle over the SeaMeWe-6 project is but one incident in a larger struggle for dominance over global digital infrastructure. Other instances—such as the US' lobbying of Vietnam to avoid using Chinese cables are no longer mere technological assets, but "important pieces on the geopolitical chessboard" to control global data traffic and its contents.²

Heralded as the "arteries" and "backbone" of modern civilisation,³ these subsea cables span approximately 1.4 million kilometres and are responsible for transmitting over 95 per cent of global data traffic.⁴ The cables connect nation-states and their citizens, facilitating virtually every aspect of human activity, from trade and commerce to entertainment and social interactions.⁵ Their importance is further underscored by the fact that satellite data capabilities fall vastly short in comparison to the enormous bandwidth provided by these cables.⁶

Subsea cables are undeniably indispensable to the modern way of life, yet the ongoing US-China rivalry is driving a "fragmentation" of these crucial networks.⁷ As tensions intensify and major power rivalry creep into the architecture of subsea cables, Southeast Asian countries are increasingly forced to choose between subsea infrastructure being provided by China or by the US.⁸ This perspective examines the rise of China in the subsea cable sector and how it has challenged the US' dominance in this field, assesses the current state of subsea cable networks in Southeast Asia, and explores the extent to which countries in the region are divided between US and Chinese infrastructure.

MAKING WAVES: CHINA'S RISE IN THE SUBSEA CABLE ARENA

For decades, the global subsea cable industry has been dominated by the United States and its close allies.⁹ However, in recent years, China has emerged as a formidable challenger in this domain. In a bid to expand its diplomatic reach and economic influence globally through infrastructure financing, China launched its Belt and Road Initiative (BRI), including the Digital Silk Road (DSR). A cornerstone of China's technological and communication infrastructure expansion, the DSR aims to create an "information Silk Road" by constructing bilateral and transcontinental cable networks.¹⁰ The DSR's metaphorical "silk" is data—a commodity increasingly central to economic and political power in the digital age.¹¹ Under the DSR, Chinese companies receive substantial subsidies, loans, and political backing from the

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Chinese government and banks to support their overseas infrastructure projects. It is estimated that the Chinese government has invested US\$70 billion in digital infrastructure projects—inclusive of subsea cables, 5G cellular networks and data centres—spanning around 80 countries worldwide.¹²

Due to such strategic investments and extensive support, Chinese companies have been able to gain increasing prominence in the subsea cable industry, particularly in regions such as Asia and Africa. This competitive advantage is largely attributed to the ability of Chinese companies to engage in aggressive price competition, which allows them to secure contracts in emerging markets. ¹³ Furthermore, China has made considerable progress towards achieving self-sufficiency in undersea cable technology,¹⁴ and producers in China increasingly possess the capability to manufacture all components of submarine communication cables, enabling the country to extensively engage in the production and deployment of this critical infrastructure.

Driven by national security concerns—specifically the potential for sabotage and espionage the US has imposed sanctions to block China's increased engagement with the global subsea cable infrastructure, as exemplified by the US' decision to blacklist Chinese subsea cable companies such as HMN Technologies, Huawei and Wuhan FiberHome, placing them on its trade "Entity List" in 2020.¹⁵ These measures are aimed at limiting China's access to critical technologies that could potentially be exploited to disrupt or monitor communication networks. The underlying concern is that Chinese control or influence over undersea cables could be used as a tool for espionage, compromising the security of sensitive data, or even for strategic sabotage during conflicts. This growing apprehension also stems from China's legal frameworks, notably Article 14 of the National Intelligence Law, which confers the government's extensive authority to request the transfer of data from Chinese companies, including data obtained from communications carried on subsea cables.¹⁶

SUBSEA CABLES IN SOUTHEAST ASIA: BEYOND US-CHINA RIVALRY

While much of the existing literature revolves around how the US-China rivalry is unfolding in the subsea domain, it is important to recognise that the industry is not exclusively dominated by these two nations. In reality, the subsea cable industry is shaped by a broader range of influential players. Currently, it is largely dominated by a mix of companies from the US, China, Japan, France and Germany, with several notable players such as SubCom (US), HMN Technologies (China), NEC and Fujitsu (Japan), ASN (France) and NSW (Germany). With ASN, NEC, SubCom, and HMN Technologies holding about 98 per cent of the subsea market share, the subsea market landscape is now mostly supplied and dominated by these four companies.¹⁷

Japan as a Leader in Southeast Asia's Subsea Cable Landscape

While the subsea cable industry is often framed through the binary lens of US-China competition, with the former striving to prevent the latter from securing key construction deals,



a closer analysis reveals that Southeast Asian countries have engaged multiple players, particularly Japan, France and Germany, to develop their subsea cable networks. Notably, Japan remains the largest supplier of subsea cables in Southeast Asia (Figure 1). Based on data collected from TeleGeography Submarine Cable Map, Japan—through NEC and Fujitsu—accounts for 41 per cent of the subsea cables in the region, a significant share that surpasses both the US and China (For detailed analysis of subsea cable suppliers, refer to Annex A). The US supplies around 20 per cent of the subsea cables in the region, while China follows closely with 19 per cent. France, another key player, supplies 18 per cent of the region's subsea cables, while Germany provides 2 per cent. The subsea cable industry thus cannot be understood solely through the perspective of US-China rivalry; the region continues to rely on diverse suppliers, with no single nation dominating the region's infrastructure.



Figure 1. Subsea Cable Suppliers in Southeast Asia

Source: Submarine Cable Map, TeleGeography (compiled by author) (Author's note: This figure is based on publicly available knowledge as of December 2024)

Japan's NEC has been a central figure in Asia's subsea cable landscape, having played a pivotal role in the establishment of extensive subsea cable networks that account for 99 per cent of the region's internet traffic.¹⁸ In particular, its dominant position in recent years has been largely attributable to strategic government support aimed at mitigating China's influence over subsea cables. Notably, the Ministry of Internal Affairs and Communications launched an overseas expansion action project to facilitate the development of submarine cable projects, channeling loans and investment funds via the public-private Fund Corporation for the Overseas Development of Japan's ICT (JICT) to key players in the industry, such as NEC.¹⁹

Apart from Japan, France also plays a significant role as a supplier in the undersea cable industry. For instance, French companies like ASN supply more cables to countries such as Indonesia than the United States and China (Figure 2). This demonstrates that the global



infrastructure relies on a diverse set of suppliers beyond the two superpowers, indicating a more multipolar landscape where various nations, including France and Japan, contribute substantially to connectivity in Southeast Asia.



Figure 2. Number of Subsea Cable Suppliers in Southeast Asia

China's Influence: Cambodia, Indonesia and the South China Sea

While Japan serves as the largest subsea cable supplier for most Southeast Asian countries, China holds the dominant position in Cambodia (Figure 2). Previously, two submarine cable systems were installed in Cambodia, with one supplied by NEC and SubCom (Asia Africa Europe-1 subsea cable) and the other by HMN Technologies (Malaysia-Cambodia-Thailand subsea cable). However, the forthcoming third subsea cable—Sihanoukville-Hong Kong subsea cable—also supplied by HMN Technologies, solidifies China's position as Cambodia's largest subsea cable supplier, underscoring China's influence in Cambodia's subsea and telecommunications infrastructure (Table 1).

Source: Submarine Cable Map, TeleGeography (compiled by author) (Author's note: This figure is based on publicly available knowledge as of December 2024)



S/N	Cable Name	Cable Length	Date	Landing Points	Owner	Supplier
1	Asia Africa	25,000km	2017	Vietnam +	Metfone + 18	NEC,
	Europe-1			17 other	other companies	SubCom
	(AAE-1)			countries		
2	Cambodia-	2,715km	2025	Cambodia,	Government of	HMN
	Hong Kong			China	Cambodia	Tech
3	Malaysia-	1,300km	2017	Cambodia,	Symphony,	HMN
	Cambodia-			Malaysia,	Telcotech,	Tech
	Thailand			Thailand	Telekom	
	(MCT) Cable				Malaysia	

Table 1. Subsea Cable Suppliers in Cambodia

Source: Submarine Cable Map, TeleGeography (compiled by author) (Author's note: This figure is based on publicly available knowledge as of December 2024)

It is important to note that although China is not the top supplier of subsea cables in Indonesia, it has overtaken the US as the third largest supplier after Japan and France (Figure 3). This is not surprising given China's significant efforts in the region (Annex A). Indonesia, being one of the top destinations for China's Digital Silk Road (DSR) investments in Southeast Asia, has secured a staggering 33 per cent share of these investments.²⁰ According to Zulfikar Rakhmat, Indonesia, as "one of the most important destinations of the BRI over the years", has increasingly become "a target to boost China's digital foothold globally".²¹

Figure 3. Subsea Cable Suppliers in Indonesia



Source: Submarine Cable Map, TeleGeography (compiled by author) (Author's note: This figure is based on publicly available knowledge as of December 2024)

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China's influence extends beyond subsea cable projects undertaken by Chinese companies in Southeast Asian countries. It is also embedded in China's geographic leverage and geopolitical manoeuvres. China has sought to obstruct foreign companies from laying new cables in the vast waters it claims under the Nine-Dash Line, positioning itself as a gatekeeper for regional cable infrastructure.²² Notably, the Singapore-Japan Cable 2 (SJC2) project — which connects Vietnam, Singapore, Thailand, Japan and South Korea — had been significantly delayed for several years due to Beijing's objections and lags in obtaining permits.²³ Additionally, two subsea cable systems — the Apricot and Echo — have been deliberately rerouted to avoid passing the South China Sea by circling around Indonesia. According to Alan Weissberger, this redesigned pathway has incurred higher costs due to increased cable length and the need for extra sheathing in the shallower waters.²⁴ At the same time, China's HMN Technologies has an operational advantage in deploying its own cables within these contested waters, raising the risk of an emerging "Chinese monopoly of subsea cables in the South China Sea".²⁵ This would significantly enhance China's strategic edge over Southeast Asian claimant states as it could allow China to disrupt the communication networks of rival states while safeguarding its own data and military communications, particularly in times of conflicts.

US and Allied Efforts to Counter China: From Sea Surface to Seafloor

The concept of "minilaterals", primarily associated with the strategic alignment between the US and its allies in the Indo-Pacific maritime domain to counter Chinese influence, is now increasingly manifesting in subsea infrastructure as well. China's growing capabilities in the subsea cable industry has prompted the formation of both bilateral and minilateral partnerships between the US and its allies aimed at countering China's potential leverage over critical subsea cable infrastructure in the region. Such collaboration reflects a clear divide in the undersea cable industry, with Western companies often working together as suppliers, while Chinese companies are largely excluded from these partnerships. Table 2 shows that companies from the US, France, and Japan have collaborated in the supply of nine cables, with no involvement from Chinese companies.



Table 2. Absence of Chinese Companies in Subsea Cable Suppliers Partnerships

S/N	Cable Name	Cable Length	Ready for Service	Landing Points	Owner	Supplier
		Lengen	(RFS)	1 Units		
1	SeaMeWe-3	39,000 km	1999	Indonesia + 29 Countries	Multiple	ASN, Fujitsu, SubCom
2	JaKa2LaDeMa	1,700km	2010	Indonesia	Telkom Indonesia	Fujitsu, NSW
3	SeaMeWe-5	20,000km	2016	Indonesia + 15 other countries	Telkom Indonesia + 16 other owners	ASN, NEC
4	Asia-America Gateway (AAG) Cable System	20,000km	2009	Brunei, China, Guam, Malaysia, Philippines, Singapore, Thailand, United States, Vietnam	PLDT + 19 other companies	ASN, NEC
5	EAC-C2C	36,500km	2002	China, Japan, Philippines, Singapore, South Korea, Taiwan	Telstra	ASN, KDD- SCS, SubCom
6	Southeast Asia- Japan Cable (SJC)	8,900km	2013	Brunei, China, Japan, Philippines, Singapore	Globe Telecom + 9 other companies	NEC, SubCom
7	Asia Africa Europe-1 (AAE-1)	25,000km	2017	Vietnam + 17 other countries	Viettel + 18 other companies	NEC, SubCom
8	Asia-America Gateway (AAG) Cable System	20,000km	2009	Vietnam + 8 other countries	Viettel + 17 other companies	ASN, NEC
9	SeaMeWe-4	20,000km	2005	Thailand + 13 other countries	National Telecom + 16 other companies	ASN, Fujitsu

Source: Submarine Cable Map, TeleGeography (compiled by author) (Author's note: This figure is based on publicly available knowledge as of December 2024)

Another notable example of such minilaterals is the launch of the Quad Partnership for Cable Connectivity and Resilience in May 2023. Drawing on the technological and financial

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resources of the Quad nations, this partnership aims to mitigate China's expanding technological influence and bolster the security of the subsea cable network in the Indo-Pacific.²⁶ A further example is the US\$95 million East Micronesia Cable System project jointly funded by the US, Japan and Australia. Originally awarded to China's HMN, the project was redirected when Australia intervened, forcing the company out of the contract, with the aim to strengthen network connectivity in the Pacific Islands backed by Australia and its allies, while curbing China's expanding influence in the region.

CONCLUSION

The subsea cable industry is frequently analysed through the lens of US-China competition. While this framing underscores the geopolitical dimensions of infrastructure development, it oversimplifies the reality on the ground. In practice, the region benefits from a diverse array of stakeholders. These actors provide alternatives to the binary US-China narrative, allowing the region to adopt hedging strategies that mitigate overreliance on any single supplier. However, non-US stakeholders and allies are increasingly coalescing with the US, in efforts to counter China's growing influence in the subsea cable arena. This emerging alignment points towards a broader trend of technological bifurcation, where the region must brace for a future where it must choose between competing powers.

The caveat remains that this growing strategic competition carries "immediate repercussions for connectivity, security... in the Indo-Pacific".²⁷ As US-China rivalry intensifies, it is more important than ever for the region to maintain a delicate balance in managing its subsea cable infrastructure, as relying too heavily on a single power can create significant vulnerabilities, such as "supply chain disruptions, technological stagnation, and geopolitical risks".²⁸ This underscores the need for the region to remain committed to diversification to bolster its subsea cable resilience and long-term digital autonomy. In this context, ASEAN's plans, as outlined in the February 2024 ASEAN Digital Ministers' Meeting, to build a "diverse... submarine cable network" are more crucial than ever.²⁹



Annex A Indonesia

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	Barat Timur Indonesia-1 (BTI- 1)	4,500 km	2026	Indonesia	Super Sistem (PT Super Sistem Data)	NA
2	Barat Timur Indonesia-2 (BTI- 2)	11,600 km	2028	Indonesia	Super Sistem (PT Super Sistem Data)	NA
3	Indonesia Global Gateway (IGG) System	5,300 km	2018 May	Indonesia, Singapore	Telin, Telkom Indonesia	NEC
4	Thailand- Indonesia- Singapore (TIS)	968 km	2003 December	Indonesia, Singapore, Thailand	National Telecom, Singtel, Telkom Indonesia	NEC
5	Java-Kalimanta- Sulawesi (Jakasusi)	1,100 km	2006	Indonesia	Indosat Ooredoo	ASN
6	Palapa Ring East	6,300 km	2019 October	Indonesia	Indonesian Government, Moratelindo, Telekom PT Smart Fren	NA
7	Kupang-Alor Cable Systems	273 km	2019	Indonesia	Moratelindo	NA
9	SMPCS Packet-1	3,156 km	2015	Indonesia	Telkom Indonesia	NA
10	Link 3 Phase-2	342 km	2005	Indonesia	XL Axiata	NA
11	SeaMeWe-3	39,000 km	1999	Indonesia + 29 Countries	Multiple	ASN, Fujitsu, SubCom
12	Australia-Singapore Cable	4,600 km	2018	Indonesia, Singapore, Australia	Vocus Communications	ASN
13	Biznet Nusantara Cable System-1 (BNCS-1)	105 km	2023	Indonesia	Biznet	CCSI
14	SJJK	543 km	2008	Indonesia	XL Axiata	NA
15	JaSuKa	n.a.	2006	Indonesia	Telkom Indonesia	NEC
16	Palapa Ring Middle	2,100km	2018	Indonesia	Indonesia Government	HMN Tech
17	JaKa2LaDeMa	1,700km	2010	Indonesia	Telkom Indonesia	Fujitsu, NSW
18	S-U-B Cable System	2,009km	2008	Indonesia	Telkom Indonesia	NA
19	Jakarta Surabaya Cable System	888km	2018	Indonesia	Triasmitra	NA
20	Java-Kalimantan- Sulawesi (JAKASUSI)	1,100km	2006	Indonesia	Indosat Ooredoo	ASN
21	Apricot	11,972km	2026	Guam, Indonesia, Japan, Philippines, Singapore, Taiwan	Chunghwa Telecom, Google, Meta, NTT, PLDT	SubCom
22	ACC-1	19,000km	2028	Australia, Guam, Indonesia, Philippines,	Inligo Networks	NA



				Singapore, Timor-Leste, United States		
23	B2JS (Jakarta- Bangka-Batam- Singapore) Cable System	759km	2013	Indonesia, Singapore	Triasmitra	NA
24	Batam Dumai Melaka (BDM) Cable System	353km	2009	Indonesia, Malaysia	Moratelindo, Telekom Malaysia	HMN Tech
25	Batam Singapore Cable System (BSCS)	73km	2009	Indonesia, Singapore	Telkom Indonesia	NEC
26	Hawaiki Nui 1	10,000km	2027	Australia, Indonesia, Papua New Guinea, Singapore, Solomon Islands	BW Digital	NA
27	Jakarta-Bangka- Bintan-Batam- Singapore (B3JS)	1,031km	2012	Indonesia, Singapore	Moratelindo	NA
28	Matrix Cable System	1,055km	2008	Indonesia, Singapore	Matrix Networks Pte. Ltd.	SubCom
29	Moratelindo International Cable System-1 (MIC-1)	70km	2008	Indonesia, Singapore	Moratelindo	NA
30	Palapa Ring West	1,980km	2018	Indonesia	Indonesian Government	NA
31	PGASCOM	264km	2010	Indonesia, Singapore	PGASCOM	NA
32	SEAX-1	250km	2018	Indonesia, Malaysia, Singapore	SEAX	HMN Tech
33	Thailand- Indonesia- Singapore (TIS)	968km	2003	Indonesia, Singapore, Thailand	National Telecom, Singtel, Telkom Indonesia	NEC
34	Javali	NA	2011	Indonesia	Indosat Ooredoo	NSW
35	SMPCS Packet-2	3,498km	2015	Indonesia	Telkom Indonesia	NEC
36	Mataram Kupang Cable System (MKCS)	1,318km	2011	Indonesia	Telkom Indonesia	HMN Tech
37	Link 1 Phase-1	368km	2003	Indonesia	XL Axiata	NA
38	Jalapati	45km	2023	Indonesia	CCSI	CCSI
39	Java Bali Cable System (JBCS)	NA	2013	Indonesia	Triasmitra	NA
40	Jakarta Surabaya Cable System (Jayabaya)	888km	2018	Indonesia	Triasmitra	NA
41	JaKa2LaDeMa	1,700km	2010	Indonesia	Telkom Indonesia	Fujitsu, NSW
42	DAMAI Cable System	575km	2019	Indonesia	Triasmitra	NA
43	Dumai-Melaka Cable System (DMCS)	159km	2005	Malaysia, Indonesia	Telekom Malaysia, Telkom Indonesia	NEC
44	SeaMeWe-5	20,000km	2016	Indonesia + 15 other countries	Telkmon Indonesia + 16 other owners	ASN, NEC
45	Sape-Labuan Bajo- Ende-Kupang Cable Systems	474km	2021	Indonesia	Moratelindo	NA
46	Bifrost	19,888km	2025	Indonesia + 5 other countries	Keppel T&T, Meta, Telin	ASN



47	INDIGO-West	4,600km	2019	Australia,	AARNET, Google,	ASN
				Indonesia,	Indosat Ooredoo,	
				Singapore	Telstra	
48	Kumul Domestic	5.457km	2019	Indonesia.	PNG DataCo Limited	HMN Tech
10	Submarine Cable	5,157IIII	2019	Papua New	The Bullot Ellined	inter i con
	System			Guinea		
49	Link 2 Phase-2	221km	2005	Indonesia	XL Axiata	NA
50	SEA-US	14,500km	2017	Indonesia + 5	GTA TeleGuam,	NEC
				other countries	Globe Telecom,	
					Hawaiian Telcom,	
51	I : 1- 2 Dh 1	2751	2002	Indensia	KII, Ielin VI, Assatia	NIA
51	Link 3 Phase I	2/5Km 2671cm	2003	Indonesia	AL AXatia	NA NA
52	System (IIBA)	207811	2014	muonesia	Moratelindo XL	INA
	System (JIDA)				Axiata	
53	Link 5 Phase 2	365km	2005	Indonesia	XL Axatia	NA
54	Denpasar-	814km	2019	Indonesia	Moratelindo	NA
	Waingapu Cable					
	Systems					
55	Luwuk Tutuyan	446km	2015	Indonesia	Telkom Indonesia	NA
	Cable System					
56	(LICS) Determ 2	1 200km	2022	Indonasia	Talin	NEC
57	I ink 4 Phase-2	1,200km	2023	Indonesia	YI Aviata	NA
58	PASULI	40km	2005	Indonesia	Fiberstar XL Axatia	NA
59	Sumatera Bangka	57km	2014	Indonesia	Telkom Indonesia	NA
	Cable System					
	(SBCS)					
60	Nongsa-Changi	50km	2025	Indonesia,	BW Digital, Telin	NA
(1	Cable	0.501	2004	Singapore		
61	East-West	950km	2004	Indonesia,	Sacota	NA
	Submarine Cable			Malaysia		
62	Link 1 Phase-2	94km	2005	Indonesia	XI. Axiata	NA
63	BALOK	60km	2016	Indonesia	XL Axiata	NA
64	JAKABARE	1,330km	2009	Indonesia	Indosat Ooredoo	NEC
65	Tanjun Pandan-	348km	2019	Indonesia	Moratelindo	NA
	Sungai Kakap					
	Cable System					
66	Luwuk Tutuyan	446km	2015	Indonesia	Telkom Indonesia	NA
	(LTCS)					
67	(LICS) Terakan Selor	83km	2014	Indonesia	Telkom Indonesia	NA
07	Cable System	OJKIII	2014	muonesia	Terkom muonesia	INA
	(TSCS)					
68	Batam-Rengit	64km	2007	Indonesia,	XL Axatia	NA
	Cable System			Malaysia		
	(BRCS)					
69	Echo	17,184km	2025	Guam,	Google, Meta	NEC
				Indonesia,		
				Falau, Singapore US		
70	Batam Sarawak	762km	2021	Indonesia	Irix Sdn Bhd	NA
, 5	Internet Cable	/ 021111	2021	Malaysia		
	System (BaSICS)			.,		
71	INSICA	100km	2026	Indonesia,	Singtel, Telin	NA
				Singapore		



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Philippines

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	APCN-2	19,000km	2001	China, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan	PLDT + 21 other companies	NEC
2	Apricot	11,972km	2026	Guam, Indonesia, Japan, Philippines, Singapore, Taiwan	PLDT, Chunghwa Telecom, Google, Meta, NTT	SubCom
3	Asia-America Gateway (AAG) Cable System	20,000km	2009	Brunei, China, Guam, Malaysia, Philippines, Singapore, Thailand, United States, Vietnam	PLDT + 19 other companies	ASN, NEC
4	Asia Connect Cable-1 (ACC-1)	19,000km	2028	Australia, Guam, Indonesia, Philippines, Singapore, Timor-Leste, United States	Inligo Networks	NA
5	Asia Direct Cable (ADC)	9,800km	2024	China, Japan, Philippines, Singapore, Thailand, Vietnam	PLDT + 7 other companies	NEC
6	Asia Link Cable (ALC)	7,200km	2025	Brunei, China, Malaysia, Philippines, Singapore, Vietnam	DITO Telecommunity + 10 other companies	HMN Tech
7	Asia Submarine- cable Express (ASE) / Cahaya Malaysia	8,148km	2012	China, Japan, Malaysia, Philippines, Singapore	PLDT, NTT, Starhub, Telekom Malaysia	NEC
8	Bifrost	19,888km	2025	Guam, Indonesia, Mexico, Philippines, Singapore, United States	Keppel T&T, Meta, Telin	ASN
9	Boracay-Palawan Submarine Cable System (BPSCS)	332km	2013	Philippines	Globe Telecom	HMN Tech
10	Converge Domestic Submarine Cable Network (CDSCN)	1,300km	2021	Philippines	Converge ICT	HMN Tech
11	EAC-C2C	36,500km	2002	China, Japan, Philippines, Singapore, South Korea, Taiwan	Telstra	ASN, KDD- SCS, SubCom



12	JUPITER	14,557km	2020	Japan, Philippines, United States	PLDT, Amazon Web Services, Meta, NTT, PCCW, Softbank Corp	SubCom
13	National Digital Transformation Transmission Network (NDTN)	1,400km	1999	Philippines	TelicPhil	NA
14	Pacific Light Cable Network (PLCN)	11,806km	2022	Philippines, Taiwan, United States	Google, Meta	SubCom
15	Palawan-Iloilo Cable system	300km	2014	Philippines	PLDT	NA
16	Philippine Domestic Submarine Cable Network (PDSCN)	2,500km	2023	Philippines	Eastern Telecom, Globe Telecom, Infinivan Inc.	Nexans
17	PLDT Domestic Fiber Optic Network (DFON)	11,100km	1997	Philippines	PLDT	NA
18	SEA-H2X	5,000km	2025	China, Malaysia, Philippines, Singapore, Thailand	Sonia Satellite Services Sdn Bhd, Converge ICT, China Mobile, China Unicom	HMN Tech
19	SEA-US	14,500km	2017	Guam, Indonesia, Micronesia, Palau, Philippines, United States	GTA TeleGuam, Globe Telecom, Hawaiian Telcom, RTI, Telin	NEC
20	Sorsogon-Samar Submarine Fiber Optical Interconnection Project (SSSFOIP)	21km	2019	Philippines	National Grid Corporation of the Philippines	HMN Tech
21	Southeast Asia- Japan Cable (SJC)	8,900km	2013	Brunei, China, Japan, Philippines, Singapore	Globe Telecom + 9 other companies	NEC, SubCom
22	Submarine Cable in the Philippines (SCiP)	1,638km	2022	Philippines	DITO Telecommunity	HMN Tech
23	Tata TGN-Intra Asia (TGN-IA)	6,700km	2009	China, Philippines, Singapore, Vietnam	Tata Communications	SubCom
24	TPU	13,470km	2025	Guam, Philippines, Taiwan, United States	Google	NEC

Vietnam

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	Asia Africa Europe-1 (AAE-1)	25,000km	2017	Vietnam + 17 other countries	Viettel + 18 other companies	NEC, SubCom
2	Asia-America Gateway (AAG) Cable System	20,000km	2009	Vietnam + 8 other countries	Viettel + 17 other companies	ASN, NEC



3	Asia Direct Cable	9,800km	2024	Vietnam,	Viettel + 7 other	NEC
	(ADC)			China, Japan,	compnies	
				Philippines,		
				Singapore,		
				Thailand		
4	Asia Link Cable	7,200km	2025	Vietnam,	Viettel + 10 other	HMN Tech
	(ALC)			Brunei, China,	companies	
				Malaysia,		
				Philippines,		
				Singapore		
5	Asia Pacific	10,400km	2016	Vietnam + 7	Viettel + 12 other	NEC
	Gateway (APG)			other countries	companies	
6	Southeast Asia-	10,500km	2025	Vietnam,	VNPT-Vinaphone + 9	NEC
	Japan Cable 2			China, Japan,	other companies	
	(SJC2)			Singapore,	_	
				South Korea,		
				Taiwan,		
				Thailand		
7	Tata TGN-Intra	6,700km	2009	Vietnam,	Tata Communications	SubCom
	Asia (TGN-IA)			China,		
				Philippines,		
				Singapore		
8	Vietnam-Singapore	NA	2027	Vietnam,	Viettel, Singtel	NA
	Cable System			Singapore,		
	(VTS)			Malaysia		

Thailand

S/N	Cable Name	Cable	Ready for	Landing	ns	Supplier
		Length	(RFS)	Points		
1	Asia Africa	25,000km	2017	Thailand + 17	National Telecom +	NEC,
	Europe-1 (AAE-1)			other countries	18 other companies	SubCom
2	Asia-America	20,000km	2009	Thailand + 8	National Telecom +	ASN, NEC
	Gateway (AAG)			other countries	17 other companies	
	Cable System					
3	Asia Direct Cable	9,800km	2024	Thailand $+5$	National Telecom +7	NEC
	(ADC)			other countries	other companies	
4	Asia Pacific	10,400km	2016	Thailand + 7	National Telecom +	NEC
	Gateway (APG)			other countries	12 other companies	
5	FLAG Europe-Asia	28,000km	1997	Thailand + 12	Global Cloud	SubCom
				other countries	Xchange	
6	India Asia Xpress	5,791km	2024	Thailand,	China Mobile,	SubCom
	(IAX)			Singapore,	Reliance Jio	
				Maldives,	Infocomm	
				Malaysia, Sri		
				Lanka, India		
7	Malaysia-	1,300km	2017	Thailand,	Symphony, Telcotech,	HMN Tech
	Cambodia-Thailand			Malaysia,	Telekom Malaysia	
	(MCT) Cable			Cambodia		
8	MIST	8,100km	2024	Thailand,	Orient Link	NEC
				Singapore,		
				Malaysia, India		
9	SEA-H2X	5,000km	2025	Thailand,	Converge ICT, Sonia	HMN Tech
				Singapore,	Satellite Services Sdn	
				Philippines,	Bhd, China Mobile,	
				Malaysia,	China Unicom	
10	a	20.0001	2005	China	N	
10	SeaMeWe-4	20,000km	2005	Thailand $+13$	National Telecom +	ASN,
				other countries	16 other companies	Fujitsu
11	Southeast Asia-	10,500km	2025	Thailand $+6$	10 companies	NEC
	Japan Cable 2			other countries		
	(SJC2)					



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12	Thailand-	968km	2003	Thailand,	National Telecom,	NEC
	Indonesia-			Singapore,	Singtel, Telkom	
	Singapore (TIS)			Indonesia	Indonesia	
13	Vietnam-Singapore	NA	2027	Thailand,	Singtel, Viettel	NA
	Cable System			Singapore,	_	
	(VTS)			Malaysia,		
				Vietnam		

Myanmar

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	Asia Africa	25,000km	2017	Myanmar + 17	19 companies	NEC, SubCom
	Europe-1 (AAE-1)			other countries		SubCom
2	SeaMeWe-5	20,000km	2016	Indonesia + 15	Telkmon Indonesia +	ASN, NEC
				other countries	16 other owners	
3	UMO	2,227km	2023	Myanmar,	Campana Group	HMN Tech
				Singapore		

Malaysia

S/N	Cable Name	Cable	Ready for	Landing Points	Owner	Supplier
		Length	Service (RFS)			
1	APCN-2	19,000km	2001	China, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan	Telekom Malaysia + 21 other companies	NEC
2	Asia Africa Europe-1 (AAE-1)	25,000km	2017	Vietnam + 17 other countries	TIME dotCom + 18 other companies	NEC, SubCom
3	Asia Link Cable (ALC)	7,200km	2025	Brunei, China, Malaysia, Philippines, Singapore, Vietnam	Telekom Malaysia + 10 other companies	HMN Tech
4	Asia Pacific Gateway (APG)	10,400km	2016	Vietnam + 7 other countries	TIME dotCom + 12 other companies	NEC
5	Asia Submarine- cable Express (ASE) / Cahaya Malaysia	8,148km	2012	China, Japan, Malaysia, Philippines, Singapore	PLDT, NTT, Starhub, Telekom Malaysia	NEC
6	Batam Dumai Melaka (BDM) Cable System	353km	2009	Indonesia, Malaysia	Moratelindo, Telekom Malaysia	HMN Tech
7	Batam-Rengit Cable System (BRCS)	64km	2007	Indonesia, Malaysia	XL Axatia	NA
8	Batam Sarawak Internet Cable System (BaSICS)	762km	2021	Indonesia, Malaysia	Irix Sdn Bhd	NA
9	Bay of Bengal Gateway (BBG)	8,100km	2016	India, Malaysia, Oman, Sri Lanka, United Arab Emirates	Telekom Malaysia + 8 other companies	ASN
10	Besut-Perhentian Islands	21km	2019	Malaysia	Telekom Malaysia	NA
11	Dumai-Melaka Cable System (DMCS)	159km	2005	Malaysia, Indonesia	Telekom Malaysia, Telkom Indonesia	NEC

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12	East-West Submarine Cable System	950km	2004	Indonesia, Malaysia	Sacofa	NA
13	FLAG Europe- Asia	28,000km	1997	Malaysia + 12 other countries	Global Cloud Xchange	SubCom
14	India Asia Xpress	5,791km	2024	Thailand, Singapore, Maldives, Malaysia, Sri Lanka, India	China Mobile, Reliance Jio Infocomm	SubCom
15	Labuan-Brunei Submarine Cable	52km	2017	Malaysia, Brunei	Common Tower Technologies Sdn Bhd	NA
16	Lumut-Pangkor Island	4km	2018	Malaysia	Telekom Malaysia	NA
17	Malaysia- Cambodia- Thailand (MCT) Cable	1,300km	2017	Cambodia, Malaysia, Thailand	Symphony, Telcotech, Telekom Malaysia	HMN Tech
18	MIST	8,100km	2024	Malaysia, Singapore, Thailand, India	Orient Link	NEC
19	Rompin-Tioman Island	75km	2018	Malaysia	Telekom Malaysia	NA
20	SAFE	13,500km	2002	Malaysia, India, Mauritius, Reunion, South Africa	Telekom Malaysia + 26 other companies	SubCom
21	SEA-H2X	5,000km	2025	China, Malaysia, Philippines, Singapore, Thailand	Sonia Satellite Services Sdn Bhd, Converge ICT, China Mobile, China Unicom	HMN Tech
22	SeaMeWe-4	20,000km	2005	Malaysia + 13 other countries	Telekom Malaysia + 16 other companies	ASN, Fujitsu
23	SeaMeWe-5	20,000km	2016	Malaysia + 15 other countries	Telekom Malaysia + 16 other owners	ASN, NEC
24	SeaMeWe-6	21,700km	2026	Malaysia + 14 other countries	Telekom Malaysia + 15 other companies	SubCom
25	SEAX-1	250km	2018	Malaysia, Singapore, Indonesia	SEAX	HMN Tech
26	Sistem Kabel Rakyat 1Malaysia (SKR1M)	3.800km	2017	Malaysia	TIME dotcom, Telekom Malaysia	NEC
27	Vietnam- Singapore Cable System (VTS)	NA	2027	Vietnam, Singapore	Viettel, Singtel	NA

Cambodia

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	Asia Africa	25,000km	2017	Vietnam + 17	Metfone + 18 other	NEC,
	Europe-1 (AAE-1)			other countries	companies	SubCom
2	Cambodia-Hong	2,715km	2025	Cambodia,	Government of	HMN Tech
	Kong			China	Cambodia	
3	Malaysia-	1,300km	2017	Cambodia,	Symphony,	HMN Tech
	Cambodia-			Malaysia,	Telcotech, Telekom	
	Thailand (MCT)			Thailand	Malaysia	
	Cable					



Singapore

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	APCN-2	19,000km	2001	China, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan	Singtel + 21 other companies	NEC
2	Apricot	11,972km	2026	Guam, Indonesia, Japan, Philippines, Singapore, Taiwan	Chunghwa Telecom, Google, Meta, NTT, PLDT	SubCom
3	Asia-America Gateway (AAG) Cable System	20,000km	2009	Brunei, China, Guam, Malaysia, Philippines, Singapore, Thailand, United States, Vietnam	Starhub + 19 other companies	ASN, NEC
4	ACC-1	19,000km	2028	Australia, Guam, Indonesia, Philippines, Singapore, Timor-Leste, United States	Inligo Networks	NA
5	Asia Direct Cable (ADC)	9,800km	2024	China, Japan, Philippines, Singapore, Thailand, Vietnam	Singtel + 7 other companies	NEC
6	Asia Link Cable (ALC)	7,200km	2025	Brunei, China, Malaysia, Philippines, Singapore, Vietnam	Singtel + 10 other companies	HMN Tech
7	Asia Pacific Gateway (APG)	10,400km	2016	Vietnam + 7 other countries	Starhub + 12 other companies	NEC
8	Asia Submarine- cable Express (ASE) / Cahaya Malaysia	8,148km	2012	China, Japan, Malaysia, Philippines, Singapore	PLDT, NTT, Starhub, Telekom Malaysia	NEC
9	Australia-Singapore Cable (ASC)	4,600km	2018	Singapore, Australia, Indonesia, Christmas Island	Vocus Communications	ASN
10	B2JS (Jakarta- Bangka-Batam- Singapore) Cable System	759km	2013	Indonesia, Singapore	Triasmitra	NA
11	Batam Singapore Cable System (BSCS)	73km	2009	Indonesia, Singapore	Telkom Indonesia	NEC
12	Bifrost	19,888km	2025	Singapore + 5 other countries	Keppel T&T, Meta, Telin	ASN

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13	EAC-C2C	36,500km	2002	China, Japan, Philippines, Singapore,	Telstra	ASN, KDD- SCS, SubCom
				Taiwan		
14	Echo	17,184km	2025	Guam, Indonesia, Palau, Singapore, US	Google, Meta	NEC
15	Hawaiki Nui 1	10,000km	2027	Australia, Indonesia, Papua New Guinea, Singapore, Solomon Islands	BW Digital	NA
16	i2i Cable Network (i2icn)	3,200km	2002	Singapore, India	Bharti Airtel	ASN
17	ÌCE IV	11,000km	2027	Singapore, Egypt, India, Indonesia, Oman, United Arab Emirates	Etisalat UAE, Telecom Egypt, Telin	NA
18	India Asia Xpress (IAX)	5,791km	2024	Thailand, Singapore, Maldives, Malaysia, Sri Lanka, India	China Mobile, Reliance Jio Infocomm	SubCom
19	INDIGO-West	4,600km	2019	Australia, Indonesia, Singapore	AARNET, Google, Indosat Ooredoo, Singtel, Superloop, Telstra	ASN
20	INSICA	100km	2026	Indonesia, Singapore	Singtel, Telin	NA
21	JAKABARE	1,330km	2009	Indonesia	Indosat Ooredoo	NEC
22	Jakarta-Bangka- Bintan-Batam- Singapore (B3JS)	1,031km	2012	Indonesia, Singapore	Moratelindo	NA
23	Matrix Cable System	1,055km	2008	Indonesia, Singapore	Matrix Networks Pte. Ltd.	SubCom
24	MIST	8,100km	2024	Thailand, Singapore, Malaysia, India	Orient Link	NEC
25	Moratelindo International Cable System-1 (MIC-1)	70km	2008	Indonesia, Singapore	Moratelindo	NA
26	Nongsa-Changi Cable	50km	2025	Singapore, Indonesia	BW Digital, Telin	NA
27	PEACE Cable	25,000km	2022	Singapore, 11 other countries	Peace Cable International Network Co. Ltd.	HMN Tech
28	PGASCOM	264km	2010	Indonesia, Singapore	PGASCOM	NA
29	SEA-H2X	5,000km	2025	China, Malaysia, Philippines, Singapore, Thailand	Sonia Satellite Services Sdn Bhd, Converge ICT, China Mobile, China Unicom	HMN Tech
30	SeaMeWe-4	20,000km	2005	Singapore + 13 other countries	Singtel + 16 other companies	ASN, Fujitsu
31	SeaMeWe-5	20,000km	2016	Singapore + 15 other countries	Singtel + 16 other owners	ASN, NEC
22	SeaMeWe-6	21,700km	2026	Singapore + 14 other countries	Singtel + 15 other companies	SubCom



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23	SEAX-1	250km	2018	Indonesia, Malaysia,	SEAX	HMN Tech
				Singapore		
24	Southeast Asia-	10,500km	2025	Vietnam,	Singtel + 9 other	NEC
	Japan Cable 2			China, Japan,	companies	
	(SJC2)			Singapore,		
				South Korea,		
				Taiwan,		
				Thailand		
25	Southeast Asia-	8,900km	2013	Brunei, China,	Singtel + 9 other	NEC,
	Japan Cable (SJC)			Japan,	companies	SubCom
				Philippines,		
				Singapore		
26	Tata TGN-Intra	6,700km	2009	China,	Tata Communications	SubCom
	Asia (TGN-IA)			Philippines,		
				Singapore,		
				Vietnam		
27	Tata TGN-Tata	3,175km	2004	Singapore,	Tata Communications	SubCom
	Indicom			India		
28	Thailand-	968 km	2003	Indonesia,	National Telecom,	NEC
	Indonesia-		December	Singapore,	Singtel, Telkom	
	Singapore (TIS)			Thailand	Indonesia	
29	UMO	2,227km	2023	Myanmar,	Campana Group	HMN Tech
				Singapore		
30	Vietnam-Singapore	NA	2027	Vietnam,	Viettel, Singtel	NA
	Cable System			Singapore,		
	(VTS)			Malaysia		

Brunei

S/N	Cable Name	Cable Length	Ready for Service (RFS)	Landing Points	Owner	Supplier
1	Asia-America Gateway (AAG) Cable System	20,000km	2009	Brunei, China, Guam, Malaysia, Philippines, Singapore, Thailand, United States, Vietnam	UNN + 19 other companies	ASN, NEC
2	Asia Link Cable (ALC)	7,200km	2025	Brunei, China, Malaysia, Philippines, Singapore, Vietnam	UNN + 10 other companies	HMN Tech
3	Labuan-Brunei Submarine Cable	52km	2017	Brunei, Malaysia	Common Tower Technologies Sdn Bhd	NA
4	Southeast Asia- Japan Cable (SJC)	8,900km	2013	Brunei, China, Japan, Philippines, Singapore	UNN + 9 other companies	NEC, SubCom

ENDNOTES

¹ Joe Brock, "U.S. and China wage war beneath the waves – over internet cables", *Reuters*, 24 March 2023, <u>https://www.reuters.com/investigates/special-report/us-china-tech-cables/</u>.

² Francesco Guarascio, Phuong Nguyen and Joe Brock, "Exclusive: Inside the US push to steer Vietnam's subsea cable plans away from China", *Reuters*, 18 September 2024,

https://www.reuters.com/business/media-telecom/inside-us-push-steer-vietnams-subsea-cable-plans-away-china-2024-09-17/.



³ Ganesh Sahathevan and Prakash Panneerselvam, "Needed, A Framework to Protect Undersea Cables", 4 March 2024, http://eprints.nias.res.in/2700/1/Brief-Prakash-Mar-4-2024.pdf. ⁴ Ibid.

⁵ Ibid.

⁶ Geoffrey Irving, "Why the U.S. Dominates the Pacific's Subsea Cable Infrastructure", 5 February 2023, The Maritime Executive, https://maritime-executive.com/editorials/why-the-u-s-dominates-thepacific-s-subsea-cable-infrastructure.

Elina Noor, "Entangled: Southeast Asia and the Geopolitics of Undersea Cables", 7 February 2024, https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/aab02982-b92e-49bb-a95c-35bf7b851d09/content.

⁸ Ibid.

⁹ Geoffrey Irving, "Why the U.S. Dominates the Pacific's Subsea Cable Infrastructure", 5 February 2023, The Maritime Executive, https://maritime-executive.com/editorials/why-the-u-s-dominates-thepacific-s-subsea-cable-infrastructure.

¹⁰ Fajar Hirawan, Raymond Atje, Veronika Sarawati and Rania Teguh, "Digital Silk Road and Inclusive Development in Indonesia", 2023,

https://www.istor.org/stable/pdf/resrep49619.4.pdf?refreqid=fastly-

default%3A030c0f224ee7ffa72c64b8cd94c9ec1d&ab segments=0%2Fbasic search gsv2%2Fcontrol <u>&initiator=&acceptTC=1</u>. ¹¹ Ibid.

¹² Ibid.

¹³ Daniel F. Runde, Erin L. Murphy and Thomas Bryja, "Safeguarding Subsea Cables: Protecting Cyber Infrastructure amid Great Power Competition", 16 August 2024,

https://www.csis.org/analysis/safeguarding-subsea-cables-protecting-cyber-infrastructure-amid-greatpower-competition.

¹⁴ Cheng Ting-Fang, Lauly Li, Tsubasa Suruga and Shunsuke Tabeta, "China's undersea cable drive defies U.S. sanctions", 26 June 2024, Nikkei Asia, https://asia.nikkei.com/Spotlight/The-Big-Story/China-s-undersea-cable-drive-defies-U.S.-sanctions.

¹⁵ Cheng Ting-Fang, Lauly Li, Tsubasa Suruga and Shunsuke Tabeta, "China's subsea cable drive defies U.S. sanctions", 26 June 2024, Nikkei Asia, https://asia-nikkei-

com.iseaslibrary.remotexs.co/Spotlight/The-Big-Story/China-s-undersea-cable-drive-defies-U.S.sanctions.

¹⁶ Asha Hemrajani, "The Quad Partnership for Cable Connectivity and Resilience", RSIS Commentary, 17 November 2023, https://rsis.edu.sg/rsis-publication/rsis/the-quad-partnership-forcable-connectivity-and-resilience/.

¹⁷ Pioneer Consulting, "Suppliers of Undersea Telecommunications Systems", 2021, https://www.pioneerconsulting.com/wp-

content/uploads/2021/03/Pioneer Consulting Suppliers Report Executive Summary Download.pdf. ¹⁸ Abhijeet Nehra, "Japan Undersea Cables in Southeast Asia", 5 July 2021,

https://www.cescube.com/vp-japan-undersea-cables-in-southeast-

asia#:~:text=NEC%20has%20been%20at%20the.the%20country%20including%20undersea%20cable s.&text=7)https://www.cnet,%2520People's%2520Liberation%2520Army..

¹⁹ Robert Clark, "Japan Government to Help Fund Subsea Cable Projects to Counter China", 7 February 2020, https://www.lightreading.com/cable-technology/japan-government-to-help-fundsubsea-cable-projects-to-counter-china.

²⁰ Wang Zheng, "China's Digital Silk Road (DSR) in Southeast Asia: Progress and Challenges", ISEAS Perspective 2024 no.1, 5 January 2024, https://www.iseas.edu.sg/articles-commentaries/iseasperspective/2024-1-chinas-digital-silk-road-dsr-in-southeast-asia-progress-and-challenges-by-wangzheng/.

²¹ Zulfikar Ahmad, "China's Digital Silk Road in Indonesia: Progress and implication", LSE IDEAS, 28 July 2022, https://lseideas.medium.com/chinas-digital-silk-road-in-indonesia-progress-andimplication-b6996172262a.



²² Jeanne-May Desurmont, "Territorial Claims and Subsea Cables: The Geopolitics of Invisible Lines in the South China Sea", Bloomsbury Intelligence & Security Institute, 21 May 2024, https://bisi.org.uk/reports/territorial-claims-and-subsea-cables-the-geopolitics-of-invisible-lines-inthe-south-china-sea.

²³ Keoni Everington, "China obstructs new subsea cable to Taiwan", *Taiwan News*, 15 March 2023, https://www.taiwannews.com.tw/news/4835599.

²⁴ Alan Weissberger, "China seeks to control Asian subsea cable systems; SJC2 delayed, Apricot and Echo avoid South China Sea", IEEE Communications Society, 14 March 2023,

https://techblog.comsoc.org/2023/03/14/china-seeks-to-control-asian-subsea-cable-systems-apricot-and-echo-avoid-south-china-sea/.

²⁵ Ibid.

²⁶ Asha Hemrajani, "The Quad Partnership for Cable Connectivity and Resilience" RSIS Commentary, 17 November 2023, https://rsis.edu.sg/rsis-publication/rsis/the-quad-partnership-for-cable-connectivity-and-resilience/.

²⁷ Jocelinn Kang and Jessie Jacob, "Connecting the Indo-Pacific: The future of subsea cables and opportunities for Australia", Australian Strategic Policy Institute, September 2024, https://ad-aspi.s3.ap-southeast-2.amazonaws.com/2024-09/Connecting%20the%20Indo-Pacific%20-

%20The%20future%20of%20subsea%20cables%20and%20opportunities%20for%20Australia_0.pdf? VersionId=.LcTT0ZYi0Nab6DeTCLgQ8M1a15m42nD.

²⁸ Ibid.

²⁹ Elina Noor, "Subsea Communication Cables in Southeast Asia: A Comprehensive Approach is Needed", 18 December 2024, Carnegie Endowment for International Peace,

https://carnegieendowment.org/research/2024/12/southeast-asia-undersea-subsea-cables?lang=en.

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