

Prepared Testimony by

Jeffrey D. Becker

Research Program Director, Indo-Pacific Security Affairs, CNA

To the House Committee on Transportation and Infrastructure

Subcommittee on Coast Guard and Maritime Transportation

Hearing titled

**“China’s Maritime Silk Road Initiative: Implications for the
Global Maritime Supply Chain”**

October 17, 2019

** The views I express in this testimony are my own and do not reflect the views of CNA, any of its sponsors or affiliates, the United States Navy, or the Department of Defense.*

Chairman Maloney, Ranking Member Gibbs, and Members of the Subcommittee: Thank you for this opportunity to share my thoughts with you on China's Maritime Silk Road and its implications for the global maritime supply chain.

Announced during a speech to the Indonesian parliament in October 2013, China's 21st Century Maritime Silk Road (MSR) is one half of Xi Jinping's signature "Belt and Road Initiative," a program aimed at leveraging Chinese lending, investment, and technical expertise to construct infrastructure projects around the world.¹ Through these projects, China seeks to connect trade paths across Europe and Central Asia, and sea routes between Southeast Asia and Africa.

To be sure, Chinese state-owned enterprises (SOEs) had been involved in overseas port development projects before Xi's announcement of MSR in 2013. However, MSR has certainly accelerated this trend. Chinese SOEs have spent billions on maritime infrastructure and now build and operate port facilities around the globe.

For example:

- China's port builders, such as China Communications Construction Company, the parent company of two state-owned enterprises (SOEs) — China Harbour Engineering Company (CHEC) and China Road and Bridge Corporation — ranks third on *Engineering News-Record's* list of the top 250 international contractors as of 2018.²
- According to People's Republic of China (PRC) Vice Minister of Transportation Liu Xiaoming, "China [has] invested and constructed 42 ports in 34 countries and regions along the Belt and Road Initiative."³
- Other analysts estimate that, in total, Chinese SOEs have equity stakes or concession agreements to operate port facilities in more than 70 ports worldwide.⁴

The emergence of Chinese companies as global port terminal owners and operators raises questions about the implications for the United States Navy (USN), United States Coast Guard, or United States Naval Ships (USNS) using those facilities. This issue received heightened attention after the government of Djibouti announced in early 2018 that it was terminating its agreement with the United Arab Emirates (UAE) terminal operator, DP World, to operate the Doraleh Container Terminal (DCT), effectively nationalizing the terminal.⁵ This raised concerns that the Djiboutian government would eventually sign an agreement with a Chinese firm to run that container terminal. In a March 2018 US House Armed Services Committee hearing, General Waldhauser (Commander, US Africa Command), articulated his concerns regarding the potential implications of a Chinese firm taking over operations at the port, and what that would mean for the USN, should the Chinese firm seek to leverage that position to impose restrictions on USN vessels:

If the Chinese took over that port, the consequences could be significant if there were some restrictions on our ability to use that, because obviously the supplies that

come in not only take care of Camp Lemonnier and other places inside the continent, it is a huge activity there...⁶

My comments on China's MSR and its implications for the global maritime supply chain focus on one aspect of this question in particular, namely the growing role of China's SOEs in overseas ports, and the implications of this trend for the United States and the U.S. Navy. In doing so, I address three important questions to consider when seeking to understand how China's growing role in overseas ports might affect USN activities and operations:

- What are the most prevalent forms of Chinese presence in overseas maritime port infrastructure?
- What tools might China employ when seeking to influence activities in ports overseas, and what actors might China target to do so?
- What actions could Chinese state-owned enterprises potentially take to adversely affect USN activities and operations in overseas ports?

The remainder of my comments examines each of these three questions in detail.

1. What are the most prevalent forms of Chinese presence in overseas maritime port infrastructure?

In general, Chinese SOEs have expanded their presence in overseas port facilities in three ways: by constructing new port facilities or upgrading existing infrastructure, by purchasing ownership stakes in port terminal operators, and by operating port facilities. Each of these types of presence is examined below.

Chinese construction of port infrastructure

Chinese SOEs build a wide range of maritime facilities, constructing new terminals and upgrading existing infrastructure. In some cases, Chinese firms win contracts through competitive tenders. In Tanzania's Port of Dar-es-Salaam, for example, the World Bank provided roughly \$345 million to improve the port, and awarded CHEC a \$154 million contract through open bidding to design and build a roll-on/roll-off terminal and improve berths 1 through 7.⁷

In other cases, however, Chinese companies benefit through support from the Chinese State and secure contracts because Chinese banks provide loans that require buying and hiring from China. In China's development of the Doraleh Multi-Purpose Port in Djibouti for example, China's Export-Import (Exim) Bank, the only bank designated by the PRC to offer government concessional loans and preferential export buyers' credit (credit provided to foreign companies to buy Chinese goods and services), provided credits to the China Merchants-Djiboutian joint venture firm that developed the port.⁸ Not only did more preferred credits make this deal more attractive

to China Merchant's Djiboutian partners, it also likely provided financial incentives to the China State Construction Engineering Corporation, which built the port, and the firm Shanghai Zhenhua, which supplied the ports' cranes.⁹

Partial Chinese ownership of port infrastructure

In addition to building, Chinese state-owned firms own an increasing amount of maritime port infrastructure worldwide. Much of this infrastructure is owned by two SOEs. The first, COSCO Shipping Ports, was the world's fifth largest terminal operator by twenty-foot equivalent unit (TEU) in 2017, and the third largest container ship owner following the completion of its acquisition of Orient Overseas Container Lines in 2018.¹⁰ COSCO has equity investments in 18 ports located in 13 countries, including the US (Seattle and Long Beach).¹¹ The second, China Merchants Port Holdings, was the world's sixth largest terminal operator by TEU in 2017.¹² The company has a presence in 23 ports in 16 countries, including Taiwan.¹³

When Chinese firms purchase ownership in a foreign port facility, they often do so by establishing a joint venture company with the host government, often through the local port authority. The host government will continue to own the land and the core port facilities, but will lease parts of the port to the joint venture (or the Chinese firm directly) through a concession agreement—a contract in which a port authority transfers operating rights to build, finance, own, and operate a facility, returning it to the state after a specific time period.¹⁴ Concession agreement lengths vary. While many are for 30 years, some are longer, particularly when large amounts of capital investment are needed to give the company time to recoup its investment. For example, in 2013, China Merchants acquired 23.5 percent of Port de Djibouti SA, the joint venture between China Merchants and the Djiboutian Ports Authority, which owns both the Doraleh Multi-Purpose Port and the Port of Djibouti.¹⁵ The joint venture will reportedly be in effect for 99 years.¹⁶

Chinese firms operating port infrastructure

In other cases, Chinese firms not only own a stake in the port terminal operator, but also operate the port, either directly or through a joint venture partner in which they are the majority owner. They are responsible for purchasing and maintaining cranes and other container ship handling equipment, hiring labor, managing customer relations, and running day-to-day terminal operations. Labor is likely to be local, though foreign managers may be parties to the agreement that allows the Chinese firm in question to operate the facility.¹⁷

Chinese SOEs are now responsible for running port terminal operations in multiple locations, including Sri Lanka, Pakistan, and the UAE. For example, China Merchants owns 85 percent of the Colombo International Container Terminal, and also operates it through a 99-year lease.¹⁸ A Chinese state firm (China Overseas Port Holdings) also manages the port of Gwadar directly, having taken the 40-year concession from the Port of Singapore Authority (PSA) in 2013, following PSA's decision to give up the lease.¹⁹ In 2016, a subsidiary of COSCO Shipping Ports

signed a 35-year concession agreement with Abu Dhabi Ports to acquire the right to develop, manage, and operate Khalifa Port Container Terminal no. 2.²⁰ COSCO Shipping Ports began operating that terminal in December 2018.²¹

2. What tools might China employ when seeking to influence activities in ports overseas, and what actors might China target to do so?

Potential tools of Chinese influence

Beijing has a track record of using the economic tools at its disposal to advance its foreign policy objectives.²² Consequently, it is not unreasonable to think that China might deploy those tools in such a way as to influence national and local leaders with authority over and access to ports. Potential sources of influence at China's disposal to achieve this goal include investments, the provision of funds through loans, cash gifts, and bribery. Each is discussed below.

Investment

One tool China may use to expand its influence in overseas port facilities is the provision of foreign direct investment, which Chinese SOE officials often tout as having the potential to dramatically reform a country's future, just as China has done over the past four decades. This approach is likely to be most effective when directed at officials from countries where capital is scarce, such as Djibouti, the Maldives, or Sri Lanka. One can see the appeal of this approach in statements such as those made by the president of China Merchants Group, who stated that "we [China Merchants] are in the process of making the country [Djibouti] the 'Shekou of East Africa'—a hub for regional shipping, logistics and trade," referring to the Chinese village of Shekou in Shenzhen, which rose to become a global commercial logistics hub.²³ China's ambassador to Oman, Yu Fulong, argued that "over the past 30-plus years, China has developed a host of competitive industries and with the help of the Belt and Road Initiative, Oman can harness these strengths so as to promote a diversified economic development."²⁴

Noticeably absent from these arguments, however, is any recognition of the fact that both countries lack other factors that were critical to China's success, including a large and educated workforce, easy access to large markets, and a stable international regional environment. Nonetheless, the promise to dramatically change the trajectory of a country's development is undoubtedly attractive to leaders of developing countries, and likely provides the Chinese government with significant leverage in negotiating the terms of investments.

Loans and debt traps

Another tool through which Beijing may seek to influence port activities is using debt owed to Chinese financial institutions as a bargaining chip. China has emerged as a major creditor to many emerging economies, lending roughly \$40 billion annually through its Exim Bank and the China Development Bank.²⁵ Countries such as Nigeria and Sri Lanka, where Chinese SOEs own or operate port facilities, have been among China's top borrowers over the past few years, accepting

loans from China to finance activities, including infrastructure development, government operations, and debt payments.²⁶ Other developing countries where Chinese firms are currently undertaking massive infrastructure projects, such as Kenya, Tanzania, and South Africa, have been major borrowers from China as well. Over time, the accumulation of debts may also provide China with opportunities to expand its presence into port facilities in these countries as well.

Several countries may have trouble servicing their debts in the near term. According to a 2018 study published by the Center for Global Development, 23 countries are at risk of debt distress as a result of borrowing from China. These countries include Djibouti, whose port infrastructure is important to USN logistics operations for Naval Forces Africa and Naval Forces Central Command. These also include Sri Lanka and the Maldives, both of which are USN partner nations in the increasingly important Indian Ocean region, where the US has important equities.²⁷

Moreover, when the Djiboutian government nationalized the Doraleh Container Terminal, the Chinese-Djiboutian joint venture Port de Djibouti SA, which owned a stake in the container terminal along with the Dubai firm DP World, could no longer meet the requirements of its loan from China Merchants, the Chinese partner in the joint venture. Therefore, in April 2019, it was reported that China Merchants will provide Port de Djibouti SA with another \$144 million in debt refinancing, possibly further adding to its debt burden, and potentially setting China Merchants up to expand its stake in Port de Djibouti SA at a later date.²⁸

China has employed various approaches when dealing with borrowers who cannot repay their loans.²⁹ In some cases, China has engaged in loan forgiveness or loan restructuring in order to provide new loans to allow borrowers to avoid default. Other times, China has conducted debt-for-equity swaps, allowing Chinese firms to acquire equity stakes in infrastructure projects that Chinese banks helped finance. For example:

- When the government of Djibouti could not provide its share of the funding for the Ethiopia-Djibouti Railway, it sold a 10 percent stake in the joint venture that manages the railway to the China Civil Engineering Construction Corporation.³⁰
- In 2016, the Sri Lankan government proposed using debt-for-equity swaps to reduce its debt burden, which allowed China Merchants Group to purchase an 85 percent stake in the concession that operates the Hambantota port.³¹
- In 2019, the Kenyan newspaper *Daily Nation* reported it had obtained a leaked copy of the agreement between China and Kenya for the construction of the Mombasa-Nairobi Standard Gauge Railway Project. According to Kenyan media, the contract states that China could take possession of the port of Mombasa should the Kenyan National Railway Corporation default on its \$2.2 billion repayments to China's Exim Bank.³²

While Chinese SOEs employing debt-for-equity swaps such as these still appear infrequently, the example of Hambantota, and the potential for China to do something similar in Kenya, suggests that Beijing is not opposed to employing this tool to obtain greater influence in overseas ports.

Cash gifts and bribes

Chinese officials and executives have already sought to influence foreign officials abroad with gifts of cash. China Harbour Engineering Company (CHEC) is a case in point. The company has a history of channeling money to foreign government officials and their families in countries where it is doing or seeking to do business. For example:

- In 2009, the World Bank barred the China Communications Construction Company and all of its subsidiaries, including CHEC, from engaging in any road and bridge projects financed by the World Bank from January 2009 to January 2017 as a result of engaging in fraud while working on a World Bank-funded road project in the Philippines.³³
- Before the January 2015 presidential elections in Sri Lanka, at least \$7.6 million was transferred from CHEC's bank account at the South African Standard Bank to affiliates of then Sri Lankan President Mahinda Rajapaksa's presidential re-election campaign.³⁴ While campaign contributions are not illegal, funding for a political party from a foreign entity does constitute external interference in local affairs, raising the possibility of charges of money laundering.³⁵
- In January 2018, Bangladesh's finance minister, Abul Muhith, said that CHEC had been blacklisted for offering bribes to government officials. According to Muhith, CHEC offered the bribes after it secured a contract to expand a highway: "They have already got the contract. I think [they offered a bribe] only to please [officials] so that they [the company] can misappropriate money."³⁶

CHEC is not the only Chinese SOE involved in port activities accused of bribing foreign officials and their families. In 2012, the China Merchants Port Holdings' controlled joint venture with the Sri Lanka Ports Authority in Colombo (Colombo International Container Terminals) donated nearly 20 million rupees to a foundation run by Pushpa Rajapaksa, who is the wife of Basil Rajapaksa, the younger brother of former President Rajapaksa. A representative from the joint venture stated that the donation was for housing for the poor. However, the joint venture did not supervise how the cash was used after it was donated.³⁷

Potential targets of Chinese influence

Given the tools described above, should Beijing seek to hinder USN access to a port with a Chinese terminal operator, or affect its activities while in port, Chinese officials would likely seek to influence different actors at both the national and local levels within the host country. The most

obvious targets for such Chinese influence would include national-level leaders and their families, local port authority personnel, and local-level officials.

National leaders and their families

Chinese officials and business executives would likely try to influence senior leaders, particularly heads of state who appreciate China's role in building national infrastructure, especially after overtures to other countries were rebuffed. For example, Djibouti's president, Ismail Omar Guelleh, has stated that he views China as his country's only long-term development partner, noting, "the reality is that no one but the Chinese offers a long-term partnership in Djibouti."³⁸

The Chinese might also target family members of national leaders, especially if they also occupy leadership positions. Again, the example of Djibouti is instructive. President Guelleh's daughter, Haibado Guelleh, is his top economic adviser and a Chinese speaker. She is responsible for implementing Djibouti's long-term development plan, "Vision 2035," and likely plays a role in negotiating Chinese debt-financed infrastructure projects.³⁹ President Guelleh's half-brother, Saad Omar Guelleh, is also the director general of Port de Djibouti SA, a major source of income for the country and the presidency.⁴⁰

Port authorities

Officials responsible for running local port authorities are also likely to be targets of Chinese influence, should China seek to influence port operations abroad. In general, a port authority decides who enters and exits a port. It controls the pilots and tugs that assist large ships when entering and leaving a port, allocates ships to berths, and is responsible for port storage. In short, port authorities know when ships, including USN and U.S. Coast Guard vessels, arrive at port, where they dock, what they carry, where they store cargo, and when that cargo gets picked up.⁴¹

Chinese officials could potentially obtain sensitive information through relationships that state-owned Chinese port terminal operators have established with local port authorities. For example, COSCO Shipping Ports and AD Ports, a company established by the Abu Dhabi government, are both stakeholders in a joint venture company that has a concession to build, operate, and manage the Khalifa Port Container Terminal no. 2 in the UAE.⁴² AD Ports is the port authority for 10 ports in total, including Fujairah Terminals.⁴³ The U.S. Navy stations roughly 5,000 military personnel at several facilities throughout the UAE, including at Fujairah.⁴⁴ Moreover, because Fujairah lies outside the Persian Gulf, it serves as an important logistics link should the Strait of Hormuz be closed. This strategic positioning could make Fujairah an important target should China seek to affect US activities in foreign ports.

Combined with the recent expansion in China-UAE relations, including increased Chinese investment in the country, it is not impossible to think that PRC state actors could potentially make use of the established connections between COSCO Shipping and UAE port authority personnel

to obtain information on the movement of personnel, supplies, and material related to USN personnel stationed in the country.

Local leaders

In Sri Lanka and elsewhere, Chinese actors may also attempt to single out not just national level leaders but also local government officials. While local officials may not have the direct access to port operations that officials within the local ports authorities do, they do have the authority to provide Chinese actors with access to areas surrounding the ports. Chinese firms, as part of MSR projects, are also often seeking to develop port-adjacent regions into special economic development zones as part of an all-encompassing “port-zone-city” development model. These port-adjacent areas could provide additional opportunities for intelligence collection on activities within the port.

Chinese investment in the city of Duqm, Oman, is one example that may be worth monitoring in this regard. In an effort to diversify its economy away from oil and natural gas, which account for roughly 60 percent of its exports, the government of Oman is seeking to develop the city of Duqm into a commercial and logistics hub.⁴⁵ In pursuing this goal, Muscat has partnered with Oman Wanfang, a consortium of private Chinese companies, to develop the China-Oman Industrial Park within the Duqm Special Economic Zone (SEZ).⁴⁶ According to Yahya bin Said al Jabri, the chairman of the Special Economic Zone Authority in Duqm, the SEZ will attract \$10 billion of investment by 2022.⁴⁷

Currently, no Chinese firms are involved in the operation of the Port of Duqm, as the July 2015 joint venture between the government of Oman and a Belgian consortium to manage the port for 28 years remains in effect.⁴⁸ However, Chinese firms under the Oman Wanfang consortium are seeking to develop the surrounding areas, and, given the amount of funding that could potentially be invested in the SEZ, this project could provide China with leverage to gain a foothold in the port, or cultivate influence among local-level government officials surrounding the port facilities.

3. What actions could Chinese state firms potentially take to adversely affect USN activities and operations in overseas ports?

Given the influence that Chinese SOEs have accrued in port facilities worldwide, how might China potentially influence USN port operations and activities in overseas ports? The following section identifies four ways in which this might occur.

Growing competition over access to facilities

First, it is worth noting that China's growing presence in overseas ports may create additional challenges for the U.S. Navy regardless of whether this is China's intent. China's MSR initiative has led to a dramatic increase in both Chinese overseas investments and Chinese citizens living and working in Asia, the Middle East, Africa, and throughout the Indian Ocean region. As a result, these expanding Chinese interests have led not only to an increased Chinese civilian presence, but also to an increased military presence, as China's military goes abroad to protect its national interests. This increased Chinese civilian and military presence abroad means that in certain locations, the USN is likely to face greater competition for access to ports and port facilities, potentially making it more difficult for the USN to gain access at certain times.

Port Khalifa may be one example where this may occur. In Port Khalifa, COSCO began operating a new container terminal in December 2018 and has already stated that it is seeking to make it a regional transshipment hub, diverting Chinese ships from other ports in the region. Should COSCO be successful, the increased port traffic in and around Port Khalifa could potentially create delays for USN ships seeking to use those port facilities as well.

Collecting intelligence on USN assets operating in foreign ports

Another issue that cannot be avoided is the opportunity for the PRC to improve its intelligence collection capabilities against USN assets operating in foreign ports. Chinese SOEs, like COSCO and China Merchants, are intimately tied to the Chinese state, and their positions as port operators could allow them to collect intelligence on the movement and location of USN ships and other assets, USN ship maintenance requirements, ship combat readiness, and the tactics, techniques, and procedures (TTPs) that the USN uses for repair, resupply, and other activities while in foreign ports. Such concerns are not without merit; as noted above, actors like China Harbour Engineering Company have reportedly been accused of seeking to bribe officials abroad. Moreover, when describing the negotiations for the Hambantota port, Nihal Rodrigo, a former Sri Lankan foreign secretary and ambassador to China, noted that intelligence sharing between China and Sri Lanka was "an integral, if not public, part of the deal."⁴⁹ Mr. Rodrigo also characterized the Chinese position during the negotiations as "We [China] expect you [Sri Lanka] to let us know who is coming and stopping here [Hambantota]."⁵⁰

Moreover, as SOEs such as COSCO work with Huawei to replace and redesign IT infrastructure in places such as the Greek port of Piraeus, it puts USN communication and other information at

risk as well.⁵¹ Finally, if Chinese SOEs are not positioned to obtain that information directly, local actors at those ports may feel compelled to provide China with privileged information in return for financial benefits or outright bribes, or to avoid punitive Chinese actions. This information would have multiple benefits, improving China's ability to counter future USN operations, while allowing the People's Liberation Army (PLA) to learn about USN TTPs, thus potentially improving the PLA Navy's own operations.

“Slow-rolling” work for USN ships at Chinese-operated ports

Chinese firms could also affect USN operations directly, potentially using their economic leverage to encourage firms providing services to the USN at the port to slow down repair or resupply operations, or to provide USN ships lower priority than they currently enjoy. To be clear, I have seen no evidence of this to date. However, given that seven of the top 10 busiest ports in the world by throughput are in China, it is not unreasonable to think that a growing number of firms that contract to conduct work for the USN at overseas ports may also have commercial interests in China, or may subcontract portions of that work to firms that do.⁵²

Actively restricting USN access to port facilities

When might China seek to restrict USN or USNS access to ports facilities run by Chinese SOEs? Hypothetically, if relations between the two countries continue to deteriorate, China could seek to restrict USN access as a response to a US action that it perceives as hostile—such as a USN warship visit to Taiwan—or even as an escalatory step should a serious crisis occur between the two countries in the East China Sea, South China Sea, or elsewhere.⁵³ Such an action would not be taken lightly, as doing so would certainly mark the start of a much more confrontational period in US-China relations with the associated political and economic ramifications. Nor would it go unnoticed in countries where concerns about ceding sovereignty as a result of China's growing footprint continue to gain traction.

China would likely face political pushback from the host country as well. For example, while China may be best positioned to restrict U.S. Navy access where it has significant economic leverage, such as Djibouti, or controls port operations, such as Piraeus, both Djibouti and Greece would have strong incentives to avoid being pulled into such a confrontation. Djibouti, for example, would potentially stand to lose some of the \$130 million it earns annually from allowing US partners and allies such as France, Japan, and Italy to operate in its territory, should some of those countries decide to reevaluate their presence there. Greece, meanwhile, could potentially be subject to political and economic pressure from other NATO or EU member states.

Restricting USN access to port facilities would be even more difficult in locations where Chinese firms are not the sole or majority equity shareholder, as Chinese SOEs would face a range of actors at the local level with incentives to avoid being pulled into a conflict. In Port Said, Egypt, for example, where COSCO Shipping Ports owns a 20 percent stake in the Suez Canal Container

Terminal, other parties to the joint venture include the Dutch firm APM Terminals (the majority shareholder and operator), the Suez Canal Authority, the National Bank of Egypt, and private Egyptian investors. All would likely want to avoid being drawn into the middle of a conflict between the US and China.⁵⁴

Finally, one may argue that China has an interest in continuing to allow USN ships to frequent Chinese-controlled port facilities, as such visits provide ample opportunities for intelligence collection. In the near term, therefore, it may be more likely that the USN decides to limit its visits to certain ports owned or operated by Chinese SOEs to mitigate these growing operational security concerns. For example, following the news that the Shanghai municipal government-owned firm, Shanghai International Port Group, had won the concession to operate the container terminal in the Israeli port city of Haifa for 25 years beginning in 2021, Israeli media reported that US officials had expressed concern about continuing U.S. Navy activities there, to include a “Sense of the Senate” statement within the Senate’s National Defense Authorization Act for Fiscal Year 2020, stating that the US Senate “has an interest in the future forward presence of United States naval vessels at the Port of Haifa in Israel but has serious security concerns with respect to the leasing arrangements of the Port of Haifa as of the date of the enactment of this Act.”⁵⁵ Former Chief of Naval Operations Admiral Gary Roughead described possible concerns by noting:

The Chinese port operators will be able to monitor closely US ship movements, be aware of maintenance activity, and could have access to equipment moving to and from repair sites and interact freely with our crews over protracted periods. Significantly, the information systems and new infrastructure integral to the ports and the likelihood of information and electronic surveillance systems jeopardize US information and cybersecurity.⁵⁶

As China’s roles and presence in overseas port operations continue to expand, the U.S. Navy is having to adapt to a more challenging operational security environment; one in which it is more likely to interact with Chinese military and civilian assets and personnel even when calling on ports located in partner and ally countries. Moreover, port investments by Chinese state-owned firms occurring today could allow them to develop capabilities that the Chinese state could leverage in the future, including the capability to hinder USN repair and resupply operations, or potentially even restrict USN access to select locations. Responding to these challenges will require careful consideration about where, when, and how the U.S. Navy operates in overseas ports.

¹ See *Speech by Chinese President Xi Jinping to Indonesian Parliament*, Jakarta, Indonesia, October 2, 2013, https://reconasia-production.s3.amazonaws.com/media/filer_public/88/fe/88fe8107-15d7-4b4c-8a59-0feb13c213e1/speech_by_chinese_president_xi_jinping_to_indonesian_parliament.pdf. The other half of the Belt and Road Initiative is the “Silk Road Economic Belt” which traverses Central and South Asia, connecting them to Europe.

² “ENR’s 2018 Top 250 International Contractors,” *Engineering News-Record*, August 2018, <https://www.enr.com/toplists/2018-Top-250-International-Contractors-1>.

³ Liu Xiaoming, *Promoting Pragmatic Cooperation in Sea Ports Along the Belt and Road*, presentation given at the ‘16+1’ Coordinating Secretariat Meeting on Maritime Issues, Szczecin, Poland, June 15, 2018.

⁴ See for example, Isaac B. Kardon, Testimony before the U.S.-China Economic and Security Review Commission Hearing on “A ‘World-Class’ Military: Assessing China’s Global Military Ambitions,” June 20, 2019, p. 5.

⁵ “London Court Rules DP World Djibouti Contract ‘Valid and Binding’—Dubai Government,” Reuters, August 2, 2018, <https://uk.reuters.com/article/uk-emirates-dp-wrld-djibouti/london-court-rules-dp-world-djibouti-contract-valid-and-binding-dubai-government-idUKKBN1KN1CI>.

⁶ Travis J. Tritten, “China May Try to Control Key US Military Port in Africa, General Says,” *Washington Examiner*, March 6, 2018, <https://washingtonexaminer.com/china-may-try-to-control-key-us-military-port-in-africa-general-says>.

⁷ World Bank, “Dar es Salaam Maritime Gateway Project: Fact Sheet,” *World Bank*, July 2, 2017, www.worldbank.org/en/country/tanzania/brief/dar-es-salaam-maritime-gateway-project-fact-sheet; World Bank, “Procurement Notices—Dar es Salaam Maritime Gateway Project,” *World Bank*, 2014, <http://projects.worldbank.org/procurement/noticeoverview?id=OP00029170&lang=en&print=Y>; “Tanzania Signs \$154 Million Contract with Chinese Firm to Expand Main Port,” *Reuters*, June 10, 2017, <https://www.reuters.com/article/us-tanzania-ports/tanzania-signs-154-million-contract-with-chinese-firm-to-expand-main-port-idUSKBN1910RU>; “Tanzania Inks Deal to Expand Dar es Salaam Port,” *World Maritime News*, 2017, <https://worldmaritimeneeds.com/archives/222503/tanzania-inks-deal-to-expand-dar-es-salaam-port/>.

⁸ China Merchants Group, “Djibouti Project (*Jibuti Xiangmu: Xing Gang Zhi lu, Shuzi Zai Tiaodong*; 吉布提项目：兴港之路，数字在跳动),” China Merchants Group, February 7, 2017, www.cmhk.com/main/a/2017/b07/a32755_32845.shtml.

⁹ Gao Jianghong, “‘Shekou Model 4.0’ Arrives in Djibouti, China Merchants ‘Flying Geese’ Model Goes Abroad,” (*‘Shekou Moshi 4.0’ Luodi Jibuti; Zhaoshangju Yanxing Chuhai*; “蛇口模式 4.0”落地吉布提, 招商局雁形出海), *21st Century Business Herald*, July 5, 2017, http://epaper.21jingji.com/html/2017-07/05/content_65726.htm.

¹⁰ Drewry Maritime Research, *Global Container Terminal Operators Annual Review and Forecast*, 2018, p. 18; Michael Angell, “Port Report: Cosco Shipping Wraps Up First Year with Orient Overseas Intl. Results Under Belt,” *Freight Waves*, April 1, 2019, <https://www.freightwaves.com/news/maritime/port-report-cosco-ooil-2018-results>.

¹¹ COSCO Shipping Ports, *Overseas Terminals*, <https://ports.coscoshipping.com/en/Businesses/Portfolio/#OverseasTerminals>; COSCO Shipping Ports Limited, *Annual Report 2018*, March 2019, p. 33, <https://ports.coscoshipping.com/en/Investors/IRHome/FinancialReports/>; Lloyd’s Maritime Intelligence, *One Hundred Ports 2018*, p. 12, <https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports-2018>. As part of its purchase of Orient Overseas International Ltd., COSCO Shipping acquired a container terminal in Long Beach, California. However, COSCO sold the facilities to a consortium led by Macquarie Infrastructure Partners in order to address U.S. security concerns. See Jia Tianqiong and Han Wei, “Cosco Unit to Sell U.S. Long Beach Container Terminal,” *Caixin Global*, May 1, 2019, <https://www.caixinglobal.com/2019-05-01/cosco-unit-to-sell-us-long-beach-container-terminal-101410715.html>.

¹² Tim Power, “The Rise of Chinese Global Terminal Operators,” Drewry, July 12, 2017, https://www.drewry.co.uk/AcuCustom/Sitename/DAM/008/Rise_of_Chinese_Global_Terminal_Operators.pdf. A TEU is used to measure a ship’s cargo carrying capacity. The dimensions of one TEU are equal to that of a 20-foot shipping container.

¹³ China Merchants Port Holdings, *Annual Report 2018*, March 2019, p. 5, <http://www.cmport.com.hk/enTouch/investor/Reports.aspx>.

¹⁴ Joseph Botham, “Concession Choices,” *Port Strategy* (2014), <http://hfw.com/downloads/HFW-Port-Strategy-Concession-choices-Article-July-2014.pdf>; Jeffrey Becker, Erica Downs, Ben DeThomas and Patrick DeGategno, *China’s Presence in the Middle East and Western Indian Ocean: Beyond Belt and Road*, (Arlington: VA, Center for Naval Analyses), February 2018, DRM-2018-U-018309-Final2, p. 86.

- ¹⁵ China Merchants Holdings, “Acquisition of 23.5% Interests in Joint Venture in Djibouti, Voluntary Announcement,” Hong Kong Stock Exchange, 2012, <http://www.hkexnews.hk/listedco/listconews/SEHK/2012/1230/LTN20121230025.pdf>.
- ¹⁶ Gao Jianghong, “‘Shekou Model 4.0’ Arrives in Djibouti.”
- ¹⁷ Becker, et. al., *China’s Presence in the Middle East and Western Indian Ocean: Beyond Belt and Road*, p. 92.
- ¹⁸ Sri Lanka Ports Authority, “Agreements Signed to Construct Colombo Port Expansion Project’s South Container Terminal,” Sri Lanka Ports Authority, November 9, 2011, http://portcom.slpa.lk/news_events_324.asp. Additionally, China Merchants is likely in charge of the port’s long-term development and strategic operations, given that the CEO of Colombo International Container Terminals is Jack Huang, who is also the deputy general manager (international) of China Merchants Holdings (International), and that seven of the 10 of Colombo International Container Terminal’s board members are Chinese. See Colombo International Container Terminals, “Management/Executive Committee,” <http://www.cict.lk/management-executive-commitee.php>; “Jack Huang—Director/CEO— Colombo International Container Terminals,” LinkedIn, <https://hk.linkedin.com/in/jack-huang-906b3617>; Colombo International Container Terminals, “Board of Directors,” <http://www.cict.lk/directors.php>.
- ¹⁹ Ministry of Ports & Shipping and Gwadar Port Authority, “Gwadar Port & CPEC: A Presentation to Parliamentary Committee on CPEC,” National Assembly of Pakistan, November 28, 2015, <http://www.na.gov.pk/cpec/sites/default/files/presentations/Parliamentary%20Committee%20on%20CPECNew.pdf>.
- ²⁰ COSCO Shipping Ports Limited, “Discloseable Transaction: Concession Agreement in Relation to Khalifa Port Container Terminal 2,” Hong Kong Stock Exchange, September 28, 2016, <http://www.hkexnews.hk/listedco/listconews/SEHK/2016/0928/LTN20160928374.pdf>.
- ²¹ “COSCO, Abu Dhabi Ports Open New Terminal at Khalifa Port,” *World Maritime News*, December 10, 2018, <https://worldmaritimeneews.com/archives/266410/cosco-abu-dhabi-ports-open-terminal-at-khalifa-port/>
- ²² See for example, Peter Harrell, Elizabeth Rosenberg, and Edoardo Saravalle, *China’s Use of Coercive Economic Measures*, Center for a New American Security, June 11, 2018, <https://www.cnas.org/publications/reports/chinas-use-of-coercive-economic-measures>; Evan A. Feigenbaum, “Is Coercion the New Normal in China’s Economic Statecraft?,” *Marco Polo*, July 15, 2017, <https://marcopolo.org/coercion-new-normal-chinas-economic-statecraft/>.
- ²³ Deng Yangzi, “CMG Wants to Make African Port of Djibouti ‘New Shekou,’” *China Daily*, March 7, 2017, http://www.chinadaily.com.cn/bizchina/2017-03/07/content_28455386.
- ²⁴ “Oman Wants to Be China’s Key Partner in Belt and Road Initiative, China Envoy,” Xinhua, July 1, 2015, http://www.xinhuanet.com/english/2015-07/01/c_134373592.htm.
- ²⁵ David Dollar, “United States-China Two-way Direct Investment: Opportunities and Challenges,” *Journal of Asian Economics* 50, June 2017, <https://www.sciencedirect.com/science/article/pii/S1049007817300830>.
- ²⁶ Ibid.
- ²⁷ John Hurley, Scott Morris, and Gailyn Portelance, *Examining the Debt Implications of the Belt and Road Initiative from a Policy Perspective*, Center for Global Development Policy Paper 121, March 2018, <https://www.cgdev.org/sites/default/files/examining-debt-implications-belt-and-road-initiative-policy-perspective.pdf>. See also Becker, et. al., *China’s Presence in the Middle East and Western Indian Ocean: Beyond Belt and Road*.
- ²⁸ Michael Angell, “Port Report: China Merchants Rejiggers Debt for Djibouti Free-trade Zone After Doraleh Container Terminal Seized,” *Freight Waves*, April 30, 2019, <https://www.freightwaves.com/news/maritime/port-report-china-merchants-ports-djibouti>.
- ²⁹ Ibid.
- ³⁰ International Monetary Fund, *Djibouti Selected Issues*, IMF Country Report No. 16/249, 2016, <http://www.imf.org/external/pubs/ft/scri/2016/cr16249.pdf>; Zhang Yuxue, “Why is Africa’s First Transnational Electrified Railway Using a Complete Set of ‘Chinese Standards’?” (*Feizhou diyi tiaokuaguo dianqihua tielu weihe yong quantao ‘Zhongguo biaojun’?*; 非洲第一条跨国电气化铁路为何采用全套‘中国标准?’), *Caijing* (财经), October 21, 2016, http://www.caijingmobile.com/top/2016/10/21/288773_2_4.html.
- ³¹ For Sri Lanka’s proposal of debt-for-equity swaps, see Ben Blanchard, “Sri Lanka Requests Equity Swap for Some of Its \$8 bln China Debt,” *Reuters*, April 9, 2016, <https://www.reuters.com/article/china-sri-lanka/sri-lanka-requests-equity-swap-for-some-of-its-8-bln-china-debt-idUSL3N17B1BR>.
- ³² William Niba, “Will Kenya’s Mombasa port be taken over by the Chinese?,” *Radio France International*, January 15, 2019, <http://en.rfi.fr/africa/20190114-kenya-mombasa-port-china-debt-default>.
- ³³ World Bank, “World Bank Applies 2009 Debarment to China Communications Construction Company Limited for Fraud in Philippines Road Project,” *World Bank*, July 29, 2011, <http://www.worldbank.org/en/news/press->

release/2011/07/29/world-bank-applies-2009-debarment-to-china-communications-construction-compamy-limited-for-fraud-in-philippines-roads-project.

³⁴ Maria Abi-Habib, “How China Got Sri Lanka to Cough Up a Port,” *New York Times*, June 25, 2018, <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html>.

³⁵ “Chinese Firm in Sri Lanka Admits to Funding Rajapaksa Foundation,” *Economynext*, July 12, 2018, https://economynext.com/Chinese_firm_in_Sri_Lanka_admits_funding_Rajapaksa_family_foundation-3-11200.html.

³⁶ “No Job for China Harbour in Future,” *The Daily Star*, January 17, 2018, <https://www.thedailystar.net/frontpage/no-job-china-harbour-future-1520917>.

³⁷ “Chinese Firm in Sri Lanka Admits to Funding Rajapaksa Foundation.”

³⁸ “Ismail Omar Guelleh: Nobody Other Than the Chinese Offers a Long-term Partnership in Djibouti (Ismail Omar Guelleh: Personne d'autre que les Chinois n'offre un partenariat a long terme a Djibouti),” *Jeune Afrique*, April 4, 2017, <http://www.jeuneafrique.com/mag/421096/politique/ismail-omar-guelleh-personne-dautre-chinois-noffre-partenariat-a-long-terme-a-djibouti/>.

³⁹ “Djibouti Legislative Elections,” *IHS Markit*, March 8, 2018, <https://ihsmarkit.com/research-analysis/Djibouti-legislative-elections.html>.

⁴⁰ “Ismail Omar Guelleh Governs Family-style with Kadra, Naguib, Saad and Co,” *Africa Intelligence*, June 18, 2015, <https://www.africaintelligence.com/ion/insiders/djibouti/2015/06/19?ismail-omar-guelleh-governs-family-style-with-kadra-naguib-saad-and-co/108078596-be1;#GeneralManagerMessage>.”

⁴¹ Becker, et. al., *China's Presence in the Middle East and Western Indian Ocean: Beyond Belt and Road*, p. 96.

⁴² COSCO Shipping Ports Limited, *Concession Agreement In Relation to Khalifa Port Container Terminal 2*.

⁴³ Abu Dhabi Digital Government, “Abu Dhabi Ports,” *Abu Dhabi Digital Government*, [https://www.abudhabi.ae/portal/public/en/departments/adports](https://www.abudhabi.ae/portal/public/en/departments/adports;#ADPC%20to%20Manage%20and%20Operate%20Zayed%20Port%20from%202014); “ADPC to Manage and Operate Zayed Port from 2014.”

⁴⁴ “The United Arab Emirates (UAE): Issues for U.S. Policy,” *Congressional Research Service Report*, May 3, 2019, <https://fas.org/sgp/crs/mideast/RS21852.pdf>, pg. 19.

⁴⁵ Asian Infrastructure Investment Bank, *Duqm Port Commercial Terminal and Operational Zone Development Project*.

⁴⁶ Ibid.

⁴⁷ “Oman-China Deal for \$10-bn Industrial City,” *Oman Daily Observer*, May 23, 2016; A.E. James, “Chinese Firms Commit \$3.1 Billion Investment in Duqm Free Zone,” *Times of Oman*, April 22, 2017, [http://timesofoman.com/article/107373/Oman/Chinese-firms-commit-\\$3.1-billion-investment-in-Duqm-free-zone](http://timesofoman.com/article/107373/Oman/Chinese-firms-commit-$3.1-billion-investment-in-Duqm-free-zone).

⁴⁸ “Overview,” Port of Duqm, <https://www.portduqm.com/About/Port-of-Duqm.html>.

⁴⁹ Maria Abi-Habib, “How China Got Sri Lanka to Cough Up a Port.”

⁵⁰ Ibid.

⁵¹ See for example Piraeus Port Authority SA, “Piraeus Port Authority SA Assigns to Huawei Technologies SA the Project of Modernizing Its Network Infrastructure,” *Hellenic Shipping News*, January 26, 2018, <https://www.hellenicshippingnews.com/piraeus-port-authority-sa-assigns-to-huawei-technologies-sa-the-project-of-modernizing-its-network-infrastructure/>; Christopher R. O’Dea, “Asia Rising: Ships of State?” *Naval War College Review*: Vol. 72: No. 1, Article 5, p. 83.

⁵² Lloyd’s Maritime Intelligence, *One Hundred Ports 2018*, p. 12.

⁵³ I am not aware, however, of Chinese analysts discussing this as a possible tactic for use in the context escalation and crisis control more. See for example Alison A. Kaufman and Daniel M. Hartnett, *Managing Conflict: Examining Recent PLA Writings on Escalation Control*, (Arlington: VA, Center for Naval Analyses), February 2016, DRM-2015-U-009963-Final3.

⁵⁴ APM Terminals, “About Us: Port Said,” *APM Terminals*, <http://www.apmterminals.com/en/europe/port-said/about-us>.

⁵⁵ “To Authorize Appropriations for Fiscal Year 2020 for Military Activities of the Department of Defense, for Military Construction, and For Defense Activities of the Department of Energy, to Prescribe Military Personnel Strengths for Such Fiscal Year, and for Other Purposes,” S1790, 116 Cong., 1st Sess (2019), pp. 607.

⁵⁶ Quoted in Michael Wilner, “U.S. Navy May Stop Docking in Haifa After Chinese Take Over Port,” *Jerusalem Post*, December 15, 2018, <https://www.jpost.com/Israel-News/US-Navy-may-stop-docking-in-Haifa-after-Chinese-take-over-port-574414>.