Chapter 3

Digital Security in the Indo-Pacific:
Assessing the Impact of China's Digital Silk Road

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ABSTRACT

This chapter offers a comprehensive analysis of the Belt and Road Initiative (BRI) and its digital component, the Digital Silk Road (DSR) in the Indo-Pacific region, with a particular emphasis on India's strategic response and its implications for regional dynamics. It explores the implications of the DSR for the balance of power in the Indo-Pacific and highlights the challenges and concerns associated with the DSR, such as cybersecurity, digital sovereignty, and weaponization of technology. The conclusion offers insights into the future of regional cooperation, emphasizing the need for a balanced approach that suits the interests of all Indo-Pacific nations while addressing the balance between risks and opportunities presented by the DSR.

BELT AND ROAD INITIATIVE: AN OVERVIEW

Belt and Road Initiative (BRI) is a strategy launched in 2013 by the People's Republic of China that primarily aims to establish connections between Asia, Africa, and Europe through land and maritime networks. However, its scope extends beyond these regions all the way to Latin America and Australia, as a result of various projects that enhance trade and stimulate economic growth (European Bank for Reconstruction

and Development, n.d.). Originally named 'One Belt One Road', the BRI consists of two key components: on one side there is the Silk Road Economic Belt, a land route linking China with Southeast Asia, South Asia, Central Asia, Russia, and Europe, and on the other side is the 21st Century Maritime Silk Road, a sea route connecting China's coastal areas with Southeast and South Asia, the South Pacific, the Middle East, and Eastern Africa, extending all the way to Europe. This dual-structure approach forms the core of the BRI, symbolizing its comprehensive network of land and maritime connections. The BRI is named after the historic Silk Road, a network of trade routes established during the Han Dynasty 2000 years ago, which connected China to the Mediterranean via Eurasia. China's President Xi Jinping coined this name, inspired by this ancient trade route to signify the initiative's goal of fostering trade, economic cooperation, and cultural exchanges along modern-day equivalents of these routes (Ibid).

Since its establishment in 2013 and as of December 2023, a total of 151 nations had formalized their participation in the Belt and Road Initiative by signing Memoranda of Understanding (MoU) with China within this ten-year period. However, because of some ambiguities associated with these agreements, the actual number of member countries is estimated to be between 146 and 151, including China itself (Nedopil, 2023). This represents approximately two-thirds of the world's population and 40% percent of global GDP (McBride, Berman, and Chatzky, 2023). The countries that officially participate in BRI are spread across five continents, but geographic diversity is not the only trait of BRI that expresses its heterogeneity. For example, there is almost a perfect balance in distribution of BRI projects across countries that span from high income to low income. According to data, 33 countries that participate in the Initiative belong to a group of high income countries, while 31 belong to low income group. In between, there are 44 upper middle income countries and 42 lower middle income countries (Nedopil, 2023). This could be interpreted as the evidence of the ultimate goal of the Initiative to build a global community which involves countries in different world regions, with different cultures and at different development stages, transcending differences in ideologies and social systems (Xinhua Silk Road, 2023). The goal was formulated by China's State Council Information office in the white paper with a title "The Belt and Road Initiative: A Key Pillar of the Global Community of Shared Future" which presents the Initiative as a public good and cooperation platform. However, critical voices raise the question of hidden intentions behind this "too good to be true" project of Chinese government. Scholars generally agree that the launch of the BRI was motivated by a combination of international and domestic factors. On the international front, it was seen as a response to the Obama administration's East Asia Strategy, famously known as the "Pivot to Asia", which presented a significant shift in the foreign policy of the United States since 2010s from the Middle Eastern and European sphere toward

the Asia-Pacific region, especially to those countries closely connected to China, whether through economic ties, geographical proximity, or political influence, with the goal of countering China's rise as a rival superpower (Silove, 2016, 44–46). In response to what Chinese critics viewed as an aggressive foreign policy aimed at slowing down Chinese power, Xi Jinping initiated a pivot to the west, establishing connections with countries not aligned with the US (Ma, 2022, p. 93). On the domestic front, the BRI has been driven by pressing economic challenges, such as regional development disparities, dealing with issues of industrial overcapacity, and promoting the interests of China's financial sector (Shen, 2018, p. 2684).

Whether conceived as a defensive measure against foreign constraints or as a solution to domestic challenges, what concerns some critics from the global West is that the BRI serves a broader and more significant purpose: the realization of a longstanding aspiration of the Chinese Communist Party (CCP) to become a leader of the developing world and a potential model for economic development (Ma, 2022, p. 93). What is intensifying these concerns even more is the growing importance of the digital aspect of the BRI, popularly referred to as the Digital Silk Road (DSR).

DIGITAL COMPONENT OF THE BELT AND ROAD INITIATIVE: THE DIGITAL SILK ROAD

The earliest mentioning of the DSR can be found in the document titled "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road", issued by the National Development and Reform Commission (NDRC) in March 2015. In this document, one of the designated cooperation priorities is the establishment of the 'Information Silk Road' and constructing optical cables and other communications trunk line networks across borders (National Development and Reform Commission, Ministry of Foreign Affairs, & Ministry of Commerce of the People's Republic of China, 2015). Indeed, the initial focus of the DSR was on physical ICT infrastructure projects, but this narrow vision saw its expansion in Xi Jinping's keynote speech on the first Belt and Road Forum (BRF) held in 2017, when he emphasized cooperation in cutting-edge areas such as the digital economy, artificial intelligence, nanotechnology, quantum computing, big data, cloud computing, and smart cities, with the goal of transforming it into a 21st century digital silk road (XinhuaNet, 2017).

The exact scope of the DSR cannot be precisely defined since there is no comprehensive list of projects included in it, and there is also no consensus on which technologies and projects should fall under its umbrella. China has been investing in telecommunication technology and electronics since early 1980s (Willet, 2022, 25) and expanding its digital technologies globally since the early 2000s, even before

the term came into existence, much like Chinese companies' involvement in the construction of railways, roads, airports and harbors abroad started long before the official launch of the BRI in 2013. Nonetheless, despite China's prior investments in digital technologies overseas independent of any official initiatives, the introduction of the DSR metaphor in 2015 and its formal integration into BRI documentation underscored the Chinese government's commitment to the commercial prosperity of China's technology sector, especially on the global stage (Gordon & Nouwens, 2022, p. 158). Today, many companies use the DSR as a label to secure government funding and promote their projects in the global market. An additional difficulty in defining the range of the DSR is the fact that most overseas ICT projects undertaken by Chinese companies are not promoted or categorized as part of the DSR (Willet, 2022, p. 25).

Current efforts to track the expansion of the DSR projects show that Chinese government has signed digital cooperation and infrastructure development agreements with about 40 countries, which accounts for approximately a quarter of all BRI participant nations. Among these 40 countries, 24 are located in the Indo-Pacific region, covering 60% of the world's developing countries (Patil & Gupta, 2024, p. 33). The geographical reach of the DSR surpasses that of the BRI, but this is just one of several distinctions between the two, including variations in stakeholders and financing structures. For example, in contrast to the BRI, most DSR activities are initiated by private Chinese corporations and executed with minimal involvement from the Chinese government, where state-linked enterprises are mostly focused on providing physical telecommunications-network infrastructure (Gordon & Nouwens, 2022, p. 158). Additionally, the resistance to the BRI projects in recipient countries has had a minimal impact on the realization of DSR projects, and at the same time the success of the DSR projects is not a guarantee that issues related to BRI projects will be solved (Ibid). This shows that, even though the DSR is frequently characterized in official documents and speeches as an integral part of the BRI, it has grown into a global initiative in its own capacity and should not be viewed merely as an accessory to the BRI.

There are five main aspects of the DSR in China's policy discourse. These aspects underscore the key motivations behind the Chinese government's engagement of domestic digital enterprises in the BRI. They include addressing industrial overcapacity, helping other Chinese firms to expand globally, supporting the internationalization of Chinese national currency (RMB), establishing a transnational network infrastructure centered around China, and promoting an Internet-enabled form of inclusive globalization (Shen, 2018, p. 2694). Western leaders are deeply concerned about these dimensions of the DSR because they indicate the Chinese government's efforts to challenge the U.S.-centric digital order both globally and in Asia, shifting it towards a more Sino-centric paradigm, and thus demonstrating that

the DSR represents not only an infrastructure project, but also the CCP's pursuit of tech dominance and greater autonomy in the worldwide digital landscape (The Diplomat, 2021). In that sense, it could be said that through the DSR, China is directly challenging Western technological supremacy.

CHALLENGES AND CONCERNS: CRITIQUES OF THE DIGITAL SILK ROAD

One of the major concerns associated with the DSR is the perception that it serves as a masterplan orchestrated by Beijing to propagate an IT-backed authoritarianism in recipient countries along the BRI. What raised these concerns are multiple examples of the misuse of technology provided by Chinese companies, especially surveillance enhanced with artificial intelligence and face recognition for the purposes of monitoring citizens by their governments (Feldstein, 2020). These advanced technologies could be used for espionage and fighting against opposition groups and public unrest, which brings risks for democracy, personal freedoms and rights. In addition, the DSR could enable ruling parties in recipient countries to promote their agendas through filtering and moderating content on internet. What is even more concerning is not only the potential for national governments to utilize these advanced technologies for their own benefit, but also the risk that China, via the DSR, could impose its interests and influence the politics of other states by using data breaches to put pressure on political elites through blackmail (Council on Foreign Relations, n.d.). By increasing other countries' dependency on Chinese infrastructure and having access to large local data pools through the DSR, skeptics are concerned that Beijing could theoretically secure a valuable instrument for directing domestic political decisions (The Diplomat, 2021).

Despite these concerns, proponents of the DSR argue that the deployment of such technologies is primarily demand-driven rather than being imposed top-down by the Chinese government (Triolo & Greene, 2020). This demand can arise from various needs, such as improving public services, achieving economic development or enhancing security. According to advocates for the DSR, whether these technologies are used for the common welfare of for particular interests of political parties largely depends on the prior political landscape of each participating country in the initiative. For instance, it is more likely that technology misuse may occur in countries already grappling with authoritarian regimes, whereas more democratic nations may have established strategies and cybersecurity policies to prevent such misuse. Therefore, DSR supporters argue that the technologies acquired through DSR projects are not inherently a tool for imposing digital dictatorship and repression, but rather that their utilization depends on the specific political context within each participating country.

Another consequential risk associated with the DSR is the potential for splintering the internet, commonly referred to as 'splinternet', which is driven by the growing intense competition between the United States and China in the digital technology sphere. This rivalry carries the potential to divide the global internet into two opposing blocs, where each would have its own unique cyberspace ecosystem. The fight for digital dominance between the US and China would force other countries to choose between these two digital superpower blocs, leading to further 'bifurcation' of the internet and other long-term political and economic consequences, such as the fragmentation of global digital norms, the potential for trade disruptions, increased geopolitical tensions and deepening internet-governance divide characterized by competing national technical standards, as well as hardware and software components (Willet, 2022, p. 34).

Ultimately, what raises the most concerns among skeptics of the DSR is the idea that, alongside the BRI, it could be used as a Trojan horse for China's military expansion and its aspiration to become dominant force in the region and Asia as a whole (McBride, Berman, and Chatzky, 2023). However, according to some experts, thanks to the DSR, China will no longer need traditional military power in order to impose itself as a supreme leader of the region. For example, Hillman notes that network dominance allows China to exercise its power far from its borders, just as great powers did throughout history. However, the difference from former colonial empires is that China can achieve its goals in much more subtle way with almost no military footprint. In that sense Hillman warns that the DSR could pave the path toward a new kind of empire (Hillman, 2021, p. 24). This raises concerns and fears of potential Chinese digital neo-imperialism (Malcomson, 2022, p. 150) and neocolonialism of developing countries that are desperate for affordable technologies in order to level up their development.

BENEFITS: PUSH AND PULL FACTORS OF THE DIGITAL SILK ROAD'S DEVELOPMENT

Despite concerns about its abovementioned potential risks, the Digital Silk Road (DSR) continues to grow, with its projects being implemented worldwide. Explanations which interpret this expansion merely as a part of China's proactive global strategy for its own benefits lack depth and fail to consider the complexities of the situation. The attractiveness of the DSR to developing countries is significant, especially for those lacking advanced digital infrastructure. As previously mentioned, many of these countries struggle to engage in the global digital economy due to their inadequate digital frameworks. DSR effectively addresses these challenges by upgrading and enhancing digital infrastructure in developing countries, thus bridging the digital

divide and facilitating their fuller participation in global digital transformation. In this context, the DSR acts as a "digital bridge" that connects China and other digitally advanced countries with developing nations (Cheng, 2022, p. 276). This enables developing countries to engage in new and emerging form of globalization under the influence of the Fourth Industrial Revolution and integrate more effectively into the global economy.

The DSR's role in facilitating digital equity extends beyond merely bridging developmental gaps between high-income and lower-income countries; it also serves as a mechanism to overcome various digital barriers within countries. The DSR holds potential to address intra-national inequalities by promoting technological advancements in less developed regions, especially by targeting the gap between rural and urban areas. One reason why Chinese telecom companies have succeeded in African countries is their provision of broadband access in sparsely populated, mountainous and other hard-to-reach areas, where Western companies have either shown no interest or have been unable to provide services at a locally acceptable price. Chinese firms like Huawei and ZTE have significantly contributed to the telecommunications boom in Africa, thanks to their extensive investments in infrastructure and affordable equipment. A key factor in their competitive advantage was the state-subsidized funding they received as part of the Belt and Road Initiative. This financial support enabled them to maintain low production costs and offer cost-effective solutions, advantages that private, non-Chinese competitors often couldn't match. As a result, Chinese companies successfully gained market share from major companies such as Ericsson, Alcatel, Nokia, and Siemens (Agbebi, 2022).

Besides addressing gaps between countries, regions, and cities, The Digital Silk Road has the capacity to mitigate the digital divide that affects various segments within populations, especially based on age and economic disparities in access to digital services. Not every group has equal access to digital technologies; particularly, older adults and those with lower incomes face significant barriers. In the context of today's information society, as discussed by Castells, those who lack digital connectivity essentially become invisible (Castells, 2010). Thus, budget-friendly digital hardware and software provided by Chinese companies offer essential opportunities for these less privileged groups to maintain connectivity and presence in the digital realm. However, beyond the mere transfer of technology, Chinese companies also provide crucial, and perhaps even more significant, transfer of knowledge. By offering training programs, they equip individuals in developing countries with skills necessary for participating in digital economy, therefore filling another digital gap, and that is the lack of hi-tech talents. For instance, Huawei has become the preferred cybersecurity provider in Indonesia by delivering extensive cybersecurity training programs throughout the nation, targeting diverse groups from senior government officials to students in remote areas. The Indonesian government,

various corporations, and the general populace have embraced Huawei and ZTE as key allies in their quest to develop both the infrastructure and the human capital needed to thrive in the digital economy of the twenty-first century (Priyandita, van der Kley, & Herscovitch, 2022). Therefore, contrary to criticisms that China is solely focused on building infrastructure, this serves as an example of the DSR's potential for capacity building, specifically in enhancing human capital. Certainly, the underlying interests behind these capacity-building initiatives are strategic. The aim is that by familiarizing users with Chinese technology and standards through education and training, there is a hope that these students will eventually become consumers of Chinese technology. Furthermore, by exposing them early to Chinese standards of digital governance, they may be more likely to accept and adopt these standards as they enter professional fields. This strategy not only cultivates a market for Chinese technology but also subtly promotes its governance models as global norms.

To encapsulate the discussion thus far, proponents of the Digital Silk Road Initiative highlight its effectiveness in bridging significant digital divides both within and across countries. This success in filling developmental gaps and meeting the growing demand for digital infrastructure and know-how is seen as a key pull factor elevating the DSR's status not just in Indo-Pacific region, but globally (Zheng, 2024). Beyond merely meeting existing demand, the DSR also stimulates new demand, thus acting as what Kuik (2021) termed an "irresistible inducement". Even though some critics argue that by providing technology and knowledge China is also exporting "digital authoritarianism", other authors, as previously mentioned, suggest that implementation of these technologies is not shaped by any Chinese grand strategy, but by local political environments of the receiving countries (Zheng, 2024). Therefore, according to more optimistic viewpoints, the DSR presents a pioneer in the digital age that turns digital divides into "digital dividends" (Xiao, 2023) and promotes digital inclusivity and connectivity on a global scale.

While the DSR does bring benefits to developing countries, it's important to recognize that this is not a one-way street. China also has a vested interest in expanding it, driven by the need to address its domestic industrial overcapacity. This serves as a significant push factor behind the expansion and success of the DSR (Zheng, 2024). The previously described pull factors, combined with this push factor, exemplify a win-win strategy: both sides derive benefits and address their respective challenges, while simultaneously strengthening mutual connections.

Despite the common perception that the Digital Silk Road primarily benefits developing countries, the pandemic has revealed the enormous potential and wide-ranging benefits it offers to high-income countries as well. The DSR played a crucial role in maintaining global trade through e-commerce services, demonstrating its relevance and effectiveness beyond traditional economic boundaries. Moreover, the Belt and Road Initiative and its established routes played a pivotal role in efficiently

providing medical kits and personnel to allied nations. Leveraging 5G networks, China's digital technology not only contributed to virus prevention and control but also facilitated the broader economic recovery process (Wang, Su, Zhang & Li, 2021, as cited in Cheng, 2022). Consequently, the digital economy emerged as the primary engine of economic recovery in the post-pandemic period. Furthermore, the DSR facilitated the transition of education to online platforms and enabled the implementation of telemedicine services, further illustrating its significance in addressing contemporary challenges.

To conclude, Cheng's reference to the Chinese idiom "adding wings to a tiger", which means to add more capacity to an already strong power, effectively illustrates the pivotal role of the Digital Silk Road within the Belt and Road Initiative: the DSR will not only benefit BRI countries, but will also be a leader in the high-tech-led digital transformation and globalization (Cheng, 2022, p. 286). This significance is particularly notable in the Indo-Pacific region where rapid digital transformation is urgently needed, especially in crucial areas such as e-government services, cybersecurity measures, and e-commerce platforms (Runde, Savoy, and Murphy, 2020).

THE STRATEGIC IMPORTANCE OF THE INDO-PACIFIC IN THE DIGITAL SILK ROAD

All the concerns listed above hold particular significance for countries positioned in Indo-Pacific region for various reasons, taking into consideration densely intertwined political, economic, cultural, and historic ties that define the relationships among these countries. Initially, a notable portion, approximately 16 percent of Chinese technology projects carried out overseas were directed towards addressing the technological needs of sub-Saharan and North African regions (Nouwens, 2022, p. 58). These areas were high point of interest for Chinese investments because of significant demand for advanced technology solutions due to their relatively limited existing infrastructure. However, roughly 40 percent of these projects were initiated prior to the official launch of the DSR in 2015. Similar percentages apply to Latin America and Europe. In contrast, 76 percent of projects in the Middle East and Southeast Asia were initiated after the DSR's inception (Ibid). This strategic transition views these regions as a lucrative opportunity for Chinese tech companies and highly promising growth market for the future development of the DSR. The area of Indo-Pacific is home to 65 percent of the global population, generates 63 percent of the global GDP, and carries half of the global trade (Patil & Gupta, 2024, p. 9). The region is emerging as the new arena of tech competition. As some experts estimate, no other region in the world is likely to see its share of global power grow

as much as the Indo-Pacific region in the decades ahead (Silove, 2016, p. 2). It is projected that this region will be the largest contributor to global growth over the next 30 years (The White House, 2022). Therefore, it is evident to scholars and experts why establishing and securing strong digital presence in the Indo-Pacific presents a top priority for Chinese foreign policy (Patil & Gupta, 2024, p. 9).

However, the economic benefits of Chinese investments are not unilateral because Indo-Pacific countries, as developing nations which require cost-effective, high-quality technology for expanding wireless phone networks and broadband internet coverage, also reap significant advantages from these engagements. According to the Asian Development Bank's assessment in 2017, developing Asian countries would require an estimated $26 trillion in infrastructure investment from 2017 to 2030 (Nouwens, 2023, p. 106), and Chinese DSR projects can partially fill in that gap. In addition to direct economic investments, Chinese companies offer additional benefits to these developing nations by setting up training centers and R&D initiatives, which further foster collaboration between local scientists and engineers in these countries with their colleagues from China and in that way contribute to acceleration of knowledge and experience in emerging technologies such as AI, robotics, smart cities, clean energy, and more (Council on Foreign Relations, n.d.).

It is important to remember that, in a historical context, many connecting initiatives and projects created for the purpose of sharing knowledge and inventions with those who are in need, similarly portrayed themselves during the colonial era as part of a "noble" mission to civilize the East. Much like Western empires once spread their influence and power wrapped in an Enlightenment narrative of saving "primitive" nations through altruistic sharing of their own accomplishments and thus selflessly shortening the path to progress for those nations, many critics argue that today, the Chinese government is doing the same through the BRI and DSR projects. According to them, China packages its ambitions to become a global superpower within a narrative of inclusive globalization through providing opportunities for economic and technological rise to developing countries in the Global South. The fact that, back in the past, colonial empires contributed to the modernization of the developing world does not mean that their actions were motivated by needs of that developing world but rather by their own commercial and imperial interests for political supremacy and hegemony. Likewise, in the modern case of China, critical voices raise concerns that even though it may elevate the development of nations participating in BRI and DSR projects, China's primary motivation isn't the welfare of those nations but rather its own interests to dominate the non-Western world and provoke Western powers (Raja Mohan & Chan, 2020, p. 34).

Of all Indo-Pacific countries, Pakistan stands out as the primary recipient of the BRI investments, with over half of the region's official BRI projects (Nouwens, 2023, p. 96). Smaller countries such as Maldives, or Nepal, which has hosted almost

a quarter of these projects, strategically use Chinese investments to balance against India's influence and hedge between China and India, depending on the governments in power at different times. Similarly, Sri Lanka viewed Chinese BRI investments as not only an economic opportunity but also as a tool to navigate its fluctuating relationship with India. However, the influx of Chinese capital into Indo-Pacific region hasn't been a guarantee that Beijing's strategic objectives will always go as planned. In fact, China's investment activities in the region have partly driven India to strengthen its ties with its Western allies, particularly through the engagement in the Quad Alliance with the US, Australia, and Japan (Ibid).

ADDRESSING DIGITAL SILK ROAD CHALLENGES IN THE INDO-PACIFIC

BRI projects have encountered a series of security, economic, and political challenges. The pace of new BRI projects in the region has slowed mostly because of deteriorating economic situations in Maldives, Sri Lanka, and Pakistan.

Some ongoing projects are situated in geographically challenging locations, such as the Himalayan interior of Pakistan, where construction of railway infrastructure and pipelines for China-Pakistan Economic Corridor (CPEC) is underway. The CPEC represents the flagship project of the BRI with the value of $46 billion and was launched in 2015 primarily as a network of roads, railways, and energy projects in order to connect the Pakistani ports of Gwadar and Karachi to China's Xinjiang province, which would reduce the time and cost of transporting goods and natural gas to China by circumventing the unstable Strait of Malacca and the South China Sea (Kabra, 2021). Chinese president Xi's visit to Pakistan in 2015 resulted in the signing of over 30 BRI-related agreements which were not only related to energy and high-speed railways, but also to digital networks, such as the establishment of a digital TV system by ZTE and installation of a fiber-optic cable in order to improve e-commerce across borders and develop financing services (Shen, 2018, p. 2687). This shows that, alongside physical infrastructure, China made a strategic commitment to add a digital component to the corridor. This decision marked the inception of the Digital Silk Road, which aligned with the geostrategic objectives of both nations. This fiber-optic line connects the city of Rawalpindi, the headquarters of the Pakistani military, with Pakistani port cities on one side, and with China's Xinjiang Uyghur Autonomous Region on the other side, establishing a connection and strategic cooperation between China and Pakistani port cities (Patil & Gupta, 2024, p. 11). This digital infrastructure links up with a submarine cable named PEACE (Pakistan & East Africa Connecting Europe) which starts in Pakistan and ends in France, thus connecting Asia, Africa, and Europe. The cable is laid down in the

Arabian Sea, Red Sea, and Mediterranean Sea, providing connectivity to countries participating in the BRI and extending towards Europe[1]. PEACE is privately owned and invested by a subsidiary of China-based HENGTONG Group, and supplied by HMN Technologies, formerly Huawei Marine (Submarine Networks, n.d.). Analysts perceive the move of linking PEACE cable to fiber-optic cable along CPEC corridor as a calculated strategy to bypass international telecommunication consortiums dominantly influenced by Western and Indian companies, thus reducing Pakistani internet traffic going through India (Haq, 2021). From the very beginning the construction of the CPEC was opposed by India because of plans for Corridor to go through, from Indian perspective, Pakistan-occupied Kashmir (The Times of India, 2024). Namely, the corridor, as we mentioned, links western Chinese province of Xinjiang with port at Gwadar through Pakistan. The only way to get from western China to the heart of Pakistan is through Karakoram Highway, a high-altitude transport corridor which was built in 1979 by joint efforts of China and Pakistan (Ayres, 2017), long before the Belt and Road Initiative was initiated. The problem is that this highway goes through the territory now called Gilgit-Baltistan which was originally part of the former princely state of Jammu and Kashmir, of which both India and Pakistan claim the entirety (Ibid).

However, the dispute over this territory is not the only complication that sabotages the completion of the China-Pakistan Economic Corridor. The corridor crosses other regions in Pakistan that have experienced significant security concerns, which include frequent terrorist attacks by extremist groups in cities like Quetta and Karachi, which have targeted infrastructure projects and Chinese workers (Nouwens, 2023, p. 97). Just two weeks after China and Pakistan in July 2023 celebrated the 10th anniversary of the BRI as well as the 10th anniversary of the launch of the CPEC, the Balochistan Liberation Army (BLA) carried out an attack on military convoy with Chinese engineers in Gwadar and gave an ultimatum of 90 days to quit all projects related to BRI in Balochistan and threatened China to get prepared for more attacks from BLA militants if it doesn't withdraw the CPEC program (Fazl-e-Haider, 2023). Security experts attempt to explain the motivation of attackers to conduct these violent acts transparently directed towards Chinese nationals, and one of the explanations is that BLA views China as Islamabad's partner in alleged exploitation and occupation of the province (Ibid). On the other hand, Islamabad sees Baloch separatist groups as India's proxies for sabotaging the CPEC (Ibid). However, diving deeper into the detailed examination of this complex and sensitive issue falls outside the scope of our research. The reason for mentioning this situation here is, first of all, to emphasize the fact that, even though we often assume that cyber reality is only virtual and is happening somewhere above us in abstract and ethereal space, it is always heavily dependent upon physical systems and tangible objects, which all fall within physical and legal boundaries of sovereign states (Hillman, 2021, p. 10).

It is the other way around too, since many non-digital infrastructure projects such as airports, oil pipelines and high-speed railways rely on ICT products. Therefore, no matter how much China wants to pursue BRI and DSR as grand global engineering projects, this infrastructure is not built in vacuum, and it is sensitive to complex political and economic contexts of specific regions. The Indo-Pacific region emerges as a critical area for the realization of the BRI's full objectives. Yet, the case of the China-Pakistan Economic Corridor illustrates that, notwithstanding concerns about China's potential hegemony over the region, each nation along the route holds a significant degree of power and influence over the project's direction and outcomes. On that account, diplomatic relations between India and Pakistan could be decisive for the future of realization of the BRI and DSR projects in Indo-Pacific region.

INDIA'S OPPOSITION TO THE DIGITAL SILK ROAD IN INDO-PACIFIC

The China-Pakistan Economic Corridor case exemplifies India's primary concern and the main reason behind its formal resistance to joining the Belt and Road Initiative. In response to questions about India's absence at first Belt and Road Forum (BRF) in 2017, the Ministry of External Affairs of India stated that "No country can accept a project that ignores its core concerns on sovereignty and territorial integrity" (Ayres, 2017).

However, India's animosity towards the mega-scale Chinese project extends beyond concerns for its national borders. India tries to convince other countries from Indo-Pacific region that both BRI and DSR are Chinese plans to dominate Asia through creating unsustainable debt burdens for recipient countries of the Chinese funds in order to seize control (McBride, Berman, and Chatzky, 2023). According to Indian geostrategist Brahma Chellaney, China has a sophisticated strategy of engaging economically vulnerable nations in a vicious cycle of extensive borrowing for infrastructure development. He argues that the BRI projects, frequently too ambitious and financially unrealistic for the beneficiary countries, often do not offer benefits that match the scale of their investment. As a proof of this statement he shares an example of Sri Lanka's Mattala Rajapaksa International Airport, which carries a reputation of the world's emptiest airport due to its low flight traffic in spite of its large size, resulting in Sri Lankan government's struggle to pay back the loans because the airport is not generating enough revenue. Even though lending loans for infrastructure is not inherently problematic, Chellaney points out that China-supported projects are not inspired by the vision to boost local economies, but rather motivated by providing an access to resources or expanding markets for Chinese exports. What is more, China often employs its own labor force for these

projects, thereby limiting local employment opportunities. In this way, China is enslaving these nations in a "debt trap", increasing their vulnerability to Chinese geopolitical interests (Chellaney, 2017).

Nevertheless, some political analysts argue that the term "debt trap diplomacy" (DTD) is hyped rhetoric employed by Indian and Western politicians to undermine the success of the BRI projects (Global Times, 2023). Authors Lee Jones and Shahar Hameiri challenge the DTD thesis and explain that the BRI presents a more complex and nuanced reality. Their findings indicate that controversial BRI projects were actually often initiated by the corrupt governments of recipient countries, and that perceived debt issues primarily stemmed from the mismanagement by local elites (Jones & Hameiri, 2020).

What the previous elaboration shows us is that beneath the DBT theory lies India's fear of Chinese dominance in the Indo-Pacific region and the risk of losing its own influence among neighboring countries. But in addition to the DBT strategy, India points out another, even more subtle approach through which China solidifies its influence in the region – by imposing its own technological standards through the promotion of DSR projects. This strategy is part of a wider conflict between the US and China, both fighting for supremacy in the realm of technology. Following restrictions imposed in Western countries, notably the U.S. ban on Huawei in 2019, Beijing redirected its focus toward emerging economies in the Indo-Pacific. These nations adopt Chinese technology due to its financial affordability and, at times, superior quality compared to Western alternatives. However, despite the potential for the DSR to enhance digital connectivity in developing Indo-Pacific countries, it also carries the risk that Beijing may utilize it as a tool to impose its geopolitical goals. Therefore, India asserts that China forces its "techno-nationalism" and uses the DSR projects to weaponize technology, thus pushing its authoritarian vision for technology expansion in the Indo-Pacific region (Patil & Gupta, 2024, 18-21).

The border clashes between China and India that happened in the Himalayas during 2020 and 2021 demonstrate another way in which technology can be weaponized in geopolitical conflicts. After clashes that arose from territorial disputes in the Sino-Indian border regions, India responded with a ban on Chinese apps and products. Even though it is not an official BRI partner, India is a major market for DSR investments, especially from companies such as Alibaba, Tencent and ByteDance. The decision of the Indian government to prohibit Chinese apps shows that unconventional methods can counter military strength, affecting the opponent's economy and political goals without using the army, even in the aftermath of armed conflict (Ma, 2022, p. 103). In today's digital world, excluding IT companies from important markets such as India highlights the role of digital technologies in geopolitical conflicts and emphasizes the significance of digital diplomacy, especially in the Indo-Pacific region where global powers have competing interests.

Even before the aforementioned territorial disputes, India imposed bans on some Chinese IT products and apps, such as the extremely popular TikTok app which is unavailable to download for Indian users since 2019 (Times of India-Online, 2019). India blocked the use of Chinese telecom equipment for the first time in 2010 due to suspicion of spying (Malcomson, 2022, p. 151). For the same reason the deployment of CCTV cameras sparked cybersecurity and surveillance fears, not only in India, but across the globe. Hikvision and Dahua, the two largest CCTV companies in the world, are Chinese, and have installed over 6.3 million cameras outside the country, of which 1,937,530 in the Indo-Pacific region (Patil & Gupta, 2024, p. 16). The fears arise from special software features these cameras are equipped with, such as face recognition and even skin-color analytics, which could pose a threat to personal freedoms and security of citizens. Some reports warn that these cameras are capable of video or audio recording and downloading this data to Chinese servers (Ibid). Despite the increasing awareness of the potential data exploitation and other cybersecurity threats associated with Chinese digital technologies, most of the countries in Indo-Pacific region prefer Chinese devices because that's often the most affordable choice available to them.

This is just the tip of the iceberg that illustrates an ongoing tension between the potential for economic prosperity and societal progress on one side and risks of becoming a vassal state on the other side. Each country in Indo-Pacific region bears responsibility to carefully assess the benefits and risks of embracing DSR projects. It's evident that none of these developing nations wish to merely exchange one superpower's dominance for another. While India positions itself as a regional safeguard against Chinese hegemony, it must be mindful to avoid assuming a dominant role and risking becoming a hegemon itself. India openly aspires to become a digital powerhouse and has made significant investments in its domestic technology sector since the late 1990s.

In the same year the DSR was initiated, the Indian government launched its flagship program, "Digital India", with the ambitious goal of reshaping India into a digitally empowered society and knowledge economy (Common Services Centres, n.d.). However, India still lacks the capacity to pursue more impactful influence over its neighboring countries in competition with Chinese digital projects, primarily because India is heavily reliant on Chinese technology as well. Aware that this dependency not only carries economic implications but also security risks, India is actively seeking alternative partners to reduce its reliance on Chinese ICT infrastructure and reach the advantage in the region.

One of these alternatives is the United States. India is a participant in South Asia Regional Digital Initiative (SARDI), which falls under the Digital Connectivity and Cybersecurity Partnership (DCCP). The DCCP is a U.S. government initiative launched in 2018 with the aim of enhancing secure internet access in targeted

emerging markets, promoting the adoption of cybersecurity and data privacy best practices in selected countries, and boosting the export of U.S. ICT goods and services (U.S. Agency for International Development, n.d.). Through its involvement in this program, alongside Nepal, Bangladesh, Sri Lanka, and the Maldives, India is committed to advancing cybersecurity and digital policies that foster free digital economies in South Asia (USAID, 2023). It could be said that this initiative is a calculated effort to challenge and diminish China's prevailing influence in the region by actively shaping digital policies that diverge from China's vision, and instead align with the strategic interests of the United States. This could lead to even fiercer competition in the digital sphere with implications for economic, political, and security dynamics in the Indo-Pacific region.

Furthermore, in 2022, American President Biden launched the Indo-Pacific Economic Framework for Prosperity (IPEF) in collaboration with the following partners: Australia, Brunei, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Vietnam. Through establishing four key pillars (trade, supply chains, clean energy, and tax and anti-corruption) in order to deepen American economic engagement in the region, the framework states that it will "pursue high-standard rules of the road in the digital economy, including standards on cross-border data flows and data localization" (The White House, 2022). Additionally, it addresses critical issues such as online privacy and discriminatory and unethical use of Artificial Intelligence (Ibid). Certainly, this strategy may be viewed as a clear reaction to the cybersecurity threats presented by Chinese technology. Yet, as it provides an alternative trajectory for Indo-Pacific nations, it raises the question of how much the region will lean toward Western digital hegemony.

CHARTING THE FUTURE: RECOMMENDATIONS FOR REGIONAL COOPERATION

In conclusion, the Indo-Pacific region finds itself at crossroads, where the Digital Silk Road projects and China's growing influence in the digital sphere have become central to its geopolitical landscape. As nations in the region grapple with the opportunities and threats presented by DSR projects, balancing short-term gains and long-term risks, they are actively seeking strategic partnerships to shape the future digital order. Among these alliances of significant interest for the future, the Quadrilateral Security Dialogue (the Quad), and the BRICS group stand out as most influential players. The Quad, consisting of Australia, India, Japan, and the United States, while not primarily a cybersecurity alliance, includes it alongside maritime and economic security, recognizing the growing digitalization of the economy and

the significance of submarine cables in data transfer. Facing China's expansionist goals in both maritime and cyberspace, the Quad could work on creating unified cyberspace governance framework in order to lead global cyber regulation and balance power in the face of new technologies (Ghosh & Das, 2021). Since China has trade interests with all the Quad countries and couldn't afford war with any of Quad members, it doesn't present a military threat. Therefore, Quad's focus is likely to be more on diplomatic and regulatory efforts in cyberspace rather than direct military confrontation.

President Xi Jinping's 2014 vision of a bipolar world with the U.S. and China as two dominant powers, and a unipolar Asia led by China, contrasts with India's view of a multipolar world and multipolar Asia, where India is one of the poles (Verma & Papa, 2021, p. 511). The BRICS platform, which includes both India and China, could indeed serve as a forum for mitigating tensions between these two nations, particularly regarding their visions for the Indo-Pacific region. A promising indication of potential collaboration is the proposed BRICS cable, designed to prevent the communications of member countries from being dominated by the Global North, while providing bandwidth throughout the Southern Hemisphere. However, the stalling of the BRICS cable can be attributed to differing views on how to counter a U.S.-dominated global order, even though they are united in the interest to challenge unipolar world order with the U.S. as its pole (Lee, 2016).

India holds a strategic position in influencing Digital Silk Road projects in Indo-Pacific, yet it must exercise this power wisely. Strong opposition to Chinese cooperation on ICT projects with countries in the region, or too close alignment with Western tech standards could disrupt the regional balance, negatively affecting smaller nations in the Indo-Pacific. These countries, striving to achieve socio-economic and technological progress while protecting their digital security and sovereignty, might become collateral damage in a larger geopolitical game. India's role should therefore be to promote a balanced and cooperative regional digital environment, fostering stability and growth not just for itself, but for all regional players.

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ENDNOTE

[1]   Initial 15,000 km long cable was later supplemented with an additional 6.500km one, extended eastward from Pakistan to Singapore (Submarine Networks, n.d.).