

# PERSPECTIVE

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## **OBOR’s Digital Connectivity Offers Both Benefits and Risks**

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### **EXECUTIVE SUMMARY**

- The Digital Silk Road component of China’s One Belt One Road (OBOR) initiative is little analyzed but, potentially, transformative.
- Chinese enterprises are building telecommunication infrastructure, providing network services and selling communication devices that will help realize the Digital Silk Road. In tandem with this, Chinese e-commerce companies are well positioned to expand across the OBOR region and lead the global e-commerce trade platform.
- Economically, Chinese overseas investment in digital infrastructure is addressing the large deficit found in several of the OBOR countries and opening up new e-commerce opportunities.
- Strategically, telecommunication cables built by Chinese firms could mean that host countries are potentially subjecting themselves to increased electronic surveillance by Beijing.
- With the rise of Chinese e-commerce giants like Alibaba and JD.com, the global e-commerce market is going to be a major arena for contest between the US and China.

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## INTRODUCTION

From its inception, the Chinese initiative of One Belt and One Road (OBOR), also known as Belt and Road Initiative (BRI), received immense attention on two aspects – the Silk Road Economic Belt, spreading across Central Asia and Europe, and the 21<sup>st</sup> Century Maritime Silk Road, running through Southeast Asia, Africa and Europe. There is a third aspect—the Digital Silk Road or Information Silk Road, which has received little attention. Yet this aspect can have significant consequences both in global economics and geopolitics.

This Perspective looks at the digital connectivity element of the OBOR initiative and discusses some of the planned and existing Chinese overseas investments in telecommunications and e-commerce sectors. These China-funded projects and businesses may offer economic benefits, but they also bind the receiving countries to a China-centric governance architecture.

## DIGITAL CONNECTIVITY EMBEDDED IN OBOR

Digital connectivity, covering sectors like telecommunication, internet technology infrastructure and e-commerce, was mentioned in the March 2015 White Paper that articulated the vision of OBOR. It called for construction of cross-border optical cables and expansion of communications networks to develop an ‘Information Silk Road’. It highlighted an increase in cross-border trade using e-commerce business models and raising trade through investment as priorities.<sup>1</sup>

The idea was reiterated during the China-EU digital cooperation forum in July 2015, when Lu Wei, then director of the Cyberspace Administration of China, mentioned that ‘we can build a digital silk road, a silk road in cyberspace’. Around the same time, Ren Xianliang, deputy minister of the Cyberspace Administration of China, encouraged internet-based businesses and media to actively participate in the OBOR initiative by building network infrastructure and developing a Digital Silk Road.<sup>2</sup>

The recently concluded Belt and Road Forum in May 2017 also included the aspect of digital connectivity in its joint communique. It promised to support ‘innovation action plans for e-commerce, digital economy, smart cities and science and technology parks’ under bilateral, triangular, regional and multilateral cooperation frameworks.<sup>3</sup>

But apart from these policy declarations, there was no mention of concrete projects or plans that will be subsequently undertaken to construct the Digital Silk Road. It seems that the

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<sup>1</sup> Vision and Action on Jointly Building Silk Road Economic Belt and 21<sup>st</sup> century Maritime Silk Road, 28 March 2015, National Development and Reform Commission (NDRC), People’s Republic of China

<sup>2</sup> Web companies asked to support ‘digital Silk Road’, Zhao Huanxin, The Telegraph, 27 July 2015

<sup>3</sup> Full text: Joint communique of leaders roundtable of Belt and Road forum, Xinhuanet, 15 May 2017

concept is a natural continuation of Beijing's 'going out' policy<sup>4</sup> and more particularly of the Chinese telecommunication companies. While this could fill the gap in building digital infrastructure of the countries along the BRI<sup>5</sup>, better linkages could in turn help Chinese e-commerce and other internet-based firms to gain access to new markets. In general, at this juncture, the idea of the Digital Silk Road is more an aspirational phrase that can apply to anything from a space-based satellite service technology to smartphone manufacturer's, like Xiaomi's, Oppo's, entry into foreign markets.<sup>6</sup>

Despite the lack of specifics, it is important to discuss some of the existing or planned Chinese overseas projects under the digital connectivity heading and consider the possible implications going forward. It should be noted that decisions regarding many of these overseas projects were undertaken prior to the launch of BRI in 2013. Since the turn of the century, Chinese companies had been encouraged to invest overseas so as to address the issue of overcapacity in the domestic economy. While these investments initially went into natural resources, with the advent of BRI and Xi administration's focus on industrial upgradation, investments shifted to the technology and consumption-oriented sectors.<sup>7</sup> Hence, while BRI cannot be solely seen as a reason for the rise in Chinese outbound investment, the initiative has definitely added momentum to it.

## **TELECOMMUNICATION AND E-COMMERCE INVESTMENT ABROAD**

China's outward Foreign Direct Investment (OFDI) rose to a record high of US\$170 billion in 2016, an increase of 44% vis-à-vis 2015 and up from US\$75 billion in 2011 (Figure 1). According to the Ministry of Commerce, a key factor for the rise is 'cooperation with countries along the Belt and Road'. In 2016, direct investment by Chinese enterprises amounted to US\$15 billion and the value of newly signed contracts for contracted projects<sup>8</sup> amounted to US\$126 billion. The manufacturing and information technology sectors constituted around 19% and 12% of total outward FDI respectively.<sup>9</sup> The following sub-sections look at two selected sectors related to digital connectivity and the underlying BRI.

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<sup>4</sup> The policy, devised at the turn of the century, encourages Chinese enterprises to acquire assets and expand business overseas.

<sup>5</sup> There are 65 countries along BRI.

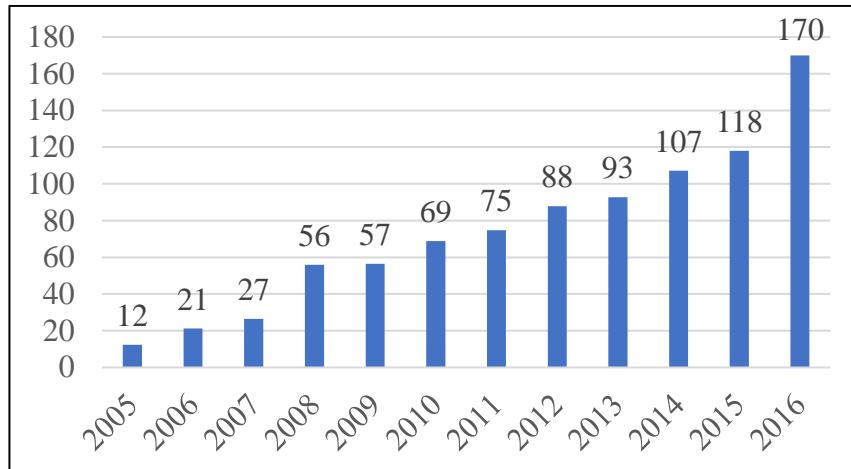
<sup>6</sup> Chinese Scientists Propose Cooperation on 'Silk Road' Earth Observation, Chinese Academy of Sciences, 17 May 2016; Chinese firms add high-tech wings to shared development on Belt & Road, Xinhuanet, 9 May 2017

<sup>7</sup> Riding the Silk Road: China Sees Outbound Investment Boom, March 2015, EY

<sup>8</sup> This is mostly in the construction sector, especially in roads, rail, ports and airports

<sup>9</sup> MOFCOM Department Official of Outward Investment and Economic Cooperation Comment on China's Outward Investment and Cooperation 2016, Ministry of Commerce, PRC

**Figure 1: China's Outward FDI (US\$ billion)**



Source: MOFCOM and China Global Investment Tracker, American Enterprise Institute (AEI) and Heritage Foundation

#### *Telecommunications and Space Information System*

Chinese enterprises, both state-owned and private, are actively involved in a ‘going out’ drive and are building infrastructure or providing network services to realize the Digital Silk Road. Three state-owned enterprises – China Mobile, China Telecom and China Unicom - have been setting up operations in Hong Kong since 2010, using it as a base for internationalization. Private players like Huawei and ZTE, the two biggest telecommunications and network equipment and services providers in China, have also joined the game, generating around 55% of total revenue from their overseas businesses.<sup>10</sup> A number of projects are already in progress. In 2006, ZTE and Huawei were commissioned by Afghanistan and Tajikistan governments respectively to lay down the countries’ fibre optic cables. China and Russia have partnered to build overland cable links between Asia and Europe, including the world’s longest Trans-Europe Asia cable link. Other projects include the Europe-Russia-Mongolia-China network, the TransEurasian Information Superhighway and the Diverse Route for European and Asian Markets.<sup>11</sup>

China is also contemplating a ‘space-based Silk Road’ by strengthening cooperation in satellite services with other countries.<sup>12</sup> A space policy paper released in late-2016 by the State Council Information Office outlines how China aims to set up the Space Information Corridor along the BRI routes in the next five years. Its Beidou satellite network, providing digital information for the roads, railways, ports and industrial parks, should be rolled out on a limited scale to other Belt and Road countries by 2018. The network features 23

<sup>10</sup> China Go Abroad (4<sup>th</sup> Issue): Key Connectivity Improvements along the Belt and Road in Telecommunications and Aviation Sectors, September 2016, EY

<sup>11</sup> A Fiber-Optic Silk Road, Nadege Rolland, The Diplomat, 2 April 2015

<sup>12</sup> Nation considers space-based ‘Silk Road of satellites’ to provide data services, Jiang Jie, Global Times, 31 May 2015

satellites at this moment and should expand to 35 satellites by 2020 to service transportation systems, fisheries management and power distribution.<sup>13</sup>

### *E-Commerce*

Increased telecommunication and information connectivity holds immense potential for the Chinese e-commerce sector along the BRI route. According to the Chinese Ministry of Commerce, cross-border e-commerce turnover in China has grown by about 30% per annum from 2008 to 2015. In 2016, total turnover of the sector was 6.3 trillion yuan (US\$0.9 trillion). Enterprises like Alibaba and JD.com are fast expressing interest to expand in the BRI countries.

JD.com, which purchases goods from the US, Europe, Australia and New Zealand and sells them in China, has 256 major warehouses across China, covering most of the domestic key cities along the BRI, including Shanghai, Xian and Chengdu. The company is planning to open more than 20 overseas warehouses along the BRI route and has recently started an e-commerce business in Indonesia.<sup>14</sup>

Alibaba's founder Jack Ma has been quoted for his interest and expansion plans in Russia, Europe and Southeast Asia. He mentioned during an International Economic Forum in Russia that 'the most important region for our company is OBOR places'.<sup>15</sup> In 2016, Alibaba has acquired Lazada, a big e-commerce firm in Southeast Asia. Earlier in 2017, the company teamed up with the Malaysian government to create the first Digital Free Trade Zone (DFTZ) by 2019. The project, which contains both physical and virtual zones, is said to facilitate small businesses in leveraging on the convergence of digital economy and cross-border e-commerce sales. It plans to offer logistics facilities, fulfillment capabilities and an online services platform<sup>16</sup>. At the launch of the DFTZ, Ma mentioned that 'For human beings the first globalization was the silk road...today in the Internet (age), I think we should transfer the silk road to an e-road'.<sup>17</sup> Ma, earlier in 2016, had argued for an ambitious plan to build an electronic equivalent of the World Trade Organisation (WTO). According to him, an 'electronic world trade platform' can reduce trade barriers in e-commerce and help small businesses ride on the exponential growth potential of the e-commerce sector.<sup>18</sup>

## **ECONOMIC AND STRATEGIC IMPLICATIONS**

Beijing's OBOR-related promotion of cross-border digital connectivity has both economic and strategic implications. Its overseas investment in digital infrastructure is addressing the large deficit in several of the BRI countries. Table 1 provides a quick snapshot of ICT

<sup>13</sup> China's 'One Belt, One Road' Takes to Space, The Wall Street Journal, 28 Dec, 2016

<sup>14</sup> Belt and Road Initiative boosts China's e-commerce, 29 April 2017, Xinhua

<sup>15</sup> Alibaba plans to expand business in Russia – Jack Ma, 17 June 2016, Russian News Agency TACC

<sup>16</sup> Malaysia Launches World's first Digital Free Trade Zone, News and Announcements, Malaysia Digital Economy Corporation (MDEC), 22 March 2017

<sup>17</sup> Alibaba launches Malaysian hub for electronic world trade platform – and plans a 'new Silk Road', Bhavan Jaipragas, South China Morning Post, 22 March 2017.

<sup>18</sup> China's internet giants go global, The Economist, 20 April 2017

readiness for a subset of BRI countries. Many of these countries are in the bottom one-third of the 175 countries ranked by the International Telecommunication Union (ITU). Lack of telecom infrastructure and outdated technology are often observed as a bottleneck for high-quality cellular phone services and internet. In Sri Lanka and Cambodia, for example, only 20% of the households use the internet. The number is even lower for Afghanistan, Bangladesh, Laos and Yemen. China-funded telecommunications infrastructure has potential to offer relief in this regard.

**Table 1: List of Selected OBOR Countries with ICT Readiness**

Countries	ICT Development Index Ranking, 2016	% of household with internet, 2015	Countries	ICT Development Index Ranking, 2016	% of household with internet, 2015
China	81	54.2	Myanmar	140	15.0
Afghanistan	164	3.9	Pakistan	146	24.0
Bangladesh	145	11.0	Philippines	107	28.3
Brunei	77	81.7	Russia	43	72.1
Cambodia	125	21.0	Singapore	20	89.5
India	138	20.0	Sri Lanka	116	18.0
Indonesia	115	38.4	Thailand	82	52.2
Kazakhstan	52	82.2	Uzbekistan	110	52.6
Laos	144	11.4	Vietnam	105	24.1
Malaysia	61	70.1	Yemen	155	5.5

*Note: the ranking is out of 175 countries*

*Source: Measuring the Information Society Report 2016, ITU*

Currently, inter-continental digital connectivity is through underwater fibre-optic cables. The majority of the international data traffic passes through the Suez Canal, the Indian Ocean, the China Seas and the Pacific Ocean. However, landlocked BRI countries such as those in Central Asia are constrained in terms of accessing international data and information, as they lack proximity to underground submarine fibre-optic cables. China-funded technology projects, which will be laid along the land-linked Silk Road, can resolve the issue to a large extent.

A bigger commercial benefit from China's digital drive under BRI derives from the opportunities for its e-commerce companies. Many of the BRI countries are yet to experience a thriving e-commerce sector due to a lack of good digital infrastructure. As such challenges are overcome, Chinese e-commerce service providers, such as JD.com and Alibaba, are well-positioned to take advantage of the pan-continental e-commerce market. JD.com, for example, has acknowledged that cooperation among the BRI countries has helped them increase the number of product brands available on their e-commerce platforms. BRI has also made shipping across continents easier. Using the China-Europe rail link, a part of BRI, JD.com has managed to cut the time transporting auto supplies from Germany to southwest China to two weeks, half of what it used to take via the sea routes.<sup>19</sup>

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<sup>19</sup> Belt and Road Initiative boosts China's e-commerce, 29 April 2017, Xinhua

Moreover, as the Chinese e-commerce firms expand their business operations, they will demand more goods from the countries along the BRI route. For example, although JD.com was sourcing its goods from Europe and the US markets in the past, more recently they have shown interest in products from BRI countries, such as pillows and rice from Thailand and electronics from Israel. Alibaba has reported that in 2016, almost 280,000 latex pillows from Thailand were sold on its cross-border retail site, namely Tmall Global. This is a jump of 152% from 2015. The big demand for latex pillow by China has driven up natural rubber prices 3-4 times in Thailand, lifting up income of Thai farmers.<sup>20</sup>

Along with the potential economic benefits, a Beijing-centric BRI has strategic implications. First, although enhanced digital connectivity will facilitate faster intercontinental data exchange, there are potential pitfalls for countries receiving investment. The telecommunication cables built by China and Russia may subject the countries to increased electronic surveillance by Beijing and Moscow. At the moment, these countries complain of risks of potential interception of critical information by the US and other Western intelligence agencies.<sup>21</sup> Second, while the Beidou system may be able to improve the accuracy of satellite navigation, it could drive other navigation companies like the US' Global Positioning System (GPS) out of Chinese and other BRI markets. Moreover, China is developing Beidou based on its own perceived military and tracking requirements, which could have implications for the national security of BRI countries.<sup>22</sup>

Third, with Chinese owning a major share of the digital infrastructure across the BRI countries, the global e-commerce market will become an arena for US-China contests. Till now, with e-commerce players like Amazon and EBay, the US private sector has been leading the industry. The trend may change in the future. Many of the BRI countries may open up their markets to Chinese online businesses, as they find themselves strategically bound to Beijing through its investments. The untapped e-commerce potential of these BRI countries will give the Chinese firms the growth space that they need to grow to a size comparable to their US counterparts.<sup>23</sup> Division of the global e-commerce market between the US and China will create a new variant, i.e. digital information and data, which can be used for exerting strategic influence in the future.

## CONCLUSION

China's ambition concerning cross-border digital connectivity is progressing quickly in parallel with its companies and technology solution providers' rapid investments along the BRI routes. They are laying out hard telecommunications infrastructure and making provisions to share information and data. Leveraging on the opportunity, Chinese e-commerce firms are fast expanding and are exploring ways to lead the global governance mechanism in the sector.

<sup>20</sup> Belt and Road Initiative boosts China's e-commerce, 29 April 2017, Xinhua

<sup>21</sup> A Fiber-Optic Silk Road, Nadege Rolland, The Diplomat, 2 April 2015

<sup>22</sup> China's Alternative to GPS and its Implications for the United States, US-China Economic and Security Review Commission, Staff Research Report, 5 January 2017

<sup>23</sup> Global e-commerce: China funded digital connectivity in OBOR has massive implications, Amitendu Palit, 20 June 2017, Financial Express

Over time, this has significant implications for China and the global economy. While the host countries along the BRI routes are likely to benefit in terms of infrastructure needs or increased trade, they may also subject themselves to increased electronic surveillance by Beijing. The rise of Chinese e-commerce operations among the BRI countries implies a new issue being included in the ongoing US-China contest. Going forward, it will be interesting to see how the BRI countries balance their economic needs with broader geostrategic loyalty. Will they submit to Chinese economic might or will they leverage on Chinese money while concurrently managing the interests of American and other major countries in their national economy?

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