

## DIGITAL SILK ROAD: OPPORTUNITIES FOR CHINA–EAEUECONOMIC COOPERATION

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The purpose of the article is to determine the essence of the China's Digital Silk Road (DSR) and the opportunities for economic cooperation between China and the EAEU. The article analyzes the current state of the development of the digital economy (DE) in China and reveals the essence of its one of the main programs for the development of the DE – the Digital Silk Road initiative, the goals of which are to improve regional and international digital connectivity and modernizing traditional industries in participating countries. Moreover, the article also reveals the potential of the DE in the EAEU member states and identifies their opportunities and constraints for economic cooperation with China within the framework of the DSR. As a result, the main directions of orderly and mutually beneficial economic cooperation between China and the EAEU were determined in the face of increasing uncertainty.

**Keywords:** Digital Silk Road (DSR); Digital economy (DE); the Belt and Road Initiative (BRI); Digital Agenda; China; EAEU.

Currently, the digital economy (DE) has become the key driver of economic growth of various countries and regions. China as the world's largest developing country, in order to push forward the economy, since 2015, the Chinese government has unveiled a series of plans or measures to develop the digital economy. Among them, Digital Silk Road (DSR) as the digital dimension of the Belt and Road Initiative (BRI) officially launched in 2015. It aims at improving the regional and international digital connectivity and modernizing traditional industries in participating countries, with China as the main driver of the process. The Eurasian Economic Union (EAEU) as a China's crucial BRI partner has become an arena for the development of the DSR, and meanwhile, the development of the DSR has the potential to provide major opportunities for China – EAEU economic cooperation.

In recent years, China's DE has expanded rapidly, and it has the highest number of internet users in the world. According to the China Internet Network Information Center (CNNIC), as of December 2021, the number of internet users and mobile phone users in China had reached 1.032 billion and 1.643 billion, respectively. The internet penetration rate reached 73%, and 1.425 million 5G base stations have been built [1]. That depends largely on COVID-19 pandemic, the Internet has become a vital necessity for working, learning, accessing basic services and keeping in touch, and it has laid a solid foundation for China to develop the DE. According to the China Academy of Information and Communications Technology (CAICT), the scale of DE value added expanded from 1.2 trillion yuan in 2002 to 39.2 trillion yuan in 2020, and the share of DE in China's GDP rise from 10.3 to 38.6% [2]. The growth rate of the DE exceeded the growth rate of the GDP by more than three times, indicating that the digital economy has gradually become one of the core growth poles in the national

economy [3]. In addition, China’s e-commerce market has been the largest in the world since 2013, and in 2021, its retail e-commerce sales value amounted to around \$2.49 trillion [4], which contributed to more than half of the world’s e-commerce retail sales, with the sales value surpassing the combined total of Europe and the United States [5]. JD, Alibaba and Pinduoduo as e-commerce giants in China in 2021 recorded a revenue of 951.5 billion yuan, 717.2 billion yuan and 93.9 billion yuan, respectively [6]. Among them, JD is the world’s second largest online retailer by revenue, while Amazon is the largest e-commerce marketplace, with a revenue of \$468.78 billion in 2021 [7].

The DSR first appeared in as early as 2014, within the document Basic Planning for Infrastructure Connectivity with Neighboring Countries, formulated by the Ministry of Industry and Information Technology (MIIT) and presented as MIIT’s policy plan in support of the BRI agenda [8]. It was first introduced as the “Information Silk Road” in the white paper, which jointly issued by the National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People’s Republic of China in March 2015 [9]. In 2016, the term “Online Silk Road” was used to highlight BRI in cyberspace, and since 2017, the term “Digital Silk Road” has adopted uniformly as the expression of the digital dimension of the BRI [10]. The DSR is linked to the “Made in China 2025” and “China Standards 2035” programmes, which aim at reducing China’s reliance on foreign technology imports and invest heavily in its own innovations in order to secure China’s position a global powerhouse in high-tech industries. Meanwhile, as an important component of the BRI, according to the Fudan University Digital Belt and Road Centre, the DSR, similar with the BRI, adopts the “five aspects of connectivity” framework (Fig. 1) and mainly includes: digital infrastructure construction, smart cities, cross-border e-commerce and digital healthcare, etc.

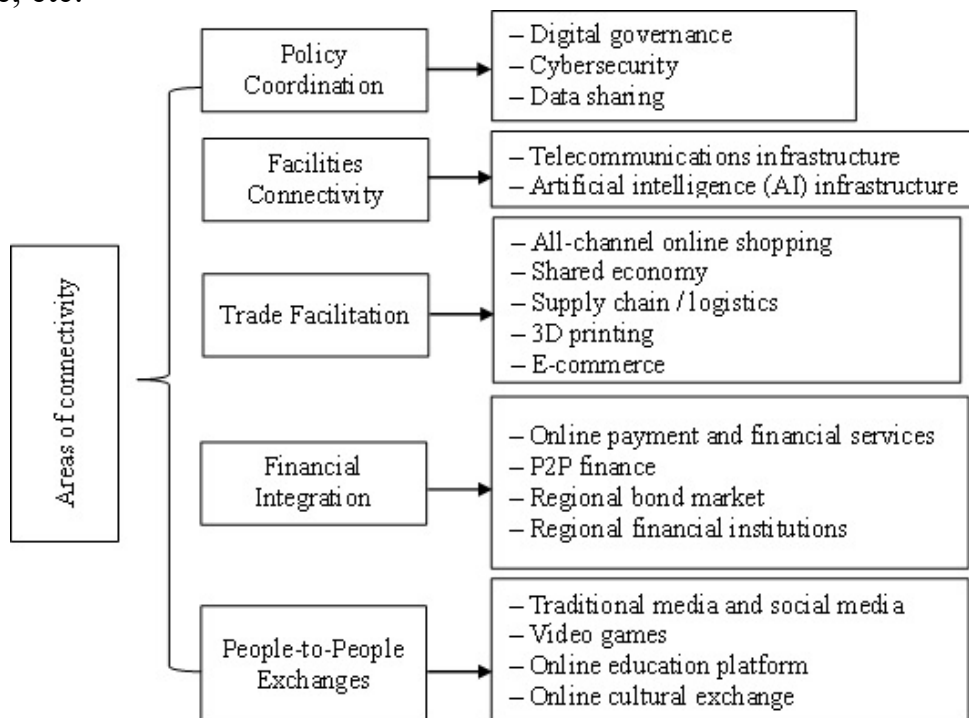


Fig. 1. Key aspects of the DSR. Source: [11].

The EAEU member states, being crucial partners for China in the implementation of the BRI, since 2016, also have adopted national strategies or

programs for development of digital economy and digital society (Table 1). Meanwhile, in order to create a single digital economy in the region and achieve associated dividends of the EAEU digital strategy, the EAEU Digital Agenda until 2025 (DA 2025) was signed on December 26, 2016. Then, in 2017, at the meeting of the Supreme Eurasian Economic Council the Main Directions for the Implementation of the EAEU DA 2025 at the supranational level were identified, which are as follows: the transformation of common markets; sectoral and cross-sectoral transformation; the development of the digital infrastructure; and the digital transformation of the management of integration processes. According to the World Bank, it is expected that by 2025 the share of the DE will be at least 20 %, and it may lead to an increase in the services market by 2.2 % of the EAEU’s GDP [12].

Tab. 1. National digital strategies/programmes of the EAEU member states

Countries	National digital strategies/programmes	Main content
Armenia	Digital Agenda of Armenia 2030 Strategy (2017)	Main areas include creation of the digital government, enhancing cybersecurity, private sector development, institution-building and formation of digital skills and infrastructure.
Belarus	Information Development Strategy for 2016-2022 (2015) and Decree “On the Digital Economy Development” (2017)	They are aimed at creating conditions for attracting global IT companies, production of competitive IT products; investing in the future (IT-personnel and education); introduction of new financial instruments and technologies and removing barriers to the introduction of new technologies.
Kazakhstan	The Third Modernization Program and “Digital Kazakhstan” State Program for 2018-2022 (2017)	Based on the digitalization of the economy, transition to digital state, implementation of the DSR, developing human capital and establishment of the innovation ecosystem.
Kyrgyzstan	“Taza Koom” State Informatization Project (2017) and the Concept of the Digital Kyrgyzstan National Digital Transformation Program for 2019-2023 (2018)	It includes building a world-class digital infrastructure; creating an enabling environment for sustainable innovation development; creating digital opportunities for all segments of the population; involvement of citizens in the country management through digital technologies; formation of the open digital society; creation of a regional hub of the Digital Silk Road for IT-business and IT innovations.
Russian Federation	“Digital Economy” National Program up to 2024 (2017)	It aims at forming research competences and technical capacities, developing information infrastructure and securing information security.

Source: [15, p. 1026].

A comparison of the international indices shows that the EAEU member states have a huge potential for digital transformation, but there are significant differences in levels of DE development among the EAEU countries, which is due to their economic development levels. Kyrgyzstan is lagging far behind other member states (Fig. 2), but it can be seen as an underused market, which can attract more investors and entrepreneurs to establish a more favorable institutional environment.

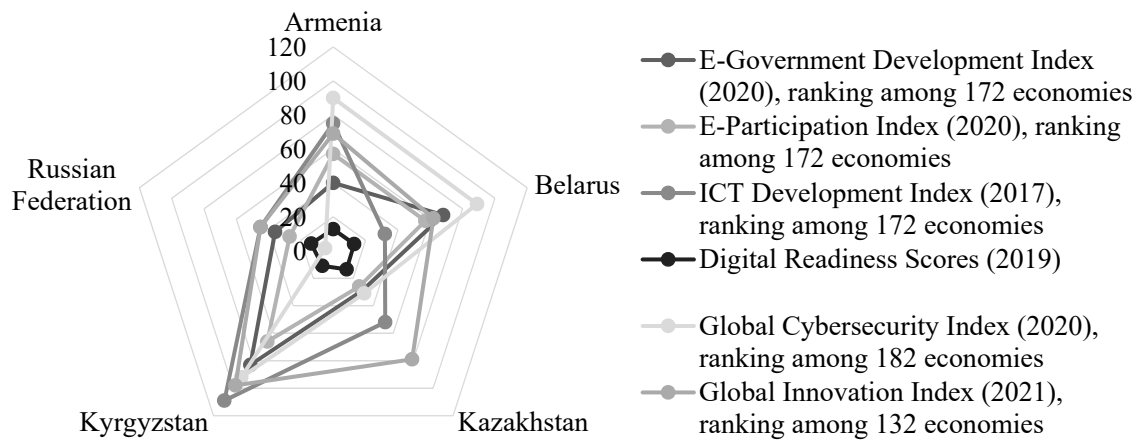


Fig. 2. Comparison of international indices measuring the development of the DE of the EAEU member states. Source: [16–20].

Since 2015, following the signature of the joint declaration with regard to integrating the development projects of the EAEU and China’s Silk Road Economic Belt (SREB), trade and investment ties between China and the EAEU member states have been reinforced, resulting in the robust alignment of digital development strategies with the DSR in all the five member countries. Currently, China is not only the largest trading partner of the EAEU, but also the main creditor and investor for these countries [19]. According to the Eurasian Economic Commission, in 2021, China accounted for about 20% of the EAEU’s foreign trade turnover amounted to 166.54 billion U.S. dollars, followed by Germany (7.5%). In addition, considering the EAEU member states are at the early stages of digital transformation, and are therefore committed to ramping up their digital capabilities through cheap but effective solutions, while the digital products and services offered by Chinese companies cheaper than European and American companies, these countries and therefore are more likely to cooperate with China. Moreover, the shaping international order, a series of uncertainties caused by the COVID-19 pandemic, and economic sanctions on Russia and Belarus impose by many countries, enable the EAEU to increase cooperation with China, resulting in their realization of digitalization Transformation and sustainable economic and social development. However, it should be noted that due to the use of Chinese digital technical equipment, the local residents’ doubts about the storage and security of own data have increased, in particular, growing trends of nationalist and anti-Chinese sentiment are already being observed in Kazakhstan and Kyrgyzstan in the context of China’s dynamic economic activity [20]. That takes a roll on the implementation of the DSR in this region.

To sum up, it can be argued that the development of the DSR, which is a component of China’s vast vision for global connectivity, has the potential to provide opportunities for further China-EAEU economic cooperation and is also allowing these related countries to realize the digital transformation of their economies, especially given the socio-economic difficulties caused by the COVID-19 pandemic. In order to promote the orderly and mutually beneficial development of China-EAEU economic cooperation and their projects linked the DSR in so-called uncertain conditions, should

be developed and improved: digital infrastructure and cross-border data flows; dispute resolution mechanisms; cybersecurity risk management systems; unified technical standards; and collaboration in digital technology and other spheres (e.g. healthcare) [21].

## REFERENCES

1. China has 1.032 billion internet users, 73.0% penetration rate // Global Times [Electronic resource]. 2022. URL: <https://www.globaltimes.cn/page/202202/1253226.shtml> (accessed: 22.05.2022).
2. Zhongguo shuzi jingji fazhan baipishu [White Paper on China's Digital Economy Development] // China Academy of Information and Communications Technology [Electronic resource]. 2021. URL: <http://www.caict.ac.cn/english/research/whitepapers/202104/P020210429540525737660.pdf/> (accessed: 22.05.2022). (In Chin.).
3. Guo Jitao, Liang Shuang. (2021). The Impact Mechanism of the Digital Economy on China's Total Factor Productivity: An Uplifting Effect or a Restraining Effect? In: *South China Journal of Economics*. Vol. 40. No. 10.
4. Retail e-commerce sales in China for 2021 with forecasts until 2025 // Statista [Electronic resource]. 2022. URL: <https://www.statista.com/statistics/289734/china-retail-ecommerce-sales/> (accessed: 22.05.2022).
5. E-commerce in China – statistics & facts // Statista [Electronic resource]. 2022. URL: <https://www.statista.com/topics/1007/e-commerce-in-china/> (accessed: 22.05.2022).
6. Dianshang sanjutou yeji chulu, pinduoduo jinglirun 77yi, ali 1432yi, jingdong ruhe [The performance of the three e-commerce giants is released. Pinduoduo's net profit is 7.7 billion, Alibaba's 143.2 billion, and how about JD.com] // Tencent [Electronic resource]. 2022. URL: <https://new.qq.com/omn/20220331/20220331A04B4J00.html> (accessed: 22.05.2022). (In Chin.).
7. Worldwide retail e-commerce sales of Amazon from 2017 to 2021 // Statista [Electronic resource]. 2021. URL: <https://www.statista.com/statistics/1103390/amazon-retail-ecommerce-sales-global/> (accessed: 22.05.2022).
8. Gongxinbu yi zhiding yu zhoubianguojia xinxi hulianhutong guihoa [The Ministry of Industry and Information Technology has formulated a plan for information interconnection with neighboring countries] // Sina [Electronic resource]. 2014. URL: <http://finance.sina.com.cn/china/20141111/020820781108.shtml> (accessed: 22.05.2022). (In Chin.).
9. China's Digital Silk Road: A Game Changer for Asian Economie // The Diplomat [Electronic resource]. 2019. URL: <https://thediplomat.com/2019/04/chinas-digital-silk-road-a-game-changer-for-asian-economies/> (accessed: 22.05.2022).
10. China-ASEAN Information Harbor: The Digital Silk Road from Guangxi to Southeast Asia // Friedrich-Ebert-Stiftung [Electronic resource]. 2021. URL: <http://library.fes.de/pdf-files/bueros/indonesien/18185.pdf/> (accessed: 22.05.2022).
11. Shuzi yidaiyilu (2018 Lanpishu) [Digital Belt and Road (Blue book 2018)] // Digital Belt and Road Centre of the Fudan University [Electronic resource]. URL: <http://brgg.fudan.edu.cn/getdownfile.php?fileid=1049&act=1> (accessed: 22.05.2022). (In Chin.).
12. The EAEU 2025 Digital Agenda: Prospects and Recommendations // The World Bank Group [Electronic resource]. URL: <https://documents1.worldbank.org/curated/en/850581522435806724/pdf/EAEU-Overview-Full-ENG-Final.pdf> (accessed: 22.05.2022).
13. Voronina, T. V., Yevchenko, N. N., Yatsenko, A. B., Madiyarova, D. M. (2018). Peculiarities of the Process of Digitalization of Economies in the Eurasian Economic Union States. In: *European Research Studies Journal*. Vol. 12. No. 2.
14. IDI 2017 Rank // International Telecommunication Union. [Electronic resource]. 2018. URL: <https://www.itu.int/net4/itu-d/idi/2017/index.html> (accessed: 24.05.2022).

15. E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development With addendum on COVID-19 Response // UN E-Government Knowledgebase [Electronic resource]. URL: <https://desapublications.un.org/file/781/download> (accessed: 24.05.2022).
16. The Global Innovation Index 2021: Energizing the World with Innovation // WIPO. [Electronic resource]. 2021. URL: [https://www.wipo.int/global\\_innovation\\_index/en/2021/](https://www.wipo.int/global_innovation_index/en/2021/) (accessed: 24.05.2022).
17. Cisco Global Digital Readiness Index 2019 // Cisco [Electronic resource]. 2020. URL: [https://www.cisco.com/c/dam/en\\_us/about/csr/reports/global-digital-readiness-index.pdf](https://www.cisco.com/c/dam/en_us/about/csr/reports/global-digital-readiness-index.pdf) (accessed: 24.05.2022).
18. Global Cybersecurity Index 2020 // International Telecommunication Union [Electronic resource]. 2021. URL: [https://www.itu.int/dms\\_pub/itu-d/opb/str/D-STR-GCI.01-2021-PDF-E.pdf](https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-GCI.01-2021-PDF-E.pdf) (accessed: 24.05.2022).
19. Yurova, N. V., Yao Jiahui (2021). Kitai i strany EAES: strategii i novye vozmozhnosti torgovo-investitsionnogo sotrudnichestva [China and the EAEU countries: strategies and new opportunities for trade and investment cooperation]. Minsk: RIHS. (In Russ.).
20. Muzaparova, L. (2021). The Digital Silk Road: Opportunities and Challenges for Central Asia // Rosa-Luxemburg-Stiftung [Electronic resource]. URL: <https://www.rosalux.de/en/news/id/45540/die-digitale-seidenstrasse-herausforderungen-und-chancen-fuer-zentralasien> (accessed: 24.05.2022).
21. Yurova, N. V., Yao Jiahui (2019). Perspektivy sotrudnichestva KNR i EAES v oblasti tsifrovoi ekonomiki [Prospects for cooperation between the PRC and the EAEU in the field of digital economy]. In: *Digital Transformation*. No. 3(8). (In Russ.).