## **RESEARCH ARTICLE**



# The Digital Silk Road between National Rhetoric and Provincial Ambitions

Elisa Oreglia<sup>1</sup> 💿 and Weidi Zheng<sup>2</sup> 💿

<sup>1</sup>Department of Digital Humanities, King's College London, London, UK, and <sup>2</sup>Independent Researcher, London, UK **Corresponding author:** Elisa Oreglia; Email: elisa.oreglia@kcl.ac.uk

#### Abstract

The Digital Silk Road (DSR) is usually described as the digital component of the Belt and Road Initiative that is reshaping the digital world order. Most existing research is concerned with the possible long-term consequences of the DSR rather than on what the DSR encompasses, how it developed and how it has changed since it was announced in 2015. We address this gap by reconstructing the origins of the DSR within China, with a focus on both rhetoric and concrete plans as they developed between central and provincial actors. We collected and analysed a corpus of 31 national and 130 provincial DSR-related plans. In contrast to prevailing views of the DSR as a unified, outward-facing strategy, we show that after an initial surge of related documents, the central government ceased to discuss the DSR in a meaningful way. Provincial governments then appropriated its rhetoric to legitimize their own digitization agendas, including upgrading infrastructure in poorer provinces and remaining plugged into export markets for those with an IT industry. Rather than reshaping the digital world order, the DSR has been appropriated by some provincial governments to attempt, mostly unsuccessfully, to shore up their own digital ambitions.

## 摘要

"数字丝绸之路"通常被视为"一带一路"倡议的数字化扩展,旨在重新定义全球数字格局。目前的研究大多集中在探讨"数字丝绸之路"可能带来的长期影响,而非具体的构成、发展历程及其自2015 年宣布以来的演进过程。为了填补这一研究空白,我们追溯了该倡议在中国的起源,并着重分析了中央与地方政府在此过程中的互动、修辞策略和具体计划。我们收集并分析了31个国家级和130个省级涉及"数字丝绸之路"的政策文件。研究发现,与将"数字丝绸之路"视为一项统一的对外战略的普遍看法不同,中央政府在初期推出一系列相关政策后便未再深入讨论该倡议,而各省级政府则开始借此支持其数字化发展计划。这些省级政府将其用作合理化其数字愿景的工具,尽管这些努力大多未能如愿。因此,"数字丝绸之路"更多的是做为一些省级政府支持其数字化战略的手段,而非重塑全球数字秩序的主要力量。

**Keywords:** Digital Silk Road; Belt and Road Initiative; digital technologies; central government; provinces; digital infrastructure; Information Harbor

关键词: 数字丝绸之路; 一带一路; 数字技术; 中央政府; 省份; 数字基建; 信息港

In 2015, two years after Xi Jinping 习近平 announced his Belt and Road Initiative (BRI) to bring economic development to an imagined new Silk Road spanning across the world, the Chinese National Development and Reform Commission (NDRC) published an action plan which explicitly mentioned information technologies (IT) as a key part of the BRI.<sup>1</sup> The plan called for the creation of an "Information Silk Road," envisioned as an extension of the infrastructure building that was already part of the original BRI announcement and further detailed in the rest of the document.

<sup>1</sup> National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China 2015. See also N01\_DSR in the Appendix 1 (online supplementary material).

<sup>©</sup> The Author(s), 2024. Published by Cambridge University Press on behalf of SOAS University of London. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

A modest and very concrete 56 words out of the 5,598 of the English-language document were dedicated to the topic, urging the construction of cross-border and submarine cables and the improvement of satellite networks, with the goal of extending the international cooperation envisioned within the BRI to the realm of (digital) information.<sup>2</sup>

The Information Silk Road, renamed as the Digital Silk Road in 2017 (*shuzi sichou zhilu* 数字丝 绸之路, DSR hereafter), has been variously described as a slogan rather than a policy,<sup>3</sup> an "umbrella term for various activities of interest to the Chinese government in the cyber realm,"<sup>4</sup> and the "digital element"<sup>5</sup> or "component" of the BRI,<sup>6</sup> but also more specifically as a package of digital technologies "to supply connectivity in terms of international communication and data flows"<sup>7</sup> and as a tool to reshape the global world order by offering BRI countries "technology 'bundles' comprised of smart cities, smart harbours, e-commerce, digital currency, communications networks, and satellite networks."<sup>8</sup> But what, in reality, is the Digital Silk Road?

Most of the existing scholarship has avoided any attempt to define the boundaries and scope of the DSR. Outside of China, the term has been seized by media, think tanks and some scholars to portray a juggernaut of Chinese tech expansion around the world, part of a unified strategy to build China's alternative digital world order.<sup>9</sup> Such analyses conflate state policies, investments in the digital field from Chinese tech companies and individual companies' globalization strategies – strategies which may or may not align with the central government's goals, may or may not be in countries that have signed BRI agreements and which often precede both the BRI and DSR. While authors sometimes acknowledge that they are taking a maximalist view of the DSR that is not based on official documents, they also portray a unified China and a clear vision as the engine behind the initiative.<sup>10</sup> Within China, the DSR is seen by many as Xi Jinping's signature project,<sup>11</sup> or as an opportunity to better coordinate Chinese outbound tech exports and investments and to facilitate the decision making in these areas by political authorities and commercial companies.<sup>12</sup>

There is scant research on how the DSR is implemented or received in third countries.<sup>13</sup> The few notable exceptions focus on the general perception of Chinese tech,<sup>14</sup> or on projects by Chinese

- 6 Triolo et al. 2020.
- 7 Erie and Streinz 2021, 4.
- 8 Hemmings 2020, 7.
- 9 Triolo et al. 2020; Chan 2022.

<sup>2 &</sup>quot;Gongtong tuijin kua jing guanglan deng tongxin ganxian wangluo jianshe, tigao guoji tongxin hulian hutong shuiping, changtong xinxi sichou zhi lu. Jiakuai tuijin shuangbian kua jing guanglan deng jianshe, guihua jianshe zhouji haidi guanglan xiangmu, wanshan kongzhong (weixing) xinxi tongdao, kuoda xinxi jiaoliu yu hezuo" (We should jointly advance the construction of cross-border optical cables and other communications trunk line networks, improve international communications connectivity, and create an Information Silk Road. We should build bilateral cross-border optical cable networks at a quicker pace, plan transcontinental submarine optical cable projects, and improve spatial (satellite) information passageways to expand information exchanges and cooperation) in ibid.

<sup>3</sup> Cheng and Zeng 2023; Creemers 2021.

<sup>4</sup> Gordon and Nouwens 2023, 14.

<sup>5</sup> Vila Seoane 2020.

<sup>10</sup> See in particular Gordon and Nouwens 2023.

<sup>11</sup> Wang 2020; Fang 2019; Xiang 2017; Liu, Lushu, and Liu 2018; Chen 2021.

<sup>12</sup> China Electronics and Information Industry Development Research Institute 2019.

<sup>13</sup> It is challenging to even determine how many countries have signed up to the DSR. There are a number of memoranda of understanding (MoU) on the DSR rather than just on the BRI; the number most often cited by both English and Chinese language sources is 16 (see Triolo et al. 2020; "Woguo shuzi jingji jiangmai xiang quanmian kuozhan qi" (China's digital economy will enter a period of comprehensive expansion). *International Business Daily*, 1 November 2022, http://tradeinservices.mofcom.gov.cn/article/szmy/zjyjgd/202211/141121.html. Accessed 8 July 2024). However, Chinese sources do not specify which countries have signed MoUs, and the list in English includes countries such as "England" (which, in fact, should be the United Kingdom) that have explicitly declined to sign DSR MoUs (see Parker, Kynge and Hornby 2018).

<sup>14</sup> Creemers 2021.

companies that are not explicitly linked to the DSR by either the company or the host country.<sup>15</sup> Even research that argues that Chinese companies are the drivers of the DSR does not identify projects that can be directly connected to it (for instance, through financing), and conflates tech companies' political signalling, which is directed at internal audiences, with their actual strategies to expand in foreign markets.<sup>16</sup>

Hong Shen in 2018, and Jing Cheng and Jinghan Zeng in 2023 offer rare in-depth analyses of the DSR's meaning and development.<sup>17</sup> Shen argues that the DSR is an extension of internal Chinese policies on tech innovation and internationalization and a way to export excess production capacity to foreign markets in line with the 13th Five-Year Plan for National Informatization and earlier initiatives, such as the internationalization of Chinese standards or the export of the Chinese satellite system, Beidou.<sup>18</sup> Cheng and Zeng, assessing the longer-term evolution of the discourse and actions surrounding the DSR, conclude that it is just a political slogan that "emerged from the grander slogan of the BRI to carry the BRI's momentum."<sup>19</sup> The actual meaning of the DSR, they argue, is both created and driven by the agendas of corporate actors, rather than by the central government, and Chinese tech giants compete to bend the DSR narrative to suit their own purposes, within and outside China.

But why does defining what the DSR actually is matter? Scholars of Chinese politics broadly agree that central government initiatives such as the BRI are programmatic documents that are then interpreted and realized by a number of different actors, including subnational ones.<sup>20</sup> Such internal contestations and appropriations during the translational phase can weaken and fragment the central narrative and undermine its execution as a cohesive whole both internally and externally.<sup>21</sup> Lee Jones and Shahar Hameiri argue that the central government steers and disciplines, while subnational actors, such as provinces, respond by primarily "influencing" and "interpreting," and more rarely, "ignoring" the centre's directives.<sup>22</sup> Audrye Wong identifies similar dynamics, with provinces "trailblazing" (influencing central policies), "carpetbagging" (implementing central policies but deviating from their goals, while rhetorically embracing them) or "resisting" central directions. In the context of the BRI, this mix of collaboration and competition creates a perpetually shifting narrative, which includes projects driven by (provincial) domestic interests that can diverge from the centre's intentions and even undermine China's foreign policy.<sup>23</sup>

These studies have contributed to a reassessment of the BRI, from "grand strategy" to a more modest set of scaled-down and not necessarily connected projects. However, the DSR continues

<sup>15</sup> Vila Seoane 2020; Vila Seoane and Álvarez Velasco 2024; El Kadi 2024. Huawei's opening of a mobile phone assembly factory in Algeria is more likely related to the Algerian government's ban on importing mobile phones than to any BRI or DSR-related agreement. See "Huawei launched its Oued Smar phone assembly plant." *ITC and Telecom Ecofin Agency*, 28 January 2019, https://www.ecofinagency.com/telecom/2801-39573-algeria-huawei-launched-its-oued-smar-phone-assembly-plant-on-january-22-2019.

<sup>16</sup> Cheng and Zeng (2023) articulate well the DSR and BRI-related narratives that tech giants such as Alibaba and Tencent have deployed to advance their own agendas and to win internal contracts related to these high-profile initiatives. This, however, does not mean that the companies' strategies and investments in South-East Asia and other markets are connected to the DSR, or that the companies themselves have a specific interest in being seen as part of the DSR in these markets.

<sup>17</sup> Shen 2018; Cheng and Zeng 2023.

<sup>18</sup> Shen 2018. See also Hong 2017b.

<sup>19</sup> Cheng and Zeng 2023, 3.

<sup>20</sup> Jaros and Tan 2020; Ye 2020; Jones and Zeng 2019; Wong 2018; Summers 2016.

<sup>21</sup> Zeng, Jinghan 2019; Jones and Hameiri 2021; Jones and Zeng 2019.

<sup>22</sup> Jones and Hameiri 2021, 49–58.

<sup>23</sup> Summers 2016; 2021; Rabe and Kostka 2022; Liu, Tianyang, and Song 2021. Summers argues very explicitly that the BRI is rooted in the projects and internationalization efforts of provinces that date back to well before the launch of the national initiative. There is a consensus in the literature on the significant degree of freedom that provincial governments have in pursuing their own interests in external relations, but Rabe and Kostka make the important point that provinces in central China have less leeway than coastal and border ones in diverging from the centre's directions.

to be portrayed as a master plan to expand the Chinese digital footprint, which ignores the internal negotiations, implementation and local initiatives. In contrast, we argue that the DSR has been a locus of power struggles – first among national-level actors and then among provincial-level governments - and has become a "legitimization mechanism" for local strategies that serve (and reflect) provincial goals of digital development, rather than a government-driven strategy to push Chinese tech to foreign countries. The DSR has evolved over two phases: an initial one (2015-2019), characterized by national actors seeking to assert control over outward-facing digital plans, followed by a second period when national guidelines declined and provincial initiatives surged. These initiatives do not appear to be part of the feedback loops identified by Jones and Hameiri or Wong: the central rhetoric has not been followed up with central funding or coordinating mechanisms, and local initiatives have been ignored by the centre, rather than being incorporated into any further policy. Rather than being loose interpretations of central guidelines, provincial plans manipulate national narratives for local use and to find a rhetorical legitimation of local policies for central audiences. Provincial governments attempt to leverage the DSR to gain opportunities to grow and modernize the digital infrastructures of poorer areas, or to promote existing tech industry priorities in richer provinces, while mostly ignoring the international dimension evoked in central documents. As a result, the DSR is internally scattered among local plans that serve local interests and seek to build provincial connections to BRI countries that, for the most part, ignore them.

Building on research that seeks to clarify the drivers of the DSR, we argue that provinces are the main actors who have taken up the central rhetoric of the DSR and who are attempting to create projects around it – with little success either internally or externally. We base our argument on 31 documents related to the DSR issued by central actors and 130 documents issued by 34 provincial-level bodies<sup>24</sup> between 2015 and July 2022.<sup>25</sup> Below, we refer to national-level documents as "N" and to provincial ones with the acronym of the province (a full list of documents appears in the online Appendix 1, with Table A for national documents and B for provincial ones). We catalogued policies according to their issue date, issuing authority and title, and conducted a qualitative analysis of the documents' structure and content, including goals, priorities, specific projects and policy changes over time. Building on the practice of interweaving textual analysis of China's internal and external digital strategies with its political economic contexts,<sup>26</sup> we propose a close reading of both the structure and the wording of official documents as a necessary starting point from which to understand internal priorities, how these priorities change over time, the degree of attention different topics receive, and what this implies for the development of the DSR.<sup>27</sup>

<sup>24</sup> We follow the standard division into 23 provinces, 4 municipalities (Beijing, Chongqing, Shanghai and Tianjin), 2 special administrative regions (Hong Kong and Macau) and 5 autonomous regions (Inner Mongolia, Guangxi, Tibet, Ningxia and Xinjiang).

<sup>25</sup> To collect policy documents at the central government level, we searched Chinese Baidu and Google, as well as the databases of the State Council, the National Development and Reform Commission, Ministry of Industry and Information Technology, Ministry of Commerce, Ministry of Foreign Affairs and Ministry of Science and Technology. We used the terms *Zhongyang wenjian* 中央文件 (central government documents), *shuzi sichou zhilu* 数字丝绸之路 (Digital Silk Road), *wangshang sichou zhilu* 网上丝绸之路 (Cyber Silk Road) and *xinxi sichou zhilu* 信息丝绸之路 (Information Silk Road) as keywords. There are very few documents that refer specifically to the DSR at the national level, so we included documents related to the BRI that discuss the DSR as well as general plans on digitization that include topics relevant to the DSR. Owing to the limited availability of provincial policies in central authorities' databases, we conducted a further search with the same keywords on the websites of each provincial government, adding the name of the province to our search string. We collected a total of 31 national and 130 provincial policies and plans, listed in Appendix 1 (online supplementary material) and available with their full text on https://www.zotero.org/groups/4933148/dsr-policies/library. Since there is no central repository nor existing list of policies, we cannot guarantee this list is complete, but it is the result of several thorough searches conducted at different points in time in 2022.

<sup>26</sup> Shen 2018; Hong 2017b.

<sup>27</sup> Downie and Wallace 2021.

# Phase One: National-level Struggles to Control the DSR Narrative

A first glimpse of what would become the DSR appeared in 2014, with the Ministry of Industry and Information Technology's (MIIT) BRI implementation plan, "Infrastructure construction plan to connect neighbouring countries," which called for the building of information highways (*xinxi gaosu gonglu* 信息高速公路).<sup>28</sup> The use of the word "information highways" and the emphasis on constructing infrastructure were early signs of a continuity between the BRI and internal plans for nation building through ICT, which date back to the early 2000s. Those plans posited infrastructure as the necessary first step to create a more even circulation of information and economic development. This link became even more pronounced with the 2015 NDRC's "Vision and action on jointly building the Belt and Road" (N01), which called for the building of an Information Silk Road and made the digital sector a priority area.<sup>29</sup> This echoed a shift in internal plans as the priority of building infrastructure then moved to an emphasis on innovation and technology as drivers of economic growth.<sup>30</sup>

The early period of the DSR has been well analysed, especially the shift in focus from infrastructure building to a broader suite of technologies and digital services, and the relentless and ultimately successful efforts of the Cyberspace Administration of China (CAC) to gain control of the narrative and direction of the initiative against other national-level actors.<sup>31</sup> This power struggle appears clearly in early documents on the DSR. The 2015 document (N01) was issued by the NDRC, the Ministry of Foreign Affairs (MFA), the Ministry of Commerce (MOFCOM) and the State Council. The CAC was not involved, but its then-director, Lu Wei 鲁炜, evoked the construction of a DSR in a number of public speeches, which made it clear that he considered it to be within the CAC's remit, given its potential to expand to digital services and governance.<sup>32</sup> Other entities that strived to influence the initiative included the MIIT and even the Ministry of Culture and the Ministry of Education, both of which issued documents linking the DSR to parts of their core missions – animation and game industries for the former and universities for the latter (N17 and N21). Each pronouncement on the DSR from the State Council or Xi Jinping himself (for example, N13 and N18) was followed by declarations and action plans from the MIIT, NDRC,

<sup>28 &</sup>quot;Wei si lu yanxian guojia jianshe shuzi qiaoliang" (Building digital bridges for countries along the Silk Road). Xinjiang ribao, 6 November 2014, http://www.scio.gov.cn/m/31773/35507/35515/35523/Document/1533729/1533729.htm. Accessed 8 July 2024. The plan aimed to increase connectivity between China and Central Asian countries through land cables to Kazakhstan, Kyrgyzstan, Tajikistan and Pakistan. It was essentially a repackaging of ongoing projects that had already started in the late 1990s (see Kaufmann 2021).

<sup>29</sup> In the early days of the DSR, a variety of names were tested out in Chinese and English, including Cyber Silk Road (*wangshang sichou zhilu*), Information Harbour (*xinxi gang*) and Information Silk Road (*xinxi sichou zhilu*). The English translation has now stabilized into Digital Silk Road, but all these other versions continue to be used in Chinese-language documents.

<sup>30</sup> Several researchers have discussed the link between Chinese internal plans on IT and the DSR, in particular the 13th Five-Year Plan and high-profile initiatives such as Internet+, Made in China and China Standards 2035 (Hillman 2021; Keane and Yu 2019; Hong 2017b.) The link, however, goes back further. The development of a strong domestic technology sector had been a recurring theme in post-Deng China, starting from the 10th Five-Year Plan (2001–2005), which listed long-term goals (e.g. develop IT along the entire supply chain and increase autochthonous innovation) and specific fields of particular importance (e.g. integrated circuits, rockets) in a level of detail that did not exist in earlier plans but was going to become a feature of all subsequent ones. In 2005, the State Council also issued a National Informatization Development Strategic Plan 2006–2020 (2006–2020 nian guojia xinxihua fazhan zhanlüe) that put informatization (*xinxihua*) squarely at the centre of China's development strategy, as a priority for the internal economy and to grow exports. Discussing the origins of the BRI, Jones and Zeng (2019) point out that the internal "Open up the west" campaign was a forerunner and a model for the BRI formulation and strategy. Similarly, the 2006–2020 Plan and Five-Year Plans from 2001 onwards became a model for the newly formed and outward-looking strategy for exporting Chinese IT. In all these plans, we can see the ambition of the Chinese government to make China a norm-maker, rather than just a norm-taker, in the international tech field.

<sup>31</sup> Koepp 2022; Cheng and Zeng 2023.

<sup>32</sup> Koepp 2022.

CAC and MCE). In more recent years, however, the only voices have been those of the NDRC and CAC (N28 and N31). The CAC's expanding and "supra-ministerial" role as regulator of the digital space and its alignment with the more political of the state-level actors suggests that, at the central level, the DSR has evolved into a tool used to export Chinese ideas on digital sovereignty rather than to build infrastructure and export tech products.<sup>33</sup>

This leads to the question of the actual content of central DSR plans. Are there specific projects, beyond lists of areas worthy of attention, which can help to draw a distinction between the DSR and the much broader and earlier expansion of Chinese tech abroad? It is worth noting that even defining a "DSR document" is challenging, since documents that do not mention either the BRI or the DSR can be quite detailed about DSR connections (for example, N27 and N28). But, in general, the vagueness of "Vision and actions" in 2015 (N01) set the template for subsequent documents; objectives remain indeterminate, as do the nevertheless persistent exhortations to build, expand, develop and export. The narrow focus on infrastructure quickly expands to cloud and data (N11, from 2016), to the digital economy (N15, from 2017) and the construction of data harbours (N30), but the language never deviates from lists of topics rather than concrete projects. The cumulative effect of the documents is one of "atmospheric guidance," in the words of Jones and Zeng, which cannot even be reduced to a long-term vision, as key terms and areas are borrowed from other existing policies and initiatives in a variety of fields, and future evolutions are entirely left open to interpretation.<sup>34</sup> The only exception is the China-ASEAN Information Harbor (*dongmeng* xinxigang 东盟信息港), which was named explicitly and received significant attention between 2016 and 2017, and again in 2021 (N07, N09, N10, N11, N12, N15, N26). The Harbor, so called to indicate "a port for internet connectivity, information sharing, wealth pooling and culture integration,"<sup>35</sup> was not even the result of national actors' priorities, but rather an idea pursued by the Guangxi provincial government. Interestingly, it is not mentioned in the 2019 document, "The BRI: progress, contributions and prospects" (N22), which lists a number of achievements in different areas including in the digital realm. Central documents do not provide an overall strategy; they simply offer vague keywords and no hints of actual projects. These only appear in documents issued by provincial governments seeking to make central exhortations to build digital connections with neighbouring countries into vehicles for their own agendas.

# Phase Two: Digital Silk Road Policies at the Provincial Level

Much like central documents, provincial ones address the DSR at different levels of detail. Three provinces (Guangxi, Gansu and Fujian) issued stand-alone DSR plans; seven issued documents that refer to the DSR in a generic way, without any implementation plan; 18 issued BRI plans that refer specifically to IT or digital infrastructure (sometimes weaving references to the DSR in their narrative). Only six provinces have no plan for either the BRI or the DSR. Figure 1 shows a timeline of central and provincial DSR documents. The initial surge in central plans and commentaries (21 between 2015 and 2019) petered out in the following years, just as provincial plan-making gained momentum, with a record 42 documents issued in 2021.

<sup>33</sup> On the "supra-ministerial" and opaque role of the CAC, see Horsley 2022. The CAC also organizes the World Internet Conference, where the DSR has often been evoked.

<sup>34</sup> Jones and Zeng 2019, 1420.

<sup>35 &</sup>quot;Lu's speech at the opening ceremony of China–ASEAN Information Harbor Forum." China Daily, 13 September 2015, http://www.chinadaily.com.cn/bizchina/informationharbor/2015-09/13/content\_21848737.htm. Accessed 8 July 2024. The concept of the "information harbour" was originally introduced to China in the 1990s and refers to a hub for all regional network infrastructures (fibre optic networks, satellite and microwave transmission) that connect directly to the national backbone. It is worth noting that only developed cities have the privilege to build information harbours that directly connect to national backbone networks (Zeng, Huashen, and Li 1999). Guangxi was able to do so through the China–ASEAN Information Harbor ("Nanning huopi sheli guojiaji hulianwang gugan zhiliandian" (Nanning approved to build a national-level backbone connection point). *Guangxi ribao*, 14 January 2021, https://gx.cri.cn/2021-01-14/6c99350f-a84e-604e-3e24-403057e84894.html. Accessed 10 July 2024).

Chinese National Documents on the Digital Silk Road



Figure 1. Central and provincial documents related to the Digital Silk Road 2014–2022, authors' visualization from the documents listed in Appendix 1 (online supplementary material).

This appears to follow the well-established pattern of provinces providing content to guidelines issued by the centre.<sup>36</sup> However, central statements on the DSR are so devoid of actual content that they result in keywords – connectivity, infrastructure, big data, e-commerce, the digitization of industry, standard-making – that are neither novel nor indicative of any particular direction in the evolution of the digital landscape other than the one set by IT companies.

Provincial plans can be divided into two groups: those by provinces which do not have an IT industry, and those that do. We discuss their characteristics below.

## Plan-rich and tech-poor provinces

Provinces without a significant tech industry have attempted to use the DSR to develop local projects with an international orientation. Guangxi stands out, with 12 documents as of July 2022, and for its influence on the national DSR even before its launch. In fact, Guangxi came up with one of the very few projects mentioned in central documents that can be directly related to the DSR and then followed through its attempted implementation: the China–ASEAN Information Harbor, mentioned above. The Guangxi provincial government and the CAC proposed the project in September 2014 during the first China–ASEAN Cyberspace Forum, which was held in Nanning. The project was immediately endorsed at the highest level and officially launched in 2015 by Zhang Gaoli 张高丽, the vice-premier of the State Council, at the following Forum.<sup>37</sup> After the 2015 announcement of the Information Silk Road, Guangxi issued a series of work plans detailing goals, programmes and key local implementers. The Harbor was incorporated as a state-controlled company charged with building the infrastructure and managing the overall project.<sup>38</sup> It was approved by the State Council in 2016 (N9, N11).

The real goal, however, was to provide an opportunity, and possibly financing, to develop Guangxi's own infrastructure and digitize its industries, rather than to build an outward-facing DSR.<sup>39</sup> In 2015, the province ranked 25th in China's Information Society Index, and its lack of an information economy was seen as the major barrier to its informatization.<sup>40</sup> A big obstacle to the growth of the local digital economy was the interprovincial competition from Guizhou and

<sup>36</sup> For the specific mechanisms of this process, see in particular Jones and Hameiri 2021; Ye 2020.

<sup>37 &</sup>quot;Di er jie Zhongguo-Dongmeng xinxi gang luntan kaimu zhuli Zhongguo-Dongmeng gongxiang 'xinxi sichou zhilu'" (The opening of the 2nd China-ASEAN Information Harbor Forum helps China-ASEAN share the "Information Silk Road"). CRI Online, 11 September 2016, https://news.cri.cn/baidunews-eco/20160911/2a73c7b6-9fe1-6f9f-9c4e-9c39e17e831e.html. Accessed 8 July 2024.

<sup>38</sup> See "China-ASEAN Information Harbor," at http://www.caih.com/index.html.

<sup>39 &</sup>quot;Guangxi jiakuai fazhan shuzi jingji" (Guangxi speeds up the development of the digital economy). Renmin ribao, 31 May 2018, https://www.sohu.com/a/233576068\_114731. Accessed 8 July 2024.

<sup>40</sup> Wu et al. 2015.

Fujian over investments and talents, so Guangxi's China-ASEAN plan was a chance to build a unique brand reflecting "Guangxi's characteristics" (Guangxi tese 广西特色).41 By 2021, the scale of the local digital economy had reached 851.2 billion yuan (roughly US\$124 billion), which represented about 34.4 per cent of Guangxi's GDP and ranked the province 18th in the country.<sup>42</sup> The Harbor was held up as an example of a flagship DSR project in the 13th and 14th Five-Year Plans.<sup>43</sup> Guangxi continued to pursue its strategy of digital development via the DSR, issuing more plans for the construction of an information highway connecting ASEAN countries and, domestically, to strengthen interprovincial broadband networks in southern China. By 2021, it had constructed 11 interprovincial backbone networks, seven cross-border land cables and dedicated data channels and 13 Beidou Navigation Satellite System demonstration projects for ASEAN countries (GX10). The Harbor was also trying to attract companies such as Huawei, Alibaba and Tencent to invest in the province.<sup>44</sup> Public praise from the central government, however, was not followed by financial support. In 2020, the Guangxi government's Big Data Research Institute bemoaned the lack of coordination between ministries, central commissions and provinces, the lack of central funding and the absence of ASEAN partners.<sup>45</sup> In 2021, the provincial government was seeking investors and trying to set right a project that was not looking likely to ever be completed or profitable.<sup>46</sup> None of the envisioned ASEAN partners materialized, either as investors or as businesses operating within the Harbor, as the local government itself admitted in its "China-ASEAN DSR 2021-2025 Plan" (GX4).<sup>47</sup> The document explicitly discusses not only the need to find ways to motivate ASEAN countries to join the DSR and take up the services offered by the Harbor but also the several areas that were not working.<sup>48</sup>

Fujian, also competing for resources from the central government, proposed its own China-ASEAN Information Harbor (*Zhongguo-Dongmeng xinxi gang wangshang sichou zhilu* 中国东盟信息港网上丝绸之路, FJ3) in 2017. Given Fujian's existing ties with Taiwan, this project was supposed to increase e-commerce between the two and to extend it to ASEAN countries. Nothing concrete followed, but the plan itself shows the fierce competition that exists among provinces to develop their own digital economy by pairing this rhetorically international framing with an inwardly focused execution. Fujian persisted in looking for ways to use the DSR to support

<sup>41</sup> Bi 2020.

<sup>42 &</sup>quot;Guangxi shuzi jingji fazhan baipishu (2022 nian)" (2022 Guangxi Digital Economy Development White Paper). Guangxi Information Centre, 15 December 2022, http://gxxxzx.gxzf.gov.cn/zxdt/t14407784.shtml. Accessed 8 July 2024.

<sup>43</sup> The China–Arabic Countries Cyber Silk Road project (*Zhong-A wangshang sichou zhilu*), which was championed by Ningxia, was also mentioned but never concretized. See "Ningxia de jingji zhuanxing yu ke chixu fazhan" (Ningxia economic transformation and sustainable development). *Jinri Zhongguo*, 5 December 2014, http://www.chinatoday.com.cn/ctchinese/zhuanti/2014-12/05/content\_674262\_3.htm. Accessed 8 July 2024. The e-commerce platform www.ubuymore. com was indeed built but later closed.

<sup>44 &</sup>quot;Zhongguo-Dongmeng xinxi gang jianshe de ji dian sikao ji jianyi" (Some thoughts and suggestions on the construction of the China-ASEAN Information Harbor). Guangxi Big Data Research Institute, 13 May 2020, http://gxxzx.gxzf.gov. cn/zxgk/cgzs/yjcg/t5455073.shtml. Accessed 8 July 2024.

<sup>45</sup> Ibid.

<sup>46</sup> In its 2021–2025 Digital Silk Road Development Plan (GX9), the Guangxi provincial government writes that it will approach the Asian Infrastructure Investment Bank, the Silk Road Fund and the China–ASEAN Investment Cooperation Fund, as well as commercial banks and central government funding, to support the China–ASEAN Information Harbor. According to the 2021 report of the China–ASEAN Information Harbor Construction Service Task Force (2021), "The investment is large and relies excessively on a single source, the return is slow ... leading to 'waiting for the rice to cook, waiting for the money to start work' during project development" (authors' translation).

<sup>47</sup> The plan identified the following areas as not quite working: first, the policy exchange mechanism on collaborations between China and ASEAN states around digitization was marred by inefficiencies; second, collaboration between countries on cross-border digital economy was lacking; third, digital trade and financial services in Guangxi remained at the level of small-scale businesses and were not growing; fourth, Guangxi's digital services were not being taken up by the ASEAN countries to which they were offered; and finally, digital infrastructure continued to remain underdeveloped (GX4).

<sup>48</sup> Ibid.

commerce with Taiwan. Its "2019–2022 work plan on the Digital Silk Road" (FJ8) proposed to leverage existing sea cables connecting it to Taiwan and build data centres and ICT businesses around them. Yet again, nothing came out of this plan.<sup>49</sup>

Gansu, another province with a very low-tech industry base, also showed an early interest in developing infrastructure, e-commerce and data exchanges with Central Asia.<sup>50</sup> Its workplan to build a "Silk Road Information Harbor 2018–2025" (GS3) envisions the creation of a network to connect it to central-western Asia and to upgrade existing China–Kazakhstan and China–Mongolia land cables – none of which has come to fruition as of 2023. Despite the rhetoric of internationalization, however, Gansu's plans are heavily focused on the local development agenda. Having one of the smallest digital economies in China, the province is trying to upgrade its traditional industries and grow its information sectors. It needs the strategic opportunity for digitization offered by the DSR, as local authorities candidly admit in their planning documents (GS3).<sup>51</sup>

Connectivity is also mentioned in plans issued by Liaoning, Heilongjiang, Ningxia, Sichuan, Shanxi, Henan, Jiangsu, Guizhou and Hubei, usually without any reference to specific resources and with flexible interpretations of "neighbouring countries." All these plans are either rehashes or at best upgrades of infrastructure-building projects that predate the DSR, such as the Transit Europe–Asia Terrestrial Network (TEA) from the 1990s,<sup>52</sup> or else did not materialize at all. The DSR framing was used simply to repurpose existing policies while further attempting to strengthen the local infrastructure to develop the local economy.

Similar attempts to leverage DSR keywords for local development appeared in the areas of "information sharing" (*xinxi gongxiang* 信息共享) and cross-border (or Silk Road) e-commerce (*silu dianshang* 丝路电商), with plans issued to exchange data with BRI countries and to empower Chinese information-service businesses to build an eco-system for big data applications (see, for example, GX3, GS3).<sup>53</sup> The scarce follow-ups to these plans that we were able to find have continued to depict them as projects that are about to happen or will happen in the future, while existing projects are used at most by local, not even national, companies.<sup>54</sup>

There have also been calls for collaborations with BRI countries to build governance guidelines for cross-border data transfer (GS3) – yet again, without international counterparts. The goal is to supply China-based information-service businesses with data from BRI countries and ease the over-capacity of big data centres in western China.<sup>55</sup> However, we have found no evidence of the involvement of international companies (unless they are localizing services for the Chinese market, like

<sup>49</sup> See "Fujian sheng xinxi chanye lizheng shixian xiaoshou shouru chaoguo 6000 yi yuan" (Fujian province's information industry seeks to gain sales revenue of more than 6 billion yuan). Www.gov.cn, 7 February 2012, https://www.gov.cn/gzdt/ 2012-02/07/content\_2060062.htm, for the 2012 announcement of the Pingtan International Offshore Data Centre.

<sup>50</sup> In fact, the Pingtan Data Centre mentioned in the Plan was first proposed back in 2012 and, at the time of writing, has yet to be approved by the central government. See "Gangsu sheng chutai 'si lu' jingji Gansu jianshe zongti fang'an" (Gansu province issues a comprehensive plan for the construction of a "Silk Road" economy in Gansu). *Zhongguo xinwen wang*, 21 May 2014, https://www.chinanews.com.cn/cj/2014/05-21/6197467.shtml. Accessed 8 July 2024.

<sup>51 &</sup>quot;Zhongguo shuzi jingji fazhan baogao" (2022 Chinese digital economy development report). CAICT, July 2022, http://www.caict.ac.cn/kxyj/qwfb/bps/202207/t20220708\_405627.htm. Accessed 8 July 2024.

<sup>52</sup> Kaufmann 2021.

<sup>53</sup> For example, Guangxi, Gansu, Guizhou, Shanxi, Yunnan and Ningxia have built data centres to supply data storage and exchange services to BRI countries and to offer big data support for energy, environment, tourism, logistics and transport applications. See Pan 2022.

<sup>54</sup> See, e.g., Guangxi's ASEAN data centres, which appear to have been built but without any foreign partner ("Jichu sheshi pingtai" (Platform infrastructure). China–Asean Information Harbor, http://www.caih.com/subpage\_236.html) and Gansu's Cloud Data Centre, which has been built but so far serves only internal Chinese clients ("Gansu jinchang zijin yun da shuju zhongxin yun pingtai yi dajian wancheng bing shangxian yunxing" (Gansu's cloud platform in the big data centre in Jinchang has been built and is operating). *Pengpai xinwen*, 24 April 2020, https://www.thepaper.cn/ newsDetail\_forward\_7123448).

<sup>55</sup> Shen 2018; on data centres overcapacity, see also Fung 2023; Lucas and Feng 2018.

Apple and Foxcomm).<sup>56</sup> A report by the Guangxi government on the China–ASEAN Information Harbor observes outright that ASEAN countries do not actively participate in the Harbor, and that among the nearly 200 key projects, there is little ASEAN or international participation, with initiatives of Chinese enterprises going without support or response.<sup>57</sup>

## "Tech-rich" provinces and the DSR

Provinces and municipalities with a significant IT manufacturing base - Guangdong, Jiangsu, Zhejiang, Shanghai, Beijing<sup>58</sup> – have not been particularly prolific in producing DSR and BRI plans, although they have referred to both as narrative devices with which to frame their own plans for digital development. These provinces and municipalities are not interested in building or strengthening infrastructure, which is already in place. Their interests lie in standard- and normmaking in digital areas and in being at the forefront of innovation. Unlike the poorer provinces, who are playing catch-up in the digital economy, richer provinces are looking to the future and working ahead of the government in attempting to identify the next wave of IT innovation. In its "14th Five-Year Plan on the digital economy" from 2021, Zhejiang proposes to explore ethics in AI and blockchain, and to enhance BRI countries' cooperation in the digital economy by building a governance system for international digital trade (ZJ3). Similarly, the "Beijing action plan for promoting high-quality development of the Belt and Road (2021-2025)" (BJ3) proposes the establishment of international digital trade standards, international cross-border mutual recognition of digital certificates and electronic signatures. Between 2015 and 2021, Guangdong issued seven plans, opinions and regulations on its own digital economy, referencing both the DSR and the BRI, but in an abstract way. The real focus of these documents was on identifying areas for the development of cutting-edge technologies to keep innovating and growing the provincial economy, without much concern for the national one. The "Overall plan for the construction of Guangzhou artificial intelligence and digital economy pilot zone" (GD2) specifies that tax breaks and subsidies are for companies and personnel based in the Guangzhou-Hong Kong-Macau Greater Day Area only; the 2021 "Opinion on accelerating the development of digitization" (GD7) identifies 6G, brain-computer interfaces and DNA storage as areas of research for local companies which can then be leveraged for export (zou chuqu 走出去). These plans discuss specific technologies to add to an existing basis that is already very solid and export oriented. They may pay lip-service to collaboration with BRI countries, but without the specific regional emphasis of poorer provinces like Guangxi. They also show awareness that the future of the digital world order lies in more political areas such as digital governance. Whereas less IT-oriented provinces propose to build data centres, Guangdong aims to participate in the creation of standards and policies for cross-border data flows. Similarly, Jiangsu's "2020 proposal on accelerating the construction of the DSR in our province" (JS2) is aimed at supporting existing strategies for "going out" (zou chuqu) and "bringing in" (yinjin lai 引进来), i.e. supporting Chinese companies in their expansion abroad and in attracting foreign technological and managerial innovations and talents.

From the very beginning of the DSR, scholarship has discussed how it is a mechanism for exporting excess equipment that cannot find an internal market.<sup>59</sup> But while the DSR strategies of IT-rich provinces fit this framing, for IT-poor ones the DSR is a way to make up for their lack of an IT industry, not to export non-existing excess capacity. IT-rich provinces do not need the DSR: IT companies based in those regions already have a firm foothold in foreign markets and employ diverse strategies

<sup>56</sup> Pan 2022.

<sup>57 &</sup>quot;Peng Zhongping: zhu tui Zhongguo–Dongmeng xinxi gang jianshe xieli dazao 'shuzi sichou zhi lu" (Peng Zhongping: promote the construction of China–ASEAN Information Port and jointly build the "Digital Silk Road"). Guangxi CPPCC, 27 January 2022, https://www.gxzx.gov.cn/html/wylz/weiyuanfengcai/540.html. Accessed 8 July 2024.

<sup>58</sup> Luo and Zhou 2022.

<sup>59</sup> Shen 2018, 2686-87.

and local incentives to expand it. Their DSR rhetoric serves to legitimize, in the eyes of the central government, policies and subsidies that benefit their own areas and enterprises.

## Conclusion: Provincial Policies as a Counterpoint to a Unified Conception of the DSR

To go back to our original question, what, in reality, is the DSR? We analysed it from the perspectives of rhetorical framing, national strategies on technology, and national and provincial actors, and showed that while it persists as a keyword in provincial plans that echo national discourses, it in fact lacks all substance, particularly in terms of actual projects supported by central funding and international partners.

That Chinese internal policies are complex and fragmented is well established, but the DSR breaks the mechanism of central direction and local execution that underpins many state initiatives. Documents issued by central actors do not signal any clear direction, much less specific projects or detailed financing and coordinating mechanisms. The very few projects that they do list were initiated by provincial governments and then were either abandoned, like the China-Arabic Countries Cyber Silk Road project, or else fell short of their international ambitions, like Guangxi's China-ASEAN Information Harbor. The timeline of national and provincial activities on the DSR shows that the central government has been steadily disengaging with the initiative after an early period of signing DSR-specific MoUs with a number of countries. This could be owing to the changing international landscape, especially in the tech field, an inward turn towards state regulation of the tech industry and a renewed emphasis on self-reliance and indigenous innovation.<sup>60</sup> The policymaking process identified by Jones and Hameiri and others implies the existence of a feedback mechanism among different actors (mostly central and provincial/local governments), even when the feedback is negative.<sup>61</sup> The absence of funding and international partners for concrete and specific DRS projects jams this "steering" mechanism<sup>62</sup> and the central impetus fades away. From a policymaking perspective, then, this adds "lack of traction" to the repertoire of the regulatory state: strategies that might be thought to be promising at a specific point in time are abandoned when the blocks required for implementation do not materialize from the involved parties. It is important to note, too, that Chinese tech companies, seen by some as the real drivers of the DSR, have maintained an ambiguous stance towards it and there is little evidence that they refer to the DSR as something that informs their market decisions.<sup>63</sup> While the Chinese government plays an important role in regulating and supporting the tech industry,<sup>64</sup> its influence on companies' internationalization strategies can be limited.<sup>65</sup>

In the 14th Five-Year Plan for National Informatization, issued in 2021 by the Central Commission for Cybersecurity and Informatization,<sup>66</sup> the DSR is discussed in a rather subdued way: "The concept of a community of common destiny in cyberspace was broadly disseminated."<sup>67</sup> This is an apt conclusion to an initiative that never found its main purpose and was never taken up by parties that could have implemented it, except on a rhetorical level. Continuing to interpret the DSR as a unified plan, or even as a strategy, only obfuscates attempts at understanding who the different actors in the Chinese technological field are and how they are contributing to reshape, in very different ways, the digital world order.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/S0305741024000936.

- 62 Jones and Hameiri 2021, 13.
- 63 El Kadi 2024.

- 65 Yin and Li 2020.
- 66 DigiChina 2022.
- 67 Ibid., 7.

<sup>60</sup> Zhang 2024.

<sup>61</sup> Jones and Hameiri 2021; Rabe and Kostka 2022; Wong 2018.

<sup>64</sup> Shen 2021; Hong 2017a; Kloet et al. 2019; Zhang 2024.

Acknowledgements. The authors would like to thank Oyuna Baldakova, Hong Shen, Chen Xuechen, Shalen Fu, Li Ping, Thant Sin Oo and the anonymous reviewers for their insightful feedback, and Thais Lobo for her editorial help. This article is part of a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme, Grant agreement No. 850891.

Competing interests. None.

#### References

- Bi, Yuchao. 2020. "Guangxi fazhan shuzi jingji yanjiu" (Research on the development of Guangxi's digital economy). Guihai luncong 36(6), 74–79.
- Chan, Gerald. 2022. China's Digital Silk Road: Setting Standards, Powering Growth. Northampton, MA: Edward Elgar.
- Chen, Jian. 2021. "Shuzi sichou zhilu: yingdui xifang shuzi diguo zhuyi de Zhongguo fang'an" (The Digital Silk Road: China's solution to Western digital imperialism). *Dongnan xueshu* 4(2021), 56–65. https://doi.org/10.13658/j.cnki.sar.2021.04.006.
- Cheng, Jing, and Jinghan Zeng. 2023. "'Digital Silk Road' as a slogan instead of a grand strategy." *Journal of Contemporary China*. https://doi.org/10.1080/10670564.2023.2222269.
- China–ASEAN Information Harbor Construction Task Force. 2021. "Zhongguo–Dongmeng xinxi gang jianshe tou rongzi xianzhuang ji duice jianyi" (The current situation regarding investments and financing of the construction of the ASEAN information port), 27 September, http://gxxzx.gxzf.gov.cn/jczxfw/dsjfzyj/t10288740.shtml. Accessed 8 July 2024.
- China Electronics and Information Industry Development Research Institute. 2019. Shuzi sichou zhilu "yidai yilu" shuzi jingji de jiyu yu tiaojian (Digital Silk Road: The Opportunities and Challenges in Developing the Digital Economy along the Belt and Road). Beijing: Zhongguo gongxin chuban jituan and Renmin youdian chubanshe.
- Creemers, Rogier. 2021. The Digital Silk Road: Perspectives from Affected Countries. Leiden: Leiden Asia Centre.
- DigiChina. 2022. "Translation: 14th Five-Year Plan for National Informatization" (Rogier Creemers, Hunter Dorwart, Kevin Neville, Kendra Schaefer, Johanna Costigan and Graham Webster (trans.)). Cyber Policy Center, Freeman Spogli Institute, Stanford University, 24 January, https://digichina.stanford.edu/work/translation-14th-five-year-plan-for-nationalinformatization-dec-2021/. Accessed 8 July 2024.
- Downie, Edmund, and Jeremy Lee Wallace. 2021. "Gatekeepers of the transition: how provinces are adapting to China's decarbonization pledges." Center on Global Energy Policy, 22 November, https://www.energypolicy.columbia.edu/publications/gatekeepers-transition-how-provinces-are-adapting-china-s-national-decarbonization-pledges/. Accessed 8 July 2024.
- El Kadi, Tin Hinane. 2024. "Learning along the Digital Silk Road? Technology transfer, power, and Chinese ICT corporations in north Africa." *The Information Society* **40**(2), 136–153.
- Erie, Matthew S., and Thomas Streinz. 2021. "The Beijing effect: China's Digital Silk Road as transnational data governance." New York University Journal of International Law and Politics 54(1), 1–92.
- Fang, Fang. 2019. "Shuzi sichou zhilu jianshe: guoji huanjing yu lujing xuanze" (Building the Digital Silk Road: the international environment and path choices). Guoji luntan 21(2), 56–75.
- Fung, Baron. 2023. "Data center infrastructure market a look into 2023." Dell'Oro Group, 19 January, https://www.delloro. com/data-center-infrastructure-market-a-look-into-2023/. Accessed 8 July 2024
- Gordon, David, and Meia Nouwens (eds.). 2023. The Digital Silk Road: China's Technological Rise and the Geopolitics of Cyberspace. London: Routledge.
- Hemmings, John. 2020. "Reconstructing order: the geopolitical risks in China's Digital Silk Road." Asia Policy 27(1), 5-21.
- Hillman, Jonathan E. 2021. The Digital Silk Road: China's Quest to Wire the World and Win the Future. London: Profile Books.
- Hong, Yu. 2017a. Networking China: The Digital Transformation of the Chinese Economy. Champaign, IL: University of Illinois Press.
- Hong, Yu. 2017b. "Reading the 13th Five-Year Plan: reflections on China's ICT policy." International Journal of Communication 11, 1755–74.
- Horsley, Jamie P. 2022. "Behind the facade of China's cyber super-regulator." *DigiChina*, 8 August, https://digichina.stanford. edu/work/behind-the-facade-of-chinas-cyber-super-regulator/. Accessed 8 July 2024.
- Jaros, Kyle A., and Yeling Tan. 2020. "Provincial power in a centralizing China: the politics of domestic and international 'development space'." *The China Journal* **83**, 79–104.
- Jones, Lee, and Shahar Hameiri. 2021. Fractured China: How State Transformation Is Shaping China's Rise. Cambridge: Cambridge University Press.
- Jones, Lee, and Jinghan Zeng. 2019. "Understanding China's 'Belt and Road Initiative': beyond 'grand strategy' to a state transformation analysis." *Third World Quarterly* **40**(8), 1415–39.
- Kaufmann, Lena. 2021. "Prefiguring China's Digital Silk Road to Europe: connecting Switzerland." Munk School of Global Affairs and Public Policy, University of Toronto, https://munkschool.utoronto.ca/belt-road/research/prefiguring-chinas-digital-silk-road-europe-connecting-switzerland. Accessed 8 July 2024.
- Keane, Michael, and Haiqing Yu. 2019. "A digital empire in the making: China's outbound digital platforms." *International Journal of Communication* 13, 4624–41.
- Kloet, Jeroen de, Thomas Poell, Zeng Guohua and Chow Yiu Fai. 2019. "The platformization of Chinese society: infrastructure, governance, and practice." Chinese Journal of Communication 12(3), 249–256.

- Koepp, Robert. 2022. "Locating the Digital Silk Road in the Belt and Road Initiative." In David Gordon and Meia Nouwens (eds.), *The Digital Silk Road*. London: Routledge.
- Liu, Lushu, and Yuwen Liu. 2018. "Shuzi sichou zhilu' xiangguan gainian yu fazhan mailuo" (Ideas and development context of the Digital Silk Road). Yuece yu xinxi 11, 78–84.
- Liu, Tianyang, and Yao Song. 2021. "Trajectories to becoming international relations actors in China's BRI initiative: a comparative study of the Guangdong and Yunnan provinces." *The Pacific Review* **34**(5), 778–809.
- Lucas, Louise, and Emily Feng. 2018. "China's underused regional data centres stir overcapacity fears." *Financial Times*, 15 November, https://www.ft.com/content/72f2ccdc-e72e-11e8-8a85-04b8afea6ea3. Accessed 8 July 2024.
- Luo, Run, and Nianxing Zhou. 2022. "Dynamic evolution, spatial differences, and driving factors of China's provincial digital economy." Sustainability 14(15), 9376.
- National Development and Reform Commission, Ministry of Foreign Affairs and Ministry of Commerce of the People's Republic of China. 2015. "Tuidong gong jian sichou zhilu jingji dai he 21 shiji haishang sichou zhilu de yuanjing yu xingdong" (Vision and actions on jointly building the Belt and Road), 28 March, http://www.china.org.cn/chinese/2015-09/15/ content\_36591064.htm. Accessed 8 July 2024.
- Pan, Darcy. 2022. "Storing data on the margins: making state and infrastructure in southwest China." Information, Communication and Society 25(16), 2412–26.
- Parker, George, James Kynge and Lucy Hornby. 2018. "May resists pressure to endorse China's 'New Silk Road' project." Financial Times, 31 January, https://www.ft.com/content/3e79ae14-0681-11e8-9650-9c0ad2d7c5b5. Accessed 8 July 2024.
- Rabe, Wiebke, and Genia Kostka. 2022. "Leaping over the dragon's gate: the 'Air Silk Road' between Henan province and Luxembourg." *The China Quarterly* 249, 160–182.
- Shen, Hong. 2018. "Building a Digital Silk Road? Situating the internet in China's Belt and Road Initiative." International Journal of Communication 12(19), 2683–2701.
- Shen, Hong. 2021. Alibaba: Infrastructuring Global China. London: Routledge.
- Summers, Tim. 2016. "China's 'new Silk Roads': sub-national regions and networks of global political economy." Third World Quarterly 37(9), 1628–43.

Summers, Tim. 2021. "The Belt and Road Initiative in southwest China: responses from Yunnan province." *The Pacific Review* 34(2), 206–229.

- Triolo, Paul, Kevin Allison, Clarise Brown and Kelsey Broderick. 2020. "The Digital Silk Road: expanding China's digital footprint." Eurasia Group, 29 April, https://www.eurasiagroup.net/live-post/digital-silk-road-expanding-china-digitalfootprint. Accessed 8 July 2024.
- Vila Seoane, Maximiliano Facundo. 2020. "Alibaba's discourse for the Digital Silk Road: the electronic world trade platform and 'inclusive globalization'." *Chinese Journal of Communication* 13(1), 68–83.
- Vila Seoane, Maximiliano Facundo, and Carla Morena Álvarez Velasco. 2024. "The Chinese surveillance state in Latin America? Evidence from Argentina and Ecuador." *The Information Society* 40(2), 1–14.
- Wang, Haiyan. 2020. "Zhongguo yu ZhongYa guojia gong jian shuzi sichou zhilu: jichu, tiaozhan yu lujing" (China and Central Asian countries jointly build the Digital Silk Road: foundations, challenges and pathways). Guoji wenti yanjiu 2, 107–133.
- Wong, Audrye. 2018. "More than peripheral: how provinces influence China's foreign policy." *The China Quarterly* 235, 735–757.
- Wu, Haiyu, Zhipeng Yan, Zhen Zhong and Fan Feng. 2015. "2015 nian Guangxi zhuangzu zizhiqu xinxi shehui fazhan baogao" (2015 Report on the development of the information society in Guangxi 2015). Zhongguo xinxihua 9, 78–80.
- Xiang, Kun. 2017. "Cong shuzi jingji shijiao kan shuzi sichou zhilu jianshe de neihan, jiegou he fanzhan lujing" (Implications, structure, and development of the Digital Silk Road from a digital economy perspective). Xibu luntan 27(6), 11–16.
- Ye, Min. 2020. The Belt Road and Beyond: State-mobilized Globalization in China: 1998–2018. Cambridge: Cambridge University Press.
- Yin, Qi, and Xiaoxia Li. 2020. "Exploring the roles of government involvement and institutional environments in the internationalization of Chinese internet companies." *Chinese Journal of Communication* 13(1), 47–67.
- Zeng, Huashen, and Lixin Li. 1999. "Information port and its basic techniques." Computer Applications 19(10), 1-4.
- Zeng, Jinghan. 2019. "Narrating China's Belt and Road Initiative." Global Policy 10(2), 207-216.

Zhang, Angela. 2024. High Wire: How China Regulates Big Tech and Governs Its Economy. New York: Oxford University Press.

**Elisa OREGLIA** is reader in global digital cultures in the department of digital humanities at King's College London. She is currently researching the expansion of Chinese tech in neighbouring countries.

Weidi ZHENG earned her PhD in media studies from SOAS, the University of London, and conducted postdoctoral research in the department of digital humanities at King's College London. Her research interests include media anthropology, digital economy, global China and South–South cooperation.

Cite this article: Oreglia E, Zheng W (2024). The Digital Silk Road between National Rhetoric and Provincial Ambitions. *The China Quarterly* 1–13. https://doi.org/10.1017/S0305741024000936