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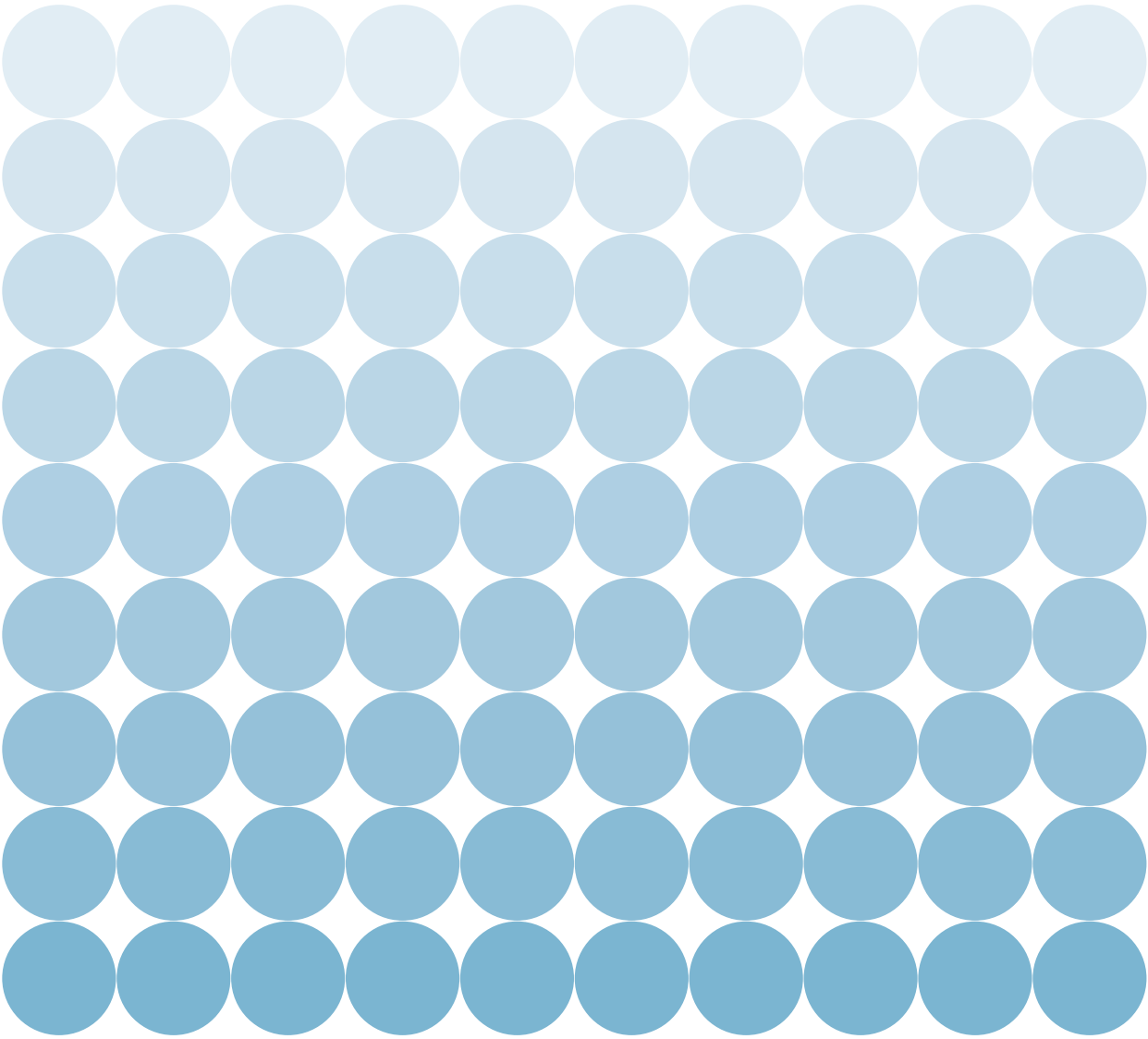
CHINA–EU CONNECTIVITY IN AN ERA OF GEOPOLITICAL COMPETITION

IAN ANTHONY, JIAYI ZHOU, JINGDONG YUAN, FEI SU AND JINYUNG KIM



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Preface

International politics are currently characterized by tensions and disagreements among major powers that hinder common action on major challenges, including the climate crisis and pandemic disease. The European Union (EU) is becoming more concerned with the challenges that an increasingly assertive China poses to the rules and norms of the liberal international order that the EU supports. Simultaneously, China is recognizing the sharper tone in EU policy discourse on China–EU relations.

This reassessment of the relationship from both sides will doubtless lead to adaptations in posture and policy by both. Where political trust has weakened, it is wise to have moderate expectations. However, a core conclusion from this policy paper is that the partnership remains both viable and, given the scale of investments and the shared stakes in the relationship, also necessary.

Alongside the recognition of emerging challenges and difficulties in China–EU relations, it is important to keep in mind the milestones that have been reached and the progress that has been made in connectivity projects over the past few years. An increasing volume of goods are being moved between China and the EU because of successful investments in rail and maritime transport infrastructure. Chinese and European contractors have worked together to build the communication networks that are in use today, even though controversy around future digital cooperation is deepening. The terms of the relationship are open to question, not the fundamental fact of it, though deeply significant adjustments in expectations and policies are necessary and are taking place.

The issues within the China–EU relationship cannot be properly understood if viewed through an exclusively China–EU lens. Transatlantic relations, which are themselves entering a process of renewal and realignment as the Biden administration takes over, are also part of the picture.

The authors of this thought-provoking policy paper—Ian Anthony, Jiayi Zhou, Jingdong Yuan, Fei Su and Jinyung Kim—have used their deep expertise on all these issues to describe the current state of China–EU discourse in this area. They draw out the subtle and shifting balance between competition and cooperation in a complex and changing international context. They are able to present some practical ideas on how to maintain cooperation while recognizing the need for realistic expectations. I commend the analysis and the policy proposals to policymakers engaged with China–EU relations, as well as to researchers and media interested in transport and digital connectivity.

Dan Smith
Director, SIPRI
Stockholm, March 2021

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The authors take full responsibility for the content of this policy paper, but the project derived great benefit from the insights of more than 20 experts who were kind enough to participate in personal interviews: Jens Bastian, Erik Brattberg, Polyxeni Davarinou, Nektarios Demenopoulos, Thanos Dokos, Mathieu Duchâtel, Mario Esteban, Rudolf Fürst, Xin Hua, Bertram Lang, Zhang Li, Liu Mingli, Tamas Matura, Georgios Mitrakos, Frans-Paul van der Putten, Carlos Rodrigues, Jamie Shea, Tim Summers, Charalampos Tsardanidis, Daniel Voelsen and Zeng Jinghan.

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Summary

Relations between China and the European Union (EU) are undergoing significant changes. With an important relationship marked by fast growing trade and increasing investments over four and half decades, China and the EU today are reassessing some of the assumptions, expectations and policy frameworks that have underpinned their hitherto largely cooperative and mutually beneficial strategic partnership.

Since at the least the 2010s, China and the EU had focused discussions on how to strengthen their commercial relationship through joint agreements related to 'connectivity'. This has included Chinese investments in transportation systems and digital networks that were seen as positive examples of bilateral cooperation and sources of economic growth. But these connectivity projects are complex and take time to implement, and political relations have meanwhile begun to deteriorate.

The EU has become disillusioned by China's failure to respect free and fair trade, transparency and accountability in investment, and reciprocity in market access. China wants to preserve the EU as a crucial market for goods and investments, and an important source of technologies and standards.

Neither China nor the EU will decouple relations given the enormous stakes involved, but they will adapt policies to reflect the new realities of their relationship. China–EU summitry and top-level political interactions have become more intense and focused on areas of substantive difference.

China–EU relations are also affected by the United States factor. The US administration of President Donald J. Trump forced sharp choices on both China and the EU over trade disputes and technological competition. The potential realignment and renewal of transatlantic relations under the new administration of President Joe Biden may force China to make policy adjustments to protect and advance its interests in an environment of transatlantic convergence on geopolitical and geoeconomic matters.

Against this background, the conceptual underpinnings and policy implications of connectivity projects in the transport and digital sectors are being reassessed. While connectivity projects are emblems of China–EU cooperation, they have also come to reveal differences in expectations, management and outcomes.

The scope for projects has narrowed in transportation, and cooperation in digital connectivity has been significantly disrupted. China and the EU need to decide whether digital connectivity is still possible, where cooperation can still take place, and what political, institutional and technical resources are necessary for realistic, safe and viable projects, for instance, in e-commerce. Disputes over investment priorities, divergent regulatory regimes, emerging security concerns and technical issues in implementation have placed a question mark over the future of connectivity programmes.

China and the EU lack the level of mutual understanding that can sustain cooperation in the long run. Investing in human resources and knowledge can

help reduce misplaced expectations and misinterpretations that impede a more mature bilateral relationship.

The China–EU relationship remains viable and their cooperation is needed, not least to facilitate economic recovery after the Covid-19 pandemic. However, greater clarity in interests and objectives is also needed. Based on these findings, the following policies can be recommended.

1. Existing China–EU institutional arrangements such as the EU–China Connectivity Platform (EUCCP) and the annual Information and Communications Technology Dialogue need to be fully focused on agreed connectivity projects in order for the two sides to reach common ground on how they will be implemented.

2. To promote integrated and sustainable supply chains, China and the EU should develop a common focus on how security issues will be addressed in the field of transportation.

3. China and the EU should agree on criteria that need to be met for digital networks to be considered secure in a joint framework. The criteria should be monitored effectively by each party based on transparent information.

4. To prepare for future cooperation, China and the EU each need to significantly increase their investment in generating knowledge about the contemporary politics of the other. The EU should prioritize contemporary China studies when earmarking research funds. China should create deeper research capacity related to the EU across its nationwide university and think-tank systems.

5. China and the EU should explore less contentious and more promising areas for cooperation, such as green financing, energy and climate change.

Abbreviations

4G	Fourth generation (digital networks)
5G	Fifth generation (digital networks)
17+1	Cooperation between China and Central and Eastern European Countries
ASEM	Asia–Europe Meeting
BDI	Bundesverband der Deutschen Industrie (Federation of German Industries)
BRI	Belt and Road Initiative
CAI	Comprehensive Agreement on Investment
CEF	Connecting Europe Facility
COSCO	China Ocean Shipping Company
CRE	China Railway Express
ENISA	European Union Agency for Cybersecurity
EU	European Union
EUCCP	European Union–China Connectivity Platform
FDI	Foreign direct investment
G20	Group of Twenty (large economies)
ICT	Information and communications technology
NATO	North Atlantic Treaty Organization
NIS	Network and information security
PPE	Personal protective equipment
SOE	State-owned enterprise
TEN-T	Trans-European Transport Network
TSI	Three Seas Initiative

1. Introduction

The past few years have witnessed significant changes in the four-and-half-decade relationship between China and the European Union (EU), which now includes elements of a so-called systemic rivalry.[1] Elections in key European countries and the inauguration of a new administration in the United States promise to make 2021–22 an important inflection point as part of the ongoing recalibration of the nature of relations with China.

The China–EU relationship has evolved from being a relatively peripheral foreign policy priority for both sides to the point where it now demands significant time and engagement from the most senior leaders. Discussions among officials are now subject to continuous political oversight because some of the key assumptions on which the China–EU relationship was based in the past have been overturned. Senior-level meetings such as China–EU summits have acquired a heightened significance.

In the early 2000s the EU believed that China would transition to an open and more liberal society, based on respect for human rights, and that this change would be accomplished (or at least accelerated) as a middle class emerged and expanded through enhanced trade and commerce.[2] It further assumed that a focus on domestic priorities would make the emergence of China as a global player a gradual and long-term process, and that an emerging China would assimilate the system of rules that the EU itself promoted.

At the same time, China saw the EU as a close trade and investment partner, with which common economic interests were expected to spill over into more wide-ranging political cooperation.[3] It foresaw that the EU could evolve into a separate centre of decision making in a multipolar world. But this idea was tempered by the belief that the European approach to international affairs would nevertheless emphasize collaborative tools to promote its interests, given the profile of the EU as a peace project and the major disagreement between important European countries and the USA over the use of force in the early 2000s.

Against these assumptions, it was logical and uncontroversial to adopt a connectivity agenda to enhance transport and digital links through investment in infrastructure. China and the EU both saw projects to make it faster and cheaper to conduct trade and commerce as being consistent with their interests.

Both sides have realized that their initial assumptions were flawed. Economic success has not translated into the kind of domestic reform in China that the EU hoped for and anticipated. In addition, China has become a powerful global actor

[1] European Commission, 'EU–China—A strategic outlook', Joint Communication to the European Parliament, the European Council and the Council, JOIN(2019) 5 final, 12 Mar. 2019.

[2] European Commission, 'A mature partnership: Shared interests and challenges in EU–China relations', Policy Paper for Transmission to the Council and the European Parliament, COM(2003) 533 final, 10 Sep. 2003, ; and Maher, R., 'The elusive EU–China strategic partnership', *International Affairs*, vol. 92, no. 4 (July 2016), pp. 959–76.

[3] Zhou, H. (周弘) and Jin, L. (金玲), '中欧关系70年：多领域伙伴关系的发展' [70 years of China–European relations: The development of a multisectoral partnership], 欧洲研究 [Chinese Journal of European Studies], no. 5, 2019, pp. 1–15.

with influence over all dimensions of international affairs at an unexpected pace. These domestic and external developments overwhelmed the capacity of the EU to process the full implications of China's emergence, in particular where the latter's new diplomatic assertiveness and its economic practices challenge existing norms and rules for global governance.

The constitutional reforms enacted by the EU have not enabled it to act with coherence and unity across the spectrum of international affairs. Compared to the pace of development in China, the transformation of the EU has been slow and uneven. Its relationship with the USA is extremely durable—as China has come to understand—and the transatlantic community moves quickly to repair relations after even the most serious disagreements. The EU has increasingly turned to instruments such as sanctions and conditionality to promote its interests and has asserted that more effective military cooperation is needed to play a proper role in global affairs.

These changes have required a serious reassessment by both China and the EU of the nature, scope and future direction of their relationship. The two sides remain committed to their strategic partnership, and this differentiates them from the USA, where a broad consensus appears to be emerging that relations with China are inevitably confrontational. However, major differences over human rights, foreign policy, and economic and political governance have emerged between China and the EU, and at times these have impeded cooperation in areas where their stated interests align. Among the areas in which such dynamics are playing out is in the field of 'connectivity', a weathervane for a relationship that is of growing importance for international relations.[4]

A broad concept, connectivity denotes both physical and non-physical linkages between geographies, polities, economies and peoples.[5] Over the past decade, it has become increasingly prevalent as an organizing economic and foreign policy concept across national capitals, international and regional organizations, and multilateral financing institutions. But not all connectivity-related initiatives work in conjunction; in addition to differences in purview and approach, they have also become a source of significant contestation as various actors reshape regional and global integration in their own interests.

Not least among the players involved in shaping 21st century connectivity are China and the EU, which are pivotal actors in their respective regions as well as globally. Both are pursuing their own connectivity initiatives: China through the Belt and Road Initiative (BRI) and the EU through its Connecting Europe Facility (CEF) and Connecting Europe and Asia strategy, which all aim to reshape

[4] European Commission, 'Elements for a new EU strategy on China', Joint Communication to the European Parliament and the Council, JOIN(2016) 30 final, 22 June 2016.

[5] E.g. Asia–Europe Meeting (ASEM) Path Finder Group on Connectivity (APGC), 'ASEM connectivity', Annex I to Chairman's statement, 13th ASEM Foreign Ministers' Meeting, 21 Nov. 2017; and European Commission, 'Connecting Europe and Asia: Building blocks for an EU strategy', Joint communication to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, JOIN(2018) 31 final, 19 Sep. 2018.

and integrate landscapes at home and abroad.[6] As pursued between them, in the China–EU policy context, connectivity initially referred to agreements to jointly pursue investments in transport infrastructure. However, the term has also been applied to other sectors and areas where deeper cooperation through government-level consultation, industrial or sectoral joint efforts, and greater societal and interpersonal exchanges would enhance China–EU policy coordination.

How China and the EU pursue their respective connectivity agendas will inevitably affect interoperability, standards and rules across multiple levels of governance. Particularly at a time of heightened geopolitical uncertainty, the elements of partnership and competition within their complex bilateral relationship will also have broader implications for the international order. Thus, through the lens of connectivity this policy paper also seeks to bring greater empirical specificity to the analysis of China and the EU's complex relationship.

Previous SIPRI publications have explored the geopolitical, economic and developmental implications of the BRI in Central, South and South East Asia, and the prospects and challenges that China's connectivity drive presents for China–EU cooperation.[7] This policy paper rounds out the analysis by outlining the implications of China's connectivity effort within the EU itself. It is based in part on workshops held with both European and Chinese stakeholders and experts, in Stockholm in October 2019 and online in September 2020, and is also informed by a range of online and in-person interviews with stakeholders and analysts conducted in the first half of 2020.

The paper examines Chinese connectivity projects within the EU's transport and digital sectors. These sectors have significant interest from the point of view of Chinese investments, but they also form the bases of the EU's own priorities, as outlined in the CEF established in 2014 and the 2018 Connecting Europe and Asia strategy.[8] While the paper does not examine EU investments in China, the bilateral Comprehensive Agreement on Investment (CAI) agreed in principle in December 2020 highlights the need to continue to scrutinize connectivity from the reciprocal perspective.[9]

Chapter 2 discusses the evolving, often nuanced and sometimes elusive definition of connectivity from political, economic and technical perspectives, and as it is understood in China and the EU. The chapter discusses the respective

[6] Chinese Ministry of Foreign Affairs, 'President Xi Jinping delivers important speech and proposes to build a Silk Road economic belt with Central Asian countries', 7 Sep. 2013; European Commission, JOIN(2018) 31 final (note 5); and European Commission, Innovation and Networks Executive Agency (INEA), *Investing in European Networks: The Connecting Europe Facility* (INEA: Brussels, July 2019).

[7] Ghiasy, R. and Zhou, J., *The Silk Road Economic Belt: Considering Security Implications and EU–China Cooperation Prospects* (SIPRI: Stockholm, 2017); Ghiasy, R., Fei., S. and Saalman, L., *The 21st Century Maritime Silk Road: Security Implications and Ways Forward for the European Union* (SIPRI: Stockholm, 2018); and Anthony, I., Zhou, J. and Su, F., 'EU security perspectives in an era of connectivity: Implications for relations with China', SIPRI Insights on Peace and Security no. 2020/3, Feb. 2020.

[8] People-to-people linkages, which are part of the Connecting Europe and Asia strategy, are not covered here. European Commission, 'Explaining the European Union's approach to connecting Europe and Asia', Fact sheet, 19 Sep. 2018.

[9] European Commission, 'EU and China reach agreement in principle on investment', Press release, 30 Dec. 2020.

policy and political frameworks in which China and the EU place connectivity. Chapter 3 briefly describes the changing perspectives of China and the EU on each other, including how the US factor has influenced the evolving China–EU relationship in recent years. This provides the broader political context within which two policy areas—transportation and digital cooperation—are outlined and analysed in chapters 4 and 5.

Connecting transport and telecommunications infrastructure was identified by both China and the EU as an area where they could deepen cooperation. In chapter 6 the paper concludes by presenting some of the key findings of the research and makes some policy recommendations.

2. The evolving approach to connectivity

Connectivity is not the exclusive domain of any one actor and does not have a common definition across policy areas. As a flexible term used by a range of international actors, it is applied in many concrete sectors, programmes and projects that are intended to enhance physical and non-physical linkages between regions and people. Indeed, it has been used as a synonym for globalization, with connotations of openness, engagement, coordination and even multilateralism.[10] At the same time, various connectivity-related initiatives have also been the subject of significant contestation regarding their geostrategic, commercial or developmental nature and implications.[11]

Much of that controversy centres on the BRI, a large-scale domestic and foreign policy connectivity framework which, among other ambitions, seeks to improve the infrastructure linking Europe and Asia by land and sea. Since it was announced by Chinese President Xi Jinping in 2013, China's foreign economic and diplomatic efforts related to the BRI have significantly shaped international discourse.[12] Other connectivity-related initiatives that include international organizations and dialogue formats—such as the Group of Twenty (G20) large economies, the Association of Southeast Asian Nations (ASEAN) and the Asia–Europe Meeting (ASEM)—as well as those of other states—such as Australia, India, Japan and the USA—have been variously characterized as both synergistic and in direct competition with the BRI.[13]

This extends to the EU's own 2018 document, 'Connecting Europe and Asia: Building blocks for an EU strategy'.[14] As implied by the name, the 2018 document is increasingly being seen as a modest first step towards a more comprehensive effort that can eventually be applied globally, approaching the level of ambition of the BRI.[15]

[10] European External Action Service (EEAS), *Shared Vision, Common Action: A Stronger Europe—A Global Strategy for the European Union's Foreign and Security Policy* (EEAS: Brussels, June 2016), p. 13.

[11] Kohlenberg, P. J. and Godehardt, N., 'China's global connectivity politics: On confidently dealing with Chinese initiatives', Stiftung Wissenschaft und Politik (SWP) Comment no. 17, Apr. 2018.

[12] Chinese Ministry of Foreign Affairs, 'President Xi Jinping delivers important speech and proposes to build a Silk Road economic belt with Central Asian countries', 7 Sep. 2013.

[13] E.g. Association of Southeast Asia Nations (ASEAN), *Master Plan on ASEAN Connectivity 2025* (ASEAN Secretariat: Jakarta, 2016); Japanese Ministry of Foreign Affairs, 'Partnership for quality infrastructure: Investment for Asia's future', 21 May 2015; US Department of State, *A Free and Open Indo-Pacific: Advancing a Shared Vision* (Department of State: Washington, DC, 4 Nov. 2019); Asia Africa Growth Corridor (AAGC), 'About AGGC', 3 Nov. 2020; US Agency for International Development (USAID), 'BUILD Act', 12 Dec. 2018; US Department of State, 'Digital Connectivity and Cybersecurity Partnership', [n.d.]; Group of 20, 'Roadmap to infrastructure as an asset class', Mar. 2018; and Japanese Government and European Commission, 'The partnership on sustainable connectivity and quality infrastructure between Japan and the European Union', 27 Sep. 2019.

[14] European Commission, JOIN(2018) 31 final (note 5).

[15] Clauss, M., Permanent Representative of Germany to the EU, 'Implications for the China work of the German Presidency of the Council of the EU', Presentation, Charting a New Course for European China Policy: Resilient, Competitive and Geopolitical conference, Mercator Institute for China Studies (MERICS), 16 Sep. 2020, session 1, 13.00–27.03.

Debates about the nature and intention of these myriad connectivity initiatives are difficult to resolve. While critics tend to stress the risks of asymmetric interdependence in recipient countries, Chinese analysts often emphasize that connectivity is inherently win–win.[16] Indeed, the Chinese policy term for connectivity, 互联互通 (*hulian hutong*), places a double emphasis on 互 (*hu*) or mutuality. However, the degree to which Chinese overseas investments are based on a model of mutual and shared benefits is highly contested. Chinese officials and analysts have tended to stress an absolute-gains model where the benefits of connectivity are not necessarily equally shared among actors. As one Chinese diplomat has put it, '"shared benefits" does not mean windfall gains. Business opportunities in the BRI could only be seized by those who make a genuine effort, not by those who sit comfortably out there complaining.'[17]

Such a sentiment highlights how China and the EU have become embroiled in discussions about the compatibility of their approaches to connectivity. Moreover, EU officials have taken a growing interest in monitoring and responding to China's investments and programme activities within and close to the EU as they have increased in scale.[18]

Connectivity in China and the European Union

In the EU, connectivity has been defined as encompassing both 'physical and non-physical infrastructure through which goods, services, ideas, information and people can flow unhindered'.[19] Indeed, one EU official has even stated that 'Connectivity is part of the European Union's DNA', both within its internal market and as a public goods provider abroad.[20] Beyond physical infrastructure, the EU has stressed the need for 'sustainable, comprehensive and rules-based connectivity' as part of a distinct 'European way'.[21] Its approach is also intertwined with values, including but not limited to those of democracy, good governance and human rights.[22]

In practice, the EU discourse on connectivity is fragmented along member state and even subregional lines.[23] Projects that fall under common EU initiatives are also negotiated and implemented by member states. Coherence in EU policies related to China and connectivity thus remains an aspiration, rather than a reality,

[16] Garcia-Herrero, A. et al., *EU–China Trade and Investment in Challenging Times* (European Parliament: Brussels, May 2020); and Keohane, R. O. and Nye, J. S., *Power and Interdependence*, 2nd edn (Harper Collins: New York, 1989).

[17] Chinese Mission to the EU, 'Spokesperson of the Chinese Mission to the EU speaks on a question concerning a report by the EU Chamber of Commerce in China on the Belt and Road Initiative', 18 Jan. 2018.

[18] European External Action Service (note 10).

[19] Šefčovič, M., 'Linking Europe and Asia offers opportunities', *Global Times*, 24 Apr. 2019.

[20] Šefčovič (note 19).

[21] European Commission, JOIN (2018) 31 final (note 5), p. 2.

[22] Šefčovič (note 19).

[23] E.g. 8th Summit of China and Central and Eastern European Countries, 'The Dubrovnik Guidelines for Cooperation between China and Central and Eastern European Countries', 12 Apr. 2019.

albeit one that is taking shape through development of new EU-wide guidance and legislation on foreign investment.[24]

The EU's own internal connectivity agenda is exemplified by the programme of work to promote transport, digital and energy networks inside the EU financed by the Connecting Europe Facility since 2014.[25]

Within the transport sector, an EU-wide network of roads, railway lines, canals and coastal shipping routes along with the associated ports, airports and railway terminals—the Trans-European Transport Network (TEN-T)—is envisaged. By 2030, through the CEF and other funding programmes, TEN-T plans to deliver a 'core' network of transport infrastructure, and by 2050 a comprehensive network covering all European regions including projects that link to adjacent non-EU member states.[26]

The EU's digital connectivity agenda is one part of the EU's Digital Europe programme, a set of initiatives to support and finance the development of the components of the Digital Single Market—a barrier-free market for digital commerce.[27] The external dimension of digital connectivity is to be partly delivered through the 2017 Digital4Development framework, which was formally launched in December 2020 and which is designed to be fully compatible with the Digital Single Market.[28]

For China, the BRI exemplifies its approach to connectivity as an economic and foreign policy initiative that has sparked intense speculation, imagination and contestation around the globe. The BRI originated in 2013 as a series of regional projects oriented to China's immediate neighbourhood.[29] The BRI was not mentioned in any of the main China–EU dialogue forums in 2013 and it does not appear in the EU–China 2020 Strategic Agenda for Cooperation adopted in that year.[30]

The scope of the BRI subsequently expanded rapidly. In November 2013 at the second meeting of the heads of government of China and 16 Central and East European countries—known as the 16+1, and later the 17+1—the leaders agreed to discuss the possibility of building an international railway transportation corridor connecting China and Central and Eastern Europe, and to strengthen

[24] Clini, C., 'The quest for coherence in Europe's connectivity strategy', European Interest, 12 Apr. 2019.

[25] Council of the EU, 'Multiannual financial framework and Next Generation EU', Press release, 17 Dec. 2020.

[26] Regulation (EU) no. 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the Trans-European Transport Network and repealing Decision no. 661/2010/EU, *Official Journal of the European Union*, L 348, 20 Dec. 2013, pp. 1–28. Cooperation with the Western Balkans is described in European Commission, *EU Connectivity Agenda for the Western Balkans* (European Commission: Brussels, 2019).

[27] European Commission, 'Digital Europe programme: A proposed €7.5 billion of funding for 2021–2027', Fact sheet, 14 Dec. 2020.

[28] European Commission, 'Digital4Development: Mainstreaming digital technologies and services into EU development policy', Commission staff working document, SWD(2017) 157 final, 2 May 2017; and European Commission, 'Team Europe: Digital4Development Hub launched to help shape a fair digital future across the globe', Press release, 8 Dec. 2020.

[29] Ghiasy and Zhou (note 7).

[30] EU–China 2020 Strategic Agenda for Cooperation, adopted Nov. 2013.

cooperation in construction of roads, railways, ports and airports.[31] In 2014, as the BRI expanded to include Asia, Africa and Eastern Europe, the EU began to question why Central and Eastern Europe was singled out, and whether this would undermine EU cohesion.[32]

At the second Belt and Road Forum for International Cooperation, in April 2019, President Xi continued to emphasize the need for a global connectivity network based on physical transportation routes.[33] However, in comparison to the EU's approach to connectivity, China has also taken a much less institutionalized and programmatic approach with the BRI. On other occasions Xi has characterized the BRI as a highly impressionistic artform with minimal details.[34] The initiative serves largely as an umbrella framework—if not public diplomacy slogan—for a variety of Chinese overseas activities, including investment projects that predate the announcement of the BRI. Indeed, no definitive list of BRI projects is publicly available. Contributing to the lack of precision, China's model of state-led capitalism has often made it difficult to distinguish between actors, interests and finance sources across national and subnational levels of government and commerce.

The BRI is a process that continues to evolve, and in speeches to the second Belt and Road Forum President Xi underlined that international concerns and cooperation can play a role in shaping Chinese views.[35] For example, China has attempted to address external criticisms of the BRI by releasing a debt sustainability framework as (non-mandatory) guidance to help ensure the investment and lending decisions of banks meet certain minimum criteria.[36] However, as Xi made clear in his speech, where divergent approaches touch on the nature of China's economic and political regime, China will not adopt and apply standards that were developed without its participation and consent.

The changing utility of connectivity

Although China and the EU have stressed that connectivity has become 'a priority and important foundation' for their bilateral relations, during 2020 the drive to enhance global interconnectedness was brought into question.[37] A proposal for a new industrial policy provided by the European Commission to EU member states places greater emphasis on managing risks associated with global supply chains, including bringing production closer to the intended market, diversifying

[31] 2nd Summit of China and Central and Eastern European Countries, 'The Bucharest Guidelines for Cooperation between China and Central and Eastern European Countries', 26 Nov. 2013.

[32] The authors are grateful to an external reviewer of the paper for this insight.

[33] Xi, J., Chinese President, 'Working together to deliver a brighter future for Belt and Road cooperation', Keynote speech, Opening ceremony of the Second Belt and Road Forum for International Cooperation, Chinese Ministry of Foreign Affairs, 26 Apr. 2019.

[34] Zhang, Y. (张翼), '共建"一带一路":从"大写意"到"工笔画"' [Building the 'Belt and Road': From 'freehand' to 'gongbi' painting], Chinese Central Government, 23 Apr. 2018.

[35] Xi (note 33).

[36] Chinese Ministry of Finance, 'Debt sustainability framework for participating countries of the Belt and Road Initiative', 25 Apr. 2019.

[37] EU–China Connectivity Platform, Minutes of 4th chairs' meeting, 8 Apr. 2019, p. 1. See also European Commission, 'EU–China Summit: Rebalancing the strategic partnership', Press release, 9 Apr. 2019.

suppliers and decreasing foreign dependency.[38] The global Covid-19 pandemic will reorder priorities and increase the relevance of sectors such as digital, social and health infrastructure over physical modes of transport and personal contact.[39] The degree to which these impulses represent a true turning point for international affairs remains to be seen. The pandemic response has also had an impact on China's diplomatic relations with the EU and EU member states in ways that may also affect prospects for connectivity.

More broadly, China–EU cooperation on connectivity may be crowded out by other priorities, particularly perhaps work to meet climate-related objectives. The EU's financial framework for 2021–27 anticipates spending of €18 billion on the CEF over seven years.[40] This is roughly half the level of financing that was proposed by the European Commission, and slightly more than half the amount allocated to the CEF in the 2014–20 financial framework.[41] At the same time, the transformation of transport systems is a key element of the European Green Deal, the set of policy initiatives at the heart of making the EU carbon neutral by 2050.[42] As a result, the amount spent on transport initiatives is likely to significantly increase, but driven by the priorities of the European Green Deal, rather than the CEF.

Large-scale financing for infrastructure for development continues to be necessary.[43] Building resilient infrastructure, which is Sustainable Development Goal (SDG) 9, remains a key part of the United Nations 2030 Agenda, as committed to by both developed and developing states.[44] Post-pandemic recovery within the EU also needs to be financed, but China is unlikely to play the same role in European recovery as it did after the 2008 financial crisis.[45] This is due both to its own economic slowdown and to new security sensitivities and policy instruments at the EU and EU member state levels.

In January 2021 the European Parliament called for a global connectivity strategy for the EU that can 'advance its interests, values and positions and strengthen cooperation with its partners in the digital field and the fields of health, security, the green transition, transportation, energy and, in particular,

[38] Borrell, J., 'The Coronavirus pandemic and the new world it is creating', European External Action Service (EEAS), 23 Mar. 2020; and European Commission, 'A new industrial strategy for Europe', Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2020) 102 final, 10 Mar. 2020.

[39] European Commission, 'Connectivity is essential during emergency situations', 31 Mar. 2020.

[40] Council of the EU (note 25).

[41] Pape, M., 'Connecting Europe Facility 2021–2027: Financing key EU infrastructure networks', 4th edn, Briefing, EU Legislation in Progress, European Parliament, June 2020.

[42] European Commission, 'The European Green Deal', Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2019) 640 final, 11 Dec. 2019.

[43] Bhattacharyay, B. N., 'Estimating demand for infrastructure, 2010–2020', eds B. N. Bhattacharyay, M. Kawai, and R. M. Nag, Asian Development Bank Institute (ADBI), *Infrastructure for Asian Connectivity* (Edward Elgar: Cheltenham, 2012), pp. 19–79.

[44] UN General Assembly Resolution 70/1, 'Transforming our world: The 2030 Agenda for Sustainable Development', 25 Sep. 2015, A/RES/70/1, 21 Oct. 2015.

[45] Xinhua, 'China becomes first non-EU country to announce contribution to Juncker plan: EU', *Global Times*, 28 Sep. 2015.

human networks'.[46] The Parliament recommended that a global strategy should include more emphasis on cooperation with India, Japan and South Korea and take account of the work to develop an Indo-Pacific strategy for the EU. The Parliament further proposed that Africa and the EU's European neighbourhood should be designated as priority regions for connectivity projects.

These rapidly evolving connectivity dynamics are recognized and, to the extent possible, incorporated in the analysis here.

[46] European Parliament, 'Connectivity and EU–Asia relations', Resolution 2020/2115(INI), 21 Jan. 2021.

3. The evolving China–European Union relationship

Since the opening of diplomatic relations between the EU's predecessor and the People's Republic of China in 1975, their relationship has developed global significance. Their bilateral dialogue has expanded to encompassing a broad range of economic, political and security issues at the most senior decision-making and working group levels and in 2003 they became 'comprehensive strategic partners'.[47] Until recently, however, both China and the EU had viewed their relationship largely in economic terms. The EU became China's largest trade partner in 2014 and China became the EU's largest trade partner for the first time in 2020.[48]

In the years since the 2008 financial crisis, China's foreign direct investment (FDI) in the EU has grown: from €2 billion in 2010 it peaked at €37 billion in 2016 but had declined to €11.7 billion by 2019.[49] This growth has promoted more sensitive and politicized conversations in the EU on the strategic implications of these capital inflows, reciprocity and a level playing field (i.e. a fair set of rules that gives an equal chance of success to each side).[50]

China has adopted a more assertive foreign policy under President Xi Jinping, while Ursula von der Leyen has clearly articulated the EU's ambition to play an independent global role since becoming president of the European Commission in late 2019.[51] The boundary between economics and geopolitics is increasingly blurred in both China and the EU.

Even as their interactions have become more contentious, China and the EU have undergone a learning process. The internationalization of Chinese companies and their presence in European markets is no more than two decades old, while Chinese foreign policy expertise and scholarship have traditionally focused on the USA.[52] Likewise, the EU faces a lack of competence and a dearth

[47] European Commission, COM(2003) 533 final (note 2).

[48] BBC, 'China overtakes US as EU's biggest trading partner', 17 Feb. 2021; and Agence France-Presse, 'China edges past US as Europe's top trade partner', EURACTIV, 3 Dec. 2020.

[49] Hanemann, T. and Rosen, D. H., *China invests in Europe: Pattern, Impacts and Policy Implications* (Rhodium Group: New York, June 2012); Hanemann, T., Huotari, M. and Kratz, A., *Chinese FDI in Europe: 2018 Trends and Impact of New Screening Policies* (Rhodium Group/Mercator Institute for China Studies (MERICS): Berlin, Mar. 2019); and Kratz, A. et al., *Chinese FDI in Europe: 2019 Update* (Rhodium Group/Mercator Institute for China Studies (MERICS): Berlin, Apr. 2020).

[50] Baruzzi, S., 'What do EU investors seek from China?', China Briefing, Dezan Shira & Associates, 6 Oct. 2020; Forchielli, E., 'Chinese investment in the EU: A challenge to Europe's economic security', Stockholm China Forum Paper Series, German Marshall Fund of the United States, Jan. 2015; and Šimalčík, M., 'Weaponizing transparency: Dealing with security risks of Chinese investments', EURACTIV, 12 June 2020.

[51] von der Leyen, U., President-elect of the European Commission, Speech in the European Parliament Plenary Session, 27 Nov. 2019.

[52] Earlier scholarly works to close the gap include Shambaugh, D., Sandschneider, E., and Zhou, H. (eds), *China–Europe Relations: Perceptions, Policies, and Prospects* (Routledge: London, 2007); Ash, R., Shambaugh, D. and Takagi, S. (eds), *China Watching: Perspectives from Europe, Japan, and the United States* (Routledge: London, 2007); and Zhou, H. (周弘), 共性与差异—中欧伙伴关系评析 [Commonalities and differences: An analysis of the China–EU partnership] (China Social Sciences Press: Beijing, 2004).

of expertise on contemporary Chinese politics.[53] As interactions have increased, China and the EU have identified issues of mutual interest and there are powerful drivers for cooperation. However, the increase in interaction has also uncovered serious disagreements over how to manage key issues. Among these complex and evolving dynamics, connectivity is an issue which currently exhibits both cooperation and divergence.

The European Union perspective on evolving relations with China

The EU has begun to approach China with greater resolve partly because the previous expectation that dialogue alone would promote EU interests does not appear to have delivered results. The European Commission has advocated a more 'realistic, assertive and multi-faceted EU approach' to China that places less emphasis on compromise, concession and downplaying differences.[54] Instead, it aims to codify measurable progress by agreed deadlines on bilateral issues such as asymmetric market access, investment opportunities and state subsidies in enforceable agreements.[55]

The more assertive effort to open opportunities for the EU in China has been developed alongside the intra-EU processes intended to protect EU companies from unfair Chinese competition in the European single market. New EU tools include an FDI-screening mechanism, which came into force in October 2020 and which highlights the 'potential risk to strategic industries' and possible 'loss of critical assets and technology' to investments and acquisitions from non-EU countries, which clearly includes China.[56] A 2020 white paper on foreign subsidies in the single market is also implicitly aimed at protecting markets against what is seen as unfair competition presented by Chinese companies—particularly state-owned enterprises (SOEs).[57]

The China–EU relationship has been further affected by the Covid-19 pandemic. In the early phase of the outbreak in Europe there were initially positive responses to the speed with which the Chinese Government brought Covid-19 under control and the assistance that China provided to EU member states. However, subsequent Chinese disinformation campaigns, the more forceful tone taken by Chinese diplomats in Europe and the politicization of Chinese medical aid as well as issues related to Hong Kong and Xinjiang have deepened the normative and

[53] Frenzel, A. and Godehardt, N., 'Improving Europe's China competence', Stiftung Wissenschaft und Politik (SWP) Comment no. 40, July 2020.

[54] European Commission (note 37).

[55] Juncker, J.-C., President of the European Commission, Remarks at the joint press conference following the EU–China Summit, European Commission, 9 Apr. 2019.

[56] European Commission, 'Guidance to the Member States concerning foreign direct investment and free movement of capital from third countries, and the protection of Europe's strategic assets, ahead of the application of Regulation (EU) 2019/452 (FDI Screening Regulation)', Communication from the Commission, C(2020) 1981 final, 25 Mar. 2020, p. 1.

[57] European Commission, 'White paper on levelling the playing field as regards foreign subsidies', COM(2020) 253 final, 17 June 2020.

political divide.[58] The Covid-19 outbreak exposed the EU's vulnerabilities—such as its dependence on China for supplies of personal protective equipment (PPE)—and reinforced the Commission's proposals to reduce dependence on foreign suppliers in strategic sectors and to shorten the supply chains of critical items.[59]

Identifying areas for constructive engagement remains the main approach, but Josep Borrell, the EU high representative for foreign affairs and security policy, has conceded that the EU has been naive about China.[60] Moreover, he has stressed, '[EU members] only have a chance if [they] deal with China with collective discipline', and there are indeed indications that, at a member state level, perspectives have begun to converge.[61]

A number of factors have sharpened the EU's focus on what divides it from China. Three are particularly noteworthy.

First, some actions by China domestically and in its neighbourhood, discussed further below, are inconsistent with the EU approach to security governance and incompatible with rules that the EU has established for itself in the fields of human rights, democracy and the rule of law.

Second, the impact of Chinese actions is magnified because the media and the expert community in Europe as well as governments now pay closer attention to them.[62] The public perception of China also appears to be deteriorating across Europe. In a 2020 opinion survey by the Pew Research Center, more than half of respondents in each of the eight EU member states included in the poll had an unfavourable view of China (ranging from 56 per cent in Italy to over 80 per cent in Sweden).[63] The survey also indicated that confidence in the current Chinese leadership to take decisions that benefit the international community was low across those eight states. The findings largely appear to be a consequence of the Covid-19 pandemic. Another critical area of disagreement is over how to manage the security dimensions of fifth generation (5G) digital networks (discussed in greater detail in chapter 5). The troubling aspects of Chinese policy and practice that resonate with European lawmakers and the public are gaining prominence, while the more positive narrative that China would like to promote through its public diplomacy is treated with increasing scepticism.[64]

[58] EUvsDisinfo, 'EEAS special report update: Short assessment of narratives and disinformation around the COVID-19/Coronavirus pandemic (Updated 2–22 April)', 24 Apr. 2020; Borrell (note 38); and Herszenhorn, D. M. and Barigazzi, J., 'EU leaders face tough time getting tough on China', Politico, 22 June 2020.

[59] European Commission, COM(2020) 102 final (note 38).

[60] Guillot, L., 'Europe has been "naive" about China, says Josep Borrell', Politico, 3 May 2020.

[61] Borrell, J., 'Opening remarks to the annual German Ambassadors' Conference', European External Action Service (EEAS), 25 May 2020. See also European External Action Service (EEAS), 'Trust and reciprocity: The necessary ingredients for EU–China cooperation', 15 May 2020.

[62] Turcsányi, R. et al., *European Public Opinion on China in the Age of COVID-19: Differences and Common Ground across the Continent* (Palacký University/Central European Institute of Asian Studies: Olomouc/Bratislava, Dec. 2020).

[63] Silver, L., Devlin, K. and Huang, C., 'Unfavorable views of China reach historic highs in many countries', Pew Research Center, 6 Oct. 2020.

[64] Lequesne, C. and Wang, E., 'Covid-19: Lessons from China's public diplomacy in the EU', The Conversation, 24 June 2020.

Third, the US perspective that China is a serious long-term threat to an international system that has served European interests well has influenced thinking in the capitals of EU members.[65] European states and the EU share the US view that enforcement measures are sometimes necessary to ensure that China complies with agreements that it has entered into, even if those measures significantly disrupt international trade. However, the EU has not adopted language that the US administration of President Donald J. Trump used to emphasize ideological differences with China and it has rejected the perspective articulated by Trump that the USA 'certainly does maintain a policy option, under various conditions, of a complete decoupling from China'.[66]

In statements after the eighth EU–China High-Level Trade and Economic Dialogue, held in July 2020, senior European Commission officials highlighted that the conditions created by the pandemic necessitated working 'hand in hand' with China. But they emphasized that China–EU bilateral and trade relations must be based on the principles of reciprocity and a level playing field with clear and predictable rules.[67]

The Covid-19 pandemic meant that the 22nd annual EU–China Summit, in June 2020, was held online. This was followed in September by a virtual EU–China Leaders' Meeting, on which senior EU officials placed high expectations. A broad discussion of China policy among EU heads of government prior to the leaders' meeting indicated more convergence among EU leaders than expected, which was later reflected in their interventions during the EU–China Leaders' Meeting.[68]

The EU had wanted the EU–China Leaders' Meeting to accelerate progress towards an agreement that would help EU companies access the Chinese market for goods and services.[69] At the meeting, the two sides reached agreement in principle on a bilateral Comprehensive Agreement on Investment.[70]

German Chancellor Angela Merkel, who was instrumental in organizing the leaders' meeting under the German EU Presidency, has been a strong supporter of building cooperation with China. However, she will step down as chancellor after September 2021. A broad consensus around a 'tougher' line on China in the post-Merkel era is said to be forming in Germany as parties of the centre-right want more progress on economic reciprocity and parties of the centre-left want to challenge China on human rights.[71]

[65] Wright, T., 'Europe changes its mind on China', Brookings Institution, July 2020.

[66] '"Complete decoupling" from China remains an "option," says Trump', Deutsche Welle, 18 June 2020. See also Lighthizer, R. E., US Trade Representative, Testimony to hearing on the president's 2020 trade policy agenda, US House of Representatives, Committee on Ways and Means, 17 June 2020.

[67] European Commission, 'EU and China discuss trade and economic relations', Press release, 28 July 2020.

[68] Clauss (note 15).

[69] Huotari, M. and Zenglein, M. J., 'The EU–China Comprehensive Agreement on Investment (CAI) is a test for the future trajectory of the EU–China relationship', Press release, Mercator Institute for China Studies (MERICS), 22 Dec. 2020.

[70] European Commission (note 9).

[71] Barkin, N., 'Germany's strategic gray zone with China', Carnegie Endowment for International Peace, Mar. 2020.

The countries of Central Europe have been a particular focus in the European discourse on China because of their participation in the 17+1 dialogue.[72] However, politicians from Central Europe have also been prominent in pointing to potential problems in relations with China. In mid-2020 a visit by Czech politicians to Taiwan produced a strong Chinese rebuke, including a detailed list of the ways in which Czech companies would suffer as a result.[73] The subsequent debate on the Taiwan visit and its repercussions promoted a wider discussion across Central Europe on over-reliance on cooperation with China, including the possible damage to the transatlantic relationship on which Central European countries depend for their national security.[74]

In addition, the EU remains ambivalent about the BRI, especially with regard to the initiative's geopolitical agenda, the lack of details and transparency in its investment plans, and its implications for global governance. Unless and until these issues are clarified and addressed, the EU will continue to hold conflicting views on the BRI and these will impede full cooperation with China, including in connectivity.[75]

Chinese perspectives on evolving relations with the European Union

Chinese perspectives on China–EU relations indicate that the EU is viewed as an important actor in the multipolar world that China actively promotes. China also considers the EU to be a valuable economic partner with an attractive market, sources of industrial and technical knowledge and power, and infrastructure connectivity. The EU is seen as a source of regulations and standards that later become adopted internationally. At the same time, the EU's aspiration for strategic autonomy will make it a competitor in shaping global norms and governance, and in global markets.[76] According to China's December 2018 policy paper on the EU, 'the two sides have broadened and deepened their relations and fostered comprehensive, multi-tiered and wide-ranging exchanges and cooperation' since they formed a strategic partnership in 2003.[77] The policy paper advocates promotion of cooperation in cyberspace, connectivity, energy and the green economy, among others. Nevertheless, compared with China–USA relations and

[72] Karásková, I. (ed.), *China's Sticks and Carrots in Central Europe: The Logic and Power of Chinese Influence* (Association for International Affairs: Prague, June 2020).

[73] Satter, R. and Carey, N., 'China threatened to harm Czech companies over Taiwan visit: Letter', Reuters, 19 Feb. 2020.

[74] Šebok, F., 'Why Taiwan matters for the Czech Republic', The Diplomat, 27 June 2020; and Kobierski, Ł., 'Public opinion on China in European and V4 countries', Warsaw Institute, 23 Dec. 2020.

[75] Zhao, H. (赵惠冉), '中国与欧盟国家对 "一带一路" 倡议的认知差异及其成因分析' [The cognitive divergence between China and EU countries on the 'One Belt and One Road' Initiative and its causes], 长江论坛 [Yangtze Tribune], no. 1, 2020, pp. 52–59.

[76] Fang, L. (房乐宪) and Yin, J. (殷佳章), '欧盟的战略自主追求及其国际含义' [The EU's pursuit of strategic autonomy and its international implications], 现代国际关系 [Contemporary International Relations], no. 11, 2020, pp. 57–63.

[77] Chinese Central Government, '中国对欧盟政策文件' [China's policy paper on the European Union], 18 Dec. 2018, section 1 (author translation).

China's relations with its Asian neighbours, many Chinese observers agree that Europe has not featured prominently in China's foreign policy.[78]

China is aware of the multiple challenges that the EU has had to face at home and (near) abroad, from the debt crisis, refugee flows, terrorist attacks, rising populism and, most importantly, the withdrawal of the United Kingdom from the EU (Brexit). These crises present a profound challenge to European integration.[79] The EU's conflict with Russia over the conflict in and around Ukraine since 2014 and its response to the USA's unilateral withdrawals from the Iran nuclear deal and the Paris Agreement on climate change have exposed the limited extent to which the EU can provide global leadership. Chinese observers have raised doubts about the EU's capability and credibility as an independent global actor.[80] More precisely, they have noted the gap between expectation and capability in delivering a common foreign policy, due also in part to the EU's unique institutional setup.[81]

In this context, the policy positions of key EU member states and the extent to which they are susceptible to US pressure have also been closely watched by Chinese analysts. However, there is acknowledgement that the EU is trying to pursue a more independent approach to foreign policy differentiated from that of the USA.[82] Meanwhile, China has become more assertive in its own foreign policy and more influential in global affairs. With its increasing economic and political power, China is shifting from being a norm-taker to being a norm-shaper, which presents further challenges for the EU as one of the few major shapers of the existing international order.[83]

Over the 2010s China adopted a multi-tiered approach to dealing with (*a*) the EU; (*b*) key EU member states such as Germany, France, the UK (before Brexit) and Italy; and (*c*) ad hoc groupings within Europe.[84] The latter includes in particular the informal 17+1 framework in which China convenes meetings with a group of 17 countries stretching from Estonia in the north to Greece in the south.

[78] Online author interviews, June 2020.

[79] Feng, C. (冯存万), '多重危机视角下的欧盟政策调整及中欧关系' [EU policy adjustment and EU–China relations from the perspective of multiple crises], 国际展望 [International Outlook] no. 6, 2018, pp. 78–94, 160–61; and Zhang, J. (张健), '"脱欧" 背景下欧盟政策调整与中欧关系' [EU policy readjustment and China–EU relations in the context of 'Brexit'], 当代世界 [Contemporary World], no. 6, 2020, pp. 25–31.

[80] Hill, C., 'The capability–expectations gap, or conceptualizing Europe's international role', *Journal of Common Market Studies*, vol. 31, no. 3 (Sep. 1993), pp. 305–28.

[81] Zeng, J., 'Does Europe Matter? The role of Europe in Chinese narratives of "One Belt One Road" and "New type of great power relations"', *Journal of Common Market Studies*, vol. 55, no. 5 (Sep. 2017), pp. 1162–76; Leonard, M. and Shapiro. J. (eds), *Strategic Sovereignty: How Europe Can Regain the Capacity to Act* (European Council on Foreign Relations: London, June 2019); Jin, L. (金玲), '"主权欧洲": 欧盟向 "硬实力" 转型?' ['A sovereign Europe': Transforming the European Union to 'hard power'?], 国际问题研究 [China International Studies], no. 1, 2020; and Online author interviews, June 2020.

[82] Wang, Y. (王义桅), '2020中欧关系的机遇与挑战' [Opportunities and challenges for China–EU relations in 2020], 环球网 [Global Network], 4 Dec. 2019.

[83] Foot, R., *China, the UN, and Human Protection: Beliefs, Power, Image* (Oxford University Press: Oxford, 2020); and Job, B. L. and Shesterinina, A., 'China as a global norm-shaper: Institutionalization and the implementation of the responsibility to protect', eds A. Betts and P. Orchard, *Implementation and World Politics: How International Norms Change Practice* (Oxford University Press: Oxford, 2014), pp. 144–59.

[84] Song, T. (宋涛), '变化中的欧洲和中欧关系' [The changing Europe and EU–China relation], Speech, Seminar on 'The European Situation and China–EU Relations', Chinese Ministry of Foreign Affairs, 16 Aug. 2012; and Cui, H. (崔洪建), '中国—欧盟关系的结构性变化及前景' [China–EU relations: Structural changes and future prospects], 国际问题研究 [China International Studies], no. 1, 2018, pp. 41–59.

This approach has been informed by the recognition that the EU and its various member states have different interests and priorities and that they are at different stages of development with varying investment needs and trade potentials.[85] The approach has also been viewed as a means to 'divide and conquer'. China has rejected such a characterization, arguing instead that it opens up more mutually beneficial opportunities. Nonetheless, it has exploited these variations within the EU context to advance its own interests. However, China continues to view the EU as the core and the principal body for its engagement with Europe.[86]

Chinese analysts have listed several reasons for an approach with a more subregional focus. They judge that the EU's internal crises have caused a long-term governance problem that requires China to disaggregate dialogue with EU member states based on their different political, economic and social needs and interests.[87] Chinese analysts surmise that, since many EU policies are implemented at member state level, for pragmatic reasons working with individual member states can be more effective in achieving objectives. At the same time, the variation in national implementation of EU-wide regulations also allows China to bypass certain restrictions. Cooperation with member states and different subregions thus becomes more appealing for China in its pursuit of its interests, but as a complement to, rather than a substitute for, existing China–EU cooperation mechanisms.

At the official level, China firmly emphasizes its support for the EU integration process.[88] One strand of argument in China is thus that support to individual states can promote, not impede, European integration if it narrows the development gap between different EU member states.[89] On this last point, however, some Chinese analysts are more cautious, arguing that the 17+1 subregional cooperation should be subordinate to engagement at EU-level to reduce any suspicion that China is following a strategy of divide and conquer.[90]

The Chinese Government has noted that the changes in EU perspectives potentially mark a new era of heightened China–EU competition. However, China has rejected the EU label of 'systemic' rivalry.[91] Instead, it insists that the relationship remains a strategic partnership, and officials use phrases such

[85] Cui, H. (崔洪建), '中国—欧盟关系的结构性变化及前景' [China–EU relations: Structural changes and future prospects], 国际问题研究 [China International Studies], no. 1, 2018, pp. 41–59.

[86] Online author interviews, June 2020.

[87] Bu, S. (步少华), '中欧"次区域合作": 动力与未来方向' [China–Europe 'sub-regional cooperation': Driving forces and future direction], 国际问题研究 [China International Studies], no. 2, 2016; and Peking University, Institute of Area Studies, '危机连连: 欧洲一体化诸问题及其背景' [Full of crisis: The problems and background of European integration], 13 May 2020.

[88] Chinese State Council, '王毅: 中欧关系已站在新的历史起点上' [Wang Yi: China–EU relations at a historical starting point], 16 Dec. 2019.

[89] Wang, H. (王海峰), '借助这两个机制, 中国与欧洲传统和新兴力量共建多边主义价值' [With the help of these two mechanisms, China and the traditional and emerging European powers can jointly build the value of multilateralism], Chinese State Council, 12 Apr. 2019.

[90] Zhang, L. (张利华), '欧盟对中国政策立场新动向及应对建议' [The new development of the EU policy on China and suggestions for response], 人民论坛 • 学术前沿 [Frontiers], 23 July 2020.

[91] European Commission, JOIN(2019) 5 final (note 1), p. 1.

as 'cooperative competition' to characterize a relationship in which zero-sum enmity is neither pursued nor envisioned.[92]

More and more Chinese observers have taken the EU's imposition of more restrictions on trade and foreign investment as a sign of rising protectionism. With China's growing economic presence in Europe, some Chinese scholars have attributed this development to (*a*) concerns over growing asymmetrical economic interdependence and the EU losing technological advantages; (*b*) a lack of confidence in the competence of domestic industry and vulnerability to supply chain disruption; (*c*) the absence of the UK as a long-time supporter of free trade and the increasing conservative voting weight in the European Commission; and (*d*) the EU's changing understanding of the global landscape and a return of geopolitics in Europe.[93] Chinese analysts also recognize the compatibility in an EU–USA relationship, where shared values, interests and goals have informed common positions and policies for more than seven decades.[94]

While agreeing to recognize the EU as the principal actor with which China will need to work in Europe, Chinese analysts also point out that it is important to differentiate among the three EU institutions—the European Commission, the Council of the European Union and the European Parliament. Each has distinct functions and procedures, and they hold both divergent and similar positions on the EU's China policies. While all three agree that developing economic ties with China remains the priority, the Parliament is more critical of China's human rights, the Council is more concerned with defence and security, and the Commission is more focused on economic issues.[95]

With its interests in human rights, the European Parliament is seen as the most difficult body to work with. There is no stable bloc in the parliament that argues for cooperation with China, and centrist parties have serious misgivings about deeper cooperation until changes have been observed in the Chinese approach to human rights, minority rights and respect for climate objectives.[96] When, just

[92] Chinese Mission to the EU, '张明大使："制度性对手"不是中国，而是藏在欧盟自己心里' [Ambassador Zhang Ming: The 'institutional opponent' is not China, but is hidden in the EU's heart], 25 Dec. 2019; and Xu, H. (徐和谦), '王毅：中欧不应是制度性竞争对手　争取年内完成投资协定谈判' [Wang Yi: China and Europe should not be institutional competitors, and strive to complete the negotiation of investment agreements within a year], 财新传媒 [Caixin], 24 May 2020.

[93] Liu, L. (刘兰芬) and Liu, M. (刘明礼) '欧盟对华经济合作中的"安全顾虑"' [The EU's security concerns in its economic cooperation with China], 现代国际关系 [Contemporary International Relations], no. 10, 2020, pp. 27–35; Ji, M. (纪明葵), '欧盟不自信和对中国制造的恐惧' [EU's distrust and fear of Chinese manufacturing], 中国网 [China.com], 25 May 2016; Li, C. (李超), '德国在欧盟中的领导作用新变化' [Germany's changing leading role in the EU], 现代国际关系 [Contemporary International Relations], no. 4, 2020; and Xie, N. (解楠楠) and Zhang, X. (张晓通), '"地缘政治欧洲"：欧盟力量的地缘政治转向?' ['Europa Geopolitica': Is the EU transforming into a geopolitical power?], 欧洲研究 [Chinese Journal of European Studies], no. 2, 2020; and Zhang (note 79).

[94] Zhang, M. (张茗), 摇晃的钟摆：欧盟—美国关系研究 [The swinging pendulum: A study of EU–US relations] (Shanghai Academy of Social Sciences Press: Shanghai, 2018).

[95] Liu, J. (刘娟平) and Zhang, L. (张利华), '欧盟三大机构对中国政策立场比较分析' [The European Union's three main institutions and their China policy positions: A comparative analysis], 国际政治研究 [Journal of International Studies], no. 4, 2020, pp. 82–105.

[96] Rühlig, T., *Towards a More Principled European China Policy? Democracy, Human Rights, and the Rule of Law in EU–China Relations* (Institut français des relations internationales (IFRI): Paris, Nov. 2020); and Timsit, A., 'Parliaments are on the frontlines of Europe's face-off with China', Quartz, 19 June 2020.

days before the EU–China Summit in June 2020, the European Parliament passed a resolution condemning China's national security law for Hong Kong, it drew an immediate and strong rebuke from the Chinese Delegation to the EU.[97] The EU–China Friendship Group in the European Parliament has been singled out as the place to promote a positive image of China and to enhance understanding of Chinese policies.[98] However, this perspective underestimates the degree of division and lack of political trust between China and the EU. Indeed, the group suspended its work in January 2021 after Parliament officials questioned the nature of its contacts with Chinese officials.[99] The way in which the European Parliament responds to the proposed CAI will be a test of how parliamentarians view the near-term future of China–EU cooperation.

In summary, China has taken on board that the EU's coordinating capacity cannot be evaluated in the same way as that of a sovereign state. The EU will continue to combine the process of integration with subsidiarity.[100]

Shared interests

China and the EU have shared interests in managing the public health impact and economic consequences of the global Covid-19 pandemic as well as preparing for and adapting to a changing climate.

The pandemic may have promoted China–EU commerce in some sectors in response to European demand for specialized medical supplies and equipment. Despite the major disruption in international travel, the volume of cargo transported via the China Railway Express (CRE) train line to Europe grew strongly in 2020.[101] China's trade with the EU's 27 members in 2020 reached €586 billion, compared to EU–USA trade of €555 billion, making China the EU's largest trading partner for the first time.[102]

China's interest in turning the crisis into opportunities to broaden and strengthen China–EU relations remains strong. Despite the fact that no face-to-face summit between China and the EU was possible in 2020, high-level dialogues were established on the environment and climate and on digital cooperation.[103]

[97] Agence France-Presse, 'European Parliament strikes tough tone on China', *Barron's*, 19 June 2020; and Xinhua, '中国驻欧盟使团驳斥欧洲议会涉港谬论' [Chinese Mission to the EU refutes the European Parliament's fallacy on Hong Kong], 20 June 2020.

[98] Zhang (note 90). See also Yoshihara, T. and Bianchi, J., *Uncovering China's Influence in Europe: How Friendship Groups Coopt European Elites* (Center for Strategic and Budgetary Assessments: Washington, DC, 2020).

[99] Cerulus, L., 'EU–China "friendship group" suspended, its chair says', Politico, 25 Jan. 2021.

[100] Yang, N. (杨娜), '欧洲模式的韧性: 新冠肺炎疫情与欧盟卫生治理' [The resilience of the European model: The Covid-19 pandemic and EU health governance], 外交评论 [Foreign Affairs Review], vol. 37, no. 6 (2020), pp. 74–98.

[101] Zhou, C., 'China's rail shipments to Europe set records as demands surge for Chinese goods amid coronavirus', *South China Morning Post*, 17 Aug. 2020.

[102] BBC (note 48); Yan, J. (闫瑾), '疫情下的欧盟应战力' [The EU's resilience to epidemics], 环球 [Globe], no. 23, 11 Nov. 2020; and Liu, Z. (刘作奎), '2020中欧关系的新变化及其前景' [Changes in EU–China relations in 2020 and future prospects], 人民论坛 [People's Forum], no. 9, 2020, pp. 118–21.

[103] Chinese Ministry of Foreign Affairs, 'Xi Jinping co-hosts meeting with German and European Union (EU) leaders', 15 Sep. 2020.

China and the EU have both felt a shared responsibility to promote the success of multilateral measures to address climate change. For some time, EU leaders have encouraged China to strengthen its climate commitments—particularly by reaching peak carbon dioxide emissions at the earliest possible date and setting the goal of domestic climate neutrality.

In a speech to the United Nations General Assembly in September 2020, President Xi Jinping announced that China will scale up its Intended Nationally Determined Contributions to the reduction in emission of greenhouse gasses by adopting more vigorous policies and measures.[104] Xi also announced that China intends to achieve carbon neutrality before 2060—an unexpected announcement described by one EU official as 'a very important and welcome step in the right direction'.[105] The same official noted that, if China is to meet the commitment, 'a lot remains to be done', but, as one US commentator noted, 'Almost all of China's climate and energy targets in recent years have been met or exceeded, so anything President Xi Jinping announces in such a public forum is not just symbolic.'[106]

Climate policy may become a unifying element in China–EU relations, although differences remain over such issues as how to measure progress towards meeting climate-related commitments and how to balance the environmental and social dimensions of climate mitigation.[107]

Areas of divergence

Sharp differences have been revealed in parts of the China–EU relationship, and discussions have revealed how difficult it will be to bridge them—in particular in the approach to issues of governance, values and security. China's alternative model of governance, beyond the basic structure of China's political and economic regime, also includes areas of its domestic law and foreign policy.

In the domestic sphere, among recent developments has been the passage in June 2020 of the Law on Safeguarding National Security in Hong Kong.[108] In May, Josep Borrell, the EU high representative, had stated that 'sanctions are not the way to solve the problems with China'.[109] However, at the end of July the EU foreign ministers jointly endorsed a package of responses, including potential restrictions on the export of sensitive technology to Hong Kong; a reconsideration

[104] Xi, J., Chinese President, Statement, General Debate, 75th session of the UN General Assembly, Xinhua, 22 Sep. 2020.

[105] Unnamed EU official quoted in Timsit, A., 'China has big climate plans but the EU isn't impressed', Quartz, 25 Sep. 2020.

[106] Joanna Lewis in Xie, Z. et al, 'China's new carbon neutrality pledge: What next?', China Dialogue, 23 Sep. 2020.

[107] European Commission, 'In focus: Towards a just and clean energy transition', 1 Oct. 2020.

[108] Law on Safeguarding National Security in the Hong Kong Special Administrative Region, enacted by the Standing Committee of the Chinese National People's Congress, 30 June 2020.

[109] European External Action Service (EEAS), 'Video conference of Foreign Affairs Ministers: Remarks by High Representative/Vice-President Josep Borrell at the press conference', 29 May 2020, (author translation).

of asylum, migration, visa and residency policies; and other measures in political support of the autonomy of Hong Kong under the 'one country, two systems' principle.[110]

In relation to Chinese foreign policy, the EU position on maritime disputes in the South China Sea has moved from encouraging all parties to seek peaceful resolutions in line with international law to statements that China has 'challenged the territorial waters of its neighbours and intensified military activity'.[111] Chinese maritime policies in Asia have begun to influence European thinking about China's Arctic activities.[112] A 2020 report on foreign and security policy cooperation commissioned by Nordic foreign ministers asserts that 'In the South China Sea, China makes maritime claims which contradict the [1982 United Nations Convention on the Law of the Sea], although ratified by China. Such actions must be kept out of the Arctic'.[113]

EU leaders highlighted these growing disagreements at the 2020 EU–China Leaders' Meeting by drawing attention to 'grave concerns' about China's actions in Hong Kong, the treatment of ethnic and religious minorities in China, and the role of China in escalating tensions in the South China Sea.[114] Following the EU–China Summit in June, Ursula von der Leyen, the Commission president, stated that the two sides have 'two very different systems, very different views on values', while stressing that 'human rights and fundamental freedoms are non-negotiable'.[115] Charles Michel, president of the European Council, likewise stated that China and the EU 'do not share the same values, political systems, or approach to multilateralism'.[116] This broader point has also been made by Borrell, who has stressed that, despite rhetorical overlap on multilateralism, the two sides diverge on issues of 'the universality and indivisibility of human rights'.[117]

Indeed, the manner in which EU representatives raised issues of human rights in the bilateral discussion with Chinese counterparts in 2020 indicates growing political pressure to take a stronger position. The European Parliament has

[110] Council of the EU, 'Council conclusions on Hong Kong', 9872/1/20 REV 1, 24 July 2020.

[111] European External Action Service (EEAS), 'Strengthening EU–ASEAN partnership, an urgent necessity', 20 Sep. 2020.

[112] On these activities see Jakobson, L. and Peng, J., *China's Arctic Aspirations*, SIPRI Policy Paper no. 34 (SIPRI: Stockholm, Nov. 2012); and Sørensen, C. T. N. and Klimenko, E., *Emerging Chinese–Russian Cooperation in the Arctic: Possibilities and Constraints*, SIPRI Policy Paper no. 46 (SIPRI: Stockholm, June 2017).

[113] Bjarnason, B., *Nordic Foreign and Security Policy 2020: Climate Change, Hybrid & Cyber Threats and Challenges to the Multilateral, Rules-Based World Order—Proposals* (Björn Bjarnason: Reykjavik, June 2020), p. 12.

[114] Michel, C., President of the European Council, von der Leyen, U., President of the European Commission, and Merkel, A., German Chancellor, 'EU–China Leaders' Meeting: Upholding EU values and interests at the highest level', Joint press release, 14 Sep. 2020.

[115] von der Leyen, U., President of the European Commission, Statement by at the joint press conference following the EU–China Summit video conference, 22 June 2020; and Stec, G., 'Mastering EU–China relations: German presidency is faced with challenges', Mercator Institute for China Studies (MERICS), 30 June 2020.

[116] Michel, C., President of the European Council, and von der Leyen, U., President of the European Commission, 'EU–China Summit: Defending EU interests and values in a complex and vital partnership', Press release, 22 June 2020.

[117] European External Action Service (note 61).

been highly critical when the leaders of EU institutions raise human rights and rule of law topics in only a brief and general manner in dialogue with China.[118] Parliamentarians have tried to pressure EU leaders to be more direct in dialogue with China by, for example, promoting the idea of targeted sanctions on Chinese officials associated with what are seen from Europe as violations of human rights and disregard for international legal norms.[119] Moreover, greater EU emphasis also on the 'protection of the European model' in normative terms is likely to heighten divisions between China and the EU.[120]

The effect of the United States factor and transatlantic ties on China–European Union relations

The US factor has always been important in the development of China–EU relations but has assumed greater weight since 2017. China–USA relations started to deteriorate significantly during the second term of US President Barack Obama. The deterioration continued during the 2017–21 presidency of Donald Trump, who adopted a range of confrontational and punitive measures against China, including high tariffs on Chinese imports, restrictions on large Chinese technology companies and rhetoric about de-coupling China–USA economic ties altogether.[121] The new US President, Joe Biden, has spoken of the need to prepare for 'long-term strategic competition with China'.[122]

EU priorities and policy objectives are not always aligned with those of the USA.[123] While recognizing that it has growing differences with China over a range of issues, and despite US pressure for harsher measures, the EU has remained pragmatic in its approach.[124] The EU does not engage in a hegemonic struggle with China and no longer believes it is possible to change China fundamentally through engagement, but it views China as a partner in areas such as climate change and post-pandemic economic recovery.[125]

The perspectives of the EU and the USA over how to respond to the perceived rise of Chinese techno-nationalism and the threats it poses to transatlantic

[118] Fotyga, A., 'Why MEPs are "Speaking up for the Uyghurs"', *New Europe*, 18 Sep. 2020.

[119] Law, N., 'Only sanctions will make China stop and think', Deutsche Welle, 31 July 2020.

[120] Borrell, J., 'The post-coronavirus world is already here', European Council on Foreign Relations (ECFR) Policy Brief no. 320, Apr. 2020. See also Borrell (note 38).

[121] Goldstein, A., 'US–China rivalry in the twenty-first century: Déjà vu and Cold War II', *China International Strategy Review*, vol. 2, no. 1 (June 2020), pp. 48–62; and Lippert, B. and Perthes, V. (eds.), *Strategic Rivalry between United States and China Causes, Trajectories, and Implications for Europe*, Stiftung Wissenschaft und Politik (SWP) Research Paper no. 2020/RP4 (SWP: Berlin, Apr. 2020).

[122] The White House, 'Remarks by President Biden at the 2021 Virtual Munich Security Conference', 19 Feb. 2021.

[123] Zhang (note 94).

[124] Sun, C. (孙成昊) and Dong, Y. (董一凡), '美欧竞争新动向：同盟框架下的博弈与前景' [New developments of US–Europe relations: Strategic competitions and prospects within the framework of alliance], 当代美国评论 [Contemporary American Review], no. 2, 2020, pp. 101–21.

[125] Besch, S., Bond, I. and Leonard, S., *Europe, the US and China: A Love-Hate Triangle?* (Centre for European Reform: London, Sep. 2020).

interests are converging.[126] The EU has clearly become more vigilant regarding technology cooperation with China, partly because of security concerns but primarily to maintain its own industrial and technological competitiveness.[127]

Another area where the USA can influence EU policy toward China relates to investment reviews. The recently introduced EU policy instruments on FDI have raised concern in China.[128] In particular, the adoption of the EU's FDI-screening mechanism has been regarded as a political move in China.[129] When discussing the mechanism, Chinese scholars have linked its development with the USA's 2018 Foreign Investment Risk Review Modernization Act.[130] Some scholars have pointed out an obvious US factor in the EU's action, arguing that, although the EU and US instruments are both aimed at FDI from all countries, it is clear that China is the primary target.[131]

Based on an EU proposal, the EU and the USA initiated a dialogue on China in October 2020.[132] The newly appointed US Special Envoy for Climate, John Kerry, has emphasized that cooperation with China on climate-related policies should be seen as a 'standalone' issue protected from the friction that exists in the wider China–USA relationship.[133] It now seems possible that proposals for action tabled at the 26th United Nations Climate Change Conference scheduled for November 2021 may be based on China–EU–USA dialogue.

The EU is also more tightly integrated in terms of both trade and investment with the USA than it is with China. Transatlantic cooperation in the political and, in particular, security domains via the North Atlantic Treaty Organization (NATO) means that the EU's policies will remain closer to, if not yet closely coordinated

[126] Dekker, B. and Okano-Heijmans, M. (eds), *Dealing with China on High-tech Issues: Views from the US, EU and Like-minded Countries in a Changing Geopolitical Landscape* (Clingendael Institute: The Hague, Dec. 2020).

[127] German Federal Ministry for Economic Affairs and Energy (BMWi), *Industrial Strategy 2030: Guidelines for a German and European Industrial Policy* (BMWi: Berlin, Nov. 2019).

[128] European Commission, 'EU foreign investment screening mechanism becomes fully operational', 9 Oct. 2020; and Chen, R. (陈若鸿), '欧盟《外国直接投资审查框架条例》评析' [A review of the EU Regulation Establishing a Framework for the Screening of Foreign Direct Investments], 国际论坛 [International Forum], no. 1, 2020, pp. 129–41.

[129] Online author interviews, June 2020; and Jia, Y. (贾英姿) et al., '《欧盟外商直接投资审查框架》条例对中国的影响及应对策略' [The EU foreign direct investment review framework: Impact on China and the corresponding strategies], 财政科学 [Fiscal Science], no. 5, 2019.

[130] Yin, W., 'A comparison of the US and EU regulatory responses to China's state capitalism: Implication, issue, and direction', *Asia Europe Journal*, vol. 19, no. 1 (Mar. 2021), pp. 1–25; and Foreign Investment Risk Review Modernization Act of 2018, Subtitle A of Title XVII of US Public Law no. 115-232, signed into law 13 Aug. 2018.

[131] Huang, Y. (黄永富), '西方加强外资国家安全审查对中国企业的影响及对策' [The impact of enhanced foreign investment national security vetting by Western countries on Chinese enterprises and countermeasures], 中国发展观察 [China Development Observation], 12 May 2019; Zhang, H. (张怀岭), '美欧强化外资安全审查及其影响' [The tightening of US and EU foreign investment security review and its implications], 国际问题研究 [China International Studies], no. 5, 2019; and Shen, W. (沈伟) and Tian, G. (田弋滢), '《欧盟外商直接投资审查条例》出台的背景、规则和应对' [Background, rules and responses to the EU foreign direct investment review regulation and China's countermeasures], 海关与经贸研究 [Journal of Customs and Trade], no. 6, 2019.

[132] US Department of State and the European External Action Service (EEAS), 'Launch of the US–EU Dialogue on China', Joint statement, 26 Oct. 2020.

[133] The White House, 'Press Briefing by Press Secretary Jen Psaki, Special Presidential Envoy for Climate John Kerry, and National Climate Advisor Gina McCarthy', 27 Jan. 2021.

with, the USA.[134] However, since the China–USA rivalry is a structural, long-term reality for global politics, EU officials have stressed the need for a longer-term perspective in EU foreign and economic policies.[135]

[134] Wang, E., 'As Trump fades, the EU and US find common cause in facing up to China', The Conversation, 9 Dec. 2020.

[135] Borrell, J., 'China, the United States and us', European External Action Service (EEAS), 31 July 2020.

4. Transportation connectivity

Physical infrastructure has been at the core of China's westward connectivity drive. Its continent-spanning projects designed to enhancing trade linkages include investments in ports, railways and logistical infrastructure. The BRI's infrastructural connectivity has two arms: the land-based Silk Road Economic Belt and the sea-based Maritime Silk Road, both of which feature Europe as a destination. However, a number of China's transport and infrastructural projects in the EU predate or are only nominally subsumed into the BRI, whose function in some cases has been a matter of post facto political branding.

China's emergence as a high-profile investor in Europe originated with the 2008 financial crisis, when China offered capital injections to crisis-affected EU member states in Southern Europe. These took the form of investments in utilities and large-scale infrastructural projects as well as purchases of government bonds.[136] However, as a source of investment for the EU, China continues to lag well behind the USA.[137] A lack of familiarity with Chinese investors, concerns regarding political leverage and European uncertainties regarding the nature of China's overall foreign economic policy have meant that Chinese investments have been subject to much greater scrutiny—if not suspicion—by EU actors, particularly in sensitive and strategic sectors.[138]

Infrastructure has featured as an important, but by no means dominant, proportion of China's investments in Europe. In 2000–14 transport, infrastructure and logistics together accounted for less than 5 per cent of its overall investments within the EU.[139] By 2017 they accounted for the largest share of Chinese investment (15.3 per cent), mostly due to the €12.3 billion acquisition of Logicor, a logistics and distribution company.[140] However, year-on-year sectoral variability often reflects such one-off large-scale mergers and acquisitions, rather than consistent and regular investment trends of Chinese activities in Europe. Opportunities for Chinese investments to match demand and fill infrastructural gaps are concentrated in Central, Eastern and South Eastern Europe. The International Monetary Fund (IMF) estimates that this region (which includes non-EU states in the Western Balkans and elsewhere) faces a major infrastructural financing gap, with physical connectivity in the form of roads and railways around 40–60 per cent below that of more developed EU states.[141] The total cost of investment to close infrastructural gaps across the EU and in its immediate neighbourhood has been

[136] Le Corre, P., 'Chinese investments in European countries: Experiences and lessons for the "Belt and Road" initiative', ed. M. Mayer, *Rethinking the Silk Road: China's Belt and Road Initiative and Emerging Eurasian Relations* (Brookings Institution: Washington, DC, 2018).

[137] Zeneli, V., 'Mapping China's investment in Europe', The Diplomat, 14 Mar. 2019.

[138] Lei, T., 'China becomes EU's largest trade partner', *Global Times*, 18 Sep. 2020.

[139] Casaburi, I., *Chinese Investment in Europe 2015–2016* (ESADE China Europe Club: Barcelona, [n.d.]).

[140] Hanemann, T. and Huotari, M., *EU–China FDI: Working Towards Reciprocity in Investment Relations*, Update no. 3 (Rhodium Group/Mercator Institute for China Studies (MERICS): Berlin, May 2018).

[141] Ari, A. et al., *Infrastructure in Central, Eastern, and Southeastern Europe: Benchmarking, Macroeconomic Impact, and Policy Issues*, Departmental paper series no. 20/11 (International Monetary Fund: Washington, DC, 2020), p. 11.

estimated at 3.5–6 per cent of these countries' gross domestic product (GDP) each year until 2030.[142]

China faces similar challenges of unbalanced regional development. This constitutes one of the core motivations for the BRI, for which internal rail and road infrastructure connecting inland regions of China to markets has featured as a central strategy.[143]

Overlapping frameworks and priorities

Up to a peak in 2016, Chinese investments in the EU increasingly coincided with the EU's own goals of mobilizing investment that had fallen in the wake of the financial crisis.[144] In 2015 China became the first non-EU contributor to the European Commission's targeted €315 billion Investment Plan for Europe (known as the Juncker Plan after the Commission president, Jean-Claude Juncker). The Juncker Plan, with the European Fund for Strategic Investments (EFSI) as its financial instrument, aimed to channel investments into areas of the economy that would boost long-term growth, including infrastructure.[145] A working group including China's Silk Road Fund (a state-owned investment fund), the European Commission and the European Investment Bank (EIB) was set up to explore co-financing opportunities to achieve this goal.[146] During the 2017 EU–China Summit the EU's European Investment Fund and the Silk Road Fund signed a memorandum of understanding on support for equity investments in Europe. This led to the creation of a China–EU Co-Investment Fund with an initial €500 million.[147] China also joined the European Bank for Reconstruction and Development (EBRD) in 2016.

The EU's transport infrastructural priorities have also been crystallized in the TEN-T programme. This internal connectivity project aims to improve multimodal integration and interoperability and reduce cross-border gaps and bottlenecks in a 'core' network by 2030.[148] Overlapping interests in infrastructural investment and financing led China and the EU to create the EU–China Connectivity Platform (EUCCP) in 2015 to explore synergies between TEN-T and the BRI and to identify concrete transport infrastructure projects for cooperation. The EUCCP takes an open and experimental approach to cooperation—including through offering pilot projects and testing feasibility within its multi-year extended dialogues. Its

[142] Ari et al. (note 141), p. 16.

[143] Ghiasy and Zhou (note 7).

[144] European Commission and European Investment Bank, 'Why does the EU need an Investment Plan?', Factsheet no. 1, [2014].

[145] European Commission and European Investment Bank (note 144).

[146] European Commission, 'Investment Plan for Europe goes global: China announces its contribution to #investEU', Press release, 28 Sep. 2015.

[147] European Investment Bank, 'EIB Group cooperation with China to be strengthened with new EUR 500 million Silk Road Fund equity investment initiative', Release no. 2017-138-EN, 2 June 2017.

[148] European Commission, Directorate-General for Mobility and Transport, 'Trans-European Transport Network (TEN-T)', 5 Dec. 2020.

multi-stakeholder format offers the two sides a way to harmonize their approaches in a range of areas, from technical to governance matters.[149]

The EUCCP also adheres to many of the principles that the EU has demanded from China in the broader economic relationship, including commitments to 'transparency, openness and a level playing field'.[150] It operates on a broad definition of sustainability, to include financial, environmental and social dimensions. Finally, it actively applies the principle of reciprocity: a number of TEN-T-related projects have been offered by EU member states as pilot projects in which China could help fill financing gaps, while a number of projects within China have been made available to European investors.[151] By the end of 2020, cooperation was proceeding on a number of these identified projects, including a logistics and industrial centre in Riga Free Port, a Rijeka–Zagreb–Budapest railway, and a motorway between Croatia and Bosnia and Herzegovina.[152]

A range of actors and interests

In addition to the above mechanisms for transport cooperation at the bilateral China–EU level, cooperation in the transport sector largely proceeds in a more ad hoc manner at the member state, subnational and corporate levels.

To a degree, China suffers from the involvement of multiple, diverse actors at the operational level, including a large number of Chinese domestic agencies that have their own interests in BRI projects. Central authorities are not always capable of fully coordinating powerful domestic actors.[153] The complex domestic dynamics of BRI in China have been identified as an impediment to international actors that want to engage with the BRI.[154]

Finding the right pathway for discussion may be a particular challenge for loose subregional platforms such as the 17+1 format, whose priorities for economic cooperation with China include such areas as infrastructure, high technology and green technology.[155] While the 17+1 framework has been criticized for a lack of content, a wide range of mid-level policy dialogues have been established, including a regular transport ministers' meeting, held annually since 2016.[156]

[149] European Commission, Directorate-General for Mobility and Transport, 'International relations: The EU–China Connectivity Platform', 5 Dec. 2020.

[150] European Commission (note 149).

[151] European Commission, 'List of projects to be considered in the framework of the EU–China Connectivity Platform', [13 July 2018].

[152] Cuenca, O., 'Croatian Railways to launch track doubling tender', *International Railway Journal*, 13 Aug. 2020.

[153] The authors are grateful to an external reviewer of the paper for this insight.

[154] Jones, L. and Zeng, J., 'Understanding China's "Belt and Road Initiative": Beyond "grand strategy" to a state transformation analysis', *Third World Quarterly*, vol. 40, no. 8 (2019), pp. 1415–39; and Zeng, J., 'Narrating China's Belt and Road Initiative', Global Policy, vol. 10, no. 2 (May 2019), pp. 207–16.

[155] Latvian Ministry of Foreign Affairs, '"16+1" Summit has concluded', Secretariat for Cooperation between China and Central and Eastern European Countries, 10 Nov. 2016.

[156] Karásková, I. (ed.), *Empty Shell No More: China's Growing Footprint in Central and Eastern Europe*, China Observers in Central and Eastern Europe (CHOICE) Policy paper (Association for International Affairs: Prague, Apr. 2020).

Echoing the EUCCP and the language used by the EU, the European members of the 17+1 have stressed that cooperation on integrated transport corridors should be explored on the basis of 'level playing field, market rules, and international norms'.[157] However, this belies the fact that economic governance of transport projects has been highly variable: a Belgrade–Budapest railway financed by and contracted to Chinese firms has been marred by controversies regarding corruption and the public tendering process.[158] In this regard, there are divergences in approach within the EU, across subregions and countries.

The subregional Three Seas Initiative (TSI), launched in 2016 by Croatia and Poland as a dialogue and cooperation platform for Central and East European states, largely overlaps with the 17+1 format. The TSI also focuses on cross-border infrastructure connections in the energy, transport and digital sectors, with a particular emphasis on developing north–south energy connectivity. Strong US backing of the initiative—including for the diversification of energy connections away from Russia and pressure on member governments to cancel 5G contracts with Huawei, a large Chinese telecommunications company—highlights its geopolitical dimensions.[159] US goals to 'protect freedom and democracy around the world', as announced by the US secretary of state, Michael R. Pompeo, in the framework of the TSI, highlight that the platform is considered a vehicle for countering growing Chinese presence in the region.[160]

However, these geopolitical fault lines are not necessarily cleanly demarcated. In the 17+1 framework, some Central and East European states have also hinted that Chinese projects are in fact synergistic with the TSI. They have welcomed China's cooperation on ports along the Baltic, Adriatic and Black seas that open 'opportunities deriving from inland waterways and the intermodal connections to further enhance the cargo transportation between Asia and Europe'.[161] All 17 European members have expressed support for a China–Europe Sea Express Line, which entails inland railway linkages from the port of Piraeus, Greece, as a shorter link to Central and Eastern Europe.[162]

However, despite a concentration of Chinese physical infrastructural projects in Central Europe, the bulk of China's overall investments remains in Western and Northern Europe. There, interests also vary and compete, with individual countries pursuing their own bilateral agreements with China. On the Chinese

[157] 7th Summit of China and Central and Eastern European Countries, 'The Sofia Guidelines for Cooperation between China and Central and Eastern European Countries', 7 July 2018.

[158] Kynge, J., Beesley, A. and Byrne, A., 'EU sets collision course with China over "Silk Road" rail project', *Financial Times*, 20 Feb. 2017.

[159] Reuters, 'Romania's Nuclearelectrica to end reactor talks with China's CGN', 28 May 2020; and Necsutu, M., 'Romania cancels deal with China to build nuclear reactors', Balkan Insight, 27 May 2020.

[160] Pompeo, M. R., US Secretary of State, 'The West is winning', Speech, Munich Security Conference, 15 Feb. 2020.

[161] 8th Summit of China and Central and Eastern European Countries (note 23), para. 3(7). See also 5th Summit of China and Central and Eastern European Countries, 'The Riga Guidelines for Cooperation between China and Central and Eastern European Countries', 5 Nov. 2016; and Morris, D., 'The Three Seas Initiative: A European answer to China's Belt and Road?', The Interpreter, Lowy Institute, 26 Oct. 2020.

[162] 8th Summit of China and Central and Eastern European Countries (note 23); and Li, X., 'China–Europe sea-land express transport takes shape', *Global Times*, 21 May 2020.

side, there remains a range of more particularistic interests across the fragmented and financially decentralized system of subnational economic governance. Thus, broad political and public diplomacy frameworks notwithstanding, interests and policy positions do vary across political scales and geographies.

China's investments in multimodal transport linkages

The BRI aims to put in place a 'secure and efficient network of land, sea and air passages' and to enhance connectivity in both economic and political terms.[163] This is an objective shared with the EU's TEN-T programme, which also aims at an integrated and interoperable transport system. According to the European Commission's most recent review of TEN-T implementation, for 2016–17, gaps remain in intermodal linkages: only 89 per cent of maritime ports and 67 per cent of airports were connected to rail, and these figures probably represent an overestimate of how many such connections functioned in practice.[164]

Providing services to a multimodal system could be a point of China–EU synergy, but transport, logistics and infrastructure also represent strategically important sectors, and several such projects have been cancelled due to growing strategic sensitivities.[165] Meanwhile, the EU is developing and deploying tools to scrutinize Chinese investments against security criteria in a coherent fashion.

Port infrastructure

Ports have been a consistent target of Chinese transport infrastructure investments. As of 2019 Chinese companies had stakes in more than 12 European ports, comprising at least 10 per cent of European shipping container capacity.[166] These stakes are largely held by state-owned enterprises, including China Ocean Shipping Company (COSCO), China Merchants Port Holdings and, more recently, China Communications Construction Company (CCCC), which has invested in ports in Hamburg, Germany, and Venice, Italy.[167] COSCO, the largest of these investors, acquired a majority stake in the port of Piraeus in 2016—the first Chinese acquisition of an overseas port authority. Although this investment dates back to 2009, President Xi Jinping on a 2019 state visit referred to the port as a leading flagship project of the BRI.[168]

[163] Ramasamy, B. and Yeung, M., 'Belt & Road's softer side just as important', *The Link* (China–Europe International Business School), no. 4, 2017, pp. 19–21, p. 20.

[164] European Commission, 'Progress report on implementation of the TEN-T network in 2016–2017', Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2020) 433 final, 26 Aug. 2020.

[165] Reuters, 'China withdraws bid for Greenland airport projects: Sermitsiaq newspaper', 4 June 2019; and Olsson, J., 'China's bid to build the largest port in Scandinavia raises security concerns', Taiwan Sentinel, 22 Dec. 2017.

[166] Kakissis, J., 'Chinese firms now hold stakes in over a dozen European ports', *Morning Edition*, NPR, 9 Oct. 2018.

[167] Grieger, G., 'China's Maritime Silk Road initiative increasingly touches the EU', Briefing, European Parliamentary Research Service, Mar. 2018.

[168] Xinhua, '访问希腊期间，习主席为何专门来到这个地方' [Why President Xi came to this particular place during his visit to Greece], 12 Nov. 2019.

Port investments have been driven by the BRI as a political strategy, but also by corporate interests in international expansion and profitability in a sector that has become increasingly integrated and consolidated over the past decade. These investments mesh with, if not facilitate overall, a shift in the economic centre of gravity towards European ports on the Mediterranean, rather than the traditionally dominant North European ports.[169]

Air infrastructure

Chinese corporations' investments in airports across Europe include stakes in Toulouse airport, France (later sold), and London Heathrow and Manchester airports, UK, with majority stakes in airports in Parma, Italy, and Frankfurt-Hahn, Germany. They also hold stakes in surrounding logistical platforms.[170]

Under the Aviation Strategy for Europe of the Juncker Commission (2014–19), the EU's Commissioner for Transport noted that 'China is one of the European Union's most important strategic partners and we attach a lot of importance to our excellent relations on transport matters', highlighting their mutual interests.[171]

Railway infrastructure

Land-based connections between China and Europe form a core vision for the BRI, as outlined in the 2015 Vision and Actions Plan on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road.[172] This so-called Eurasian Land Bridge includes rail transportation along a few main corridors: a northern east–west connection that utilizes the Tran-Siberian Railway and a central east–west corridor via Central Asia. Both of these routes cross into the EU over the Belarus–Polish border. A third, the Trans-Caspian International Transport Route (TITR), passes through Central Asia and the Caucasus and then crosses the Black Sea or Turkey. It is only starting to become viable.[173]

These various freight options are subsumed under the umbrella of the China Railway Express. The first regular China–EU rail connection began in 2011, between Chongqing and Duisburg, Germany.[174] Importantly, the initial impetus for China–Europe railway connections came largely from European actors and from multinationals, such as Hewlett-Packard (HP), based in industrial and

[169] Prodi, G. and Fardella, E., 'The Belt and Road Initiative and its impact on Europe', Valdai Papers, Russia in Global Affairs, 28 Mar. 2018.

[170] Casaburi (note 139).

[171] European Commission, 'Aviation Strategy for Europe: Commission signs landmark aviation agreements with China', Press release, 20 May 2019.

[172] Chinese National Development and Reform Commission, Chinese Ministry of Foreign Affairs and Chinese Ministry of Commerce, *Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road* (Foreign Languages Press: Beijing, Mar. 2015).

[173] Calabrese, J., 'Setting the Middle Corridor on track', Middle East Institute, 18 Nov. 2019; and Trans-Caspian International Transport Route (TITR), 'Route', [n.d.].

[174] Chinese Consulate in Düsseldorf, '奔跑吧，中欧班列！' [Go, China–Europe Express!], 29 Mar. 2019.

electronics hubs in inland China.[175] Since then, the growth in the number of trains has been exponential, albeit from a low baseline.[176]

The CRE line continues to see the largest volume and value of goods transported. However, because the CRE continues to be a rather fragmented series of initiatives, with a range of transcontinental stakeholders, in particular Chinese subnational actors, data regarding the CRE is not centralized.

Since 2016 a construction and development plan for the CRE for 2016–20 has provided guidance.[177] The CRE currently functions as a series of point-to-point connections, rather than an optimized network, although in 2020 the Chinese National Development and Reform Commission (NDRC) made financial commitments to explore an integrated hub model.[178]

Railway routes have opened up an alternative mode of transport between China and Europe, which was previously dominated by maritime shipping and air freight. Under the current heavily subsidized models, transport by train is a cheaper option than air freight for higher-value or time-sensitive goods. This diversification of options has proven to be useful during the Covid-19 pandemic, when logistical disruptions and rising costs in air freight and shipping have led to a significant jump in the use of rail. This was especially the case for the urgent shipment of PPE. However, questions remain as to its longer-term financial viability in the absence of Chinese subsidies, which are to be progressively reduced if not phased out.[179]

For Chinese actors, the CRE represents an economic project as well as a political project in support of the broader BRI vision. In China the development of railway infrastructure is creating new domestic growth corridors as cities such as Chengdu, Chongqing and Zhengzhou compete to become the starting point for railway connections to Europe. A lack of domestic coordination has fed Chinese reflections on whether the BRI should be institutionalized. A potential increase in efficiency is offset by the argument that centralized control would further promote the perception of BRI as a geopolitical tool.[180]

Benefits for the EU vary across countries, industries and stakeholders. Highly competitive manufacturing bases for goods, such as the German automotive sector, are well placed to benefit from these transport lines and open trade links. Tariffs, logistical services and capacity development in destination or

[175] Hillman, J. E., 'The rise of China–Europe Railways', Center for Strategic and International Studies (CSIS), 6 Mar. 2018.

[176] Jakóbowski, J., Kaczmarski, M. and Popławski, K., *The Silk Railroad—The EU–China Rail Connections: Background, Actors, Interests*, Centre for Eastern Studies (OSW) Studies no. 22 (OSW: Warsaw, Feb. 2018).

[177] Chinese National Railway Administration, '中欧班列建设发展规划（2016—2020 年）' [China Railway Express Construction and Development Plan 2016–2020], 19 Oct. 2016

[178] Xinhua, '中欧班列集结中心建设再上台阶' [Construction of China–Europe trains route staging centre takes step forward], 20 July 2020; and Zhao, L. et al., 'Evolution of the China railway express consolidation network and optimization of consolidation routes', *Journal of Advanced Transportation*, article no. 9536273, 25 Dec. 2019.

[179] Chinese Ministry of Commerce, '财政部要求中欧班列逐年降补贴 2019年不超运费四成' [The Ministry of Finance requires China–European Union trains to reduce subsidies year by year, not to exceed shipping costs by 40 per cent in 2019], 5 June 2019.

[180] The authors are grateful to an external reviewer of the paper for this insight.

hub European cities can also have positive economic spillover effects in various regions of the EU.

The development of rail corridors is also largely in line with the EU's own priorities. Rail is the mode of transportation with the most bottlenecks, and so has received nearly three-quarters of CEF funding since 2014.[181] In 2019 a joint study on sustainable rail-based comprehensive transport corridors between China and Europe was commissioned under the EUCCP to identify the most appropriate corridors and to identify missing links and bottlenecks between the two destinations.[182] The study will also map existing linkages, information about which remains heavily fragmented. However, while the railway links facilitate trade, not least by diversifying transport options and reducing costs for European consumers, the relatively emptier freights moving eastwards remain a perennial issue, both in terms of the asymmetry of two-way trade volume and as an indication of a lack of efficiency. At the same time, aggregate figures on containers to and from China do not themselves capture what remains a complex landscape of interdependence; due to the globalized nature of supply chains, many of the products shipped are intermediary rather than finished goods and European multinationals retain manufacturing bases in China.[183]

According to most projections, CRE freight as a share of all trade routes will increase but is unlikely to threaten the dominance of maritime shipping in any significant way.[184] However, its future also depends on the broader trajectory of China–EU trade as it evolves, and recent pronouncements could mark the end of integration trends. These include re-emphasis by President Xi on shifting away from an export-oriented growth model to one based on domestic demand and innovation.[185] The European Commission has also emphasized the need to reinforce industrial and strategic autonomy in its 2020 proposal for an industrial strategy, including to diversify suppliers and shorten supply chains.[186] Such policy perspectives, while not imperatives, both reflect and will increasingly shape new global economic and geopolitical realities for further transport connectivity.

Security policy considerations and concerns in the transport sector

Individual Chinese projects have been subject to varying degrees of politicization and contestation in the EU. The latter also reflect the traditional predominance of SOEs in Chinese investments into the EU, accounting for more than 70 per cent

[181] European Commission, Innovation and Networks Executive Agency (note 6).

[182] 'Terms of reference of the joint study on sustainable railway-based comprehensive transport corridors between Europe and China', annex to EU–China Connectivity Platform (note 37).

[183] Zenglein, M. J., *Mapping and Recalibrating Europe's Economic Interdependence with China*, China Monitor (Mercator Institute for China Studies (MERICS): Berlin, 17 Nov. 2020).

[184] Organisation for Economic Co-operation and Development (OECD), 'Transcontinental infrastructure needs to 2030/2050', Nov. 2010.

[185] BBC, '习近平再提"国内大循环"理念，应对中国经济"前所未有的压力"' [Xi Jinping reiterates the concept of 'domestic circulation' in response to 'unprecedented pressure' on China's economy], 24 July 2020.

[186] European Commission, COM(2020) 102 final (note 38); and Borrell (note 120).

of investments in 2010–15.[187] These companies receive market-distorting preferential treatment and support from the Chinese Government and create an uneven playing field for competition. But Chinese SOEs are also inherently political, tasked with executing non-commercial, policy objectives. EU strategic concerns in this regard also extend to Chinese private companies, particularly in strategically important and sensitive sectors or projects within its borders. However, in the Chinese transport and infrastructural industry, particularly maritime and rail, SOEs tend to dominate.

To address concerns, the EU has begun to promote a more coherent approach to foreign investment by developing common tools and instruments. These include the new EU FDI-screening mechanism and policy reviews on the common designation and protection of critical energy and transport infrastructure. These provide states with a common EU-wide language, if not shared perspectives on thresholds of risk, and methods for dealing with China as a foreign investor.[188] The EU is also exploring mechanisms for companies to take account of human rights and environmental impact across their supply chains. The EU will adopt the 2018 Due Diligence Guidance for Responsible Business Conduct of the Organisation for Economic Co-operation and Development (OECD), either based on a voluntary code of conduct for business or established in legislation.[189]

More strategic implications also include requirements for military mobility.[190] These raise questions regarding the role, if not appropriateness, of Chinese investment or involvement in the development of transport infrastructure. In line with targets for establishing a European Defence Union by 2025 and EU–NATO cooperation in the new environment following Russia's annexation of Crimea, development and upgrading of TEN-T must incorporate these dual-use requirements.[191] In the EU's financial framework for 2021–27, funding of €1.5 billion has been set aside for transport infrastructure to promote military mobility.[192] However, this is less than half the amount originally proposed by the Commission.[193] Digitalization of port and railway infrastructures, both proposed and ongoing, are likely to increase these strategic sensitivities.

The crisis in Belarus has raised a security policy issue of a different kind for connectivity projects. Belarus is an important transit point in the land corridor between China and the EU. Following what were widely judged to be corrupt

[187] Kratz, A. et al., *Chinese FDI in Europe: 2019 Update—Special Topic: Research Collaborations* (Rhodium Group/Mercator Institute for China Studies (MERICS): Berlin, Apr. 2020), p. 12.

[188] European Commission, 'Executive summary of the evaluation of Council Directive 2008/114 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection {SWD(2019) 308 final}', Commission staff working document, SWD(2019) 310 final, 23 July, 2019.

[189] Organisation for Economic Co-operation and Development (OECD), *OECD Due Diligence Guidance for Responsible Business Conduct* (OECD: Paris, 2018); and Krajewski, M. et al., *Human Rights Due Diligence Legislation: Options for the EU*, Policy paper (European Parliament: Brussels, June 2020).

[190] Anthony et al. (note 7).

[191] European Commission, 'Joint Communication to the European Parliament and the Council on the Action Plan on Military Mobility', JOIN(2018) 5 final, 28 Mar. 2018.

[192] Council of the EU (note 25).

[193] Pape (note 41).

elections in 2020, the EU no longer considers the authorities of Belarus to be the country's legal representatives and has suspended all cooperation with them. The suspension of cooperation will continue until the EU has completed a fundamental review of relations with Belarus.[194]

In summary, the level of Chinese SOE involvement in investments into EU transportation networks has dropped, and this may partly reflect rising political sensitives in Europe. In 2019 SOE projects constituted only 11 per cent of Chinese investments, down from 72 per cent in 2017.[195] A tighter regulatory environment will probably have a further impact on Chinese investments in the transport sector given the dominant role that Chinese SOEs play.[196]

[194] European Commission, 'EU—Belarus relations', 21 Dec. 2020; and Council of the European Union, 'EU relations with Belarus', 14 Jan. 2021.

[195] Kratz et al. (note 187), p. 12.

[196] European Commission, COM(2020) 253 final (note 57).

5. Digital connectivity

Digital technology has become a pillar of China's global connectivity vision. The use of labels such as 'Information Silk Road' or 'Digital Silk Road' since 2015 suggest that Internet and telecommunications infrastructure, digital services such as e-commerce, and other emerging technology products and applications are now seen as elements of the BRI.[197] China's formal push for digital connectivity overseas has had multiple drivers. These include addressing the same overcapacity problems that domestic heavy industries have faced, and a policy to expand overseas activity by Chinese technology companies.[198] The approach intersects with longer-term ambitions as outlined in the Made in China 2025 industrial strategy for advanced technology sectors and the forthcoming China Standards 2035, which strives for the development and setting of global standards across emerging technologies.[199]

In practice, however, China's expanding role in the global digital economy has constituted less of a coordinated vision under the framework of the BRI.[200] Rather, it has been strongly shaped by companies such as Alibaba (a large e-commerce platform), Tencent (owner of WeChat, a multipurpose messaging app), ByteDance (owner of TikTok, a video-sharing app), ZTE and Huawei (large telecommunications companies). Indeed, as early as 2010, Huawei's overseas sales made up 65 per cent of its total sales, although that share has dropped in recent years as political controversy has increased.[201] Governmental branding and public diplomacy efforts, as in the case of infrastructure projects, belie a much less unified or strategic approach to digital connectivity abroad.

At the same time, the line between industry and state is blurred. This is particularly notable in a sector as sensitive as digital, where, for example, the 2017 National Intelligence Law obligates organizations and citizens to support, assist and cooperate with intelligence organs upon demand.[202] Broader normative divergences related to data protection and digital sovereignty contribute to concern from the EU and beyond. In this regard, the EU serves both as a competitor in the realm of global standard-setting and digital norms and as a target market for research and development and a destination for mergers and acquisitions.

[197] Chinese National Development and Reform Commission et al. (note 172); and Huang, Y., 'Construction of digital Silk Road lights up BRI cooperation', *People's Daily*, 24 Apr. 2019.

[198] Shen, H., 'Building a Digital Silk Road? Situating the Internet in China's Belt and Road Initiative', *International Journal of Communications*, vol. 12 (2018), pp. 2683–701; and Chinese State Council, '国务院关于积极推进"互联网+"行动的指导意见' [State Council's guidance on actively promoting 'Internet Plus' action], 4 July 2015.

[199] Pop, V., Hua, S. and Michaels, D., 'From lightbulbs to 5G, China battles West for control of vital technology standards', *Wall Street Journal*, 8 Feb. 2021.

[200] Greene, R. and Triolo, P. 'Will China control the global Internet via its Digital Silk Road?', SupChina, 8 May 2020.

[201] China Daily, 'China's Huawei sales up 24%', 18 Apr. 2011

[202] '中华人民共和国国家情报法' [National Intelligence Law of the People's Republic of China], adopted 27 June 2017, amended 27 Apr. 2018, Articles 7 and 14.

The EU perspective on digital connectivity has been changing rapidly at member state level and within EU institutions. The objective of the Digital Europe policy file—an integrated set of projects supported by the common EU budget in the financial framework for 2021–27—is to establish the EU as a global leader shaping a digital ecosystem that will be the platform for future economic competitiveness, national resilience and military security.[203] To achieve the objectives of Digital Europe, the EU has to think through an extremely complex set of issues around future governance, including the question of how to identify, measure and manage security risk in a future digital network. Moreover, the complexity is magnified because the role of the digital network is closely linked to the parallel and interconnected developments in fast computing, artificial intelligence and cryptography.

Developing an intra-EU Digital Single Market is a central objective of the EU and a focal point for the European Commission. The single market in goods and services established the EU as an important player in global trade and commerce and the single currency (the euro) established the EU as an important actor in global finance. To operate in an EU Digital Single Market, actors will have to respect EU rules on fair competition, cybersecurity, data protection, the privacy of information about EU citizens, and online free speech and freedom of the online media as well as protection against cybercrime, misinformation, radicalization leading to violent extremism and hate speech.

While the EU is coming to terms with this complex but vital set of issues, similar assessments are taking place in other key states and world regions. Even as it works internally, the EU must engage in a transatlantic dialogue, incorporate key partners in Asia and bring into the conversation countries in the Global South as they invest in their own digital resources.

In addition, companies in the private sector are engaged in their own dialogue about technical standards and efficient legislation as they design future products and services. The industry association representing the technology industries of the EU, Orgalim, has highlighted the risk that current developments might produce a fragmented legal environment that would complicate their efforts. It proposes that the EU adopts integrated cybersecurity legislation applicable to all networkable products present inside the EU single market.[204]

Dialogue between China and the European Union on the digital economy

The future development of digital networks has become one of the most contentious issues in China–EU relations. However, the bilateral dialogue on digital issues has remained at the technical level. The principles that should guide technical and operational matters are mainly discussed in global and multilateral settings.

The future potential of 5G networks was recognized when China and the EU deepened their dialogue on connectivity and in annual Information and

[203] European Commission (note 27).

[204] Orgalim, 'Proposal for a horizontal legislation on cybersecurity for networkable products within the new legislative framework', Position paper, 9 Nov. 2020.

Communication Technologies (ICT) Dialogue meetings at technical working level.[205] In 2013 China and the EU pledged to support and promote the establishment of a peaceful, secure, resilient and open cyberspace, and to work for just, reasonable and effective rules to govern the Internet and a new generation of wireless communication technology.[206] Since 2013 a China–EU Cyber Taskforce has also met annually.[207] In 2015 a joint declaration on strategic cooperation on 5G mobile networks was presented as a major outcome of the EU–China High-Level Trade and Economic Dialogue.[208]

China was instrumental in bringing the issue of governing the digital economy onto the agenda of the G20 at its Hangzhou summit, which agreed to create a Digital Economy Development and Cooperation Initiative. The objective of that initiative is to create favourable conditions for a future digital economy based on expanded, better and more affordable broadband access; the free flow of information for economic growth, trust and security, while ensuring respect for privacy and personal data protection; investment in the ICT sector, entrepreneurship, digital transformation and e-commerce cooperation; enhanced digital inclusion; and the development of micro-, small- and medium-sized enterprises.[209]

At one of the largest gatherings of the business communities of China and the EU in 2020, the three main priorities for bilateral cooperation as outlined by Chinese officials were speeding up negotiations on a China–EU Comprehensive Agreement on Investment, strengthening China–EU cooperation on the digital economy and forging China–EU 'green partnerships'.[210]

Dialogue between the European Union and the United States on management of digital security risks

The USA has made strenuous efforts to promote initiatives that exclude authoritarian governments from digital networks, with a particular emphasis on excluding China.

The Secure and Trusted Communications Networks Act was passed in March 2020 to require US communications providers to remove specified equipment from their networks.[211] From 13 August 2019, US Government agencies had been prohibited from procuring telecommunications equipment or services produced

[205] European Commission, 'EU–China: Commission and China hold first High-Level Digital Dialogue', 10 Sep. 2020.

[206] EU–China 2020 Strategic Agenda for Cooperation (note 30).

[207] Chinese Ministry of Foreign Affairs, 'The 7th China–EU Cyber Taskforce was held in Beijing', 13 Jan. 2020.

[208] Mogni, A. and Goethals, A., *Perspectives on an EU Dialogue with China on Digitalization*, European Institute of Asia Studies (EIAS) Policy Brief no. 6 (EIAS: Brussels, July 2020).

[209] G20 Leaders' Communique, Hangzhou Summit, 4–5 Sep. 2016, para. 14.

[210] EU–China Business & Technology Cooperation Fair, 'Focusing on digital economy and intensifying EU–China pragmatic cooperation', Chengdu, 19 Nov. 2020.

[211] Secure and Trusted Communications Networks Act of 2019, US Public Law 16–124, signed into law 12 Mar. 2020. See also US Senate, Committee on Commerce, Science and Transportation, 'President signs rip and replace bill into law', Press release, 12 Mar. 2020.

by Huawei, ZTE or their subsidiaries.[212] In April 2020 the US Department of State explained the steps it would take to ensure compliance by creating a 'clean path' into diplomatic mobile data traffic and blocking access to untrusted ICT vendors.[213] The initiative was subsequently expanded as the Clean Network initiative to include five additional dimensions: Clean Store, Clean Apps, Clean Cloud, Clean Carrier and Clean Cable.[214]

The USA has promoted a coalition of selected states and companies 'to secure their critical telecommunications, cloud, data analytics, mobile apps, Internet of Things, and 5G technologies from malign actors by relying on only trusted vendors who are not subject to unjust or extra-judicial control by authoritarian governments'.[215] The initiative is targeted at 'authoritarian states', but when presenting the initiative the US secretary of state, Michael R. Pompeo, emphasized the role of Chinese suppliers.[216]

The USA and a number of EU member states in Central Europe made politically binding joint declarations on 5G network security with a standardized content during 2019 and 2020.[217] The declarations promise that only trusted and reliable suppliers will participate in 5G networks to protect them from unauthorized access or interference. Each declaration underlines the need for a rigorous evaluation of providers and supply chains that should include the following elements: (*a*) no supplier subject to control by a foreign government without independent judicial review;[218] (*b*) transparent, commercially based financing that follows standard best practices in procurement, investment and contracting; (*c*) transparent ownership, partnerships and corporate governance structures; (*d*) commitment to innovation and respect for intellectual property rights; (*e*) a track record of respect for the rule of law, the security environment and vendor ethics; and (*f*) compliance with secure standards and industry best practices to promote a vibrant and robust supply of products and services.[219]

In calling for a transition to trusted ICT providers and supply chains, the declarations underline that there are still unresolved concerns about security risk in already installed fourth generation (4G) digital networks (where Chinese companies play an important role) while preparing for the future. A 2019 EU risk assessment notes that risk mitigation must account for vulnerabilities in existing 3G and 4G infrastructure over an extended period, but 'fundamental differences'

[212] John S. McCain National Defense Authorization Act for Fiscal Year 2019, US Public Law 115-232, signed into law 13 Aug. 2018, section 889(a)(1)(A).

[213] Hartman, L., 'Defending America's cyberfrontier with a 5G "clean path"', US Department of State, Bureau of Global Public Affairs, 7 May 2020.

[214] Hartman, L., 'Expanded Clean Network initiative safeguards data', ShareAmerica, US Department of State; and Pompeo, M. R., US Secretary of State, Remarks at a press availability, US Department of State, 5 Aug. 2020.

[215] US Department of State, '5G clean networks', 23 July 2020.

[216] Pompeo, M. R., US Secretary of State, 'Announcing the expansion of the Clean Network to safeguard America's assets', Press statement, US Department of State, 5 Aug. 2020.

[217] The USA reached agreement with Estonia, Poland and Romania in 2019, and with Bulgaria, Czechia, Latvia, Slovakia and Slovenia in 2020.

[218] On a related proposal see European Commission, COM(2020) 253 final (note 57).

[219] The White House, United States–Estonia Joint Declaration on 5G Security, 1 Nov. 2019

in how 5G operates mean 'current security measures as deployed on 4G networks might not be wholly effective or sufficiently comprehensive to mitigate [future] risks'.[220]

Representatives of the EU and the USA have emphasized that the Clean Network initiative and the EU cybersecurity risk-mitigation toolbox (discussed further below) are based on the same principles and have the same objective of protecting personal data, intellectual property and national security.[221]

US representatives have suggested that the protection of democratic institutions, collaboration on the development and use of future technologies, and addressing the security implications of China's infrastructure investments should be central topics in the EU–USA dialogue.[222] However, there are dimensions of digital security that are difficult to discuss in an EU–USA framework for structural reasons.

In December 2016 and December 2017 the EU and NATO leaders agreed to common proposals to give substance to the strategic partnership that they had declared in Warsaw in June 2016.[223] Cybersecurity and cyber-defence are prominent areas for EU–NATO cooperation, and after December 2019 new topics were introduced including cyber aspects of crisis management and response; enhancing network security and resilience, including 5G and supply chain security; promoting 'cyber stability' between states; and reaching out to respective partner networks to discuss cyber resilience.[224]

Digital technology is now central to the military capability of states across the transatlantic community, but the EU is constrained in discussing 'hard' security risks. Instead, NATO is now becoming a forum on the military dimensions of network security.[225] At their meeting in December 2019, NATO leaders agreed for the first time that, 'NATO and Allies, within their respective authority, are committed to ensuring the security of our communications, including 5G, recognising the need to rely on secure and resilient systems. . . . We are increasing our tools to respond to cyber attacks, and strengthening our ability to prepare for,

[220] NIS Cooperation Group, *EU Coordinated Risk Assessment of the Cybersecurity of 5G Networks* (European Commission: Brussels, 9 Oct. 2019), para. 3.8.

[221] Krach, K., US Under-Secretary of State for Economic Growth, Energy and the Environment, and Breton, T., European Commissioner for Internal Market, 'Statement on the importance of the EU and US partnership for securing telecommunications infrastructure', 1 Oct. 2020.

[222] Risch, J., Chairman of the US Senate Foreign Relations Committee, Statement on the launch of the US–EU Dialogue on China, 23 Oct. 2020.

[223] Statement on the implementation of the Joint Declaration signed by the President of the European Council, the President of the European Commission, and the Secretary General of the North Atlantic Treaty Organization, NATO Press Release (2016) 178, 6 Dec. 2016; and Common set of new proposals on the implementation of the Joint Declaration signed by the President of the European Council, the President of the European Commission and the Secretary General of the North Atlantic Treaty Organization, NATO Press Release (2017) 174, 5 Dec. 2017. On the strategic partnership see the original Joint Declaration, 8 July 2016.

[224] EU and NATO, 'Fifth progress report on the implementation of the common set of proposals endorsed by EU and NATO Councils on 6 December 2016 and 5 December 2017', 16 June 2020.

[225] Gilli, A. and Bechis, F., 'NATO and the 5G challenge', *NATO Review*, 30 Sep. 2020.

deter, and defend against hybrid tactics that seek to undermine our security and societies.'[226]

China has been excluded from some forums that discuss how to approach security risk management. Czechia convened a conference in May 2019 at which invited participants agreed on a set of recommendations and principles, codified as the Prague Proposals, that could guide states when designing, constructing and administering their 5G infrastructure.[227] China was not invited to the 2019 conference or to the follow-up 2020 conference at which a group of like-minded states, international organizations (including the EU) and key private sector actors conducted detailed discussions on a broad range of issues related to 5G networks.[228]

Recent security-related developments in digital connectivity in the European Union

Making the online environment safe and secure has been a key element of the Digital Europe policy file described above. To that end, EU legislation has begun to create a more common basis for action on various aspects of cybersecurity.

The 2016 Network and Information Security (NIS) Directive aims to improve the security of network and information systems for consumers and businesses across the EU. It requires every member state to put in place a national strategy defining measures that will achieve and maintain 'a high level of security of network and information systems' covering a set of sectors and services agreed at the EU level.[229] To implement the NIS Directive, member states, the European Commission and the EU Agency for Cybersecurity (ENISA) have established a systematic framework for information sharing as well as analysing the impact of significant cyber incidents. EU member states are also obliged by the NIS Directive to create computer security incident response teams (CSIRTs).

The EU's 2019 Cybersecurity Act addresses security challenges posed by the increasing number and diversity of devices connected digitally.[230] The act envisages a comprehensive certification scheme to raise confidence that a networked product, service or process can be trusted and encourages producers to adopt 'security by design' by taking account of certification requirements in new products.

[226] North Atlantic Council, London Declaration, 3–4 Dec. 2019, para. 6.

[227] Czech National Cyber and Information Security Agency (NÚKIB), 'Prague 5G Security Conference 2019', 2–3 May 2019; and Prague 5G Security Conference, 'Prague Proposals: The chairman statement on cyber security of communication networks in a globally digitalized world', 3 May 2019.

[228] National Cyber and Information Security Agency (NÚKIB), 'Prague 5G Security Conference 2020', 23–24 Sep. 2020.

[229] Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (NIS Directive), *Official Journal of the European Union*, L 194, 19 July 2016, pp. 1–30, Article 7(1).

[230] Regulation (EU) 2019/881 of the European Parliament and of the Council of 17 April 2019 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) no. 526/2013 (Cybersecurity Act), *Official Journal of the European Union*, L 151, 7 June 2019, pp. 15–69.

Whereas EU member states formerly decided whether to implement national certification systems, under the Cybersecurity Act it is now mandatory. In parallel, ENISA will oversee and coordinate the development of cybersecurity certificates that will be recognized in all EU member states. A process for mutual recognition of national certificates will also form part of the overall framework. The advisory Stakeholder Cybersecurity Certification Group is composed of representatives of European academic, industry and trade associations alongside the various European standards authorities in relevant technical areas.[231]

Chinese authorities and companies will play no role in developing the certification framework, but Chinese companies will have to comply with it if they are to sell products in the EU.

In January 2020 the Commission and member states published a toolbox of the types of security risk that can affect the cybersecurity of 5G networks along with mitigating measures to address them.[232] One recommendation is to 'avoid or limit any major dependency on a single supplier and avoid dependency on suppliers considered to be high risk'.[233] This is implicitly aimed at Huawei, ZTE and other Chinese companies.[234]

Action at the national level

In December 2020 the European Commission reported that member states were incorporating the different EU agreements and rules described above in national procedures.[235] As noted above, eight EU member states have also reached bilateral agreements with the USA on measures to strengthen 5G network security. There appear to be some common features emerging in how member states are approaching national implementation.

The greater emphasis of security issues, including the direct engagement of intelligence services and the armed forces into decisions about commercial contracts, is translating into decisions about specific projects. In Denmark, where authorities awarded the contract to develop 5G core capabilities to a Swedish company, the intelligence community and Ministry of Defence have raised concerns about companies from countries without close ties to Denmark.[236] Italy is the only member of the Group of Seven (G7) that has signed a memorandum

[231] European Commission, Directorate-General for Communication Networks, Content and Technologies, 'Stakeholder Cybersecurity Certification Group: Terms of reference', 23 July 2019.

[232] European Commission, 'EU toolbox for 5G security', Fact sheet, Jan. 2020; and NIS Cooperation Group (note 220).

[233] European Commission, 'EU toolbox for 5G security' (note 232), p. 2.

[234] European Commission, 'Secure 5G deployment in the EU—Implementing the EU toolbox', Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2020) 50 final, 29 Jan. 2020, p. 6.

[235] European Commission, 'Commission reviews the impacts of the EU process and EU Toolbox, and sets out next steps to ensure secure 5G networks in a coordinated way', 16 Dec. 2020; and European Commission, 'Report on the impacts of the Commission Recommendation of 26 March 2019 on the Cybersecurity of 5G networks', Commission staff working document, SWD(2020) 357 final, 16 Dec. 2020.

[236] Reuters, 'Denmark wants 5G suppliers from closely allied countries, says defence minister', 9 June 2020; and Danish Defence Intelligence Service (FE), *Intelligence Risk Assessment 2020: An Assessment of Developments Abroad Impacting on Danish Security* (FE: Copenhagen, Dec. 2020), p. 46.

of understanding with China outlining participation in the BRI.[237] However, in 2019 the Italian Government issued a decree giving it the power to intervene in transactions related to the digital market based on national security concerns.[238] The security committee of the Italian Parliament subsequently produced a report advising the exclusion of Huawei from Italy's 5G networks.[239] In October 2020 it was reported that the Italian Government had made use of the new powers to terminate a contract between Huawei and the telecommunications operator Fastweb.[240] Sweden specifically excluded Huawei and ZTE from its auction of licences that are central to delivering 5G services, on the recommendation of the security police and armed forces.[241]

France does not plan to exclude named Chinese suppliers from bidding for 5G network contracts, but President Emmanuel Macron has emphasized developing European capacity as an important factor in future decisions.[242] China plays an important role in existing 4G networks in France, but French authorities have apparently advised telecommunications operators to give preference to European suppliers when re-applying for future licences. In effect, Chinese suppliers are likely to be phased out of French networks after 2028, when current licences will expire.[243]

Germany

Germany is arguably the most important single national context for the discussion of 5G connectivity.

It is the largest EU national market for 5G products and services, and also one of the most advanced in terms of both projects under way and collaboration with China. In December 2019 Telefónica, one of the three largest telecommunications operating companies in Germany, signed an agreement with Huawei keeping open the possibility of later contracts to build core elements of 5G infrastructure.[244] A number of German cities are implementing projects to promote the move towards so-called smart cities. By 2020 city-level urban infrastructure projects based on 5G technology were under way in Berlin, Bonn, Cologne, Darmstadt, Duisburg

[237] Cristiani, D., 'Italy joins the Belt and Road Initiative: Context, interests, and drivers', *China Brief*, Jamestown Organization, 24 Apr. 2019.

[238] 'Disposizioni urgenti in materia di perimetro di sicurezza nazionale cibernetica' [Urgent provisions on the national cybersecurity perimeter], Decree-Law no. 105 of 21 Sep. 2019. See also Mele, S., 'National security and 5G', Commentary, Istituto per gli Studi di Politica Internazionale (ISPI), 18 Sep. 2020.

[239] Ghiretti, F., 'Europe's manoeuvring on 5G technology: The case of Italy', Italian Institute of International Affairs (IAI) Commentaries no. 20/67, Sep. 2020.

[240] Bicheno, S., 'Italy reportedly blocks Huawei 5G deal as Bulgaria joins US "clean network" scheme', Telecoms.com, 26 Oct. 2020.

[241] Post- och telestyrelsen (PTS), 'Fyra sökande godkända att delta som budgivare i 3,5 GHz och 2,3 GHz-auktionerna' [Four applicants approved to participate as bidders in the 3.5 GHz and 2.3 GHz auctions], 20 Oct. 2020; and Säkerhetspolisen, 'Inriktning för samråd med Post- och telestyrelsen (PTS) inför tilldelning av frekvenstillstånd' [Focus for advice to the Post and Telecom Authority (PTS) before the allocation of frequency licences], 16 Apr. 2020.

[242] Reuters, 'Macron says France's 5G strategy founded on European sovereignty', 28 Aug. 2020.

[243] Rosemain, M. and Barzic, G., 'Exclusive: French limits on Huawei 5G equipment amount to de facto ban by 2028', Reuters, 22 July 2020.

[244] Germano, S., 'Huawei strikes German 5G deal despite political pushback', *Wall Street Journal*, 11 Dec. 2019.

and Munich.[245] Key industries such as rail transport and car manufacturing have sectoral strategic partnership agreements with Huawei for cooperation on 5G development.

Germany played a leading role in promoting EU-wide rules to enhance scrutiny of Chinese FDI against security criteria. In addition, the Federation of German Industries (Bundesverband der Deutschen Industrie, BDI) played a prominent role in highlighting the need to go beyond rules for the trade in goods to a more comprehensive approach to regulating commercial and financial relations with China. The BDI emphasized that 'No EU Member State can on its own cope with the economic and political challenges posed by China. Answers can only come from a strong, reformed Europe speaking with one voice.' Furthermore, 'Germany and the EU must coordinate even more actively with other liberal market economies so that common interests vis-à-vis China also lead to joint action'.[246]

In December 2020 the German Government agreed on the text of legislation to be presented to the parliament on 5G network security.[247] If adopted the bill will give the Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik, BSI) oversight of 5G projects at an early stage and the powers to require changes to contracts where a risk to German information security is identified. The draft law also contains a regulation that for the first time prohibits the use of certain critical components without prior certification.[248]

The new legislation does not exclude any supplier by name, but it may make it more difficult for Huawei and other Chinese companies to compete for contracts in Germany.[249]

Pushback by China

Facing action at the national and EU levels that reduces the probability of participation in future European 5G networks, the Chinese Government and major Chinese companies have organized a response with several dimensions.

Huawei has questioned the legality of decisions by Poland, Romania and Sweden.[250] At the request of the company, Huawei representatives met senior European Commission officials in September 2020 to express their concern about the 'fragmented implementation' of the EU cybersecurity toolbox by member states.[251]

[245] E.g. Huawei, 'Huawei deepens cooperation with Duisburg to transform Germany's industrial heartland into a smart city', Press release, 3 Sep. 2018.

[246] Federation of German Industries (BDI), *Partner and Systemic Competitor: How Do We Deal with China's State-Controlled Economy?*, Policy Paper (BDI: Berlin, Jan. 2019).

[247] German Federal Office for Information Security, 'Kabinett beschließt Entwurf für IT-Sicherheitsgesetz 2.0' [Cabinet approves draft for IT Security Act 2.0], Press release, 16 Dec. 2020.

[248] Morris, A., 'Germany sets high barriers for Huawei with new security bill', Light Reading, 17 Dec. 2020.

[249] Rinke, A. and Busvine, D., 'Germany moves to toughen Huawei oversight: Sources', Reuters, 30 Sep. 2020.

[250] Belton, P., 'Huawei says Romania and Poland bans violate EU law', Light Reading, 3 Nov. 2020.

[251] European Commission, Secretariat General, 'Report on meeting with Huawei, 30 September 2020', Redacted, Document reference no. Ares(2020)6030599, 28 Oct. 2020.

Huawei responded to the exclusion of Chinese companies from the 5G auction in Sweden by presenting a technical case via the Swedish media that the decision will weaken cybersecurity in Sweden, not strengthen it.[252] In November 2020 the company made a legal challenge in a national court that delayed the 5G auction.[253] The Chinese reaction also included statements by the Chinese Ministry of Foreign Affairs urging Sweden to 'correct its mistake' to avoid a negative impact on China–Sweden economic cooperation and on Swedish businesses operating in China.[254]

[252] Purdy, A., Head of Cybersecurity Huawei USA, 'Post och telestyrelsen måste ta sitt förnuft till fånga' [The Post and Telecom Authority must listen to reason], Altinget, 4 Nov. 2020.

[253] Reuters, 'Sweden halts 5G auction after court grants relief to Huawei', Euractiv, 10 Nov. 2020.

[254] 'Kina hotar med motaktion efter 5G beslut' [China threatens retaliation after 5G decision], *Dagens Nyheter*, 21 Oct. 2020 (author translation).

6. Conclusions

The relationship between China and the EU has been evolving under conditions of significant geopolitical turbulence. This has seen earlier areas of cooperation—such as trade, investment and infrastructural connectivity—become politicized and instrumentalized within and beyond the bilateral relationship.

Transportation and digital projects that were following a commercial and technical logic are increasingly embedded in security policy, symptomatic of the increasingly contentious China–EU relationship over the past few years. In the future, the EU will take account of potential security considerations when assessing economic cooperation with China. The result of this important change is greater caution and closer scrutiny of Chinese investments, and the EU has designed new policy instruments that are now coming into force to mitigate identified risks. This can lead to political interventions that disrupt or terminate connectivity projects.

China has continued to pursue its Belt and Road connectivity initiative in Europe, but its lack of specificity and clarity has made it difficult for EU partners to respond coherently and cohesively. Pressure from the USA and a growing view that China presents a serious challenge to the multilateral rules-based order have also influenced what has become a more assertive EU stance towards China. China continues to stress that its relationship with the EU is one of all-round partnership and that it is upholding the multilateral system, while a growing EU view has emerged that the very nature of China's political and economic system may represent an alternative and even competing form of global governance.

As Chinese investments in the EU have grown over the past decades, both sides have undergone a process of learning. Different expectations of what each side aims to achieve, differences in approaches and divergent standards related to connectivity certainly exist, and at times they have resulted in misinterpretations or even disputes.

A previous SIPRI publication found that transportation projects are now being affected by considerations related to military mobility.[255] The need to adapt infrastructure to the movement of armed forces and their equipment has become an element of EU planning, as reflected in common budget arrangements. This military dimension is making European states cautious about who can join projects as they develop national implementation measures to comply with recent EU legislation that requires scrutiny of foreign investment.

A more restrictive approach will mean that programmes to upgrade transport networks through infrastructure projects may be slowed or even cancelled if Chinese and European partnerships are broken. At the same time, European financing for infrastructure projects may be easier to find in the coming years because these projects are prominent in the EU budget for 2021–27. This could reverse a pattern whereby Chinese investment helped to fill a gap created by the

[255] Anthony et al. (note 7).

reluctance of European public and private institutions to support transportation infrastructure projects.

Existing transportation projects should be brought to completion, and the main priority for the EU–China Connectivity Platform should be ensuring the harmonization of ongoing projects with the EU strategy for transport network development. As EU member states implement new legislation on screening foreign direct investment at national level, the EUCCP can also be a forum for explaining how the new rules will be applied. The clarity generated can establish the parameters for viable future projects.

The impact of security policy on projects to promote digital communication networks is perhaps even more tangible. Recent decisions about who may participate in developing the next generation of digital communications networks have been heavily influenced by inputs from the security services and the armed forces. In the past these agencies would not have been consulted about commercial projects at all, but now their views can be decisive.

From the information presented in this paper, it now seems inevitable that European digital networks will contain far less Chinese technology in the future than could have been predicted only five years ago. However, the transition to the next generation of digital communications will build on existing networks, in which China is heavily invested. Breaking partnerships between Chinese and European entities will make transition from one generation to the next slower and more expensive.

The sensitivity of issues around digital connectivity has made the topic prominent in transatlantic discussions, and there is a growing convergence regarding digital connectivity as a component of national security. For Chinese industry, this means that the political and business environment of the EU represents as much risk as opportunity in the medium-term future.

Another conclusion from this paper is that the physical infrastructure that enables digital communication can no longer be seen as a technical and politically neutral public good. The infrastructure that China and the EU build within their legal jurisdictions is an integral part of the wider international discussion on the proper use of ICT and the products and services that it supports.

Whether China–EU partnerships should be encouraged or further restricted is likely to be influenced by security policy considerations of a different kind. The degree of cooperation will influence the pace of economic recovery from the impact of the Covid-19 pandemic—a high political priority in both China and Europe. It is not yet possible to assess the impact of the pandemic on connectivity. One reaction has been the conclusion that supply chains (the sourcing of products) and value chains (the sourcing of all inputs back to the original raw materials) need to be more tightly controlled by public authorities to reduce the impact on society of disruption. Another conclusion, that pulls in the opposite direction, has been that efforts to compartmentalize what were conceived as globally integrated systems will be detrimental to recovery and future development.

It is not yet possible to assess the impact of the December 2020 agreement in principle on a bilateral China–EU Comprehensive Agreement on Investment. The

expectation from the EU is that the CAI will force a more harmonized approach as it will supersede bilateral agreements between member states and China. The EU also expects the CAI's enforcement mechanism to allow it to judge how far economic cooperation with China can move beyond transactional trade relations to a deeper partnership. However, it is not yet possible to know whether these expectations will be met.

Prospects for cooperation between China and the EU across overlapping connectivity interests remain. However, the connectivity agenda is likely to reach a limit without addressing more fundamental issues such as reciprocity and a level playing field. While this is outside the scope of the current study, it should be noted that the deeply rooted differences between China and the EU on Chinese state subsidies and the Chinese political economic model are structural and unlikely to be resolved in the near term. Furthermore, these structural differences also touch on more fundamental issues of political and normative values. In this regard, it must be noted that connectivity is increasingly seen as a vehicle for promotion of these competing value systems. The divergence between the two sides is likely to increase and contribute to an international system marked by competition rather than collaboration.

Recommendations

China and the EU will need to cooperate to facilitate post-pandemic economic recovery. The system that the EU develops to certify and monitor trusted products and services to protect its security should not be China-specific. The system should instead hold all suppliers to agreed standards. As they develop more detailed elements in the CAI, China and the EU must hold each other to account over agreed standards, including in the areas of transportation and digital connectivity.

Existing forums such as the EUCCP should continue to serve as useful venues to discuss issues related to implementation of agreed connectivity projects. The EUCCP, which incorporates joint policy, technical and civil society consultations from initial project design, could play an important role in monitoring respect for agreed standards over the lifetime of projects.

Connectivity will remain a critical means to facilitate economic recovery. Neither the transport of essential commodities within supply and value chains nor the continued growth of e-commerce should be blocked. The EU post-pandemic economic recovery plan includes a Strategic Investment Facility focused on building resilient value chains, and the European Commission has begun to assess which supply chains should be designated as both essential and in the common European interest.[256] Moreover, convergence in technical standards and interoperability tailored to the transport and digital sectors should not be

[256] European Commission, 'The EU budget powering the recovery plan for Europe', Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2020) 442 final, 27 May 2020, annex, pp. 5–6.

limited to China–EU frameworks—they should be a high priority within forums such as ASEM.

In policy areas such as the response to climate change, China and the EU continue to have shared interests and can work together in finding realistic, well-defined, and mutually agreed and enforceable plans. However, in the policy fields of transportation and digital connectivity, China and the EU need to adjust their expectations to avoid future misunderstandings. The dilution of political trust has made it more important to define rules governing connectivity projects clearly and to make them explicit. In this regard, it is important to enhance existing communication and dialogue mechanisms at both the political and functional levels.

Transport

The Covid-19 pandemic has led to a heightened concern about long supply chains and overdependence on single suppliers. However, risk diversification and economic resilience can also be pursued through increased connectivity. The opening of new transcontinental railway lines between China and the EU in the past decade, for instance, is an important success for connectivity. In 2020 this infrastructure provided an important third channel for the necessary flows of goods, as a result of pandemic-induced problems for maritime shipping and air freight—in terms of both delivery time and increased costs. Continued investments in these railway corridors—to address bottlenecks and to improve capacity, efficiency, and intermodal freight transport and logistics—would benefit both China and the EU.

Principles of economic, environmental and social sustainability need to be mainstreamed across Chinese investments in the EU. China's 2019 debt sustainability framework, which takes steps in this regard, serves only as non-mandatory guidance. To make Chinese actions compatible with rhetoric about sustainable connectivity, additional steps are needed. Stronger monitoring and enforcement mechanisms should be applied to projects being implemented in the EU (and elsewhere abroad), particularly where Chinese public banks and SOEs are involved. The assessment (and re-assessment) of the sustainability of these projects requires also greater transparency by Chinese actors.

The ability to absorb Chinese investment varies across EU member states depending on national legal, administrative and technical capacities to assess longer-term cost–benefit balances and to fully understand the implications of transport infrastructure projects. The EU should consider establishing a service to supplement and help provide the necessary competence on request from a member state. A service of this kind should be tailored to EU-wide standards, even as it recognizes the variations among member countries. The service would also assist China to understand and make good-faith efforts to comply with EU regulations when designing, developing and implementing country-specific financial packages and construction plans. This service would help enhance mutual trust and minimize disputes due to misinterpretation.

China and the EU should focus on how security issues will be addressed in transportation projects to promote integrated, sustainable supply chains. A common working document explaining how security measures will be applied should be produced jointly by governmental institutions, companies and civil society on both sides.

China and the EU have clearly indicated their interest in enhancing connectivity across and within Eurasia. Expanding the discussion of the security dimension of integrated, sustainable supply chains would be consistent with the ambition to facilitate joint financing of projects in third countries.

Digital

The digital dimension of China–EU connectivity presents the most difficult challenges. Designing a transatlantic approach to digital governance is certain to remain a key focus under the new US administration. It will be a prominent issue within the dialogue between the EU and the USA on their future relations with China.

Pending the outcome of transatlantic discussions, progress is unlikely in China–EU forums such as the Cyber Taskforce and the ICT Dialogue. However, these forums should continue their work with a focus on promoting a better understanding of the security measures that China and the EU both recognize to be legitimate and necessary under their existing concepts of cybersecurity and digital sovereignty. Clearer understanding of risks and agreement on legitimate measures to counter them could help avoid exacerbating political disagreements.

Enhance mutual understanding and develop common language

Divergence in expectations, disputes over investment priorities, different regulatory regimes, emerging security concerns and technical issues in implementation have placed a question mark over the future of connectivity programmes. The discussion of connectivity highlights the challenge of bridging differences in the bilateral relationship at a time where growing frictions between the two sides are eroding the foundation of a critical international relationship.

More broadly, realistic assessments are necessary if mutual political, technological and financial misunderstandings are to be avoided. China and the EU need to acknowledge their differences constructively.

China should acknowledge that, unless it addresses the issue of reciprocal market access, conversations about deepening integration and economic relations will be limited. As a point of departure, each partner acknowledging the boundaries of the other can potentially help move the China–EU dialogue in more productive directions. While China has benefitted from claims to still be a developing country, as its economic and political presence inside the EU has grown it must acknowledge and accept that EU openness cannot and will not be unequivocal. The EU must acknowledge at the same time that China's political and economic system is unique, and that it is not likely to undergo significant changes at the EU's request.

Indeed, while acknowledging these differences and challenges, China and the EU have already started exploring new areas for cooperation. These may include green financing, energy development and conservation, and climate change.[257]

China and the EU each need to significantly increase their investment in long-term capacity and knowledge related to the other's contemporary politics as a necessary ingredient for taking forward future cooperation projects. The EU should prioritize contemporary China studies when earmarking research funds and target money linking the capacity of member states in projects financed under, for example, the Horizon Europe instrument. China should leverage opportunities to create deeper research capacity related to the EU across its university and think tank systems.

[257] Anthony, I., Yuan, J. and Sun, X., 'Promoting China–European Union cooperation on green and sustainable finance', SIPRI Policy Brief, Feb. 2021.

China–EU Connectivity in an Era of Geopolitical Competition

The long-standing relationship between China and the European Union (EU) is being subsumed into a broader geopolitical competition between major power centres. Alongside cooperation, elements of competition and rivalry have been sharpened by a re-evaluation of the bilateral relationship by EU actors. Areas of cooperation have included Chinese involvement in the EU's internal connectivity projects—specifically in transport and digital networks. This report examines this cooperation and assesses its prospects.

Enhancing connectivity within and around the EU to facilitate trade and commercial relations was relatively uncontroversial even if initiatives were never fully aligned. But the space for common projects has been narrowed by political divergence and new sensitivities in the EU regarding the security implications of Chinese investments. China understands that the EU's scrutiny of its investments and restrictions on its involvement in connectivity projects are affected by EU–US relations. Despite these tensions, the report shows that constructive ways forward in this globally significant relationship are still possible, both within and beyond the connectivity domains.

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