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Policy | Brief

*The EL-CSID project is coordinated by the Institute for European Studies (IES)*



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 693799.

# China and Science Diplomacy: An Emerging or a Marginal Policy?

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Issue 2019/17 • March 2019

## Abstract

The term “science diplomacy” has become widely used in recent years, especially in the developed economies of the “West”. The term has also been adopted in China, where it has been incorporated into academic discussion and policy making in the area of international science and technology cooperation. However, science and technology have been an element in China’s relations with the external world for many centuries, and moved centre stage in the relationship with the West since the 19<sup>th</sup> century. The success of China in creating scientific capacities in recent decades is the basis of the possibility for it to conduct its own science diplomacy. Yet, despite the adoption of the idea in recent government policy documents, it is unclear that a coherent new science diplomacy has emerged in China that is integrated into wider foreign policy. A question arises as to whether science diplomacy is still an emerging policy, or whether merely a marginal one. Many aspects of what is now called science diplomacy are continuations of China’s existing international science policies, which focus on global competition as well as cooperation. While science diplomacy is frequently considered to be a tool of soft power, scientific and technological capacities underlie hard power. In an environment where global military and economic competition dominates, science diplomacy may be overtaken by harder power considerations.

## 1. Introduction

Science diplomacy has become a widely current term in the West in recent years, indicating a new emphasis on the close relationship between science and technology and the international relations of states. Despite the recent currency, the link between science and diplomacy or international relations, nevertheless, existed long before the term science diplomacy became fashionable. In the case of China, science and technology have been an important aspect of its relations with other parts of the world for hundreds of years. This has been especially the case in the last two hundred years, when scientific advantage has been the basis of efforts by foreign powers, initially primarily Western European states, but later the US, Japan and even the Soviet Union, to exert power and influence over China. At the same time, science has been a central element of China’s domestic and also foreign policy and diplomacy in its efforts to respond to this challenge and recover its past position of wealth and power.

The spread of scientific knowledge was a feature of China’s relationship mainly on land routes with civilizations in India, Central Asia, the Arab world or even with Europe over hundreds of years from the Han dynasty onwards (Needham 1954). The direction of flow was both to and from China, although through much of this period Chinese tended to regard their scientific achievements as superior to those of other civilizations with which they came into contact. While not necessarily the direct object of diplomacy, the flow of scientific knowledge was often closely associated with missions sent from China to India, central Asia and the Arab world (Needham 1954). The routes to Europe along the Silk Road through which the knowledge flowed were a function of military and diplomatic activity by rulers in China, as well as that of others along the way.

The development of sea routes from Europe and the increasing projection of power in East Asia by European powers, notably the Portuguese and then Dutch, from the 16<sup>th</sup> century opened a new dimension in China’s relationship with the world, more specifically what has come to be called the “West”. Science has been at the centre of this relationship, through the projection of power, both in “hard” and “soft” forms. In this, Western Europe was the key actor, mostly obviously through the dominant powers, the Portuguese, Dutch and British, but later joined by other actors including the US and Japan in the 19<sup>th</sup> century, and also extending to the Soviet Union in the 20<sup>th</sup> century.

On the soft side of the power equation, the use of science by Jesuits was central to their efforts beginning in the 16<sup>th</sup> century to convert Chinese, especially court officials, to Christianity, over a period of several centuries through what today would be called an exercise in soft power. As the Jesuit Father Parnnin stated concerning the Confucian literati in 1735:

In order to attract their attention, it is necessary to win credit in their minds and gain their respect through knowledge of natural things, about which they know very little and are curious to learn: there is nothing that better disposes them to listen to us when we speak of the holy truths of Christianity (Quoted in Gernet 1985).

While their science may have been impressive, the efforts of the Jesuits had little impact in either converting Chinese to Christianity, or more widely in transforming Chinese science and society or its relationship with the West. The impact of rising Western European powers in China was limited until the problem of science and technology took a new and critical form in the 19<sup>th</sup> century as the aggression of European powers, spearheaded by Great Britain and the Royal Navy, joined by the US, and later by Japan, finally succeeded in dominating China through their superior military prowess.

Thus, it is worth recalling that while from the point of view of Europe or other scientifically and economically advanced powers, in current formulations of the 21<sup>st</sup> century the diplomacy of science may appear to be part of soft power (The Royal Society 2014, European Commission 2012), for weak states faced with a scientifically and technologically advanced aggressor the problem of science is considered to be at the core of hard power. Even where military aggression is not involved, scientific and technological capacities are central to power relationships. While the question was much debated in formulating the Qing Dynasty response to European aggression, it became increasingly clear to Chinese officials that Western power was related to Western science. As result, in the earliest diplomatic exchanges in the modern sense initiated by China with Western powers in the mid-19<sup>th</sup> century, understanding of and acquisition of their science was a central goal (the reaction in Japan to the incursion of Western powers in the 19<sup>th</sup> century was similar) (Kuo and Liu 1978, Hirakawa 1989). While not entirely military in focus, acquisition of capacities to manufacture naval steamships and modern weapons was a central diplomatic aim of the Qing Dynasty Self Strengthening movement (Kuo and Liu 1978). Hence, the question of science and technology has been at the centre of China's efforts to "modernize" since the 19<sup>th</sup> century. During the May 4<sup>th</sup> Movement in 1919, one of the formative events of modern China, Chen Duxiu, one of the future founders and the first secretary general of the Chinese Communist Party, invoked democracy and science ("Mr Democracy and Mr Science") as twin necessities for China's renewal (Chen 1919).

In the post-1949 period science and technology were central to Soviet aid to China until the Sino-Soviet split, which in part concerned these transfers, and efforts by Moscow to use them to assert control over China (Zhang et al 2006, Wang 2015). Science diplomacy played a role in the strategic shift that occurred when Nixon and Mao met in 1973, and as Suttmeier notes, the geopolitical context is important to cooperation on science and technology (Suttmeier 2010). The Four Modernizations, which were central to the efforts of Deng Xiaoping to revive China in the late 1970s in order to reverse the catastrophic impact of the Cultural Revolution which Chairman Mao had launched in 1966, included science and technology, as well as agriculture, industry and national defence, and sought to open China to international scientific exchange in order to close the gap which had grown between it and the advanced economies of Europe and the US and also the rapidly rising "Tigers" of East Asia.

In the period of opening and reform beginning in 1978, science and technology have been central to China's economic policy. While the initial foundations may have been laid in the 1970s with the adoption of the Four Modernizations, the implementation was made increasingly concrete in the 1980s with the adoption of specific science policies (Xie et al 2014). This was implemented through domestic investment in education and research and other areas directly concerned with building scientific and technological capacity. At the same time, it has entailed external policy efforts that have included multiple dimensions such sending students and researchers abroad, participation in international scientific cooperation programmes and joint research, and also attracting foreign students and researchers to China. In the international dimension both the EU and US have been important partners in scientific exchanges. Thus, in the period of opening and reform, both domestic and international science policy has been part of government efforts to build China's science.

While the international and even diplomatic dimension of science has a long history in the case of China, the concept of science diplomacy has become current in the West relatively recently (Flink and Schreiterer 2010, The Royal Society 2010). The current usage suggests an effort to more coherently argue for the integration of science and diplomacy on the part of policy makers, and an attempt to provide a more coherent framework for the analysis of these efforts on the part of academics and others.

China often has been an adopter of Western ideas on policy, including in the area of international relations and diplomacy since the 19<sup>th</sup> century when it was forced to accept European concepts of statehood and of relations between states. More recently China has shown itself eager to adopt ideas such as soft power and public diplomacy which have become current in the West and integrate them into its own policy approaches to international relations (d'Hooghe 2005). The idea of science diplomacy is another example of such adoption. In both academic discussion and policy formulation the concept

of science diplomacy, usually formulated as “science and technology diplomacy” (*keji waijiao*) in Chinese, is now used in China. One key difference with the past is that while China has for centuries been the learner in terms of science, taking its science from more advanced states, this is no longer the case. China’s science is now seen as, at least in some respects, as being on a par with, or even superior to, that of what had been considered advanced states (Xie et al 2014, National Science Foundation 2018), and it thus has acquired the underlying scientific capacity to attempt to conduct science diplomacy as others such as the US and EU have done. Kingah, Amaya and Langenhove discuss the requirements for the EU to conduct effective science diplomacy in terms of willingness, capacity and acceptance (Kingah et al 2017). In China, there has clearly been a willingness to adopt the idea of science diplomacy. However, while the underlying scientific capacities may exist it is less clear that capacities to conduct science diplomacy have been created and its full acceptance into policy making has been achieved.

This paper reviews the concept of science diplomacy, and its adoption in China. It analyses the extent to which it has been integrated into policy in China on international science and technology, with specific reference to the Belt and Road Initiative (BRI) which since its initiation in 2013 has become a key framework for foreign policy under President Xi Jinping.

## 2. China and the Idea of Science Diplomacy

The idea of science diplomacy has become internationally current, but there is little consensus over its meaning, or more importantly what it entails in concrete policy actions. The term has been adopted in different ways by the US, the EU and some of its member states, as well as many other governments and international organizations. The term varies in its meaning, the ends and means of science diplomacy depending on the government in question (Flink and Schreiterer 2010).

One widely used set of definitions of science diplomacy noted the vagueness of the term, but suggested that it includes three aspects: “‘Science diplomacy’ is still a fluid concept, but can usefully be applied to the role of science, technology and innovation in three dimensions of policy” (The Royal Society 2010). The three dimensions are defined as, “informing foreign policy objectives with scientific advice (science in diplomacy); facilitating international science cooperation (diplomacy for science); using science cooperation to improve international relations between countries (science for diplomacy) (The Royal Society 2010). This is the basis for a positive view of the potential role of science diplomacy across many international policy areas:

The scientific community often works beyond national boundaries on problems of common interest, so is well placed to support emerging forms of diplomacy that require nontraditional alliances of nations, sectors and non-governmental organisations. If aligned with wider foreign policy goals, these channels of scientific exchange can contribute to coalition building and conflict resolution. Cooperation on the scientific aspects of sensitive issues—such as nuclear non-proliferation—can sometimes provide an effective route to other forms of political dialogue. (The Royal Society 2010).

The idea of science diplomacy is frequently used in conjunction with concepts such as soft power. Science diplomacy is often invoked in policy discussion as if it is a tool or subset of soft power and public diplomacy. The Royal Society asserted that, “Science is a source of... ‘soft power’”. The EU has explicitly considered science diplomacy to be an instrument of soft power (European Commission 2012). Science, it is assumed, can be used to advance EU policy interests that are wider than those which are purely scientific in nature. The US has also adopted similar ideas in its science diplomacy, as for instance in the case of policy toward the Middle East under President Obama. While it is also true that science has been seen a source of hard power in China, and as such is the basis of and object of foreign policy or diplomacy, the widespread currency in the West of ideas such as soft power and public diplomacy has made them hugely influential in China, where they have been adopted in policymaking. The use of soft power and public diplomacy have become key elements in China’s wider diplomatic policy (d’Hooghe 2005).<sup>1</sup> In a similar fashion to soft power and public diplomacy, the increased currency of the idea of science diplomacy in the West has also led to its adoption in China.

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<sup>1</sup> Although they may appear modern and Western, such practices are also deeply rooted in traditional Chinese political ideas of rulership. The Confucian view of rulership emphasizes the power of the ethical ruler and ideas, and their priority over mere exertion of force to achieve political ends

The concept of science diplomacy has been adopted in China, but its transposition into policy depends not just on the adoption of the policy idea. Underlying the adoption of the policy idea is the problem of scientific capacity. The type of science diplomacy envisaged by the Royal Society or the EU and US as a projection of soft power presupposes that a nation has a foundation of science capacity that can be utilized as the basis for its diplomacy or for the exercise of soft power. In recent centuries China has been primarily an importer of science and technology from the West. This has now changed. Having overcome what Elvin called the Needham question (Needham 2004), “the great problem of why modern science and technology developed in Europe and not in Asia” (Needham 1947), China is in a position to engage in science diplomacy, even if, as Suttmeier noted, despite advances this may not yet be on an equal basis:

Although the reforms and investments made in China’s research institutes and universities have not entirely erased the asymmetries of the past, they have certainly made China an especially important partner in research and innovation for many constituencies in the US. In a number of fields of research, and on a number of pressing global problems, the S&T partnership between the United States and China will play a critical role in determining how the 21st-century future is invented (Suttmeier 2010).

China may have been scientifically backward in the 19<sup>th</sup> century or even at the beginning of the period of reform and opening in the 1970s, and thus a marginal actor in global science that had been dominated by the West, but this is no longer the case. China is now a leading scientific power by many measures, and is at the centre of global science (Xie et al 2014, National Science Foundation 2018). This has resulted in a qualitative change in the relationship between China and the rest of the world in the realm of science. While China remains an importer of science, its scientific strength now gives it greater capacity to use science in its diplomacy in ways similar to other major actors such as the US and EU.

### 3. Emergence of Science Diplomacy in China’s Science and Technology Policy

The adoption of science diplomacy has been advocated by policy analysts in China in response to its currency in the West. The concept of science diplomacy has in fact been adopted in policy documents and by government officials in China. For instance, Wan Gang, the Minister of the Ministry of Science and Technology (MOST) stated in his annual work report in 2018 that, “science and technology diplomacy is an important part of the comprehensive national foreign policy strategy” (Wan 2018). Such statements give science diplomacy an important apparent status in China’s overall foreign policy.

Nevertheless, despite official assertions that it has become part of a wider foreign policy, the implementation of science diplomacy has thus far been limited in its impact. Government policy documents suggest that science diplomacy has been adopted as an idea only recently, and it remains undeveloped in implementation. Much of what is now called science diplomacy in China is a continuation of existing policies on international science cooperation, and although science diplomacy has been incorporated into key wider foreign policy strategies such as the BRI, this is far from complete, and it is unclear that science diplomacy has been fully developed as a coherent policy. At the same time, while science diplomacy is often considered by its proponents to be a mainly cooperative exercise, Chinese policy continues to also view science as a central element of competition between states.

<b>Table 1: Progression of “Science Diplomacy” in Chinese Science Policy 2005-2017</b>			
<i>Policy Document</i>	<i>Period Covered</i>	<i>Mention of Science Diplomacy</i>	<i>Key Headings/terms</i>
National Medium- and Long-Term Science and Technology Plan Outline (2006-2020), State Council, December 31, 2005	2006-2020	No	“Widen international and regional cooperation and exchange”
National Science and Technology Development Plan for the 11th Five Year Plan 2006-2010, MOST, 2006	2006-2010	No	Create a new form of science and technology cooperation system International cooperation
Outline for Implementation of International Science and Technology	2006-2010	No	Science and diplomacy

Cooperation in the 11th Five Year Plan, MOST, 2006			Closely coordinate scientific and foreign policy strategy"
National Science and Technology Development Plan for the 12th Five Year Plan 2011-2015, MOST 2011	2011-2015	No	1. Raise the level of international cooperation in scientific research 2. Participation in international scientific organisations and major science projects
Plan for International Science and Technology Innovation Cooperation in the 12th Five Year Plan, MOST, 2011	2011-2015	No	Science and foreign policy "Promote international science cooperation while advancing foreign policy strategy"
National Science and Technology Innovation Plan for the 13th Five Year Plan 2016-2020, State Council, 2016	2016-2020	Yes – 3 sentences in 67000 characters	1. Open cooperation in scientific innovation
Special Plan for International Science and Technology Innovation Cooperation in the 13th Five Year Plan, MOST, 2017	2016-2020	Yes – 2 sentences in 7902 characters	"Promoting science diplomacy is a major part of the nation's overall diplomatic work, and makes a contribution to major power diplomacy with Chinese characteristics"

The evolution of science diplomacy in China in recent years is revealed in government policy documents. A key overall framework for current science policy is the National Medium- and Long-Term Science and Technology Plan Outline 2006-2020 (Science and Technology Plan) (State Council 2005). As is normally the case in such documents in China, the Science and Technology Plan set the outline and goals for China's domestic and international science policy from 2006 until 2020. The document, issued at the end of 2005, included a section on international scientific cooperation and exchanges, but did not make any reference to science diplomacy, which is unsurprising, given that its formulation predated the rise to prominence of the concept in the West.

The Science and Technology Plan has been implemented through China's 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> Five Year Plans, drawn up by the National Development and Reform Commission (NDRC). The Five Year Plans, which provide the parameters for China's economic and social development, are implemented through subsidiary plans, including those for science and technology covering each plan period, and which are formulated by MOST. Plans for international science and technology cooperation are also adopted under the overall science and technology plans for each Five Year Plan. These policy documents demonstrate the recent official adoption of the idea of science diplomacy in China, and which makes its first appearance only in 2016.

International cooperation has been considered a key element in the development of China's science since the 1970s. However, while science diplomacy as envisaged in the outline of the Royal Society is seen as a largely cooperative endeavour, in the view of China's government policy documents international science and technology cooperation has been seen as taking place in a wider context that is not necessarily only cooperative. The National Science and Technology Development Plan for the 11<sup>th</sup> Five Year Plan (issued in 2006 and running from 2006 to 2010) focused on international competition, noting that, "international competition on the basis of science and technology innovation is becoming increasingly intense" (MOST 2006a). The theme of competition was similarly emphasized in the National Science and Technology Development Plan for the 12<sup>th</sup> Five Year Plan (issued in 2011 running from 2011 to 2015) (MOST 2011a). In this context of international competition, both of these policy documents provide outlines for international cooperation in science and technology in the framework of China's wider domestic and foreign policy goals. However, like the Science and Technology Plan issued in 2005, they make no reference to science diplomacy. Only in the National Science and Technology Innovation Plan for the 13<sup>th</sup> Five Year Plan (issued in 2016 and running from 2016 to 2020), does the term science diplomacy make an appearance in the main policy document on science and technology for a Five Year Plan (State Council 2016).

References to science diplomacy in the international cooperation policies for science and technology of the recent Five Year Plans show a similar evolution to the overall science and technology plans,

although the concept of science diplomacy makes an earlier appearance. The Outline for Implementation of International Science and Technology Cooperation in the 11<sup>th</sup> Five Year Plan (MOST 2006b), issued in 2006, makes no reference to science diplomacy, although it draws a close connection between international science and technology cooperation and diplomacy, or foreign policy, asserting that, “international science and technology cooperation is already a major constituent part of China’s science and technology and foreign policy work”. The document makes clear, as this formulation suggests, that international science and technology cooperation is a subordinate part of wider domestic and foreign policy goals.

The Plan for International Science and Technology Innovation Cooperation in the 12<sup>th</sup> Five Year Plan (MOST 2011b) also fails to mention science diplomacy. Once again international science and technology cooperation is considered within the wider framework of domestic and foreign policy goals. Hence, within the Five Year Plan period, one of the goals is to, “clearly raise international science and technology cooperation in the advancement of China’s foreign policy strategy”. Only in the Plan for International Science and Technology Innovation Cooperation in the 13<sup>th</sup> Five Year Plan, issued in 2017, is the concept of science diplomacy introduced (MOST 2017). Nevertheless, the concept is still embedded within the wider foreign policy framework in similar terms to those previously used for science and technology cooperation. The document asserts that, “promoting science diplomacy is a major part of the nation’s overall diplomatic work, and makes a contribution to major power diplomacy with Chinese characteristics”. Although this document makes reference to the need to train science and technology diplomats, this is also seen within the wider context of domestic and foreign policy goals. As a result, while the concept of science diplomacy is adopted, it is not clear that this indicates any significant change in the substance of policy. Many policy formulations in the document remain unchanged from preceding Five Year Plans, and science diplomacy is referred to only in passing.

The evolution of policy formulations in official documents demonstrates that the official adoption of science diplomacy as an idea derived from other major international actors in the field of science and technology is recent, and does not appear yet to have brought with it a significant new approach to the substance of policymaking. As the number of references to science diplomacy in key policy documents shown in Table 1 suggest, the concept remains marginal to the wider framework of China’s policymaking on science and technology. Nevertheless, much of the content referred to in policy documents on international science cooperation in recent years arguably falls within the activities of science diplomacy as envisaged by the Royal Society or the EU, even if the concept itself is not explicitly used. The integration of science and foreign policy has been part of Chinese policymaking for many years.

#### **4. The Belt and Road Initiative and Science Diplomacy**

The BRI was launched in 2013 by President Xi Jinping in a speech in Astana. Since then, although the exact intent and content of the BRI is a matter of considerable debate, and much detail remains unclear, it has become a central pillar of China’s foreign policy under Xi Jinping. The BRI has, for instance, been written into the Chinese Communist Party Constitution, and could perhaps be described as a form of unstructured regionalism. Regionalism usually includes a set of institutions, rules and territorial boundaries agreed by all participants, but the BRI, while attempting to create regional linkages, has none of these. There are policy outlines issued by the Chinese government, bilateral and other international documents, summits and other official meetings, all on the BRI, but no formal structure. Science and technology is one of the policy areas that have been incorporated into the BRI. As Wan Gang, the Minister of Science and Technology stated in 2018, science diplomacy is subsumed in wider policy frameworks (Wan 2018). These include the BRI, which has become the framework to which much of China’s foreign policy has been subordinated. The degree to which the BRI incorporates science diplomacy may be taken as an indicator of how far it has become a coherent policy framework and actually incorporated into policy practice.

The overall National Science and Technology Innovation Plan for the 13<sup>th</sup> Five Year Plan includes a section on the BRI (State Council 2016). According to this, science and technology innovation cooperation has a major role in the implementation of the BRI. This role, however, is not envisaged in terms of science diplomacy, which is not mentioned in this specific context. The Plan for International Science and Technology Innovation Cooperation in the 13<sup>th</sup> Five Year Plan also asserts the important role of international science and technology cooperation in the BRI, although again without explicitly connecting the two through science diplomacy (MOST 2017). In addition, science and technology is the subject of specific BRI policy documents. The Plan for the Promotion of Science and Technology



Innovation Cooperation in the Construction of “One Belt, One Road” sets out the policy framework for the role of science and technology in the BRI (MOST, NDRC, MFA, MOFCOM 2016). This document also does not refer to science diplomacy.

Following the launch of the BRI in 2013, the Chinese government has signed numerous bilateral and other documents that refer to the project. Many, but not all, of these also refer to cooperation in science and technology (Table 2). Nevertheless, the reference to science and technology cooperation is often only in very broad terms with no detail, and the documents frequently are not even primarily concerned with the BRI, but are general agreements, statements and communiqués. While the inclusion of such cooperation and the activities envisaged may fall within the ambit of science diplomacy as it has been conceived of in the West, it remains unclear that as yet this represents a consistent and coherent strategy concerning science diplomacy on the part of the Chinese government in relation to the BRI. The content included in the agreements the Chinese government claims to be related to the BRI varies considerably, and in many cases they lack all reference to science and technology. Despite the assertion of the Minister of Science and Technology, the fact that science diplomacy is not consistently applied in the implementation of the key foreign policy strategy of the BRI suggests that science diplomacy remains undeveloped and underutilized as a policy framework in China.

Table 2: Science Diplomacy in BRI Documents	
<i>Includes science and/or technology</i>	
Yes	No
Lancang-Mekong	Tonga
France	Maldives
Philippines	United Nations Economic Commission for Europe
Indonesia	United Arab Emirates
Africa	New Zealand
Finland	Timor-Leste
Kazakhstan	Central and East European Countries
Thailand	Myanmar
Singapore	Papua New Guinea
Brunei	Afghanistan
Pakistan	

*Source: Documents on BRI between China and other countries, regions and organisations. Based on “bilateral documents” published on the official BRI website <https://eng.yidaiyilu.gov.cn> as at February 1, 2019. It should be noted that while included on the official BRI website many of these documents are not primarily concerned with the BRI, and are often more general agreements, statements or communiqués that happen to refer to the project.*

## 5. Conclusion

Science has been present in China’s relations with the rest of the world for many centuries. The impact of European powers in particular on China in the 19<sup>th</sup> century brought the problem of science to the centre of its domestic policy and international relations. In the period of reform and opening since 1978, China has caught up with, and even exceeded, the advanced economies in many areas of science and technology. In this period China has also adopted many policy concepts from the West, including those such as soft power, public diplomacy and more recently science diplomacy. However, in the case of science diplomacy, official policy has only adopted this concept relatively recently, and it has been an



emerging element of science and technology policy, including that for international cooperation. Policy in the area of international cooperation on science and technology to a considerable extent remains a continuation of previous policies. Furthermore, despite official assertions, science diplomacy has not been fully integrated into key foreign policy frameworks such as the BRI. It is unclear that science diplomacy represents a fully worked out or coherent policy, and it remains marginal to wider policy frameworks. In becoming a leading science power China has acquired the underlying scientific capacity to undertake science diplomacy, and has in principle expressed the willingness to undertake science diplomacy through adoption of the concept in policy documents. However, its marginality suggests that investment in capacity to engage in science diplomacy and acceptance in policy making has been limited. The assumption that science diplomacy is cooperative or an element of soft power is belied by the considerations of hard power that underlie science and technology competition. In a global environment where competition between powers is increasingly determining policy on science and technology, driven in large measure by the policies of the administration of President Trump in the US, the emergence of science diplomacy as a tool for soft power in China may remain limited and marginal.

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The EL-CSID project  
is coordinated  
by the  
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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 693799.