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Along the Road China in the Arctic

by Cécile Pelaudeix



In January 2018, on the occasion of the release of its Arctic policy white paper, China unveiled the Polar Silk Road project – officially incorporating the Arctic Ocean into its trillion-dollar Belt and Road Initiative (BRI). Far more than a mere shipping route, the Polar Silk Road underlines the consistency and the scale of Beijing's ambitions in the Arctic, combining economic and security interests and boosting its strategic presence in the region.

Why and how did Beijing manage to gain ground in the Arctic and what are the implications of this for European security? In many ways, the Polar Silk Road is a good example of China's approach to expanding its influence globally, combining foreign direct investment (FDI) in strategic sectors, 'science diplomacy' and norm shaping. This Brief examines the gradual deployment of these three instruments, before highlighting the many interconnected security concerns that the Polar Silk Road project entails for the EU.

China's rising profile in the Arctic

China's interest in developing strategic infrastructure along the Northern Sea Route dates back to 2016, after it was identified as a plausible alternative to the traditional southern route

to Europe, passing through the Malacca Straits and the Suez Canal. Sea ports were among the

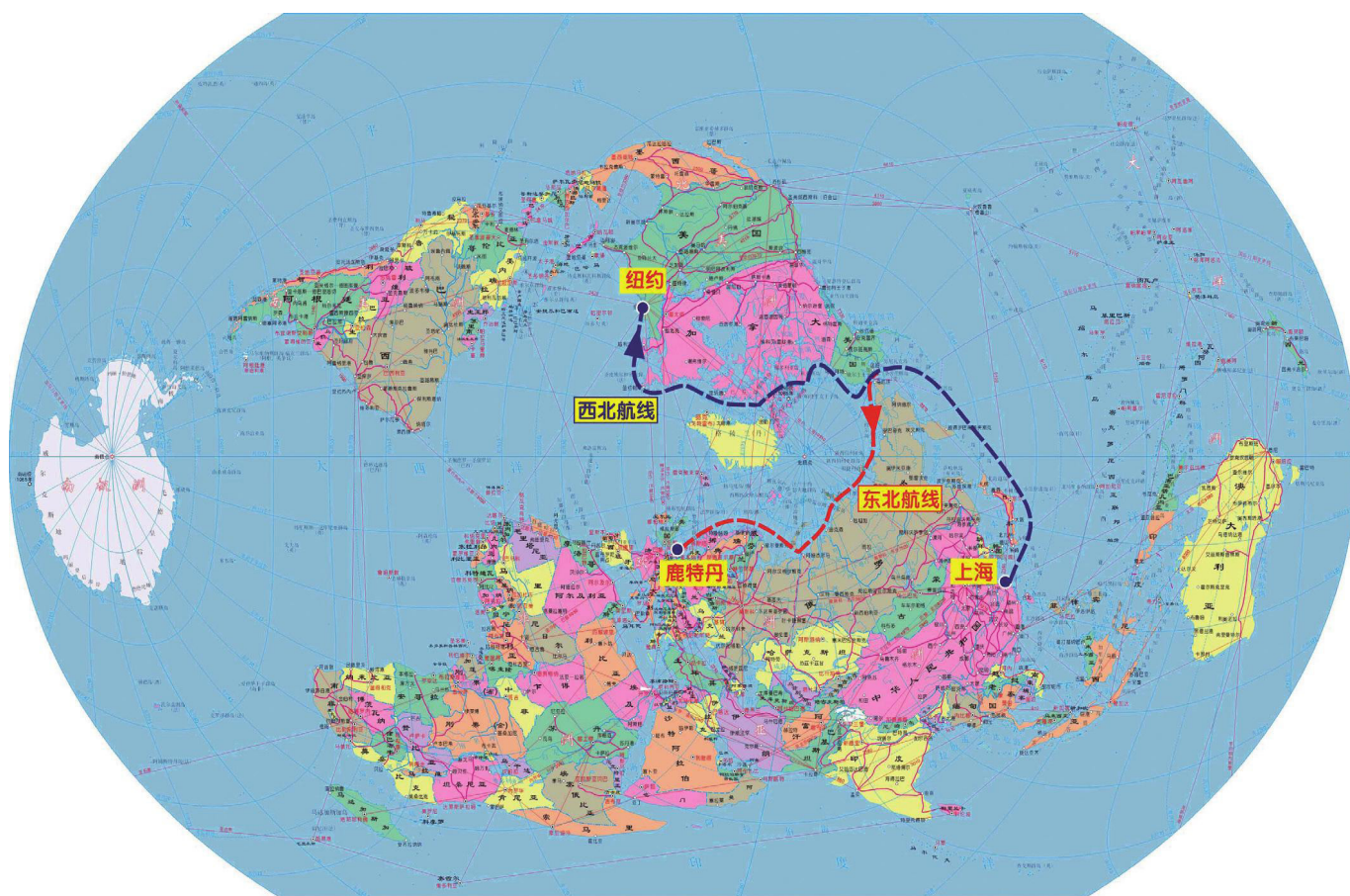
Summary

- > The Arctic has growing importance as part of China's quest to secure access to natural and energy resources, including rare earth elements (REEs). China has also intensified energy cooperation with Russia and built economic partnerships in the Arctic, while systematically developing strategic infrastructure there.
- > While China does not yet have the capacities to project military power in the Arctic, the potential that it could use the facilities, technologies and resources it has acquired for other than civilian purposes is real.
- > The scale and speed of the development of the Polar Silk Road may pose a challenge to the environmental and social standards upheld by the EU.
- > Addressing the many security challenges that the Polar Silk Road entails will require strong political will and unity on the part of EU member states and their partners.



Figure 1 | A Chinese view of Arctic sea routes

Captions label Shanghai, Rotterdam, New York, the 'North East Sea Route' (red) and the 'North West Sea Route' (blue)



Source: Arctic Portal

first targeted infrastructure projects. In October 2016, the Chinese company Poly International Holding Co confirmed its intention to finance the construction of Russia's Arkhangelsk deep-sea port, a major modern transportation hub with an expected capacity of 38 million tons, to be completed by 2035. The state-owned China Ocean Shipping Company (COSCO), one of the world's largest shipping companies, repeatedly demonstrated interest in participating in the construction of a deep-sea port in the northeast of Iceland: the Finnafjörður project, expected to become a major hub for trans-Arctic shipment with a 6.3 km long quay, will begin awarding concessions to investors and operators in 2019.¹ Other investment proposals have been received by the Lithuanian port of Klaipėda and the Norwegian port of Kirkenes.

Land infrastructure development follows accordingly. Poly International Holding Co is currently considering the possibility of investing \$5.5 billion in a railway linking Arkhangelsk to Siberia. Another Arctic railway, linking Rovaniemi in Lapland to the Norwegian port of Kirkenes, at an estimated cost of €3 billion, would open up a new connection from the Baltic Sea region to the Northeast Passage and to Asia, and this is also

attracting China's attention.² The last leg of the 'Arctic corridor' – a 100km-long undersea tunnel between Helsinki and Tallinn – is the latest target of Chinese investors, possibly contributing 70% to the estimated total €15 billion cost.³

Finally, in Greenland Chinese investors are eyeing the air transport sector. China Communications Construction Company (CCCC) took part in the bidding process for the tender organised by Kalaallit Airports, a Greenlandic-owned company which sought investments for three airport infrastructures on the island: Nuuk (the capital), Ilulissat (a tourist destination due to its UNESCO World Heritage Centre), and Qaqortoq (in the South). The bid put forth by the CCCC gave rise to security concerns in Denmark and in the US. Denmark feared Greenland could fall into a debt trap, an outcome which has characterised a number of Chinese investment deals along its Belt and Road Initiative, such as in Sri Lanka. Greenland, while a self-ruled territory, still depends on economic aid from Copenhagen which amounts to €470 million per year, approximately 40% of the island's GDP. Denmark, which retains competences over defence in Greenland, was also worried that the airports could be used for military purposes and upset



the US, with whom the Kingdom has a Defence Agreement since 1951. The Thule Air Force Base is a very important part of America's missile defence system. Greenland and Denmark therefore concluded an agreement in September 2018 granting Denmark a 33% stake in Kalaallit Airports in exchange for €93 million for the construction and operation of the airports in Nuuk and Ilulissat.⁴ Denmark also provides the government of Greenland with a loan guarantee of €60 million. Yet the deal does not rule out China's investment in the project and still excludes the Qaqortoq airport. While approved by the Parliament in Greenland, the agreement is still awaiting approbation in Denmark.

Besides connectivity, the Arctic matters to China for its resources. The region is estimated to contain 13% and 30% of the world's undiscovered oil and gas reserves,⁵ which constitute another major target of Chinese FDI. The China National Petroleum Corporation (CNPC) and China's Silk Road Fund hold a 20% and 9.9% share respectively in the Yamal LNG plant, which started its production in Russia in December 2017. Yamal LNG is the largest production site in the country: it has a production capacity of 16.5 Mt/year which represents more than 15% of the world market. In 2017, China Development Bank signed a memorandum of understanding (MoU) with Russia's largest independent natural gas producer Novatek for another economic project – the 'Arctic LNG 2', located on the Ob river estuary, with a production capacity of 19.8 Mt/year.⁶ Investments in other offshore projects, such as the CNPC contract with Rosneft to explore three areas in the Pechora and Barents Seas, are yet another example of the intensifying energy cooperation between Russia and China in the Arctic. Finally in Iceland, China National Offshore Oil Corporation (CNOOC) reached a deal with Eykon Energy to explore its north-east coast. Although it later withdrew from the project due to scarce initial findings, Iceland could be a Chinese gateway to Europe. In the wake of the 2008 financial crisis, it was the first European country to sign a free trade agreement with China in 2013 and is keen to attract Chinese investment flows.

China's interest in Greenland started with its resources, and some of these have a strategic dimension. This is the case of Rare Earth Elements (REEs), which are extensively utilised in alternative energy technologies, electronics, space exploration and the defence sector. Greenland holds 9.16% of global REE reserves⁷ and is the most promising potential source of REEs in Europe, along with the Baltic Shield.⁸ The Kvanefjeld site in the south of Greenland contains one of the world's largest identified

deposits of REE and uranium. In 2016 Chinese state-controlled mining company Shenghe purchased a 12.5% share of the Australian company Greenland Minerals and Energy Ltd to exploit the site. More importantly, in August 2018, the two companies signed an MoU allowing Shenghe to make an equity investment in the project and to acquire all REE output produced at Kvanefjeld to process it for direct supply to the industry. The project thus gives China even stronger control over REE production in the world.

Diplomacy through science

The scope of the Polar Silk Road positions China as a powerful stakeholder in the Arctic. But this did not happen overnight and the first harbingers could be seen in its proactive involvement in scientific research. Back in 1994, China bought an icebreaker – the *Xue Long* (*Snow Dragon*) – which it subsequently upgraded to a polar research vessel. In 1996, it became a member of the International Arctic Science Committee, and by 2004, it had already built a research station in Svalbard, Norway (the Arctic Yellow River Station) and organised eight scientific expeditions. Its application in 2009 to be an observer at the Arctic Council, a status granted in 2013, firmly established Beijing's ambition in the region. China's accession to observer status was carefully planned through science diplomacy. A case in point is its cooperation with Iceland, where an initial MoU between the Icelandic Centre for Research and the Polar Research Institute of China, signed in 2012, eventually led to a joint China-Iceland statement that included a provision on Icelandic support for China's candidacy to the Arctic Council.⁹ Although the observer status does not allow a direct role in governance – the Council has no legal personality and little regulatory capacity – it legitimises Beijing's involvement in Arctic affairs.

The set-up of the China Nordic Arctic Research Center (CNARC) in Shanghai in 2013 demonstrates China's use of science diplomacy to promote its interests. Officially, the purpose of the platform is: (i) to foster research contacts and to increase awareness, understanding and knowledge of the Arctic and its global impacts; and (ii) to promote the sustainable development of the Nordic Arctic and the 'coherent development of China in a global context.' In practice, it serves to build Chinese confidence and knowledge of the Arctic, enables dialogue between scholars, and helps to convey a positive image of China as a contributor to Arctic science and to social and economic development in the region. The flagship initiative of the CNARC is the annual China-Nordic Arctic Cooperation Symposium,

addressing issues such as shipping, natural resources, fisheries, tourism, and providing a convenient forum for exploring openings and the state of play in new economic arenas. Other platforms, such as the Arctic Circle, chaired by former President of Iceland Olafur R. Grimsson, and of which the Polar Research Institute of China is a partner, organise large conferences across the North and Asia, serving a similar purpose.

Three dimensions of science diplomacy, as defined by the Royal Society (2010)¹⁰

- (1) *Science in diplomacy*: informing foreign policy objectives with scientific advice
- (2) *Diplomacy for science*: facilitating international science cooperation
- (3) *Science for diplomacy*: using science cooperation to improve international relations between countries.

Chinese scientific diplomacy quickly yielded results. In 2013, China and Iceland jointly established the Aurora Observatory, inaugurated on 22 October 2018. Its scope of activities was widened in 2017 at China's request to also include research on atmosphere, oceanography, geophysics, remote sensing and biology.¹¹ Pascal Heyman, a former official at the Organisation for Security and Cooperation in Europe (OSCE), surmises that the Chinese might want to use the equipment to monitor NATO airspace.¹² In Sweden, another space observation research centre was established in 2016: the China Remote Sensing Satellite North Polar Ground Station (CNP GS). It has already 'improved China's capability to access remote sensing data in the Arctic region'. In Finland, an agreement was signed in April 2018 with China to establish a joint research centre for Arctic space observation and data sharing services. Speculation about scientific equipment being used for military purposes has given rise to concern. In May 2017, without any official authorisation from Greenland, a satellite ground station project, supported by Beijing Normal University, with potential dual-use capabilities, was launched in Kangerlussuaq, Greenland's main airport.¹³ China has also proposed to build the biggest research station in Greenland.

Scientific diplomacy efforts have also swiftly unfolded at sea. By the time Europe and North America had begun to speculate about if and when the Arctic Ocean would open up opportunities for transit shipping, the Yong Sheng

Chinese cargo ship had already transited several times through the Northeast Passage since 2013. China organised a workshop in Shanghai in 2015, gathering Arctic experts from shipyards, shipping companies, ship design and engineering firms, icebreaking services, insurance companies, the banking, business development, and research and development sectors, and academia. In September 2017, it launched a second domestically-built polar icebreaker, the *Xue Long 2* (*Snow Dragon 2*). Not only does China now match the US in terms of operational icebreakers, it has also issued a tender for a nuclear-powered one.¹⁴ Having acquired sufficient confidence in the matter, the 13th Five-Year Plan 2016-2020 mentions the establishment of a 'new shore-based Arctic observation station through cooperation', building 'new advanced icebreakers', completing 'the basic framework for a land-sea-air observation platform in the polar regions', developing 'exploration technology and equipment suitable to the polar environments', as well as establishing 'a service platform for the provision and application of information regarding the polar environments and potential polar resources'.¹⁵

The development of the Polar Silk Road is concomitant to China's interest in the Antarctic. Common technology and equipment are used in both regions which are targeted in the National Security Law of the People's Republic of China, passed on 1 July 2015. The basic idea is to define Polar Regions and the global commons as new strategic frontiers for China. The Law's Article 32 specifies that '(t)he State adheres to the peaceful exploration and utilization of outer space, international seabed and Polar Regions; guarantees secure access (to the regions); enhances capacities of scientific research, development and utilization (in the regions); strengthens international cooperation; and safeguards the security of activities, assets and other interests in outer space, international seabed and Polar Regions'.¹⁶ In order to 'utilise' those regions, Beijing knows that norm-entrepreneurship is crucial. In the section headed 'International Economic Governance System', the Five-Year Plan states that China 'will take an active role in formulating international rules in areas such as the internet, the deep sea, the Polar Regions, and aerospace'.

Norm entrepreneurship

To justify its participation in Arctic governance, Beijing positions itself as a 'near-Arctic State'. But contrary to the UK, which qualifies as such based on geographical proximity (it is the northernmost country which does not cross the Arctic Circle),¹⁷ China insists on the impacts that a

changing Arctic is having on its 'climate, environment, agriculture, shipping, trade and social and economic development'.¹⁸ Thus, despite having no sovereignty or sovereign rights in the region, Beijing has formulated a legal position on three key issues allowing the 'utilisation' of the Arctic Ocean: the rights to navigation, the access to resources and the use of those, and creatively applying the UN Convention on the Law of the Sea (UNCLOS) to serve its interests.

Freedom of navigation and innocent passage

The Northern Sea Route (NSR), the Arctic's sole route currently used for long-distance commercial shipping, is a sub-section of the Russian part of the North East Passage, stretching from Norway to the Bering Strait. It includes sea waters (comprising internal sea waters, territorial sea, a contiguous zone and exclusive economic zone) from the Novaya Zemlya archipelago in the West, to the Bering Strait in the East. Some of the NSR and the Northwest Passage (NWP) sections are regarded by Russia and Canada as internal waters, and not as international straits, meaning that no ship can navigate through them without their consent (see Figure 2). Beijing, like Washington, has sought to maintain that freedom of navigation (which includes military activities) should prevail along the NSR. Beijing in its Arctic Policy white paper adds that 'disputes over the Arctic shipping routes should be properly settled in accordance with international law'.¹⁹ Considering Beijing's position on freedom of navigation in the South China Sea, and on the Arbitral Tribunal of UNCLOS, China's stance *vis-à-vis* the Arctic might give rise to scepticism. Thus far the issue of navigation along the NSR and NWP has not been very prominent because as long as the Arctic passages are covered with sea ice, Canada and Russia maintain the right to administer navigation with reference to UNCLOS article 234 – the 'ice clause'. When a warmer Arctic Ocean is likely to facilitate commercial navigation beyond the contested sections, especially on the NSR which is less packed with sea ice than the Canadian archipelago, a common interpretation of freedom of navigation (including for military purposes) in the exclusive economic zone (EEZ) will remain to be achieved.

Access to resources

In the case of seabed resources, China refers to itself as a country supporting the rights of developing countries. While it is the world's third economy in terms of GDP (behind the US and the EU), China's GDP per capita still qualifies as part of the emerging market and the developing countries group of the IMF. As such, it deems

that it 'has to work hard to bring all countries, particularly the developing countries, into the rule-making process as equals'.²⁰ This argument is used to support claims in the Area of the Arctic Ocean as articulated in June 2009 by Hu Zhengyue, Chinese assistant minister of foreign affairs: 'When determining the delimitation of outer continental shelves, the Arctic States need to [...] consider the [...] common human heritage, to ensure a balance of coastal countries' interests and the common interests of the international community.'²¹ Indeed, the rationale behind the creation of the Area was to also let land-locked states and developing countries benefit to at least some degree from the wealth of the oceans (art. 136 of UNCLOS). But if all claims to an extended continental shelf were accepted by the UN Commission on the Limits of the Continental Shelf (CLCS), only very small areas would be left for the Common Heritage of Humankind (see the lightest blue area in Figure 2). Decisions made by coastal states on the basis of the recommendations of the CLCS are final and binding (art. 76.8 of UNCLOS). However, it is actually possible for a distant state whose coasts are neither opposite nor adjacent to initiate a dispute that would concern the CLCS. For now, China is unlikely to engage in such a move that would upset Arctic states, but it cannot be ruled out that it may consider it in the future.

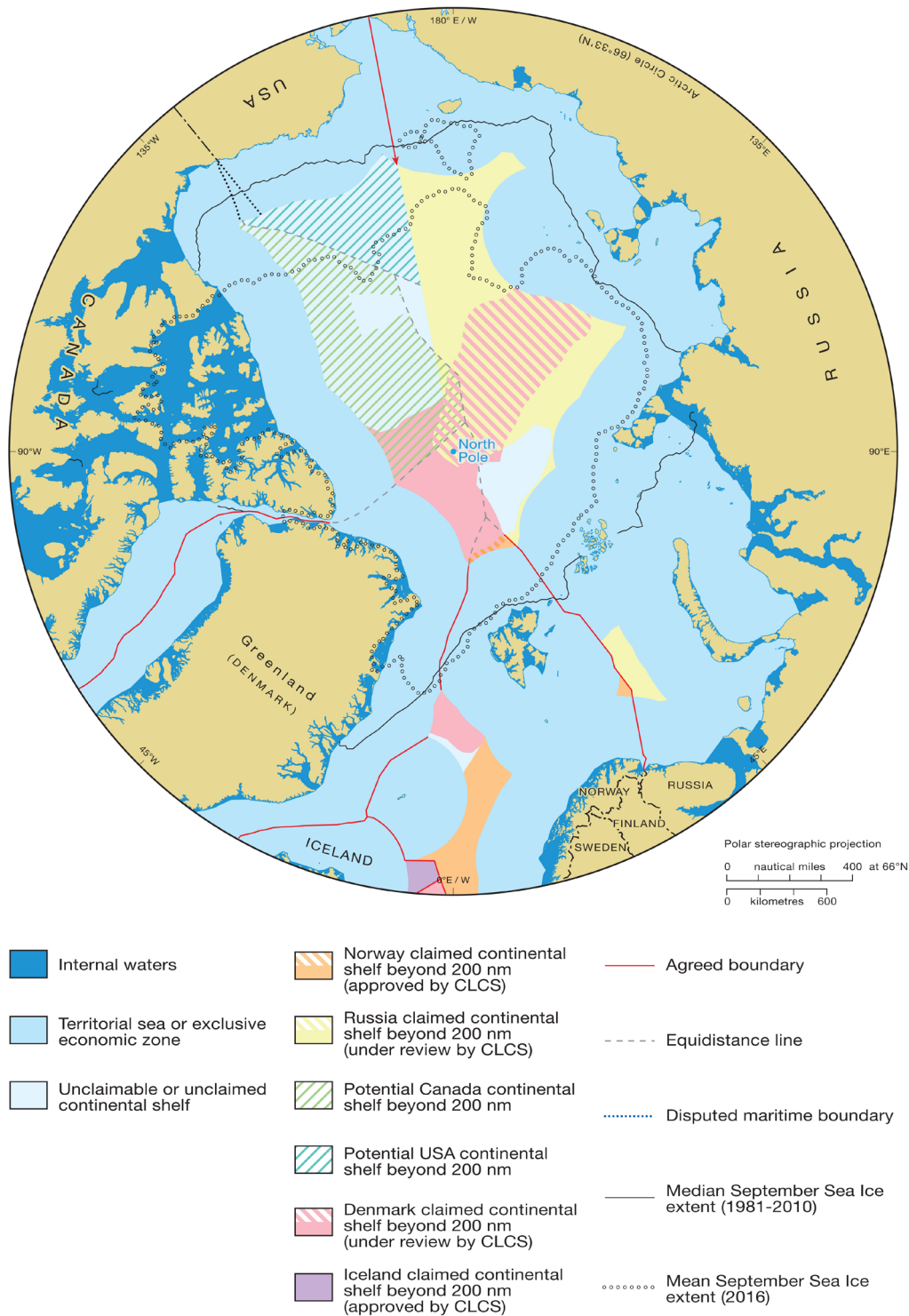
Use of resources

Deep sea-bed resources in the Area of the Arctic Ocean (as well as other oceans), which contain REE and also critical metals are of special interest to China. The International Sea-Bed Authority which administers the deep seabed has estimated the potential value of non-living resources in the outer continental shelf areas of the world to amount to a total of \$10,328 trillion. Although the technological conditions for extractive activities are not yet in place in the Arctic, China has already voiced its interest.

In general, Beijing favours economic use of resources rather than their preservation. In order to fulfil its obligations under UNCLOS, it promulgated the 'Deep Seabed Law', which secures compliance from all Parties to carry out activities in the Area in accordance with art. 139 of UNCLOS on the 'Responsibility to Ensure Compliance and Liability for Damage'. Yet despite its merits, the law puts emphasis on the 'benefit for mankind' rather than 'heritage of mankind', which, according to legal scholars, signals a preference for an economic perspective rather than conservation.²²

This preference also applies when it comes to living resources. Substantive arguments advanced

Figure 2 | Status of Arctic waters beyond 200 nautical miles from shore



Source: IBRU, Durham University, UK (<https://www.dur.ac.uk/ibru/resources/arctic/>)

by China in its Arctic Policy refer to ‘conservation in a scientific manner’ and to a ‘rational use’ of resources.²³ Both concepts lack clarity. The first concept is actually a re-interpretation and weakening of the precautionary principle. The use of the second term has already raised much concern when discussing fisheries in the Antarctic where its meaning is all but clear: the Chinese delegation’s statement indicated in 2013 a clear interpretation of ‘rational use’ as meaning an unrestricted right to fish.²⁴ In a legal sense,

there is actually no definition of what ‘rational use’ means but its mention is clearly intended to blur the distinction between environmental protection and economic use of resources, and thus to re-interpret the concept of ‘sustainability’.

Implications for EU security

China’s Arctic initiative has direct implications for European security – both in terms of the

physical proximity of the Polar Silk Road, as well as because of the many strategic sectors the project involves, including energy, space observation and defence.

First of all, China's rising economic power along the Polar Silk Road can contribute to the fragmentation of EU political cohesion and undermine its strategic autonomy. In the Arctic and elsewhere, Beijing has been targeting countries and territories that have been strongly affected by the 2008 financial crisis, or that need to boost their economies to support their respective political agendas. Chinese investments can also weaken countries' political systems, as could be seen in Greenland after the controversy surrounding the Chinese bid in Kalaallit airports which cost the Greenland government its parliamentary majority: some viewed Denmark's financial offer as incompatible with Greenland's path to independence. Chinese investments can also influence or coerce the host government to adopt Chinese political stands on some issues.

European companies are often disadvantaged compared to Chinese state-owned companies, which use governmental subsidies to facilitate strategic acquisitions. The asymmetry can be substantial, given that current WTO rules are not necessarily enforced or adapted to contemporary challenges. As one of the world's leading economies, the EU can use this advantage to address this issue. Supporting EU member states, or possibly Greenland infrastructure projects, through the Investment Plan for Europe would allow building trust in the Union's policies and ensuring long-term sustainable development.

Chinese investments in REE and critical minerals extraction, as well as deep seabed mining, is especially worrying. Even if today China respects the rulings of the WTO dispute settlement body on its REE export restrictions,²⁵ it already controls the market prices. As such, it can thwart existing or future mining exploitation profitability, as it did with the Mountain Pass mine in the US (which restarted in 2010, but then went bankrupt in 2015 before it was auctioned to a Chinese-led consortium including Shenghe Resources). This consideration needs to be factored into any financial calculations regarding the exploitation of REE reserves in the EU.

Second, while China does not yet have the capacities to project military power in the Arctic, the potential that it could use the land infrastructure, air space observation technologies and platforms, or mining resources it invests in the EU, European Economic Area (EEA) member states and Overseas Countries and Territories

(Greenland) for other than civilian purposes is real. Investments in seaports along the Northern Sea Route give Beijing the possibility to monitor and control activities in key logistical nodes. Airports can be used to accommodate military aircraft, as well as to monitor activities in nearby strategic infrastructure (a military base, for instance, as is the case with the US military base in Greenland). A Chinese owner could potentially also exercise control over the air traffic. The potential use of space observation technologies for military purposes in Europe, strategically located between Russia and the US, constitutes a further concern.

Last but not least, the scale and speed of the development of the Polar Silk Road risks undermining environmental and social standards upheld by the EU. When Chinese investments in natural resources and in industrial projects are planned with partners eager to speed up development, environmental and social standards may be jeopardised. Oil spills, deep-sea mining, air and land contamination have important and lasting transnational impact. Since prevention will always be more effective than clean-up, it is important that the legislation that applies in the EU, and the EEA countries, is kept up to European and international standards, in particular with regard to transparency and sustainability. In the EEZ of Greenland, the government of Greenland has not taken responsibility for the environment, and Denmark's implementation of the relevant EU directives does not cover the Arctic area.²⁶ This blind spot in the legal covering of Greenland marine areas is clearly a weakness. The value of ecosystem services that are essential to the ecosystem balance and to the living conditions of indigenous peoples in northern Europe and in Greenland needs to be taken into consideration.

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