

# CHINA PREPARES FOR AN ICE-FREE ARCTIC

LINDA JAKOBSON\*

## I. Introduction

China is paying increasing attention to the consequences of the melting of the ice in the Arctic Ocean as a result of climate change. The prospect of the Arctic being navigable during summer months, leading to both shorter shipping routes and access to untapped energy resources, has impelled the Chinese Government to allocate more resources to Arctic research. Chinese officials have also started to think about what kind of policies would help China benefit from an ice-free Arctic environment. China is at a disadvantage because it is neither an Arctic littoral state—it has no Arctic coast, and so no sovereign rights to underwater continental shelves—nor an Arctic Council member state with the right to participate in the discussion of Arctic policies. Despite its seemingly weak position, China can be expected to seek a role in determining the political framework and legal foundation for future Arctic activities.<sup>1</sup>

The formerly ice-covered Arctic is undergoing an extraordinary transformation as a result of the unprecedented rate with which the ice is diminishing (see figure 1).<sup>2</sup> Estimates about when the Arctic Ocean could be consistently ice-free during the summer season vary greatly, from 2013 to 2060.<sup>3</sup> The melting of the Arctic ice poses economic, military and environmental challenges to the governance of the region. In 2008 the five littoral states—Canada, Denmark, Norway, Russia and the United States—committed themselves to the existing legal framework of the Arctic and the ‘orderly settlement of possible overlapping claims’.<sup>4</sup> Despite these assur-

<sup>1</sup> See box 1 below for the current legal and political framework governing the Arctic.

<sup>2</sup> According to one report, the annual average extent of Arctic Ocean ice has shrunk by 2.7% per decade, with a decrease of 7.4% per decade during the summer months. Solomon, S. et al. (eds), *Climate Change 2007: The Physical Science Basis*, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge University Press: Cambridge, 2007), p. 7.

<sup>3</sup> For estimates of 2013, 2040 and 2060 see Gupta, A., ‘Geopolitical implications of Arctic melt-down’, *Strategic Analysis*, vol. 33, no. 2 (Mar. 2009), p. 174; Arctic Council, *Arctic Marine Shipping Assessment 2009 Report* (Arctic Council: Apr. 2009), p. 30; and US National Snow and Ice Data Center, ‘Arctic Sea ice shrinks as temperatures rise’, Press release, 3 Oct. 2006, <[http://nsidc.org/news/press/2006\\_seaiceminimum/20061003\\_pressrelease.html](http://nsidc.org/news/press/2006_seaiceminimum/20061003_pressrelease.html)>.

<sup>4</sup> Arctic Ocean Conference, Ilulissat Declaration, Ilulissat, Greenland, 28 May 2008, <<http://arctic-council.org/filearchive/Ilulissat-declaration.pdf>>. See also ‘UN to rule on Arctic seabed ownership’, *Daily Telegraph*, 29 May 2008.

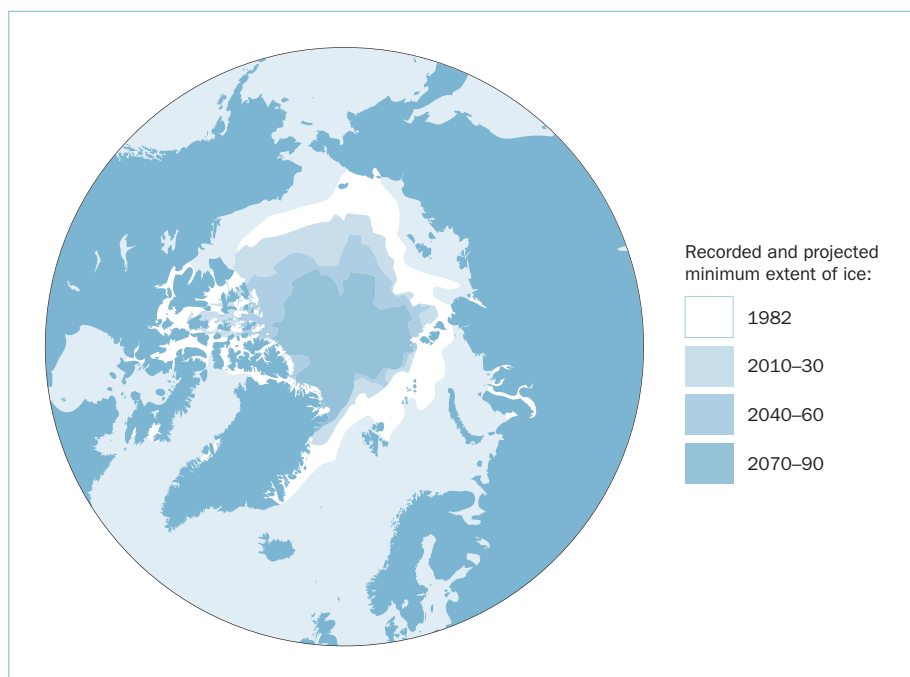
\* The author is indebted to Jingchao Peng for his invaluable research assistance during the process of writing this paper. She also thanks the Norwegian Ministry of Foreign Affairs for providing support for her research on China and the Arctic.

## SUMMARY

● The prospect of the Arctic being navigable during summer months as a result of climate change has impelled the Chinese Government to allocate more resources to research in the High North. Several Chinese academics have encouraged their government to be aware of the political, economic and military implications of shorter shipping routes and untapped energy resources. However, Chinese officials advocate cautious Arctic policies for fear of causing alarm and provoking countermeasures among the Arctic states.

China’s insistence on respect for sovereignty as a guiding principle of international relations deters it from questioning the territorial rights of Arctic states. Furthermore, China is aware that its size and rise to major power status evoke jitters, but at the same time it is striving to position itself so that it will not be excluded from access to the Arctic.

Smaller Arctic Council members have an opportunity to lay the foundation for a unique relationship with China by engaging Chinese officials and academics on Arctic issues—ranging from climate change and maritime rescue operations to commercial shipping routes and resource exploration.



**Figure 1.** Projected decrease of Arctic sea ice

Source: United Nations Environment Programme (UNEP), GRID-Arendal, Maps and Graphics Library, <<http://maps.grida.no/go/graphic/the-decrease-of-arctic-sea-ice-minimum-extent-in-1982-and-2007-and-climate-projections>>.

ances, the evolving situation in the Arctic could potentially lead to new geopolitical disputes involving also non-littoral states, especially regarding issues related to free passage and resource-extraction rights. Consequently, policymakers not only in China but across Asia, Europe and North America are turning their attention to the region in order to assess this transformation and its economic, territorial and geopolitical implications.

To date China has adopted a wait-and-see approach to Arctic developments, wary that active overtures would cause alarm in other countries due to China's size and status as a rising global power.<sup>5</sup> Chinese officials are therefore very cautious when formulating their views on China's interests in the Arctic.<sup>6</sup> They stress that China's Arctic research

activities remain primarily focused on the climatic and environmental consequences of the ice melting in the Arctic. However, in recent years Chinese officials and researchers have started to also assess the commercial, political and security implications for China of a seasonally ice-free Arctic region.<sup>7</sup>

This paper examines thinking among Chinese officials and scholars on the political dimensions of a changing Arctic. It provides an overview of China's scientific, commercial and security interests in the Arctic (sections II and III), and then outlines China's approach to the international politics of the Arctic (section IV). Conclusions are given in section V.

<sup>5</sup> Guo, P., Associate Professor of Ocean University of China, Interview with the author, Qingdao, 25 June 2009.

<sup>6</sup> The author had off-the-record discussions with 13 Chinese officials and researchers dealing with Arctic issues in Beijing and Shanghai between 4 Apr. 2009 and 9 Feb. 2010.

<sup>7</sup> See e.g. Li, Z., '北极航线的中国战略分析' [Analysis of China's strategy on the Arctic route], *Zhongguo Ruankexue*, no. 1 (2009), pp. 1-7; Li, Z., '中国参与北极航线国际机制的障碍及对策' [Obstacles to China's participation in the international Arctic route mechanism and countermeasures], *Zhongguo Hanghai*, vol. 32, no. 2 (June 2009), pp. 98-102; Guo, P., '大国战略指北极' [A big power's strategy points at the Arctic], *Liaowang*, no. 27 (2009), p. 64; Ren, X. and Li, Y., '北冰洋主权之争与中国国际责任浅析' [A tentative analysis on sovereignty dispute over the Arctic Ocean and China's international responsibility], *Langfang Shifan Xueyuan Xuebao (Shehui Kexue Ban)*, vol. 24, no. 4 (Aug. 2008), pp. 66-69; and Zhao, Y., '浅析北极所面临的法律挑战及其对我国的影响' [A brief analysis of legal challenges in the Arctic region and its influence on China], *Haiyang Fazhan Yu Guanli*, vol. 26, no. 3 (Mar. 2009), pp. 17-21.



## II. China's expanding polar research capabilities

China has one of the world's strongest polar scientific research capabilities.<sup>8</sup> Since 1984 China has organized 26 expeditions and established 3 research stations in the Antarctic.<sup>9</sup> The Arctic became a focus from 1995, when a group of Chinese scientists and journalists travelled to the North Pole on foot and conducted research on the Arctic Ocean's ice cover, climate and environment. China's first Arctic research expedition by sea took place in 1999 and since then it has carried out two more expeditions, in 2003 and 2008, with a fourth planned for the summer of 2010. China's first Arctic research station, Huanghe (Yellow River), was founded at Ny-Ålesund in Norway's Svalbard archipelago in July 2004.<sup>10</sup>

Since 1994 China has conducted polar exploration onboard the Research Vessel *Xuelong* (Snow Dragon), which was purchased from Ukraine in 1993. The 163-metre-long vessel, with a displacement of 21 000 tonnes, is the world's largest (non-nuclear) icebreaker.<sup>11</sup> However, in October 2009 the State Council (the Chinese Cabinet) decided that *Xuelong* alone no longer meets the demand of the country's expanding polar research and needs 'brothers and sisters'.<sup>12</sup> After months of deliberating between purchasing a second-hand foreign vessel or building a Chinese vessel, the government approved the building of a new high-tech polar expedition research icebreaker.<sup>13</sup> Preliminary plans to order a Chinese-built icebreaker at the cost of 2 billion yuan (\$300 million) had been under way within the Chinese Arctic and Antarctic Administration (CAA) since at least early 2009. The new vessel, expected to be operational in 2013, will be co-designed by Chinese and foreign partners and built in China.<sup>14</sup> It will be smaller than *Xuelong*, with a displacement of only 8000 tonnes.<sup>15</sup>

Besides its own scientific expeditions, China has collaborated with international partners to monitor the Arctic's environmental changes. In 1997, China joined the International Arctic Science Committee (IASC), a non-

<sup>8</sup> Zhu, Y., '我们已经是极地考察最强国之一' [We are already one of the strongest countries to conduct polar scientific expedition], *Nanfang Dushi Bao*, 25 Oct. 2009; and Spears, K. J., 'China and the Arctic: the awakening snow dragon', *China Brief*, vol. 9, no. 6 (18 Mar. 2009).

<sup>9</sup> '国家海洋局副局长:中国极地考察进入新的发展时期' [Deputy Administrator: China's polar expedition has entered a new period of development], Xinhua, 20 Nov. 2009, <[http://news.xinhuanet.com/tech/2009-11/20/content\\_12495500.htm](http://news.xinhuanet.com/tech/2009-11/20/content_12495500.htm)>.

<sup>10</sup> '北极地区' [Arctic region], Xinhua, 13 June 2006, <[http://news.xinhuanet.com/ziliao/2006-07/13/content\\_4826007.htm](http://news.xinhuanet.com/ziliao/2006-07/13/content_4826007.htm)>; and '新闻背景: 中国人与北极' [News background: the Chinese and the Arctic], Xinhua, 11 July 2008, <[http://news.xinhuanet.com/newscenter/2008-07/11/content\\_8530258.htm](http://news.xinhuanet.com/newscenter/2008-07/11/content_8530258.htm)>.

<sup>11</sup> Zhu (note 8); and Spears (note 8).

<sup>12</sup> '我国新建一艘极地科学考察破冰船 计划2013年投入使用' [China will build a new polar expedition icebreaker and plans to put it in use in 2013], Xinhua, 19 Nov. 2009, <[http://news.xinhuanet.com/tech/2009-11/19/content\\_12495351.htm](http://news.xinhuanet.com/tech/2009-11/19/content_12495351.htm)>; '中国南极考察25周年:和平利用南极永不过时' [25th anniversary of China's Antarctic expedition: peaceful utilization of the Antarctic will never be out of date], Xinhua, 14 Oct. 2009, <[http://news.xinhuanet.com/tech/2009-10/14/content\\_12232453.htm](http://news.xinhuanet.com/tech/2009-10/14/content_12232453.htm)>.

<sup>13</sup> '中国南极考察25周年:和平利用南极永不过时' (note 12). In addition, icebreaker supporting facilities such as a wharf, storehouse and a training base will be built.

<sup>14</sup> Xu, C., '中国拟自建万吨级破冰科考船' [China is planning to independently build a polar expedition icebreaker with a capacity of 10 000 tonnes], *Xin Jing Bao*, 15 Jan. 2009, <[http://epaper.bjnews.com.cn/html/2009-01/15/content\\_311876.htm](http://epaper.bjnews.com.cn/html/2009-01/15/content_311876.htm)>. At the time of writing the identity of the possible foreign partners had not been made public.

<sup>15</sup> '我国新建一艘极地科学考察破冰船 计划2013年投入使用' (note 12).



**Figure 2.** A Chinese view of Arctic sea routes

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

Source: Chinese Arctic and Antarctic Administration, <[http://polar.chinare.gov.cn:8039/xuelong\\_N\\_pole.html](http://polar.chinare.gov.cn:8039/xuelong_N_pole.html)>; map drawn by Hao Xiaoguang, <<http://www.hxgmap.com/>>.

governmental organization that aims to facilitate multidisciplinary research on the Arctic region and its role in the earth system. At the 2005 Arctic Science Summit held at Kunming, Yunnan Province, China was invited to join the Ny-Ålesund Science Managers Committee, which was established in 1994 to enhance cooperation among the research centres at Ny-Ålesund. For more than a decade Chinese researchers and officials have participated in international seminars dealing with environmental, scientific and climatic issues in the Arctic. From March 2007 to March 2009 a group of Chinese polar experts worked in the International Polar Year programme, an international scientific programme that focused on the Arctic and Antarctic.

China's primary Arctic-focused research institutions are: (a) the Polar Research Institute of China (PRIC) in Shanghai, with a staff of 142 people, which is in charge of polar expeditions on *Xuelong* and conducts comprehensive studies of the polar regions; (b) the China Institute for Marine Affairs, the research department within the State Oceanic Administration (SOA) in Beijing, which mainly does research on international maritime law and China's ocean development strategy; and (c) the Institute of Oceanology, a multidisciplinary marine science research and development institute under the Chinese Academy of Sciences. In addition, Arctic-related research is conducted at the Ocean University of China in Qingdao, Dalian Maritime University, Xiamen University, Tongji University in Shanghai, the Chinese



Antarctic Centre of Surveying and Mapping at Wuhan University, and the Research Centre for Marine Developments of China in Qingdao.<sup>16</sup> The latter research centre was established in 2006 and Wang Shuguang, former head of the SOA, was appointed as director. The centre's primary role is to conduct 'prospective, strategic and macroscopic research concerning China's major maritime problems' and provide consultative services for the SOA.<sup>17</sup>

Although there is no Chinese institution devoted specifically to research on Arctic politics, there are a handful of individuals who have published articles and book chapters that focus on Arctic strategies and geopolitics. Since the mid-2000s Chinese researchers and officials have expanded their participation in international seminars focusing on commercial, legal and geopolitical Arctic issues. In a major step to enhance China's understanding of the political, legal and military dimensions of the Arctic, in September 2007 the Chinese Government launched a research project entitled Arctic Issues Research involving scholars and officials from around China. The 10 research topics are: the Arctic and human society, Arctic resources and their exploitation, Arctic scientific research, Arctic transportation, Arctic law, Arctic politics and diplomacy, military factors in the Arctic, China's Arctic activities, the Arctic's strategic position, and China's Arctic policy and recommendations.<sup>18</sup> The research project, organized by the CAA, was completed by 2009, but the reports were not made public.

*Chinese research remains primarily focused on how the melting Arctic will affect China's continental and oceanic environment*

### III. China's commercial and strategic interests in the Arctic

Because China's economy is reliant on foreign trade, there are substantial commercial implications if shipping routes are shortened during the summer months each year. Nearly half of China's gross domestic product (GDP) is thought to be dependent on shipping.<sup>19</sup> The trip from Shanghai to Hamburg via the Northern Sea Route—which runs along the north coast of Russia from the Bering Strait in the east to Novaya Zemlya in the west—is 6400 kilometres shorter than the route via the Strait of Malacca and the Suez Canal (see figure 2).<sup>20</sup> Moreover, due to piracy, the cost of insurance for ships travelling via the Gulf of Aden towards the Suez Canal increased more than tenfold between September 2008 and March 2009.<sup>21</sup>

<sup>16</sup> The Research Centre for Marine Developments of China is managed by the Ministry of Education and the SOA. Its offices are located at Ocean University of China.

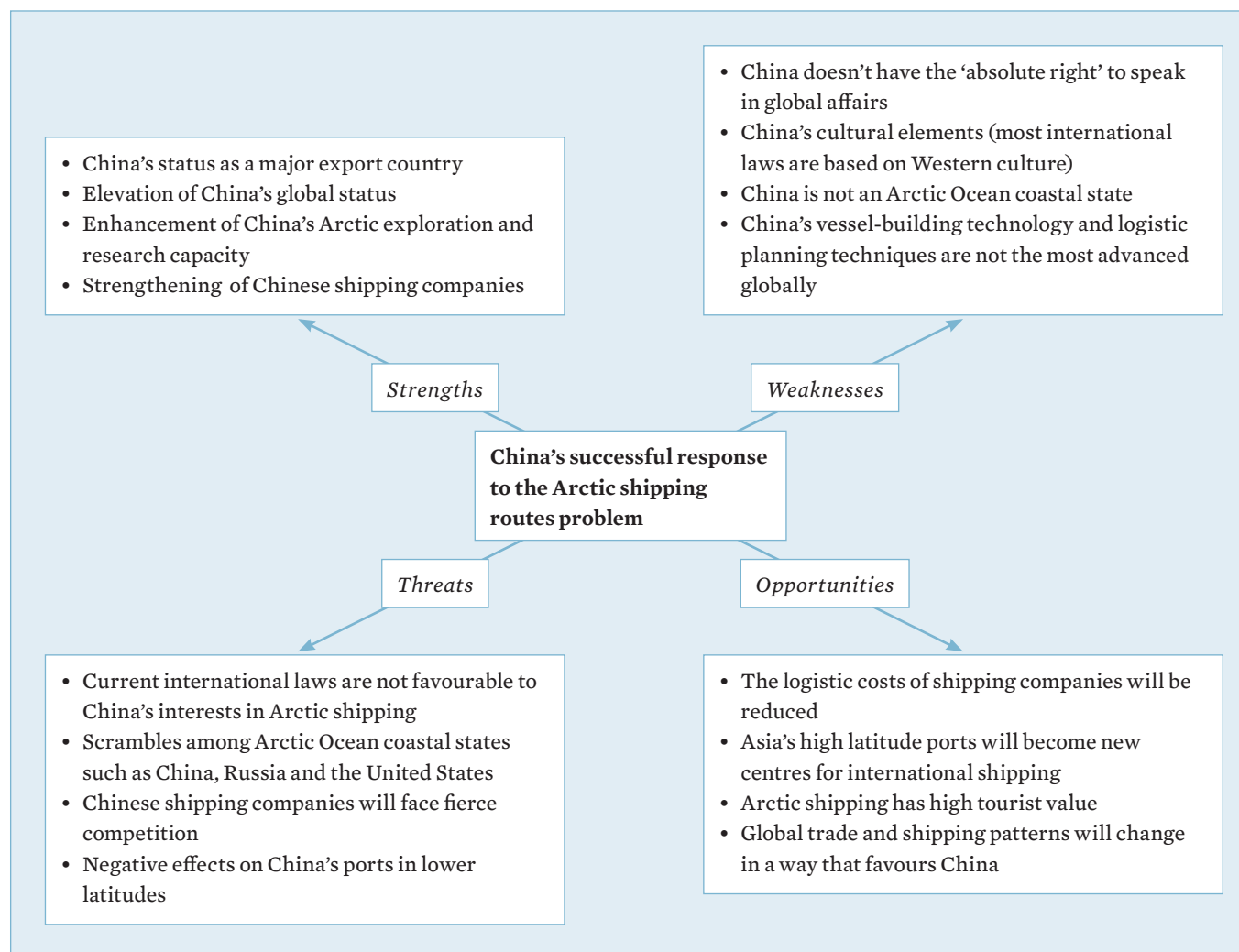
<sup>17</sup> Zhao, G., '中国海洋发展研究中心今年将启动40项研究课题' [Research Center for Marine Developments of China will launch 40 research topics this year], *Zhongguo Haiyang Bao*, 26 June 2009, (author's translation).

<sup>18</sup> Wang, H. et al. (eds), '中国海洋年鉴2008' [China ocean yearbook 2008] (Ocean Press: Beijing, 2008).

<sup>19</sup> The precise share of China's GDP that depends on shipping is difficult to determine. It is stated as 46% in e.g. Gao, W., Executive Vice President of COSCO Group, 'Development strategy of Chinese Shipping Company under the multilateral framework of WTO', Speech at the International Maritime Forum, 30 Oct. 2003, <<http://www.cosco.com/en/pic/forum/654923323232.pdf>>.

<sup>20</sup> International Northern Sea Route Programme, <<http://www.fni.no/insrop/>>; and Guo, P. et al., '北极航道的国际问题研究' [A study of the international issues of the Arctic route] (Ocean Press: Beijing, Oct. 2009), pp. 323–26. The Northern Sea Route is also known as the North East Route or North East Passage.

<sup>21</sup> Gullestrup, P. and Stumbaum, M.-B., 'EU maritime interests and the piracy problem: a perspective from the shipping industry', eds B. van Ginkel and F.-P. van der Putten, *The International*



**Figure 3.** A Chinese specialist panel's SWOT (strengths, weaknesses, opportunities and threats) assessment of use of Arctic sea routes

Source: Li, Z., '北极航线的中国战略分析' [Analysis of China's strategy on the Arctic route], *Zhongguo Ruankexue*, no. 1 (2009), pp. 1–7.

Chinese research remains primarily focused on how the melting Arctic will affect China's continental and oceanic environment and how in turn such changes could affect domestic agricultural and economic development. However, a small number of Chinese researchers are publicly encouraging the government to actively prepare for the commercial and strategic opportunities that a melting Arctic presents. Li Zhenfu of Dalian Maritime University has, together with a team of specialists, assessed China's advantages and disadvantages when the Arctic sea routes open up (see figure 3). 'Whoever has control over the Arctic route will control the new passage of world economics and international strategies', writes Li, referring both to the shortened shipping routes between East Asia and Europe or North America and to the abundant oil, gas, mineral and fishery resources presumed to be in the Arctic.<sup>22</sup> Commenting on the successful test voyages from South Korea

*Response to Somali Piracy: Challenges and Opportunities* (Martinus Nijhoff: Leiden, forthcoming 2010).

<sup>22</sup> Li, *Zhongguo Hanghai* (note 7), (author's translation).



to the Netherlands via the Northern Sea Route in the summer of 2009 by two German commercial vessels, Chen Xulong of the China Institute of International Studies said that ‘the opening of the Arctic route will advance the development of China’s north-east region and eastern coastal area . . . It is of importance to East Asian cooperation as well.’<sup>23</sup> Chen also said that China should have a long-term vision regarding Arctic shipping.

Li Zhenfu has criticized the fact that Chinese research on the Arctic shipping route has not been planned and conducted in a comprehensive manner to enable China to protect its interests. According to Li, China’s research ‘fails to provide fundamental information and scientific references for China to map out its Arctic strategy’ and therefore China’s power to speak out to protect its rights in the international arena is limited.<sup>24</sup> This kind of criticism of the government’s approach by Chinese scholars is rare in Arctic-related publications. Li’s article was published in a national journal administered by the prestigious China Association for Science and Technology (CAST). Li points out that the Arctic also ‘has significant military value, a fact recognized by other countries’. In a rare open-source article about the Arctic by an officer of the People’s Liberation Army, Senior Colonel Han Xudong warns that the possibility of use of force cannot be ruled out in the Arctic due to complex sovereignty disputes.<sup>25</sup> The increasing military importance of an ice-free Arctic is indeed reflected in decisions during recent years by all five littoral states to strengthen their military capabilities in the Arctic.<sup>26</sup>

*The Arctic has significant military value, a fact recognized by other countries’*

Another Chinese researcher on Arctic politics, Guo Peiqing of the Ocean University of China, has not written quite as critically as Li about government policies, but in media interviews he too has voiced disapproval of China’s predominantly natural sciences-oriented Arctic research and said it is not in China’s interests to remain neutral and ‘stay clear of Arctic affairs’.<sup>27</sup> Guo has said that China, which is transitioning from a regional to a global power, should be more active in international Arctic affairs. He notes that ‘any country that lacks comprehensive research on Polar politics will be excluded from being a decisive power in the management of the Arctic and therefore be forced into a passive position’.<sup>28</sup>

<sup>23</sup> Zhou, Z., ‘北极通航引发“深海”暗战’ [The opening of Arctic shipping triggers an unclear battle in the ‘deep’ sea], *Liaoning Ribao*, 15 Oct. 2009.

<sup>24</sup> Li, *Zhongguo Hanghai* (note 7), (author’s translation). The journal, ‘China navigation’, is published by the China Institute of Navigation and administered by CAST, the largest quasi-governmental supervisory body for science and technology research institutes in China.

<sup>25</sup> Han, X., ‘备受关注的北极主权之争’ [Closely watched dispute over Arctic sovereignty], *Bingqi Zhishi Fangwu GuanCha Jia*, vol. 253, no. 9B (Sep. 2008), pp. 16–19.

<sup>26</sup> E.g. in Aug. 2007 Canada announced that it was setting up an Arctic military training centre in Resolute Bay, on the Arctic; in Mar. 2009 Russia announced that it will establish a military force to protect its Arctic interests; in July 2009 the Danish Parliament approved a plan to set up an Arctic military command and task force by 2014; in Aug. 2009 Norway moved its centre of military operations from Jättå, in the south of the country, to Reitan, in the north; and in Nov. 2009 the US Navy made public its first Arctic ‘road map’ to guide its policy, strategy and investments in the Arctic. See e.g. Ebinger, C. K. and Zambetakis, E., ‘The geopolitics of Arctic melt’, *International Affairs*, vol. 85, no. 6 (2009); and US Navy, Chief of Naval Operations, ‘U.S. Navy Arctic roadmap’, Oct. 2009.

<sup>27</sup> ‘New cold wars over Arctic wealth’, *Global Times*, 27 July 2009.

<sup>28</sup> Interview with Guo, P., in Xie, K., ‘极地未来对中国影响重大’ [The future of the polar region is crucial to China], *Cankao Xiaoxi*, 8 Nov. 2007 (author’s translation).



Chinese Arctic specialists acknowledge the same uncertainties as many of their Western counterparts when contemplating how lucrative the Arctic routes would ultimately be in comparison to the current routes through the Suez and Panama canals.<sup>29</sup> Although passage along the Northern Sea Route from eastern China to Western Europe would substantially shorten the journey, high insurance premiums, lack of infrastructure and harsh conditions may make the Arctic routes commercially unviable, at least in the short term. Drift ice will continue to be a problem for ships even when the Arctic passages are officially deemed ice-free.<sup>30</sup> Because of the melting of Greenland's ice cap, the number of icebergs is expected to increase, forcing ships to proceed at a slow speed and make detours. Furthermore, the shallow depth of some of the passages along the shipping routes (in particular the Bering Strait) makes the Arctic unsuited for big cargo ships.

The opening up of the Arctic will also provide access to new reserves of the energy and other natural resources on which China's economic growth increasingly relies. The US Geological Survey estimates that the Arctic contains up to 30 per cent of the world's undiscovered gas and 13 per cent of the world's undiscovered oil resources.<sup>31</sup> Additionally, the region contains vast amounts of coal, nickel, copper, tungsten, lead, zinc, gold, silver, diamonds, manganese, chromium and titanium.<sup>32</sup>

The technological challenges associated with extracting energy and mineral deposits in the Arctic have been noted by both Chinese and Western observers.<sup>33</sup> To be able to exploit the Arctic's resources, China needs to partner with foreign companies because, as one Chinese scholar notes, 'there is a rather large gap between Chinese and advanced foreign deep-sea oil extracting technology'.<sup>34</sup> Russia, which controls many of the resources in Arctic waters, lacks both the technology and the capital needed to extract them—opening the way for tri-lateral joint ventures in Russian waters using Chinese capital and Western or

*To be able to exploit the Arctic's resources, China needs to partner with foreign companies*

<sup>29</sup> See e.g. Yu, B. and Li, Y., '北方航线的综合评价研究' [Comprehensive evaluation of the Northern Sea Route], *Dalian Haishi Daxue Xuebao*, vol. 35 (June 2009), p. 228; Bai, C., Li, Z. and Yang, Z., '北极航线探讨' [Research of Arctic sea routes], *Hanghai Jishu*, no. 5 (2009), pp. 7–9.; and Zhang, X. et al., '北极航线的海运经济潜力评估及其对我国经济发展的战略意义' [Assessment of the economic potential of Arctic sea routes and its strategic significance for the development of China's economy], *Zhongguo Ruankexue*, Supplementary issue 2, 2009, pp. 86–93. For articles by Western specialists questioning the practicability of the Arctic shipping routes see e.g. Lasserre, F., 'High North shipping: myths and realities', eds S. G. Holtsmark and B. A. Smith-Windsor, *Security Prospects in the High North: Geostrategic Thaw or Freeze?*, NATO Defense College (NDC) Forum Paper no. 7 (NDC: Rome, May 2009), pp. 179–99; and Christensen, S. A., 'Are the northern sea routes really the shortest?', DIIS Brief, Mar. 2009, <<http://www.diis.dk/sw74533.asp>>.

<sup>30</sup> Christensen (note 29), p. 3.

<sup>31</sup> Gautier, D. et al., 'Assessment of undiscovered oil and gas in the Arctic', *Science*, 29 May 2009.

<sup>32</sup> ECON, *Arctic Shipping 2030: From Russia with Oil, Stormy Passage, or Arctic Great Game?*, ECON Report 2007-070 (ECON: Oslo, 2007), p. 4.

<sup>33</sup> See e.g. Feng, D., Lu, C. and Zhou, S., '北极石油开发的争夺与障碍' [Petroleum exploitation in the Arctic region: competition and obstacles], *Jieneng Jishu*, vol. 27, no. 4 (July 2009); and Hai, T., '石油公司纷纷抢滩 北极,下一个中东?' [Vied for by oil companies, the Arctic—the next Middle East?], *Guoji Xianqu Daobao*, 29 July 2008. For scepticism expressed by Western analysts on the question of whether energy resources in the Arctic are a competitive alternative to other untapped resources see e.g. Offerdal, K., 'High North energy: myths and realities', eds Holtsmark and Smith-Windsor (note 29), pp. 151–78.

<sup>34</sup> Li, Q., '我国海洋深水油气开发面临的挑战' [The situation and challenges for deep water oil and gas exploration and exploitation in China], *Zhongguo Haishang Youqi*, vol. 18, no. 2 (Apr. 2006).



Brazilian technology.<sup>35</sup> For example, when in late 2009 Russia's state-owned oil company Rosneft announced plans to apply for the operating licences to develop 30 offshore sites on Russia's Arctic continental shelf, industry experts predicted that it would not be able to develop these deposits on its own.<sup>36</sup> Massive capital will be needed in addition to knowledge of highly advanced technology and specialized project management skills. Another potential multilateral joint venture in which China's capital could be used in exchange for the opportunity to gain the experience it seeks in deep-water drilling projects is the ongoing cooperation between Statoil, Total and Gazprom to develop the first phase of the Shtokman gas fields in the Barents Sea. This is regarded not only as a huge commercial opportunity but also a formidable technological challenge.<sup>37</sup>

#### IV. China and Arctic politics

Although Hu Zhengyue, Chinese assistant minister of foreign affairs, has said 'China does not have an Arctic strategy', the country does appear to have a clear agenda regarding the Arctic.<sup>38</sup> Hu made his statement while attending an Arctic forum organized by the Norwegian Government on Svalbard in June 2009. His speech at the forum, along with his comments to Chinese journalists after the forum, forms the most up-to-date and comprehensive official articulation of China's thinking on the geopolitics of the Arctic and resulting sovereignty issues.

In line with the country's oft-stated governing principles in international affairs, Hu emphasized China's wish to see disputes related to sovereignty resolved peacefully through dialogue. He expressed China's support for Arctic countries' sovereign and judicial rights—for example, in relation to the continental shelf—endowed by international laws including the 1982 United Nations Convention on the Law of the Sea (UNCLOS; see box 1). At the same time, according to Hu, China thinks these laws need to be refined and developed due to the circumstances that are arising from the melting of the ice. It looks on the Arctic Council as the most influential regional governmental organization. China has participated as an ad hoc observer in two Arctic Council ministerial meetings, in 2007 and 2009, and hopes that its application to be granted permanent observer status will be decided as soon as possible (see box 1). Hu stressed the need for cooperation among Arctic and non-Arctic states.

In his speech at Svalbard, Hu acknowledged that the Arctic is mainly a regional issue but said that it is also an inter-regional issue due to climate change and international shipping. Hu did not mention energy and other natural resources. Unsurprisingly, China would like to see the Arctic states

<sup>35</sup> E.g. 'Rosneft seeks licences for 30 offshore Arctic fields', *FSU Oil & Gas Monitor*, 21 Oct. 2009. British Petroleum (BP), the Brazilian state-owned company Petrobras, Royal Dutch Shell and the Norwegian company Statoil are currently the world's leading deep sea energy drillers.

<sup>36</sup> 'Rosneft seeks licences for 30 offshore Arctic fields' (note 35).

<sup>37</sup> Anker, M., 'The High North and Russo-Norwegian bilateral economic relations', *Russia, Finland and Norway: Economic Essays*, BOFIT Online no. 15 (Bank of Finland: Helsinki, 15 Dec. 2009), pp. 36–39.

<sup>38</sup> Ning, X., '地球未来的缩影—外交部部长助理谈“北极研究之旅” [A microcosm of the world's future—Assistant Minister of Foreign Affairs talks about 'High North Study Tour'], *Shijie Bolan*, vol. 349, no. 19 (2009), p. 58.

**Box 1. The international legal and political framework for the Arctic****United Nations Convention on the Law of the Sea (UNCLOS)**

*Opened for signature at Montego Bay, Jamaica, on 10 December 1982; entered into force on 16 November 1994; 160 parties as of 1 January 2010; depositary UN Secretary-General*

The convention aims to regulate all aspects of the resources of the sea and uses of the ocean. According to UNCLOS, coastal (littoral) states have undisputed sovereign rights to their territorial sea and exclusive economic zone, which extend to a distance of 200 nautical miles (370 kilometres) from their coastal baseline (articles 3 and 57). On ratification of UNCLOS, a country has 10 years to make claims to extend its 200-nautical-mile zone (Article 4).

In the case of the Arctic Ocean, the littoral states are Canada, Denmark, Norway, Russia and the United States. Russia ratified UNCLOS in 1997 and in December 2001 it submitted to the UN Commission on the Limits of the Continental Shelf (CLCS) a request that 120 million hectares of underwater terrain between the Lomonosov and Mendeleev ridges be confirmed as a continuation of the Siberian shelf.<sup>a</sup> Norway ratified UNCLOS in 1996 and submitted its claim in November 2006.<sup>b</sup> Canada (ratified in 2003) and Denmark (ratified in 2004) are in the process of preparing claims. The USA has not ratified UNCLOS.

*Treaty text: United Nations Treaty Series, vol. 1833 (1994)*

**The Arctic Council**

*Established by the Declaration on the Establishment of the Arctic Council (Ottawa Declaration), 19 September 1996; inaugurated 17 September 1998; 8 member states, 6 non-Arctic observer states and 3 ad hoc non-Arctic observer states*

The Arctic Council is an intergovernmental forum for promoting cooperation among the Arctic states, in particular on issues of sustainable development and environmental protection. The full member states are the eight circumpolar states: Canada, Denmark, Finland, Iceland, Sweden, Norway, Russia and the United States. It is not an international organization with a firm legal charter but rather an international forum designed to foster cooperation and collaboration on Arctic issues. Most member states are opposed to broadening the Council's mandate to deal with legal issues, although they acknowledge that the changing Arctic environment requires increased international cooperation on issues of trans-border interest.<sup>c</sup>

China, among others, has applied to become a permanent observer state. At the Arctic Council's April 2009 ministerial meeting, no decision was taken on the applications. Currently, as an ad hoc observer China must apply to be admitted to each Arctic Council meeting.<sup>d</sup> Permanent observer status does not differ from ad hoc observer status with regard to the influence on the decision-making process in ministerial meetings. Only Arctic Council member states have voting rights.<sup>e</sup>

*Website: <<http://arctic-council.org/>>*

recognize the interests of non-Arctic states. As Hu said, 'When determining the delimitation of outer continental shelves, the Arctic states need to not only properly handle relationships among themselves, but must also consider the relationship between the outer continental shelf and the international submarine area that is the common human heritage, to ensure a balance of coastal countries' interests and the common interests of the international community.'<sup>39</sup> Professor Guo Peiqing put it more directly: 'Circumpolar nations have to understand that Arctic affairs are not only regional issues but also international ones.'<sup>40</sup> Guo has estimated that about 88 per cent of the seabed of the Arctic Ocean would be under the control of the Arctic littoral states if the Commission on the Limits of the Continental Shelf were to approve all the existing or expected claims to the Arctic Ocean continental shelf.<sup>41</sup> However, when considering the concerns of China and other non-Arctic states it is worth bearing in mind that the vast majority of known but

<sup>39</sup> '中国对北极事务的看法' [China's perspective on Arctic matters], *Shijie Zhishi*, vol. 55, no. 15 (2009), (author's translation).

<sup>40</sup> Guo, P., '北极并不冷清' [The Arctic is not desolate], *Huanqiu*, no. 17 (Sep. 2008).

<sup>41</sup> Guo, P., Associate Professor, Ocean University of China, Interview with the author, Qingdao, 25 June 2009.



### Box 1 continued

#### International Maritime Organization Guidelines for Ships Operating in Arctic Ice-covered Waters

Approved October and December 2002; issued 23 December 2002.

The International Maritime Organization (IMO) Guidelines focus on the special climatic conditions of the Arctic and aim to promote the safety of navigation and to prevent pollution from ship operations in the Arctic. The Guidelines are not legally binding: UNCLOS is the only existing law regulating maritime activities in the Arctic. Both Russia and Canada have adopted strict legal regimes under UNCLOS for navigation in the Arctic within their respective area of jurisdiction.<sup>f</sup>

Text: International Maritime Organization, MSC/Circ.1056 and MEPC/Circ.399, 23 Dec. 2002, <[http://www.imo.org/safety/mainframe.asp?topic\\_id=1787](http://www.imo.org/safety/mainframe.asp?topic_id=1787)>

#### Treaty concerning the Archipelago of Spitsbergen (Svalbard Treaty)

Signed by the 9 original parties at Paris, France, on 9 February 1920; entered into force on 14 August 1925; 40 parties as of 1 January 2010; depositary French Government

The treaty establishes Norway's full sovereignty over the Svalbard archipelago but stipulates that it must remain demilitarized. Citizens from all states party enjoy the same right of access to and residence in Svalbard. Eleven institutions from 10 countries have established research stations at Ny-Ålesund, Svalbard, three of which are permanently manned.

Treaty text: *League of Nations Treaty Series*, vol. 2 (1920)

<sup>a</sup> United Nations, 'Commission on Limits of Continental Shelf receives its first submission', Press Release SEA/1729, 21 Dec. 2001, <<http://www.un.org/News/Press/docs/2001/sea1729.doc.htm>>; and Baev, P., *Russia's Race for the Arctic and the New Geopolitics of the North Pole*, Occasional paper (Jamestown Foundation: Washington, DC, Oct. 2007), p. 4.

<sup>b</sup> United Nations, Commission on the Limits of the Continental Shelf, 'Outer limits of the continental shelf beyond 200 nautical miles from the baselines: submissions to the Commission: submission by the Kingdom of Norway', <[http://www.un.org/Depts/los/clcs\\_new/submissions\\_files/submission\\_nor.htm](http://www.un.org/Depts/los/clcs_new/submissions_files/submission_nor.htm)>.

<sup>c</sup> Ebinger, C. K. and Zambetakis, E., 'The geopolitics of Arctic melt', *International Affairs*, vol. 85, no. 6 (2009), pp. 1227–30.

<sup>d</sup> Bennet, M., 'Round-up from the Arctic Council Ministerial Meeting (2/2)', *The Arctic, Foreign Policy Blogs*, 1 May 2009, <<http://arctic.foreignpolicyblogs.com/2009/05/01/>>.

<sup>e</sup> Cleveland, J. W., 'The next generation of international organizations: lessons from the Arctic Council in addressing regional climate change', *Appalachian Natural Resources Law Journal*, vol. 1, no. 2 (spring 2008).

<sup>f</sup> Jensen, Ø., *The IMO Guidelines for Ships Operating in Arctic Ice-covered Waters: From Voluntary to Mandatory Tool for Navigation Safety and Environmental Protection?*, Fridtjof Nansen Institute (FNI) Report 2/2007 (FNI: Lysaker, Mar. 2007); and Ebinger and Zambetakis (note c).

untapped energy resources lie in undisputed areas, that is, within the legitimate exclusive economic zones (EEZs) of the Arctic littoral states.<sup>42</sup>

Canada and Norway are the only countries to have thus far engaged with China in a formal bilateral dialogue on Arctic issues. China and Norway have agreed to hold a follow-up dialogue in 2010. At the first China–Norway dialogue meeting in June 2009, climate change and polar research were identified as the issues of strongest common interest, although the two sides also exchanged views on Arctic policies, energy issues and sea routes.<sup>43</sup>

It is unclear if and when China will issue a more formal Arctic strategy. The precise targets of the 12th Five-Year Plan (2011–15) for polar expeditions and polar research projects will be finalized after China completes its 26th Antarctic expedition in March 2010.<sup>44</sup> In October 2009, on the eve of the expedition, Chen Lianzeng, Deputy Director of the SOA, shed some light on the next Five-Year Plan's general targets. These will be to deepen China's

<sup>42</sup> See e.g. Offerdal (note 33); and Ebinger and Zambetakis (note 26).

<sup>43</sup> Gou, H., Chinese Ministry of Foreign Affairs, Personal communication, 15 and 26 Jan. 2010; and Svedahl, E., Minister Counsellor, Norwegian Embassy, Beijing, Personal communication, 13 Jan. 2010.

<sup>44</sup> '国家海洋局副局长:中国极地考察进入新的发展时期' (note 9).



knowledge of the impact of climate change on the two polar regions, expand China's scientific exploration activities, and 'take an active part in polar affairs and establish China's strategic position'. To accomplish these goals, the SOA intends to build both 'soft power and hard power'.<sup>45</sup>

## V. Conclusions

Several Chinese academics are encouraging their government to 'grasp this historical opportunity and recognize the political, economic and military value of the Arctic and then re-evaluate China's rights in the Arctic region and adjust its strategic plan'.<sup>46</sup> Chinese decision makers, on the other hand, advocate cautious Arctic policies for fear of causing alarm and provoking countermeasures among the Arctic states. Professor Guo Peiqing has even raised the alarmist possibility of an alliance of Arctic states.<sup>47</sup> China is aware that its size and rise to major power status evoke jitters but at the same time it is striving to position itself so that it will not be excluded from access to the Arctic.

### *Chinese decision makers advocate cautious Arctic policies for fear of causing alarm*

China appears to be particularly wary of Russia's intentions in the Arctic. Chinese observers have made note of Russia's decision in August 2007 to resume long-distance bomber flights over the Arctic and the planting of a Russian flag on the Arctic seabed that same month.<sup>48</sup> Guo has said that the disputes in the Arctic are in fact 'Russia and some other states' challenge to the international order and international law after the end of the cold war'.<sup>49</sup> China and the rest of the world would be at a disadvantage if Russia's claims over the underwater terrain between the Lomonosov and Mendeleev ridges are legitimized because, in that case, Russia alone would have rights to the resources in that area (see box 1). Even if that claim is unsuccessful, some Chinese Arctic specialists have expressed concern that the commercial advantage of the Arctic routes would substantially decrease if Russia were to unilaterally charge exorbitant service fees for ships passing through its EEZ waters.<sup>50</sup>

It is important to note, however, that Arctic issues have thus far been approached in a 'spirit of cooperation, with outstanding disputes managed peacefully'.<sup>51</sup> International cooperation in the Arctic has for the most part been multilateral.<sup>52</sup> Media reports of competition in an ice-free Arctic that

<sup>45</sup> '中国南极考察25周年:和平利用南极永不过时' (note 12), p. 2 (author's translation).

<sup>46</sup> Li, S. et al., '机遇与挑战:气候变暖趋势下的北极' [Opportunities and challenges: the trend of global warming in the Arctic], *Kexue*, vol. 61, no. 4 (25 July 2009), p. 47 (author's translation).

<sup>47</sup> Xie (note 28).

<sup>48</sup> See e.g. Zhao, Q., 'Arctic scramble strains relations amid increasing militarization', *Xinhua*, 30 Mar. 2009, <[http://news.xinhuanet.com/english/2009-03/30/content\\_11099234.htm](http://news.xinhuanet.com/english/2009-03/30/content_11099234.htm)>.

<sup>49</sup> Xie (note 28).

<sup>50</sup> This concern was expressed in the author's off-the-record discussions with Arctic experts in Beijing and Shanghai. Also, in articles published in China, reference is made to a Russian regulation dating back to 1991 that Russia will charge high passage and service fees for ships traversing the Northern Sea Route. Zhang, J., '北极:从“科考时代”步入“纷争时代”' [The Arctic: 'age of expedition' to 'age of scramble'], *Jingji Cankao Bao*, 10 Apr. 2009; and Liu, J. and Guan, Q., '北极“黄金航道”起争端' [Disputes arise in the Arctic's 'golden route'], *Huanqiu*, no. 22 (2008).

<sup>51</sup> Ebinger and Zambetakis (note 26), p. 1228.

<sup>52</sup> See e.g. Heininen, L., Remarks at the seminar 'Arctic resources policies in Russia', Finnish Institute of International Affairs, Helsinki, 3 Mar. 2009, <<http://www.upi-fiaa.fi/en/event/204/>>.



emphasize potential disputes and a scramble for the Arctic's resources give rise to scenarios of armed conflict breaking out in the region, especially a conflict involving Russia. However, there is no evidence that Russia is not playing by the rules or that it would not want to find multilateral solutions to disputes regarding sovereignty.<sup>53</sup>

While the melting of the Arctic ice could create tension in China–Russia relations, the new opportunities that will arise as a result of an ice-free Arctic could deepen cooperation among East Asian states. As non-Arctic states, China, Japan, North Korea and South Korea are all in the same boat. Each of them stands to benefit enormously from shorter commercial shipping routes and possible access to new fishing grounds and other natural resources. A unified Arctic strategy would be in their mutual interest. Finding ways to jointly use an ice-free Arctic has the potential to create a genuine win–win situation for both China and Japan, the two East Asian powers which in so many other areas find it difficult to find common ground.

From China's viewpoint, an ice-free Arctic will increase the value of strong ties and broader cooperation with the Nordic countries that otherwise struggle to be noticed by the rising great power that is preoccupied by global challenges. China already has the largest foreign embassy in Reykjavik, in anticipation of Iceland becoming a major shipping hub.<sup>54</sup> By actively persisting to further engage Chinese officials and academics on Arctic issues—ranging from climate change and polar research to commercial shipping routes and maritime rescue operations—Nordic countries can already start laying the foundation for a special Arctic-orientated relationship with China. Norway, with its deep-sea drilling expertise, has an advantage if it wants to forge a unique Arctic relationship with China. Finding ways for Chinese and Norwegian companies to cooperate in Arctic energy resource extraction—in, for example, the ongoing project in the Shtokman field<sup>55</sup>—would be of great interest to Chinese companies and would undoubtedly strengthen China–Norway relations.

The notion that China has rights in the Arctic can be expected to be repeated in articles by Chinese academics and in comments by Chinese officials until it gradually begins to be perceived as an accepted state of affairs.<sup>56</sup> However, under international law, China's rights in the Arctic are limited. Moreover, China's insistence that respect for state sovereignty be a guiding principle of international relations makes it difficult for China to question the Arctic states' sovereignty rights. There is some irony in the statements by Chinese officials calling on the Arctic states to consider the interests of mankind so that all states can share the Arctic.<sup>57</sup> These statements appear to be contrary to China's long-standing principles of respect for sovereignty and the internal affairs of other states. Based on official statements by the Chinese Government and the open-source literature written by Chinese Arctic scholars, China can be expected to continue to persistently, yet quietly and unobtrusively, push for the Arctic in spirit being accessible to all.

*While the melting of the Arctic ice could create tension, the new opportunities that will arise as a result of an ice-free Arctic could deepen cooperation*

<sup>53</sup> Heinen (note 52).

<sup>54</sup> Wade, R., 'A warmer Arctic needs shipping rules', *Financial Times*, 16 Jan. 2008.

<sup>55</sup> Anker (note 37).

<sup>56</sup> E.g. Li et al. (note 46); and Xie (note 28).

<sup>57</sup> E.g. '中国对北极事务的看法' (note 39).



## Abbreviations

CAA	Chinese Arctic and Antarctic Administration
SOA	State Oceanic Administration
UNCLOS	United Nations Convention on the Law of the Sea
EEZ	Exclusive economic zone

## OTHER SIPRI INSIGHTS ON PEACE AND SECURITY

### **China's engagement in nuclear arms control, disarmament and non-proliferation**

SIPRI Insights on Peace and Security no. 2010/4

Bates Gill

Forthcoming, April 2010

### **End-user certificates: improving standards to prevent diversion**

SIPRI Insights on Peace and Security no. 2010/3

Mark Bromley and Hugh Griffiths

Forthcoming, March 2010

### **Demilitarizing mining areas in the Democratic Republic of the Congo: the case of northern Katanga Province**

SIPRI Insights on Peace and Security no. 2010/1

Ruben de Koning

SIPRI, January 2010

### **Prosecuting conflict-related sexual violence at the International Criminal Court**

SIPRI Insights on Peace and Security no. 2009/1

Ashley Dallman

SIPRI, May 2009

### **Stemming destabilizing arms transfers: the impact of European Union air safety bans**

SIPRI Insights on Peace and Security no. 2008/3

Hugh Griffiths and Mark Bromley

SIPRI, October 2008

### **Resource–conflict links in Sierra Leone and the Democratic Republic of the Congo**

SIPRI Insights on Peace and Security no. 2008/2

Ruben de Koning

SIPRI, October 2008

### **The private military services industry**

SIPRI Insights on Peace and Security no. 2008/1

Sam Perlo-Freeman and Elisabeth Sköns

SIPRI, September 2008

## OTHER RECENT SIPRI PUBLICATIONS

### **SIPRI Yearbook 2009: Armaments, Disarmament and International Security**

Oxford University Press, 2009

**Recent trends in the arms trade****Arms transfers to Central, North and West Africa/the Americas/the Middle East/Asia and Oceania/East and Southern Africa/Europe and Central Asia**

SIPRI Background Papers

The SIPRI Arms Transfers Programme

SIPRI, April 2009–February 2010

**Chronology of armaments, disarmament and international security 2009**

SIPRI Fact Sheet

Nenne Bodell

SIPRI, January 2010

**North Korea's nuclear test explosion, 2009**

SIPRI Fact Sheet

Vitaly Fedchenko

SIPRI, December 2009

**SIPRI Map of Multilateral Peace Operation Deployments**

SIPRI, September 2009

**The EU non-proliferation clause: a preliminary assessment**

SIPRI Background Paper

Lina Grip

SIPRI, November 2009

**China's Expanding Role in Peacekeeping: Prospects and Policy Implications**

SIPRI Policy Paper no. 25

Bates Gill and Chin-hao Huang

SIPRI, November 2009

**Building air traffic capacity in Africa: options for improving security and governance**

SIPRI Policy Brief

Hugh Griffiths

SIPRI, October 2009

**Multilateral peace operations: Africa/Asia/Europe/personnel, 2008**

SIPRI Fact Sheets

Kirsten Soder

SIPRI, July 2009

**Handbook of Applied Biosecurity for Life Science Laboratories**

Peter Clevestig

SIPRI, June 2009

**Air Transport and Destabilizing Commodity Flows**

SIPRI Policy Paper no. 24

Hugh Griffiths and Mark Bromley

SIPRI, May 2009

**Enforcing European Union Law on Exports of Dual-Use Goods**

SIPRI Research Report no. 24

Anna Wetter

Oxford University Press, 2009

These publications can all be ordered or downloaded from <<http://www.sipri.org/publications/>>

**SIPRI** is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

## GOVERNING BOARD

Ambassador Rolf Ekéus,  
Chairman (Sweden)  
Dr Alexei G. Arbatov (Russia)  
Ambassador Lakhdar Brahimi  
(Algeria)  
Jayantha Dhanapala  
(Sri Lanka)  
Dr Nabil Elaraby (Egypt)  
Ambassador Wolfgang  
Ischinger (Germany)  
Professor Mary Kaldor  
(United Kingdom)  
The Director

## DIRECTOR

Dr Bates Gill (United States)



## STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

Signalistgatan 9  
SE-169 70 Solna, Sweden  
Telephone: +46 8 655 97 00  
Fax: +46 8 655 97 33  
Email: sipri@sipri.org  
Internet: www.sipri.org

SIPRI INSIGHTS ON PEACE AND SECURITY NO. 2010/2

# CHINA PREPARES FOR AN ICE-FREE ARCTIC

LINDA JAKOBSON

## CONTENTS

I. Introduction	1
II. China's expanding polar research capabilities	3
III. China's commercial and strategic interests in the Arctic	5
IV. China and Arctic politics	9
V. Conclusions	12
Box 1. The international legal and political framework for the Arctic	10
Figure 1. Projected decrease of Arctic sea ice	2
Figure 2. A Chinese view of Arctic sea routes	4
Figure 3. A Chinese specialist panel's SWOT (strengths, weaknesses, opportunities and threats) assessment of use of Arctic sea routes	6
Abbreviations	14

## ABOUT THE AUTHOR

**Linda Jakobson** (Finland) is the Acting Programme Director and Beijing-based Senior Researcher of the SIPRI China and Global Security Programme. She previously worked for 10 years at the Finnish Institute of International Affairs (FIIA), most recently as Director of its China Programme and Senior Researcher. She has lived and worked in China for over 15 years and has published six books on Chinese politics, foreign policy and East Asian society. Her current research focuses on China's foreign and security policy as well as regional security issues in North East Asia.