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*Arild Moe, Olav Schram Stokke*

## CHINA AND ARCTIC SHIPPING: POLICIES, INTERESTS AND ENGAGEMENT<sup>1</sup>

**Summary.** China is widely perceived as an emerging key actor in Arctic shipping. The purpose of the article is to clarify how strong China's engagement really is; how much of it is purely commercial, and how much is a reflection of political goals. We take a bottom-up approach, examining use of arctic sea routes from the perspectives of Chinese governmental agencies and companies, but we also place shipping in the context of China's Arctic policy. The Arctic policy is upbeat on Arctic shipping options, subsuming them under the larger Belt and Road Initiative as a "Polar Silk Road". However, the Chinese shipping industry's actual moves into the region have been cautious, and mainly reflect sober commercial calculations.

**Keywords:** Arctic, shipping, China, «Polar Silk Road», «Belt and Road initiative» (BRI), COSCO — China Ocean Shipping (Group) Company (COSCO Group).

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**Authors:**

Arild MOE, Cand. polit. (Political Science), Research Professor, Fridtjof Nansen Institute (Lysaker, Norway) (amoe@fni.no);

Olav Schram STOKKE, Dr. philos. (Political Science), Professor, University of Oslo, Department of Political Science (Oslo, Norway); Research Professor, Fridtjof Nansen Institute (Lysaker, Norway) (e-mail: o.s.stokke@stv.uio.no).

**Арильд МУ, Улав Скрам СТОККЕ****Китай в арктическом судоходстве:  
политика, интересы и направления участия**

Резюме. Китай все более широко воспринимается как восходящий ключевой участник арктического судоходства. Цель данной статьи — выяснить, каковы масштабы реальной вовлеченности Китая в этот процесс; в какой степени она имеет собственно коммерческую подоплеку и насколько является отражением политических интересов. Анализ строится «снизу вверх», отталкиваясь от подходов китайских правительственных инстанций и компаний к использованию арктических морских путей, и до уровня арктической политики Китая как таковой. Эта политика демонстрирует оптимистичный взгляд на перспективы участия страны в арктическом судоходстве, которые рассматриваются в контексте «Полярного Шелкового пути» — составной части более масштабной инициативы «Пояс и путь». Однако в практическом плане курс китайской судоходной отрасли на проникновение в регион носит осторожный характер, в основном руководствуясь трезвым коммерческим расчетом.

**Ключевые слова:** Арктика, судоходство, Китай, «Полярный Шелковый путь», China Ocean Shipping (Group) Company (COSCO Group)<sup>1</sup>, инициатива «Пояс и путь».

**Авторы:**

Арильд МУ, кандидат политических наук, профессор-исследователь, Институт им. Фридьофа Нанесена (Лисакер, Норвегия). E-mail: amoe@fni.no;

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<sup>1</sup> COSCO Group — китайская компания, мировой контейнерный оператор (входит в десятку крупнейших в этой отрасли), лидер в секторе навалочных грузов (Прим. ред.).

Улав Скрам СТОККЕ, доктор философии, профессор Кафедры политологии Университета г. Осло (Осло, Норвегия); профессор-исследователь Института им. Фритьофа Нанесена (Лисакер, Норвегия). E-mail: o.s.stokke@stv.uio.no.

## Introduction

How important is shipping for the Arctic aspirations of China? How much of its engagement is purely commercial, and how much is a reflection of political goals? We take a bottom-up approach, examining Arctic sea routes from the perspectives of Chinese governmental agencies and companies, rather than a top-down approach centered on Arctic change. A recent study ranked China highest among the leading maritime nations of the world, with Japan and the Republic of Korea as third and fourth [*Menon and DNV-GL*, 2018]. Given the global orientation of their maritime industries, these nations will always assess Arctic options across a wide array of alternatives.

Three alternative transit routes are in focus in debates over trans-Arctic shipping: the Northeast Passage between the Atlantic and the Pacific north of Russia, the Northwest Passage through Canada's Arctic archipelago, and the Central Route across the North Pole. For the near future, it is only the Northeast Passage—specifically, the Northern Sea Route—that has attracted serious interest from Asian shipping actors [*Moe*, 2014]. The Northwest Passage has depth limitations and remains severely constrained by permanent or moving ice. Regular use of the Central Route remains a futuristic scenario, requiring far greater ice retreat than seen so far [*Melia et.al.*, 2016]. The “Northeast Passage” is the loose term historically applied to the entire Arctic passage between Europe and Asia: the *Northern Sea Route* is the clearly demarcated sea area between the Kara Sea in the west to the Bering Strait in the east, extending 200 nautical miles from the coast, developed and regulated by Soviet and Russian authorities since the 1930s. In addition to its potential as a transit corridor, this route is of interest to the shipping industry because of transport-intensive resource extraction projects in the Russian North. Shipping out from the Arctic or into it is termed “destination shipping”, as distinct from *transit shipping* between the Pacific and the Atlantic.

## China's Arctic policy

China issued its Arctic policy document in January 2018. As in all Arctic strategy documents so far, there is a fourfold emphasis on scientific research, economic opportunities, environmental protection, and the human dimension—notably the traditions and living conditions of indigenous peoples. While such documents do not reveal all aspects of state interests, they provide occasions for articulating priorities. Here we review these policy statements, noting their sensitivity to the privileged role enjoyed by Arctic coastal states and relatively little attention paid to maritime transport relative to scientific research and environmental protection.

Due to China's steadily rising geopolitical status, its foreign-policy moves are followed with keenness by the outside world. China acquired its first (and as yet only) ice-strengthened research vessel in 1993; in 2004, the Chinese Arctic and Antarctic Administration set up an Arctic research base in Svalbard, Norway. Its Arctic engagements have expanded during the past decade from an early focus on scientific research, orchestrated by polar research agencies more heavily engaged in Antarctic than in Arctic research.

China's Arctic policy document is thorough and specific, reflecting a longstanding process of developing regional priorities and defining four principles: respect, cooperation, win—win results, and sustainability. “Respect” and “cooperation” refer primarily to international institutions, notably the UN Law of the Sea Convention (LOSC) and the network of “global, regional, multilateral and bilateral channels” for facilitating joint endeavors [China's Arctic Policy, 2018, part III]. Reciprocity is highlighted — that coastal states must respect the rights that non-Arctic states enjoy in the region—a point reiterated in official Chinese statements on the Arctic over the past decade. A speech by the Assistant Minister of Foreign Affairs, Hu Zhengyue, on a visit to Svalbard in 2009 was the first prominent articulation of how China perceives its role in this region. Only slightly modified, this speech titled “China's view on Arctic cooperation” was published on the Ministry website, indicating that it represented official policy [Bekkevold, 2015]. Like the 2018 policy document, the 2009 speech reflects China's longstanding foreign-policy line of reassuring the outside world that it accepts the international order [Zhang Feng, 2012; Chen, 2011]. Three points emphasized by the Assistant Minister in 2009 are no less prominent in the 2018 official policy document: the requirements un-

der LOSC for cooperation with non-Arctic states on matters such as shipping, the gains derivable from joint scientific research and peaceful pursuit of win—win opportunities, and the transregional effects of Arctic environmental change [Hu, 2010].

How one's own country is affected by Arctic environmental change is a prominent and recurrent feature of all Asian-state policy statements on the Arctic, explicitly justifying a greater scientific presence in the region and implicitly suggesting some level of stakeholder saliency [Stokke, 2014; Roseth, 2014; Jakobson and Peng, 2012].

The third principle put forward in Chinese policy, “win—win results”, has become increasingly prominent in official statements and was in 2015 already cited among the central norms underlying China's practice in the Arctic [Zhang, 2015]. The term, with variants like “common interest” or “mutual benefit”, occurs throughout China's Arctic policy document. Also the final principle, “sustainability”, present in early statements, has become more elaborate and pronounced with time — in the policy document, references to sustainability or environmental or ecological protection are outnumbered only by those to “China”.

China's Arctic policy devotes considerable attention to maritime transport, and makes some bold claims: “The utilization of sea routes and exploration and development of the resources in the Arctic may have a huge impact on the energy strategy and economic development of China ... (and) China's capital, technology, market, knowledge and experience is expected to play a major role in expanding the network of shipping routes in the Arctic and facilitating the economic and social progress of the coastal States along the routes”[China's Arctic Policy, part II]. Shipping is mentioned first among the economic sectors of interest to China—but references to the economy appear only *after* China's policies and positions concerning scientific research and protection of the Arctic environment are elaborated. Highlights include the “constructive role” China has played in “the formulation of Arctic-related international rules”, presumably including the negotiation of the legally binding Polar Code under the International Maritime Organization, as well as the “Polar Silk Road” branch of the broader infrastructure project known as the Belt and Road Initiative (see below).

The four principles articulated in China's Arctic policy sit well with Bennett's argument that China is systematically building two mutually re-

inforcing narratives to gain legitimacy as a regional stakeholder: one territorial, highlighting its “near-Arctic” location and involvement in Arctic research, and one globalist, highlighting the extra-regional impacts of Arctic change [Bennett, 2015].

## Bureaucratic involvement

China’s slow pace in publishing an Arctic policy document is in line with its generic foreign-policy approach, originally advanced by Deng Xiaoping, of seeking to avoid unnecessary alarm about the country’s gradually increasing financial and geopolitical weight [Chen, 2011, Peng and Wegge, 2015; Tonami; Zhang, 2012]. It also reflects the high degree of fragmentation typical of Chinese foreign policy, with the Party, the government, and the military offering largely separate paths for influencing the many issues that never reach the main coordinating mechanism, the Leading Small Group for Foreign Affairs [Kim, 2012; Chen, 2011].

In the development of China’s Arctic policy, no single bureaucratic entity has had an aggregating role—and the ministry responsible for shipping has not been much involved. The Ministry of Foreign Affairs coordinates China’s participation in the Arctic Council as well as its “track-2” level of Arctic diplomacy—attendance at salient international Arctic conferences arranged by non-governmental organizations. Two salient track-2 annual events are the Arctic Frontiers in Tromsø (Norway) and the Arctic Circle in Reykjavik (Iceland); China has used both venues for articulating its views on Arctic affairs [Su and Lanteigne, 2018]. Since 2017, the ministry has had a special representative for Arctic affairs, but the governmental agency with the broadest scope of Arctic-relevant expertise, widely portrayed as the pivotal player in China’s Arctic activities, was the State Oceanic Administration (SOA) under the Ministry of Land and Resources [Jakobson and Peng, 2012; Zhang, 2012]. The SOA was responsible for marine research, marine environmental protection, as well as some maritime industries other than shipping proper. It was also the lead agency for the Chinese Arctic and Antarctic Administration, orchestrator of polar expeditions, and headed the Chinese Advisory Committee for Polar Research (CACPR). In 2018, the ministerial structure was changed: the SOA was dismantled, and most of its functions were transferred to the new Ministry

of Natural Resources [State Council, 2018]. The Chinese Arctic and Antarctic Administration became an agency under this Ministry.

Because the CACPR serves as a linchpin between polar research organizations and relevant governmental or military bureaucracies, institutional membership offers a low-threshold indicator of Arctic interest among Chinese agencies. Interestingly, China's Ministry of Transport, responsible for the world's biggest shipping industry, which is often portrayed as eyeing northern sea routes with special interest, is not among the CACPR members—unlike a large number of other ministries or agencies under the State Council, as well as the People's Liberation Army Headquarters of the Central Staff [*Wang*, 2018].

## Economic commitment

Rather than focusing on Arctic opportunities, an analysis of the material interests that China may have in Arctic sea routes must start with its maritime policies and the shipping-sector characteristics. Only this point of departure can provide a realistic picture of the extent of interest in Arctic shipping and help clarify whether other factors, like geopolitical considerations, affect China's involvement in Arctic shipping.

When the Northern Sea Route (NSR) was opened to foreign vessels in 1991, the international shipping community showed little interest — partly due to unattractive commercial and administrative conditions but also to the perception that ice remained a major obstacle, posing severe risks likely to generate prohibitive insurance costs [*Sæther*, 2000]. Twenty years later, the combination of climate change, receding ice-cover, and rising prices on Arctic natural resources had drastically boosted global interest in the NSR. Russian authorities had begun promoting it actively, and several practical steps had improved conditions for international usage [*Moe*, 2014]. The first transit sailing through the entire route without entering a Russian port occurred in 2010. Steadily rising numbers of international sailings took place in subsequent years, some using the entire North-East passage but most bringing raw materials from Russian ports to Europe or Asia. A host of scholarly articles appeared, most of them concluding that the NSR could become a regular transport route in the near future (e.g. [*Verny and Grigentin*, 2009]).

## Concrete shipping activities

Shipping opportunities in the Arctic also attracted industrial attention in China. In 2010 L. Jakobson identified an internal Chinese debate beginning around 2008 on China's role in the Arctic, with an emphasis on maritime issues and especially the attraction of a shorter sailing route to Europe and the US East Coast [Jakobson, 2010]. Subsequently, several articles were published in English-language journals, detailing the attractions of a shorter sailing route to the Atlantic and giving the outside world an impression of strong Chinese commitment to exploring the Arctic routes. Zhang and associates argued that, under certain conditions, container traffic on the Northern Sea Route could reach up to 1180 million TEUs by 2030, corresponding to 50 % of expected volumes between the North Pacific and Northwestern Europe [Zhang et. al., 2013]. (TEU refers to the twenty-foot equivalent unit used to indicate the capacity of container ships and terminals). Such huge figures took on a life of their own and were soon interpreted as official predictions rather than the theoretical exercise they in fact were [Zhou, 2013; China plans, 2013]. The impression of a comprehensive Chinese maritime strategy towards the Arctic was reinforced by the cruise in August/September 2012 by the Chinese icebreaker research vessel *Xuelong* (Snow Dragon) belonging to the Polar Research Institute of China, for the first time traversing the Arctic Ocean, including the NSR [Icebreaker Xuelong, 2012]. Chinese interest in commercial exploitation of Arctic shipping was also reflected in the effort to send a ship through the NSR on an experimental voyage in 2013. The journey with the combined bulk carrier/container ship *Yong Shen* in August/September 2013 drew headlines worldwide. *China Daily* quoted industry experts as saying: "Cosco Shipping Co's new shortcut route to Europe and North America via the Arctic Northeast Passage is expected to change China's industrial layout in its coastal provinces and reshape the prospects for the global shipping sector" [Arctic trade, 2013].

But how strong was the commitment by the Chinese shipping sector? In sharp contrast to the optimistic projections by Chinese scholars, interviews and surveys among Chinese shipping companies conducted in 2013 indicated a striking dis-interest in Arctic routes among Chinese shipping companies [Huang et. al., 2015]. COSCO was the sole company to announce specific plans for exploring the NSR, with the *Yong Shen* sailing as



the only one scheduled. However, in 2015, COSCO—which presents itself as the world’s largest maritime operator and provider of logistics services—announced that it would start a regular container shipping service through the Arctic [China plans, 2015] and in early 2016 it agreed with the ABS classification society on trans-arctic shipping development, aiming to “expand COSCO’s use of the Northeast Passage for more regular trading, explore navigation in Northwest Passage, and develop ice-classed vessels”. [ABS, COSCO Sign, 2016]

Such statements can be interpreted as expressions of keen interest in Arctic shipping from a major player. However, actual shipping activity has remained modest. In 2014, not a single ship under Chinese flag transited the whole NSR, in 2015 only one (*Yong Shen* again) completing two transits. In 2016 an additional vessel — *Tian Xi* — was employed. The two ships completed six transits [Centre for High North Logistics]. In 2017 there were three sailings westwards and two eastwards [Balmasov, 2018], and in 2018 four in each direction [Chen, 2019].

Chinese companies have also been engaged in destination shipping. In 2012 and 2013 there were, respectively, five and four sailings into China; six and two out of China. In 2014 there was no traffic; 2015 and 2016 saw two and five destination sailings respectively [Balmasov, 2017]. The actual numbers were higher in 2017, perhaps as many as 12 [Balmasov, 2018], including also other Chinese shipping companies than COSCO. The accuracy of all figures for reported sailings can be questioned because of unclear definitions, but it is clear, that most of the destination sailings went to Sabetta, with materials and equipment for the port and the Yamal Liquefied natural gas plant. These transports were conducted mainly by COSCO’s division for ultra-heavy and super-large transport. That development project was completed in 2017, but extension of the Sabetta port and new hydrocarbon development projects in the same region will spur demand for similar shipping services.

Shipment of liquefied natural gas (LNG) from Yamal is in itself giving a large boost to Arctic destination shipping, and Chinese shipping companies will be heavily involved. There are Chinese owner interests in 14 of the 15 icebreaking LNG carriers constructed or under construction in South Korea. Chinese companies are partnering in three joint ventures with shipping companies from Japan, Greece and Canada—but all the carriers will be operated by the non-Chinese partners. That arrangement unders-

cores China's lack of experience in Arctic shipping operations, but also the financial strength of Chinese companies and their determination to take part in projects that can be termed "strategic".

All the same, Chinese shipping activity in the Arctic falls short of the expectations created a few years ago. There has been no boom in Chinese Arctic shipping—certainly not in the container segment that formed the basis for those expectations. China's very modest use of the NSR for transit must be seen in connection with the generally weak development of international transit traffic there, the annual number of full international NSR transits, defined as sailing from a non-Russian port directly to a non-Russian port, remain very limited.

In addition, problems in the Chinese shipping industry unrelated to the Arctic have played a role. Soon after the trial journey in 2013, it became clear that COSCO was in deep financial trouble due to over-contracting of ships [China COSCO, 2013]; in late 2015, it was announced that the company would merge with China Shipping Group, another state-owned shipping holding [China's cabinet, 2015]. The merger entailed a major reorganization of the state-owned Chinese shipping industry, spurred by overcapacity in the global shipping market.

Moreover, the ultimate potential of the NSR for China may be questioned. As noted by Humpert, "trade with Northern Europe, the region most relevant to Arctic shipping, accounts for just 2.9 percent of China's international trade" [Humpert, 2013]. There is little bulk trade between the regions, and container shipping, which has the largest cargo potential, has operational and commercial limitations in the Arctic, because of unpredictable ice conditions, depth restrictions and lack of markets *en route*. Since 2013, announcements of upcoming container routes have tended to be brief and unspecific on implementation schedule, scope and service frequency, indicating that COSCO prefers to keep longer-term options open. But in 2018, the company announced that three new 36,000 DWT ice-class multi-purpose carriers<sup>1</sup> would be ready in the course of the year [Arctic Shipping Route Normalization, 2018]. Intended as the company's main operating ships in the Arctic, they will be used to establish a route

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<sup>1</sup> Deadweight tons (DWT) — грузоподъемность судна в тоннах. Здесь имеются в виду многоцелевые суда ледового класса грузоподъемностью 36 тыс. тонн (Прим. ред.).

with three to four westbound and four to six eastbound voyages annually [Arctic Shipping Route Normalization, 2018]. COSCO realizes that the ships will not be filled up with cargo initially; the company is prepared to conduct a loss-making operation for some time—not unusual in connection with Chinese infrastructure investments. This is clearly an important step, but a relatively cautious one.

How much of this development is commercially driven, and how much is dictated by political priorities? A company like COSCO must take political signals into account. According to the head of the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC), which is the chief regulator of Chinese state-owned assets, “state firms should become ‘the most trustworthy’ entities upon which the party and the country rely and an important force for China’s ambitious trade and infrastructure strategy, known as the Belt and Road initiative” [Wu, 2017]. This implies that state companies will invest some of their resources to help realize the government’s ambitions.

## The Polar Silk Road

The framework for China’s international transport initiatives is the far-flung BRI (*Silk Road Economic Belt and Maritime Silk Road*) initiative first presented in 2013. The initiative — or plan— is a broad policy for integrating China with world markets, including the establishment of new transport routes. At the core is a vision of new railway, road and pipeline connections via central Asia and Russia to Europe, with new shipping and logistics chains in Asia [One belt, one road, 2015]. In the 2015 Action Plan released jointly by the National Development and Reform Commission, the Ministry of Foreign Affairs and the Ministry of Commerce, the list of potential infrastructure and logistics developments was very long—but the Arctic was *not* mentioned [Vision, 2015]. True, the Silk Road Fund, established in 2014, has invested in the Yamal LNG project in Russia’s Arctic, indicating, according to Bennett, that the initiative is also about access to resources [Bennett, 2015]. In the 13th Five-Year Plan for Marine Development (2016–2020), however, Arctic shipping was not mentioned at all [NDRC and SOA, 2015].

Things changed when a new “Vision for Maritime Cooperation under the Belt and Road Initiative” was released on June 20, 2017. It stated that “Another blue economic passage is also envisioned leading up to Europe via the Arctic Ocean” [Full text, 2017]. There has been some discussion about the origin of this initiative, with Chinese sources indicating that it was initially a Russian idea [Yang and Tillman, 2018]. Considerable frustration existed in Russia that the BRI seemed to entail the establishment of new transport routes largely bypassing Russia, at a time when Russia had ambitious ideas for developing its NSR. In the autumn of 2015 deputy premier Dmitry Rogozin, who had a coordinating role in Russia’s Arctic policy, proposed the creation of a “Cold Silk Road”, explicitly linking the NSR to the Belt and Road Initiative [Rogozin, 2015a, b]. However, China seemed reluctant to extend the BRI to the Arctic; and it was only with the “Vision document” in June 2017 mentioned above that China declared interest, but without specific commitment to develop the route: “China supports efforts by countries bordering the Arctic in improving marine transportation conditions, and encourages Chinese enterprises to take part in the commercial use of the Arctic route”. [Full text, 2017]. This formulation places the Arctic route in a different category than other maritime Silk Road stretches where specific investments and diplomatic efforts are underway. Gao Feng, China’s special representative for the Arctic, reportedly remarked that it was Russia who asked China to add the Northern Sea Route to the Belt and Road initiative [DeGeorge, 2018]. When Xi Jinping met Prime Minister Medvedev in November 2017, support for a Polar Silk Road was couched in very general terms in the official statement [Zhang & Zhang, 2017].

China’s long-awaited 2018 Arctic policy document again encouraged Chinese enterprises “to participate in the infrastructure construction for these routes and conduct commercial trial voyages in accordance with the law to pave the way for their commercial and regularized operation”. [China’s Arctic Policy, 2018: Para. IV.3]. But the document strongly stressed international cooperation in developing Arctic shipping routes and did not mention Russia specifically. It seems that Chinese authorities do not want their vision of a Polar Silk Road — or a “Silk Road on Ice” — to be seen as an appendix to Russian plans, although they realize that Russia must play a key role in any development of trans-Arctic shipping for the foreseeable future.

Since then the “Polar Silk Road” (PSR) has expanded to become a framework for Chinese ideas about increased connectivity as well as economic development in the Arctic, and China has been seeking endorsement for the ideas also from other Arctic countries than Russia. These efforts have had limited success, an important reason being that PSR has become so all-encompassing and vague that it is difficult to say what signing up to the PSR really means. Norwegian officials have explicitly stated that Norway has joined neither the BRI nor the PSR, but will review individual projects. Denmark has rejected a Chinese proposal to invest in an airport in Greenland, linked to the Polar Silk Road concept [Greenlands picks, 2018]. Finland and Iceland have been more forthcoming, though.

Even as PSR continues to be highlighted by Chinese officials linked to China’s Arctic policy-making [Nilsen, 2019], the Polar Silk Road, and indeed the Arctic in general, was conspicuously absent in the long list of “deliverables” from the Second Belt and Road Forum for International Cooperation, held in Beijing in April 2019, with President Putin as well as President Xi present [List of deliverables, 2019]. (Russia was mentioned 16 times in the document). This could be interpreted as the Chinese taking a step back, recognizing that PSR is an immature concept, which should not be identified too closely with the more developed elements of BRI.

## Summing up China’s shipping interests

Even if the development of Arctic shipping corresponds with China’s broad policy goals, we find no evidence that Arctic options enjoy high priority. Chinese shipping companies are encouraged—but not strongly—to take part in Arctic shipping. To Chinese policymakers, it would appear commercially advantageous for Chinese companies to be involved in the opening of a new international transport route, and cooperation in developing NSR infrastructure would sit well with the numerous proposals under the Russian—Chinese partnership agreement on more Chinese foreign direct investment in Russia [Bennett, 2015]. A financial mechanism was created in 2018 with a USD 9.5 billion credit line from China, aimed at “joint integration processes on the area of the Eurasian Economic Union and the Chinese Belt and Road initiative”, with the NSR mentioned as a priority [Staalesen, 2018]. However, even if commitments to this Arctic seaway

would be positive for bilateral relations with Russia, the Chinese authorities are unlikely to undertake large-scale investments without serious consideration of the long-term commercial potential. For Chinese commercial shipping companies, the time horizon in evaluating profitability is a short one. The steps they are taking are important in an Arctic context, but very small and cautious measured against the global activities of Chinese shipping. There are also political obstacles in the bilateral relationship that may slow down developments. Chinese representatives have occasionally alluded to the need for some sort of joint management of the NSR, if China is to invest heavily in infrastructure [Sevmorput', 2016; *Bennett*, 2017]. This has remained totally unacceptable to Russia.

China's interest in Arctic shipping is real but cautious, and expectations are considerably lower today than in 2012/2013. Despite optimistic projections, transits through the entire North-East passage have remained rare; the only large-scale financial commitments by Chinese operators to Arctic shipping opportunities are the investments in custom-made ice-breaking gas carriers serving the major resource development project in the Russian North, Yamal LNG.

Shipping is not quite as powerful as driver of the Arctic aspirations pursued by China as many believe. Soberness in evaluating maritime business opportunities is evident. China's Arctic policy is upbeat on Arctic shipping options, subsuming them under the larger Belt and Road Initiative as a "Polar Silk Road". However, the Chinese shipping industry's actual moves into the region have been cautious.

The political attention China pays to the Arctic is clearly rising, but not as steeply as the rise in attention to Asia among Arctic-policy analysts. Claims to saliency as Arctic stakeholder are based primarily on the effects of Arctic climatic developments on Chinese territory and on the rights all non-coastal states enjoy under international law. However, China also emphasizes its own contributions to scientific investigations in the Arctic as well as the relevance of their capital and technology for regional economic development. In China's policy document, those reasons are reinforced by explicit references to its own prominence in global governance and international affairs. China underscores that it fully respects the sovereign rights of coastal states and has not explicitly challenged the unilateral shipping regulations that Canada and Russia have established for ice-covered waters adjacent to their coasts. At regional and global levels China has ma-

intained a relatively low profile, in shipping-oriented activities under the Arctic Council and in the negotiations of a legally binding Polar Code under the International Maritime Organization.

### *Библиографический список*

*Нильсен Томас.* Китай хочет играть более активную роль в Арктике // Новостной портал The Barents Observer. 14.05.2019. URL: <https://thebarentsobserver.com/ru/arktika/2019/05/kitay-hochet-igrat-bolee-aktivnyu-rol-v-arktike> (дата обращения: 27.05.2019).

Рогозин предложил создать «холодный Шелковый путь» // Lenta.ru. 07.12.2015. URL: <https://lenta.ru/news/2015/12/07/rogozin/> (дата обращения: 27.05.2019).

Рогозин: Северный морской путь — перспективный проект работы с КНР // РИА-Новости. 12.10.2015. URL: <https://ria.ru/20151012/1300440612.html> (дата обращения: 27.05.2019).

Севморпуть требует особой ответственности // Морские вести России. 2016, № 6. URL: <http://www.morvesti.ru/tems/detail.php?ID=63778> (дата обращения: 27.05.2019).

Цюаньго хайян цзинци фачжань «шисаньбу» гуйхуа : [13-й пятилетний план национального морского развития] // Гоцзя фачжань гайгэ вэй гоцзя хайян : [Государственная морская администрация и Комиссия национального развития и реформ]. URL: <http://www.ndrc.gov.cn/zcfb/zcfbghwb/201705/U020170516530439547022.pdf> (дата обращения: 27.05.2019). (На кит. яз.).

ABS, COSCO Sign Cooperation Agreement // Press Release, American Bureau of Shipping, February 2, 2016. URL: <http://portnews.ru/news/213948/> (accessed: 27.05.2019).

Arctic Shipping Route Normalization // COSCO Shipping Specialized Carriers Co. Presentation. Oslo, March 9, 2018.

Arctic trade route opens // China Daily, 10.08.2013. URL: [http://www.chinadaily.com.cn/china/2013-08/10/content\\_16884390.htm](http://www.chinadaily.com.cn/china/2013-08/10/content_16884390.htm) (accessed: 27.05.2019).

*Balmasov S.* Detailed analysis of ship traffic on the NSR in 2017 based on AIS data, presentation at Arctic Shipping Forum, Helsinki, April 17, 2018. URL: [http://arctic-l.io.com/wp-content/uploads/2018/10/Sergey\\_Balmasov\\_17-04-18\\_Helsinki.pdf](http://arctic-l.io.com/wp-content/uploads/2018/10/Sergey_Balmasov_17-04-18_Helsinki.pdf)

*Balmasov S.* Detailed analysis of the 2016 season at the NSR Ship movements based on AIS data, presentation at Arctic Shipping Forum, Helsinki, April 25, 2017. URL: [http://arctic-l.io.com/wp-content/uploads/2018/05/news\\_2017-04-25\\_Helsinki.pdf](http://arctic-l.io.com/wp-content/uploads/2018/05/news_2017-04-25_Helsinki.pdf)

*Bekkevold Jo Inge*. High North: High Politics or Low Tension // Asian Countries and the Arctic Future / Leiv Lunde, Jian Yang and Iselin Stensdal (eds). Singapore: World Scientific Publishing, 2016. 341 p.

*Bennett Mia*. China's Belt and Road Initiative Moves into the Arctic // Cryopolitics, 2017, June 27. URL: <https://www.arctictoday.com/chinas-belt-and-road-initiative-moves-into-the-arctic> (accessed: 27.05.2019).

*Bennett Mia*. How China Sees the Arctic: Reading between Extraregional and Intraregional Narratives // Geopolitics. 2015. № 20.

*Bennett Mia*. The Silk Road Goes North: Russia's role within China's Belt and Road Initiative // Journal of Area Development and Policy. 2015. № 1.

Centre for High North Logistics (CHNL) / NSR (Northern Sea Route) Information Office. April 25, 2017.

*Chen Feng*. Sustainable Arctic Shipping Service by COSCO Shipping Specialized Carrier // Presentation at Arctic Circle China Forum. Shanghai. 9 May, 2019.

*Chen Gang*. China's Emerging Arctic Strategy // Polar Journal. 2011. № 2.

China Cosco director quits amid probe // South China Morning Post. 09.11.2013.

China plans first commercial trip through Arctic shortcut in 2013 // Reuters. 12.03.2013. URL: <http://www.reuters.com/article/shipping-china-idUSL6N0C4F9720130312> (accessed: 27.05.2019).

China plans regular shipping services through Arctic // AFP. 27.10.2015. URL: <https://www.yahoo.com/news/china-plans-regular-shipping-services-arctic-072716590.html> (accessed: 27.05.2019).

China's Arctic Policy // The State Council Information Office of the People's Republic of China. Beijing, 2018. URL: [http://english.gov.cn/archive/white\\_paper/2018/01/26/content\\_281476026660336.htm](http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm) (accessed: 27.05.2019).

China's Cabinet Approves Merger of Cosco Group // China Shipping / Bloomberg, December 11, 2015. URL: <https://www.bloomberg.com/news/articles/2015-12-11/china-s-cabinet-approves-merger-of-cosco-group-china-shipping> (accessed: 27.05.2019).

*DeGeorge Krestia*. Why Asia and Europe are positioned to define the future of the Arctic // Arctic Today. 20.12.2018. URL: <https://www.arctictoday.com/asia-europe-positioned-define-future-arctic/> (accessed: 27.05.2019).

Full text: Vision for Maritime Cooperation under the Belt and Road Initiative // Xinhua. 20.07.2018. URL: [http://news.xinhuanet.com/english/2017-06/20/c\\_136380414.htm](http://news.xinhuanet.com/english/2017-06/20/c_136380414.htm) (accessed: 27.05.2019).

Greenland picks Denmark as airport project partner over Beijing // Reuters. 10.09.2018. URL: <https://www.reuters.com/article/us-china-silkroad-greenland/greenland-picks-denmark-as-airport-project-partner-over-beijing-idUSKCaand-pic> (accessed: 27.05.2019).



*Hu Zhengyue*: China's View on Arctic Cooperation / Ministry of Foreign Affairs of the PRC. URL: [http://www.fmprc.gov.cn/mfa\\_eng/wjb\\_663304/zzjg\\_663340/tyfls\\_665260/tfsxw\\_665262/t812046.shtml](http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/tyfls_665260/tfsxw_665262/t812046.shtml) (accessed: 27.05.2019).

*Huang Linyan, Lasserre Frederic, Alexeeva Olga*. Is China's interest for the Arctic driven by Arctic shipping potential? // *Asian Geographer*. 2015. № 32.

*Humpert M.* The Future of Arctic Shipping: a New Silk Road for China? Washington, DC: The Arctic Institute, 2013.

Icebreaker Xuelong concludes Arctic expedition // *China Daily (USA)*. 27.09.2012. URL: [http://usa.chinadaily.com.cn/china/2012-09/27/content\\_15787867.htm](http://usa.chinadaily.com.cn/china/2012-09/27/content_15787867.htm) (accessed: 27.05.2019).

*Jakobson Linda*. China Prepares for an Ice-Free Arctic // *SIPRI Insights on Peace and Security*. 2010. № 2.

*Jakobson Linda, Jingchao Peng*. China's Arctic Aspirations // *SIPRI Policy Paper*. 2012. № 34.

*Kim Heungkyu*. Principles and Practices in Chinese Foreign Policymaking: Implications for its South Korea Policies // *Korean Journal of Defense Analysis*. 2012. № 24.

List of Deliverables of the Second Belt and Road Forum for International Cooperation. Beijing, 25—27 April, 2019. URL: <http://www.beltandroadforum.org/english/n100/2019/0427/c36-1312.html> (accessed: 27.05.2019).

*Melia N., Haines K., Hawkins E.* Sea Ice Decline and 21st Century Trans-Arctic Shipping Routes // *Geophysical Research Letters*. 2016. № 43.

*Menon and DNV GL*. The Leading Maritime Nations of the World 2018. URL: <https://www.dnvgl.com/maritime/publications/leading-maritime-nations-of-the-world-2018-study.html> (accessed: 27.05.2019).

*Moe Arild*. The Northern Sea Route: Smooth Sailing Ahead? // *Strategic Analysis*. 2014. № 38.

“One belt, one road”: China's great leap outward // *China Analysis, European Council on Foreign Relations*. 2015, June. URL: [http://www.ecfr.eu/page/-/China\\_analysis\\_belt\\_road.pdf](http://www.ecfr.eu/page/-/China_analysis_belt_road.pdf) (accessed: 27.05.2019).

*Peng Jingchao, Wegge Njord*. China's bilateral diplomacy in the Arctic // *Polar Geography*. 2015. № 38.

*Roseth Tom*. Russia's China Policy in the Arctic // *Strategic Analysis*. 2014. № 38.

*Sæther Rolf*. What Do We Need? The Shipping Industry's Views on the Northern Sea Route's Potential and Problems // *The 21st Century — Turning Point for the Northern Sea Route?* / Ed. Claes Lykke Ragner. Dordrecht: Kluwer Academi, 2000. P. 35—38.

*Staalesen Atle*. Chinese Bank Invests in Russia's Northern Sea Route // Eye on the Arctic, June 12, 2018. URL: <http://www.rcinet.ca/eye-on-the-arctic/2018/06/12/china-russia-arctic-shipping-infrastructure-northern-sea-route> (accessed: 27.05.2019).

State Council 2018. China to set up ministry of natural resources. URL: [http://english.gov.cn/state\\_council/ministries/2018/03/13/content\\_281476076304160.htm](http://english.gov.cn/state_council/ministries/2018/03/13/content_281476076304160.htm) (accessed: 27.05.2019).

*Stokke Olav Schram*. Asian Stakes and Arctic Governance // Strategic Analysis. 2014. № 38.

*Su Ping, Lanteigne Marc*. China's Developing Arctic Policies: Myths and Misconceptions // Journal of China and International Relations. 2018. № 3.

*Tonami Aki*. Asian Foreign Policy in a Changing Arctic: The Diplomacy of Economy and Science at New Frontiers. Basingstoke, UK: Palgrave Macmillan, 2016. xv + 140 p.

*Verny C., Grigentin Jerome, Grigentin Christophe*: Container shipping on the Northern Sea Route // International Journal of Production Economics. 2009. № 122. P. 107—117.

Vision and actions on jointly building Silk Road Economic Belt and 21st-century Maritime Silk Road" / National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China (with State Council authorization), March, 2015. URL: [http://en.ndrc.gov.cn/newsrelease/201503/t20150330\\_669367.html](http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html) (accessed: 27.05.2019).

*Wang Chuanxing*. Tongji University, personal communication, 17 December, 2018.

*Wu Wendy*. How the Communist Party controls China's state-owned industrial titans // South China Morning Post. 17.07.2017. URL: <http://www.scmp.com/news/china/economy/article/2098755/how-communist-party-controls-chinas-state-owned-industrial-titans> (accessed: 27.05.2019).

*Yang Jian, Tillman Henry*. On the International Cooperation in the Framework of Polar Silk Road, Arctic and Beyond — Pathways to the Future. Seoul/Honolulu, Korea Maritime Institute/East—West Center, 2018.

*Zhang Feng*. Rethinking China's Grand Strategy: Beijing's Evolving National Interests and Strategic Ideas in the Reform Era // International Politics. 2018. № 49.

*Zhang Ming*. China in the Arctic: Practices and Policies. Presentation at 2015 Arctic Circle Assembly. Reykjavik, 16—18 October, 2015.

*Zhang X., Shou J., Zhou H.* Scale and Scope of Maritime Cargoes through the Arctic Passages // Advances in Polar Science. 2013. № 24. P. 158—166.

*Zhang Yunbi, Zhang Yue*. Xi Backs Building of Polar Silk Road // China Daily. 02.11.2017. URL: [http://www.chinadaily.com.cn/china/xismoments/2017-11/02/content\\_34012484.htm](http://www.chinadaily.com.cn/china/xismoments/2017-11/02/content_34012484.htm) (accessed: 27.05.2019).

## References

- ABS, COSCO Sign Cooperation Agreement (2016), *Press release, American Bureau of Shipping, February 2*. URL: <http://portnews.ru/news/213948/> (accessed: 27 May, 2019).
- Arctic Shipping Route Normalization (2018), *COSCO Shipping Specialized Carriers Co. Presentation*, Oslo, March 9.
- Arctic trade route opens (2013), *China Daily*, August 10. URL: [http://www.chinadaily.com.cn/china/2013-08/10/content\\_16884390.htm](http://www.chinadaily.com.cn/china/2013-08/10/content_16884390.htm) (accessed: 27.05.2019).
- Balmasov, S.* (2017). Detailed analysis of the 2016 season at the NSR Ship movements based on AIS data, presentation at Arctic Shipping Forum, Helsinki, April 25. URL: [http://arctic-lio.com/wp-content/uploads/2018/05/news\\_2017-04-25\\_Helsinki.pdf](http://arctic-lio.com/wp-content/uploads/2018/05/news_2017-04-25_Helsinki.pdf)
- Balmasov, S.* (2018). Detailed analysis of ship traffic on the NSR in 2017 based on AIS data, presentation at Arctic Shipping Forum, Helsinki, April 17. URL: [http://arctic-lio.com/wp-content/uploads/2018/10/Sergey\\_Balmasov\\_17-04-18\\_Helsinki.pdf](http://arctic-lio.com/wp-content/uploads/2018/10/Sergey_Balmasov_17-04-18_Helsinki.pdf)
- Bekkevold, Jo Inge* (2016). High North: High Politics or Low Tension, Asian Countries and the Arctic Future. Leiv Lunde, Jian Yang and Iselin Stensdal (eds), Singapore: World Scientific Publishing. 341 p.
- Bennett, Mia* (2015). How China Sees the Arctic: Reading between Extraregional and Intraregional Narratives, *Geopolitics*, No. 20.
- Bennett, Mia* (2015). The Silk Road Goes North: Russia's role within China's Belt and Road Initiative, *Journal of Area Development and Policy*, No. 1.
- Bennett, Mia* (2017). China's Belt and Road Initiative Moves into the Arctic, *Cryopolitics*, 27 June. URL: <https://www.arctictoday.com/chinas-belt-and-road-initiative-moves-into-the-arctic/> (accessed: 27 May, 2019).
- Centre for High North Logistics (CHNL), *NSR (Northern Sea Route) Information Office*, April 25, 2017.
- Chen Feng* (2019). Sustainable Arctic Shipping Service by COSCO Shipping Specialized Carrier. Presentation at Arctic Circle China Forum, Shanghai, 9 May.
- Chen Gang* (2011). China's Emerging Arctic Strategy, *Polar Journal*, No. 2.
- China Cosco director quits amid probe (2013), *South China Morning Post*, November 9.
- China plans first commercial trip through Arctic shortcut in 2013 (2013). *Reuters*, March 12. URL: <http://www.reuters.com/article/shipping-china-idUSL6N0C4F9720130312> (accessed: 27 May, 2019).

China plans regular shipping services through Arctic (2015), *AFP*, October 27. URL: <https://www.yahoo.com/news/china-plans-regular-shipping-services-arctic-072716590.html> (accessed: 27 May, 2019).

China's Arctic Policy (2018). The State Council Information Office of the People's Republic of China, Beijing. URL: [http://english.gov.cn/archive/white\\_paper/2018/01/26/content\\_281476026660336.htm](http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm) (accessed: 27 May, 2019).

China's Cabinet Approves Merger of Cosco Group, China Shipping (2015). *Bloomberg*, December 11. URL: <https://www.bloomberg.com/news/articles/2015-12-11/china-s-cabinet-approves-merger-of-cosco-group-china-shipping> (accessed: 27 May, 2019).

*DeGeorge, Krestia* (2018). Why Asia and Europe are positioned to define the future of the Arctic, *Arctic Today*, 20 December. URL: <https://www.arctictoday.com/asia-europe-positioned-define-future-arctic/> (accessed: 27 May, 2019).

Full text: Vision for Maritime Cooperation under the Belt and Road Initiative (2018), Xinhua, 20 June. URL: [http://news.xinhuanet.com/english/2017-06/20/c\\_136380414.htm](http://news.xinhuanet.com/english/2017-06/20/c_136380414.htm) (accessed: 27 May, 2019).

Greenland picks Denmark as airport project partner over Beijing (2018). *Reuters*, 10 September. URL: <https://www.reuters.com/article/us-china-silkroad-greenland/greenland-picks-denmark-as-airport-project-partner-over-beijing-idUSKCN1LQ2BX> (accessed: 27 May, 2019).

*Hu, Zhengyue* (2010). China's View on Arctic Cooperation, Ministry of Foreign Affairs of the PRC. URL: [http://www.fmprc.gov.cn/mfa\\_eng/wjb\\_663304/zzjg\\_663340/tyfls\\_665260/tfsxw\\_665262/t812046.shtml](http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/tyfls_665260/tfsxw_665262/t812046.shtml) (accessed: 27 May, 2019).

*Huang, Linyan; Lasserre, Frédéric; Alexeeva, Olga* (2015). Is China's interest for the Arctic driven by Arctic shipping potential? *Asian Geographer*. No. 32.

*Humpert, M.* (2013). *The Future of Arctic Shipping: A New Silk Road for China?* Washington, DC: The Arctic Institute.

Icebreaker Xuelong concludes Arctic expedition (2012), *China Daily* (USA), September 27. URL: [http://usa.chinadaily.com.cn/china/2012-09/27/content\\_15787867.htm](http://usa.chinadaily.com.cn/china/2012-09/27/content_15787867.htm) (accessed: 27 May, 2019).

*Jakobson, Linda* (2010). China Prepares for an Ice-Free Arctic, *SIPRI Insights on Peace and Security*, No. 2.

*Jakobson, Linda; Jingchao Peng* (2012). China's Arctic Aspirations, *SIPRI Policy Paper*, No. 34.

*Kim, Heungkyu* (2012). Principles and Practices in Chinese Foreign Policymaking: Implications for its South Korea Policies, *Korean Journal of Defense Analysis*. No. 24.

List of Deliverables of the Second Belt and Road Forum for International Cooperation (2019), Beijing, 25–27 April. URL: <http://www.beltandroadforum.org/english/n100/2019/0427/c36-1312.html> (accessed: 27 May, 2019).

*Melia, N.; Haines, K.; Hawkins, E.* (2016). Sea Ice Decline and 21st Century Trans-Arctic Shipping Routes, *Geophysical Research Letters*. No. 43.

*Menon and DNV GL* (2018). The Leading Maritime Nations of the World 2018. URL: <https://www.dnvgl.com/maritime/publications/leading-maritime-nations-of-the-world-2018-study.html> (accessed: 27 May, 2019).

*Moe, Arild* (2014). The Northern Sea Route: Smooth Sailing Ahead? *Strategic Analysis*. No. 38.

*Nilsen, Thomas* (2019). Kitaj hocet igrat' bolee aktivnuy rol' v Arktike [China wants to play a more active role in the Arctic], *The Barents Observer*, 14 May. URL: <https://thebarentsobserver.com/ru/arktika/2019/05/kitaj-hocet-igrat-bolee-aktivnuy-u-rol-v-arktike> (accessed: 27 May, 2019). (In Russian).

“One belt, one road”: China's great leap outward (2015), *China Analysis, European Council on Foreign Relations*, June. [http://www.ecfr.eu/page/-/China\\_analysis\\_belt\\_road.pdf](http://www.ecfr.eu/page/-/China_analysis_belt_road.pdf) (accessed: 27 May, 2019).

*Peng, Jingchao; Wegge, Njord* (2015). China's bilateral diplomacy in the Arctic, *Polar Geography*. No. 38.

Quánguó haiyáng jīngjì fāzhan “shísānwu” guìhuà (2017) [The 13th Five-year Plan of the national marine economic development], *Guójiā fāzhan gǎigé wěi guójiā haiyáng jú [The State Oceanic Administration and the National Development and Reform Commission]*. URL: <http://www.ndrc.gov.cn/zcfb/zcfbghwb/201705/U020170516530439547022.pdf> (accessed: 27 May, 2019). (In Chinese).

Rogozin predložil sozdat' ‘holodnyj Shelkovyj put’ cherez Arktiku (2015b) [Rogozin proposed to create a 'cold silk road' through the Arctic], *Lenta.ru*, December, 7. URL: <https://lenta.ru/news/2015/12/07/rogozin> (accessed: 27 May, 2019). (In Russian).

Rogozin: Severnyj morskoy put' — perspektivnyj proekt raboty s KNR (2015a) [Rogozin: the Northern sea route' — a promising project to work with China], *RIA-Novosti*, October 12. URL: <https://ria.ru/20151012/1300440612.html> (accessed: 27 May, 2019). (In Russian).

*Roseth, Tom* (2014). Russia's China Policy in the Arctic, *Strategic Analysis*. No. 38.

*Sæther, Rolf* (2000). What Do We Need? The Shipping Industry's Views on the Northern Sea Route's Potential and Problems, The 21st Century — Turning Point for the Northern Sea Route? Ed. Claes Lykke Ragner. Dordrecht: Kluwer Academi: 35–38.

Sevmorput' trebuyet oboj otvetstvennosti (2016) [The Northern sea route requires special responsibility], *Morskie vesti Rossii [Maritime news of Russia]*, No. 6. URL: <http://www.morvesti.ru/tems/detail.php?ID=63778> (accessed: 27 May, 2019). (In Russian).

*Staalesen, Atle* (2018). Chinese Bank Invests in Russia's Northern Sea Route, *Eye on the Arctic*, June 12. URL: <http://www.rcinet.ca/eye-on-the-arctic/2018/06/12/china-russia-arctic-shipping-infrastructure-northern-sea-route> (accessed: 27 May, 2019).

State Council (2018). China to set up ministry of natural resources. URL: [http://english.gov.cn/state\\_council/ministries/2018/03/13/content\\_281476076304160.htm](http://english.gov.cn/state_council/ministries/2018/03/13/content_281476076304160.htm) (accessed: 27 May, 2019).

*Stokke, Olav Schram* (2014). Asian Stakes and Arctic Governance, *Strategic Analysis*. No. 38.

*Su Ping; Lanteigne, Marc* (2018). China's Developing Arctic Policies: Myths and Misconceptions, *Journal of China and International Relations*. No. 3.

*Tonami, Aki* (2016). Asian Foreign Policy in a Changing Arctic: The Diplomacy of Economy and Science at New Frontiers. Basingstoke, UK: Palgrave Macmillan. xv + 140 p.

*Verny, C.; Grigentin Jerome; Grigentin Christophe* (2009): Container shipping on the Northern Sea Route, *International Journal of Production Economics*. No. 122: 107—117.

Vision and actions on jointly building Silk Road Economic Belt and 21st-century Maritime Silk Road" (2015), National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China (with State Council authorization), March. URL: [http://en.ndrc.gov.cn/newsrelease/201503/t20150330\\_669367.html](http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html) (accessed: 27 May, 2019).

*Wang Chuanxing* (2018). Tongji University, personal communication, 17 December.

*Wu, Wendy* (2017). How the Communist Party controls China's state-owned industrial titans, *South China Morning Post*, 17 June. URL: <http://www.scmp.com/news/china/economy/article/2098755/how-communist-party-controls-chinas-state-owned-industrial-titans> (accessed: 27 May, 2019).

*Yang Jian; Tillman, Henry* (2018). On the International Cooperation in the Framework of Polar Silk Road, Arctic and Beyond — Pathways to the Future. Seoul/Honolulu, Korea Maritime Institute/East—West Center.

*Zhang Feng* (2012). Rethinking China's Grand Strategy: Beijing's Evolving National Interests and Strategic Ideas in the Reform Era, *International Politics*. No. 49.

*Zhang Ming* (2015). China in the Arctic: *Practices and Policies*, Presentation at 2015 Arctic Circle Assembly, Reykjavik, 16—18 October.

*Zhang Yunbi; Zhang Yue* (2017). Xi Backs Building of Polar Silk Road, *China Daily*, November 2. URL: [http://www.chinadaily.com.cn/china/xismoments/2017-11/02/content\\_34012484.htm](http://www.chinadaily.com.cn/china/xismoments/2017-11/02/content_34012484.htm) (accessed: 27 May, 2019).

*Zhang, X.; Shou, J.; Zhou H.* (2013). Scale and Scope of Maritime Cargoes through the Arctic Passages, *Advances in Polar Science*, No. 24: 158—66.