

# MP-IDSA

## *Issue Brief*

# Prospects for India–Russia Cooperation in the Arctic

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## **S***ummary*

With climate change, the Arctic region presents new political and economic opportunities. Out of the eight Arctic states, Russia has the largest territorial and maritime extent in the region. Estimate of economic potentials draws Asian states, some of which are observer members in the Arctic Council, to chart their interests in the region. India and Russia maintain comprehensive partnerships in multiple spheres. The Arctic offers new pathways to enhance their relationship especially as India is an observer member. This issue brief aims to highlight all such possible areas of cooperation that could be explored and enhanced between India and Russia in the Arctic.

## Introduction

Prime Minister Narendra Modi in his opening remarks at a recent virtual meeting of Eastern Economic Forum 2021, highlighted the historical and civilisational significance of ‘Sangam’.<sup>1</sup> Calling Vladivostok a true ‘Sangam’ of Eurasia and the Pacific, he emphasised the geo-strategic location of the region in terms of connectivity. The opening up of the Northern Sea Route (NSR) due to Arctic sea-ice melt is potentially making the region an important hub for shipping between Europe and Asia. Simultaneously, the Arctic is opening new opportunities for hydrocarbons and other potential resources that lie unexplored beneath its ice. Russia maintains a dominant position in the Arctic and considers the region as its strategic backyard. The Russian leadership conscious of the economic returns has, over the years, prioritised the Arctic. Having expressed Russia’s ‘superiority’ in the Arctic by renewing its ice-breaker fleets, Russian President Vladimir Putin, in no uncertain terms, ordered for greater investment in infrastructure and mineral extraction in the Arctic while dismissing the US concerns over Russia’s growing military presence. In a recent statement, Putin said that Russia was not doing “anything new” but only “restoring the destroyed infrastructure” in the Arctic.<sup>2</sup> More recently, Russia’s deputy prime minister, Yury Trutnev, anticipated that year-round shipping via the NSR will be possible by 2023.<sup>3</sup> With the sea warming faster in the Arctic than the rest of the world—the current shipping season is about nine months through the NSR—and with evidence of continued warming, an ice-free sea route in all likelihood will be a reality.

India and Russia share a long history of bilateral relations marked recently by 50 years of the Indo-Soviet Treaty signed in 1971 between Prime Minister Indira Gandhi and Soviet leader Leonard Brezhnev. While the Soviet Union imploded in 1991, both Russia and India remain committed to each other’s territorial integrity. Decades later, the two countries signed a strategic partnership in October 2000. The landmark declaration signed by Prime Minister Atal Bihari Vajpayee and President Vladimir Putin envisaged “annual summits to carry forward political dialogues.”<sup>4</sup> The partnership has remained uninterrupted and has developed in numerous sectors ranging from security and defence, healthcare, energy, ship-building, outer space, nuclear technology to several

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<sup>1</sup> **“Prime Minister’s Virtual-Address at Eastern Economic Forum 2021”**, Ministry of External Affairs, Government of India, 3 September 2021.

<sup>2</sup> **“Putin Says ‘No Basis’ for US Concerns Over Russian Military in Arctic”**, *NDTV*, 16 June 2021.

<sup>3</sup> Sam Chambers, **“Russia Anticipates All-year Arctic Transits by as early as 2022”**, *Splash*, 12 October 2021.

<sup>4</sup> **“Arrival Statement of Prime Minister Shri Atal Bihari Vajpayee During his Visit to the Russian Federation”**, Ministry of External Affairs, Government of India, 7 November 2001.

others. Over the years, robust people-to-people contact along with social and cultural ties has developed.

The Arctic, in recent times, has presented a new front of opportunities and cooperation. In fact, when Prime Minister Modi visited Vladivostok in September 2019 for the 20<sup>th</sup> India–Russia Annual Summit, the Arctic was emphasised for the first time. The Joint Statement mentioned, “India looks forward to cooperate with Russia in the Arctic, India has been following the development in the Arctic region with interest and is also ready to play a significant role in the Arctic Council.”<sup>5</sup> A few months later, in January 2020, the Ministry of External Affairs along with Dr Syama Prasad Mookerjee Research Foundation organised the Ganga–Volga Dialogue of Civilisations.<sup>6</sup> The dialogue brought together eminent experts from India and Russia and discussed four themes: education, culture and civilisation; entrepreneurship and innovation; trade routes including inland navigation; and, India, Russia and Greater Eurasia.

Often less emphasised, the Arctic incredibly showcases India’s civilisational connect and soft power. Bal Gangadhar Tilak, a prominent leader of India’s independence movement, in his work, *The Arctic Home in the Vedas* (1903) concluded that the ancestors of India’s ancient Vedic civilisation lived in the Arctic region. It was for the first time that the Arctic was featured in India’s racial debate. Tilak’s thesis of Aryan migration was later challenged by ‘Out-of-India’ proponents who claimed that the Indo-European languages originated in India and moved ‘westwards’. Be that as it may, Tilak’s Arctic findings give a historical legacy that needs to be underscored and his work should be celebrated as a knowledge heritage. Equally, less emphasised is the fact that India’s colonial participation in the Spitsbergen Treaty (1920) along with other countries defined Norway’s sovereignty over the Arctic archipelago of Svalbard.

## Oil and Gas

India is one of the fastest energy consumers in the world and the Arctic presents an opportunity to partner with Russia in exploring hydrocarbon potential. Apart from hydrocarbons, in particular natural gas, the Barents area in the Arctic region presents opportunities for mineral development as well. The Barents has some of the best known mineral deposits and some of the world’s best deep harbours from which to transport

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<sup>5</sup> “**India–Russia Joint Statement During Visit of Prime Minister to Vladivostok**”, Ministry of External Affairs, Government of India, 5 September 2019.

<sup>6</sup> “**India–Russia Ganga–Volga Dialogue of Civilizations (January 22, 2020)**”, Ministry of External Affairs, Government of India, 23 January 2020.

the products. The region is rich in iron-ore and the demand for steel will be critical to India's growing economy.

Russia's oil and gas development projects in the Arctic are being given high priority. The Russian Arctic approximately holds between 3 and 25 per cent of the world's total oil and gas resources.<sup>7</sup> Russia earns more than half of its total export revenues from hydrocarbons. Recently, the Chairman of Russia's State Duma Committee on Energy predicted that since the global hydrocarbon demand will remain stable until at least 2040, Russia's oil and gas companies need to enhance their production capabilities and search for new avenues in the high North and Russia's Far East. Russia's energy outlook has been outlined in the recent national strategy document, *Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2035*.<sup>8</sup> Russia's major state-owned energy companies—Gazprom, Novatek and Rosneft—have already started oil and gas exploration projects in the Arctic region particularly the peninsula of Yamal and Gydan. Following on the line “all that can be extracted must be extracted and sold”<sup>9</sup>, Russia is eager to modernise its oil and gas industry. There are, however, questions over technical and financial viability. Low oil prices and lack of technology add to the difficulties. Consequently, some Russian energy experts, circumspect about the Arctic shelf, consider Western Siberia as the potential hydrocarbon area. Irrespective, the Russian energy companies are seeking collaborations and foreign investments.

Russia remains the largest investment destination for Indian oil and gas companies. After defence, energy has emerged as the second pillar. India accounts for US\$ 16 billion of investments in the Russian oil and gas sector that involves sourcing and supplies, upstream investments and collaborations.<sup>10</sup> India's ONGC Videsh Limited (OVL) currently holds 20 per cent stakes in Russia's Sakhalin-1 oil and gas project. In 2016, the Indian energy consortium of Indian Oil Corporation Limited (IOC), Oil India Limited (OIL) and Bharat Petro Resources Limited (BPRL), a subsidiary company of Bharat Petroleum, acquired 23.9 per cent and 29.9 per cent stakes in JSC Vankorneft and LLC Taas-Yuryakh fields, respectively.<sup>11</sup> This is in line with India's stated objective of augmenting its energy security. In order to enhance energy partnership, the OVL and IOC have signed separate MoUs with Gazprom. Calling energy as a ‘major pillar’ of the

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<sup>7</sup> Alina Ilinova and Amina Chanysheva, “**Algorithm for Assessing the Prospects of Offshore Oil and Gas Projects in the Arctic**”, *Energy Reports*, 6 (2), February 2020, pp. 504–509.

<sup>8</sup> Atle Staalesen, “**Behind Putin's New Arctic Strategy Lies a Rude Quest for Natural Resources**”, *The Barents Observer*, 30 October 2020.

<sup>9</sup> Atle Staalesen, “**Russian Arctic Oil Races Against Time**”, *The Barents Observer*, 6 May 2021.

<sup>10</sup> “**Visit of Minister of Petroleum and Natural Gas and Housing and Urban Affairs, Shri Hardeep S. Puri to Russia to Participate in the 6th Eastern Economic Summit in Vladivostok**”, Press Information Bureau, Government of India, 31 August 2021.

<sup>11</sup> “**India–Russia Relations**”, Ministry of External Affairs, Government of India, January 2020.

India–Russia strategic partnership, Prime Minister Modi recently asserted that the India–Russia partnership in the energy sector “can help bring stability to the global energy market”. Moreover, the involvement of Indian workers in developing Russia’s major gas projects in the Amur, Yamal and Vladivostok region adds traction to the energy cooperation.<sup>12</sup>

## Shipping Connectivity

Apart from the prospects of natural resources, the receding ice along the Arctic coast is opening new shipping routes. Out of the three major Arctic routes (the northwestern passage, the northern sea route and the transpolar route), the NSR along the Russian coast is gaining prominence. The NSR offers the shortest route between East Asian and Western European ports. It is estimated that the maritime distance from Shanghai to Rotterdam will be 30 per cent shorter vis-à-vis the Suez Canal route thereby cutting time by 10–12 days. Likewise, the distance from Yokohama to Rotterdam will be 40 per cent shorter.<sup>13</sup> The importance of NSR as an alternative shipping route to the Suez Canal came to the limelight recently when a large cargo ship *Ever Given* blocked the narrow passage of Suez for six days as a result of its grounding. Though opening up of NSR brings limited prospects for India, in terms of shipping distance and travel time, it could still offer a strategic alternative to India’s energy shipments once the oil and gas fields in the Russian high north develop.

Developments in the Chennai–Vladivostok Maritime Corridor (CVMC) to connect the ports of Chennai, Visakhapatnam and Kolkata with Vladivostok, Vostochny and Olga on the east coast of Russia would act as an extension to NSR. The CVMC in addition to the International North-South Corridor could bring India and Russia physically closer than ever in terms of connectivity. Once fully operational, the CVMC would reduce the cargo transfer time between India and Russia to 24 days instead of 40 days via the European route. Consequently, the CVMC would jettison India’s strategic position in the South China Sea and broaden the Indo-Pacific region by enhancing its naval presence in order to secure its energy and trade shipments from the Russian Far East. The CVMC would also offer a strategic alternative for Russia in terms of diversification of its energy and other exports from its Far East to India and East Asian countries and thereby reduce its exports dependency on China. It would also involve Russia in the emerging geopolitics of the Indo-Pacific.

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<sup>12</sup> Ministry of External Affairs, no. 1.

<sup>13</sup> Helene Bareksten Solvang, Stavros Karamperidis, Nikolaos Valantasis-Kanellos and Dong-Wook Song, “**An Exploratory Study on the Northern Sea Route as an Alternative Shipping Passage**”, *Maritime Policy & Management*, 45 (4), 2018, pp. 495–513.

### Arctic Shipping Routes Map

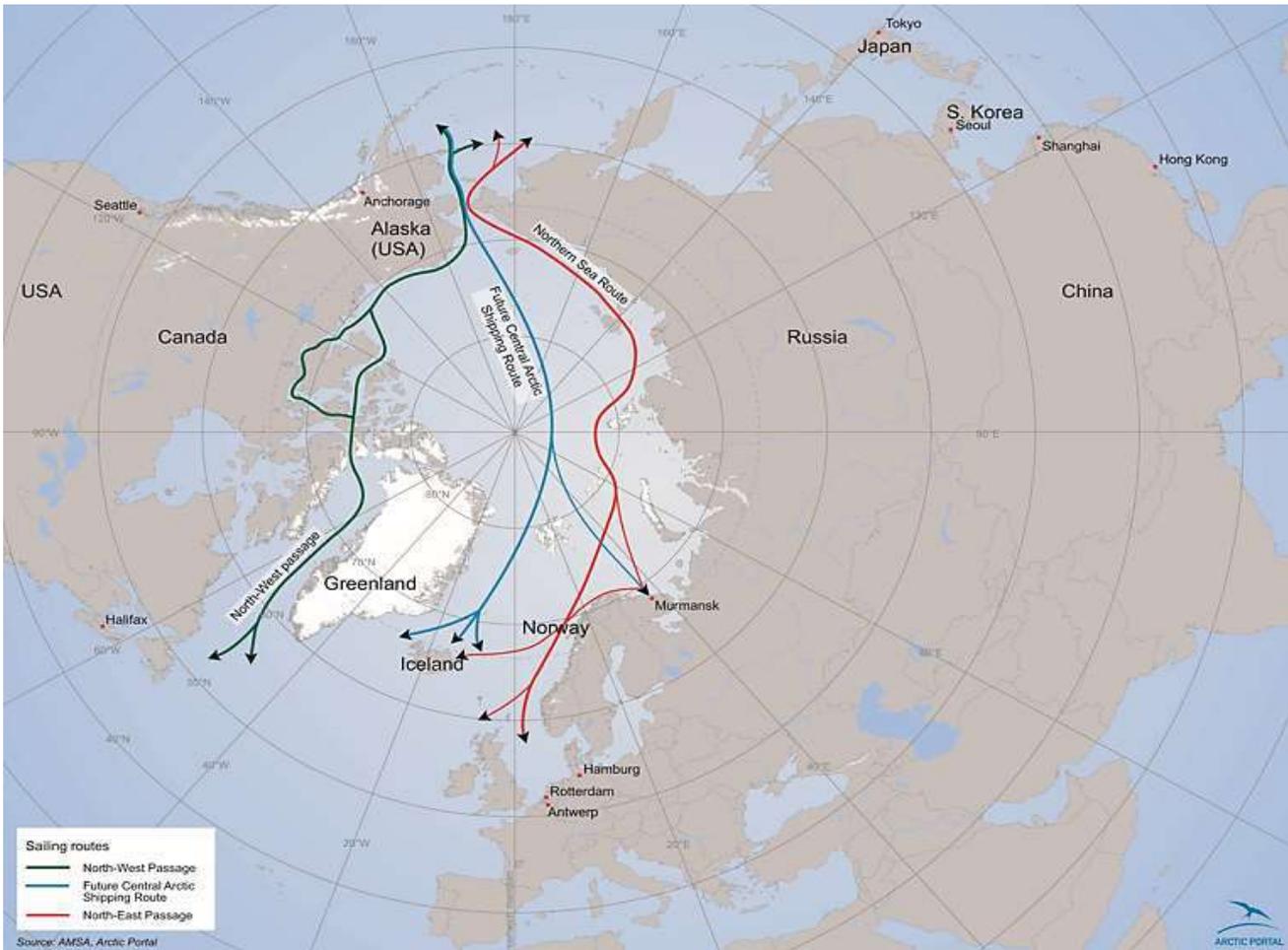


Image Source: Arctic Portal Library

### Manpower and Seafaring

In order to undertake various energy and mineral resources extraction projects in the Arctic and the Russian Far East, a pool of skilled seafarers with expertise in polar operations and a trained workforce is required. India currently provides 9.35 per cent of global seafarers in the maritime industry and ranks third.<sup>14</sup> By imparting training to its existing as well as a new generation of seafarers in polar waters, India can reap the benefits of the emerging shipping activities. For many decades, Russia continues to be a favourite destination for Indian students studying MBBS. Similarly, seafaring courses in Russian universities can skill the Indian youth seeking job opportunities in the

<sup>14</sup> See **Our Strength**, Directorate General of Shipping, Ministry of Ports, Shipping and Waterways, Government of India.

maritime industry. India is currently the fifth-youngest country in the world where the average age is 29 years.<sup>15</sup> The youth demography has made India the largest emerging consumer market as well as the largest workforce provider both in terms of skilled and unskilled labour. The Russian Arctic with its scarce population could become the next migration destination. As economic opportunities increase, Russian immigration and investment rules are bound to readjust and since Indians and Russians share common social affinities it could help to create multiple opportunities.

## Arctic Tourism

Tourism is another prospect area of cooperation. The number of Russian tourists visiting India is substantially higher as compared to Indians travelling to Russia. However, the overall figures between the two remain significantly low as compared to other destinations among Indian and Russian tourists.<sup>16</sup> Russia's direct contribution of tourism to its GDP is US\$ 23 billion (1.66 trillion rubles)<sup>17</sup> and wants to significantly increase incoming tourism by showcasing its culture, nature and hospitality. Tourism revenues in India reached an all-time high in 2019 and in 2020 its contribution to the GDP was US\$ 121.9 billion. However, both countries need to enhance the inflow of tourists. Russia has recently positioned India as its top-priority market. On the other hand, charter flights from Russia to Goa has recently been approved as India opens up to foreign tourists.

The Arctic region with its beautiful, and fragile landscape and the magical northern lights offer a unique experience. Russian tour companies could gain business opportunities by promoting the Arctic to Indian tourists. At the government level, cooperation could be strengthened by involving the Indian Ministry of Tourism and the Russian Federal Agency for Tourism in promoting the Arctic as a prime destination. Apart from this, the breathtaking scenery in the Arctic could offer rich dividends by attracting the Indian film industry to the picturesque locales for cinematography and shoots.

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<sup>15</sup> **“One of the Youngest Populations in the World–India’s Most Valuable Asset”**, Economic Diplomacy Division, Ministry of External Affairs, Government of India, 13 June 2021.

<sup>16</sup> **“India Tourism Statistics 2019”**, Market Research Division, Ministry of Tourism, Government of India, December 2019.

<sup>17</sup> **“Travel and Tourism in Russia–Statistics & Facts”**, *Statista*, 29 July 2021.

## Science and Climate Change Research

Scientific research in climate change is a key area of India's engagement in the Arctic. It seeks to monitor and observe various complexes in the Arctic glaciology, atmosphere as well as biological, marine and earth sciences. Indian scientists at the Himadri research station in Nye Alesund on the Svalbard archipelago of Norway are engaged in studying teleconnections between the Arctic climate and the Indian monsoon.<sup>18</sup> Environmental transformations in the Arctic bear direct implications to Indian monsoons and observing these connections will be vital to India's agricultural productivity. Secondly, India has a long coastline of approximately 7516 sq. km with about 14.2 per cent of its population living in coastal cities, towns and villages.<sup>19</sup> Continuous Arctic ice retreat is causing a rise in sea level in the Indian and Pacific Oceans thus making coastal areas vulnerable to floods, storms and other challenges from the seas.

India maintains strong technical and scientific cooperation with Russia under three institutional-level mechanisms that include the Working Group on Science and Technology, the Integrated Long Term Programme (ILTP), and the Basic Science Cooperation Programme.<sup>20</sup> Apart from these, the other platforms include India–Russia Bridge to Innovation, cooperation in Telemedicine, creation of a Traditional Knowledge Digital Library (GIAN), and the Russia–India Network (RIN) of universities. India's scientific experiences in Antarctica and Himalayas are well noted. Polar research in the Arctic remains a niche area between India and Russia. Significant scientific collaborations between marine biologists, glaciologists and atmospheric scientists along with domain-related universities and centres of excellence can be developed.

## Polar Medicines

India and Russia have healthy cooperation in medical science research and in pharmaceutical sector. Research in polar medicines, relatively unexplored, has scope. Due to the receding Arctic sea-ice, certain categories of infectious viruses are appearing in the ecosystem. Arctic scientists view this as a serious concern.<sup>21</sup> The discovery of antibiotic resistance genes in the Arctic add to the complexities of future human-animal health. The detection of one such 'metallo- $\beta$ -lactamase-1 gene' (code named as *bla*<sub>NDM-1</sub>)

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<sup>18</sup> "India and the Arctic", Ministry of External Affairs, Government of India, 10 June 2013.

<sup>19</sup> "Database on Coastal States of India", Centre for Coastal Zone Management and Coastal Shelter Belt, Institute for Ocean Management, Anna University, Chennai, Last Updated on 17 February 2017.

<sup>20</sup> Ministry of External Affairs, no. 11.

<sup>21</sup> Ed Yong, "Giant Virus Resurrected from 30,000-Year-Old Ice", *Nature*, 3 March 2014.

in the Arctic in 2013, which was first detected in a hospital patient in India in 2007, evidences the migratory pattern of such genes over a long distance.<sup>22</sup> While the infectious pathogens and antibiotic-resistant bacteria and viruses are worrying, there, however, remains a prospect for studying several organisms that potentially can help future medicines and drug discoveries. The harsh Arctic environment has resulted in unique adaptations in organisms that may hold new compounds for medicines.<sup>23</sup> Bioprospecting for drug development can be a critical area of cooperation.

## Digital Connectivity

Apart from the emerging maritime shipping routes, the Arctic is also gaining prominence in terms of digital connectivity. As economic and commercial activities gain ascendancy, the Arctic region is also being linked globally through undersea fibre optic cables and satellites. Consequently, internet connectivity has significantly enhanced. Russia's 'Polar Express' project that includes underlying 12,500 km of fibre optic cable to connect all major Russian regions along the NSR from Murmansk to Vladivostok with high-speed internet, is an important development.<sup>24</sup>

India and Russia have longstanding cooperation in outer space. Moreover, India's success in launching cost-efficient satellites is well recognised.<sup>25</sup> Given the extreme polar weather conditions, the prospect of digitally connecting the Arctic region via satellites has greater resilience than optic cables. In order to achieve total connectivity in the Arctic region, multiple satellites in low earth orbits need to be placed. The Indian Space Research Organisation's (ISRO) *Antrix* could spearhead such satellite launches at cost-effective prices. India's IT sector could also offer technology solutions to Russia in developing the software technology infrastructure for the region. The Arctic offers a perfect location for setting big data hubs. Both the space and IT sectors offer promising areas of collaboration.

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<sup>22</sup> Clare M. McCann, Beate Christgen, Jennifer A. Roberts, Jian-Qiang Su, Kathryn E. Arnold, Neil D. Gray, Yong-Guan Zhu and David W. Graham, **"Understanding Drivers of Antibiotic Resistance Genes in High Arctic Soil Ecosystems"**, *Environment International*, 125, April 2019, pp. 497–504.

<sup>23</sup> Micheil Page and Erin Willahan, **"Arctic Antibiotics—The Hunt for New Medicines in the Arctic"**, *The Polar Connection*, 24 August 2018.

<sup>24</sup> Heiner Kubny, **"Polar Express' Fiber Optic Cable 'Made in Murmansk'"**, *Polar Journal*, 6 August 2021.

<sup>25</sup> **"ISRO Sends 104 Satellites in One Go, Breaks Russia's Record"**, *The Economic Times*, 15 February 2017.

### Submarine Cable Map

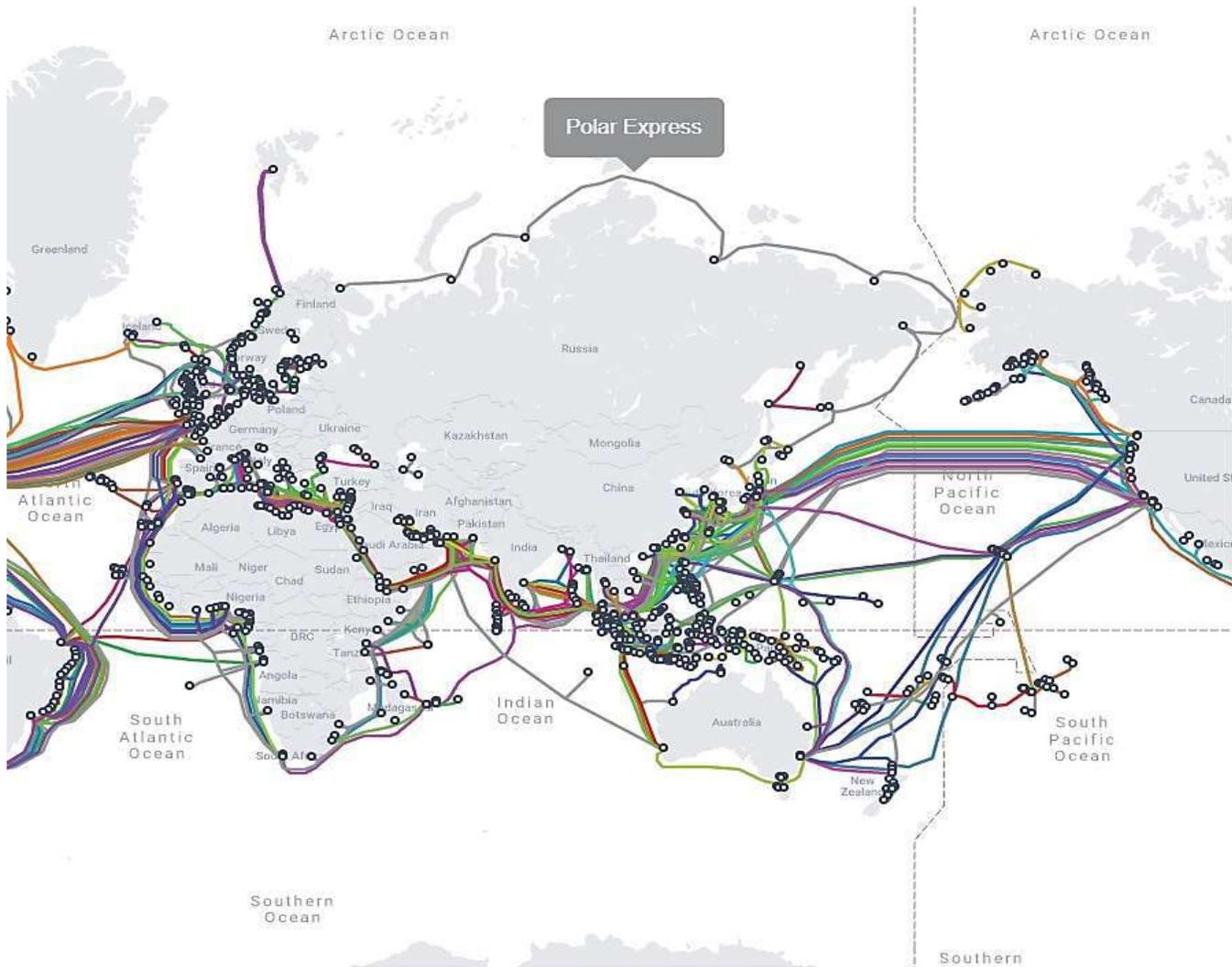


Image Source: TeleGeography

### Strategic Cooperation

India and Russia continue to cooperate in defence and security issues. The defence ministers meet annually through the India–Russia Inter-Governmental Commission on Military Technical Cooperation (IRIGC-MTC).<sup>26</sup> Initiatives such as the Reciprocal Exchange of Logistics Agreement (RELOS) and the proposed Navy-to-Navy MoU would

<sup>26</sup> Ministry of External Affairs, no. 11.

grant India access to Russian naval port facilities in the Arctic.<sup>27</sup> This could enhance Indian Navy’s reach and operational experience in Polar waters, thereby adding an overall strategic edge to the service. Similarly, RELOS will benefit Russia in terms of accessing Indian naval port facilities in the Indian Ocean. Though there is a synergy between Russia and China in the Arctic, India’s presence in the region will act as a strategic counterweight to China’s strategic posturing. Moreover, military coordination between Indian and Russian troops over the years and the percentage of Russian military hardware<sup>28</sup> in the Indian armed forces would make the interoperability between the two countries militarily robust in any hostile situation in the future.

## Conclusion

India and Russia are physically apart but interconnected through the geographies of the Himalayas (known as the Third Pole) and the Arctic. This polar inter-connectivity makes India and Russia natural partners for cooperation on global climate change that has a direct impact with the three poles (Arctic, Antarctica and Himalayas). Given India–Russia longstanding relationship and formal mechanisms of cooperation, the Arctic brings new opportunities. From joint oil and gas development projects to connectivity via shipping and fibre optic routes, the Arctic offers untold opportunities for joint investments and partnerships. Tourism, medicine and seafaring are some other beneficial areas. While climate change trends remain critical for future courses of action, it is time for India and Russia to explore new areas of mutual benefit in the Arctic.

*(With inputs from Capt Anurag Bisen [Indian Navy], Member, Non-Traditional Security Centre, MP-IDSA)*

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<sup>27</sup> Dinakar Peri, **“Logistics Agreement with Russia Shortly, in Final Stages with U.K.”**, *The Hindu*, 5 September 2021.

<sup>28</sup> Sushant Singh, **“86 per cent of Indian Military Equipment of Russian Origin: Stimson Center Paper”**, *The Indian Express*, 22 July 2020.

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