

China's Participation in Arctic Governance from the Perspective of International Law

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doi:10.56397/LE.2025.03.05

Abstract

From the perspective of international law, as a non-Arctic state, China's participation in Arctic governance evolves through three stages: passive involvement, active exploration, and policy integration. China holds significant interests in the Arctic region, spanning environmental, economic, and security dimensions, and possesses corresponding legal mechanisms under international law. Currently, China's engagement in the international legal system of Arctic governance faces challenges such as institutional exclusivity in Arctic governance, fragmentation of international legal rules, an underdeveloped domestic polar legal framework, and an immature capacity for rule-making. To address these issues, China may adopt strategies including leveraging existing international organizations and international law-based systems, advancing the construction of its domestic polar legal framework, fostering a multi-tiered and multi-stakeholder participation framework, and proposing responsible governance concepts and solutions.

Keywords: Arctic governance system, China's participation, international law

1. Introduction

Although eight states hold partial sovereignty over the Arctic region, the vast majority of the Arctic remains part of the global commons. Non-Arctic states are entitled to conduct activities in the Arctic and participate in its governance. On one hand, against the backdrop of global warming and melting sea ice, the Arctic's accessibility for development has significantly increased, with its abundant resources—such as biological resources, mineral reserves, and shipping routes—generating potential economic benefits that have attracted global attention. On the other hand, the protection of the Arctic is critical to humanity's survival, as unregulated development could severely harm its environment. For instance, uncontrolled fishing threatens fish populations and disrupts Arctic ecosystems, while increased shipping and mineral extraction risk marine pollution. Thus, Arctic affairs constitute a global public issue central to the fate of humankind. As a major maritime power and a responsible nation, China holds significant interests in Arctic governance and bears corresponding responsibilities to demonstrate global leadership. This paper focuses on international law, outlining the historical trajectory of China's participation in Arctic governance, analyzing the legal frameworks involved, identifying challenges, and proposing recommendations for improving China's engagement in the international legal system for Arctic governance.

2. Historical Progression of China's Participation in Arctic Governance Under International Law

2.1 Passive Participation Phase (1925–1991)

China's official involvement in Arctic affairs dates back to 1925, when the Provisional Government of Duan Qirui, at the invitation of France, acceded to the Svalbard Treaty (also known as the Spitsbergen Treaty), originally signed in Paris in 1920 by 18 nations, including the United Kingdom, the United States, France, and Japan. Under the treaty, Norway retains exclusive sovereignty over the Svalbard Archipelago, but the territory

must remain open to all signatory states, which are granted equal rights to conduct economic activities and scientific research there. However, the treaty lay dormant for over six decades until 1991, when Professor Gao Dengyi of the Chinese Academy of Sciences participated in a joint Arctic scientific expedition involving Norway, the Soviet Union, China, and Iceland. This event reignited domestic interest in the long-forgotten treaty, ushering in a new era of Arctic research in China.

During this period, China also ratified or joined several other treaties applicable to the Arctic, such as the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and the 1985 Vienna Convention for the Protection of the Ozone Layer. Yet, lacking awareness or intent to utilize these frameworks for Arctic activities at the time, the relevant provisions remained largely inactive. Thus, this phase can be termed China's "passive participation in Arctic governance"—a period during which it possessed legal grounds for engagement in the Arctic but took no concrete action.

2.2 Active Exploration Phase (1991–2013)

As previously noted, the Chinese government affirmed its status as a signatory to the Svalbard Treaty in 1991, providing a robust legal foundation for its participation in Arctic governance. Subsequently, China joined a series of international treaties applicable to the Arctic, including the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). Additionally, China initiated organized Arctic scientific expeditions. Throughout the 1990s, its polar research primarily involved joint field studies, with Chinese scientists participating in expeditions led by Arctic states such as the United States, Canada, Finland, and Norway from 1991 to 1997. In 1996, China joined the International Arctic Science Committee (IASC), marking the institutionalization and regularization of its Arctic research programs.

In 1999, China's Arctic expedition team completed its first independent scientific survey aboard the domestically built icebreaker Xuelong (Snow Dragon). Between 2003 and 2012, China conducted four additional expeditions before attaining formal observer status in the Arctic Council in 2013. A pivotal milestone came in 2004 with the establishment of China's first Arctic research station, the Yellow River Station, in Ny-Ålesund, Svalbard. This station, China's third polar research facility following the Antarctic's Great Wall and Zhongshan Stations, made China the eighth country to operate a research base in the Svalbard Archipelago. (Wang, C. X., 2017)

In 2006, China applied for observer status in the Arctic Council and began attending meetings as an ad hoc observer in 2007, including Senior Officials' Meetings, the 2009 and 2011 Ministerial Meetings, and the 2012 Deputy Ministerial Meeting. During this period, Chinese experts also contributed to working groups such as the Arctic Monitoring and Assessment Programme (AMAP) and the Protection of the Arctic Marine Environment (PAME). (People's Daily Online, 2013, May 15) On May 15, 2013, at the Arctic Council's 8th Ministerial Meeting in Kiruna, Sweden, China—alongside Italy, Japan, South Korea, India, and Singapore—was granted formal observer status, a landmark event signifying China's transition from scientific exploration to institutionalized engagement in Arctic governance.

2.3 Policy Integration Phase (2013–Present)

Since formally becoming a Permanent Observer to the Arctic Council in 2013, China has adopted a markedly proactive stance in Arctic governance. In 2017, building on the concept of the "21st Century Maritime Silk Road," China proposed the "Polar Silk Road" initiative. The same year, the National Development and Reform Commission and the State Oceanic Administration jointly issued the "Vision for Maritime Cooperation under the Belt and Road Initiative," which for the first time designated the Arctic shipping routes as one of the three primary maritime corridors under the Belt and Road framework. In 2018, China released its inaugural Arctic policy document—the "China's Arctic Policy" white paper—outlining its core positions, policy objectives, guiding principles, and key proposals for Arctic engagement. This document serves as a strategic blueprint for coordinating domestic Arctic activities, fostering international cooperation, and advancing collective efforts to ensure the Arctic's peace, stability, and sustainable development. (The State Council Information Office of the People's Republic of China, 2018, January 26)

Furthermore, since the 18th National Congress of the Communist Party of China, successive Five-Year Plans have prioritized Arctic governance. The 13th Five-Year Plan (2016–2020) emphasized active participation in shaping international rules for polar regions, (The Central People's Government of the People's Republic of China, 2016, March 17) while the 14th Five-Year Plan (2021–2025) and the 2035 Long-Range Objectives explicitly called for "pragmatic Arctic cooperation and the development of the Polar Silk Road". (The Central People's Government of the People's Republic of China, 2021, March 13) Over the past decade, China has also engaged in drafting Arctic-related international treaties, such as the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean and the 2023 Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Agreement) under UNCLOS. In this phase, China's Arctic activities have expanded beyond scientific research to asserting rule-making

authority in governance, reflecting its evolving role as a key stakeholder in shaping the Arctic's future.

3. International Legal Frameworks for China's Participation in Arctic Governance

At present, China lacks dedicated Arctic legislation, relying instead on policy documents such as the China's Arctic Policy white paper for guidance. However, China's engagement in Arctic governance is firmly grounded in international law. As a key stakeholder with environmental, economic, and security interests in the Arctic, China leverages relevant international legal frameworks to legitimize its activities and participation. Below is a detailed categorization of Arctic affairs and their associated international legal regimes pertinent to China.

3.1 Environmental Affairs and Related Frameworks

3.1.1 Environmental Protection

The Arctic environment represents one of Earth's most unique and fragile ecosystems. Characterized by extreme conditions—prolonged winters, brief summers, subzero temperatures, intense winds, aridity, hypoxia, and high radiation—the region sustains relatively low biodiversity levels yet harbors numerous endemic species. However, climate change and human activities are driving profound and irreversible ecological shifts, with cascading global repercussions. For instance, the melting of Arctic ice sheets accelerates sea-level rise, directly threatening coastal cities worldwide, while glacial retreat contributes to ocean warming and acidification, destabilizing marine ecosystems. Notably, the Arctic Ocean and broader Arctic region exert significant and distinct influences on China's climate system. As one of the countries most vulnerable to climate impacts, China faces heightened environmental security risks from Arctic changes, including altered monsoon patterns, increased extreme weather events, and disruptions to freshwater resources. (Zhang, C., 2019)

The legal basis for China's participation in Arctic environmental protection can be divided into two interconnected layers. The first layer consists of global multilateral treaties that apply universally, including those applicable to the Arctic region. These include the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and its subsidiary agreements, the Convention on Biological Diversity (CBD), and the United Nations Framework Convention on Climate Change (UNFCCC). Additionally, specialized treaties addressing marine pollution further reinforce this framework, such as the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL), the 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC), and the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention), along with its updated 1996 London Protocol. The second layer comprises regional multilateral treaties specifically tailored to the Arctic or polar regions. For instance, the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, adopted by the Arctic Council, and the 2015 International Code for Ships Operating in Polar Waters (Polar Code), established by the International Maritime Organization (IMO), directly address Arctic-specific challenges. These regional agreements complement the global treaties, collectively forming a cohesive legal foundation for China's role in promoting environmental governance and sustainable practices in the Arctic.

3.1.2 Scientific Research

Scientific research stands as a cornerstone of human activity in the Arctic, driven by two intertwined realities: first, the region's ice-covered conditions remain unsuitable for large-scale, routine economic operations, and second, humanity's scientific understanding of the Arctic remains incomplete. Moreover, as a low-political-tension endeavor, scientific exploration serves as China's primary avenue for engagement in Arctic governance, while also laying the foundational knowledge required for future activities. Consequently, China holds dual-dimensional interests in Arctic scientific research—both existential and aspirational—encompassing research stations, expeditions, and robust international collaborations. (Lu, J. Y., & Zhang, X., 2016)

China's scientific activities in the Arctic are firmly grounded in international law. Beyond the United Nations Convention on the Law of the Sea (UNCLOS), often termed the "Constitution of the Oceans," the 1925 Svalbard Treaty—to which China acceded—provides critical legal underpinning. While Norway retains sovereignty over the Svalbard Archipelago under the treaty, all contracting parties are granted rights to conduct economic and scientific activities there. Article 5 of the treaty further stipulates that "Conventions shall also be concluded laying down the conditions under which scientific investigations may be conducted in the said territories," meaning the scope, timing, and procedures for scientific research must be negotiated multilaterally among signatory states. In essence, scientific endeavors in Svalbard require collaborative international arrangements. Additionally, the 2017 Agreement on Enhancing International Arctic Scientific Cooperation, adopted by the Arctic Council, applies to China through the third-party effect principle in treaty law, further legitimizing its research engagements.

3.2 Economic Affairs and Related Frameworks

3.2.1 Arctic Shipping Routes

The opening of Arctic shipping routes under global warming is profoundly reshaping global maritime systems and even the world trade landscape. These routes, connecting the Atlantic and Pacific Oceans through Arctic waters, represent the shortest maritime corridor linking Asia, Europe, and North America. However, historically dubbed the “legendary passage” due to their year-round ice cover, limited navigable windows, and treacherous conditions, they remained largely inaccessible for centuries. In recent years, accelerated glacial melt driven by climate change has significantly enhanced their usability, unlocking vast commercial potential. By offering time and cost savings compared to conventional routes like the Suez Canal, Arctic shipping is poised to attract growing maritime traffic. For China, as a global manufacturing powerhouse, logistics leader, and maritime giant, the operationalization of Arctic routes promises direct trade benefits and regional economic opportunities. Beyond immediate gains, China’s interests extend to navigation rights, safety protocols, regulatory frameworks, and infrastructure development along these routes, while also encompassing broader strategic and geopolitical advantages. (Lu, J. Y., & Zhang, X., 2016)

Regarding the international legal basis for China’s participation in Arctic shipping route governance, the United Nations Convention on the Law of the Sea (UNCLOS) serves as the foundational framework. Furthermore, the International Code for Ships Operating in Polar Waters (Polar Code), developed by the International Maritime Organization (IMO), is directly relevant to Arctic shipping governance. Prior to the Polar Code, the IMO had already established a series of global conventions to regulate international maritime navigation, such as the International Convention for the Safety of Life at Sea (SOLAS), the International Convention for the Prevention of Pollution from Ships (MARPOL), and the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW). Specifically, the Polar Code aims to standardize safety, environmental protection, and crew welfare in polar navigation. Applicable to both Arctic and Antarctic waters, it covers ship design, navigation practices, operational protocols, and maintenance requirements, marking it as the first legally binding international rulebook exclusively tailored for polar operations. Structurally, the Polar Code is divided into two distinct parts: Part I addresses safety measures, while Part II focuses on environmental safeguards, collectively ensuring a holistic approach to polar maritime governance.

3.2.2 Resource Development

The polar regions serve as critical repositories of global natural resources, encompassing oil, natural gas, minerals, freshwater, and fisheries. Among these, oil and gas stand out as the most commercially significant resources in polar areas, with the Arctic holding one of the world’s largest untapped reserves of hydrocarbons. However, the extraction of these resources carries substantial environmental risks, necessitating stringent management and mitigation measures to balance economic gains with ecological preservation. Meanwhile, the Arctic’s abundant fisheries resources—though vital—face growing challenges in sustainable management due to the dual pressures of climate change and human activities, transforming their conservation into a pressing global issue.

China’s international legal framework for participation in Arctic resource governance operates across three interconnected dimensions.

First, it is primarily anchored in global multilateral treaties. A cornerstone example is the United Nations Convention on the Law of the Sea (UNCLOS), notably supplemented by the 1994 Agreement Relating to the Implementation of Part XI of UNCLOS, which addresses deep-sea mineral resource management.

Second, the framework extends to regional multilateral treaties. For instance, the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean represents a critical regional effort. Specifically, this agreement mandates signatory states to immediately suspend unregulated fishing in the Central Arctic Ocean’s high seas, prioritizing scientific research and the development of sustainable management plans. Only after assessing fish stock levels, determining sustainable harvest limits, and establishing binding conservation measures can commercial fishing activities proceed, thereby safeguarding Arctic marine ecosystems and fisheries.

Third, the framework incorporates foundational principles of international law, such as the “common heritage of mankind” principle. While applying this principle to the entire Arctic is impractical due to overlapping sovereignty claims by Arctic states, it retains partial relevance. As articulated in UNCLOS Article 136, “the Area and its resources are the common heritage of mankind,” implying that mineral and hydrocarbon resources beyond national jurisdiction in the Arctic should be collectively managed. Consequently, states exploiting these resources must adhere to international legal obligations to protect the Arctic’s ecological and climatic systems, balancing development with environmental stewardship.

3.3 Security Affairs and Related Frameworks

China holds corresponding rights and interests in Arctic security affairs, which can be categorized into five interconnected dimensions: geostrategic and military security interests, shipping route safety interests, asset and

personnel security interests, climate and environmental security interests, and resource and energy security interests. (Liu, F. M., & Liu, D. H., 2018) Broadly speaking, both China's traditional and non-traditional security interests in the Arctic align with general national rights under international law.

Regarding China's current participation in Arctic security governance, its engagement is primarily guided by international treaties focusing on non-traditional security domains. These include conventions under the International Maritime Organization (IMO) framework, such as the 1974 International Convention for the Safety of Life at Sea (SOLAS), the 1978 International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), and the 1979 International Convention on Maritime Search and Rescue. Additionally, the International Code for Ships Operating in Polar Waters (Polar Code) and the 2011 Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, adopted by the Arctic Council, further shape China's role in addressing safety, environmental, and operational challenges in polar regions. These treaties collectively address risks such as maritime accidents, environmental degradation, and search-and-rescue coordination, reflecting a holistic approach to safeguarding shared security interests in the Arctic.

4. Challenges and Responses to China's Participation in the International Legal System for Arctic Governance

4.1 Challenges Facing China's Participation in the Arctic Governance Legal System

4.1.1 Inherent Issues in the International Legal System for Arctic Governance

(1) Insufficient Institutional Openness

The insufficient institutional openness of the Arctic governance legal system is an inherent issue rooted in Arctic geopolitics. The Arctic Council, as the primary international body overseeing Arctic affairs, restricts full membership to the eight Arctic states, while non-Arctic states like China, India, South Korea, and Japan are confined to observer status. Observers hold limited influence, unable to directly engage in decision-making or rule-setting, and may only voice opinions through reports or statements during meetings. This marginalizes non-Arctic states, diminishing their impact and participation in Arctic governance.

The root of this institutional exclusivity lies in the politicization of Arctic issues, which have become a focal point for international power struggles. On one hand, unresolved sovereignty disputes among Arctic states, such as overlapping territorial claims, intensify political tensions within the region. On the other hand, Arctic affairs are increasingly leveraged as bargaining chips in broader geopolitical rivalries, complicating governance as external actors' involvement becomes contingent on shifting political dynamics. This politicization permeates even low-politics domains. For example, the Arctic Council's 2017 Agreement on Enhancing International Arctic Scientific Cooperation, while promoting intra-Arctic scientific collaboration, entrenches information monopolies among Arctic states and raises barriers for non-Arctic states to access critical data. Such institutional discrimination fosters an asymmetric power dynamic, where Arctic states dominate scientific knowledge while excluding others, undermining equitable cooperation. (Xiao, Y., 2019) In the economic sphere, competition over Arctic resources—such as oil, gas, and fisheries—further politicizes governance. States vie for resource allocation, eroding neutrality and fairness in decision-making. The Arctic Economic Council, the region's foremost economic governance mechanism, exemplifies this imbalance. Arctic states wield collective institutional hegemony by imposing restrictive membership criteria, effectively blocking non-Arctic states from gaining meaningful influence despite their economic stakes in the region. (Xiao, Y., 2020)

The institutional exclusivity and politicization of the Arctic governance system may also lead to broader adverse effects. First, the absence of a comprehensive and open international cooperation mechanism within the current system leaves critical issues—such as resource development, environmental protection, and scientific collaboration—vulnerable to interstate conflicts of interest and competitive dynamics, resulting in institutional rigidity. Second, the existing governance framework lacks sufficient adaptability and flexibility to address rapidly evolving environmental challenges, while failing to adequately incorporate the concerns and interests of non-Arctic states. Consequently, the system struggles to respond effectively to emerging issues, exhibiting significant lag and inefficiency in addressing pressing global priorities.

(2) Severe Fragmentation of Rules

The fragmentation of rules within the Arctic governance system refers to the coexistence of multiple norms, regulations, and organizations with divergent origins in addressing Arctic affairs, which may conflict or lack consistency, thereby amplifying systemic complexity and uncertainty. This issue manifests in several key dimensions:

First, the multiplicity of international governance frameworks complicates Arctic governance. For instance, overlapping mechanisms like the Arctic Council, the United Nations Convention on the Law of the Sea (UNCLOS), and the Svalbard Treaty operate under distinct mandates and principles, resulting in a decentralized

and often contradictory legal landscape. Second, the absence of a unified legal architecture exacerbates contradictions between disparate regulations. Since Arctic-related treaties are negotiated and enacted by different entities, their provisions frequently clash, leaving ambiguity in legal applicability and undermining predictability in resolving specific disputes. Third, the fragmentation of governance themes hinders holistic policymaking. While some organizations prioritize environmental protection, others focus on resource exploitation or shipping regulations, creating siloed rules that resist integration into a cohesive framework. Finally, unilateral state actions further destabilize the system. Certain Arctic states may adopt self-determined measures or issue unilateral declarations without consensus, compounding governance challenges and eroding multilateral cooperation. Collectively, these factors—competing frameworks, legal inconsistencies, thematic dispersion, and unilateralism—undermine the coherence and effectiveness of Arctic governance, urgently necessitating institutional reforms to harmonize rules and enhance collaborative governance.

4.1.2 Insufficient Institutional Capacity in China's Participation in Arctic Governance

(1) Inadequate Legal Frameworks for Domestic Arctic Affairs

At the domestic level, a pressing challenge lies in China's incomplete legal framework for polar governance. While Antarctic legislation has been included in the legislative agenda of the National People's Congress (NPC), Arctic-specific laws remain underdeveloped. Currently, China's polar governance is characterized by a scarcity of laws, narrow legislative focus, and a lack of high-level legal instruments to guide and regulate domestic polar activities. The absence of unified legislation addressing both the Arctic and Antarctic further exacerbates inconsistencies in implementation, leaving China's legal framework ill-equipped to meet the demands of global polar governance. (Yang, H., 2020)

Compounding these issues are deficiencies in the structure and operation of polar affairs management institutions. Specifically, China's polar management agencies operate at a low administrative level with limited mandates, hindering their ability to comprehensively regulate the expanding scope of Arctic activities. Moreover, fragmented oversight across agencies—such as the Ministry of Natural Resources and the Chinese Arctic and Antarctic Administration—impedes integrated governance, undermining China's capacity to address complex, cross-sectoral challenges. These institutional shortcomings underscore an urgent need to elevate administrative authority, broaden functional responsibilities, and streamline coordination mechanisms to enhance governance efficacy. (Yang, H., 2020)

(2) Immaturity in China's Arctic Rule-Shaping Capabilities

At the international level, China's capacity to shape Arctic-related international rules remains underdeveloped. This stems from China's status as a non-Arctic state, which lacks sovereignty over Arctic territories under international law and holds only observer status in the Arctic Council, resulting in a weaker legal standing and limited influence in rule-making processes. While this relatively closed institutional landscape is difficult to alter, China retains potential to enhance its agenda-setting capabilities and targeted rule-shaping expertise in specific domains.

Specifically, advancing agenda-setting requires crafting norm-setting initiatives that garner multilateral support, such as proposing Arctic-specific environmental or shipping regulations aligned with global priorities. Meanwhile, improving rule-shaping capacity demands systemic investments in specialized talent (e.g., Arctic legal and technical experts), increased participation in expert-level negotiations, and streamlined interagency coordination to unify China's diplomatic, scientific, and economic strategies in Arctic governance. (Jiang, C. Y., 2021)

4.2 China's Response Strategies

4.2.1 Effectively Leverage Existing International Organizations and International Law-Based Systems

To better engage with the international legal system for Arctic governance, China should prioritize leveraging existing international organizations and international law-based frameworks. Firstly, it must strengthen its role as an Arctic Council observer. By actively participating in council activities, contributing to specialized working group discussions, and offering expert recommendations on Arctic affairs, China can amplify its influence in regional decision-making. Secondly, China should deepen its involvement in Arctic-related international bodies such as the United Nations (UN) and the International Maritime Organization (IMO). Through these platforms, China can shape Arctic rule-making on a broader scale while elevating its global diplomatic clout. Thirdly, proactive engagement in Arctic-related international negotiations is critical. By fostering dialogue and consensus-building, China can secure greater discourse power, ensuring its perspectives inform the development of Arctic rules—a goal requiring enhanced diplomatic strategies and multilateral collaboration. Finally, China must cultivate a cadre of professionals skilled in international organizational dynamics, particularly legal experts capable of driving the drafting, amendment, and interpretation of international rules. This includes targeted training in Arctic law, multilateral negotiation tactics, and institutional diplomacy to bridge gaps in specialized

expertise.

4.2.2 Improve Domestic Legal Frameworks for Arctic Governance

To strengthen the domestic legal framework for Arctic governance, China must accelerate the development of a comprehensive polar legal system to fill gaps in domestic legislation. The legislative process should begin with Antarctic laws, which face fewer political obstacles, and progressively extend to Arctic-specific legislation, while ensuring regulatory coherence between the two poles to harmonize standards and avoid conflicts. Simultaneously, reforms to polar governance institutions are critical. First, elevating the administrative authority of polar management bodies will enhance their decision-making power and legitimacy. Second, expanding their functional mandates is necessary to address emerging challenges such as environmental monitoring, resource management, and international cooperation. Third, streamlining coordination mechanisms among domestic agencies—such as the Ministry of Natural Resources, the Chinese Arctic and Antarctic Administration, and environmental regulators—will improve interdepartmental synergy and governance efficiency.

By integrating these interconnected measures, China can establish a robust legal and institutional foundation to support its sustainable and influential participation in polar governance.

4.2.3 Promote Multilayered Cooperation and Participation in Arctic Affairs

Polar affairs transcend regional boundaries to constitute a global public issue central to humanity's shared future, necessitating coordinated international governance. China must pursue a multi-tiered, multi-stakeholder approach to Arctic engagement.

At the state level, China should deepen bilateral and multilateral cooperation with Arctic nations through joint research initiatives, collaborative projects, and economic partnerships. By forging stronger strategic partnerships, China can enhance its agenda-setting capacity in Arctic governance, ensuring its priorities align with global sustainability goals. Concurrently, scientific collaboration and data sharing with Arctic states are critical. Pooling research findings and datasets not only unlocks cooperative opportunities but also strengthens the scientific basis for China's policy decisions in Arctic governance.

Beyond official channels, China should empower non-state actors—including NGOs, research institutions, enterprises, and individuals—to actively contribute to Arctic governance. Leveraging track II diplomacy (civil diplomacy) and public diplomacy, these actors can foster grassroots dialogues, advance technological innovation, and promote cross-cultural understanding, complementing state-led efforts and enriching China's holistic engagement strategy.

4.2.4 Propose Responsible Arctic Governance Concepts and Solutions

China's engagement in reforming and shaping the international legal system for Arctic governance must leverage its role as a key stakeholder in Arctic affairs, guided by the principles of consultation, collaboration, and shared benefits, with the overarching aim of safeguarding humanity's common interests, while firmly protecting its core national interests. Specifically, building on scientific research, China can prioritize environmental protection—a low-political-tension domain—as an entry point, addressing the livelihoods of Arctic Indigenous communities and advocating for a sustainable, eco-centric Arctic governance model. By supporting and participating in Arctic ecological conservation, promoting green technologies (e.g., renewable energy, pollution control), and balancing economic development with environmental stewardship, China can champion equitable solutions that harmonize resource utilization and ecological resilience.

5. Conclusion

China's geographical remoteness from the Arctic inherently challenges its participation in shaping the international legal framework for Arctic governance, while the volatile international landscape further amplifies uncertainties in this process. Ultimately, China's strategy to strengthen its role in Arctic legal governance must center on capacity-building and enhancing institutional discourse power. To advance capacity-building, three priorities stand out: Firstly, China must prioritize enhancing its economic and scientific prowess, particularly in Arctic-related infrastructure, technology, and research, which form the bedrock for practical engagements such as icebreaker operations, climate modeling, and resource exploration. Secondly, establishing a comprehensive domestic legal framework for polar governance is critical to regulate Arctic activities, align domestic practices with international norms, and address China's specific strategic needs. Thirdly, cultivating a specialized talent pool—including experts in international law, Arctic diplomacy, and multilateral negotiations—is essential to bridge expertise gaps and sustain long-term engagement. In parallel, enhancing institutional discourse power demands a threefold approach: Concurrently, China should leverage existing international platforms (e.g., the Arctic Council, UNCLOS forums) to refine its legal advocacy and rule-shaping strategies, demonstrating mastery of international law. Furthermore, deepening international partnerships—both with Arctic states and non-Arctic actors—is vital to amplify China's voice in multilateral negotiations. Finally, fostering a

multi-stakeholder governance model—engaging governments, NGOs, academia, and industry—will diversify participation, enrich policy perspectives, and solidify China’s role as an important stakeholder in Arctic affairs.

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