



Poland's polar policy in the face of the Arctic Council 2022 cooperation crisis

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Abstract: Developments in Arctic international relations resulting from Russia's aggression against Ukraine in 2022 stand as the most serious crisis in regional cooperation since the end of the Cold War. This crisis has necessitated a re-evaluation of the regional governance system and an update of the political strategies of Arctic stakeholders. In this article, based on qualitative research methodology, we explore the challenges to regional cooperation in the near and mid-term perspectives, and we discuss how the current situation can contribute to a transformation of Poland's role in the Arctic, particularly in the field of science diplomacy. The study includes a critical analysis of the content of the Polish Polar Policy officially adopted in 2020, as well as its implementation. We conclude that the future of Arctic relations will be based not only on the hindered functioning of the Arctic Council but also on the emergence of new competitive forms of collaboration to be developed by Russia and its partners, distancing themselves from Western states. In such a situation and in the face of the emerging opposition between the two blocs, the role of science diplomacy will substantially increase and gain new dynamics. This, in turn, means that although Poland's Arctic policy in its present framework requires only minor conceptual correction, its implementation should be considerably built up and advanced.

Keywords: Arctic, Poland, Arctic strategy, science diplomacy.



Introduction

The contemporary Arctic is an area where numerous natural and social consequences of climate change occur (Falardeau and Bennett 2020; Ford *et al.* 2021). This is a region whose international significance largely hinges on the dynamic political relations between Arctic states and other Arctic stakeholders (Łuszczuk 2015b; Coates and Holroyd 2020; Weber 2020). A notable transformation in the Arctic political climate occurred post-Cold War, with another shift at the end of the 2000s, marked by the onset of the 'Arctic Rush' (Howard 2009; Heininen 2016). Currently, as a result of Russia's aggression against Ukraine in 2022, another modification is under way, which redefines the framework and directions of cooperation and competition around the North Pole for the coming years and perhaps decades.

Despite the current situation presenting the most serious crisis in Arctic cooperation since the end of the Cold War (Gricius and Fitz 2022; Lindroth *et al.* 2022; Koivurova and Shibata 2023), it simultaneously provides a unique opportunity to redefine previous systemic solutions and political strategies. Given this fact, it is relevant to explore how the transformation occurring nowadays in the international environment affects the policies of the Arctic actors. Referring to the political adaptation theory by J.N. Rosenau (Rosenau 1981), we can ask which states are able and ready, and to what extent, to follow one of the several paths of political adaptation: politics of acquiescent adaptation, politics of intransigent adaptation, politics of promotive adaptation or politics of preservative adaptation. Until a comprehensive study appears as a continuation of the research from several years ago (Heininen *et al.* 2019), it is worth undertaking partial research.

In this article, focusing on the case of Poland, we aim to address two key research questions. First, to what extent can the current shift in global political climate and the crisis of international cooperation in the Arctic, particularly within the Arctic Council, provide an opportunity to enhance Poland's role in the Far North? Second, how influential can science diplomacy be for the future of the Arctic when pursued by states like Poland, that is, countries outside the region but with established positions in Arctic research? Seeking answers to these questions will also provide the first scientific analysis of the Polish Polar Policy, adopted by the Polish government in September 2020 (Polish Polar Policy 2020).

Research concerning Poland's activity in the Arctic is relatively sparse, reflected in both English-language sources (Graczyk 2012; Łuszczuk 2013, 2015a; García Cáceres 2019) and Polish ones (Łuszczuk 2011; Grzela 2014; Łuszczuk *et al.* 2015; Gromadzki 2018). The Polish Polar Policy, officially announced in 2020, has not been analyzed so far. Likewise, there is limited scientific literature on the international situation in the Arctic and the suspension of the Arctic Council's operations due to the war in Ukraine (Gricius and Fitz 2022; Koivurova and Shibata 2023). Conversely, the subject of science

diplomacy in the Arctic has received more extensive exploration (Berkman *et al.* 2017; Bertelsen 2019, 2020; Szkarlat *et al.* 2020; Wood-Donnelly and Bartels 2022).

A considerable advantage of our study is the unique expertise of the authors who have been involved in the formulation of Poland's polar policy in various roles, and at the same time have been active in Poland's science diplomacy in the Arctic for several years. The study in question utilized desk research, participant observation, and a series of semi-structured individual interviews conducted in 2022 with representatives of polar research and Arctic experts (n=15). The respondents, who hailed from Poland, Germany, and Finland, represented the exact, natural, and social sciences.

Grounded in the neoclassical realism approach, our analysis contributes to a better understanding of foreign policy, which representatives of this paradigm perceive as a state's response to systemic pressure from the international environment. Furthermore, it encourages deeper reflection on the significance of science diplomacy, particularly in the context of an international crisis. After all, a crisis represents a change to which the state must respond. If a change occurs in a state's external environment, determinants such as the political situation and other specific internal factors should be considered when analyzing the state's response to this phenomenon. Neoclassical realists emphasize that while the international situation is influenced by the international system, the interpretation of and response to signals from this system, reflected in a state's foreign policy, largely depend on internal factors (Taliaferro *et al.* 2009). In their quest to understand how states react in the face of international conflict and evolving preferences, neoclassical realists suggest that one strategy is 'bandwagoning', which involves aligning with a stronger actor in international relations. Bandwagoning results from and is motivated by the will to change one's assets and not by maintaining the status quo or balancing, that is keeping one's possessions (Schweller 2004).

In our study, we posit that the future of Arctic cooperation will depend not only on halting cooperation with Russia at the political level and within the Arctic Council, but also on the emergence of new competitive forms of collaboration in Arctic governance. These forms may appeal to Russia and its partners, who distance themselves from the stance of Western states. According to this scenario, Russia will continue the policy reflected in its amended Arctic strategy, which leaves no room for the Arctic Council (Humpert 2023). Given the emerging divide between the Western and Russian blocs, the role of science diplomacy will likely increase substantially, gaining new dynamism. This suggests that Poland's Arctic policy, within its current framework, requires only minor conceptual adjustment, but a significant intensification of implementation. This means striving to achieve certain goals more quickly than originally planned, particularly regarding the enhancement of institutional and financial resources for entities involved in Polish science diplomacy in the Arctic.

In the first part of the study, we delve into the origin, content, and implementation of Poland's polar policy, with a special focus on its Arctic component. We then reflect on the current state of international cooperation in the Arctic, particularly within the Arctic Council, examining its effects and potential future solutions. Subsequently, we discuss Poland's potential future involvement in the Arctic, with an emphasis on the role Poland could play politically and in the sphere of science diplomacy. Our recommendations encompass specific initiatives, actions, and tools.

Polish Polar Policy: guidelines and functioning

The Polish Polar Policy is rooted in over a hundred years of Poland's activity in the polar regions, which has encompassed: (i) scientific research, (ii) participation in various forms of international cooperation related to these regions, and (iii) occasional economic initiatives. Polish expeditions beyond the Arctic Circle commenced in the interwar period, with the experiences gained then forming a basis for the development of increasingly ambitious and extensive research in the Arctic and Antarctic in subsequent decades. After Poland's accession to the Svalbard Treaty in 1931, another politically significant moment was achieving full membership in the Antarctic Treaty System in 1977. However, despite the constant development of research infrastructure, regular scientific expeditions, the institutionalization of polar studies domestically, and mostly routine diplomatic activity internationally, Polish authorities have not prioritized these regions in their foreign policy since the 1980s.

The situation began to change gradually in 2006 with the establishment of a position dedicated exclusively to polar issues at the Ministry of Foreign Affairs, long held by the titular ambassador for the legal status of the Arctic and Antarctic. This enabled a representative from Poland to participate more regularly and assertively in the work of the Arctic Council, and even to implement initiatives to strengthen Poland's position in Arctic cooperation. At the same time, Polish diplomacy in cooperation with the scientific community began formulating guidelines for the Polish foreign policy towards the Arctic region. Firstly, the so-called 'pillars' of Polish policy towards the Arctic were presented at Arctic Council meetings and scientific conferences involving diplomats. Despite a degree of caution in defining its role in polar regions, Poland has actively contributed to the development of political cooperation in the Arctic. This is best exemplified by the regular organization of Warsaw Format Meetings since 2010. These are routine gatherings of Arctic Council observer states and countries seeking this status. They meet amongst themselves and with the Chair of the Senior Arctic Officials and representatives of the Arctic Council Secretariat. The most recent meeting took place in 2019, and another is planned for autumn 2023.

It is worth mentioning that an ad hoc Working Group for Polar Issues (so-called Polar Task Force) was established in 2011 at the Ministry of Foreign Affairs, as an informal platform operating at the level of experts, for contacts between representatives of state administration and scientific community in polar-related matters. Its purpose was to support the government in ongoing issues related to the Arctic and the Antarctic. At the same time, the Ministry of Foreign Affairs commissioned experts to prepare an analysis of the international situation in the Arctic and provide recommendations on the objectives and tools of Polish policy towards the Arctic. The presentation of this study, which reflects the authors' opinions rather than the official position of the Ministry, served as an opportunity to organize a seminar that included, among other things, the first inter-ministerial debate on Polish activity in the Arctic and the region's growing significance to Poland.

The political shift in the autumn of 2015, although it interrupted the continuity of the work in progress, ultimately proved conducive to the formulation of the Polish Polar Policy, which was initiated in the spring of 2016. Following an extended finalization and consultation process, the document, covering both polar regions, was eventually adopted on September 11, 2020. This came in the form of a resolution by the Council of Ministers approving the government's strategy titled *From Past Expeditions to Future Challenges: Poland's Polar Policy* (Polish Polar Policy 2020). This is Poland's first cross-sectional strategy towards the Arctic and Antarctic regions at the government level. It defines the guidelines and objectives of Poland's polar policy and specifies cross-sectional tasks to be fulfilled by the competent domestic bodies. On one hand, the policy emphasizes the need for closer cooperation and more effective coordination among these bodies, with the coordinating role assigned to the Minister of Foreign Affairs. It also calls for the establishment of a stronger mechanism for coordinating and monitoring the policy's implementation. On the other hand, it highlights the necessity of preparing Polish foreign policy for challenges associated with climate change, which affects the geopolitical and socio-economic environment in the polar regions (Polish Polar Policy 2020).

The adoption and official announcement of the Polish Polar Policy is intended to establish formal grounds, indicate strategic political goals, and formulate an organizational and institutional framework to strengthen previously disparate domestic and international activities related to polar matters. In the international context, the document aims to enhance Poland's position through expanded institutional support for diplomacy, including public diplomacy and other forms of activity in the polar regions. As intended by the authorities, the document affirms that Poland is and will continue to be a serious and responsible player in global polar policy, approaching its polar activities with long-term stability and commitment, without sudden shifts in goals. However, it is important to note that while the document holds political dimensions, it lacks specific solutions regarding the financing of the planned activities.

The strategy consists of three parts: *(i)* the goals and objectives of Poland's polar policy, *(ii)* the Arctic part, and *(iii)* the Antarctic part. The axiological foundations of Poland's polar policy are such categories as *(i)* respect, *(ii)* cooperation, and *(iii)* law. The main long-term objective of Polish Polar Policy is to ensure the constant and active presence of Poland in dialogue, cooperation and formulation of the polar policy worldwide. This objective should be achieved through: *(i)* ensuring active participation and influence of Poland on the processes shaping the future of the polar regions, *(ii)* strengthening Poland's presence in the polar regions and ensuring the development of the scientific activity of Polish researchers, *(iii)* ensuring that polar issues are duly recognized in the state's internal policy, and *(iv)* active search for new and innovative paths of development of Poland's position in polar matters.

The following priority areas of interest are regarded by the government as the key factors in the implementation of Polish Polar Policy: *(i)* international cooperation, *(ii)* sustainable and responsible development, and *(iii)* science. Due to the multifaceted character of differences between the Arctic and the Antarctic, including dissimilar legal status and institutional differences, the actions proposed in the strategy are divided into 3 main groups: *(i)* common to both areas; *(ii)* specific to the Arctic; *(iii)* specific to the Antarctic (Polish Polar Policy 2020)

For effective implementation of the Polish Polar Policy at the national level, it was necessary to establish a coordination and monitoring mechanism. This mechanism would be managed by competent bodies and involve other domestic entities in the process of implementing the strategy. In January 2022, the Prime Minister appointed the Team for the Polar Policy of the State (Prime Minister 2022). The Team's tasks include: *(i)* monitoring of the implementation of programme documents related to polar policy; *(ii)* coordination of the fulfilment of polar policy tasks by the government administration; *(iii)* identification of problems, the definition of specific tasks and formulation of recommendations related to polar policy; *(iv)* analysis of international agreements and other documents concerning polar policy; and *(v)* providing the government with periodic opinions on legislative, scientific, organizational and factual activities, which should be undertaken to ensure that the obligations arising from the polar policy are fulfilled (Prime Minister 2022).

The Team consists of a secretary or undersecretary of state in the Ministry of Foreign Affairs as the Chair of the Team, a representative of the Head of the Prime Minister's Chancellery as the Vice-Chair of the Team, and representatives of such ministries as energy, economy, maritime economy, mineral resource management, climate, fisheries, higher education and science, natural environment, tourism and foreign affairs. Among the Team members, there are also five representatives of the scientific community and institutions conducting research in the polar regions. Furthermore, representatives from other institutions or organizations, whose knowledge and experience may contribute to the Team's

tasks, can also participate in an advisory capacity (Prime Minister 2022). Team members convene in meetings organized biannually. During the inaugural meeting in March 2022, two specialized working groups were established: one for Arctic affairs and another for Antarctic affairs (MSZ 2022a). The second meeting took place in November 2022 (MSZ 2022b).

In May 2023, the Minister of Education and Science established the position of Special Representative for Polar Affairs. The responsibilities of the representative comprise the following: (i) acting as the Minister's representative and providing him expertise on polar matters; (ii) collaborating with research institutes, universities, non-governmental organizations, employers' groups, and entrepreneurs engaged in polar-related activities; (iii) partnering with other domestic and international institutions, including the Team for the Polar Policy of the State; (iv) providing opinions, analyses, and recommendations concerning research programmes, infrastructure and organizational developments in the field of polar issues; (v) contributing to the formulation and review of proposed legislation and strategic documents relevant to polar affairs; and (vi) participating in the promotion and dissemination of polar-related topics (MEiN 2023).

This position was established without consultation with any relevant institutions or academic bodies, indicating a low level of coordination in official activities. While it is premature to assess the impact of this development, it appears that the Representative may function more as an advisor to the Minister rather than as an entity with independent executive powers or organizational capacities. Upon analyzing the implementation of the Polish Polar Policy in the first two years since its enactment, several issues stand out. Firstly, neither the adoption of the strategy nor the work of the Polish Polar Policy Team garnered much public interest. This is hardly surprising given the lack of promotional efforts or public debates on the Polish Polar Policy. Secondly, the Team's work largely occurs during members' meetings, which are more reporting-oriented rather than project-based or conceptual. Thirdly, the adoption of Polish Polar Policy has not shifted the perception of polar issues among public administration officials. For them, these issues still appear to be exotic or of minimal importance. Interestingly, this stance remained largely unchanged even with the outbreak of the Russo-Ukrainian war, which significantly influenced international forums dealing with polar matters. Fourthly, the financing for the Polish Polar Policy's implementation remains unchanged, rendering it a document of mostly symbolic value. It does not offer sufficient incentive to apply for support in planning or executing economic, scientific, or development activities in the polar regions.

While the Polish Polar Policy acknowledges the necessity for relevant expenditure to implement the entire polar policy, the cost of activities in polar regions is still primarily associated with scientific research. The political and diplomatic aspects are financed on a short-term basis from the funds of specific ministries, predominantly the Ministry of Foreign Affairs, and are often tied to the organization of trips or meetings in Warsaw. As Polish diplomacy continues

to actively monitor developments in the polar regions, changes in the geopolitical situation in the Arctic, and indirectly, tensions in Antarctic cooperation, should prompt more vigorous implementation of Poland's polar policy. The nature and extent of this adaptation, particularly how it relates to Poland's principal asset in the polar regions, *i.e.*, science, will be discussed in subsequent parts of the study.

Challenges to the Arctic cooperation after 24 February 2022

Russia's aggression against Ukraine, which dramatically polarized relations between Western states and Russia, naturally influences international cooperation in the Arctic as well. Seven members of the Arctic Council, currently referred to in the media and diplomatic practice as A-7 (Koivurova 2022b), unequivocally condemned the illegal actions of Russia in a joint statement of 3 March 2022 (United States 2022). Moreover, these states confirmed that cooperation and achievement of the Arctic Council's goals are based on respect for the basic principles of international law, in particular the sovereignty of states and their territorial integrity (United States 2022).

It appears clear that the Arctic Seven (A-7) cannot simply resume cooperation with Russia within the Council. The member states, condemning the Kremlin's actions as a gross violation of fundamental international law principles, condition their cooperation on the prior resolution of the conflict in Ukraine, treating it as an indispensable condition (Koivurova 2019). On the other hand, in their statement A-7 states emphasize also the significance of further cooperation in the Arctic: "We remain convinced of the enduring value of the Arctic Council and reiterate our support for this institution and its work. We hold a responsibility to the people of the Arctic, including the indigenous peoples, who contribute to and benefit from the important work undertaken in the Council." (United States 2022).

The message from A-7 states is unequivocal: they intend to continue cooperation within the Arctic Council, but not with Russia for the time being. Due to Russia chairing the Arctic Council from May 2021 to May 2023, there has been no political level cooperation, including meetings of so-called Senior Arctic Officials, since February 24, 2022. In essence, broader cooperation between states, and organizations of indigenous peoples, which makes this international initiative unique, is indefinitely suspended. This also applies to scientific cooperation, although it is possible that a handful of research projects continue on a very limited scale (Nolan 2022). Conversely, any actions or statements made by the Russian presidency primarily possess a deceptive or even propagandistic character (Dickie 2022; Edvardsen 2022).

In light of this, there were calls as early as 2022 for the establishment of an 'Arctic Council 2.0'. In the mid-term and long-term context of creating an effective counterbalance to Russia's policy by Western countries, and likely soon

all A-7 states belonging to NATO states, this would undoubtedly have numerous benefits (Koivurova 2022b). Nonetheless, it is important to recognize that long-term, effective, and strategic cooperation among regional states cannot be achieved without Russia's involvement. Despite the current differences and significant divergences, the West still aligns with Russia's objectives in the Arctic, which include combating climate change, effective environmental protection, and promoting sustainable development for Arctic inhabitants, although these goals are often half-hearted and lack practical implementation.

Geography also plays a crucial role, considering the extent of Arctic territory governed by Russia, potential future transport routes, and available resources, it becomes clear that significant progress on fundamental pan-Arctic issues is unlikely without Russia's participation. The manner of cooperation within the Arctic Council is based on a compromise contained in the Ottawa Declaration from 1996 and many other detailed regulations enacted over the years (Kirchner and Koivurova 2022). However, they are based on the key principle that the Council consists of eight members, more or less polar. Paradoxically, in this situation, it is quite positive that the Arctic Council is only an intergovernmental forum. It was established on the basis of a declaration as a so-called soft law act, and not by a legally binding international agreement, hence it is not subject to these rules of public international law which are applicable to intergovernmental organizations. In consequence, as mentioned above, the A-7 states have an opportunity to apply the existing rules creatively in the situation when cooperation with Russia is temporarily suspended (Koivurova 2022a).

Furthermore, the aforementioned is of crucial practical significance considering that the Arctic Council has a large number of ongoing projects, which, despite the repercussions of the war in Ukraine, must continue in one form or another (Struzik 2023). However, it is important to remember that the Russian Federation does not lead most of these projects, nor does it oversee other working groups within the Council, with the exception of the Sustainable Development Working Group. It is conceivable that other countries might find a way to continue cooperation within the Council over the mid-term without Russia's involvement. Perhaps the Council's internal rules could be applied then, but with the understanding that the Council currently comprises seven members. A flexible approach from all parties would be necessary for this, but given that the A-7 states recognize the importance of cooperation within the Council, it seems probable they would adopt a sort of temporary agreement. However, much will hinge on Norway, which will be discussed later in the article.

Nevertheless, it is far more difficult to predict how long Russia, the largest country in the Arctic, shall remain outside the Arctic Council, which will radically affect the future of cooperation in the region. If the conflict in Ukraine is not stopped and Russia continues to occupy a part of the Ukrainian territory, it will probably take years before Russia is accepted again as a member of various forms of international cooperation, especially in the Far North.

In this context, another significant aspect must be mentioned. The majority of analysts have agreed so far that threats to international security are at a minimum level in the Arctic, owing to many years of efforts to keep it a so-called low-tension area (Almqvist 2021; Kornhuber *et al.* 2023). Even though this state of affairs has not changed yet, it cannot be ruled out that as the war in Ukraine continues and Russia searches for ways to manage the situation in one way or another, states shall take actions that would transform profoundly the situation in the Far North. Therefore, it is considered that Russian military provocations may extend to the Arctic (Vindevoel 2022). This can also be an element of influence on the A-7 states, thwarting their attempts at changing the methods of cooperation within the Council or at restricting Russia in various fields of Arctic cooperation.

This situation also prompts questions about the role of the European Union (EU) and its member states, including those European countries that also have observer status in the Arctic Council, in regards to the Arctic. So far, there have been no indications of any significant breakthroughs. The Arctic states' policy, particularly Russia's, towards the EU's observer status in the Arctic Council remains skeptical. However, the possibility of change in the medium term cannot be ruled out, especially considering Russia's limited capacity to continue preventing the EU from achieving formal observer status. However, this is not a priority at present, so the status quo is likely to be maintained. On the other hand, this presents an opportunity for greater involvement in the political process at the A-7 level, not so much for EU Arctic states but primarily for all EU observer states. This is particularly true for some states like Germany, France, and especially Poland, given their backing of Ukraine, which strengthens their arguments for involvement. We now arrive at a previously mentioned question regarding Norway assuming leadership in the Council after Russia. The chairship of the Council, as Norway refers to it in official documents, was formally transferred on May 11, 2023. This transition was rather unique because, for the first time, it was not in the form of a 'standard' ministerial summit. Instead, the event was divided between two parallel locations, an in-person gathering in Salekhard, Russia, and virtual participation online. Nevertheless, the composition was standard, *i.e.*, all eight Arctic states, as well as the six Indigenous Permanent Participants, were present. Despite political tensions elsewhere, the meeting proceeded smoothly and without obstacles, resulting in a standard declaration that set aside all differences (Arctic Council 2023).

Norway has revealed its plans and priorities, which can be regarded as justifiable in these circumstances. In particular, the chairship plans to concentrate on four key topics: the oceans, climate change and environment, sustainable economic development and the sake of the people of the North. In such presented priorities, one can only agree. However, the question raises how in detail Norway is planning to proceed and how to implement those priorities into the two years daily routine of the Arctic Council. At this moment, *i.e.*, the beginning of the

chairship, we can only predict what might take place. Especially that behind the general priorities the hidden one remains and they suggest what the future of the Arctic Council would be and what role Norway would play in this regard.

Some key points have already been noted, albeit in a very general manner. For now, Norway's top priority is clearly stated: 'Maintaining the Arctic Council as the most important international forum for solving Arctic problems is one of the main tasks of Norwegian foreign policy' (Bye 2023; Fouche and Dickie 2023; Śmieszek 2023). If there are no radical changes on the Ukraine front by summer 2023, the implementation of tasks to achieve this objective seems challenging (Jonassen 2023).

It seems that Oslo should acknowledge that there are currently three theoretical scenarios for development. The first is to maintain the Arctic Council in its present form while persuading Russia to refrain from participating in the forum's activities during the transition period, certainly not at the political level. However, this strategy leaves the door open for the resumption of the Council's activity if the war situation is resolved. This expectation, marked by considerable optimism about Russia's potential cooperation, carries a high risk of failure. The smooth transition of chairmanship should be not deceiving, *i.e.*, Russia takes a relatively strong stance on the future of Arctic cooperation, as demonstrated by Minister S. Lavrov's claim that 'the future of the Arctic club is now at risk' (Staalesen 2023).

The second option is to continue the work of the Arctic Council, but without Russia's participation. This would mean maintaining the Council's working groups, secretariat, and rules, but evolving into a seven-member body. This approach assumes that relations with Russia cannot be normalized within the next five years or more and that mutual relations must simply be put on hold rather than relying on a gentlemen's agreement to prevent Russia from participating in meetings. This path, effectively excluding Russia from Arctic cooperation, risks pushing Russia to conclude that it will never be able to rejoin the club. This would force Russia to seek alternatives, which may be eagerly seized upon by other states, such as China.

Finally, the third option is to seize the moment and propose something new: an alternative to previous arrangements. This would involve updating and reforming the current structure of the Arctic Council to provide more practical leadership in a world grappling with simultaneous geopolitical, resource, and climate crises. However, these crises also imply that it would be challenging to reach a collective resolution, and consequently, a compromise to swiftly and effectively implement new solutions. Again, without Russia's participation, their effectiveness for the entire Arctic region would be limited (Koivurova 2022b).

Nevertheless, such considerations have a medium- and long-term character and are highly speculative. On the other hand, from a short-term perspective, it seems that the majority of participants in this process, if not all of them, are aware that Norway's chairship efforts should be aimed in two key directions:

(i) realization of the unequivocal ambition to maintain the Arctic Council in the current transition period (that is A-7 formula) and (ii) continuation of the project activity of the Council's working groups, resumed without Russia in mid-2022 (Devyatkin 2023).

Furthermore, while there is currently no expectation of a complete collapse or 'dissolution' of the Council, there is a serious risk that its significance could diminish significantly compared to the period before February 24, 2022. However, this is not necessarily negative, as it could prompt the creation of something new and more effective. Yet, during its presidency, Norway does not appear prepared for such a development. As a consequence, in view of the above, it is likely that during the first period of the Norwegian chairship, although it depends on external factors closely related to the aggression, the issue of an "agreement" between A-7 and Russia may emerge (Sharma 2023). Nevertheless, it will be crucial whether Norway will be able to prepare such an agreement based on pragmatic solutions on the one hand, and, on the other hand, to maintain the provisional character of this solution without prejudice to the Council's formula in a long-term perspective.

Many participants may rightly fear that replacing the previous, albeit often inadequate, cooperation with a dichotomous opposition of A-7 versus Russia could reinstate divisions reminiscent of the Cold War era. Furthermore, this could prompt Russia, 'encouraged' by the stance of A-7, to create its own Arctic Council. Such a scenario is plausible, particularly since Moscow announced a change in its Arctic strategy in February 2023, including the removal of key references to the Arctic Council (Humpert 2023). Currently, however, there is not enough data to determine whether this is a genuine political shift, a purely symbolic action, or even a misrepresentation of reality. Without a doubt, it requires further observation, primarily in terms of potential practical consequences (Wishnick and Carlson 2023).

Given the potential continuation of the Finnish or Icelandic approach towards the observers, which is in general considered as semi-inclusive especially at the level of SAO as well as going beyond the scope of "traditional" functioning of the Arctic Council, the Norwegian presidency will be confronted with a dilemma, or even a challenge, on how to respond to China's policy towards the Council and the Arctic. The aforementioned conflict in Ukraine and the related polarization of attitudes worldwide are connected with the allocation of approaches towards Russia. As has been observable for some time, from the perspectives of both political and economic activities, China appears to be playing its own game, potentially aimed at reaping maximum benefits at Russia's expense.

Given the broad spectrum of issues and interests involved, the Arctic will undoubtedly be impacted, either directly or indirectly. China's interest in the Arctic is not a recent development for the Council or other Arctic states. The White Paper published by Beijing in 2018 merely confirmed its aspirations rather

than serving as a starting point for discussions about the region and China's role there (China 2018). These aspirations have been met with some degree of skepticism. For instance, during President D. Trump's administration, Secretary of State M. Pompeo expressed significant doubts about China's Arctic policy, tying it to the country's broader strategy, on the sidelines of the ministerial summit in Rovaniemi in 2019 (Quinn 2019). Moreover, he discussed threats from China to general cooperation, accusing the state of, among other things, potentially negatively impacting the development of the region, violating international law, and interfering in the policies of Arctic states and peaceful cooperation within the Arctic Council.

In this context, it is worth mentioning that the current administration of President J. Biden also recognizes the significance of the Arctic and the growing interest of other states in this region. Despite differing opinions from the previous presidency, this subject, including China's aforementioned policy, serves as a common ground and a certain continuation of the overarching American strategy. This suggests that Norway would need to take such an approach into account. Furthermore, it is important to emphasize that under the Biden's administration the nomination for first ever US Ambassador-at-Large for the Arctic Region is in the pipeline. This is a symbolic confirmation of the region's significance to US foreign policy (Schreiber 2023).

In this situation, a question arises whether the chairship can pursue the policy of limiting the influence of some observers, China specifically, in favor of increasing the role of others. It seems difficult, to say the least. Despite the "softness" of the Arctic Council initiative, it seems unlikely that Norway would take such a step. Firstly, it could constitute a dangerous precedent for which nobody seems ready yet, and secondly, it would require support from the entire Council and cooperation with Russia is not expected in principle. This leads to the conclusion that other observers in the Council will unfortunately bear the consequences of such an approach, with all related repercussions. Certain positive signals or initiatives cannot be ruled out, but they are likely to be rather limited, at least under these circumstances. Nevertheless, this does not exempt the interested parties, primarily the observer states, from making various attempts, either unilaterally or in larger groups, to influence the presidency or the Arctic Council, even though the current circumstances are hardly conducive.

At the same time, it can be argued that, in all likelihood, China will do everything in its power to use the current impasse to pursue its long-term interests. As a result, China should not be expected to abandon cooperation in the Arctic Council. On the contrary, the state will likely assert and continue its participation in the Council's activities as long as possible, particularly with regards to scientific research (Chater 2021). Furthermore, China will undertake individualized actions towards the Arctic states, as well as attempt to influence Russia or make Russia dependent on China, in order to explore potential economic or developmental avenues. Therefore, this factor should be considered

not only by the Council and its presidency, but also by other observers, when attempting to increase their influence on the work of the Arctic Council or even its future. In this context, the question arises: where can we find a space for debate, various forms of activity, and support for cooperation that would stabilize the geopolitical situation while also promoting the sustainable development of the Far North? There are many arguments supporting the claim that such a space is provided by science diplomacy, the advantages of which, as they relate to the Arctic, are discussed in the subsequent part of the article.

Poland and the future of cooperation in the Arctic

To begin with, it should be emphasized that Poland's involvement in the active monitoring of the situation in the region and, as far as possible, presentation of opinions in the debate (bilateral and multilateral) constitute not only the fulfilment of goals of the Polish foreign policy, but also the actual implementation of Polish Polar Policy objectives. Anyway, it would be incoherent if Poland's opinions and activity were visible and heard concerning the allies' policy towards Russia in the majority of spheres of international relations, but excluding the Arctic. However, there is an impression that the geopolitical consequences for this region and its future somehow fall off the current list of priorities of the Polish political activity in the world.

In this context, one should not forget that Poland is historically one of the first observer states in the Arctic Council (Arctic Council 2023). Although this status is not reflected in the formal influence on the directions of this institution's activity, it definitely provides an impulse to pursue effective diplomacy. Of course, supported by involvement in scientific research, these areas are closely related not only towards the Arctic states per se, but also vis-a-vis other observers, mostly states, but not only. Again, bearing in mind the objectives of Polish Polar Policy, being visible in this group is nothing else than the practical implementation of the goals of the state's polar policy. Suggesting development-promoting activities, presenting postulates or ideas encouraging closer cooperation in the region, searching for potential business or development paths, but also expressing consistently and permanently a stance towards Russia as an outcome of the current situation and war in Ukraine, are the key, but not sole examples of such an approach.

The causative powers and alliance-building potential are confirmed by, for instance, the aforementioned instrument of informal cooperation between observer states and the EU, known as the Warsaw Format (MFA Poland 2019). This has become especially important as over time, it has evolved into a unique "format" where participants can also discuss in other locations or configurations, most notably on the sidelines of the so-called Senior Arctic Officials (SAO) meetings. Furthermore, during Iceland's presidency (2019–2021), a representative

from Poland not only had the opportunity to present the outcomes of the Format's meetings at formal SAO sittings, but the Icelandic presidency, building on the experiences of former Arctic Council presidencies, especially that of Finland, began to include meetings with observers in the SAO agenda even more frequently. This policy was understandably curtailed first by the Covid-19 pandemic, and then by the war in Ukraine, as described above, but the trend had already been evident. Therefore, it would be a mistake not to revisit these experiences and not to amplify the voices of observers, including Poland, of course.

Another avenue, or rather a platform for potentially intensifying influence on the situation in the Arctic, is a closer dialogue within the EU (Coninx 2021). The goal is not necessarily to enhance the EU's position in the Council, since it has not attained observer status thus far, but to strengthen the dialogue between the Arctic states of the EU, or more broadly, the Arctic states of the EU and the European Economic Area (EEA), and the EU states with observer status. This is particularly important as there are increasing calls to bolster the EU's role in the Arctic, especially in the context of the war in Ukraine (McGwin 2021; Chuffart and Raspotnik 2022). Interestingly, in the case of NATO and issues related to global security, the situation appears much clearer. The North Atlantic Alliance has been analyzing safety issues in the Arctic region for many years, and potential threats in the region are considered in strategic plans and forecasts about situational development (Mottola 2023). We also should not overlook the fact that Finland's and Sweden's membership in the Alliance is quite probable in the near future, which will again shift the balance of power in the region. A quasi-institutional example that can be mentioned here is the Munich Security Conference, where these issues frequently make the agenda. This conference includes the participation of NATO as well as EU states (MSC 2020; Rowe *et al.* 2020; Friis *et al.* 2023). The Arctic has not only become a place where various interests collide, but it is likely to remain so. Therefore, the sooner more effective forms of political cooperation are developed, the better (Jones 2023). This also represents an opportunity for Poland, given its long-term Arctic potential as previously described.

Certainly, the question about the format and location of such a dialogue still exists. Perhaps this is the best time to analyze the decision-making model within the EU itself, although it is known that issues concerning the Arctic are widely dispersed among various institutions and entities. This is particularly true for the Commission, European External Action Service, the Council of the European Union, and the European Parliament. Nevertheless, it does not change the fact that, especially concerning the above-mentioned dialogue between states, the current formula, where the Working Party on Eastern Europe and Central Asia, *i.e.*, competent in the issues of Russia and Eastern policy, is the leading group, does not fulfil the contemporary requirements. Therefore, it may be a suitable

moment to consider amendments to the rules of the Council, even aimed at the establishment of a separate group for Arctic cooperation.

However, that is not the entire picture. The aforementioned dialogue between the Arctic states from the EU/EEA and the EU observer states in the Arctic Council could also occur outside the formal decision-making structures in the EU. This would still involve EU representation, adhere to the framework of "loyal cooperation" and respect the competencies assigned to the EU as part of external relations. This presents another opportunity for Poland to become the spearhead of such a dialogue formula, especially given that the current number of EU observer states in the Arctic Council, which are now five, may soon change. One should remember the interest expressed by Estonia already some time ago, but also about the plans of Ireland (Government of Ireland 2020) and Belgium (Coninx *et al.* 2022). Hence, the process has certain dynamics. Poland, already the designated "host" of the Warsaw Format Meetings and a country that has recently strengthened its position in the EU with regard to Eastern policy, stands a good chance of becoming the catalyst for such a process. Of course, this process depends not so much on other European states, but primarily on the Arctic states of the EU/EEA, which have not always been fully supportive of including other countries in their relatively exclusive club. Nevertheless, one deals here with the *rebus sic stantibus* rule in a sense that not only the challenges related to climate change but also the polarization of attitudes and contemporary geopolitics strongly influence the prospects for maintaining the current forms of cooperation. In this context, the inadequacy of the political cooperation formula in the Arctic, *i.e.*, a soft international initiative and exclusive "management" by a group of Arctic states, is even more noticeable. Despite the current problems, it is a potential opportunity to be seized.

Poland's science diplomacy, understood as a set of practices followed by a diverse group of stakeholders, has a long tradition. The development of science has always been accompanied by contacts between scientists and the exchange of knowledge which goes beyond the ethnic, cultural and state borders. On the other hand, science diplomacy as a conscious form of external international activity, undertaken by state institutions and other stakeholders, is a relatively new field of operation in the case of Poland, as the first ministerial documents were issued in 2015, still in the conceptualization phase. Despite the initial involvement of state institutions, such as the Ministry of foreign affairs or the Ministry of Science, in the definition of the strategic and operational guidelines and the establishment of entities responsible for Poland's science diplomacy, most of the actions undertaken were abandoned at a very early stage of implementation, while in the case of others, *e.g.*, the development of structures accountable for the implementation of science diplomacy, we can even talk about regression, *e.g.*, liquidation of the position of the science and technology advisor to the Minister of Foreign Affairs (Szkarłat 2020).

Nevertheless, the abandonment of efforts leading to the further development of the concept and the implementation of science diplomacy, noticeable on the part of the state administration, does not mean that Poland pursues no science diplomacy at all. As in the majority of states, which do not have separate strategies or institutions responsible for this dimension of external activity, grass-roots initiatives prevail, undertaken by public and private entities operating in the science, technology and innovation sectors. Their activity goes beyond state borders, and the instruments used by them have been associated so far with the implementation of foreign policy and the activity of the state's diplomatic service (Szkarałat *et al.* 2020).

In the teleological dimension, a feature of the current science diplomacy of Poland is joining and benefiting from the cooperation with entities of a higher potential, including both states and non-state actors, which is described by neoclassical realists, *e.g.*, R. Schweller, as bandwagoning behavior (Schweller 2004). In our opinion, cooperation with entities of higher scientific and technological potential, more experience and a higher position in the internationalization of science or the application of science/expert knowledge for the achievement of goals of the external dimension of the state's public policies is a *sine qua non* condition for changing the status of Poland and the Polish science in the world. However, we notice a discrepancy between the declarations and the realities of Polish science diplomacy. This results from the impact of several variables, mostly internal factors, such as polarization and ineffective dialogue between political and scientific elites, wrongly understood instrumentalization of science, and a foreign scientific and technological policy aimed at the achievement of short-term goals of the domestic policy (Szkarałat *et al.* 2020).

Participation in international scientific cooperation, as well as the creation and provision of scientific/expert knowledge into the decision-making process, are of special importance in the Polish foreign policy and the foreign scientific policy towards the Far North. This is corroborated by the long tradition of research in the polar regions, since the end of the 19th century, and the established position of Polish researchers in the international scientific community. Moreover, Poland has the necessary scientific infrastructure which is made available to own and foreign research teams. It consists of S. Siedlecki Polish Polar Station at the Hornsund fjord in Svalbard, the Oceania research vessel, the Horyzont II research vessel, field stations of the University of Wrocław, Nicolaus Copernicus University in Toruń, Maria Curie-Skłodowska University in Lublin and Adam Mickiewicz University in Poznań. Polar research is conducted in 13 academic centers and scientific institutions, and the community of polar explorers is represented by the Committee on Polar Research of the Polish Academy of Sciences, established in 1977, the Polish Polar Consortium operating since 2012 and the Centre for Polar Studies, co-founded by the Faculty of Earth Sciences of the University of Silesia, the Institute of Geophysics and the Institute of

Oceanology of the Polish Academy of Sciences. Furthermore, the Polish polar explorers participate in numerous international research projects, get involved in the work of international bodies gathering the Arctic researchers, and share their knowledge in the decision-making processes and development of international regulations concerning such issues as the change of climate and its consequences for the Far North and the whole world through the Committee on Polar Research of the Polish Academy of Sciences and the Polish Polar Consortium.

The goals and guidelines of Poland's science diplomacy in the Arctic are specified in the Polish Polar Policy (Polish Polar Policy 2020) and the Strategy for Polish Polar Research 2017–2027 (KBP PAN and PKPol 2017). In the former document, the term of science diplomacy is mentioned *expressis verbis* and it is emphasized that one of the goals of the Polish Polar Policy is to develop Poland's science diplomacy in the Arctic and the Antarctic. Furthermore, the Polish Polar Policy authors identify a catalogue of instruments and actions that fit into the scope of science diplomacy. All dimensions of science diplomacy are discussed comprehensively (diplomacy for science, science for diplomacy, science in diplomacy), and a catalogue of instruments, activities and actors involved is adjusted to the general objectives of the Polish foreign policy and its polar dimension (Polish Polar Policy 2020).

The change in the international situation triggered by Russia's aggression in Ukraine and its consequences for the scientific cooperation in the Arctic, as well as internal factors related to changes in the state's scientific policy and the approach of the Ministry of foreign affairs and the ministry of education and science to the role of research and its further internationalization in Poland's external policy, create a necessity for adaptation and adjustment of the strategy and activities of science diplomacy to new challenges. A comprehensive vision of Poland's science diplomacy towards the Far North does not require a thorough redefinition, but rather a revision aimed at sorting out the priorities and making them realistic, taking into account the internal and external factors. In our opinion, effectively operating science diplomacy could be based on the triad conceptualization–coordination–evaluation. In the case of its northern direction, it was conceptualized; goals and priorities were set, stakeholders were identified and relevant roles were assigned to them, and tools were defined. Those responsible for the coordination of tasks were consciously selected. However, this stage still has a declarative or wishful character and lacks a strictly operational aspect, which refers primarily to the top-down coordination being one of the prerogatives of the state administration. It would be reasonable to create an institutionalized mechanism for coordination of the state's science diplomacy, also for the Arctic, in the form of an interministerial team, which would include representatives of ministries of foreign affairs, science, natural environment, maritime economy and energy, representatives of the scientific community, *i.e.*, the Polish Academy of Sciences, business and non-governmental organizations. However, except for a short-lasting Interministerial Team

for the Promotion of Poland Abroad, and the Task Group for the Scientific, Educational and Linguistic Promotion within its framework, no real efforts have been taken to establish such an entity (Szkarałat 2020). It would be especially relevant in the current situation when scientific cooperation and the use of scientific/expert knowledge in the decision-making process will be even more significant in such regions as the Arctic. Another argument in favor of this thesis is a challenge connected with the involvement in the preparations for the Fourth International Conference on Arctic Research Planning (ICARP IV) and the International Polar Year 2032–2033.

Currently, Polish science diplomacy is dominated by bottom-up activities undertaken by a diverse group of stakeholders, mostly by the scientific community and organizations representing it. This form of activity will be most probably maintained and continued in the future, but it would be reasonable to make it more coherent and coordinated. This is a task for the Polish Polar Consortium and the Committee on Polar Research of the Polish Academy of Sciences as the entities representing the Polish community of polar researchers. An important element of the processes of coordination but also communication is maintaining regular contact and dialogue with Poland's diplomatic service, especially with the diplomatic posts important from the perspective of Polish science diplomacy in the Arctic. In our opinion, the optimal solution would be to return to the idea of appointing scientific and technological advisors or scientific attachés in selected locations (Szkarałat *et al.* 2020). Owing to the long tradition of the Polish researchers' presence in the Svalbard archipelago region, a separate position, dedicated to scientific cooperation, should be established at the Embassy of Poland in Oslo. An indirect solution would be to intensify and include scientific cooperation and promotion of science into the list of priorities implemented by cultural attachés or by those responsible for economic and public diplomacy. It is worth drawing on the experience of other states, *e.g.* France, where the Campus France agency organizes the so-called breakfasts with ambassadors regularly, that is meetings of scientific and academic communities with French diplomats. The goals of the meetings are to improve communication, to discuss scientists' expectations connected with their presence in the receiving state in which the invited diplomat resides, as well as to provide information on the science and higher education sector, opportunities and circumstances of scientific cooperation. The similar activity could be implemented in Poland by the National Agency for Academic Exchange (Szkarałat 2022).

The same applies to the diplomatic mission of Poland in multilateral relations with the EU. A permanent communication channel should be created between the entities representing the Polish community of polar researchers and the diplomatic mission of the Poland at the EU. Another element ought to be regular cooperation with the Polish Science Contact Agency PolSCA of the Polish Academy of Sciences in Brussels. These actions are intended to build a desired image and to improve the recognition of the Polish community of polar

researchers in the EU system of managing the policy of scientific research and innovation. The aim is, *e.g.*, to increase the participation of Polish experts in groups evaluating the new guidelines formulated as part of the EU scientific research and innovation policy, and the priority areas financed under the EU framework programmes for scientific research and innovations.

Due to the lack of structures coordinating Polish science diplomacy at the level of the state's central institutions, especially ministries, this role must be taken over by the entities bringing together the Polish scientific community, such as the Polish Polar Consortium and the Committee on Polar Research of the Polish Academy of Sciences. Their priorities in this area should be aimed at the development and presentation of an uniform stance of the Polish scientific community on the international forum. The future activity of the Arctic Council may consist of the operation of the working groups and the intensification of observer states' activity in the Arctic Council. This is an important area that cannot be disregarded while defining the priorities of Poland's science diplomacy in the Arctic. As part of the actions promoting science abroad, such entities as the Polish Polar Consortium, the Committee on Polar Research and the recognized and acknowledged representatives of the Polish community of Arctic researchers should lobby the central institutions, especially the Ministry of Foreign Affairs and the Ministry of Science and Higher Education, to support and take an active part in the promotion of Poland as the host of important international events of the scientific character or with a scientific component, *e.g.*, events of the 5th International Polar Year or the Arctic Science Summit Week, hosted in Poland in 2013.

The effectiveness of science diplomacy depends largely on the understanding between the representatives of the worlds of science and politics. It can be promoted by training courses in scientific communication, while in a longer perspective, it is worth considering and creating permanent institutional solutions, *e.g.*, modelled on the Policy Associate Scheme in the United Kingdom. It is an instrument which enables a scientist to be delegated for several months to an institution responsible for the state's scientific policy. A similar programme operates in the USA and is aimed at delegating scientists to work in American diplomatic posts (Szkarłat *et al.* 2022; The Royal Academy 2023). Without a doubt, the media can provide support in communication and promotion of knowledge about the Far North and the contribution of Polish researchers to international scientific cooperation in this region. In addition to the popular channels based on social media, it is worth inviting well-known and acknowledged writers, journalists, travelers and photographers, who share an interest in the Arctic, to regular cooperation.

The biggest challenge for the operationalization of Polish science diplomacy in the Arctic is the insufficiency or complete lack of regular sources of funding, dedicated to this purpose. For the intensification of the Polish international presence, it is necessary to create a permanent financial mechanism that would

include the National Polar Research Programme but also additional paths for funding the greater presence of experts from Poland in international decision-making and consulting bodies, actions promoting Polish polar research abroad and networking, without which it would be hardly possible to maintain a good position in a highly competitive international environment of research and innovation.

Conclusions

The current situation, marked by a crisis in Arctic cooperation and a pause in the Arctic Council's activity, resembles a puzzle with diverse configurations of actors (Western states versus Russia and its partners, Arctic states versus non-Arctic actors, starting with the EU and China), various facets of relations (policy, diplomacy, economy), and alternative development scenarios primarily concerning the future operation of the Arctic Council. Apart from the general relations between the West and Russia associated with prospects for ending the war in Ukraine, key factors will include Norway's impending chairship of the Arctic Council, and the potential for developing institutionalized cooperation around Arctic issues under Russia's aegis. Therefore, in light of the aforementioned analysis, we believe that the future of Arctic cooperation should be predicated not only on freezing political cooperation with Russia and within the forum of the Arctic Council, but also on the emergence of new, competitive forms of collaboration aimed at Russia and its partners who are distancing themselves from the positions of Western states. According to this scenario, Russia will persist in an Arctic policy of confrontation towards Western countries in the coming years. In this context, with the looming opposition between Western and Russian blocs, and potentially a group of actors that are at least formally independent, the role of science diplomacy will likely see significant enhancement and acquire new dynamics.

The aims of such diplomacy and the instruments used generally point to its cooperative-competitive character, which is clearly confirmed by the experience from the Arctic. A heterarchical network of science diplomacy stakeholders, functioning there for many years, not only has its own specific features, *e.g.* inclusion of traditional knowledge, and dynamics, *i.e.*, some activities based on long-term research projects, or diplomatic-scientific conferences organized regularly, but also responds to the current crisis in diverse ways. While in spring 2023 the prospects for real dialogue between the West and Russia seem distant, at the same time it is noticeable that exactly in the area of science diplomacy there are chances for returning to the table, at least for some actors. In this context and the current conditions, science diplomacy provides a place for the operation of not necessarily major players, such as Poland or Belgium (van Loon 2023).

The enactment of the Polish Polar Policy, which was prepared over several years, primarily on the initiative of the Ministry of Foreign Affairs and with the support of the scientific community, was intended to establish formal grounds, identify strategic political goals, and develop the organizational and institutional framework for enhancing previously scattered domestic and international activities in polar matters. However, in our opinion, the document has so far only held political, or even symbolic significance, primarily because it lacks specific solutions for consistent, long-term financing of Poland's activity in the polar regions. The enactment of the Polish Polar Policy has not changed the polar issues' status among officials representing public administration bodies, who often view this subject as not very important or simply ignore it. However, in the context of the shift in the political climate and the cooperation crisis in the Arctic after February 2022, the Polish Polar Policy requires only minor adjustments, but most importantly, an "implementation" that mirrors Poland's creative adaptation to the new circumstances. Concurrently, bolstering Polish science diplomacy in the Arctic requires more than mere discussions and declarations.

Poland possesses relevant experience, both as an observer state in the Arctic Council and as the initiator of the Warsaw Format Meetings, to develop its polar policy leading to an intensification of diplomatic activity in the Arctic and globally. This is particularly true among Western states, especially within the EU, but also in contacts with Asian observers, which may indirectly impact their relations with Russia. Due to limitations in consciously leveraging the potential of science diplomacy, Polish authorities may struggle to utilize available resources and opportunities pertaining to the Arctic. In this situation, a bandwagoning strategy may prove to be the correct approach, as it could significantly enhance the implementation of Polish Polar Policy principles, including Poland's science diplomacy in the Arctic. However, before this can occur, an operational model must first be developed domestically, which we define as a triad conceptualization–coordination–evaluation; strengthening of the entities coordinating Poland's polar policy, its funding, and promotion both domestically and internationally. Without a doubt, the scale of these tasks is daunting, but we should remember that every crisis has its end. In this case, this may mean that, without proper adaptation, the window of opportunity we mentioned at the beginning could soon become an opportunity missed.

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