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APPLICATION AND INTERPRETATION OF THE AGREEMENT ON ENHANCING INTERNATIONAL ARCTIC SCIENTIFIC COOPERATION

INTRODUCTION. *The Agreement on Enhancing International Arctic Scientific Cooperation, 2017, has recently become part of the International Law applicable to the Arctic Region and the relevant legal history is considered in this paper. Special attention is paid to the scope of application of the 2017 Agreement and the interpretation of provisions which provide new rights and obligations of its Parties in the context of an extensive international legal framework which already applies to the Arctic Ocean. Materials and Methods.* *The materials for research include first and foremost the text of the 2017 Arctic Agreement, in the context of other rules of International Law, both treaty and customary, which are applicable to the Arctic Ocean. General and special*

scientific methods of contemporary cognition composed the relevant methodological basis for the research.

RESEARCH RESULTS. *The 2017 Arctic Agreement has become an important element of the extensive international legal framework which applies to the Arctic Ocean. This broad international legal framework is contained in a system of International Law instruments regulating relations between subjects of International Law: first of all, between Arctic States, and then between them and non-Arctic States; especially in such branches of States' activity as the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea.*

*Within this extensive legal framework the 2017 Agreement has a special position as *lex posterior*. This is important in the context of the scope of the Agreement (the designated territories of the Parties) and also taking into account the complexity of its correct interpretation.*

DISCUSSION AND CONCLUSION. Science cooperation according to the 2017 Arctic Agreement may contribute to improving regulatory measures in a number of vital areas: to promote best available technologies in the Arctic region; to make more safe navigation in the Arctic waters (while they are becoming free from ice during most of the year); to assist in formulating modern maps for Arctic navigation; to advance plans for creating modern port infrastructure in the North; science cooperation might give impetus to designating new sea lanes and

traffic separation schemes (in the Barents Sea and in the Bering Strait, for example) and to promote additional legal measures to protect and preserve the marine environment in the Arctic.

KEYWORDS: *The Agreement on Enhancing International Arctic Scientific Cooperation, the extensive international legal framework, the Arctic Council, international science collaboration, Arctic States, non-Arctic States*

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ВОПРОСЫ ТЕОРИИ

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ПРИМЕНЕНИЕ И ТОЛКОВАНИЕ СОГЛАШЕНИЯ ОБ УСИЛЕНИИ МЕЖДУНАРОДНОГО НАУЧНОГО СОТРУДНИЧЕСТВА В АРКТИКЕ

ВВЕДЕНИЕ. Соглашение об усилении международного научного сотрудничества в Арктике, 2017 г., недавно стало частью международного права, применимого к данному региону, и в настоящей статье это рассматривается в историко-правовом контексте. Особое внимание уделено району применения Соглашения 2017 г. и толкованию тех его положений, которые предусматривают новые права и обязательства государств – участников Соглашения в контексте широкой международно-правовой основы, которая уже применяется к Северному Ледовитому океану.

МАТЕРИАЛЫ И МЕТОДЫ. Исследовался прежде всего текст Соглашения 2017 г. в контексте других норм международного права, как обычных, так и договорных, применимых к Северному Ледовитому океану.

Общие и специальные научные методы современного познания составили применимую методологическую основу исследования.

РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЯ. Соглашение 2017 г. стало важным элементом широкой международно-правовой базы, применимой к Северному Ледовитому океану. Эта широкая международно-правовая основа заложена системой международно-правовых норм, регулирующих отношения между субъектами международного права, в первую очередь между арктическими государствами, а также между ними и неарктическими государствами, особенно в таких сферах деятельности государств, как защита морской среды, в том числе в покрытых льдом районах; свобода судоходства в открытом море; морские научные исследования; другие виды использования моря.

В этой широкой международно-правовой базе Соглашение 2017 г. занимает особое место как *lex posterior*. Это важно в контексте сферы действия данного Соглашения и трудностей его корректного толкования.

ОБСУЖДЕНИЕ И ВЫВОДЫ. Научное сотрудничество в соответствии с Соглашением 2017 г. может способствовать улучшению мер регулирования в ряде жизненно важных областей, с тем чтобы судоходство в арктических водах (по мере того, как они освобождаются от льдов в течение большей части года) было более безопасным; чтобы содействовать выпуску современных навигационных карт для Арктики; чтобы продвигать планы создания современной портовой инфраструктуры на Севере и устанавливать новые схемы разделения движения (например, в Баренцевом море и в Беринговом проливе); чтобы принимать дополнительные правовые меры защиты и сохранения морской среды в Арктике.

КЛЮЧЕВЫЕ СЛОВА: Соглашение об усилении международного научного сотрудничества в Арктике, широкая международно-правовая база, Арктический совет, международное научное сотрудничество, Арктические государства, неарктические государства

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Signed on behalf of the Governments of all eight Arctic States – members of the Arctic Council (that is on behalf of the Governments of Canada, Denmark, Finland, Iceland, Norway, Russian Federation, Sweden and USA) on May 11, 2017 in Fairbanks, Alaska, USA, the *Agreement on Enhancing International Arctic Scientific Cooperation* (further also – *the 2017 Arctic Agreement*)¹ promotes, in essence, a holistic process through which science can advance deeper understanding of the Arctic, not

only by decision-makers in the Arctic States but also by the public in general. This will help contribute to answering many modern and urgent questions relevant to constructive and fruitful interaction between Arctic States, in view of the present and significant environmental change in the Arctic region, including the Arctic Ocean; the multi-year (permanent) sea-ice cap, which is diminishing; while more and more areas of the Arctic Ocean are becoming seasonally ice-free [Young 2013].

¹ Agreement on Enhancing International Arctic Scientific Cooperation. Fairbanks. 2017. URL: <https://www.state.gov/e/oes/rls/other/2017/270809.htm> (accessed date: 18.10.2017).

The purpose and object of the 2017 Arctic Agreement. The States which are Parties to this new international treaty recognized first and foremost in its preamble:

- “the importance of maintaining peace, stability, and constructive cooperation in the Arctic;
- “the importance of the sustainable use of resources, economic development, human health, and environmental protection;
- “the importance of need for increased actions to mitigate and adapt to climate change”;
- and, “the importance of international scientific cooperation in that regard”.

The purpose of the 2017 Arctic Agreement, as it is provided in Article 2, “is to enhance cooperation in Scientific Activities in order to increase effectiveness and efficiency in the development of scientific knowledge about the Arctic”.

In short, the 2017 Arctic Agreement, negotiated under the auspices of the Arctic Council, between foreign ministers of the Arctic States, contains legally binding commitments of the Parties relating first of all to facilitation of the work of scientists engaged in research dealing with Arctic issues. Specifically, the 2017 Arctic Agreement provides rules aimed to facilitate entry and exit of persons, equipment, and material (Art. 4); rules aimed to facilitate access to national research infrastructure and facilities and logistical services (Art. 5); to facilitate access to terrestrial, coastal, atmospheric and marine areas as identified in the Agreement (Art. 6 and Annex 1).

It is notable that the Russian Federation and the USA chaired the task force that developed the terms of the 2017 Arctic Agreement. Russian Foreign Minister Lavrov and US Secretary of State Tillerson expressed their support for this initiative at the signing ceremony in Fairbanks, Alaska, US.

Relevant precedents

The 2017 Arctic Agreement is certainly not the first multilateral international agreement created by a number of States with the leading contributing roles of USA and Soviet Union/Russia.

During World War II (1939-1945), the US and the Soviet Union (or the USSR), together with Great Britain, were key Allies in the struggle against Nazi Germany. Resulting from their common Great Victory the US and the USSR, together with Great Britain and France, played a key role in drafting the major instrument of contemporary international law, that is the Charter of the United Nations (finally signed on 26 June 1945); which remains today the principal treaty source of contemporary International Law – the only legal regulator of behavior of States [Vylegzhanin, Ignatenko, Skuratova 2011: 9-27]. In the event of a conflict between the obligations of a State under the UN Charter and its obligations under any other international agreement, its obligations under the Charter “shall prevail” (article 103 of the UN Charter).

Even during the depths of the Cold War, effective international regimes were established, on account of common objectives of both the USA and USSR. Best known is the *Antarctic Treaty System*. The core of this regime is *the Antarctic Treaty*², signed in 1959. The Treaty freezes pre-existing claims to territorial sovereignty in Antarctica (Art. IV), demilitarizes the continent (Art. I), declares “freedom of scientific investigation in Antarctica” (Art. II), and provides for measures “to promote international cooperation in scientific investigation in Antarctica” (Art. III). In the language of the 1991 *Environmental Protocol to the Antarctic Treaty*³, the Parties designate Antarctica “as a natural reserve, dedicated to peace and science”. The Antarctic regime, now approaching its 60th anniversary, has proven highly effective. Although it has evolved in significant ways over time, covering different areas of relations between States in the Antarctic, scientific cooperation remains the glue that holds the Antarctic Treaty System together.

Another famous example centers on the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, 1967⁴. This legal regime is based on the premise that outer space as a whole and any celestial body cannot be a territory under the sovereignty of any state (Art. II). The 1967 Treaty provides that the moon and other celestial bodies are

² Antarctic Treaty; Entered into force June 23, 1961. 402 U.N.T.S. 71.

³ Golitsin V.V., Vylegzhanin A.N. Mezhdunarodno-pravovoi rezhim ispol'zovaniya mineral'nykh resursov za predelenami natsional'noi yurisdiktsii [International Legal Regime of utilization of mineral resources beyond the national jurisdiction]. *Mezhdunarodno-pravovye osnovy nedropol'zovaniya*. Pod red. A.N. Vylegzhanina [International Legal Basics of Using Subsoil. Ed. by A.N. Vylegzhanin]. Moscow.2007. P. 221-230. (In Russ.) See also: *Deistvuyushchee mezhdunarodnoe pravo. Izbrannye dokumenty* [International Law today. Selected Documents]. Moscow: MGIMO–University Publ. 2014. P. 98-102. (In Russ.).

⁴ Kolosov Yu.M., Shtodina I.U., Uzbashyan M.R. Mezhdunarodnoe kosmicheskoe pravo [International Space Law]. – *Mezhdunarodnoe pravo*. Pod red. A.N. Vylegzhanina. V dvukh tomakh. Tom 2. [International Law. Ed. by A.N. Vylegzhanin Vol. 2]. Moscow: Yurait Publ. 2016. P. 242, etc. (In Russ.). See also: [Shaw 2017:403-405].

not subject to appropriation by any country and calls for space programs to be “carried out for the benefit of all countries” (Art. I). It stipulated that “there shall be freedom of scientific investigation in outer space, including the moon and other celestial bodies, and States shall facilitate and encourage international cooperation in such activities” (Art. I). Since that time, science and scientific investigation in outer space remains as one of the core objects of such a branch of International Law as Outer Space Law⁵. The outer space legal regime (which has become feasible because of the consent between USA and USSR/Russia) has provided a framework for the public order of outer space for over fifty years and remains robust even in the current era marked by rapid advances in the uses of satellite observations for a variety of purposes⁶.

There are other positive precedents of US-Russia scientific collaboration. One of them (though less notorious) is their leadership in the joint drafting of the multilateral *Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean*. Unregulated and uncontrolled fishing of these valuable stocks in the High Seas of the North Pacific since 1950 was a serious problem for conservation and management of such stocks. Biologists, ecologists and specialists in the law of the sea from US and USSR/Russia worked together in late 1980s to prepare a draft set of mutually accepted compromises. These compromises did not reflect all preferences of either the US or Russia (as States of origin of significant Pacific anadromous stocks), nor of Japan, South Korea and other States which practiced fishing such stocks in the High Seas at that time. Nevertheless, such compromises provided a reasonable balance of competing legal positions of States of origin and of States whose vessels fished anadromous stocks in the High Seas. As a result, a balanced international regime was agreed upon and, in 1992, the multilateral *Convention for the Conservation of such stocks* was signed. The Convention proved to be successful, as was generally recognized at the International Conference in 2017 devoted to its 25th Anniversary⁷.

Building Common Interests in the Arctic. The Arctic certainly differs from Antarctica and from the

vast maritime spaces of the Pacific Ocean, not least because the Arctic Region has some four million permanent residents; only the US, Canada, Denmark, Norway and Russia have their Exclusive Economic Zones (EEZ) and Continental Shelves in the Arctic Ocean, including areas to the North of the Arctic Circle; and, because sizable parts of the region are located within the sovereignty of the Arctic States [Environmental Security... 2013]. The impacts of climate change are more dramatic in the Arctic than anywhere else on the planet; key questions arising from this situation focus on the dynamics of sea ice in the Arctic, including the Greenland ice sheet; the consequences of the melting of terrestrial permafrost; and, the problems of communities facing pressures to relocate in the face of coastal erosion. Similar opportunities focus on the conditions governing sustainability in Arctic communities, which are no longer able to pursue purely subsistence lifestyles but which, at the same time, are not in a position to adopt the lifestyles of mainstream communities in advanced industrial societies. The challenges these communities face, ranging from issues of health, education, and welfare to threats to cultural integrity, call for efforts to combine the contributions of traditional ecological knowledge with the insights of modern science, in an effort to develop strategies that can support sustainability in a world of rapid biophysical and socioeconomic change.

Arising from the “burning security issues”⁸ of the Cold War, science began to promote international cooperation in the Arctic, starting with the establishment of the nongovernmental *International Arctic Science Committee* in 1990⁹. The following year, the eight Arctic states signed the Rovaniemi Declaration on the Protection of the Arctic Environment, launching the intergovernmental *Arctic Environmental Protection Strategy*¹⁰ with “cooperation in scientific research” as the centerpiece of the activities to be carried out.

In 1996, the eight Arctic States, together with six indigenous people’s organizations established the Arctic Council as “a high-level forum” to promote cooperation with sustainable development

⁵ Kolosov Yu.M., Shtodina I.U., Uzbashyan M.R. *Op. cit.* P. 247-255.

⁶ Ibidem.

⁷ Personal archives of Prof. Vylegzhanin (in 1980-s being the Chief Legal Adviser for the USSR Delegation at the US-USSR negotiations on the Conservation of Anadromous Stocks in the North Pacific Ocean).

⁸ Gorbachev M. Speech in Murmansk at the Ceremonial Meeting on the Occasion of the Presentation of the Order of Lenin and the Gold Star to the City of Murmansk, 1 October 1987. English translation prepared by the Press Office of the Soviet Embassy, Ottawa, 1988. URL: https://www.barentsinfo.fi/docs/Gorbachev_speech.pdf (accessed date: 18.10.2017).

⁹ International Arctic Science Committee. URL: <http://iasc.info/> (accessed date: 18.10.2017).

¹⁰ Arctic Environmental Protection Strategy. Rovaniemi. 1991. URL: (http://library.arcticportal.org/1542/1/artic_environment.pdf). (accessed date: 18.10.2017).

and environmental protection as “*common Arctic issues*”¹¹.

Of special importance is the Arctic Ocean conference in Ilulissat, Greenland (Denmark), 27–29 May 2008. As provided in the Ilulissat Declaration of the five coastal States bordering on the Arctic Ocean – Canada, Denmark, Norway, the Russian Federation and the United States of America:

“By virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean the five coastal states are in a unique position to address” relevant possibilities and challenges. In this regard, they have recalled “that an extensive international legal framework applies to the Arctic Ocean”. Notably, “the law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea”. The five Arctic coastal states “remain committed to this legal framework” which provides a solid foundation for responsible management by the five coastal States and other users of this Ocean through national implementation and application of relevant provisions”. As a conclusion, the Arctic coastal States “see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean” while keeping “abreast of the developments in the Arctic Ocean” and continuing “to implement appropriate measures”. The document also provides that the Arctic Ocean “is a unique ecosystem, which the five coastal states have a stewardship role in protecting. Experience has shown how shipping disasters and subsequent pollution of the marine environment may cause irreversible disturbance of the ecological balance and major harm to the livelihoods of local inhabitants and indigenous communities”. The five Arctic coastal States have an obligation to “take steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection and preservation of the fragile marine environment of the Arctic Ocean”.

The document further provides that the five Arctic coastal states “currently cooperate closely in the

Arctic Ocean with each other and with other interested parties. This cooperation includes the collection of scientific data concerning the continental shelf, the protection of the marine environment and other scientific research. We will work to strengthen this cooperation, which is based on mutual trust and transparency, inter alia, through timely exchange of data and analyses”.

It is notable that the “Arctic Five” highly estimated in their 2008 Declaration the role of the Arctic Council and other institutional mechanisms in the governance of the Arctic region: “The Arctic Council and other international fora, including the Barents Euro-Arctic Council, have already taken important steps on specific issues, for example with regard to safety of navigation, search and rescue, environmental monitoring and disaster response and scientific cooperation, which are relevant also to the Arctic Ocean. The five coastal states of the Arctic Ocean will continue to contribute actively to the work of the Arctic Council and other relevant international fora.”

The Ilulissat Declaration has confirmed the common position of the five Arctic Coastal States relating to the contemporary legal regime of the Arctic Ocean. This legal regime provides for harmonizing common interests of the Arctic and non-Arctic States in the High North [Vylegzhanin 2011: 379–371].

Starting in 2009, as the foreign ministers of the Arctic countries began to engage personally, the idea of “*peace*” became an explicit commitment articulated in the Arctic Council Declarations¹².

At the same time, the Arctic Council began to use “*working groups*”, “*expert groups*” and “*task forces*” to address issues of common concern.

In parallel with developing the international legal network relating to the Arctic, the Arctic Council initiated the Arctic Economic Council¹³ in 2014 as well as the Arctic Coast Guard Forum¹⁴ and Arctic Offshore Regulators Forum¹⁵ in 2015. These new institutions also function within the international legal framework applicable to the Arctic Ocean, to which all Arctic states remain committed¹⁶.

Further strengthening the role of science in the Arctic was the objective of the Arctic Science Ministerial meeting organized by the United States in 2016

¹¹ Declaration on the Establishment of the Arctic Council, Ottawa, Canada. 1996. URL: <https://oarchive.arctic-council.org/handle/11374/85> (accessed date: 18.10.2017). See also: [Berkman et al. 2017: 2–4].

¹² Arctic Council website. URL: <https://www.arctic-council.org> (accessed date: 18.10.2017).

¹³ Arctic Economic Council. URL: <https://arcticeconomiccouncil.com> (accessed date: 18.10.2017).

¹⁴ Arctic Coast Guard Forum. URL: http://www.arctic-council.org/eppr/wp-content/uploads/2015/06/2015_11_05_ACGF_TOR_Final_Approved.pdf (accessed date: 18.10.2017).

¹⁵ Arctic Offshore Regulators Forum. URL: <https://oarchive.arctic-council.org/handle/11374/1729>. (accessed date: 18.10.2017)

¹⁶ Vision for the Arctic. Arctic Council Secretariat. Kiruna. 2013. URL: http://www.mid.ru/en/foreign_policy/ecology/asset_publisher/9jm0ASADm3qm/content/id/110278 (accessed date: 18.10.2017).

“to focus on the potential of increased cooperation on Arctic science”¹⁷, with the next meeting scheduled for October 2018 hosted by Germany¹⁸. With high-level engagement since 2009, the Arctic Council has broadened its focus to include all aspects of sustainable development and become more prominent in the realm of policy, progressing – for the first time in history – toward a gathering of all heads of the Arctic States during the Finnish chairmanship (2017–2019).

In this context the 2017 Arctic Agreement has become a remarkable contribution to the broad context of International Law rules applicable to the conduct of scientific research in the Arctic.

The 2017 Arctic Agreement: issues of application within the general legal regime of marine scientific research.

There is a *universal legal framework*, by way of customary rules of international law, relating to the legal regime of marine scientific research. Most of these rules are now reflected in Part XIII of the *UN Convention of the Law of the Sea (UNCLOS)* with its emphasis on marine scientific research¹⁹. The 2017 Arctic Agreement provides in its Preamble that the Parties “fully” take into account “the relevant provisions” of UNCLOS, “in particular the provisions of Part XIII”. This Part provides for general principles for the conduct of marine scientific research – such research shall be conducted “exclusively for peaceful purposes”; “shall not unjustifiably interfere with other legitimate uses of the sea”, etc. (Art. 240 of UNCLOS). Marine research activities “shall not constitute the legal basis for any claim to any part of the marine environment or its resources” (Art. 241). States, “in accordance with the principle of respect for sovereignty and jurisdiction and on the basis of mutual benefit, promote international cooperation in marine scientific research for peaceful purposes” (Art. 242).

There are specific rules for marine scientific research in areas with different legal status. In the *territorial sea* such research “shall be conducted only with the express consent of and under the conditions set forth by the coastal state” (Art. 245 of UNCLOS). The same is true when a part of the territorial sea of the

coastal state forms a part of a strait used for international navigation; according to Article 40 of UNCLOS, during transit passage through such straits foreign ships “may not carry out any research or survey activities without the prior authorization of the States bordering straits”.

In the *exclusive economic zone*, according to Article 56, the coastal state has jurisdiction with regard to *inter alia* “marine scientific research”. The coastal state exercises over the *continental shelf* sovereign rights for the purpose *inter alia* “of exploring it” (Art. 77).

Marine scientific research in the EEZ and on the *continental shelf* “shall be conducted with the consent of the coastal state”. In normal circumstances coastal states shall “grant their consent” for such research. Coastal States may, however, “withhold their consent to the conduct of a marine scientific research project of another State or competent international organization in the exclusive economic zone or on the continental shelf of the coastal State if that project:

“(a) is of direct significance for the exploration and exploitation of natural resources”;

(b) involves “drilling into the continental shelf, the use of explosives or the introduction of harmful substances into the marine environment”;

(c) involves “the construction, operation or use of artificial islands, installations and structures”; or,

(d) contains information “regarding the nature and objectives of the project which is inaccurate or if the researching State or competent international organization has outstanding obligations to the coastal State from a prior research project” (Art. 246).

As for the *high seas*, it is remarkable that in contrast to the Geneva Convention on the High Seas, UNCLOS specifically provides that freedom of the high seas comprises *inter alia* “freedom of scientific research” (Art. 87 of UNCLOS). All competent international organizations have the right, in conformity with UNCLOS, “to conduct marine scientific research in the water column beyond the limits of the exclusive economic zone” (Art. 257). The term “water column” means here superjacent waters beyond the 200-mile EEZ. Reference to the words “water column” is especially important for the Arctic Ocean which is the smallest in comparison to the Atlantic, Pacific and Indian Oceans; the average depth

¹⁷ US Arctic Research Commission and Arctic Executive Steering Committee, Supporting Arctic Science: A Summary of the White House Science Ministerial Meeting, September 28, 2016. Arlington, VA.: USARC. 2016. URL: https://www.arctic.gov/publications/other/supporting_arctic_science.html (accessed date: 18.10.2017).

¹⁸ European Commission. URL: <http://ec.europa.eu/research/index.cfm?pg=events&eventcode=187D5765-E38F-9AFC958DA987ECDD0613> (accessed date: 19.10.2017).

¹⁹ United Nations Convention on the Law of the Sea. Signed December 10, 1982. Entry into Force November 16, 1994. URL: http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm (accessed date: 18.10.2017).

of the Arctic Ocean is also the least; it is suggested that from the legal point of view, the areas of the sea bottom in the Arctic – under the “water column” of the Arctic High Seas – are to be qualified as the continental shelf either of the US, Canada, Denmark (Greenland), Norway or Russia.

Specific legal instruments relevant to scientific collaboration in the Arctic Ocean have been created and are being created by the Arctic States. The first international agreement of the five Arctic Coastal States, the *Agreement on the Conservation of Polar Bears*, 1973, provides: “Each Contracting Party shall take appropriate action to protect the ecosystems of which polar bears are a part, with special attention to habitat components such as denning and feeding sites and migration patterns, and shall manage polar bear populations in accordance with sound conservation practices based on the best available scientific data”.

According to the *Agreement on cooperation on aeronautical and maritime search and rescue in the Arctic*, 2011 (sometimes referred to as “the agreement regarding search-and-rescue”²⁰): “The Government of Canada, the Government of the Kingdom of Denmark, the Government of the Republic of Finland, the Government of Iceland, the Government of the Kingdom of Norway, the Government of the Russian Federation, the Government of the Kingdom of Sweden, and the Government of the United States of America”, shall promote mutual search and rescue cooperation by giving due consideration to collaborative efforts including, but not limited to: (a) exchange of experience; (b) sharing of real-time meteorological and oceanographic observations, analyses, forecasts, and warnings; (c) arranging exchanges of visits between search and rescue personnel; ... (f) sharing information systems, search and rescue procedures, techniques, equipment, and facilities...”

In accordance with the *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic*, 2013 (sometimes referred to as the “Preparedness Agreement”²¹), the Government of Canada, the Government of the Kingdom of Denmark, the Government of the Republic of Finland, the Government of Iceland, the Government of the Kingdom of Norway, the Government of the Russian Federation, the Government of the Kingdom of Sweden, and the Government of the United States of America shall endeavor to cooperate in organizing and conducting monitoring, especially regard-

ing transboundary oil pollution, inter alia, through conclusion of bilateral or multilateral agreements or arrangements. Such monitoring certainly implies exchange of scientific data.

There are numerous bilateral agreements between Arctic States which provide rules relevant to international scientific cooperation already considered in literature on International Law, including Russian legal sources published in English [International Cooperation...2013:69-77].

Less well-known is the work of the *International Arctic Science Committee* (IASC), an initiative reflected in assemblies of national ministers of science, and the efforts of the Working Groups of the Arctic Council. IASC is a nongovernmental body established in 1990 whose members are national academies of science or analogous entities; it currently has 23 members. The gatherings of science ministers represent an alternative approach to the promotion of scientific cooperation regarding Arctic matters. The first of these gatherings, held on 28 September 2016 in Washington, DC, brought together ministers from some 25 countries plus the European Union “to focus on the potential of increased cooperation on Arctic science”. A second gathering of this group is planned for 2018 to be hosted by the European Union.

For their part, the Working Groups of the Arctic Council, which are the principal “engines” powering the Council’s research work, produce rigorous scientific assessments. Within the framework of the Arctic Council, the *Arctic Monitoring and Assessment Programme* (AMAP), and the *Working Group on the Conservation of Arctic Flora and Fauna* (CAFF), in particular, have produced scientific assessments that have played significant roles in identifying and addressing major policy issues.

IASC, on the other hand, tries to bring together working scientists from all countries engaged in Arctic research; to assess the state of knowledge in a variety of fields; to identify fruitful areas for future research; and, to set priorities within the science community. Ministries of science (or analogous bodies like the National Science Foundation in the US) have a critical role to play in mobilizing the material resources needed to conduct sustained research in the Arctic. Although the resources involved are not large (compared to those required to support Antarctic research programs), they are substantial compared to research in other fields.

²⁰ Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic. Nuuk. 2011. URL: <https://www.state.gov/documents/organization/205770.pdf> (accessed date: 18.10.2017).

²¹ Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic. Kiruna. 2013. URL: <https://www.state.gov/documents/organization/264791.pdf> (accessed date: 18.10.2017).

For their part, bodies like AMAP and CAFF specialize in scientific assessment. The results of their work depends, critically, on the growth of scientific knowledge. While they are not producers of knowledge, they can help to identify important gaps in knowledge to be filled by members of the science community in their ongoing research. There is a risk of confusion or even friction regarding the role of these initiatives in future. Taken together and assembled coherently, however, these elements can provide a strong base for further improving the scientific expertise available to decision – makers in the Arctic States.

The *territorial scope* of the 2017 Arctic Agreement is a special issue to consider. According to the *Vienna Convention on the Law of Treaties*, 1969, unless a different intention “appears from the treaty or is otherwise established, a treaty is binding upon each party in respect of its entire territory” (Art. 29). The 2017 Arctic Agreement establishes “a different intention” of the Parties as far as access to research areas are concerned. According to Article 6, the Parties “shall facilitate access by the Participants to terrestrial, coastal, atmospheric, and marine areas in the Identified Geographic Areas”. This term means, according to Article 1, those areas described in Annex 1. And Annex 1 is remarkable: each Party of its own free will has described its component of “*Identified Geographic Areas*” (IGA). Taken together, however, these components are a part of the 2017 Agreement and can't be changed by any Party.

The Parties have demonstrated different approaches describing such IGA, that is, its national areas to which the Agreement's provisions on access are applicable:

Canada – the “territories of Yukon, Northwest Territories, and Nunavut and the adjacent marine areas of Canada”;

USA – US “territory north of the Arctic Circle and north and west of the boundary formed by Porcupine, Yukon, and Kuskokwim Rivers; the Aleutian chain; and adjacent marine areas in the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas”;

Norway has demonstrated the most cautious approach – including in its IGA only “Marine areas north of 62 degrees north latitude, and land areas north of the Arctic Circle”.

And the most expansive approach has been demonstrated by Russia, opening the largest land and marine territories to foreign access:

1. Territory of the Murmansk Region;
2. Territory of the Nenets Autonomous Area;
3. Territory of the Chukchi Autonomous Area;

4. Territory of the Yamalo-Nenets Autonomous Area”.

In addition to these huge Autonomous Areas of Russia some municipal entities of Komi Republic; of Krasnoyarsk Territory; of Arkhangelsk region are included in Russia's IGA. Also, all territories “identified in the Resolution of the Presidium of the Central Executive Committee of the USSR dated April 15, 1926” are included in the IGA.

So different Arctic States included different parts (from very small part to vast spaces) in Identified Geographic Areas. Such uncorrelated legal positions of the Arctic States relating to Identified Geographic Areas might raise questions in their Parliaments, but hopefully will not hinder the very application of the Agreement.

In sum, the 2017 Arctic Agreement (being a peculiar international treaty and an intergovernmental measure concluded by all the eight Arctic States) is not limited in its application to marine research. The legal scope of the 2017 Arctic Agreement might be ambitious: to promote synergistic interaction among all, including legal arrangements relating to scientific collaboration in the Arctic Region. What, though, is the most important, under the terms of the 2017 Agreement, is that the Parties can take the initiative to ensure access to research areas, the availability of research infrastructure and facilities, and access to data. Realization of such provisions of the Agreement, however, might raise sharp questions of its interpretation; taking into account, for example, the sensitivity of such access to concrete areas in the Northern areas of Russia and in Alaska, USA, because defense and security interests of the USA and Russia in the Arctic are traditionally significant.

Issues of interpretation of the 2017 Arctic Agreement

Only four terms are defined in the 2017 Agreement: “Facilitate”, “Participant”, “Scientific Activities” and “Identified Geographic Areas”. The meaning of such terms as defined in the 2017 Agreement does not seem to create difficulties. As for understanding the precise meaning of other terms and clauses used in the Agreement, it is necessary to rely on “General rule of interpretation” as provided in Article 31 of the *Vienna Convention on the Law of Treaties*. That is, the 2017 Agreement “shall be interpreted in good faith in accordance with the ordinary meaning” to be given to the terms in their context and in light of the object and purpose of the Agreement.

The key term – “*marine scientific research*” – is not defined in provisions of UNCLOS, which are certainly “relevant rules of international law applicable in the relations between the Parties”, using the words of para. 3 of Article 31 of the Convention of 1969.

The 2017 Arctic Agreement, however, provides that “*Scientific Activities*” means “efforts to advance understanding of the Arctic through scientific research, monitoring and assessment. These activities may include, but are not limited to, planning and implementing scientific research projects and programs, expeditions, observations, monitoring initiatives, surveys, modelling, and assessments; training personnel; planning, organizing and executing scientific seminars, symposia, conferences, workshops, and meetings; collecting, processing, analyzing, and sharing scientific data, ideas, results, methods, experiences, and traditional and local knowledge; developing sampling methodologies and protocols; preparing publications; and developing, implementing, and using research support logistics and research infrastructure” (Art. 1).

Such a broad meaning of a “science component” is of practical significance bearing in mind that analytical information and science components have become a *conditio sine qua non* of every policy decision today, especially in the Arctic.

For example, finalizing the *International Agreement on Preventing Unregulated Fishing in the Central Arctic Ocean* is in the long-standing interests of not only the Arctic Coastal States, but also in the interests of the international community as a whole; and it is the scientific community which is to play a key role explaining to the broader public that marine research and stock assessments take first priority, and only after that the Arctic coastal states (whose 200-mile EEZ surround the Central Arctic Ocean) might consider whether it is time to create a *fisheries management organization* for this region: because, in the Law of the Sea, “management” includes “fishing”. Regulated fishing within the 200-mile EEZ of the US, Canada, Denmark, Norway and Russia is already available; such fishing is available also for non-Arctic States through agreements with a relevant Arctic coastal State as provided in Art. 62 (1) of UNCLOS; such fishing within EEZ of the Arctic coastal States is properly monitored and controlled. By contrast, such monitoring and control beyond 200-miles Arctic zones is difficult to organize and risks of disaster for fishing ships in these remote ice-waters of the Arctic high seas are real.

The obligation of the Parties, provided in Article 4, “to facilitate entry to, and exit from, its territory

of persons, research platforms, material, samples, data, and equipment of the Participants as needed to advance the objectives of this Agreement” does not mean that national customs and immigration regulations of the Parties are not applicable any more. It means the obligation to pursue “for the purpose of conducting Scientific Activities”, as provided in Article 6. Of some difficulty might be a case with a research platform of one Party entering the territory of another Party, taking into account relevant national laws of the Parties.

The obligation of the Parties under Article 6 – to “facilitate access by the Participants to terrestrial, coastal, atmospheric, and marine areas in the Identified Geographic Areas” – is limited only to access “for the purpose of conducting Scientific Activities”.

Of course, there might be disagreements between the Parties as to whether a particular access is “for the purpose of conducting Scientific Activities” or not. Such disagreements might be settled according to general international law or specific means according to international agreements concluded between the parties in dispute. In this context, disputes concerning the application and interpretation of clauses of the 2017 Agreement might be foreseen. Article 15 provides in this respect that the Parties shall resolve any such disputes “through direct negotiations”.

Of even more sensitivity is interpretation of the obligations of each Party to facilitate access of foreign specialists “to terrestrial” areas within its sovereignty and within the IGA – for example, in Alaska or in the Murmansk Region, where defense infrastructure might be situated. Still, a saving clause is available in Article 10: “Activities and obligations under this Agreement shall be conducted subject to applicable international law and the applicable laws, regulations, procedures, and policies of the Parties concerned. For those Parties that have subnational governments, the applicable laws, regulations, procedures, and policies include those of their subnational governments”. So, not only is international law to be respected when activities under the Agreement are conducted, but the national laws of a relevant State – Party to the 2017 Arctic Agreement are also to be respected.

It is important that the Parties have agreed to encourage “Participants to utilize, as appropriate, traditional and local knowledge in the planning and conduct of Scientific Activities under this Agreement” (Art. 9). And the term “Participant” is interpreted very broadly, meaning:

“the Parties’ scientific and technological departments and agencies, research centers, universities

and colleges, and contractors, grantees and other partners acting with or on behalf of any Party or Parties, involved in Scientific Activities under this Agreement” (Art.1).

Conclusion

The practical importance of the 2017 Agreement is without any doubt as shown in this paper. It is even underlined by the obligation of the Parties under Article 12 to consider the implementation of the 2017 Agreement, “including successes achieved and obstacles to implementation, as well as ways to improve the effectiveness and implementation”. The wording “to improve”, in conjunction with Article 18 (relating to possible amendments to the Agreement), might mean that the scope and object of the Agreement might be enhanced by the Parties in future.

Thus, science cooperation according to specific rules of the 2017 Arctic Agreement may well con-

tribute to improving measures in a number of vital areas: to promote best available technologies in the Arctic region; to make navigation in the Arctic waters more safe (while they are becoming free from ice during most of the year); science collaboration may also assist in formulating modern maps for Arctic navigation and in advancing plans for creating modern port infrastructure in the North and for better management of such port infrastructure; science cooperation might give impetus to designating new sea lanes and traffic separation schemes (in the Barents Sea and in the Bering Strait, for example); science collaboration according to the 2017 Agreement may also encourage adopting additional legal measures to protect and preserve the marine environment in the Arctic. All such improvements are already needed.

In this context, the 2017 Arctic Agreement has a promising legal and political potential.

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