

# Tourism management in the Arctic coastal zone of Northern Eurasia

Anton Mosalev<sup>1</sup>, Alexandr Sanin<sup>2,\*</sup>

<sup>1</sup> Financial University under the Government of the Russian Federation, Russia

<sup>2</sup> Lomonosov Moscow State University, Russia

\* Corresponding author: eather86@mail.ru

## ABSTRACT

This article analyzes the recreational activity in the Arctic region of Northern Eurasia and the influence of geographical and economic factors on its recreational potential. The SWOT analysis showed that the Arctic tourist region has a number of strengths and opportunities for further development. However, to realize these opportunities, it is necessary to reduce the negative impact of weaknesses and neutralize the existing threats to tourism in the region. At the same time, it is necessary to consider the political, economic, social and technological factors that were identified as a result of the PEST analysis. Processes related to the melting of permafrost due to climate changes represent a special threat, which is significantly constraining the future development of tourism in the region. The major problem of the Arctic region is the low level of development of recreational infrastructure, which results in the high cost of touristic tours. The article suggests two strategies for the future development of tourism in the Arctic region. The first is based on premium tourism, offering unique services that are not offered anywhere else. The second one is an active development of budget-priced tourism focusing mainly on the Russian market in the Russian Arctic and the European market in Northern Scandinavia and Svalbard.

## KEYWORDS

nature management; Russian Arctic; the Northern Eurasia; tourism; SWOT-analysis; PEST-analysis

Received: 28 December 2021

Accepted: 19 September 2022

Published online: 3 November 2022

Mosalev, A., Sanin, A. (2022): Tourism management in the Arctic coastal zone of Northern Eurasia. *AUC Geographica* 57(2), 122–130

<https://doi.org/10.14712/23361980.2022.10>

© 2022 The Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>).

## 1. Introduction

Currently, the trend of intensification of economic activity in the Arctic region, especially the mining industry and transportation of mineral resources is observed. There is a tendency for violent conflicts between different types of human activity, in particular, between environmental activity on the one hand, and industrial, transport, special (military) and recreational activity on the other. Traditional land-use of small peoples of the North also comes into conflict with industrial activity for the same territorial resources (Dushkova and Evseev 2012). However, conflicts between tourism and other types of human economic activity, as a rule, are not as acute as other types of land-using with each other. The impact that tourism has on natural landscapes is also noticeably less in comparison with the impact of industrial activity, in particular, mining.

Human economic activity is increasingly affected, both positive and negative, by the emerging trend towards climate warming and its consequences. Among them, the most important for human economic activity is the degradation of permafrost and the reduction of the area of ice cover in the Arctic Ocean (Aybulatov 2005; Gramberg, Laverov, and Dodin 2000; Dodin, Evdokimov, and Kaminsky 2007; Tatarnikova 2014).

The research focuses on Northern Eurasia, which, along with the northern part of North America (along with Greenland) and it is one of the two parts of the Arctic region. Two countries have access directly to the coast of the Arctic Ocean in the north of Eurasia: Norway and Russia (as well as located on the island of Iceland). However, the northern regions of Sweden and Finland can also be attributed to the Arctic region to some extent, and possibly all of these countries.

There are different approaches to determining the spatial boundaries of the Arctic region. For example for Russian Arctic, the authors understand it as the Arctic coast of Russia from the border with Norway to Chukotka region, and the Arctic shelf of the Russian Federation. On land, the border is conventionally drawn along the Polar circle. A similar approach can be applied to the countries of the Scandinavian Peninsula, as well as to North America the coast is located to the south of it (for example, the White sea coasts or the Gulf of Bothnia), the first few tens of kilometers of territory adjacent to the coastline, economic activity on which is somehow connected with the sea is being considered.

Within the Arctic countries, as a rule, the Arctic region includes those administrative territorial units that have access to the Arctic Ocean. For example, in Russia it is Murmansk Region, the Nenets, Yamalo-Nenets and Chukchi Autonomous Districts, Arkhangelsk Region, Krasnoyarsk District and the Republic of Sakha (Yakutia), including the Arctic islands that are part of them. However, not the entire territory of

the listed regions is considered as the Arctic region of Russia, but only their municipalities with direct access to the seas of the Northern Arctic Ocean (Soldatenko and Alekseev 2020).

Further intensification of recreational activity is quite promising for economy arctic countries in general and economy of Arctic region in particular. Unlike industrial activity, it does not enter into acute conflicts with other types of human activity. Some types of recreation, such as ecological and ethnic tourism, on the contrary, have a positive impact on the other types of human activity. There are opportunities for a significant increase in tourist flows (both external and internal), which is confirmed by the example of other Arctic territories in the world: Svalbard, Greenland, Alaska, and the Canadian Arctic archipelago (Sevastianov 2018; Tourism for development 2018; Doiron 2011 etc.). However, this requires significant investments in recreational infrastructure, as well as consistent advertising campaigns to promote the region among potential tourists, especially in those countries from which the largest number of them come (Germany, the Scandinavian countries, China, the United States etc.). It seems optimal here, as the experience of developing other tourist destinations of Russia and the world shows, to use partnership between state and private business, which allows the state and private business to combine their efforts to achieve their goals. The article also identified other strengths and weaknesses of the Arctic as a tourist region, in addition to those listed above, using the example of the Russian Arctic, which occupies most of Northern Eurasia, opportunities for its development and threats to this development (which was done in the form of a SWOT analysis). The economic, political, technological and social components of the environment external to the Russian Arctic as a tourist region were also evaluated, which directly affects the development of tourism in the region. The latest assessments include a PEST analysis conducted, as well as an assessment of the impact of technological features on the development of tourism. Both SWOT analysis and PEST analysis are most often performed for a specific company or enterprise, but there is no reason not to apply it to regions considered as tourist sites, as it was done for the Arctic region on the example of the Russian Arctic.

To date, various scenarios of permafrost degradation in the Arctic and its consequences have been considered in the literature (Kutepov and Sheko 2002; Filatov et al. 2012 etc.). However, the impact of this process on the tourism industry of the region is poorly considered, there is an opinion that the increase in temperatures opens up new opportunities for the development of tourism in the region (Soldatenko and Alekseev 2020).

The purpose of the article is to identify the features of tourism in the Arctic region within Northern Eurasia, its relationship with other types of human economic activity, as well as to develop recommendations

for the development of tourism, taking into account the need to preserve the unique natural landscapes of the Arctic.

The global changes taking place in the world, in particular, the COVID-19 pandemic and its consequences, the Ukrainian conflict and its consequences cannot but affect tourism in the Arctic, in particular, in Northern Eurasia, and all components of the external environment for the tourism industry. The ongoing economic and social processes carry both opportunities and threats for the development of tourism in the region.

## 2. Materials and methods

In order to achieve the goals set in the article, a review of Russian and foreign literature on the research topic was carried out, emphasis was placed on sources fully or partially devoted specifically to tourism in Northern Eurasia. The Arctic region of the continent was considered as a tourist destination, its strengths and weaknesses, opportunities for development and threats to this development were identified (SWOT analysis). The authors have developed recommendations to maximize the opportunities for development and reduce the negative impact of possible threats to this development. A PEST analysis was also performed to assess the political, economic, technological and social component of the environment in which the Arctic region of Northern Eurasia is located as a tourist destination.

The authors actively used statistical data for regions with access to the Arctic coast, in general, and for tourism on them in particular. Cartographic information and Earth remote sensing data have been used as well.

## 3. Results and their discussion

### 3.1 Some trends for environmental management in the Arctic region of the Russian Federation

The following trends are observed in the structure of human activity in the coastal zone of the Arctic seas.

1. In contrast to the 1990s and partly the first decade of the 21st century, the role of military (special) activity is beginning to increase, for example, in Greenland and Russia, which is associated with some strengthening of the armed forces of the Russian Federation in general, and its Navy in particular. The second reason is the exacerbation of relations between the Russian Federation and many leading world states in general, and in the Arctic region (the United States, Canada, Norway, etc.) in particular. The trend towards militarization of the Arctic region, in particular, Northern Scandinavia, may increase due to the entry of Sweden and Finland into the NATO.

Similar processes of activation of the economic activity of the military should be expected in other countries with access to the Arctic, due to the growth of geopolitical tensions in the world in general and in the Arctic region in particular, which may restrain the recreational development of the region in certain areas. During the Cold War, special nature management on the territory of the modern Russian Arctic and beyond, was the leading one on some parts of the coast and had a significant impact on the environment, in particular, pollution, including radiation from nuclear weapons tests and large household garbage.

2. In contrast to the 1990s and partly the first decade of the 21st century, the role of transport is beginning to increase, especially within the so-called Northern Sea Route along the northern coasts of Eurasia (Tatarnikova 2014; Sevastyanov 2018; Lukin 2020). It is known that Vladimir Putin, the President of the Russian Federation, has set the goal of achieving the volume of cargo transportation of 80 million tons along the Northern Sea Route by 2020. For a number of reasons, in particular, due to the COVID-19 pandemic, this result was not achieved, however, there is an increase in the volume of cargo transportation along the Arctic coasts and there is every reason to expect its growth in the future. The increase in cargo traffic is the results of increasing of mining in particular, polymetallic ores near Norilsk and coal on Taimyr Peninsula, as well as natural gas in the Arctic coastal zone and their transportation. Moreover, the active use of technologies that allow natural gas to be liquefied for shipment by special tankers from the newly built port of Sabetta on Yamal. In the future, the role of transport activity may increase even more in connection with the possible use of the Northern Sea route for the transport of goods from East Asia to Western Europe. Nowadays trend towards climate warming has been observed, which, in turn, causes a decrease in the ice content of the ocean area. It makes positive impact on the organization of transportation of mineral resources and other types of transportation. Due to the COVID-19 pandemic, the volume of cargo transportation along the Northern Sea Route has decreased slightly in the last two years, but after the recovery of the global economy, we can expect its further growth. The growth of cargo traffic along the Northern Sea Route is also planned due to the deterioration of economic and trade relations between Russia and the countries of the European Union, in particular, difficulties with the insurance of Russian vessels and a ban on them entering European ports.

The Northern Sea Route is part of the so-called Northern Sea Transport Corridor, which includes the Russian part of the Pacific coast in eastern Asia. Norway, which has a long access to the Arctic coast, can intensify the use of the Northern Sea Route for trade with China, which is currently carried out mainly by sea, as well as Sweden and Finland. The latter two countries could use Norwegian or Russian ports for this.

3. The role of recreational activity is increasing (Aybulatov 2005; Tatarnikova 2014; Lukin et al. 2016a; Grushenko 2018; Zubakina and Pogodina 2016; Dushkova and Evseev 2012; Lukin et al. 2016b). Some types of tourism have already been developed in the region, while others have potential opportunities for development. Thus, tourism to the North pole is actively developing with access from Murmansk by sea (Lukin et al. 2016a; Zubakina and Pogodina 2016). A number of direction of tourism, such as adventure tourism (hunting including photo hunting, fishing, hiking etc.), ethnographic tourism, cruise tourism etc. can potentially get much more development than at the present moment. Thus, the literature (Gramberg, Laverov, and Dodin 2000; Dodin, Evdokimov, and Kaminsky 2007) notes the potential attractiveness of cruise routes along the Northern sea route, which would become one of the most unique tours offered around the Earth. This route is comparable in uniqueness with the trip along the Trans-Siberian railway, which is quite popular among foreign tourists. At least one such cruise has already been organized. It included visiting of the land of Frans-Joseph and Novaya Zemlya on the way (Sevastyanov et al. 2015). Two more cases of organizing cruise tourism from Murmansk to Anadyr were noted in 2017 (Sevastyanov et al. 2015).

The COVID-19 pandemic and the growth of geopolitical tensions in 2022 has significantly complicated foreign tourist trips for Russians, which contributes to the growth of domestic tourism. This trend may also affect the Arctic region. To a lesser extent, the tendency to decrease the percentage of foreign trips due to an increase in domestic ones due to the COVID-19 pandemic is also observed in the Scandinavian countries.

### 3.2 Features of recreational activity in the Arctic region

Recreational activity could enter into mutually beneficial relationships with other types of human activity that are common in the region, and have a positive impact on the economic situation of local residents, as indicated by the experience of other tourist regions of Russia and the world. Among the foreign experience (not only for the Arctic region), it is of particular interest to take into account the interests of local residents and coordinate with them programs for the development of tourism in the Arctic regions, partnership between the state and private business in the tourism industry, types of tourism that have developed in certain regions of the Arctic, control of recreational flows, both organized and unorganized recreants. Comparison of the Russian and Scandinavian Arctic with the Arctic territories in North America shows that the problems of tourism development in these regions are largely similar: poor development of tourist infrastructure, high prices for consumer goods, the problem of littering of the most attractive places for

tourists, the need to determine the portrait of a typical tourist, etc.

At first glance, recreational activity inevitably conflicts with environmental management. However, there are also many mutually beneficial options for their relationship, the main of which is the development of eco-tourism, which can supplement the income of natural reserves, but not cause significant damage to their landscapes. After all, world experience shows that partnership between state and private business is optimal for recreational activity, which allows developing tourism while minimizing financial costs and negative impact on natural landscapes (Lukin et al. 2016b; Kruzhalin et al. 2015; Lexin and Porfiriev 2015; Korostelev and Biletsky 2014). Here, the implementation of the touristic cluster approach, which is well-established in many tourist areas around the world, is promising (Kruzhalin et al. 2015; Korostelev and Biletsky 2014; Menshikova 2019). This is possible in the case of controlling tourists, in particular, the organization of their movement along ecological trails, as confirmed by the experience of numerous natural parks around the world. Ecotourism is particularly promising in this regard, which is the most priority and competitive in the Arctic, especially for its Western part of Russian Arctic (Grushenko 2018; Zubakina and Pogodina 2016; Lukin et al. 2016b) and Northern Scandinavia, as well as Svalbard and Iceland, where it is already actively developing. However, in the Asian part of the Russian Arctic there are many potentially interesting sites from the point of view of ecological tourism as well, such as Wrangel island (included with the list of UNESCO World Natural Heritage Sites) or the Large Arctic preserve on Taimyr Peninsula.

Cruises on the Northern sea route makes sense to ensure the possibility of their technical implementation and reduce their cost of combining with the wiring of transport vessels. Moreover, it makes sense to organize calls to port cities along the route for the organization of hunting, fishing, and industrial tourism (Norilsk, the port of Sabetto, Bilibinskaya nuclear power station). There are excellent opportunities for amateur hunting and fishing outside the Russian Arctic, in particular, in Greenland, but these activities should be strictly regulated in order to avoid damaging populations of rare and endangered animals. If there is a need for delays on the coast, tourists can be taken to the departed ship by helicopter. Helicopter trips over the most beautiful places along the route of ships (Kamchatka, the Lena Delta, the Bering Strait, the most beautiful Norwegian fjords, islands of the Canadian Arctic archipelago and parts of the coast of Greenland etc.) can also be included in the tour program as an additional service.

Cruise tourism is already quite popular in the region. For instance, in 2018, 3,938 people (23 cruises) visited the regions of the Arctic zone of the Russian Federation on cruise ships, and in 2017 – 2,521 people



(25 cruises). A much larger number of tourists, including by sea, arrive in Svalbard.

From the experience of the coastal zone of tourist region in Russia, in particular, the Krasnodar region, the positive impact of recreation on local residents is obvious. This includes work places in the tourism industry, and the possibility for locals of providing various services to tourists, in particular, organizing trips to hunting and fishing, renting personal vehicles and houses. It is known about the positive impact of tourism on the well-being of local residents, including small peoples of the North for some Arctic regions

The experience of tourism development in Svalbard can be used as an example for the Russian Arctic. The revenue of tourism and culture enterprises located on the island amounted to 5 billion rubles. Svalbard Airport receives more than 80 thousand passengers per year. Dozens of cruise ships visit island every year (in 2017 more than 84 thousand cruise tourists arrived in island). A slight decrease in tourist activity was observed in 2021 and especially in 2020 due to the COVID-19 pandemic, but now there is a recovery in the tourist flow. In addition to Svalbard, the popularity of cruises to Franz Josef Land, the northernmost land in the Arctic region of the Russian Federation, is growing. Alaska achieved results that are even more impressive. It was visited by 1.1 million cruise passengers (Sevastyanov 2018).

The Western Arctic of Russia is a priority part of Russian Arctic region (just like, for example, the southern part of Greenland for Denmark) for tourism development. In the all-Russian rating of Russian regions as tourist destinations, it is the Murmansk and Arkhangelsk regions that took the highest place among Arctic regions of state. This is due to its proximity to Europe and Central Russia, from which most tourists come. Among other reasons are its high population density, and the better development of infrastructure, in particular transport, in comparison with other Arctic regions. Although even in the Murmansk and Arkhangelsk regions, there are far fewer settlements with hard surface road. The situation is even worse for settlements in the Urals and eastward away from it. Eastward of Yamalin the coastal zone belonging to the Arctic coast, there are no railways, the northernmost of which are located in hundreds or even thousands of kilometers from the coast. Similar problems are typical for remote parts of the Arctic territories of other countries, for example, the Canadian Arctic Archipelago (here the situation is complicated by the fact that it consists of many islands, navigation between which is difficult due to navigational conditions), the northern coast of Alaska, the northern part of Greenland. As for Northern Scandinavia, it is characterized by an even higher population density and the level of development of tourist infrastructure than the European part of the Arctic region of Russia. However, for this region there are problems associated with poor

transport accessibility, in particular, the lack of flights to the north of Sweden (Brouder 2013).

There are a number of factors constraining Arctic tourism. The most important of them are low income levels of many Russian citizens, distance from major centers and low infrastructure development. However, for some tourists the remoteness of the Arctic territories is a positive factor. The low level of income of Russian tourists can be compensated by attracting foreign tourists, in particular, from neighboring Scandinavia, Germany and some other states. In more detail, the factors constraining the development of tourism, as well as positively influencing it, are considered as the weaknesses and strengths of the Arctic as a tourist region below, among the results of the SWOT analysis carried out for it.

Recreational, as well as other types of human activity, should take into account adverse and dangerous natural processes that are typical of the coastal zone of the region. Dangerous natural processes and their consequences are similar for the entire Arctic region, both in the north of Eurasia and in the north of North America, including on the islands (with the exception of Alaska, where volcanism and earthquakes are added). The most threatening processes in the region include processes of abrasion and thermal abrasion, storm events and accompanying waves, processes associated with permafrost on land (thermokarst, frost heaving, ice formation, partly waterlogging and flooding etc.). Moreover, for mountainous areas of the coastal zone (for example, in the north of Scandinavia, in Alaska, etc.) slope processes (landslides and others) can be taken place. A climatic adverse process, in particular, severe winter frosts, affects as well (Kutepov and Sheko 2002). They, together with the remoteness from the most developed part of Russia, USA, Canada and other Arctic states and the weak development of the transport network (especially a shortage of rail transport) greatly complicate economic development of the region.

In particular, thermoabrasion processes sometimes cause significant rates of coast retreat, up to several meters per year. For example, within the Russian Arctic the highest intensity of such processes is recorded for the Laptev sea, it reached 18 m/year (Aybulatov 2005). Due to the rise in the level of the World Ocean, the activation of thermoabrasion processes is expected, which has already been noted. It inevitably threatens the objects which located in the immediate vicinity of the coastline. Processes related to the dynamics of permafrost soils threaten the stability of roads and buildings. The threat from such processes becomes more acute due to the recorded tendency of increasing of average temperatures. Especially processes associated with permafrost rocks typical to Arctic territory eastward away from Urals mountings, as if to the European Arctic part of Russia they are distributed in a narrow coastal strip, or missing while eastward away from the Urals is much farther; to the East from Yenisei reaching the Russian border in the South.

The emerging climate changes, in particular, the reduction of the area of the ocean area covered with ice activates a number of adverse and dangerous processes. Due to the increase in the ice-free period, the impact of waves on the sea coast increases, hence the rate of thermal abrasion. Some increase of precipitation have been revealed (Kutepov and Sheko 2002), increasing intensity of waterlogging, which embrace all the new areas that increases the cost of drainage.

All the above-mentioned adverse and dangerous natural processes can also threaten recreational infrastructure facilities, which are already clearly insufficient.

### 3.3 SWOT analysis of the Russian Arctic as a tourist region and PEST analysis for it

The Arctic as a tourist region is considered below by the authors of the article on the example of the Russian Arctic, which occupies most of Northern Eurasia. The results of the SWOT analysis performed for this region are given below. Most of them are peculiar to some extent to the Arctic territories of other countries. To assess the current state of the Arctic region as a tourist destination and determine the prospects for the development of tourism in it, the authors performed a SWOT analysis. The results are shown in table 1 below.

**Tab. 1** Results of SWOT analysis of the Arctic tourist region of Russia.

Strengths of tourism in the Arctic region	Weaknesses of tourism in the Arctic region
<ul style="list-style-type: none"> <li>– The destination is «exotic» and unusual for the most tourists, the uniqueness of the tourist product that can attract tourists from all over the world.</li> <li>– A variety of possible types of tourism in the region: cruise, ethnographic, extreme, adventure, excursion, event, religious, etc. The possibility of combining two or more of these types of tourism within one tour.</li> <li>– Esthetic resources of the region, beauty and uniqueness of landscapes, flora and fauna.</li> <li>– Natural landscapes are relatively little changed by man, which attracts a lot of tourism. The richness and originality of flora and fauna.</li> <li>– Unique natural phenomena such as the polar day, the Northern lights and some others can attract and already attract tourists who have never seen them.</li> </ul>	<ul style="list-style-type: none"> <li>– The cost of many tourist services, in particular, the cost of cruises can begin at several thousand US dollars.</li> <li>– Remoteness of the region from the main economic centers, densely populated areas of the Russian Federation, European and Asian States (except for the Scandinavian countries).</li> <li>– Weak level of development of tourist infrastructure (and transport infrastructure in general), especially in the Asian part of the Russian Federation.</li> <li>– Unfavorable climatic conditions, which strongly reduce the duration of the tourist season, make the stay of tourists uncomfortable, and in some cases can pose a threat to their health and even life. Their unaffordability increases from West to East of Russia.</li> <li>– Risks to the health and life of recreants associated with the risk of storms, frequent non-flying conditions, strong frosts and other natural dangerous processes. For the same reasons, it is more difficult for tourists to plan the logistics of their travels</li> <li>– Lack of opportunity (or limited opportunities) to develop some mass tourism destinations, for example, beach and bathing recreation.</li> <li>– Perceptions of Russians and residents of other countries about the region, according to which tourist trips there are often not expected.</li> </ul>
Opportunities for tourism development in the region	Threats to tourism in the Arctic region
<ul style="list-style-type: none"> <li>– The development of international cruise routes (Norway-Russia, Alaska-Chukotka, possibly Greenland-Iceland-Norway-Russia or Saint Petersburg-Murmansk around the Scandinavian Peninsula etc.).</li> <li>– The combining transport and touristic trips on the Northern Sea Route.</li> <li>– The creation of combined touristic routes using air, river, sea and rail transport, which will make the trips cheaper and more diverse.</li> <li>– Reduction of international tension, which activates international cooperation in the field of tourism.</li> <li>– Warming of the climate, which will lead to the improvement of the conditions for navigation and will make the region more attractive for tourism.</li> <li>– Development of small and medium-sized businesses in the tourism sector, which will lead to the improvement of the touristic infrastructure, a greater variety of recreation and will increase its comfort.</li> <li>– The increase of the income level of residents of Russia and those countries with the largest tourist flows (Germany, China, Scandinavian countries, etc.).</li> <li>– The increase of the number of independent tourists, which, as the examples of such Russian region as Krasnodar region show, has a positive effect on the level of well-being of local residents.</li> <li>– Development of competition in the tourism business, which will reduce prices and improve the quality of touristic services.</li> <li>– Improving the transport accessibility of the region, in particular, the construction of new railways and highways, airports, an increase in the number of flights of passenger trains, buses, airplanes, sea and river vessels. All this can be used by both organized and independent tourists.</li> </ul>	<ul style="list-style-type: none"> <li>– Exacerbation of conflicts with other types of human activity: military and environmental ones, which may lead to restrictions on the possibility of visiting a number of attractive areas for tourism, industrial, etc.</li> <li>– Complication of the geopolitical situation, which will limit opportunities for international cooperation in the field of tourism, in particular, will make it more complicated to obtaining tourist visas and other documents necessary for organizing tours.</li> <li>– The decrease in the level of income of the population in Russia and the countries from which the largest number of tourists arrive (USA, Germany, China, Scandinavian countries, etc.).</li> <li>– Climate changes and their possible consequences (although they represent not only threats, but also opportunities).</li> <li>– Adverse and dangerous natural processes in general and their activation, in particular, degradation of permafrost.</li> <li>– The increased of competition by other tourist regions, especially those of them, whose climate and recreational potential are similar to the Russian Arctic, in particular, Alaska and Greenland.</li> </ul>

Some trends can be considered for the Arctic tourist region both as opportunities and as threats. In particular, the possible recovery of international tourist flows after the end of the COVID-19 pandemic may contribute to the influx of foreign tourists to the Arctic. On the other hand, the restoration of opportunities for foreign travel may negatively affect domestic tourism, because in that case Russians may go abroad instead of Russian Arctic. A similar situation is possible in the Scandinavian countries, but it will be mitigated by an increase in the flow of tourists from the rest of Europe, for which these countries, especially Norway, are very attractive as a tourist destination. The warming of the climate will make the temperatures for tourists visiting the region more comfortable, and will improve the ice conditions for ships. But it also conduces the melting of permafrost, which can lead to damage or complete destruction of the region's infrastructure (roads, buildings, pipelines), which will negatively affect its accessibility and convenience for tourists. A similar mixed effect (including both positive and negative consequences) of global climate warming will have on Arctic tourism in North America, which is also characterized by the ubiquity of permafrost.

To assess the "background" on which the development of the Arctic within Northern Eurasia as

a tourist region is carried out, a PEST analysis of the Arctic region as a tourist object was also carried out. Its results are shown below in table 2.

There are regional features of the various Arctic territories and different countries, and within a single country, especially Russia due to its large territory, which are also evident when considering the threats and opportunities for Arctic as a touristic region as well as its strengths and weaknesses. Thus, the level of infrastructure development, including tourism, gradually decreases when moving within Russia from West to East, in the same direction increases the severity of climatic conditions, in particular, values of winter temperatures as well as the duration of the ice period. Due to this, as well as the proximity to Central Russia, St. Petersburg and foreign countries, the Western Arctic is the most attractive for tourism, which is also confirmed in the literature (Zhilenko 2021).

The rest of the Russian Arctic coast is of interest for routes through the Northern Sea route, and to a lesser extent for other types of tourism. However, in the Eastern Arctic there are a number of unique, attractive sites for tourists, such as the so-called "mammoth" routes in Yakutia, which allow tourists to see the remains of ancient mammoths frozen in permafrost.

**Tab. 2** Results of PEST analysis of the Arctic region as a tourist object within Northern Eurasia.

PEST analysis for the Arctic region of Eurasia as a tourist destination	
Political factors	Economic factors
<p>The growth of geopolitical tensions in relations between Russia and European countries, in particular, Scandinavia, as well as between Russia and the United States and Canada. The conflict between the interests of China and the interests of countries with access to the Arctic coast.</p> <p>Curtailing cooperation between Russia and the rest of the Arctic region.</p> <p>The use of Arctic waters is regulated by the 1982 UN Convention on the Law of the Sea, which regulates the legal regime of maritime spaces (open sea, continental shelf, exclusive economic zone, territorial sea, etc.), including in relation to the Arctic marine spaces.</p> <p>The use of the Barents Sea, along which the border between Russia and Norway runs, is regulated by the Agreement between the Russian Federation and the Kingdom of Norway on the Delimitation of Maritime Spaces and Cooperation in the Barents Sea and the Arctic Ocean of September 15, 2010.</p> <p>The 1958 Geneva Conventions on the High Seas, on Fisheries and protection of Living Resources of the High Seas, on the continental shelf, on the territorial sea and the adjacent zone can also be applied to the waters of the Arctic Ocean, but they also do not reflect the specifics of the international legal regulation of the Arctic marine spaces.</p> <p>There are also a number of other international and regional agreements regulating the use of the Arctic Ocean.</p>	<p>The weak level of development of transport infrastructure (especially in the Russian Arctic), which determines the significant costs of its creation for the development of tourism.</p> <p>Severe climatic conditions, which cause additional costs for heating the premises and a number of others, which affects the cost of tours to the region.</p> <p>Harsh climatic conditions, in particular, low winter temperatures, as well as the widespread permafrost, especially in the Asian part of Russia, significantly complicates and increases the cost of construction and operation of infrastructure facilities, in particular, railways and highways.</p> <p>The high level of prices for everyday goods, which repels tourists.</p> <p>The economic feasibility of other types of human economic activity (in particular, the extraction of mineral resources) on the coast areas that are attractive for tourism, which repels recreationists.</p> <p>Low density of the local population, which makes it difficult to organize tourist trips, especially independent ones, to the Arctic regions.</p>
Social factors	Technological factors
<p>Fatigue of some tourists from other, more accessible tourist destinations, which may encourage them to visit the Arctic region.</p> <p>A decrease in the standard of living, especially in Russia, because of the COVID-19 pandemic, as well as events in Ukraine, which may lead to a decrease in the tourist flow.</p> <p>Conflicts between the small peoples of the North and tourists, as well as the alien population (especially acute in Russia).</p> <p>The lack of perception of the Arctic territories as a tourist region among the majority of potential tourists.</p> <p>Low level of awareness of potential tourists about recreational opportunities in the Arctic.</p>	<p>Lack of icebreakers, without which it is impossible to move on water in most of the Arctic waters for a significant part of the year (especially in the Asian part of the Russian Arctic).</p> <p>Difficulties in the operation of some equipment in winter due to low temperatures, especially in the Asian part of Russia, in winter.</p> <p>Logistical difficulties for tourists, especially independent ones, when visiting the Arctic region.</p>

Among the Arctic territories of other countries, Northern Scandinavia seems to have the greatest attractiveness for tourists due to the relatively high level of infrastructure development and proximity to densely populated European countries with solvent populations.

#### 4. Conclusion

At present, Arctic tourism is mostly related to the premium segment of the touristic market (especially in Russia), and it occupies an extremely small part of it on a global, European and Russian touristic market. There are two ways to develop Arctic tourism that do not exclude each other. One of them is development of premium tourism niche of the tourist market. Other way is developing of an «economy-class» tourism. The first way involves further increasing the number of Arctic cruises, as well as increasing their diversity, and organizing individual tours (helicopter, off-road, hunting, fishing, there may be completely different options). This, of course, includes such a unique tourist product as tours to the North Pole. The second involves the development of mass tourism in the most developed and densely populated Northern regions. In Russia, for example, there are Murmansk region, West part of Arkhangelsk region and in the vicinity of other large cities in the European North, including in the Asian part (Norilsk, Salekhard, Magadan, Anadyr). Comparatively large (in comparison with Greenland, the north of Canada, the Asian part of Russia) population density is also characterized by Northern Scandinavia, which is already characterized by mass tourism, which has a high potential for further development here. Mass budget-priced tourism can include hunting, fishing tours, excursions, event tourism (for example, visiting folk festivals of the indigenous peoples of the North: the Sami on the territory of Finland, Sweden, Norway and Russia, Nenets and Komi in Russia etc.).

When developing both premium and budget tourism in the region, it is necessary to take into account the threats identified in the study for the recreational development of the Arctic. The most acute of them at the moment is the degradation of permafrost and its consequences, including for tourism. These include the activation of flooding and waterlogging processes, as well as damage and destruction of buildings and structures, including tourist infrastructure facilities. It is necessary to observe the condition of permafrost rocks and take into account the consequences of their degradation during the construction of any engineering structures.

The processes taking place in the economy and society in general and in the tourism industry in particular open up a number of opportunities for the Arctic region, but at the same time exacerbate many problems that are characteristic of it. In particular,

it is possible to aggravate conflicts between tourism and other types of economic activity: transport use of the region, extraction of mineral resources, military human activity etc.

The intensification of other types of economic use in the Arctic, especially transport and industrial, leads to a significant increase in the impact on the unique natural landscapes of the region. Tourism, especially some of its types, such as ecological, cruise, etc., can be organized in such a way that it will have minimal impact on natural landscapes.

#### References

- Aybulatov, N. A. (2005): Russian activities in the coastal zone of the sea and environmental problems. Nauka, Moscow.
- Brouder, P. (2013): Tourism Development in Peripheral Areas: Processes of Local Innovation and Change in Northern Sweden. Doctoral thesis thesis, Mid Sweden University.
- Dodin, D. A., Evdokimov, A. N., Kaminsky, V. D. (2007): Mineral resources of the Russian Arctic (state, prospects, research directions). Nauka, Sankt-Peterburg.
- Doiron, A. A. (2011): Tourism development and the third sector: A case study on Dawson City, Yukon. Master of Arts M.A. thesis, Concordia University.
- Dushkova, D. O., Evseev, A. V. (2012): Modern nature management in the Russian Arctic and sustainable development of geosystems of circumpolar territories. Problems of Regional Ecology 1, 216–220. (In Russian)
- Filatov, N. N. et al. (2012): Changes and climate variability in the European North of Russia and their impact on water bodies. Arctic: Ecology and Economics 2 (6), 80–93. (In Russian)
- Gramberg, I. S., Laverov, N. P., Dodin, D. A. (2000): The Arctic on the threshold of the third Millennium (resource potential and environmental problems). Nauka, Sankt-Peterburg.
- Grushenko, E. B. (2018): Ecological tourism as a factor of sustainable development of the Western Arctic. Arctic and North 32, 18–29, <https://doi.org/10.17238/issn2221-2698.2018.32.18>. (In Russian)
- Chjen, H. (2016): Strategy of the Northern Sea Route of China: Cooperation and Competition. Symbol of Science, 4–4(16), 230–235.
- Kruzhalin, V. I., Shabalina, N. V., Aigina, E. V., Novikov V. S. (2014): Technologies of management and self-regulation in the sphere of tourism. Dialog of Cultures, Moscow.
- Korostelev, E. M., Biletsky, A. V. (2014): Ecological and geographical approach to the organization of regulated tourism in the Arctic zone of the Russian Federation. Russian Journal of Sustainable Tourism 4, 12–16. (In Russian)
- Kutepov, V. M., Sheko, A. I. (2002): Natural hazards of Russia in 6 volumes. Moscow, KRUK.
- Lexin, N. K., Porfiriev, B. N. (2015): Re-Development of the Russian Arctic as a subject of system research and state program-target management. Issues of Methodology 4, 84–104. (In Russian)
- Liu, D., Zhang, Z., Zhang, D., Ma, X. (2021): “Polar Silk Road” Strategy in Jilin Province Based on SWOT-AHP



- Methodology Against the Background of Arctic Navigation. In: 1st International Symposium on Innovative Management and Economics (ISIME 2021). Atlantis Press, 367–375.
- Lukin, Yu. F. et al. (2016a): Arctic tourism in Russia. Arctic and North, Arkhangelsk, <https://doi.org/10.17238/issn2221-2698.2016.25.211>. (In Russian)
- Lukin, Yu. F. et al. (2016b): Tourism in the Arctic: conceptual approaches, regional resources. Northern Arctic Federal University, Arkhangelsk.
- Lukin, Yu. F. (2020): International shipping routes for cargo transportation in the Arctic. Arctic and North 40, 225–253, <https://doi.org/10.37482/issn2221-2698.2020.40.225>.
- Menshikova, T. N. (2019): Spatial analysis of tourism development in the regions of the Arctic zone of the Russian Federation based on the cluster approach. Vestnik of the Moscow State Regional University: Natural Sciences 2, 94–100, <https://doi.org/10.18384/2310-7189-2019-2-94-100>. (In Russian)
- Sevastyanov, D. V., Korostelev, E. M., Gavrilov, Yu. G., Karpova, A. V. (2015): Recreational nature management as a factor of sustainable development of the Russian Arctic regions. Geography and Natural Resources 4, 90–97, <https://doi.org/10.1134/S1875372815040071>. (In Russian)
- Soldatenko, S. A., Alekseev, G. V. (2020): Managing climate risks associated with socio-economic development of the Russian Arctic. In: IOP Conference Series: Earth and Environmental Science. IOP Publishing, 012–060, <https://doi.org/10.1088/1755-1315/606/1/012060>.
- Tatarnikova, A. I. (2014): The Russian Arctic: a modern paradigm of development. Nestor-History, Sankt-Peterburg.
- Tourism for development Volume I: main activities (2018): WTO, Madrid.
- Zhilenko, V. Yu. (2021): Sea cruise tourism in specially protected natural areas of Arctic. Service and Tourism: Current Challenges, 15(3), 149–156, <https://doi.org/10.24412/1995-0411-2021-3-149-156>.
- Zubakina, E. V., Pogodina, V. A. (2016): Development of tourism in the Russian Arctic of special interests. Nauka, Sankt-Peterburg.