Development of Transboundary Hydrocarbon Fields: Legal and Economic Aspects

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Abstract

Objectives: The article considers some legal and regulatory aspects and investigates the main features of the development of transboundary offshore oil and gas deposits. Methods/Statistical Analysis: To study the transboundary cooperation, the authors applied statistical techniques, methods of strategic and comparative analysis, as well as a systematic approach. The research papers of Russian and foreign authors, laws and regulations, international treaties and agreements, reports of oil and gas companies formed theoretical and methodological basis of the paper. Findings: The study of legal and economic features of the development and operation of transboundary hydrocarbon offshore fields enabled the authors to reveal certain specific features, challenges and difficulties in implementing unitization principles. The authors carried out a historical analysis of such concepts as a transboundary deposit, unitization, unitization agreement and explored various issues of unitization in the development of transboundary deposits. The article presents a review of Norwegian and Russian experience concerning the conclusion of unitization agreements and delimitation agreements (demarcation of boundaries). The authors conducted a detailed study of the cooperation of Norway and the United Kingdom regarding the Frig field development. The article analyzes the Treaty between the Russian Federation and the Kingdom of Norway on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean, as well as the Agreement between the Russian Federation and the Republic of Kazakhstan on the delimitation of the northern part of the Caspian Sea and on joint development of transboundary Imashevskoye deposit. Improvements: Conducted research proved the possibility to use international practices in the development of transboundary hydrocarbon deposits, taking into account the possibilities and challenges of the Russian and Norwegian legislation; the article proposes the mechanism of transboundary cooperation in the development of hydrocarbon fields in the Arctic.

Keywords: Delimitation, Government Regulation, International Practices, International Treaty, Norway, Oil and Gas, Russia, Transboundary Deposits, Unitization

1. Introduction

For a long time fuel and energy complex (FEC) has been one of the key sectors of the economy for many countries, including Russia. At the same time, in Russia, oil and gas industry has a significant impact on the revenues of the federal and regional budgets, investment climate, exchange rate and other key parameters of economic development. For instance, oil and gas industry and petroleum production, excluding export duties, in 2014 accounted for about 31.4% (3.963 trillion rubles) of the Russian Federation budget revenues.

Despite the current unstable market conditions, development of alternative energy sources and volatility of oil prices (a reduction in more than twice over the last 2 years), petroleum will remain the main world energy source in the long term, according to the forecasts of the leading experts. Thus, in the near future the global oil and gas industry will continue to play an important role in economic development for both main producers and countries-consumers of oil and gas.

At the same time, according to most analysts, the trends in the global oil and gas development will be associated with an increasing oil and gas production from offshore fields, which have huge hydrocarbon reserves, according to the experts’ estimation.
However, numerous maritime boundaries, where most oil and gas resources are located, have not yet been delineated. Moreover, countries have not yet developed uniform norms and mechanisms for the delimitation and the resolution of disputes on the delimitation of the subsoil areas with mineral resources.

In addition to that, when considering the delimitation of zones, it quite often occurs that mining fields cross national borders, forming so-called transboundary deposits. The issues of international regulation are crucial in the development of hydrocarbon transboundary deposits since these resources can move from one part of deposits to another during their extraction.

In the USA, the UK, Norway and other countries the regulation of transboundary oil and gas development is carried out according to the unitization agreement, which is an agreement between the holders of licenses for the development of hydrocarbons in the same area of mineral resources, aiming at joint development of a field as a whole after an agreed plan. So, for quite a while countries have been conducting theoretical studies regarding the development of the conceptual apparatus, creating the development schemes of transboundary deposits development and settlement of boundary disputes. However, in Russia only a small number of publications consider the issues of the development of transboundary fields.

The Treaty between the Russian Federation and the Kingdom of Norway on the maritime delimitation and cooperation in the Barents Sea necessitates the preparation of recommendations for transboundary deposits development by unitization methods and principles taking into account international practices.

Speaking about the joint development and exploitation of deposits by Norway and Russia, it should be noted that these countries have different expertise in transboundary deposits development.

Norway has accumulated considerable practical experience in the joint development of the deposits with Britain, Denmark and Iceland; these countries signed unitization agreements that have been successfully regulating the work of the companies developing transboundary fields for a long time.

Along with it, Russia has a rather limited practical experience of real projects. The agreement on the delimitation of the sea bed and Khvalynskoe field development (offshore), the Tsentralnaya and Kurmangazy areas (offshore), as well as an agreement on the development of Imashevskoye transboundary deposit (coastal) were concluded with Kazakhstan, but the development of these fields is at an initial stage.

Thus, at present moment the issues of international unitization of the fields on the continental shelf in delimited areas are becoming increasingly relevant for Russia. Creation of a mechanism of cooperation between Russia and Norway regarding the implementation of joint energy projects in the Barents Sea delimitation area is one of the top priorities due to the significant hydrocarbon resources in that region.

All this proves that the study of the regulatory aspects and identification of the main features of transboundary oil and gas fields development are highly relevant research topics.

2. Literature Review

The first studies related to legal regulation of the development of transboundary deposits were carried out in Europe in the late 19th century. After that, in the 20th century governments passed various laws regulating these activities.

For example, in February 22, 1869 Prussia adopted a law that allowed landowners of several adjacent plots to unite, forming a so-called common ownership of the subsoil.

In Austria, the Act of December 17, 1884 granted the right and made it possible to form the oil field by connecting several adjacent plots belonging to different owners.

The Mining Act of 1980 of the Federal Republic of Germany enables joining ore fields if they border with each other and contain the same minerals.

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Decree of the President of the Republic of Kazakhstan “On Oil” No. 2350 of June 28, 1995 (repealed) also regulated the procedure of the development of transboundary deposits that intersected both internal and state borders.

In the USA, the Mineral Leasing Act of 1920 regulates the agreed cooperation of leaseholders, their representatives, as well as private owners within one site for the preservation and development of natural resources. At the same time, any action under this legislation must be approved by the Minister of Internal Affairs.
In Norway, the legislation regulating relations in the oil and gas industry also governs the legal aspects of the transboundary deposits development. The UK legislation states that the transboundary field should be developed as one site to avoid competitive drilling, duplication of production capacity, as well as to maximize the extraction of minerals from the subsoil.

As for the Russian Federation, there are practically no laws regulating the development of transboundary deposits. These issues are outlined in several regulations. For instance, para 6.3 of the Regulations on the Procedure for Licensing of the Subsoil Use approved by the Supreme Council of the Russian Federation No. 3314-1 on July 15, 1992 (revised on May 04, 2016) states: the development of a mineral deposit by different users of the subsoil should prevent the irrational use of mineral resources and should be implemented according to the agreed technological plan. After the decision of the majority, one of the enterprises performs the functions of a coordinator. Internal Russian documents do not contain legal definition of the concept of transboundary deposits and unitization.

Experts in international law began studying the legal issues of the development of transboundary fields crossed by state borders both on land and on the continental shelf in the late 60-70s of the 20th century. Mechanisms for the settlement of boundary disputes as well as the research on the theoretical aspects of unitization to identify their economic and legal challenges and specifics on the basis of case studies can be found in the works by such foreign scientists as A. Bastida, M.-L. Nele, T. Reynolds, A.-L. Wong, H. Fox, B. Rodman, E. Willheim and others.

In Russia, only a few researchers considered the issues related to the development of cross-border fields. For instance, the research was conducted by the experts of the Moscow State University of International Relations (MGIMO) A.N. Vylegzhanin, and S.Y. Mareeva, A.A. Arbatov, V.S. Ulyanov, E.A. Dyachkova, A.A. Konoplyanik, A.I. Rubtsova, and a number of other researchers.

Thus, by present moment international scientists have conducted numerous studies on the development of transboundary deposits abroad and created the legal basis for the exploitation of such deposits, while in Russia the research on these issues is currently at an initial stage, and there is no fixed legal framework. All this necessitates studying international experience so that one could identify the specifics and challenges referring to the unitization for the effective cooperation between Russia and Norway.

3. Results and Discussion

To determine the economic and legal specifics and challenges associated with the development of transboundary deposits, the authors conducted a historical analysis of the basic concepts and definitions, reviewed the international practices, including the Norwegian experience in concluding unitization and delimitation agreements and analyzed the Treaty between the Russian Federation and the Kingdom of Norway concerning maritime delimitation and the Agreement on the Delimitation between Russia and Kazakhstan.

3.1 Analysis of Key Terms and Concepts

“Transboundary deposit”, “unitization” and “unitization agreement” are central concepts of the following study.

Some international and Russian experts state that a transboundary deposit is a deposit crossed by state borders. Other researchers provide a more detailed definition of this concept. So, according to them, transboundary deposits are the ones crossed by the state, internal administrative, or licensing (when issuing licenses to several subsoil users on the exploration and development of deposits) and other boundaries. These boundaries set different legal regulations regarding subsoil use on the delimited areas.

In this paper we will use a definition of a transboundary deposit that complies with international law: a transboundary deposit is a deposit that crosses the boundary (or boundaries) of state sovereignty (in the case of the national territory) or their sovereign rights (in the case of the depths of the continental shelf).

The term "a transboundary deposit" is generally used in respect of hydrocarbon fields, due to the fact that under certain physical, chemical and geological conditions oil and gas can cross the boundaries set on the surface by moving in the rocks, with the result that the field can be developed on either side of the border, which greatly affects and complicates the legal regulation of its development, leading to disputes and conflicts of the parties involved.
In international practices, the development of transboundary deposits is carried out by means of unitization, which is a form for subsoil users association for sharing the subsoil. The term “unitization” is derived from “unit” (American English) which means ‘an association’. It implies concluding a unitization agreement – an agreement between the holders of licenses for the development of hydrocarbons in the same area of mineral resources, the purpose of which is the joint rational development of a site as a single object.

Having analyzed the history of the concept of “unitization”, we could conclude that many countries have a unitization approach that is based on the US experience and is adapted to the needs of specific countries and regions.

Today, in the United States, unitization is a fundamental principle, applicable both in international cooperation and in the development of fields located within the country.

However, in the late 19th century many US states had a principle “first-come first-take”, that is the one who came first could own the land. In other words, according to this principle the oil and gas were considered the property of a person who “mined minerals and controlled it”. At the same time, such deposits had the rule of capture which stated that the site owner can drill any number of wells provided that there is no drilling too close to the site boundaries; this also gave the right to the owner on all products produced at this site.

The disadvantages of this approach include the following:

• minimal responsibility of a subsoil site owner for the depletion of the whole field;
• performing drilling operations without consideration of geological and hydrodynamic characteristics;
• the volume of produced hydrocarbon reserves was significantly lower when compared with the volume which could be achieved with a single development plan considering mining and geological characteristics of the deposit, this leading to a very low oil recovery factor;
• costs associated with field development increased significantly due to the fact that mining companies owning the adjacent subsoil deposits developed them independently.

In this regard, the provisional federal law on unitization of public lands was adopted in 1930. This was followed by the adoption of permanent federal regulations on field development in 1931, according to which an agreed development plan was to be prepared for their exploitation.

As a result, the US and then several other countries adopted legislation which obliged subsoil users to cooperate when developing the hydrodynamically related hydrocarbons deposits, thus initiating the creation of a unitization mechanism.

### 3.2 International Practices of the Transboundary Deposits Development

The analysis of global experience in the field of the transboundary deposits development showed that there are two situations when a unitization agreement is concluded. The first option implies the conclusion of the agreement on the development of a transboundary deposit when the maritime border of the states was determined in advance, which makes it possible to determine the percentage of hydrocarbons belonging to each state. At the same time, the agreement on delimitation often includes a clause which obliges the parties to reach an agreement that would involve the most effective field development, if it is located on both sides of the border.

The second option occurs when a field is located in the disputed waters, or in the region where the maritime boundary was not established, so that it takes a longer time for subsoil users to establish cooperation.

The agreement between the governments of the United Kingdom, Northern Ireland and the Kingdom of Norway on the exploitation of the Frigg field and the transmission of gas there from to the United Kingdom (1976) is thought to be a classic interstate mechanism of the transboundary deposit development when the maritime boundary was stated in advance.

The Frigg field was discovered in 1972; it is located in the northern part of the North Sea. Initial recoverable reserves are estimated at 185 billion m³ of natural gas, of which, according to the agreement, 39.18% are in the British sector.

The main provisions of the agreement are as follows:

• the field should be considered as a whole;
• agreements between all the license holders on the deposit development can be concluded only in accordance with the unitization agreement;
• it is necessary to settle the field reserves, pool boundaries, the procedure for issuing licenses, shares, location of facilities, safety standards, construction...
requirements, environmental protection, reciprocal inspection;
• a single field operator shall be appointed by agreement between the companies and approval of both governments;
• disputes are to be settled in the court of arbitration;
• coordination of the construction and use of pipeline transport;
• agreement on the conditions of taxation;
• redefinition of the boundaries of the deposit and the revaluation of the total amount of the reserves every 4 years or under certain conditions.

Thus, the main objectives of this agreement are settlement of the issues of reserves distribution between states and companies, development of coordination mechanisms between the license holders when developing the field, creation of dispute resolution procedures.

Next, the conclusion of agreements between the Governments of the UK and Norway on the joint development of Statfjord, Murchison, Markham fields facilitated the cross-border cooperation between these two countries32.

These agreements included almost all of the provisions contained in the Agreement on the Frigg field development, as well as some of the new aspects related to the requirements to license holders on reporting on the amount of produced, reclaimed, used hydrocarbons, as well as the revaluation of the field reserves, resources and etc.

This is how a system of exploitation of transboundary resources in the North Sea has gradually evolved and which later was extended and used beyond the region.

In 2005 the Framework Agreement was signed, which attempted to summarize the existing experience in the development of transboundary deposits with a view to establishing a common legal framework that would bind the parties to conclude unitization agreements on the North Sea. However, its ratification was delayed until 2015.

It is worth mentioning the experience of Mexico and the United States which concluded unitization agreements on development of cross-border hydrocarbon fields in the Gulf of Mexico.

The Agreement Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico was signed on February 12, 2012. Under this agreement the parties are required to jointly develop these deposits according to the principle of unitization.

This agreement has the following specific features:
• a complex multistage system of settling cross-border disputes;
• an opportunity not to appoint a single operator in the case of a categorical refusal from the joint development of the field;
• in case of independent development of the deposit, this should be done with the distribution of quotas, which leads to significant increase in costs and encourages the conclusion of unitization agreements.

Compared with the agreements concluded between the United Kingdom and Norway and referring to specific fields, Mexico and the United States adopted a general document, binding the parties to cooperate.

As noted above, international unitization has certain specific features if the state border has not been established. When fields are discovered in such an area, on the one hand, it can lead to significant complications with the delimitation and, on the other hand, if all parties are willing to cooperate, the development can be carried out by joint efforts and with the establishment of the joint control zone. Table 1 presents some examples of such agreements.

Definitely, these measures do not completely solve the problem of delimitation. However, they enable to develop the field applying all mechanisms of cooperation between

### Table 1. Countries’ cooperation in the development of transboundary deposits

<table>
<thead>
<tr>
<th>Year signed</th>
<th>Countries</th>
<th>Subject matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>Qatar, Abu Dhabi</td>
<td>Agreement on the maritime border setting the equal extraction shares (50/50) from Al Bundug field (jointly owned)</td>
</tr>
<tr>
<td>1979</td>
<td>Thailand, Malaysia</td>
<td>Establishing the joint development zone where the development is controlled by the joint commission.</td>
</tr>
<tr>
<td>1989</td>
<td>Australia, Indonesia</td>
<td>Timor Strait Treaty, under which the cooperation zone was established.</td>
</tr>
</tbody>
</table>
the states, which reduces competition in the issue of delimitation.

Thus, some countries have a sufficiently developed practice of unitization agreements that can prevent disputes between states and can enable the parties to receive significant benefits from joint development of deposits and abide by the principles of rational subsoil use.

### 3.3 Agreement on the Delimitation and Cross-Border Cooperation of Russia

Currently, international agreements on the delimitation and borders have a direct impact on the operation of oil companies that are interested in the implementation of strategic projects of mineral resources development on the continental shelf due to its size and abundance of mineral resources. The main aim of concluding agreements on the delimitation and borders is to define the coordinates of the dividing line, settling the issues of mineral resources exploration and exploitation, as well as fishery issues.

In 1990, before adopting the legal framework, Russia initiated the settlement of maritime boundaries, which could be explained by the need for establishing new federal boundaries after the collapse of the Soviet Union. Nevertheless, there are still some controversial issues related to maritime delimitation of certain territories.

Table 2 presents information on the existing agreements and contracts between Russia and other countries on the delimitation of waters of the strategically important seas such as the Baltic and Caspian Seas, the Sea of Okhotsk and the Barents Sea.

Most of the considered contracts and agreements contain articles that reflect the need for bilateral coordination of the rules regulating the development of transboundary deposits.


The following agreement consists of the agreement itself and the protocol.

The key article of the agreement is Article 2 on the exclusive right to joint exploration and development of prospective features and fields in case the modified median line crosses them.

Based on this agreement and the Russian legislation, Russia has sovereign rights on the subsoil use in the

| Table 2. | Agreements and treaties on the delimitation of maritime boundaries |
|-----------------|-------------------|--------------|
| **The sea** | **Country** | **Subsoil use cooperation** |
| Bering Sea | Agreement on the maritime boundary between the USSR and the United States, June 1, 1990 (not ratified by Russia) | The agreement does not contain any special provisions on cooperation mechanisms regarding the subsoil use. |
| Baltic Sea | Agreement on the delimitation of the exclusive economic zone and continental shelf in the Baltic Sea, October 24, 1997. | Contains standards which laid the foundation of bilateral cooperation in the development of transboundary deposits; the document does not establish specific mechanisms of cooperation in the development of transboundary fields. |
| Caspian Sea | Agreement between the Russian Federation and Kazakhstan on delimitation of the deep seabed of the Northern Part of the Caspian Sea for the purpose of the exercise of sovereign rights to subsoil management, July 6, 1998 | Agreements delimit the seabed and subsoil only in the northern part of the Caspian Sea and provide mechanisms for bilateral cooperation in the exploration and production of hydrocarbons. |
| | The agreement between Azerbaijan and Russia on the delimitation of adjacent sections of the Caspian seabed, 2002 | |
| Barents Sea | Agreement between the Russian Federation and the Kingdom of Norway on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean, September 15, 2010 | Provides a detailed mechanism for cooperation in the development of cross-border hydrocarbon fields. |
3.5 Imashevskoye Field

On September 7, 2010 the Government of the Russian Federation and the Government of the Republic of Kazakhstan signed an agreement on joint geological study and exploration of cross-border Imashevskoe gas condensate field, which is the first example for the Russian Federation of conducting joint work on the transboundary field.

A joint venture of PJSC “Gazprom” and JSC “NC KazMunayGas”, the company “KazRosGas” became the operator at the Imashevskoye field in 2011.

Representatives of the Oil and Gas Ministry and the Russian Ministry of Natural Resources signed an interdepartmental protocol on the exploration of the field.

The main provisions of the agreement are as follows:

- Joint work to be limited to geological study and exploration of the cross-border gas condensate field;
- Implementation of joint exploration in accordance with the laws of the States;
- All geological information to be provided;
- The mineral reserves are to be entered on the state balance by each Party with an indication that the deposit is subject to cross-border and joint development;
- Payment of royalties on the terms and conditions as statutorily required by the legislation of the state;
- Costs to be shared equally between authorized organizations and joint activities to be conducted;
- The creation of a coordinating committee (meeting at least once a year);
- Measurements of the current condition and environmental monitoring;
- Resolution of disputes through consultations and negotiations.

The main challenges for the field development are relatively high initial reservoir pressure, high hydrogen sulfide content in the gas, uncertainty with the refining capacity required for the production of marketable gas.

Tsentrnoye structure of the Khvalynskoe field. The Republic of Kazakhstan exercises its sovereign rights for the subsoil use on the Kurmangazy structure (“Kulalinskaya”) according to its national laws. Table 3 summarizes the data on the fields.

<table>
<thead>
<tr>
<th>Deposit</th>
<th>The operator on the Russian side, the share of Russia and Kazakhstan</th>
<th>Conditions of subsoil use</th>
<th>Current state</th>
</tr>
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<tbody>
<tr>
<td>Kurmangazy geological structure</td>
<td>OJSC &quot;Rosneft Oil Company&quot;, 50 to 50%, permits the transfer of 25% of the operators’ options for the development by other companies.</td>
<td>The contract on the subsoil use – the production sharing agreement, the company’s right to subsoil use is granted by the Government of the Republic of Kazakhstan.</td>
<td>Parity cooperation between the companies. The participation is reduced as the first wells were drilled dry.</td>
</tr>
<tr>
<td>Tsentralnaya geological structure</td>
<td>LLC “TsentrKaspneftegaz”, 50 to 50%, permits the transfer of 25% of the operators’ options for the development by other companies.</td>
<td>General regime or production sharing agreement, the right to subsoil use is granted to the company by the Government of Russia, the development of the field will be carried out by a joint Russian-Kazakh company “Oil and Gas Company Tsentralyaya” (“NGKTS”)</td>
<td>The field is available for geological study, exploration and development for up to 25 years with geological study for up to 7 years with the general tax regime. After 7 years, it is possible to resume the general regime or conclude an agreement with the Russian government about the production sharing. The company pays a one-time payment for subsoil use under the combined license.</td>
</tr>
<tr>
<td>Khvalynskoe field</td>
<td>OJSC “Lukoil Oil Company”, 50 to 50%, permits the transfer of 25% of the operators’ options for the development by other companies.</td>
<td>A joint venture of “Caspian Oil and Gas Company”, the right to subsoil use is granted to the company by the Government of Russia.</td>
<td>Agreement cannot be reached due to economic problems of the project.</td>
</tr>
</tbody>
</table>
The development of Imashevskoyegas condensate field is the first Russian attempt to implement the concluded agreements on the development of transboundary deposits. It should be mentioned though that this field is currently at the exploration stage.

3.6 Treaty between the Russian Federation and the Kingdom of Norway Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean

This agreement was signed on September 15, 2010 in Murmansk with the following advantages:

- Establishing clear boundaries of the exclusive economic zones and continental shelf;
- Lifting the moratorium on the extraction of mineral resources in the disputed area;
- The creation of favorable legal environment for the development of oil and gas resources of the Arctic continental shelf;
- The possibility of cooperation in the exploration and production of hydrocarbons.

The agreement includes an Annex which regulates the Russian-Norwegian cooperation in the development of transboundary deposits.

The main provisions of this application are as follows:

- Development of deposits according to the principle of unitization which implies that each field crossed by the delimitation line can only be subject to joint development and should be considered as a whole;
- The need to conclude a pooling agreement, whose parts are stated in Article 1 of the Annex;
- The need to conclude an agreement between legal entities holding exploitation licenses;
- Accessibility to the entire geological information on related areas;
- The appointment of a joint operator of the field development;
- Determination of rules of national government agencies, according to which licensing procedures related to the subsoil combined plot shall be regulated independently in accordance with the national legislation;
- Access to the International Court of Arbitration.

4. Conclusion

The conducted research revealed the following major challenges and disputes that arise between mining companies and states in the development of transboundary fields:

- Difficulties associated with the establishment and agreement of the principles for the calculation of hydrocarbons shares owned by each of the parties;
- Differences in national legislation regulating taxation, legal aspects of business, environmental management, etc.;
- Differences in national accounting standards of hydrocarbon reserves and resources, the design of field development regulations, industrial safety rules and protection of mineral resources.

As a result of long-term negotiations and considerable Norwegian experience, Norway and Russia signed an agreement on the delimitation of the disputed areas and secured the principle of state control over the activities of legal entities that have rights to the exploration and development of cross-border hydrocarbon fields.

Therefore, unitization is considered to be the most appropriate mechanism for co-operation during the development of cross-border fields between Russia and Norway.

Upon the discovery and development of a transboundary deposit the states and companies shall conclude an agreement on joint development of the field. This agreement shall be a document comprehensively regulating the relationships of the transboundary deposit users:

The agreement should contain the following information:

- Coordinates of the field and its sites;
- Obligation of the parties to develop the field according to a single project and a single agreed estimate;
- The shares in the unitization agreement and the equity revaluation procedure;
- The procedure for the evaluation and re-evaluation of hydrocarbon reserves;
- The procedure for the distribution and redistribution of costs, results, as well as mined products;
- The procedure for preparation and approval of cost estimates and development programs;
- The formation of a coordinating body for joint action;
- The procedure for the appointment of the operator, the rights and obligations of the operator;
- The procedure for the exchange of geological and any other information;
• Specifics of customs, tax regimes and accounting.

Summing up, it can be said that the main idea of the international unitization is the development of the field as a whole that is achieved through the cooperation of not only states concerned, but also subsoil users operating at this field.

Thus, to ensure effective exploitation and sustainable development of transboundary deposits in the Barents Sea, Russia needs to legally state the basic concepts and definitions and to develop a law or provision on transboundary deposits.

5. Acknowledgements

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6. References

8. Decree of the President of the Republic of Kazakhstan having the force of law, of June 28, 1995 No. 2350 On Oil (repealed).


