Legal Aspects of the Russian-Norwegian Model for Cross-Border Unitisation in the Barents Sea and Arctic Ocean

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Abstract:

This article examines the provisions in the 2010 Russian-Norwegian Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean dealing with the management of transboundary hydrocarbon resources. How compatible is the unitisation mechanism in the Treaty with Russian and Norwegian legislation? Will there be tension between Russian and Norwegian interpretations? How does Russian and Norwegian legislation support or challenge the concept of a "unit operator" in a cross-border unitisation? What are the possible concerns and pitfalls related to mechanisms for consultations and procedures for dispute resolution?

Keywords: Unitisation, Barents Sea, delimitation, Norway, Russia, unit operator, joint commision, apportionment

I. Introduction

The concept of absolute ownership to petroleum rights has long been challenged by the migratory nature of hydrocarbons that straddle state boundaries without respect for delimitation lines or licensing demarcations.[1] The current international trend in developing transboundary hydrocarbon resources favours the concept of unitisation rather than the rule of capture.[2] Neighbouring states negotiate a framework for the joint coordinated development of transboundary deposits to ensure more efficient, fair and responsible management.[3] This approach offers protection against the possibility of competitive drilling from either side of the boundary.[4] It results in enhanced oil recovery, lower development costs, a fair and equitable distribution between parties, and improved ecological efficiency. Joint petroleum development is practised by several countries, but has been found to be counter-productive to the above-mentioned objectives of unitisation.[5]

"Efficient and responsible management of their hydrocarbon resources" is one of the major commitments in the Russian-Norwegian Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean (the 2010 Cooperation Treaty).[6] The 2010 Treaty defines a single maritime boundary that divides the States' continental shelves and exclusive economic zones (EEZs) in the Barents Sea and the Arctic Ocean,[7] obliges Norway and Russia to continue their cooperation in the sphere of fisheries (Annex I), and Annex II contains provisions for the development of transboundary hydrocarbon deposits. The Treaty was negotiated in English, then translated into Norwegian and Russian, and signed on 12 September 2010, with both texts being equally authentic.[8] It was ratified by the two countries and came into force on 7 July 2011.[9]

One of the longest delimitation lines in the world is believed to cross significant hydrocarbon deposits.[10]

This article examines the 2010 Cooperation Treaty looking at the applicable national legislation and international legal mechanisms for the management of transboundary hydrocarbon resources. How compatible is the unitisation mechanism in the Treaty with Russian and Norwegian legislation? Does the Russian and Norwegian legislation support or challenge the concept of cross-border unitisation? Might there be tension between Russian and Norwegian interpretations?

The first section considers how the concept of unitisation is situated in the multi-layered legal framework. What is meant by a "unit operator" in Annex II of the 2010 Cooperation Treaty emerges as a key issue where understandings may differ. What is then presented is an overview of the mechanisms for consultations and procedures for dispute resolution in the 2010 Cooperation Treaty noting the possible concerns and pitfalls that exist.

II. The Legal Framework

The regulation of cross-border unitisation between neighbouring states has often relied on a three-layer legal framework: international, national and private.[11] This article focuses primarily on the first two - the international and national.

There are no general binding rules in international law governing cross-border unitisation.[12] In 2006 the Association of International Petroleum Negotiators (AIPN) developed a model contract form for international unitisation and unit operating agreements.[13] The model forms a comprehensive basis for bilateral agreements.[14] Although the 2006 form is only a guide, it represents an important reference point in the petroleum industry.

While international law and practice does not directly address issues of cross-border unitisation, it does offer a few guiding principles and strong encouragement for cooperative development of transboundary hydrocarbon resources.[15] As already noted, such cooperation is embedded in the 2010 Cooperation Treaty.

Article 5.2 of the 2010 Cooperation Treaty sets the conditions for the commencement of the negotiation process on cross-border unitisation – there must be a hydrocarbon deposit on the continental shelf of one of the states that the other party is of the opinion that it extends into its continental shelf.

At this stage, several scenarios have been considered. Dr. Andrey Krivorotov has proposed that if the other party does not submit convincing data that the deposit extends into its shelf, the hydrocarbon deposit can be developed unilaterally by the former party.[16] If the other party is able to show that the hydrocarbon deposit is transboundary, either state may require that an agreement on its exploitation "as a unit" (unitisation agreement) is to be reached in accordance with Annex II of the 2010 Cooperation Treaty.[17]

This unitisation provision is found in many agreements, for example, the 2005 United Kingdom-Norway Agreement.[18] More generally, the 2010 Cooperation Treaty replicates Norway's unitisation practice in the North Sea with many of the provisions in the Cooperation Treaty modelled on other agreements entered into by Norway, such as, the 1965 Agreement between Norway and the United Kingdom on Delimitation of the Continental Shelf.[19]

The signing of a Unitisation Agreement is one of the milestones in the transboundary unitisation process.[20] Article 1 of Annex II of the 2010 Cooperation Treaty envisages a separate unitisation agreement for every transboundary deposit and sets out the main elements for such

agreements, including the determination of tract participation which is the respective equity interest assigned to each licensee or license group in the unit.

The next step is the reaching of an agreement between the holders of domestic licenses for the development of the cross-boundary deposit (the licensees), with the goal being the development of the field as a whole with an agreed plan, commonly termed a unit operating agreement or joint operating agreement. This inter-licensee agreement is to specify how the field is to be developed. Such an agreement requires the approval by both states without undue delay.[21]

Not all aspects of cross-border unitisation are clear or set out in the 2010 Cooperation Treaty. Various questions remain to be clarified in further discussions between the parties. As a result, national laws, agreements between the governments and the licensees authorising development (e.g., a license, concession or production-sharing agreement) and current practices may be used as inspiration to further develop cooperative arrangements.

Russian regulation of petroleum activities draws on a significant number of sources, including different federal laws, regulations and presidential decrees. Here, the focus is only on those laws that are of key importance to the regulation of petroleum activities on the Russian continental shelf. These are the Tax Code,[22] the Law on Subsoil,[23] the Federal Law on the Continental Shelf[24] and the Federal Law on Production-sharing Agreements.[25] These laws apply to all types of mineral deposits, including gold, silver and other minerals – not only to petroleum or offshore hydrocarbons. Russia does not have a specific petroleum law, although it does have a law governing certain aspects of the country's gas sector, the Federal Law on Gas Supply in the Russian Federation.[26] More critically, there is no specific law that enables unitisation in Russia.

The main source for the regulation of petroleum activities on the Norwegian continental shelf is the Norwegian Petroleum Act.[27] Various other laws are also relevant, but the total number of such laws is significantly lower than in Russia.[28] Unitisation is regulated by the Petroleum Act, Section 4-7 on joint petroleum activities:

> If a petroleum deposit extends over more than one block with different licensees, or onto the continental shelf of another state, efforts shall be made to reach agreement on the most efficient co-ordination of petroleum activities in connection with the petroleum deposit as well as on the apportionment of the petroleum deposit. Agreements on joint exploration drilling shall be submitted to the Ministry. Agreements on joint production, transportation, utilisation and cessation of petroleum activities shall be submitted to the Ministry for approval. If consensus on such agreements is not reached within a reasonable time, the Ministry may determine how such joint petroleum activities shall be conducted, including the apportionment of the deposit.

III. Unit Operator

In a typical cross-border unitisation, the straddling field is developed as a unit by a single operator (a unit operator) appointed jointly by the licensees or the license groups of each country.[29] For Norway this is a familiar practice.[30] Russia, however, has less experience regarding international cooperation on transboundary hydrocarbon development.[31] Such differences may lead to differing perceptions between the two states, including as regards the definition and status of a unit operator.

The status of a unit operator in a joint operation is not evident in the 2010 Cooperation Treaty. According to Article 1.6(d) of Annex II, the unitisation agreement is to provide for the obligation of each party "to require the legal persons holding rights to exploit a transboundary hydrocarbon deposit as a unit to appoint a unit operator as their joint agent in accordance with the provisions set out in the Unitisation Agreement…"[32] However, there are important discrepancies between the Russian and Norwegian texts.

While in the Russian and English version each party is obliged "to require" ("требовать") the appointment of a unit operator; in the Norwegian text the parties have the obligation "to impose" ("å pålegge") such an appointment.[33] This, as discussed below, is grounded in the different approach the Russians and Norwegians have respecting the appointment of an operator.

Another legal inconsistency in Article 1.6(d) arises regarding the term a "transboundary hydrocarbon deposit" in the English and Norwegian text (en grenseoverskridende petroleumsforekomst); whereas the Russian text is a "transboundary hydrocarbon field" (трансграничного месторождения углеводородов). In Norway, a petroleum deposit, once discovered, receives the status of a "field" (or becomes part of an existing field), when the licensees have decided to develop it and a plan for development and operation has been approved, or granted exemption for, by the relevant authorities.[34] In Russian legislation, Article 10 of the Subsoil Law[35] correctly replaces the term "subsoil plots/deposit" (участки недр) with the term "field" (месторождение полезных ископаемых) as works proceed from exploration to production phase.

However, there is another aspect of usage of the term "field," related to the appointment procedure of a unit operator. On the Russian side, it is clear that the appointment of a unit operator is required only by the holders of the production license. Article 1.6(d) of Annex II applies, therefore, to the production phase and not to the exploration phase. This interpretation is confirmed by a comparison of Articles 1.6(a) and 1.6(d) of Annex II. While Article 1.6(d) of Annex II in the Russian text refers to the production phase and "the legal persons holding the rights to exploit ("правами на разработку") a transboundary hydrocarbon field," Article 1.6(a) refers to both the exploration and production phase "relevant legal persons holding rights to

explore for and exploit ("правами на разведку и разработку") hydrocarbons." In addition, Article 1.6(a) refers to "hydrocarbons" and not to a "transboundary hydrocarbon field" as in Article 1.6(d).

The situation is not that clear on the Norwegian side. Article 1.6(d) in Norwegian text refers to "the legal persons holding the rights to utilisation" ("rettighetene til å utnytte"), while Article 1.6(a) refers to "relevant legal persons holding rights to explore for and exploit" ("rettighetene til undesøkelse etter og utvinning"). The Norwegian licensing system consists of an exploration license (Petroleum Act, Section 2-1[36]), a production licence (Petroleum Act, Section 3-1) and a specific license to install and to operate facilities, (Petroleum Act, Section 4-3), in addition to a plan for development and operation (Petroleum Act, Section 4-2) and a decommissioning plan (Petroleum Act, Section 5-3). Each licence gives the licensee a right to conduct limited kinds of activities, including exploration, exploitation (production) and utilisation of oil and gas, as defined in Petroleum Act, Section 1-6. According to Petroleum Act, Section 1-6(i) the term "utilisation" includes all activities that are not exploitation (production), including "cooling in order to liquefy gas, refining and petrochemical activity, production and transmission of electric power and other use of produced petroleum, storage of petroleum as well as the construction, placing, operation and use of a facility for the purpose of utilisation."[37] Utilisation appears not to be production and requires a specific licence to install and to operate facilities, as per Petroleum Act, Section 4-3. In this hypothetical case, the wording of the Norwegian text of Article 1.6(d) of Annex II of the 2010 Cooperation Agreement indicates that a unit operator should be appointed for the utilisation phase, for example to build and operate pipelines. However, under public international law, treaties are interpreted "in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and

in the light of its object and purpose", Article 31 of the Vienna Convention on the Law of Treaties. Therefore, Article 1.6(d) of Annex II in Norwegian text applies also to the production phase.

A unit operator is normally subject to a set of obligations and rights included in a unitisation agreement. For example, a unit operator is usually to prepare a development plan for exploitation of the transboundary field. Article 1.6(d) of Annex II defines a unit operator as a "joint agent." The appointment procedure is to be specified by the states in the unitisation agreement. It is the responsibility of the licensees to appoint a unit operator, but they are obliged to follow the mechanism prescribed in the unitisation agreement. Transboundary field production cannot commence unless the Russian and Norwegian governments have jointly approved the unit operator – and likewise any change of unit operator.

Assessing the status of a unit operator becomes complicated when compared with the term operator used in the relevant Russian and Norwegian legislation. This issue takes as its starting point the legal nature of a legal person holding rights to exploit a transboundary deposit.

With most fields on the Norwegian continental shelf, exploration and production activities are conducted by license groups. The Norwegian Ministry of Petroleum and Energy assembles a group of oil companies on the basis of submitted applications. In some cases, license groups are formed with direct state participation through Petoro, a company wholly owned by the Norwegian state. Each individual member of the license group is awarded a production license and is commonly referred to as a "licensee." These licensees are required to conclude a standard joint operating agreement. The Ministry of Petroleum and Energy tasks one of the licensees with leading and conducting the day-to-day management of operations on behalf of the license group.[38] As per Section 3-7 of the Petroleum Act, the appointed company is referred to as

an "operator." An operator may farm out certain tasks to external contractors and those in turn to subcontractors. The status of an operator under the Norwegian petroleum legislation is, therefore, very similar to that of a unit operator in cross-border unitisation.

Unlike the Norwegian resource management approach, exploitation of petroleum deposits in Russia is rarely conducted by an operator on behalf of a group of companies, though there are exceptions. The oil and gas projects offshore of Sakhalin involve production-sharing agreements (PSAs), and are being developed under individual PSAs negotiated by the participants with the Russian state that were concluded prior to the enactment of the Federal Law on Production Sharing Agreements. For the Sakhalin 2 field an operating company - Sakhalin Energy Investment Company Ltd. has been formed.[39] For Sakhalin 1 the set-up is different, as Exxon Neftegas Limited, a subsidiary of ExxonMobil, is the operator on behalf of the partners in the project.[40] However, both of these projects are PSA's. According to Article 7 of the Production Sharing Agreements Law, the investors may designate an operator to carry out the work under a PSA.[41] PSAs have become controversial in Russia and the PSA approach has not been applied to new projects since the 1990s.

More recently, in Russia, a licensing regime has been used for offshore developments governed by the Subsoil Law[42] and the Continental Shelf Law.[43] Even though the concept of an offshore operator is not defined in these laws, it can be identified by analysing the Russian petroleum license system and the Russian Tax Code.[44] According to Article 2.1 of the Subsoil Law, natural resource areas in the internal waters, territorial seas and the continental shelf of the Russian Federation are considered as having Federal significance and thus are classified as "areas of Federal importance." Areas of Federal importance must be approved by the Government of Russia and are officially published by Rosnedra.[45] Pursuant to Article 9(3) of the

Subsoil Law, licenses for using areas of Federal importance on the continental shelf may only be granted to Russian legal entities. These entities must have at least five years' experience in Russian continental shelf exploration or production. Further, the Russian Federation is required to own or control more than 50 % of equity capital.[46] In practice, this means that there are only three Russian oil and gas companies which may be granted licenses to use subsoil areas on the continental shelf – Rosneft, Gazprom and Zarubezhneft. Other companies, including foreign ones, may participate in offshore projects but only as partners on the basis of service agreements. As a result, some oil and gas projects have been structured as incorporated joint ventures. According to Article 16.2 of the Russian Continental Shelf Law, the licensee may, on a contractual basis, engage an "implementer" or an "executor" ("исполнитель") for conducting work (services) related to the construction, operation and use of artificial islands, installations and facilities. The service provider may be a Russian or a foreign entity.

In certain cases, "the executor" may be referred to as an "operator," based on a special concept in the Tax Code – "an operator of a new offshore hydrocarbon field"- introduced for all new offshore fields in 2013.[47] The amendments were intended to improve the investment environment for offshore hydrocarbon development within Russian internal sea waters, its territorial sea, on Russia's continental shelf and in the Russian sector of the Caspian Sea, with provision for commercial extraction to commence on or after 1 January 2016.[48] (Article 11.1)

In order to qualify as an operator of a new offshore field in Russia, a legal entity (whether Russian or foreign) must satisfy the three conditions set out in Article 25.7 of the Tax Code.[49] First, a licensee (or one of its affiliates) is to have a direct or indirect equity participation in such a legal entity. However, under the Tax Code there are no requirements or restrictions concerning the percentage share. Second, the operator should conduct at least one type of extraction

operation (either itself or by hiring contractors) at a new offshore hydrocarbon field. Finally, operations at a new offshore hydrocarbon field are to be conducted according to an agreement between operator and licensee whereby a fee is to be paid to the operator, calculated on the basis of the volume of hydrocarbons produced and/or revenues earned from the sale of such hydrocarbons. In international parlance, such operator agreements are known as "risk service contracts." Before this concept was adopted in Russian legislation, Shtokman Development AG had, in 2008, established as a joint venture between OAO Gazprom, Total S.A. and Statoil ASA as a practical example of a legal entity that met all the above-mentioned criteria for an operator.

This analysis of the legal prisms through which Russian and Norwegian stakeholders might view future joint operations regarding a unit operator reveals considerable differences and potential difficulties. First and foremost, the countries differ in their perceptions of an "operator." The differences between the parties' anchor-points in national legislation may lead to differing expectations of joint-field development mechanisms, as well as misperceptions of the expectations of the other party. As seen above, an "operator" in Norwegian law and practice has a lead role and broad responsibilities; whereas an "operator" to the extent the concept is used in Russian law and regulations, has a more limited role. However, it is not impossible to provide to an operator under Russian law functions similar to those common in the Norwegian practice.

IV. Resolution of Disputes

1. Introduction

The effectiveness of the 2010 Treaty, as with other international agreements, hinges on compliance. This relies on a high degree of common understanding and the absence of major discrepancies between the parties. As shown above, the signing of a unitisation agreement does not necessarily resolve all issues relating to unitisation. A unitisation agreement normally

provides a new starting point for further discussions. The parties can be expected to protect their fundamental interests, including those related to health, safety, environment, tax income, employment, hydrocarbon production and metering. If they should fail to agree on procedural or technical matters, the 2010 Cooperation Treaty proscribes mechanisms for consultations and a set of procedures for dispute resolution.

According to Article 5.4 of the 2010 Cooperation Treaty, any disagreement between the parties concerning a transboundary deposit "shall be resolved in accordance with Articles 2-4 of Annex II" and such disagreements are to be settled "as rapidly as possible."[50] Once the parties have made every effort to resolve the impasse, they are encouraged to jointly "consider all options." In addition to a general duty to resolve issues through consultations from the pre-unitisation to abandonment stage, Annex II sets forth two forms of compulsory dispute resolution for issues respecting unitisation: ad hoc arbitration, and expert determination. Each of these is briefly discussed in turn below. What comes first, however, involves obligations on information exchange and mutual consultations. This is followed by an examination of Article 4 of Annex II, which creates a mechanism for independent expert determination in cases where the parties cannot agree on apportionment. On these matters, the Cooperation Treaty largely follows the provisions of the 2008 Agreement on Transboundary Hydrocarbon Deposits between Norway and Iceland.[51]

2. Consultations and Joint Commission

The general obligations of regular information exchange and of on-site inspections are set out in Article 1.11 of Annex II of the 2010 Cooperation Treaty. Article 1.10 of Annex II highlights the obligation for mutual consultation with respect to national health, safety and environment legislation. Article 1.13 of Annex II requires the establishment of a Norwegian-Russian Joint

Commission, with a clearly stipulated mandate to be responsible for ensuring a continuous consultation and an exchange of information "on issues pertaining to any planned or existing unitised hydrocarbon deposits."

Although the 2010 Cooperation Treaty is silent as to further details, the inspiration for future collaboration can be found in the pre-existing bilateral arrangements on cross-border economic activities between Russia and Norway, such as the Joint Norwegian–Russian Fisheries Commission[52] and the Joint Norwegian-Russian Commission on Environmental Protection.[53] Under the auspices of these bodies, both countries have been successfully cooperating on fisheries and in the fields of research and regulation for sustainable Barents Sea management. Both commissions have been active for numerous decades. Collaborative fisheries management, in particular, is widely regarded as setting an example for other states.[54]

Does Article 1.13 of Annex II of the 2010 Cooperation Treaty imply the establishment of the same type of institutional mechanism for Russian-Norwegian cooperation on unitisation issues? The experience of the fisheries sector shows that establishing a system for cooperation can help to develop expertise, and ensure on-going consultation and information exchange. Another approach could be based on the proliferation of joint commissions by creating individual joint commissions for each separate transboundary deposit, justified by the fact that each straddling field situation is unique. Nigel Banks has argued for interpreting the 2010 Cooperation Treaty provisions in favour of this alternative.[55] Obviously, Article 1.13 structurally belongs to Annex II Article 1, which determines the terms of each unitisation agreement concerning exploitation of each transboundary deposit, so that a joint commission would have to be established in every case of unitisation.

However, the proliferation solution appears to be contradictory to the aim of ensuring a "continuous consultation and exchange of information."[56] It would also deviate from the earlier Russian-Norwegian practice of joint commissions, with all advantages these have entailed.[57] In addition, based on the Russian text, Article 1.13 of Annex II, which refers to consultations "on issues pertaining to any ("любым") planned or existing unitised hydrocarbon deposits." Such a clarification is absent from the Norwegian text. This seemingly minor inconsistency in translation might be important for the choice of forum, but does not affect the obligation to collaborate. However, if the intention of the parties were to continue the tradition within institutionalised joint commissions, it would have been less confusing to place the consultation provisions outside of Article 1 of Annex II. In any case, the role of the joint commissions is usually to resolve issues through consultation before a matter becomes an actual dispute. As presented here, the joint commission is intended to function as a support structure with a preventive mandate.

3. Expert Determination on Apportionment

Disagreements on the apportionment of hydrocarbon deposits can be difficult to resolve through consultations thus making a special form of dispute settlement necessary. As with many other agreements dealing with transboundary deposits,[58] the apportionment issue is to be decided by an independent expert if the parties fail to manage the dispute themselves. In contrast to an arbitral award, as described below, an expert determination requires specialized knowledge on specific technical matters within the petroleum industry and the ability to conduct a comprehensive data analyses.

The expert's decision can prove vital for the parties. The apportionment of reserves has, for example, determined the basis for tract participation in the case of the transboundary

Norway-UK Flyndre Field unitisation.[59] However, the Cooperation Delimitation Treaty is unclear as for which of the possible matters in dispute the appointed expert involvement is allowed or required: "1) basis for tract participation; 2) quantification of initial tract participation; 3) key elements of technical procedures for redetermination of tract participation; 4) redetermination of tract participation; 5) expansion and reduction of unit area and/or unit interval."[60]

Strong interest from each side of the border in tract participation is reflected in Article 4 of Annex II of the 2010 Cooperation Treaty. It states that an independent expert should be appointed by the governments, but the process of expert selection, the expert's mandate and decision-making method are not prescribed. These matters are usually covered in detail by the unitisation and joint operating agreement. The regular procedure seems to be for each licensee or license group to nominate a prescribed number of candidate experts with the expert chosen in order of preference or by drawing from the lists.

As stipulated by Article 4.1 of Annex II, the final decision of an expert concerning apportionment is binding on the parties. This is clear in both the Norwegian and the Russian texts. Further, in the 2010 Cooperation Treaty there is no provision for the possibility of challenging the expert's decision before an Arbitral Tribunal.[61]

According to Article 4.2 of Annex II, "notwithstanding the provisions contained in paragraph 1 (Article 4.1):

- the Parties may agree that the hydrocarbon deposit shall be reapportioned between them;" (English text of the Treaty);
- the Parties may agree on a new apportionment of the hydrocarbon deposit between them (Norwegian text: en ny fordeling);

- the Parties may agree on another apportionment of the hydrocarbon field between them (Russian text "об ином распределении").

While the wording in Norwegian refers to reapportioning (redetermination), the Russian text may be understood as opening for the possibility of challenging the expert's decision – if, for example, it proved to be commercially deleterious for Russia. In line with this interpretation, it may be assumed that the Russian text of the treaty has no provisions for the possibility of redetermination. In any event, Article 4.2 of Annex II has been shaped by unitisation practice from the North Sea, which allows for at least one redetermination.[62] Redetermination is a very costly and often problematic exercise and one which both parties would try to avoid in practice.[63]

4. Ad hoc Arbitral Tribunal

As noted, any disagreements on the apportionment of the hydrocarbon deposit are to be solved by an expert. If the Parties fail to reach agreement respecting the interpretation, implementation or application of the unitisation agreement, the 2010 Cooperation Treaty contemplates a two-step procedure. The first step involves "negotiation or any other agreed procedure" to resolve disagreements. Underlying uncertainties and controversy are to be discussed and resolved on the abovementioned premise as rapidly as possible, and within six months. Otherwise, as a second step, either of the parties may submit the dispute to an "ad hoc arbitral tribunal" for a binding decision.[64]

Ad hoc arbitration is to be administered by the parties. Article 3.2 of Annex II specifies the appointment procedure of an arbitral tribunal. The 2010 Cooperation Treaty follows the standard appointment procedure for ad hoc arbitrations. A tribunal should consist of three members. Each party is to appoint one arbitrator within three months of a request to do so. The Treaty imposes no other special requirements in this regard. Should a party refuse to participate

in the arbitration proceedings, for example by failing to appoint an arbitrator within the stipulated time limit, the President of the International Court of Justice is empowered to make such an appointment. The two appointed arbitrators are to elect a third arbitrator within one month of the appointment of the second arbitrator. In default of such an appointment, the President of the International Court of Justice has the same power. The third arbitrator is to serve as the Chair. The Chair is to be impartial and should be neither a Norwegian nor a Russian citizen or resident. In accordance with Article 3.1 and Article 3.3, para. 2 of Annex II, the legal mandate of an ad hoc arbitral tribunal is limited to resolving issues that have arisen pursuant to the unitisation agreement.[65] Therefore, the arbitration provisions do not apply to disputes about the existence or extension of the hydrocarbon deposit or the possibility of exploiting the deposit as a unit. In such cases, the parties are to attempt to settle the matter by discussions under Article 5.2, para. 2 of the 2010 Cooperation Treaty.

The arbitral tribunal determines its own rules of procedure and the decisions are to be taken by majority vote of its members.[66] The tribunal's decision is binding on the parties and shall be enforced within the unitisation agreement.

V. Conclusions

Successful examples of transboundary field development around the world show that the concept of unitisation is viable. However, there are also examples of areas where petroleum development has been either delayed or put on hold because of difficulties in implementing unitisation agreements. From a legal perspective, as has been noted that "no jurisdiction has been able to produce a perfect solution for all the problems and difficulties associated with unitisation."[67]

The current concept of cross-border unitisation is not fully developed in international law. The basis for state cooperation are boundary delimitation agreements. The 2010

Cooperation Treaty stands as a significant, state-of-the-art bilateral model for the management of transboundary hydrocarbon resources and is expected to provide the foundation for future cooperation in the Arctic and the development of further norms, internationally and nationally.[68] Nevertheless, the Treaty contains several instances of inconsistency between the Russian and Norwegian texts, although the two are to be regarded as equally authentic. Further, the parties appear to differ in their understanding of the principles and procedures respecting transboundary unitisation. This article has illustrated the latter point by examining the concept of a "unit operator" through comparing the relevant Russian and Norwegian legislation on petroleum licensing. Under the Norwegian legal framework, the status of an operator is similar to that of a "unit operator" in cross-border unitisation – the operator is one of the licensees appointed or approved by the Norwegian Ministry of Petroleum and Energy to lead and conduct the day-to-day operations on behalf of the license group. However, the Russian legislation has a different perception indicating that an operator is a legal entity (joint venture), contractually engaged by licensee as service provider to conduct works where the licensee has a direct or indirect equity participation.

These and other discrepancies between the expectations and experiences of the two parties may stall transboundary field development. However, Russia and Norway have agreed on several mechanisms for consultations and procedures for dispute resolution. In addition to a Russian–Norwegian Joint Commission for consultations, there are two forms of dispute settlement, ad hoc arbitration and expert determination.

Certain issues under the 2010 Cooperation Treaty require further clarification. Whether Russia and Norway will succeed in turning the Treaty into an operating model of cooperation depends on many factors – not only presence of hydrocarbons – but also there being a common

understanding of the crucial principles of unitisation and the ability of the states to understand each other. Despite the bilateral tensions both countries have demonstrated an ability to discuss a large range of complicated questions. When cooperation is the goal, the parties should be able to find a solution.

1 U.N. Convention on the Law of the Sea, 1833 *U.N.T.S.* 397, Article 56 recognizes a coastal state's sovereign rights over the resources of the continental shelf and the exclusive economic zone (EEZ).

2 See Ana E. Bastida, Adaeze Ifesi-Okoye, Salim Mahmud, James Ross, and Thomas Walde, "Cross-Border Unitization and Joint Development Agreements: An International Law Perspective," *Houston Journal of International Law* Volume 29, (2006): 358-359:

> ...cross-border unitization in the strict sense covers situations where a common reservoir is underlying the delimited boundary between two states, and it involves the treatment of an identified deposit-that is, a specific petroleum reservoir or field-as a single deposit. By contrast, joint petroleum development agreements refer to arrangements between two states to develop and share in agreed proportions the petroleum found within a geographic area whose sovereignty is disputed.

[3] David M. Ong, "The Role of Maritime Boundary Delimitation and Related Co-operative Resource Regimes within Global Ocean Governance" Volume I: UN and Global Ocean Governance (edited by David Ong & Dino Kritsiotis) of the IMLI Treatise on Global Ocean Governance (general editor: David Attard) to be published by OUP, forthcoming, 2018.

4 See Robert E. Hardwicke,"The Rule of Capture and Its Implication as Applied to Oil and Gas," *American Bar Association. Section of Mineral and Natural Resources Law, Proceedings* (1935):5: "the rule of capture may be stated as follows: The owner of a tract of land acquires title to the oil or gas which he produces from wells drilled thereon, though it may be proved that part of such oil or gas migrated from adjoining lands."

5 Regarding the conceptual differences between unitisation and joint development agreements of offshore hydrocarbon deposits see Vasco Becker-Weinberg, *Joint Development of Hydrocarbon Deposits in the Law of the Sea*, (Springer, 2014), 18-21.

6 This aspiration is reflected in the Preamble of the 2010 Cooperation Treaty: "underlining the importance of efficient and responsible management of their hydrocarbon resources". Treaty between Norway and the Russian Federation concerning Delimitation and Cooperation in the Barents Sea and Arctic Ocean, 15 September 2010, 77 *Law of the Sea Bulletin* (2012) 24 and on the website of the Norwegian Foreign Ministry at <www.regjeringen.no/globalassets/upload/ud/vedlegg/folkerett/avtale_engelsk.pdf>. The authentic Russian and Norwegian texts and an English translation are available at <www.regjeringen.no/no/tema/utenrikssaker/folkerett/innsikt_delelinje/avtalen/id614006/> (July 2017).

The Cooperation Treaty followed more than four decades of negotiation. Norway and Russia had overlapping claims to the continental shelf and zones in the Barents Sea and the Arctic Ocean. The disputed area constituted an area of 175 000 km² and was defined by a sector line in the west and a median line in the east. The background of the 2010 Cooperation Treaty is presented in detail in Tore Henriksen and Geir Ulfstein, "Maritime Delimitation in the Arctic: The Barents Sea Treaty," *Ocean Development & International Law* Volume 42, (2011): 2-8.

7 *Ibid.*, Article 1.

8 *Ibid.*, Article 8.

9 *Ibid.*, Article 8.

As a delimitation agreement is considered to be of particular importance, the consent to ratification of the parliament of Norway (the Storting) is required in accordance with the Norwegian Constitution Section 26.2. The Agreement was unanimously approved by the Storting on 8 February 2011, see Samtykke til ratifikasjon av overenskomst av 15. september 2010 mellom Norge og Russland. Prop. 43 S (2010-2011).

In Russia, the ratification of international treaties is required if this is provided for by the treaty itself or if a treaty is contrary to current legislation. The State Duma gave its approval for ratification on 25 March 2011, with 351 votes for and 57 against, see Федеральный закон "О ратификации Договора между Российской Федерацией и Королевством Норвегия о разграничении морских пространств и сотрудничестве в Баренцевом море и Северном Ледовитом океане" от 05.04.2011 N 57-ФЗ (последняя редакция).

10 Norway and the Russian Federation had undertaken exploration activities in the region in the late 1970s. In the 1980s, Norway and Russia agreed not to carry out exploration or exploitation activities in the disputed area. Prior to the moratorium the Russians had engaged in seismic studies of the area with promising results, primarily regarding the Fedynsky High structure (or Hjalmar Johansen-Høyden as it is called in Norway). Exploration since the moratorium has been lifted has not yet revealed transboundary petroleum resources. Deposits have been discovered in the Barents Sea outside the disputed area with the Norwegian Snøhvit gas field and Goliat oil field and the Russian Shtokman gas field.

11 See Jacqueline Lang Weaver and David F. Asmus, "Unitizing oil and gas fields around the world: A comparative analysis of national laws and private contracts," *Houston Journal of International Law* Volume 28 (2006): 9.

12 Bastida, et al., supra note 2, 420.

13 It is presently under revision. A new AIPN drafting committee was approved in 2015 to review the 2006 Unitization and Unit Operating Agreement in light of the 2012 JOA, available at <**https://www.aipn.org/forms/store/ProductFormPublic/unitization-and-unit-operating-agreement-2006**>.

14 Jim Ross. "Special Feature: Unitisation – Introduction," *Oil, Gas & Energy Law Intelligence Journal* Volume 5 (2007): 13.

15 "The international legal regime might therefore be better described as providing States with 'rules of engagement' rather than rules of cooperation." Peter D. Cameron, "The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean," *International and Comparative Law Quarterly* Volume 55 (2006): 561.

[16] Interview with Secretary of the Board at Shtokman Development AG Dr. Andrey Krivorotov. See Marat Tukhvatullin, *Norwegian-Russian Petroleum Cooperation in the Barents Sea in the Arctic Context: Comparative Analysis of Different Views*, (2017 Master's Thesis, Nord University): 44.

17 Cooperation Treaty, supra note 5, Article 5, para. 2. ".. the hydrocarbon deposit extends to the continental shelf of each of the Parties and the deposit on the continental shelf of one Party can be exploited wholly or in part from the continental shelf of the other Party, or the exploitation of the hydrocarbon deposit on the continental shelf of one Party would affect the possibility of exploitation of the hydrocarbon deposit on the continental shelf of the other Party..".

18 Framework Agreement between the United Kingdom and Norway Concerning Cross-boundary Petroleum Co-operation, 4 April 2005, available at < **https://www.gov.uk/government/publications/framework-agreement-between-the-uk-and-norway-concerning-cross-boundary-petroleum-co-operation**>.

19 Available at <**http://www.un.org/depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/GBR-NOR1965CS.PDF**>. See generally, Daniel Fjærtoft, Arild Moe and Natalia Smirnova, "Unitization of petroleum fields in the Barents Sea: Towards a common understanding?"

(forthcoming), which examines Norwegian and Russian practical experience with cross-boundary hydrocarbon development.

20 There is no provision for a pre-unitisation agreement in the 2010 Cooperation Treaty. Pre-unitisation allows preliminary work to be done while negotiations are taking place.

21 Cooperation Treaty, supra note 5, Annex II, Article 1.6(b).

22 Tax Code of the Russian Federation Part I of 31 July 1998 no. 146-FZ [last amended 28 December 2017] and the Tax Code of the Russian Federation Part II of 5 August 2000 July 1998 no. 117-FZ [last amended 28 December 2017], are available on Russian at the Russian law database ConsultantPlus, <www.consultant.ru/>.

23 Law on the Subsoil of 21 February 1992 no. 2395-1 [last amended 3 June 2016], *ibid*.

24 Federal law on the Continental Shelf of the Russian Federation of 30 November 1995 no. 187 [last amended 3 July 2016], *ibid*.

25 Federal law on Production Sharing Agreements of 30 December 1995 no. 225 [last amended 5 April 2016], *ibid*.

26 Federal law on Gas Supply in the Russian Federation of 31 March 1999 no. 69 [last amended 5 December 2016], *ibid*.

27 Act of 29 November 1996 no. 72 relating to Petroleum Activities [last amended 1 October 2015], available at <www.npd.no/en/Regulations/Acts/Petroleum-activities-act/>.

28 For example, the legal basis for the taxation of petroleum activities is derived from the Act of 13 June 1975 no. 35 on the Taxation of Subsea Petroleum Deposits, etc. [last amended 1 January 2017], available in Norwegian at <lovdata.no/>. Other relevant regulations for the petroleum activities are available on the websites of the respective authorities, or on Lovdata (Norwegian laws in English). Some of the texts are available only in Norwegian.

29 By contrast, in a joint development zone, each party is allowed to develop its part of the transboundary field as the operator with its own facility.

30 See: United Kingdom and Norway Agreement relating to the exploitation of the Frigg Field reservoir and the transmission of gas therefrom to the United Kingdom, 1976, see Article 5, at <treaties.un.org/doc/Publication/UNTS/Volume%201098/volume-1098-I-16878-English.pdf> and Framework Agreement between the United Kingdom and Norway concerning Cross-Boundary Petroleum Co-operation, 2005, Article 3.7, at <www.regjeringen.no/globalassets/upload/kilde/oed/prm/2005/0142/ddd/pdfv/242757-traktat_no_storbrit_e_april_05.pdf>. Such appointments are subject to the approval of the two Governments.

31 The two practical examples are with Kazakhstan in the Caspian Sea. See Fjærtoft, Moe and Smirnova, supra note 18.

32 Russian: “требовать от юридических лиц, обладающих правами на разработку трансграничного месторождения углеводородов как единого целого, назначения оператора месторождения в качестве их совместного агента в соответствии с положениями Соглашения об объединении”; Norwegian: “å pålegge de juridiske personer som innehar rettighetene til å utnytte en grenseoverskridende petroleumsforekomst som en enhet, å oppnevne én operatør som skal fungere som felles representant for dem, i samsvar med bestemmelsene fastsatt i unitiseringsavtalen”.

33 An order (an imposition) in Norwegian legislation is a company-specific, administrative decision taken pursuant to the regulations.

34 See <www.npd.no/en/about-us/information-services/dictionary/>.

35 Federal Law on the Subsoil, supra note 22.

36 Petroleum Act, supra note 26.

37 See, **Ernst Nordtveit,** ***Kommentarer til lov om petroleumsvirksomhet av 29 nov. 1996 nr. 72*****. (KARNOV,** Norsk lovkommentar, **2008), note 22**, at <https://www.rettsdata.no/Norsk-Lovkommentar>.

38 Petroleum Act, supra note 26, Section 3-7, the Ministry of Petroleum and Energy can appoint or approve an operator who is not a licensee according to the production licence, but it has never been practiced. See, Nordtveit, supra note 36, at note 43.

39 The shareholders are: Gazprom 50% (plus one share), Shell 27.5% (minus one share), Mitsui 12.5%, and Mitsubishi 10%. See <www.gazprom.com/about/production/projects/lng/sakhalin2/>.

40 The participants are: Rosneft 20%, ExxonMobil 30%, Sodeco (Japan) 30%, ONGC (India) 20%. See <sakhalin1.rosneft.com/about/Rosneft_today/Operational_structure/Development_and_Production/Sakhalin1/>.

41 Federal Law on Production Sharing Agreements, supra note 24.

42 Federal Law on Subsoil, supra note 31.

43 Federal Law on the Continental Shelf, supra note 23.

44 The term "operator" is mentioned only once in the Subsoil Law, in Article 21.1 on short-term right to use subsurface resources, supra note 31.

45 See <www.rosnedra.gov.ru/category/144.html>.

46 See: Irina Fodchenko, *Utenlandsk deltakelse i petroleumsvirksomhet på russisk kontinentalsokkel: Hovedtrekk ved Russlands petroleumsregimer med referanse til det norske konsesjonssystemet*. (Marius 380, 2009), 87-91.

47 Federal Law 30 September 2013 No. 268-FZ on amendments to parts one and two of the Tax Code of the Russian Federation and certain legislative acts of the Russian Federation in connection with the provision of tax and customs duty incentives for hydrocarbon production on the continental shelf of the Russian Federation, available on the Russian law database, supra note 21.

48 *Ibid.,* Article 11.1. Also included were offshore hydrocarbon deposits for which the date of commencement of commercial hydrocarbon extraction has not been determined as of 1 January 2016.

49 Tax Code of the Russian Federation Part I of 31 July 1998 no. 146-FZ [last amended 28 December 2017].

50 Cooperation Treaty, supra note 5, Annex II, Article 2.

51 Agreement between Norway and Iceland concerning transboundary hydrocarbon deposits, 3 November 2008, at <www.regjeringen.no/no/dokumenter/stprp-nr-43-2008-2009-/id547160/sec12>.

52 See <http://www.jointfish.com/eng>.

53 Overenskomst mellom Norge og Russland om samarbeid på miljøsektoren, 3 September 1992, at <https://www.regjeringen.no/contentassets/66b54513e82d453c88f030135513d582/overenskomst_av_1992_no.pdf>.

54 Geir Hønneland, "Enforcement co-operation between Norway and Russia in the Barents Sea fisheries," *Ocean Development & International Law* Volume 31 (2000): 259.

55 Nigel Bankes, "The Regime for Transboundary Hydrocarbon Deposits in the Maritime Delimitation Treaties and Other Related Agreements of Arctic Coastal States," *Ocean Development & International Law* Volume 47 2016): 150.

56 Cooperation Treaty, supra note 5, Annex II, Article 1.13.

57 See Hønneland, supra note 53, at 251.

58 Framework Agreement between the United Kingdom and Norway, supra note 29, Article 3.4.

59 Paul F. Worthington, "Provision for expert determination in the unitization of straddling petroleum accumulations," *The Journal of World Energy Law & Business* Volume 9 (2016): 258.

60 The list is provided by Paul F. Worthington, *Ibid.*

61 *Ibid*.

62 Bastida, et al., supra note 2, 420.

63 Chukwuemeka Mike Okorie, "Have the Modern Approaches to Un it Development of Straddling Petroleum Resources Extinguished the Applicability of the Primordial Law of Capture." *International Trade Law Journal*, Volume 18 (2009): 45.

64 Cooperation Treaty, supra note 5, Annex II, Article 3.

65 The 2010 Cooperation Treaty, supra note 5, Annex II, Article 3.1: "If the Parties fail to reach the Unitisation Agreement referred to in Article 1 of the present Annex, the disagreement should as rapidly as possible be resolved by negotiations or by any other procedure agreed between the Parties....".

Annex II, Article 3.3, para. 3, provides that: "The decisions of the Arbitral Tribunal shall be binding upon the Parties and the Unitisation Agreement referred to in Article 1 of the present Annex shall be concluded by them in accordance with these decisions."

66 Cooperation Treaty, supra note 5, Article 3.3 of Annex II.

67 Ann Soh and Clare Pope, "A critical analysis of the offshore unitisation regime in Australia," *The Australian Petroleum Production & Exploration Association Journal* 47 (2007): 2.

68 Emilie E. Hawker, James Lloyd Loftis, and Timothy J. Tyler, "Gaps in the Ice: Maritime Boundaries and Hydrocarbon Field Development in the Arctic," *Oil, Gas & Energy Law Intelligence Journal*, Volume 2 (2012): 2.