International Oil and Gas Industry Disputes

By Doran Doeh

Introduction

This article gives a very brief outline of the kinds of disputes that arise in the international oil and gas industry. I was asked by the editor of *Arbitration.ru* to prepare it as part of a series surveying disputes that arise in particular areas relevant to international arbitration. Later in the year, I will prepare one on M&A transactions.

The subject is potentially encyclopaedic in scope, so for an article of this kind I have had to be selective. My aim has been to give practitioners in Russia whose main focus is on general commercial practice (who have limited familiarity with activities of the international oil and gas industry), with a general overview of those aspects of the international oil and gas industry where a general practitioner might not be aware of particular issues that commonly arise in the legal affairs of the industry or where the practice of the international industry is materially different from that in Russia. I have tried to do this in broad generic terms without going into detail or highlighting "latest" developments. Inevitably, this selection of subject matter is to some extent subjective and reflects my own experience and interests. However, in characterizing the areas in which disputes arise, I have kept in mind the topics covered by the joint conference put on the Association of International Petroleum Negotiations (**AIPN**) and London Court of International Arbitration (**LCIA**) conference on "Dispute Resolution in the Oil and Gas Business" in London in October 2018 and the similar conference they put on three years earlier. My focus is mainly on upstream – i.e. exploration and production – activities, as well as other related activities (e.g. oil and gas sales).

I have been more discursive with the first two topics - which fall under public international law – because they are likely to be less familiar to the general practitioner and therefore merit greater elucidation. By its nature, public international law is the same in Russia as everywhere else, but unless a practitioner has been engaged in matters involving public international law (or studied it as university) it is likely to be less familiar than the areas normally dealt with in commercial practice.

I would note for Russian readers that the way the international oil and gas industry is structured and regulated in Russia is different from that in many other parts of the world. Each country, of course, has its own laws and legal practices but the way of doing things in the international oil and gas industry has been greatly influenced by US and – especially – UK practice because so many of the global players have been engaged there.

The topics I will deal with are as follows:

Boundary Disputes between States,

Investor-State Dispute Settlement,

Disputes relating to Joint Ventures,

Disputes relating to M&A/A&D,

Oil and Gas Pricing Disputes,

Disputes relating to Infrastructure,

Trading and Shipping Disputes,

Human Rights and Environmental Disputes,

Damages in Oil and Gas Disputes.

Boundary Disputes between States

Disputes over the land boundaries of states are as old as mankind. Boundaries in western Europe have been stable since the Treaty of Versailles (1919), while those in central and eastern Europe have been anything but so. Nonetheless, since WW2, the main oil and gas producing regions there have lain in places that are relatively remote from disputed areas. The break-up of the former Soviet Union into new states was relatively peaceful and the main oil and gas producing areas were little affected by disputes over boundaries, although there have been exceptions in Georgia and Crimea. These disputes however have involved major political issues of a kind that go much wider than boundary determination through legal processes. These may, of course, come into play at a future stage if the broader issues are resolved. The area where there have been issues within the former Soviet Union that might be resolved in this way concern the delimitation boundaries within the Caspian Sea, which is problematic because, being wholly enclosed, it is not subject to international public law of the sea (about which, see below) and, on the other hand, the countries concerned have been reluctant to treat it merely as a lake. Nonetheless, they have come to practical resolution (in some cases by bilateral agreements between adjacent states) that has enabled exploitation to take place in areas that would clearly belong to one country or another if a full delimitation were achieved (particularly in areas offshore Kazakhstan, Russia and Azerbaijan) and they may also be well on the way to resolution in the remaining areas.

However, the situation in many other parts of the world – especially the Middle East, Africa and Asia – in many cases have involved legal as well as political processes. In some cases – such as in the Empty Quarter of the Arabian quadrilateral - the boundaries have been ill defined because in the past there was no need to define them and the area was in common use by different tribes. In others, particularly where states have split up or otherwise been separated into different new states, the situation has been more complex. Settling such disputes involves reviewing historical antecedents and usage as well as geography. The situation inevitably becomes more complicated – and focus on the issues more intense – once oil or gas (or other valuable minerals) is found. It is, in practice, possible to exploit such resources without challenge in areas where there is unlikely to be any adverse claim. It is different, of course, where such a claim is likely or active.

In North America, the landward boundaries were settled in the 19th century. However, delimitation of seaward boundaries has been a different matter and initiated the development of public international law described below.

By contrast with the landward situation, the legal regime relating to offshore boundaries – particularly as regards the continental shelf - is relatively new. It began in 1945 when President Truman declared publicly that the United States intended to exploit the natural resources of the continental shelf beneath the seas contiguous to its coasts. The focus was particularly on the Gulf of Mexico, which is very rich in oil and gas deposits. Many nations joined in subsequently to assert claims in respect of their own continental shelf areas, and it quickly became evident that some sort of resolution was needed which would be effective in public international law. An International Law Commission worked between 1951 and 1958, and the United Nations held its first conference on the law of the sea in Geneva, Switzerland. This resulted in four treaties in 1958 which covered a broad range of public international law issues relating to the law of the sea and together constituted the Convention on the Continental Shelf. It had a high level of adherence amongst the major coastal states (although some registered reservations, i.e. their acceptance was qualified in relation to matters key to them).

The most contentious area concerns the dividing line separating areas of jurisdiction between adjacent or opposite states where the continental shelf is the natural prolongation of the land territory of both states.

The Convention set out principles on determination of baselines, bays, delimitation between states whose coasts are adjacent or face each other, innocent passage and contiguous zone. It also addressed the notion, limits and regime of the continental shelf. Amongst other things it set out the "equidistance-special circumstances" principle as the method of delimitation of boundaries between states in offshore areas. This provides that the boundary between opposite or adjacent states is to be determined along the median or equidistance line between their respective coasts, in the absence of agreement to the contrary or special circumstances justifying another boundary.

Most importantly, in the *North Sea Continental Shelf* case of 1969 the International Court of Justice in the Hague (**ICJ**), whose decisions are generally regarded as definitive in this area of public international law, declared that there was a body of customary international law on the continental shelf which is identical in content to Articles 1 and 3 of the Convention. It declined to hold that the equidistance principle contained in Article 6 also held the same status, preferring instead "equitable principles"; but in practice the effect of this approach has been to recognize equidistance as a starting point but to emphasise the importance of special circumstances rather than pure equidistance in arriving at final delimitation. Other decisions followed. Most notable was in the *Anglo-French Continental Shelf Case* (1997-8), which was not a decision of the ICJ but rather of an ad hoc tribunal whose award was published. The case was complicated due to the number and location of islands (especially the Channel Islands, which are close to the French coast), promontories and other irregularities. The tribunal held that "a lateral equidistance line extending…for long distances may…result in inequitable delimitation by reason of the distorting effect of individual geographical features". In the *Libya/Malta Continental Shelf* case of 1985, the ICJ applied an "equitable principles/special circumstances" approach which took into account the general configuration of coastlines and proportionality between length of coastline and length of continental shelf, with the result that it established delimitation 18 minutes north of the equidistance line – in effect recognizing the much greater mass of Libya in comparison with Malta.

In legal historical terms this body of law established by the Convention and ICJ decisions was a remarkable achievement in a relatively short period of time.

The Third United Nations Conference on the Law of the Sea between 1973 and 1982 resulted in an even more wide-ranging Convention on the Law of the Sea of 1982 ("UNCLOS") which had an even larger number of adherents, but some significant states – most notably the United States – did not adopt it. Nonetheless, in relation to delimitation of boundaries, UNCLOS reaffirmed the principles in the 1958 Convention and the decisions of the ICJ as reflecting customary international law.

The success of this international law regime is well exemplified by the agreement in 2010 of the Russia-Norway treaty on delimitation and cooperation in the Barents Sea and the Arctic Ocean. It was signed after many decades of negotiations going back into the Soviet period.

It remains to be seen how this will play out in the broader reaches of the Arctic Ocean, where both Russia and Canada have very long coastlines and the United States a relatively short one. In recent years, Russian has been carefully taking steps to lay its claim by asserting its position in relative to the Lomonosov and Mendeleev Ridges in its offshore continental shelf area.

Investor-State Dispute Settlement

Having successfully attracted investment, states sometimes – and from an investor's point of view, far too often - change their minds about the terms that should apply. This has been the experience of many in the petroleum industry over a long period of time. A state trying to attract investment – particularly where no oil or gas has previously been found - may offer an investor very favourable terms which the state (or some key element in it) later regrets. The reasoning before the investor comes in (particularly, but not always, where the population of the state is desperately poor) often is,

in effect, that “something is better than nothing” bearing in mind that the state has neither the technical capabilities nor the capital to find petroleum in the ground (whether onshore or offshore) and therefore to do what is necessary to get the interested foreign investors in. It is rarely easy to find oil or gas where none has been found before (even in countries which subsequently prove to have vast and prolific reserves – Iran and Saudi Arabia are a very good examples) so the investor perceives that it is taking very high risks and should be rewarded accordingly. Once the reserves have been proved and developed, all this may be forgotten about, particularly by the government of the state and its population who see “our oil” or “our gas” being produced by foreigners who make a lot of money out of it. Inevitably there are suggestions (or, at least, innuendos) that the clever foreigners with the assistance of their sophisticated international lawyers pulled some sort of “fast one” on the gullible politicians of the state in persuading it to grant the initial terms.

Non-financial aspects may also come into the picture. Environment, health and safety, labour rights and human rights issues can become of great concern and, in some situations, can outweigh the financial side. The imbalance between benefits accruing to the local community and the nation as such can sometimes make the situation very complicated.

This is not only a problem in developing countries – similar situations have arisen in countries as advanced and diverse as the UK and Israel. (The United States, which has had its own powerful domestic industry since the mid-19th century, whilst not so much concerned about foreign investment in its petroleum industry, has nonetheless experienced high tensions between the interests of consumers and producers - and massive domestic anti-trust issues - which continue to this day and, in some ways, may be seen by some as analogous.)

Stabilisation

Over time, investors from the international petroleum industry have developed techniques for protecting themselves. One of the older techniques was the use of “stabilisation” provisions either in legislation or agreements with governments (or both). Stabilisation provisions can take various forms, the most common of which are clauses which attempt to “freeze” the state’s legislation so that subsequent changes do not affect the investor, clauses which provide that the state will not nationalise the assets or modify the investment contract without the investor’s agreement, economic equilibrium clauses - which provide that the state will maintain the economic equilibrium of the investment and compensate the investor if it is disturbed by e.g. subsequent legislation - and clauses which provide that the burden of changes resulting from subsequent legislation will be borne by the state. Economic equilibrium clauses were particularly common while stabilisation provisions were still fashionable.

The problem with legislative stabilisation is very simple – the state is sovereign, and it is often impossible (particularly in the absence of external pressure from the investor’s home state, which may be reluctant to interfere in another state’s affairs) to prevent the legislation from being changed subsequently. Contractual stabilisation therefore has been preferred, but the drafting of clauses that will be effective in all possible situations is fraught with difficulty, not least because it is often not possible at the outset to anticipate the circumstances that could give rise to a dispute in future. If a dispute arises over a stabilisation clause therefore, however carefully and thoughtfully the draftsman may have worked in preparing it, the claim is almost inevitably a complex, long and hard-fought one.

For this reason, stabilisation clauses have fallen from fashion as a way of providing long term security for investments in the industry.

PSAs

The industry has tended, in recent years, to focus much more on the form of the grant of rights to exploit petroleum. In Russia, during the Yeltsin years, the international industry was very reluctant to invest under the licencing regime which Russia had adopted to replace that of the Soviet system. Licensing regimes are common in western Europe, so why not in Russia?

The problem with licensing is that it falls under administrative law, under which it is usually much more difficult to bring a claim successfully than under a contract. The industry therefore prefers contractual forms, particularly where the contract provides for a governing law of a state other than the one in which the investment is made (English law being much favoured for this) and international arbitration, which is enforceable under the New York convention. The effectiveness of this was proved in the Libya cases of the 1970s after Libya nationalised the assets of various international oil companies. Although enforcement of awards in Libya itself was not possible, the companies were able to arrest cargoes of oil being exported by Libya and satisfy their claims from the proceeds.

Production sharing agreements (**PSAs**) in their current form were introduced in Indonesia in the 1960s as a way of giving the state more control and direct participation in petroleum production - in contrast to the more traditional concession agreements which had previously been used in much of the Middle East, Africa, Asia and Latin America. Nonetheless, although the international industry was not happy with the imposition of PSAs at the time, after reflection they took the view that the contractual nature of the relationship under a PSA (particularly if it includes the protections above-indicated) gave them much more protection than under a licence and it became a preferred form of grant of petroleum exploitation rights.

Whereas international companies were willing to live with the uncertainties of licensing in the UK which has a highly respected legal system, they were not willing to take the risk in Russia – at least not until BP struck its highly lucrative deal with TNK, which brought them extensively into the Russian licensing system. The insistence of the other international companies that they would only participate in Russia under PSAs then faded away. PSAs are, nonetheless, still popular with the international industry in other jurisdictions.

ISDS

In recent years, the industry has also focused on the protections available in Investor-State Dispute Settlement (**ISDS**). ISDS is another relatively newly developed field. Traditionally, if an investor had a claim against a foreign state and felt it could not obtain an adequate remedy in the state's own courts or other domestic processes, it could try to prevail upon its own state to take up the claim as between the two states – state-state-dispute-settlement. Some states would conclude Friendship, Commerce and Navigation treaties to facilitate this. However, in practice, because it was necessary to involve the investor's own state the process was often cumbersome and unsatisfactory both to the investor and the states involved – particularly if the investor's home state was reluctant to get involved in the dispute.

Since the late 1950s, many states have entered in Bilateral Investment Treaties (**BIT**s). These often provide assurances relating to foreign direct investment such as fair and equitable treatment (which limits arbitrary and discriminatory treatment), protection from expropriation, most favoured nation treatment (nationals and companies of the investor country being treated no worse than those from any other country), national treatment (being treated at least as well as nationals of the investee country), free transfer of investment and returns. The most significant feature of BITs for investors is that they enable the investor to have recourse to international arbitration directly against the host state (without having to ask the investor's own state to get involved) through international arbitration (so that the investor does not need to go to the domestic courts of the host state).

The development of ISDS has been managed under the auspices of the Investment Center for the Settlement of Investment Disputes based in Washington, D.C. (**ICSID**). The first BIT was signed in November 1959 between Pakistan and the Federal Republic of Germany. There are now over 2,750 BITs.

There are also multinational treaties – such as the Energy Charter Treaty – and free trade agreements – such as the North American Free Trade Agreement (which is also multinational) and, more recently, Comprehensive Economic and Trade Agreement between Canada and the European

Union (**CETA)** – which include similar protections. CETA includes an unusual dispute settlement by setting up a special court to determine disputes.

An investor initiating an arbitration under a BIT or similar treaty usually has choice of doing so under UNCITRAL rules or ICSID rules.

Each BIT is different. Some states have their own standard forms but, in practice, the actual terms after negotiation may depart from the form and it is necessary to look carefully at the BIT applicable to the situation of the investor concerned. Some investors carefully structure their investments through countries with favourable BITs, but it is essential to check the effectiveness particularly if the structure is somewhat artificial.

Since the late 1990s, there has been an explosion of ISDS claims. This has arisen partly because so many treaties have been signed, partly because of the globalization of business and partly because investors see the example of other investors bringing claims.

ISDS claims are often very high profile. Although the arbitrations are subject to confidentiality, news of an important claim often leaks out or is publicised by one side (or both) and, when this happens, it may become controversial. Governments may complain that ISDS inhibits them from instituting or implementing reforms and policies relating to public health, environmental protection, labour rights and human rights. Against this, it is pointed out that investment treaties do not limit a sovereign's right to regulate in the public interest in a fair, reasonable and non-discriminatory matter.

The proliferation of cases and their political high profile has resulted in other criticisms particularly since it has become apparent that claims can be directed against developed country states – e.g. under NAFTA or the Energy Charter Treaty – and particularly have emerged in relation to the negotiations between the EU and countries like the US and Canada (hence the different approach to dispute resolution taken in CETA).

It is sometimes suggested that there is a conspiracy between the arbitrators and the law firms to promote ISDS because they earn large fees from it and therefore the arbitrators (many of whom are also practitioners in law firms) tend to favour investors so as to encourage them to being claims. This is particularly the case where arbitrators also practice as counsel. However, according to the International Bar Association (**IBA**), states have won a higher percentage of ISDS cases than investors and about a third of cases end in settlement. The IBA has also observed that investors, when successful, recover on average less than half of the amounts claimed and that "only 8 per cent of ISDS proceedings are commenced by very large multinational corporations." It also notes that the practice of awarding costs against the losing party also discourages claims with substance.

Another criticism concerns the transparency of the process. Because arbitrations are confidential and conducted in private, the public do not have access and the press particularly can be irked by this. In practice, however, a great deal of information about ISDS cases of public important is, in practice, made public.

Another concern often expressed is that the arbitrators are private practitioners who may or may not have judicial background and that tribunals do not take account of broader policy concerns in that way that judges would. This may be true of some but not all, and, generally, the arbitrators involved in ISDS cases tend to be highly qualified.

There is also the advantage in most ISDS arbitrations that the tribunal consists of three arbitrators, with each party appointing one and the third determined either by the parties or their appointees or, if they can't agree, by an institution agreed on by the parties. The parties therefore have greater control over the selection of arbitrators than is usual in court proceedings, although this point is often ignored in the debate over the merits of ISDS.

One approach is for the BIT or trade agreement to provide for the establishment of an "investor court" to provide greater accountability and transparency. This was the approach taken in CETA, which has recently been approved by the European Court of Justice as compliant with EU law.

Disputes relating to Joint Ventures

Although there are some international oil and gas companies that prefer to develop projects on their own, much of the industry does so in combination with others through joint ventures. An important part of the motivation for this is to spread risks and combine expertise. In some countries, national policy encourages this by welcoming international investors but also requiring them to work closely with locals. There also many infrastructure projects – pipelines, treatment and transhipment terminals for example – where each country has its own customary approach. In some countries such infrastructure may be developed by governments, in others by specialist private utilities and in others by joint activities of producers.

Incorporated and unincorporated joint ventures

In Russia, virtually all joint ventures take corporate form – the parties usually set up a company and take shareholdings if it is a joint stock company or participation percentages if it is a limited liability company. Some very sophisticated forms of agreement have been developed for Russian incorporated joint ventures, such as the Shareholders and Operating Agreement which is often used.

In much of the rest of the world, the international industry prefers unincorporated joint ventures because of the greater flexibility they provide to tailor them to the exact needs – and compromises – of the participants.

In the case of corporate joint ventures, the disputes are much like those arising under the legislation governing companies more generally, with which Russian practitioners will be generally familiar, and therefore I will focus on unincorporated joint ventures.

Because the contractual documentation for an unincorporated joint venture of the duration expected in the upstream oil and gas industry (often more than 20 years) must provide comprehensively for the governance of the venture, the industry has developed its own forms for this. Whilst there are standard forms (most notably those of the AIPN) for the most common types of agreement – joint operating agreements, for example – each agreement is tailored to the exact needs and situation of the consortium concerned, often in long and sometimes difficult negotiations. There are often materially different views on what the terms should be – the position adopted by a huge multinational with long term presence in the industry may be very different from that of a small or medium size player and a company which is primarily an investment vehicle for financial interests may have a different approach than that of an industry veteran. Hard negotiations do not always produce good results, particularly where wrestling over language produces ambiguous wording which mean different things to the different parties involved. It is hardly surprising that such situations give rise to disputes afterwards.

Pre-emption provisions

Amongst the most common areas of dispute are pre-emption provisions. Virtually all joint venture agreements in the international petroleum industry have pre-emption provisions of some kind. The ventures are often very long term in expected duration, a great deal of money is usually involved, and parties want – at the minimum - some control over who may take the place of one of the other parties. In many cases they also want to have the option to increase their stake if another party wants to leave. Some, often the more entrepreneurial or speculative players, look for a high level of flexibility

because they anticipate wanting to sell out (wholly or partly) if the venture is successful. Others, often industry stalwarts, take a much more long-term view but nonetheless recognize that they may at some stage need some flexibility themselves, for example in a corporate reorganization. One of the most difficult problems in drafting pre-emption clauses arises from the need of virtually all parties to avoid a pre-emption clause inadvertently acting as a “poison pill” in a take-over situation. For example, if a public bid is made for the parent company of a party which the parent wishes to accept, it will not want to be in a position where the successful bid triggers pre-emption on interests of a subsidiary which results in the subsidiary losing an asset of great importance to the parent. It is very difficult to draft a clause that wholly avoids this problem and is nonetheless enforceable without question in other circumstances.

Another problem for pre-emption clauses is to provide for the multi-asset deal, where the asset subject to the joint venture is bundled up with other assets in which the other parties to the venture are uninvolved. There are also situations where non-financial consideration is involved, and it is difficult to quantify it in financial terms. Often the compromise is to require the party offering the assets to assign values to each including the one subject to the joint venture agreement – but it is very difficult to prevent the party concerned attributing an artificially high value in the hope of avoiding pre-emption by making it too expensive for the others. An alternative is to go for expert determination but that may involve delay that is unwelcome in a take-over situation.

The art of resolving these issues often lies in working out a solution that, while not perfect, provides enough impediment to the unwanted behaviour so as to give each of the other joint venture participants the comfort that it will have a basis for fighting its respective corner if the need arises. Unsurprisingly, when a pre-emption situation arises, the parties scramble to look at the clause in the agreement and the circumstances may give rise to a dispute.

Operator/non-operator disputes

Another area of inherent tension is the relationship between the operator and the non-operators.

It is logical and common to a consortium of petroleum industry players to appoint one of their members to manage the activities and operations of the joint venture – particularly where one or more of them are well-experienced at doing so and have the resources necessary, Issues then arise. How is the operator to be paid and how much? How is it to be controlled? What standard of liability should apply? in what circumstances and how can the operator be replaced?

It is often felt by the non-operators that the position of operator gives its holder advantages. Even where there is strong provision for supervision and control by the non-operators, the operator is much closer to operations, has better access to information and has much greater ability to shape and control the direction of the project. The non-operators are therefore reluctant to pay more than the basic costs of the operator and it is common to see some kind of “no gain, no loss” principle written into the agreements. This begs questions about control of costs, and the industry has developed its own elaborate systems for programmes and budgets, authorities for expenditures, recovery of overheads and accounting procedures – but again these must be negotiated. In return, the standard of liability of the operator is usually not very stringent – the operator being liable only for gross negligence or wilful default – again, although there are standard definitions, there are variations which require negotiation.

The operator conversely often feels that it is making available superior resources and risking its reputation if anything goes wrong and therefore needs a degree of freedom to operate as it sees fit. In each case there are negotiations and it is not always easy to attain an acceptable balance, and this can give rise to disputes.

The long-term nature of petroleum industry joint ventures sometimes results in disputes arising long after operations have been completed. There was a recent dispute in the UK over liability for the pension provision of employees that were engaged by the operator many years earlier.

Default

Default procedures can also be problematic. What happens if a party fails to pay its share of a cash call? The simple and common solution is forfeiture of interest, but some parties may feel this is too draconian a consequence and lawyers may have doubts about its enforceability, leading to elaborate "withering interest" provisions. Indeed, the issue of enforceability of such default clauses has come up time and again in the course of this author's career even though the issue has been laid to rest more than once in the past based on then current court judgments only for doubts to re-emerge later in a different context.

De-commissioning

Although for most of the life of a joint venture, parties will be focusing on development and operational issues, at the end of the field life there is usually some legislative or other legal requirement to remove the production facilities and restore the site. Industry joint venture agreements often provide for how this is to be funded in advance of the decommissioning liability arising, but, again, given the long term nature of the agreements and the difficulty of foreseeing all circumstances that may pertain the time the liability arises (including changes in legislation), disputes can arise as to how the provisions of the agreement are to be implemented.

Sole risk, non-consent and withdrawal

There can also be issues over non-participation in a particular operation or withdrawal from the joint venture altogether – if a party decides that it does not wish to proceed, can it withdraw and, if so, on what terms, given that the others may have been counting on its participation to spread cost and risk. Conversely, there are sometimes provisions which enable a member of the consortium to be able to carry out operations on its own if it is willing to take the risk and others are not.

Unitisation and other matters requiring references to experts

Certain kinds of joint venture agreements specifically provide for certain matters to be referred to an expert if the parties cannot agree. Among the most common are unitisation agreements. In Russia, licences tend to be granted to encompass a whole field and an extension or additional licence is granted relatively readily if it is found that a field extends over the boundary. Other countries take a different approach and it often happens that a field is found which extends over the boundary between licenced areas which have been granted to two (occasionally three) different groups. The legislation of such jurisdictions usually contains provisions whereby the different groups involved can be compelled to agree on unitisation, i.e. developing and operating the field as a single unit. In practice, it is very rare that the authorities actually impose unitisation as the parties will eventually agree it (it can take a long time, however) as being in their own interests. Nonetheless, it is common in such situations to recognize that as the field is developed the information that become available about it will greatly increase and the allocation of interests as between the parties may need to be adjusted, with compensation being made between the groups for past production and past costs which have with hindsight also have been misallocated. In some unitisations there may be an expectation that "redetermination of equities" (as it is often called) may need to take place more than once. There is usually a provision for reference to an expert to take place in such circumstances and the reference is often handled in the same way as a dispute, with each side preparing a formal case and presenting it in a hearing.

Disputes relating to M&A/A&D

Russian practitioners will be well familiar with oil and gas M&A transactions relating to shareholdings in companies, which are seen in the context of the preceding section of this article as incorporated joint ventures. They will also be familiar with kinds of disputes that arise in relation to them.

They will be less familiar with similar transactions relating to unincorporated joint ventures, which, to distinguish them from transactions concerning incorporated joint ventures, are often referred to in the industry as "acquisition and disposal" transactions (**A&D**).

As with the difference between incorporated and unincorporated joint ventures, the documentation for the transaction – mainly the Sale and Purchase Agreement (**SPA**) although there may be other documents as well – needs to take a more comprehensive approach by either describing conceptually the assets to be transferred (e.g. by referring to the production licence for an interest in a field to be transferred and then referring generically to all other assets that relate to the licence or which are used for the purposes of production of petroleum under it) or by cataloguing the assets (or both). Often the assets will consist of a complex of agreements that establish the unincorporated joint venture, but there may well be others that are entered into pursuant to the main JV agreements. If there is an operator for the field, as is usually the case so that the physical and contractual assets used to produce the field are held by the operator as agent or trustee for the other parties, then it may only be necessary to refer to the contractual arrangements which connect the seller and the operator rather than describing or cataloguing the full panoply of assets. There would then be in the SPA an extensive set of representations, warranties and undertakings as for a corporate M&A deal but relating to assets. This can give rise to disputes in the same way that they do under M&A agreements, with added complications if the description of the assets is not adequate or effective.

The oil and gas industry also had its own specialised kinds of M&A deals. One of the most characteristic is the "farm-in", usually on an exploration prospect (i.e. where no oil has been discovered or what has been discovered is insufficient to give a full picture of the prospectivity of the relevant formation). The agreement may specify that a final depth must be reached in the well (or wells if more than one is to be drilled). There can be disputes as to whether that depth has been reached and, depending on the terms of the farm-in, whether there are any relieving circumstances (e.g. force majeure). Usually also a farm-in agreement also provides for the party coming to reimburse the established party's back costs, and there can sometimes be disputes over these.

Where the field has been proved but there is a lot of expenditure to be incurred before it is produced, the parties may enter into a "carry" agreement under which one party pays the other party's costs until production comes on stream, following which the funding party is repaid the carried costs out of production. In a complex deal there can be issues arising from unclear drafting as to what costs were incurred, how they are to be repaid and the valuation of production.

Oil or Gas Pricing Disputes

In the 1970s and 1980s, when there were great concerned over security of supply of oil it was much more common to enter into long term supply agreements. Such agreements in relation to oil are now mainly used for financing in order to establish a flow of receivables by a producer from a reputable and creditworthy off-taker whose credit is acceptable to a bank that will provide a loan facility secured on the cash flow under the agreement.

Long term supply agreements continue to be common in the gas industry either to finance gas field production and any attendant pipeline or LNG liquefaction plant (plus dedicated tankers if necessary). In the North Sea, for many years before there was adequate infrastructure in place and a hub gas market accessible, in order to provide the financial security needed to produce gas it was necessary to enter into life-of-field depletion contracts. These are no longer needed in the same way in the North Sea but may be required in other parts of the world. For other gas field production or pipeline projects it may be more appropriate to have long term supply agreements (on a "take-or-pay" basis or, in the case of a pipeline "send-or-pay" for very long periods of time, say 20 or 30 years). These may be necessary in other parts of the world – such as the Far East – where similar conditions (lack of pipeline infrastructure and gas hubs) still apply. LNG projects – whether for liquefaction or regasification – also tend to require such arrangements although the increasing commodification of LNG with acceptance of hub-based pricing may make this less common in the future (again, currently the Far East continues to have this situation).

A long-term agreement of this kind will include pricing provisions based, usually, on a complex and heavily negotiated formula which refers to other products which have pricing referable to regularly published sources. Because of the very long duration of the contract, it usually includes a process for review from time to time and an opportunity for one party or the other to require the pricing mechanism to be reopened. There are usually two stages to this. The first concerns establishing that circumstances have arisen – e.g. the market has changed sufficiently – justifying a price review. The second concerns the price review itself, which may include intensive scrutiny of an algebraic price formula. The agreement sets out the criteria for both stages. Both stages may – and often are – disputed, almost always through arbitration as the parties are normally very reluctant for the information involved in the process or, indeed, that there is even a process of this kind taking place, to be made public.

Disputes Relating to Infrastructure

The international petroleum industry engages in some of the largest infrastructure projects in the world, often in remote locations or extreme climatic conditions and involving cutting edge technology. However well prepared initially, plans are often changed or adapted as a project moves forward. Unexpected circumstances arise. The industry and its activities are subject to rigorous regulation of a great variety of kinds and sources and can sometimes be required to satisfy simultaneously the authorities and regimes of different countries in relation to the same project. In addition, the industry is constantly subject to public scrutiny and pressures from a wide range of political interests and lobbying groups. If not effectively controlled, petroleum can be extremely dangerous.

Unsurprisingly in such circumstances, disputes arise. Many of these are contractual, such as breach of warranty, indemnity claims, termination, price revision, force majeure and the many more general forms of breach of contract. There are disputes with regulators and other governmental authorities. Tortious claims may arise if an accident occurs.

As mentioned above, decommissioning at the end of the field life may throw up unexpected situations concerning infrastructure which may lead to disputes.

Trading and Shipping Disputes

Petroleum, in its many varieties and forms, is among the most frequently traded commodities. Although, as indicated above, much transportation takes place by pipeline, vast amounts are also shipped in vessels ranging from the largest super-tankers to relatively small vessels, and including highly specialised LNG carriers, ice-breakers and FPSOs.

Quantity and quality claims are common as are shipping claims of all kinds including demurrage, deviation, extra port charges and bunkering costs. Whilst many of these are relatively small and are often settled between the parties, but claims can be substantial and go to dispute resolution.

Human Rights and Environmental Disputes

Mentioned in passing above in the section on ISDS, human rights and environmental disputes can be a major challenge for petroleum industry players. It is not within the scope of this article to review these in detail, but it would be remiss of the author not to mention them.

Damages in Oil and Gas Disputes

Again, it is not within the remit of this article to go into detail on how damages are assessed in oil and gas disputes, as much of it falls within the usual practice of lawyers specializing in the many kinds of dispute mentioned above. However, it is worth mentioning a few factors which, while not unique to the petroleum industry, are particularly relevant.

One is the high volatility of prices. For many years before 1973, when OPEC first exercised its pricing power, crude oil prices were constant at US$3 per barrel. Since then, there have been times when there seemed be no limit to the increase in oil prices, and it was hard to keep the old maxim that "trees don't grow to the sky" in mind. At others, prices were in precipitous decline and the industry seemed headed towards financial disaster. The volatility of prices makes it very difficult to assess damages and the factors and methodology to be used can be hotly disputed, with experts heavily involved in presenting contrasting alternatives.

Determination of the time value of money can also be a significant factor in dispute. If a volume of oil is not produced on a particular day, the physical oil that should have been produced is not lost because it remains in the ground – indeed the molecules which should have been produced that day are very likely to be the ones produced the next day if production resumes then, and the total volume of oil produced from the field over time may be the same. However, the date of production of that total volume will, unless the production rate is increased, be put back by a day so that, in effect, the volume of production not produced on the day the field was down will not be recovered until the end of the field life. On most methods of calculating time value of money and net present value, the physical volume concerned might as well have been lost. There are, no doubt, other industries where lack of production on a day cannot be made up, but it explains the high importance in the industry of achieving production targets and maintaining production even in very difficult circumstances. I mention this, in conclusion, because it reflects the nature of the industry.

Doran Doeh