1. First principles

Before undertaking a detailed examination of the terms of a typical JOA, it is useful first to consider some of the conceptual and structural principles which underpin the content and the effect of, and even the rationale for, the JOA.

These principles relate to the mineral laws which permit private sector participation in the business of exploring for and producing percoleum and the grant of the concessions which will facilitate that participation.

These principles also relate to why joint ventures (in whichever form) are an inherent part of the petroleum projects landscape, the form that the JOA might take in structuring a joint venture and the relationship that will exist between the JOA and the concession which it underpins.

1.1 Mineral laws and concessions

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In most jurisdictions possessed of performed deposits there is usually, in broad terms, some form of mineral law by which the ownership of that petroleum will become vested in the state.¹

The state can elect to develop those petroleum deposits entirely by itself and for its own account, or alternatively can choose to invite certain participants from the private sector (both domestic and international) to develop at least some of those petroleum deposits on its behalf.

In this latter instance the state, acting through its duly appointed government (see below), might grant some form of concession to a private sector participant for the development of a particular petroleum deposit. The concession is effectively the vehicle by which the state's interests in a petroleum deposit are conveyed to a private sector participant so that the petroleum deposit can thereby be developed.

The concession which is granted might be a licence, a production sharing contract (PSC), a risk service contract or a hybrid form of any of the foregoing. This book does not examine concessions in detail and does not suppose the existence of any particular form of concession, except that certain terms from the form of licence-based concession which governs the exploration for and the production of petroleum on the UK Continental Shelf (UKCS) are referred to on occasion so as to illustrate a point. The particular position of North American leasehold interests is addressed separately below.

In the United Kingdom, for example, this mineral law was represented originally by the Petroleum (Production) Act 1934, which was consolidated most recently by the Petroleum Act 1998.

This book assumes that, in the simplest of terms, the concession will be granted by 'the government', which is used as a convenient shorthand for whichever ministerial or government agency has the necessary legislative authority for authorising private sector participation in the exploitation of petroleum reserves which are owned by the state (and which might also exercise a right to become a recipient part of that participation (3.4)).

On the UKCS, the entitlement to all petroleum deposits is vested exclusively in the Crown,² and a licence is granted to a private person for the undertaking of petroleum exploration and production activities for a defined area and for a defined period by the secretary of state for energy and climate change, acting on behalf of the Crown. On the UKCS, 'petroleum' is defined as "mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata", and excludes "coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation".³

The detailed terms of the licence are provided by the incorporation of a set of terms (called the 'model clauses') which are issued from time to time by way of secondary legislation. The model clauses have been successively updated and reissued over the years. The model clauses which relate to a particular licence are those which applied when the licence was granted not the most current set of model clauses.⁴

Several aspects of the concession, which are discussed further in this book, have a bearing on the terms of the JOA:

- Concession area the concession will define a certain physical area in respect
 of which the concession holder will enjoy certain rights and will be subject
 to certain obligations. The area to which the concession is expressed to apply
 could be determined by reference to areal coordinates (ie, according to
 surface-mapped latitudinal and longitudinal bearings), by reference to certain
 stratigraphic layers (ie, according to levels of depth below sea level), or by a
 combination of these descriptions.
- Work obligations most concessions oblige the concession holder to perform a defined series of activities (commonly known as the 'minimum work obligations' and sometimes also known as 'commitment wells') within the early part of the lifecycle of the concession.⁵ These obligations will relate to certain exploration and appraisal activities. Thereafter, any wider development and production activities will typically require government consent.⁶
- Concession phases the concession which is granted might be a single concession which is intended to govern all of the phases of exploration, appraisal, development, production and decommissioning (4.1), but it may

² Section 2(1) of the Petroleum Act 1998.

³ Section 1 of the Petroleum Act 1998.

⁴ The model clauses which apply to UKCS licences issued in the most recent licensing round for offshore operations (in 2008) can be found in the Petroleum Licensing (Production) (Seaward Areas) Regulations 2008 (SI 2008/225).

⁵ Model Clause (MC) 16.

⁶ MC 17.

be that, depending on the terms of the prevailing mineral law, separate concessions will be granted for different phases of the overall petroleum project. Thus, there may be an exploration and appraisal permit which will apply for a defined period and which will require the performance of a defined series of exploration and appraisal activities, and only upon the expiry of that permit might a further concession be granted for the development of any discovered petroleum deposit.

• The operator – the concession might identify one of the concession-holding parties to act as the operator for the purposes of the concession⁷ and this will be replicated through the appointment of an operator under the JOA (see Chapter 6).

The examination of the terms of a typical JOA in this book is prompted by the assumption that a concession has been granted to and is held by a private sector participant in the form of a group of persons that have agreed to act together within some form of collaborative joint venture, rather than to a single person as the sole concession holder. Under the terms of the concession that group of persons, as the concession holders, will be entitled (and will also be obliged) to explore for petroleum, and to produce any petroleum which is thereby discovered, in the defined concession area.

The concession sets out the vertical relationship between the government (as the grantor of the concession) and the perties (in their capacity as the concession holders), but does not address the terms of the horizontal relationship between those parties.

As a result, it becomes necessary for the parties to define their relationship. Where they have elected to work together through the vehicle of an unincorporated joint venture, the JOA will be the agreement which defines that relationship and which provides for the sharing between the parties of the rights and the liabilities arising in connection with the concession. The JOA underpins the concession and is the accord which records the relationship between the members of the joint venture as the parties that together hold the concession.

1.2 The role of the JOA

Where it is held by several persons, the concession typically provides that those persons will be jointly and severally liable to the government for the proper performance of the terms of the concession.⁸ This means that the government could, if it so wished, look to enforce the terms of the concession against any one of the parties which are together the concession holders. The JOA reallocates this position of joint and several liability between the parties through provision that the parties' liability *inter se* will be apportioned according to several predetermined shares (although this several liability could be invisible to a third party which deals with the parties and will also not constrain the government in respect of the concession).

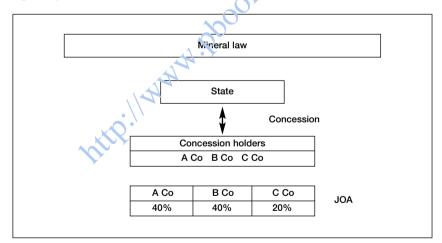
⁷ MC 24.

⁸ MC 1(2).

The concession is of obvious importance to the joint venture between the parties. This will be reflected in provisions in the JOA whereby the operator will undertake to keep the concession in force (6.3); but the JOA might also impose an obligation on all parties not to do anything which might jeopardise the concession. Any breach by a party of this obligation which leads to loss of the concession (in an extreme case) would ostensibly expose that party to liability to the other parties for breach of contract, but any exclusion of the liability of a party for consequential losses which might exist in the JOA (12.2) would make questionable the real value of such an obligation.

The JOA does not operate as a formal conveyance of the individual interests of each of the parties to a single entity. Rather, it is effectively the constitution for the unincorporated joint venture which exists between the parties for the exploration for and the production of petroleum and for the management of the concession, and it provides for how the operations which are required to be performed under the terms of the concession will actually be performed as between the parties. Essentially, the JOA performs the same role between the parties as a partnership agreement performs between partners (although the JOA could go to some lengths to make it clear that it is not intended to be a partnership – see Appendix B)

The relationship between the mineral law, the concession and the JOA (other than in respect of North American leasehold interests, which are considered separately below) can be illustrated thus:



The JOA might provide that in the event of a conflict between the terms of the concession and the terms of the JOA, the terms of the JOA (or the concession, depending on what is negotiated) will prevail, but because of the very different nature of the relationships created by the concession and the JOA, the prospects for such a conflict should be minimal.

The JOA typically relates to a single concession and applies in respect of petroleum operations in the area which is identified within that concession.

A curious hybrid which sometimes also appears is the 'joint operating body,' often

found within the wording of a PSC and providing for the management of the interests of the government (as the grantor of the concession) and the parties to the concession (as the concession-holders) in respect of the PSC. This body operates within the context of the vertical relationship between government and concession holder, but also applies certain operational provisions horizontally between the concession holders, and contains several of the provisions which are commonly found within a JOA.

There may be a situation where, in consequence of, for example, a successful effort by the parties under a joint study and bid agreement (2.3), more than one concession has been awarded to those parties by the government. It is possible that the parties might choose to enter into a single JOA in respect of several concessions, with a single operator (see Chapter 6) appointed in respect of all of those concessions, but this approach might not be ideal. For example, it may be that over the lifetime of the concessions, one party might transfer its interests in one of the concessions to another person but remain in the other concessions, or a party might transfer its interests in all of the concessions to different persons – such that in either case there might be different groups of persons that are recited as the parties in respect of the respective concessions, but that are all variously party to the same single JOA.

The position would be further complicated if the party which was appointed as the operator in respect of all concessions later ceased to be the operator in respect of some, but not all, of the concessions, and so the one JOA would need to be interpreted to apply to more than one operator.

In the circumstances, therefore, the preferable solution is to have a separate JOA entered into in respect of each concession, despite the initial commonality of the parties. If the parties wish to operate multiple concession interests as whole, the implementation of a programme of unitisation might be the preferable solution, although a general pooling of concession interests might also be possible (see Appendix D). The parties might also consider a more general cooperation agreement (eg, a form of area of mutual interest agreement – see 2.3) in respect of their multiple concession and JOA interests.

Whether there might be some advantage in linking the default remedy across more than one JOA and concession is considered separately (14.5).

Where separate concessions are granted for the separate activities of exploration and production, a separate JOA might also be entered into, specific to those particular concessions and their defined activities.

The principal use of the JOA is in the context of exploration for and production of petroleum, both onshore and offshore, where technical complexity and/or economic exposure necessitates the creation of a joint venture. On occasion, the typical upstream JOA has also lent itself readily to adaptation for abandoned mine methane (AMM)/coal bed methane (CBM) project developments (see below in respect of the American Association of Professional Landmen (AAPL) JOA)), and at the time of going to press the AIPN is soliciting input for the preparation of a JOA which is intended for use in unconventional petroleum projects.

There is no reason why the JOA might not also be used as the constitutional basis for any other mining or wider energy sector project where an unincorporated joint venture approach is required, subject to the changes being made to the text of the agreement which are necessary to reflect the nature of the particular project. This possibility will be reflected in part in the scope of the JOA (see Chapter 4). Indeed, one of the Rocky Mountain Mineral Law Foundation (RMMLF) model contract JOAs (see below) is specifically written to govern mineral extraction, and the AMPLA JOA (see below) is drawn from a joint venture agreement for mining projects.

1.3 The logic for a joint venture

In the simplest case, the government will grant a concession granting the right to explore for and to produce petroleum to a single company as the concession holder. This has typically been the case for relatively modest petroleum projects, where a low level of technical complexity and/or of financial exposure (eg, found in respect of any combination of easy exploration, shallow depth drilling, onshore petroleum deposits or crude oil production) means that a single company can hold the concession and can comfortably perform the work obligations.

In this situation, therefore, it is not necessary to consider the manner in which a joint venture will be documented, as the sole concession holder has no other person to enter into a joint venture with in order to perform the concession.

However, where petroleum exploration and production projects become more complex and more expensive (eg, found in respect of any combination of complex exploration, deep drilling, offshore petroleum deposits or natural gas and liquids production), the associated risk can be spread more widely, across a group of persons that have come together for that purpose.

The concession might therefore be been by several parties, which have agreed to act together in a joint venture whereby they will divide the expenditures incurred in the performance of the concession, and will divide the benefit of any petroleum which is produced under the terms of that concession, between themselves in accordance with pre-agreed shares. Consequently, a JOA will be needed between this group of persons in order to record the terms of their joint relationship if they propose to proceed on the basis of an unincorporated joint venture.

It also follows that the parties to the JOA that are not appointed as the operator (see Chapter c) will require a proportionately greater say in the manner of the performance of the JOA where the joint operations envisaged under the JOA (4.1) have proportionately greater levels of risk and cost associated with them.

There are several well-rehearsed reasons for entering into a joint venture for the undertaking of a petroleum exploration and production project, which it is helpful to summarise:

- Multiple projects participation participation in a joint venture allows a
 party to undertake only part of a project, so freeing up that party to devote
 its unutilised resources to participation in a wider number of other projects.
 This allows that party to spread itself across several projects simultaneously,
 rather than applying itself to just one project entirely, while still achieving
 the same overall economy of scale.
- Risk sharing a joint venture allows the parties to share the various risks (principally the geological, financial and commercial risks) which are typically associated with the business of petroleum exploration and

production, such that no single party is exposed to bearing all of those risks alone. Where the costs of exploration and production can run into hundreds of millions, or even billions, of dollars, few companies are able or willing to bear those costs (and the attendant risks) individually.

- Skill sharing a joint venture allows the parties to pool their respective skills, expertise and abilities (whether operational, financial or political skills, or simply the accumulation of previous relevant experience) in the manner that best complements their joint venture and avoids unnecessary duplication. It also affords the parties the opportunity to observe and to learn new skills from each other. Getting the chemistry right in this respect partially explains why the parties might thereafter be keen to control the circumstances in which a party can later exit the joint venture and bring in a replacement (10.2).
- Political risk mitigation a joint venture can help to reduce the risk of adverse political or regulatory interference which might impact on the petroleum project that the parties have agreed to undertake. Having a widely invested petroleum project, with a joint venture of multiple parties in the concession (especially where one of the parties is a government entity (3.4)) might cause a government to think twice about doing anything which might prejudice the interests of that particular project. This could be true up to a point, although it will be less effective as a safeguard against the risk of wholesale re-regulation of the entire petroleum sector which also affects the particular petroleum project on e non-discriminatory basis.
- Managing state participation the JOA which the parties to the joint venture enter into will provide a protocol for government participation, if that is a feature of the prevailing mineral law or of the concession (3.4), and will offer some education to the government on the commercial positions and the operational behaviour which might be expected to be undertaken in return for that participation.

The interests of the parties in their joint venture should ostensibly be the same – that is, to produce the greatest possible quantities of petroleum on the most costeffective basis. This alignment of interests will be recognised in the JOA, but there could also from time to time be some misalignment between the interests of the parties which the JOA will also need to accommodate.

Thus, a party might prefer its interests in another concession to which it is party over its interests in the concession to which the JOA relates; or one party might wish to shut in petroleum production during periods of low petroleum prices while another might not; or a government entity which has become party to the concession and the JOA may have an ambition focused on exploration at all costs and the production of even marginal quantities of petroleum solely in order to benefit the national interest which the other parties do not share. The JOA will need to be able to address these sorts of tensions.

1.4 Model form contracts

The popular theory is that the generation of a commercial contract from the starting