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Stewardship of offshore petroleum: Where is the value?

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ABSTRACT

This paper examines the role of stewardship in offshore petroleum licensing systems, comparing Australia, Norway and the United Kingdom. These countries face similar challenges such as ageing infrastructure as production areas reach maturity, but have taken different approaches to evolving their ideas of stewardship to deal with them. One such approach is the UK's recently introduced strategy of maximising economic recovery of UK petroleum, which is indicative of a profound change to the traditional concession model on which its system is based. That model focuses on production in an individual licence area rather than achieving maximum value for the nation. This paper explores how this and other innovative approaches to stewardship can produce improved outcomes for the management of offshore petroleum and other natural resources, and in doing so suggests a way forward for countries like Australia who have relied on the concession model.

1. Introduction

Many countries exploiting petroleum on their continental shelves use a licensing system. These include countries like Australia, Norway and the United Kingdom (UK) which issued their first licences in the 1960s. The first in production was the UK's West Sole field in 1967, followed by Australia's Baracouta field in 1969 and Norway's Ekofisk in 1971. The essence of licence systems is the grant to a licensee, usually an oil company or more commonly oil companies acting together in a joint venture, of the exclusive right to explore for petroleum in a defined licence area. If the licensee makes a commercial discovery it will have the right to develop the discovery and then keep the petroleum produced. Although some countries, for example the United States of America in the Gulf of Mexico, seek a financial return through cash payments for the grant of the exploration rights, most get their major return through taxes on the profits produced by the licensee, and through other fiscal measures such as royalties and indirect taxes.

A number of the production areas of countries using a licensing system are reaching the mature stage, where production is declining and new commercial discoveries are becoming rarer. This is one aspect of how the context of petroleum operations has changed since many licensing systems were designed in the 1960s, and the purpose of this paper is to compare how the licensing systems of selected countries are responding to some of these changes, particularly in relation to the framing of stewardship. The changes range from increasing concerns about climate change, the environment and sustainability through to practical problems like ageing infrastructure, decommissioning and commercialising small discoveries. The countries selected are Australia, Norway and the UK because they have a number of common elements apart from the use of a licensing system. They all have a significant offshore petroleum resource which is often located in challenging situations because of harsh weather conditions, remoteness, shortage of infrastructure and the depth of the water. They all contain areas which can be described as mature, semi-mature and frontier. They are not members of the Organisation of Petroleum Exporting Countries, but export petroleum and also use it for domestic purposes.

Each of Australia, Norway and the UK has produced reports in recent years, which reflect on the dilemmas of the regulation of mature fields and set out how their governments intend to deal with them. They are the Norwegian Ministry for Petroleum and Energy white paper *An Industry for the future- Norway's petroleum activities* (Norwegian Industry Review) in 2011, the Wood Review in 2014 and the Australian Government Department of Industry, Innovation and Science, *Offshore Petroleum Resource Management Review Interim Report* in 2015 (AOPRMR Review).[1] The UK faces declining production from the North Sea, with the Wood Review noting that production had fallen by 38 per cent between 2010 and 2013. It therefore made a dramatic change by introducing into its licensing regime a strategy (which this paper calls MER) to achieve the principal objective of maximising the economic recovery of UK petroleum.[2] The MER strategy and a new regulator, the Oil and Gas Authority (OGA), came into effect in 2016.[3] The reason the change is dramatic is that

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[1] These are available at: https://www.regjeringen.no/globalassets/upload/oed/petroleumsmeldingen_2011/oversettelse/2011-06_white-paper-on-petro-activities.pdf.; http://www.woodreview.co.uk/; and http://www.industry.gov.au/resource/UpstreamPetroleum/Pages/Offshore-Petroleum-Resources-Management-Review.aspx all accessed13 October 2016.

[2] Petroleum Act 1998 (UK) s9A, as amended by the Infrastructure Act 2015 (UK).

[3] The MER strategy is available at the OGA's website https://www.ogauthority.co.uk/ accessed 9 January 2017.

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it seeks to get licensees to focus on the UK's economic interests as well as their own, which is in strong contrast to the concession model on which licences are based.

2. Stewardship explained

Stewardship means to shepherd and safeguard another's assets. The focus of this paper is the need for a nation to have a clear stewardship governance system in respect of natural resources and how it should be structured. It is the central argument of this paper that without that clarity it is not possible for government to be effective in the management of a nation's resources or to be held accountable. The secondary argument is that the particular context of offshore petroleum exploitation has changed since the licensing systems were designed which emphasises that each nation needs to review its stewardship approach on a regular basis. The question in the title to this paper "where is the value?" is to bring out what it is countries are seeking to achieve by the extraction of offshore petroleum, in terms of value to society, and to put this into a wider context of stewardship. Governments face major difficulties in balancing environmental (including carbon emissions), safety and other socio-economic issues with their desire, and need, for the revenue, employment and other economic benefits of petroleum operations. It is outside the scope of this paper to suggest a comprehensive list of stewardship objectives which would cover all these areas. Its main focus is on the economic value being sought, and its preservation. But the comments about structure are equally applicable to setting environmental and other objectives. Generally, countries have separate legislation dealing with the environment and also have policies dealing with their broader energy strategy, neither of which is dealt with in this paper. But it would be possible for these to intersect, say, if the petroleum stewardship obligations set objectives aimed at preserving some of the resource for future generations or imposed broad sustainability requirements, such as a requirement to develop alternative energy supplies.

Stewardship is also relevant in two other ways; first, in relation to the obligations of directors and managers of oil companies as stewards of the company's assets for shareholders which influence the behaviour of those companies and, secondly, in relation to obligations, in some cases termed stewardship obligations, imposed on licensees by licensing systems which require certain kinds of behaviour. Invoking stewardship in this way is a means for host countries to reposition the bargain between the host country and the licensee to deal with contemporary challenges. For example, the AOPRMR Review stresses that: "The Australian Government's role is ultimately to work within the concepts of resource management and stewardship to achieve an appropriate balance between the objectives of the owner of the petroleum resources (i.e. the Crown) and the developer of those resources (i.e. industry)." The AOPRMR Review makes the point that resource management and stewardship are not exclusive to government and that there must be a shared ownership of these concepts across all public and private interests in the sector.

The AOPRMR Review defines stewardship as "the informed and responsible management of the nation's petroleum inventory in the national interest".[4] The utility of this definition depends upon how well the national interest is defined. It is only if it is clearly defined that it is possible to determine informed and responsible management. It is relevant to compare this broad definition at the state level with the different approach of the other party to the licence. A company can only act through human intervention from the directors and management. Because of this relationship and because directors and managers are managing the shareholders' money, the common law legal systems recognise that directors have special duties to act in the company's interests and promote its success. These duties have been the subject of many decided cases.[5] Underpinning these cases is the idea of a steward, who in the Middle Ages was a servant who managed his master's household. Stewardship therefore involved ideas of shepherding and safeguarding another's assets, and with that responsible planning and management. Over time this has produced a strong focus on directors acting in the interests of shareholders- which in practical terms means maximising profits and value for shareholders- and governance systems so that markets can be confident that they are doing so. This is something which is also ingrained in corporate culture and remuneration systems. These things can also combine to mean that companies are unwilling to collaborate if it risks their profits or what they see as critical assets.

It is relevant also to ask if there is a minimum standard of state stewardship. This can be addressed by asking what it would be reasonable for future generations to expect the current generation to maintain. It is submitted that it would be reasonable to expect that current operations would not leave petroleum incapable of production in the future: that is not destroying value for the future. This could happen if current operations reduce pressure in undeveloped connected petroleum reservoirs to the point that production is no longer economic.[6] Natural reservoir pressure is one kind of reservoir energy which can be used to displace hydrocarbons from the reservoir and into the wellbore and up to the surface. This enables what is sometimes called primary recovery. Secondary and tertiary recovery involve injection of gas or fluids and other techniques to pressurise the reservoir, all of which add to the cost of production.[7] This paper will refer to managing these energies and recovery processes as reservoir management, and it is one aspect of being able to regulate a region or basin as a whole. Similar issues could arise if infrastructure essential for future developments was allowed to be removed, or could not be accessed because of legal impediments. Then in relation to fiscal matters, if there is no constraint on developers of projects doing so in a way that is unduly expensive or uses infrastructure inefficiently, this will reduce the tax recoverable by future generations. This paper will refer to the review of these matters by the host country as infrastructure oversight and economic oversight. It is suggested that effective regulation of reservoir management, infrastructure oversight and economic oversight are examples of the minimum that a nation should expect to safeguard its petroleum resources.[8]

It is important in this discussion to bear in mind that these issues have become more important as basins have matured and geological knowledge has increased. Instead of large fields with large operators, where light touch regulation was appropriate, countries like the UK have to deal with many more fields, smaller discoveries, marginal fields and greater inter-dependence.[9]

[4] AOPRMR Review, 4.

[5] For examples see *Lennard's Carrying Co Ltd v Asiatic Petroleum Co Ltd* [1915] AC 705 and *The Bell Group Ltd (In Liq) -V- Westpac Banking Corporation* [No 9] [2008] WASC 239.

[6] The Schlumberger oilfield glossary defines reservoir as "a subsurface body of rock having sufficient porosity and permeability to store and transmit fluids. Sedimentary rocks are the most common reservoir rocks because they have more porosity…", and reservoir pressure as "the pressure of fluids within the pores of a reservoir, usually hydrostatic pressure, or the pressure exerted by a column of water from the formation's depth to sea level." Available at http://www.glossary.oilfield.slb.com accessed 8 March 2017.

[7] Expressions like primary, secondary and tertiary recovery are defined in the Schlumberger oilfield glossary. See above n 7. It comments that the expression tertiary recovery is being replaced by the expression enhanced oilfield recovery, which can occur at any stage.

[8] More efficient use of infrastructure such as pipelines can play a key role in bringing cost down. Infrastructure regimes are complex and so are not dealt with in this article in any detail. For a discussion of them see David H. Sweeney, 'Introduction to Third Party Infrastructure Projects: A comparative Approach', 4 L.S.U. Journal of Energy Law & Resources (2016), 9.

[9] Wood Review, 1.