



IMO

INTERNATIONAL MARITIME LAW INSTITUTE

Established under the auspices of the International Maritime Organization

A specialized agency of the United Nations



**DEALING WITH DECOMMISSIONING COSTS OF
OFFSHORE OIL AND GAS FIELD INSTALLATIONS:
AN APPRAISAL OF EXISTING REGIMES**

**A Dissertation submitted in partial fulfilment of the requirements for the
award of the Degree of Master of Laws (LL.M.) at the IMO International
Maritime Law Institute**

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Academic Year 2012/2013

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Chapter 1: The international regulatory framework

1.1 Introduction

It is a fact that the operating life of oil and gas fields is a limited one, and when a field reaches the end of its operational life a plan must be in place to have it plugged and to have its disused operations – to some extent or other – removed.¹ This process is known as decommissioning.

It has been observed that “to date, decommissioning has been comparatively infrequent”.² This trend is however set to be markedly reversed over the next few decades as a number of fields reach the end of their viable production lives. Given the extensive costs involved³ and the potential impact on such costs by a wide spectrum of variables – some predictable and controllable, others not – it comes as no surprise that companies in “the oil and gas sector are voluntarily seeking to more systematically and comprehensively manage the full cycle of their operations”.⁴

Concerns become more entrenched on consideration of the fact that decommissioning activity tends to pick up pace towards the end stage of a given project – i.e. “when income from the oil field has declined and the ageing infrastructure sometimes has little or no economic value”.⁵ It should come as no surprise, therefore, that a proper regulatory framework and solid financial assurance mechanisms are established top priorities for the industry, as emerges from a 2009 decommissioning survey undertaken by the World Bank, illustrated in

¹ Samir Mankabady, “Decommissioning of Offshore Installations”, *Journal of Maritime Law and Commerce*, (Volume 28, No 4, 1997), p. 603.

² World Bank Multistakeholder Initiative; *Towards Sustainable Decommissioning and Closure of Oil Fields and Mines: A toolkit to Assist Government Agencies* (March 2010) p. GG-11. Available online at <http://siteresources.worldbank.org/EXTOGMC/Resources/336929-1258667423902/decommission_toolkit3_full.pdf> accessed 9/2/2013.

See also Zhiguo Gao, “Current Issues of International Law on Offshore Abandonment, with Special Reference to the United Kingdom”, *Ocean Development & International Law*, (Volume 28, Issue 1, 1997), p. 59. Gao points out that, given the recentness and complexity of the issue in question “many issues remain unresolved or even unaddressed”.

³ See for example Petter Osmundsen and Ragnar Tveteras, “Decommissioning of petroleum installations – major policy issues” *Energy Policy*, 31(2003), p. 1579. Osmundsen and Tveteras describe decommissioning as “a relatively new issue involving tens of billions of dollars globally”.

⁴ *Ibid.*

⁵ Morakinyo Adedayo Ayoade, *Disused Offshore Installations and Pipelines: Towards Sustainable Decommissioning*, Kluwer Law International, The Hague, 2002, p. 2.

Figure 1 below.⁶ These are, it is submitted, issues best addressed at the initial stages of a licensing agreement. Such a strategy would counter the present situation, where “absence of decommissioning or financial security clauses in many operational contracts has become a source of increasing anxiety in places as diverse as Indonesia, Malaysia and India”.⁷

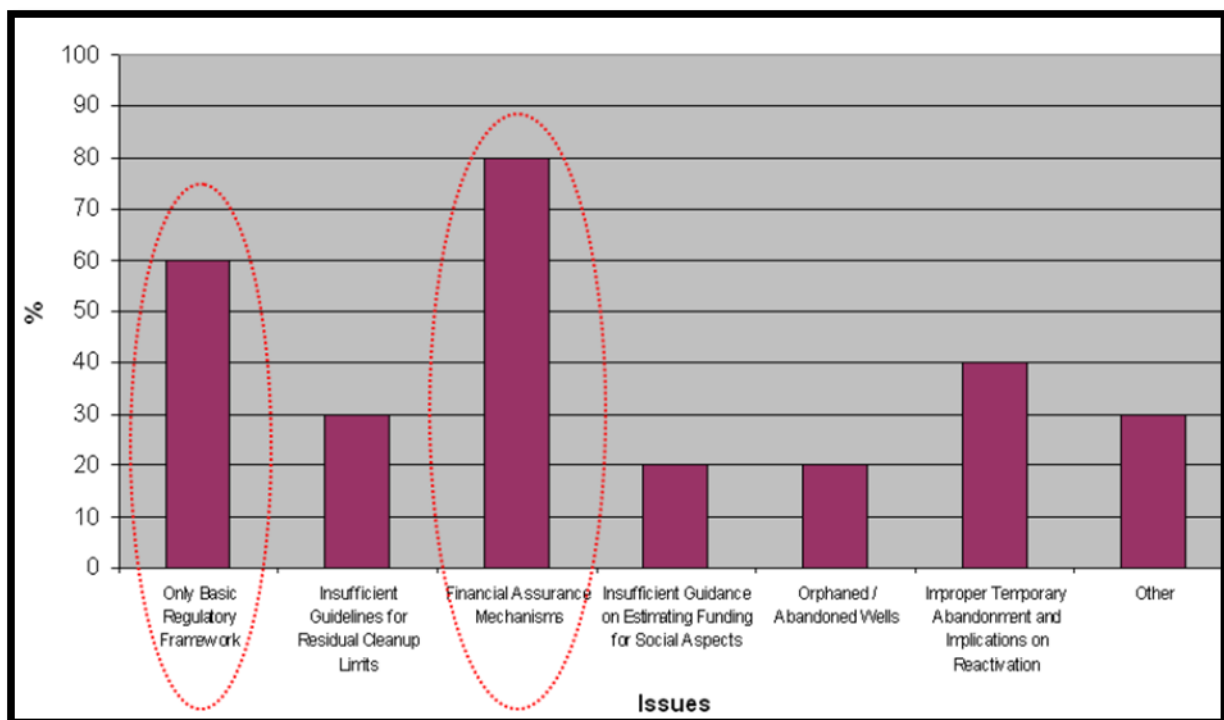
Chapter 1 examines the international regulatory framework applicable to decommissioning, the Convention for the Protection of the marine Environment of the North-East Atlantic⁸ and OSPAR Decision 98/3.

Chapter 2 reviews the various possible regimes that may be utilised to finance decommissioning costs and the various security arrangements that may be adopted.

Chapter 3 then considers the different regimes and security mechanisms adopted by a number of countries to tackle decommissioning costs. Given that their decommissioning regimes are comparatively rather well developed,⁹ Norway and the UK will constitute the centre point of the exercise undertaken in Chapter 3. Thailand’s regime will also be considered.

Following the exercise undertaken in Chapter 3, conclusions will be drawn and a number of suggestions postulated in Chapter 4.

Figure 1



⁶ World Bank Multistakeholder Initiative; *op. cit.*, p. GG-20.

⁷ Adedayo Ayoade; *op. cit.*, p. 4.

⁸ Hereinafter referred to as the ‘1992 OSPAR Convention’.

⁹ See, for example, the World Bank Multistakeholder Initiative; *op. cit.*, p. GG-12.

1.2 The International Regulatory Framework

1.2.1 Introduction to the International Regulatory Framework

Prior to briefly analysing the existing international regulatory framework it makes sense to put such analysis into perspective by making the observation that – at least presently – international (and regional) law provides merely:

a tapestry... consisting of norms of various degrees of cogency and enforceability, applying to different groups of states. It provides at best only a framework within which nations and international oil companies may conduct their operations.¹⁰

If reasonable predictability is to be ensured, much has to be provided for in national legislation which has been described as “the most important tier of decommissioning legislation”,¹¹ i.e. the tier which companies look at to determine the legal obligations immediately applicable in their regard. Moreover, considering that international decommissioning law has not acquired the status of customary law,¹² it is host governments that decide (by choosing whether to ratify the relevant Conventions) the extent to which international decommissioning law is to apply domestically.

A holistic view must be therefore adopted in attempting to determine the relevant responsibilities of all parties concerned. Indeed, it has been observed that “the legal framework for decommissioning offshore facilities... encompasses the following items: international conventions; regional conventions; national law; [and] host government contracts”.¹³

¹⁰ Peter Cameron, “Tackling the Decommissioning Problem”, *Natural Resources & Environment*, (Vol 14, No. 2, 1999), p. 122.

¹¹ Adedayo Ayoade; *op. cit.*, p. 4.

¹² *Ibid* 55.

¹³ Tim Martin, “Decommissioning of International Petroleum Facilities: Evolving Standards & Key Issues” available online at <
http://www.timmartin.ca/fileadmin/user_upload/pdfs/Decommissioning_of_Int_Petroleum_Facilities.pdf>
accessed 10/2/2013 p. 1.

This reservation made, insofar as the international regulatory framework is concerned, it is worthwhile to mention the 1958 Geneva Convention on the Continental Shelf,¹⁴ the 1982 UN Law of the Sea Convention¹⁵ and the non-binding IMO Guidelines and Standards of the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone.¹⁶

1.2.2 The relevant provisions of the 1958 Geneva Convention and UNCLOS 1982 examined

Article 5(5) of the 1958 Geneva Convention clearly lays down that:

[...] Any installations which are abandoned or disused must be entirely removed.

This has widely been interpreted – notwithstanding attempts to advance interpretations to a different effect - as establishing a Total Removal Rule (TRR)¹⁷ and, as such, to be in contradistinction with the parallel provision in UNCLOS 1982 where, following lengthy negotiations and a “better understanding and greater experience of the subject matter”,¹⁸ the following Article 60(3) was agreed upon:

Any installations or structures which are abandoned or disused shall be removed to ensure safety of navigation, taking into account any generally accepted international standards established in this regard by the competent international organization. Such removal shall also have due regard to fishing, the protection of the marine environment and the rights and duties of other States. Appropriate publicity shall be given to the depth, position and dimensions of any installations or structures not entirely removed.

The resulting situation is markedly different from that under the 1958 Geneva Convention. No longer is total removal the sole acceptable outcome. Rather, partial and (to a lesser

¹⁴ Hereinafter referred to as the ‘1958 Geneva Convention’.

¹⁵ Hereinafter referred to as ‘UNCLOS 1982’.

¹⁶ Hereinafter referred to as the ‘IMO Guidelines’.

¹⁷ Adedayo Ayoade; *op. cit.*, p. 48. See also Hossein Esmaeili; *op. cit.*, pp. 195-197.

¹⁸ Adedayo Ayoade; *op. cit.*, p. 49.

extent) non-removal both become possibilities “so long as policy considerations and international standards are obeyed”.¹⁹ The rigidity of Article 5(5) is swapped for greater host State discretion under Article 60(3).

1.2.3 Tensions between the Decommissioning Treaties

It has already been observed that “there is an inconsistency between the 1958 Geneva Convention on the Continental shelf, which provides for total removal of offshore installations, [and the] 1982 UNCLOS which requires only partial removal”.²⁰

While several attempts have been made to sustain the contention that the 1958 Geneva Convention is no longer applicable, the unwelcome truth remains that – by traditional legal interpretative techniques at least – “the complete removal regime is legally applicable to host states”.²¹ Moreover, while Article 311(1) of UNCLOS 1982 lays down that UNCLOS 1982 “shall prevail, as between States Parties, over the Geneva Conventions on the Law of the Sea of 29 April 1958”, this leaves the 1958 Geneva Convention applicable to States party to the latter Convention that have not ratified UNCLOS 1982.²²

Several suggestions have been postulated with a view to resolving conflicts between these two treaties.²³ While an examination of these suggestions goes beyond the remits of the present study, it is pertinent to point out that the need to reconcile the apparent conflict that arises must be addressed if a meaningful customary decommissioning law is ever to emerge. Moreover, determination of whether international obligations dictate a duty of partial or of complete removal can have a considerable impact on decommissioning costs, which can be considerably lower in the case of partial removal.²⁴

All this said, and as has been indicated earlier, whether a situation of tension arises or not at the national level is a question that can only be answered by looking at a given country’s domestic legislation. It is at this (and at the respective contract concluded with the host

¹⁹ Ibid 50.

²⁰ Hossein Esmaeili; *The Legal Regime of Offshore Oil Rigs in International Law*, Ashgate, Aldershot, 2001, p. 190.

²¹ Ibid 53.

²² Ibid 197. See also Zhiguo Gao; *op. cit.*, pp. 71-72. Gao considers the possibility of convening “a conference of parties to the 1958 convention with a view toward officially announcing the termination of the treaty” as the most viable solution in this regard.

²³ See for example Adedayo Ayoade; *op. cit.*, p. 57.

²⁴ Ibid 12. See also, specifically with regards to the divergent interests of environmentalists and oil companies in this regard, Hossein Esmaeili; *op. cit.*, p. 195.

government) that a licensee must look at to ascertain what its precise obligations in terms of decommissioning are.

1.2.4 The IMO Guidelines

The IMO Guidelines are the generally accepted international standards referred to in UNCLOS 1982²⁵ and have been described as “the first detailed rules on decommissioning”.²⁶ Notable is the fact that the guidelines “provide that all new installations... installed offshore on or after 1 January 1998 must be designed so that they can be removed entirely at the end of their economic lives”.²⁷ This has been interpreted as an indication of the possibility that such a rule could acquire customary law status in the future.²⁸ This said, it is submitted that the IMO Guidelines remain non-binding – lacking the necessary norm creating character – and such a prediction is somewhat premature, given particularly the lack of State practice against which it could possibly be assessed.

While they establish a general rule of complete decommissioning, at the same time the guidelines make provision for partial or non-removal so long as this is consistent with carefully delineated rules.²⁹ While, *prima facie*, this case by case approach which is adopted by the Guidelines appears to be objective, in practise “there may be inconsistencies between the various conditions required”³⁰ and coming to a decision in accordance with the said guidelines might therefore prove to be a burdensome task.

1.2.5 The 1992 OSPAR Convention and Decision 98/3

Coming into force on the 25th of March 1998, the OSPAR Convention replaced the Oslo and Paris Conventions. OSPAR Decision 98/3, adopted in a ministerial meeting under the OSPAR Convention, establishes the general rule that “dumping, and the leaving wholly or partly in place, of disused offshore installations within the maritime area is prohibited”.³¹ This general rule is however made subject to carefully defined derogations – such as in cases

²⁵ This said, “the IMO Guidelines do not derive mandatory force from Article 60(3) of the LOSC”. See Hossein Esmaeili; *op. cit.*, p. 203.

²⁶ Adedayo Ayoade; *op. cit.*, p. 58.

²⁷ Hossein Esmaeili; *op. cit.*, p. 218.

²⁸ *Ibid.* See also Zhiguo Gao; *op. cit.*, p. 74. Gao detects “an emerging trend, tentative but steady, toward requiring total removal”.

²⁹ See in this regard Articles 1.1, 3.1, 3.1.3, 3.2, 3.6, 3.11 of the IMO Guidelines.

³⁰ Hossein Esmaeili; *op. cit.*, p. 203. Esmaeili cites the possibility of a conflict “between the potential effect of dumping on the marine environment and the costs associated with removal” as an example.

³¹ OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations. Available online at < www.ospar.org/documents/dbase/decrecs/decisions/od98-03e.doc > accessed 10/2/2013.

where there are “exceptional and unforeseen circumstances resulting from structural damage or deterioration”.³² Another facility for derogation is afforded with regards to footings of large steel jackets with a weight of more than 10,000 tonnes (placed in the maritime area before 9 February 1999) and concrete installations.³³

1.2.6 Concluding remarks on the International Regulatory Framework

The first concluding consideration that must be made is a preliminary one concerning applicability or otherwise of the international and regional regulatory frameworks. In order for such frameworks to be applicable the relevant platform must lie “within the [jurisdictional] span of a treaty to which the licensor host state is signatory”.³⁴ Moreover, it must be recalled that offshore structures in internal waters remain “within the complete discretion of the host State”³⁵ and therefore outside the remit of international and regional regulations.

The second consideration relates to the development of international decommissioning law, presently tinged with a somewhat incompatible two decommissioning conventions and a number of moot points (given the lack of clarity of certain provisions enshrined within the aforementioned instruments). This present situation “leaves open to question future decommissioning standards and militates against the achievement of uniformity in state practise”. The price of uncertainty might well fall on the shoulders of the tax payer, the licensee (generally reluctant to mar relations with a given State on consideration of potential future licensing deals) or both. This is clearly an undesirable situation in a field where there is an overwhelming desire for predictability by all those involved.

The present lack of clarity residing within the international decommissioning regime only serves to highlight the necessity of developing comprehensive national legislation and of providing for decommissioning obligations extensively in licensing contracts from the earliest possible stage. While there is an understandable reluctance on the part of host States to introduce clauses that might deter investment, the establishment of clear decommissioning rules and allocation of responsibilities, it will be postulated, is in the interest of all parties involved.

³² Ibid.

³³ Ibid Annex 1.

³⁴ Adedayo Ayoade; *op. cit.*, p. 76.

³⁵ Ibid.

Chapter 2: Tackling decommissioning costs and establishing security against default

2.1 Introduction

Generally speaking, insofar as productive activities are concerned, a project cycle runs as follows: there is first an ‘investment period’ in the project’s initial years, which is eventually followed up by a ‘recovery years period’ where a positive cash flow subsists. Exploration and Production (E&P) projects, however, “present an additional third period of unavoidable negative cash flow... [which occurs] precisely when no revenue is being generated any longer”.³⁶ This is a unique point which must be kept in mind as financing and security regimes vis-a-vis decommissioning are envisaged and eventually implemented.

Whatever system of financing future decommissioning costs is chosen, it is arguably always ideal for both host States and companies to plan ahead, given especially the extent of costs involved and the industry’s desire for relative predictability. This said, both States and licensees need to keep in mind that, as crucial for accurate planning as reliable cost forecasts are, “the long period of project duration and various complexities have raised question marks about the reliability of cost forecasts”.³⁷ This point itself needs to be incorporated within the planning of both host States and licensee companies. Indeed, a most valid remark is a comment made by Cameron, who argues that in the context of uncertainty that defines decommissioning activity “the best that a lawyer (either in government or industry) can do is to provide a legal framework for this uncertainty, note the risks facing his or her client and attempt to minimise them”.³⁸

Given that “[f]iscal treatment of decommissioning costs depends on individual host State regimes”,³⁹ States can be said to enjoy a discretion which allows them to chose the financing regime which best caters for their given peculiarities. What follows is a brief overview of,

³⁶ Virginia Parente, Doneivan Ferreira, Edmilson Moutinho dos Santos and Estanislau Luczynski, “Offshore decommissioning issues: Deductibility and transferability”, *Energy Policy Review*, (Vol 34, 2006), p. 1992.

³⁷ Adedayo Ayoade; *op. cit.*, p. 16.

³⁸ Peter Cameron; *op. cit.*, p. 121.

³⁹ Adedayo Ayoade; *op. cit.*, p. 21.

firstly, different fiscal treatments that could be adopted to finance decommissioning costs and, secondly, of potential security mechanisms against default. Following this brief overview, the specific regimes of a number of States (particularly of the UK and Norway) will be examined in detail in Chapter 3.

2.2 Financing Decommissioning Costs

The financing of decommissioning costs is an issue which is dealt with via various mechanisms. Amongst these are the following: units of production, amortisation over field life and carry back against taxation. This is not to say that other mechanisms, such as the Norwegian grant system (discussed in Chapter 3), may not be envisaged and implemented.

Unit of production method

Estimated future decommissioning costs are here recovered by the licensee gradually, “on the basis of a predetermined portion of production... [and then] deposited into a fund”.⁴⁰ Recovery can occur either throughout the oil field’s life or from a trigger point onwards, when a considerable portion of the reserves have been exploited (this generally ranges anywhere from between 50-80% of reserves).⁴¹ While host States will tend to be wary of the trigger mechanism scenario (given also the possibility of misleading estimates), the said mechanism enables licensees to recover initial costs quicker and to delay for as long as possible the resultant negative impact on cash flow.

Amortisation over field life

In amortisation, once an estimate of decommissioning costs is made, the whole amount is deposited into an abandonment fund and subsequently amortised over the field’s life. The recovery of such a deposit then occurs in a prorated manner over a number of years, either in terms of a deduction against tax or in terms of a classification as operating costs.⁴²

Carry back against taxation

Under this regime decommissioning costs are carried back for the maximum period possible and eventually relieved against taxable income (via a tax rebate) for the years during which

⁴⁰ Ibid 22.

⁴¹ Ibid.

⁴² Ibid.

decommissioning actually occurs or for the years immediately preceding decommissioning.⁴³ The UK adopts a variant of this system, which is the system that has the least negative impact on cash flow throughout the project's lifetime.

The Norwegian grant system

The Norwegian grant system operates outside Norway's oil taxation system, even if costs are apportioned between the Norwegian Government and respective licensee companies on the basis of a ratio which takes into consideration the amount of taxes paid by the respective licensees. This system will be discussed in greater detail in Section 3.3.4 below. At this point it suffices to say that "[t]he Norwegian government provides a direct grant of between 70-80% towards decommissioning costs".⁴⁴

2.3 Security against default

2.3.1 Introduction

Mechanisms that provide security against default play an important role in the scenario of decommissioning activities, and this statement holds true from the point of view of both host States and licensees. Indeed, security mechanisms are crucial to both governments wanting to "ensure [that] the funding needed for proper decommissioning [is available]"⁴⁵ and to respective licensees in a Joint Operating Agreement (JOA) with an interest in being shielded from each other's possible default.⁴⁶ Security is also significant in the context of sale of field interest by a licensee to a third party,⁴⁷ especially where the domestic regime prescribes— in the eventuality that the acquiring licensee defaults – liability of former licensees who have sold their interest. In such cases, it is generally in the seller's interest to ensure that the

⁴³ Ibid.

⁴⁴ Ibid 24.

⁴⁵ World Bank Multistakeholder Initiative; *op. cit.*, p. T3-2.

⁴⁶ See for example Ashley Pittard, "Field abandonment costs vary widely worldwide" (1997). Available online <<http://www.ogj.com/articles/print/volume-95/issue-11/in-this-issue/production/technology-field-abandonment-costs-vary-widely-worldwide.html>> accessed 17/2/2013. Pittard remarks that both governments and companies may be affected in the eventuality of default. See also Mark Saunder and Nabarno Nathanson; "Abandonment Agreements" in Martyn R. David (ed); *Upstream Oil and Gas Agreements: with precedents*, Sweet & Maxwell, 1996, p. 234. See also Eduardo Pereira, "Protection against Default in Long Term Petroleum Joint Ventures" (May 2012), The Oxford Institute for Energy Studies, p. 1. Available online at <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/05/WPM_47.pdf> accessed 17/2/2013. Pereira remarks that, given the risks and expenses involved, "oil and gas companies, even majors, prefer to combine their efforts in joint ventures".

⁴⁷ Adedayo Ayoade; *op. cit.*, p. 25.

prospective buyer will have sufficient funds to meet the requisite decommissioning obligations and to establish some form of security to safeguard his position.

2.3.2 Decommissioning security mechanisms

There are several types of decommissioning security mechanisms, including the following:

Parent guarantee

This involves the issuing of a guarantee by a parent company and takes account of the fact that huge multinational companies have a reputation to uphold and are therefore likely to honour any obligations undertaken by them or their affiliates. This said, it has well been pointed out that “future events may erode the creditworthiness of even oil giants... [and this option is] not popular with governments”.⁴⁸ Moreover, where the parent company has no resources within the remits of the host State’s jurisdiction, complications may arise in trying to enforce a parent company guarantee.

Third party guarantee⁴⁹

This generally involves the issuing of a guarantee by a bank or some other financial institution and, as such, there is once again the risk that “the organisation may be unable to provide the funds at a future date”.⁵⁰ To counter this risk host States generally require that the organisation issuing the guarantee must hold a given minimum credit rating which will be reviewed periodically and, in the eventuality of the guarantor falling below a stipulated rating, the licensee will have to provide alternative security or otherwise incur penalties.

Third party guarantees, such as standby letters of credit, are often utilised by small independent companies given that these generally “prefer not to use upfront payment schemes for cash flow reasons”.⁵¹ At the end of the day, however, the guaranteeing

⁴⁸ Adedayo Ayoade; *op. cit.*, p. 25.

⁴⁹ See the World Bank Multistakeholder Initiative; *op. cit.*, p. T3-7. A disadvantage of letters of credit is that while the annual cost generally ranges “from 0.5 to 9% of the guaranteed amount” (depending on the proponent’s credit rating) “the funds held in a letter of credit do not generate any interest”.

⁵⁰ Adedayo Ayoade; *op. cit.*, p. 25.

See also Saunders and Nathanson; *op. cit.*, p. 235. Saunders and Nathanson opine that the only difference between banks and other financial institutions is their financial strength. This even if “[c]ertain companies... have a better credit rating than some banks”.

⁵¹ *Ibid* 27.

organisation will probably require some form of collateral and the extent of this could mean that “single field companies may be unable to obtain cover”.⁵²

Insurance

While it is not possible to insure a certain event (such as decommissioning is) it is possible to insure against the consequences of unforeseen costs and earlier than anticipated decommissioning dates. The problem with this sort of security mechanism is that premiums are likely to be prohibitively expensive.⁵³

Decommissioning trust funds

Regarded as “the safest and most dependable security mechanism”⁵⁴ decommissioning trusts funds require the payment of cash into a trust fund with the requisite amount being established on the basis of a ratio of present production to anticipated future production. The problem with such funds is that “there is a need to reconcile the desire for high returns with the need for security”⁵⁵ and the host State and licensee companies may well have different views in this regard.

2.3.3 Failure to maintain adequate security by licensee

In the eventuality that a licensee defaults on maintaining adequate security, the issue arises of how to deal with such default. While forfeiture of the licensee’s interest in the venture is generally the contemplated penalty, problems may arise where the remaining value of the defaulter’s interest fails to exceed the extent of decommissioning costs for which he is responsible.⁵⁶ Indeed, “[b]y the time abandonment is an issue the field will probably be in decline and the defaulter’s future revenues could well be less than its share of abandonment costs”.⁵⁷

⁵² Ibid 28.

⁵³ Ibid 26.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Adedayo Ayoade; *op. cit.*, p. 27.

⁵⁷ Saunders and Nathanson; *op. cit.*, p. 235.

See also Eduardo Pereira; *op. cit.*, p. 2. Pereira remarks that in certain situations the forfeiture ‘threat’ may well prove to “have the opposite effect” of a threat and entice a licensee to “withdraw form a project near to the end of its life when decommissioning costs are due to be paid”.

Whatever the form of security mechanism chosen, it is probably difficult to overstate the importance of constant review of the adequacy of security. The scenario of a licensee defaulting on security is truly one to be avoided, and this statement holds particularly true once the decommissioning stage approaches closer and the value of the would-be defaulter's interest in the field considerably declines.

2.3.4 Problems peculiar to smaller companies

Saunders and Nathanson observe that security arrangements are, generally speaking, “not such good news for the smaller companies”.⁵⁸ This applies no matter what the form of security mechanism under consideration:

- Parent companies guarantee are not likely to constitute an option, given that these normally require a high credit rating of the parent company.
- A letter of credit might well imply annual costs ranging from 0.5 to 9% of the guaranteed amount (see fn 49) and as such could well be inaccessible to small companies.

This situation, Saunders and Nathanson conclude, leaves the trust fund option as the only *prima facie* accessible one with regards to small companies. This said, they too acknowledge that this “will swallow up valuable cash flow”⁵⁹ and far from being a desirable solution will probably constitute the less damaging (if not the only accessible) option.

2.4 The Conundrum of Production Sharing Agreements

In Production Sharing Agreements (PSAs) the oil company works for the government as if it were a contractor, with the relevant agreement allocating to the oil company cost oil as compensation for exploration and other capital outlay and then dividing the remaining profit oil in terms of a predetermined formula.⁶⁰ PSAs are, more often than not, stand-alone laws which generally operate in jurisdictions that have no separate petroleum laws.⁶¹

The problem with PSAs is that, especially with the earlier ones, no provision was made with regards to decommissioning and – coupled with this – it was made clear that (through a process of cost-recovery) ownership of facilities rested with the Government. Given the

⁵⁸ Ibid 236.

⁵⁹ Ibid.

⁶⁰ Adedayo Ayoade; *op. cit.*, p. 82.

⁶¹ Tim Martin; *op. cit.*, p. 10.

prevailing position under international law (where liability for abandonment is attached to the concept of ownership) a situation results where “because the government holds title to the facilities at the end of the PSA term, it has the liability”.⁶² This is clearly not what governments actually envisaged when negotiating PSAs.⁶³

Independently of the intention of governments upon entering into PSAs, it is clear that oil companies are in a relatively advantageous legal position – especially where ownership of facilities at the end of production is identified exclusively with the government. This said, it must be noted that “international oil companies do not always rely upon the strength of their legal position”.⁶⁴ Indeed, especially in the case of countries that have extensive reserves still up for exploitation, the government has a good card to play. To ensure continuing good relations with the host State, companies may well be willing to engage in negotiations with the government to ensure “a reasonable and affordable process... to manage the decommissioning of fields and facilities”.⁶⁵

2.5 Residual liability

Residual liability has been defined as “accidental obligations occasioned after the decommissioning and disposal of installations or pipelines”.⁶⁶ What the IMO Guidelines establish in this regard is that States must ensure that ownership of any structures not entirely removed is clearly identified so as to avoid unnecessary questions of imputability in the eventuality of residual liability.⁶⁷

Admittedly, the risk of residual liability is considerably reduced by the existence of exclusion zones around offshore sites. This said, the risk is not totally eliminated. Firstly, in certain cases – such as distress or weather problems – it is not illegal to enter such zones. Secondly,

⁶² Ibid. See also Adedayo Ayoade; *op. cit.*, pp. 82-83.

⁶³ See for example Peter Cameron; *op. cit.*, p. 121. Cameron observes how, for those countries with PSAs, “it came as an unpleasant surprise to discover that the transfer of title to installations that had seemed so important to them had apparently also transferred to them liability for decommissioning”.

⁶⁴ Tim Martin; *op. cit.*, p. 10.

See also Adedayo Ayoade; *op. cit.*, p. 101. Ayoade claims that “in reality, [stabilization] clauses [often found in early PSA agreements] should not restrict the introduction of decommissioning legislation”.

⁶⁵ Ibid.

⁶⁶ Adedayo Ayoade; *op. cit.*, p. 121.

Amongst the various types of liability situations that may be envisaged one may mention environmental pollution and the possibility of submarines, fishing or other vessels being caught and damaged by installation footings.

⁶⁷ IMO Guidelines, Article 3.11.

and more importantly, “natural current movements may shift decommissioned debris outside the exclusion area and pose a risk to other users of the sea”.⁶⁸

As might be expected, one method to assuage fears of residual liability is to engage in constant monitoring and re-checks. This however, besides from not being an infallible system, is also a costly approach. Indeed, commentators such as Fjellsa have observed that “the maintenance of structural integrity will require ever increasing expenditure over the years until accumulated costs may equate or possibly exceed the value of complete removal costs”.⁶⁹

It appears that two alternative regimes can be detected. In the first, ownership (and therefore residual liability) of offshore structures that have not been totally removed generally lies with private companies. While there have been some suggestions to the effect that residual liabilities should be transferred to governments, these have not been met with enthusiasm. The UK Government, for instance, has turned down a proposal of the UK Offshore Oil Operators association to similar effect, arguing that “contingent liability is a matter for private companies and not tax payers”.⁷⁰ The problem with such a regime is that it fails to take account of the fact that, unlike States, private companies do not have a “capacity for almost unlimited corporeal existence... [and] are not designed to bear open-ended liability in perpetuity”.⁷¹

In the second regime, adopted by countries such as Norway, “the government can accept maintenance and future responsibility in return for a financial settlement”.⁷² Such a system is not without its fair share of problems – financial settlements have to be agreed upon and disagreement is likely to result given the complex calculations involved.⁷³

Given that both the first and second regime have their merits and demerits it is submitted that an approach which combines the two, taking their advantages while avoiding the weak points

⁶⁸ Adedayo Ayoade; *op. cit.*, p. 124.

⁶⁹ O. Fjellsa, “The Norwegian Position and Consequences”, IBC Conference on Decommissioning and Removal of Offshore Structures (London, April 1989) as quoted in Adedayo Ayoade; *op. cit.*, p. 125.

See also Zhiguo Gao; *op. cit.*, pp. 73 – 74. Gao remarks that “it is time to ask the question of whether partial removal is a shortcut worth taking”.

See also Tim Martin; *op. cit.*, pp. 10-11. While he agrees with Fjells and Gao, Martin notes that there may be exceptions. In certain instances in the North Sea, for example, “where the structures are so huge, the costs so prohibitive and the technology not available to safely remove the entire structure”, some justification may subsist to only partially remove the offshore facility in question.

⁷⁰ Adedayo Ayoade; *op. cit.*, p. 125.

⁷¹ *Ibid* 126.

⁷² *Ibid*.

⁷³ *Ibid*.

of both, might be the best solution. Attempting to introduce insurance into the formula, for example, Adedayo Ayoade suggests that a mechanism similar to that adopted vis-a-vis terrorist risks in the UK may be adopted. This would involve:

- i. The insurance of residual risk to a predetermined level by private sector insurers;
- ii. A guarantee by the State to cover any excess;
- iii. The creation of a dedicated fund maintained by the offshore oil industry to make good for the government's guarantee to cover excess.⁷⁴

It is submitted that this constitutes a good working model from which other tailor-made regimes (depending on a country's given scenario) may potentially be developed. The underlying idea is that there should be some sort of backup mechanism to address residual liability in the eventuality that licensee companies cease to exist or are not able to meet the full extent of liability. While governments may be envisaged as assuming an important role in this backup mechanism, it is immediately clear that governments will be apprehensive to see the full burden of residual liability fall on the tax payers' shoulders. At the end of the day, the guiding principle is that "public moneys should not be spent on the bills for oil companies' redundant installations".⁷⁵

⁷⁴ Ibid 129.

⁷⁵ Zhiguo Gao; *op. cit.*, p. 73.

Chapter 3: An examination of existing approaches

3.1 The UK Approach

3.1.1 Introduction

It has been observed that the 500 oil and gas installations, 10,000 wells and 10,000 kilometres of pipeline found on the United Kingdom Continental Shelf (UKCS) together add up to an astounding estimated decommissioning cost of “at least £25 billion”.⁷⁶

Decommissioning of offshore oil and gas installations on the UKCS is governed by Part IV of the Petroleum Act 1998⁷⁷ and by the Energy Act of 2008.⁷⁸

3.1.2 The Decommissioning Process

Part IV of the Petroleum Act endows the Secretary of State with the power to require, by means of a notice served under Section 29 of the said Act, submission of a decommissioning programme. The obligation to present such programme is a joint liability imposed upon all those who receive a Section 29 notice.

A decommissioning programme, in terms of Section 29(4):

- a. shall contain an estimate of the cost of the measures proposed in it;
- b. shall either specify the times at or within which the measures proposed in it are to be taken or make provision as to how those times are to be determined;

⁷⁶ Nicholas Ross-McCall, “Oil and gas decommissioning: present problems, future solutions” (July 25 2011) Available online at < <http://www.internationallawoffice.com/newsletters/detail.aspx?g=b0fdf57b-f4c2-41e6-97a5-40fb5ff52383>> accessed 16/2/2013.

⁷⁷ Hereinafter referred to as ‘the Petroleum Act’.

⁷⁸ Hereinafter referred to as ‘the Energy Act’. The Energy Act amends the Petroleum Act and, *inter alia*, extends the powers of the Secretary of State to request decommissioning security and, in the case of insolvency of a licensee protects from other creditors the funds put aside for decommissioning.

- c. if it proposes that an installation or pipeline be left in position or not wholly removed, shall include provision as to any continuing maintenance that may be necessary.

Once a programme is approved it becomes the duty of every person who submitted it to ensure that it is actually carried out and any conditions made as a condition for its approval must be abided by.⁷⁹

Section 38 enables the Secretary of State, in order to ensure that a person with the duty to carry out decommissioning will eventually be able to do so, to require (by means of a written notice) such person to provide any information and documents as may be requested in the notice. If the Secretary of State is not satisfied that a person is actually capable of discharging the decommissioning duty, the same Section 38 enables him to require such person to take such action as may be specified in the notice.

The polluter pays principle clearly serves as a basis to the UK decommissioning regime so that “the person who is responsible for developing or operating an offshore installation should also be responsible for decommissioning at the end of its useful life”.⁸⁰ This principle is followed to the extent that any fees incurred by the relevant government department to approve and revise decommissioning programmes are forwarded to the industry as opposed to the taxpayer.⁸¹

3.1.3 Withdrawal of a Section 29 notice

While a section 29 notice (which is the source of a licensee company’s decommissioning obligations) may be withdrawn, this does not mean that the relevant company is thenceforth necessarily absolved of all decommissioning obligations. Rather, “in certain circumstances... [the company may] be placed under a duty to carry out the programme even though it has previously been released from a notice”.⁸² Admittedly, it is clearly set out in the pertinent sections of the Petroleum Act that current section 29 holders must be resorted to first, and it is understood that the government will endeavour to avoid such a situation by seeing that adequate security arrangements are made. This said, and even if the situation has not

⁷⁹ The Petroleum Act, Section 36.

⁸⁰ Department of Energy & Climate Change, “Guidance Notes: Decommissioning of Offshore Oil and Gas Installations and Pipelines under the Petroleum Act 1998” (March 2011), p. 7. Available online at <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69754/Guidance_Notes_v6_07.01.2013.pdf> accessed 19/2/2013. Hereinafter referred to as the “UK Decommissioning Guidance Notes”.

⁸¹ Ibid.

⁸² Ibid 11.

occurred to date,⁸³ the fact remains that once served with a section 29 notice and independently of how many transfers of ownership occur, a person remains potentially liable to shoulder decommissioning costs in the eventuality of default by those subsequently served.

3.1.4 Residual liability

The position with regards to residual liability under the UK regime is clear: “the persons who own an installation or pipeline at the time of its decommissioning will remain the owners of any residues... in perpetuity”.⁸⁴ It is also clear that any claims for residual liability that might arise will be governed by general law.⁸⁵

3.1.5 Securing a free trade in mature oil and gas assets

Insofar as the UKCS is concerned, it has become evident that in the last few years there has been a significant trade in assets from large to small companies. It is government policy to encourage such trading, particularly with regards to mature fields, as this “can help to extend field life and maximise economic recovery”.⁸⁶ This said, this trend has also focused attention on the fact that the financial strength of smaller companies is considerably less than that of larger ones, and this implies that the chances of a company not being able to shoulder decommissioning costs increase.

The above means that the UK Government has had to adopt a mechanism of serving and withdrawing section 29 notices as a means of balancing taxpayer protection on the one hand and increasing UKCS productivity on the other.⁸⁷ A flowchart included as part of the Decommissioning Guidance Notes, included as *Figure 2* below, outlines the process undertaken to ascertain whether a given section 29 notice should be withdrawn or not. While *prima facie* it might appear to be a rather straight forward mechanism, in practise the process involves multiple considerations which make it rather complex:

Once a classification has been assigned to each current section 29 notice holder and any incoming party it is possible to assess the risk of the group of notice holders as a whole, i.e. the section 29 group risk.

⁸³ Ibid 12.

⁸⁴ Ibid 56.

⁸⁵ Ibid.

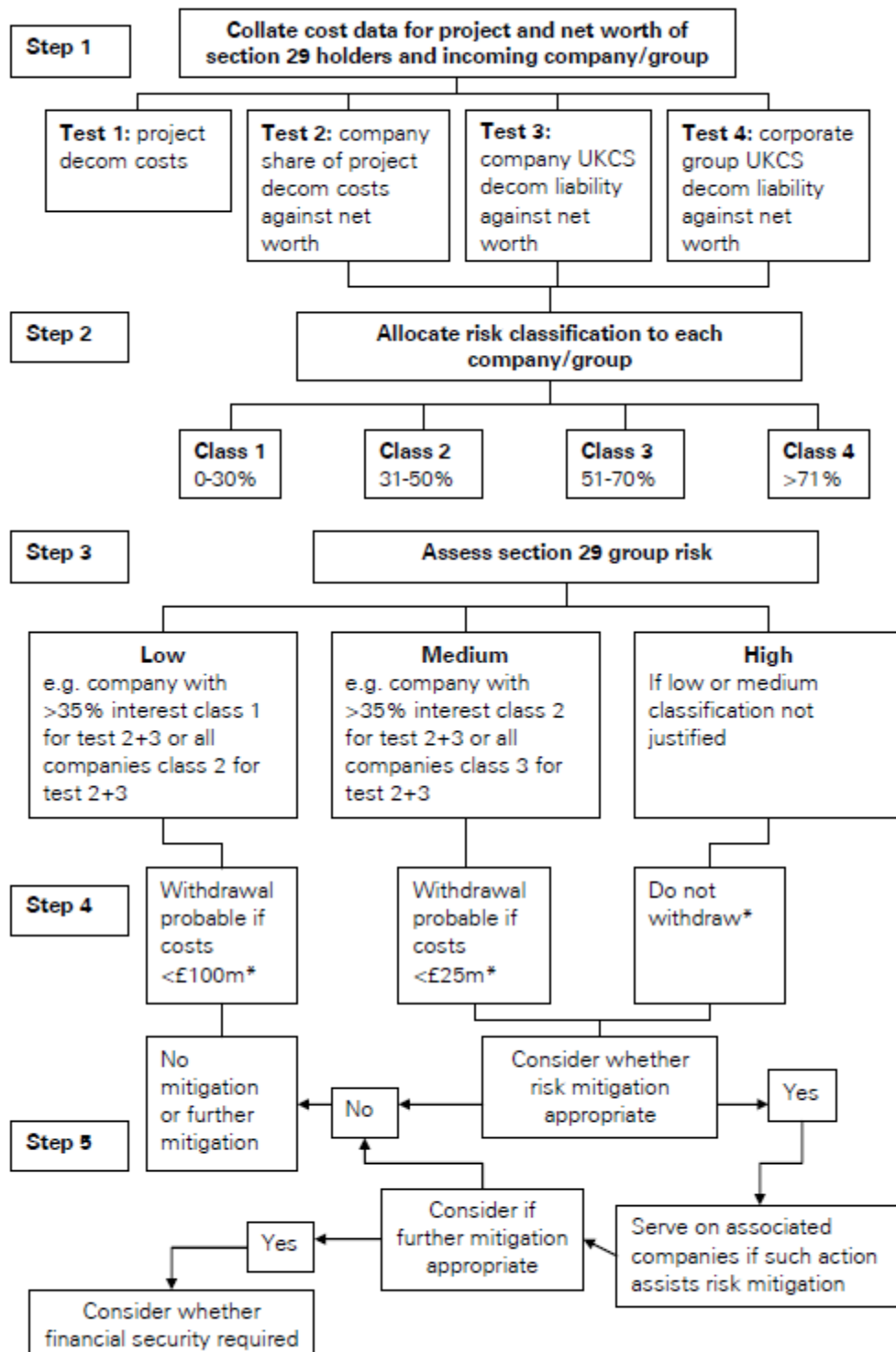
⁸⁶ Ibid 101.

⁸⁷ Ibid.

This should be calculated both with and without the presence of any outgoing party to consider the impact of withdrawing their notice.

The intricacies of this mechanism are therefore many, and one will do well to recall here that notwithstanding the inherent advantage of the withdrawal of a section 29 notice (liability for decommissioning costs arises only if present section 29 notice holders default on their obligations), withdrawal does not imply absolution from all decommissioning obligations in all eventualities.

Figure



3.1.6 Decommissioning relief deeds

Recognising that “a lack of certainty over how much decommissioning tax relief companies will be able to claim [currently makes] it difficult for assets to change hands, limit[s] funds available for new ventures, and deter[s] incremental investment”,⁸⁸ the UK Government pledged in its 2012 budget to provide further certainty over the tax relief that will be available upon decommissioning. This it aims to do via decommissioning relief deeds whereby the government plans to sign contracts with companies operating on the UKCS to clarify the extent of tax relief that will be available upon decommissioning.⁸⁹

The present tax relief regime operating vis-a-vis the UKCS is a prima facie simple one:

Tax relief within the upstream regime is given for decommissioning costs at the point that they are incurred and the decommissioning is carried out. If decommissioning expenditure produces an overall loss for a year, the loss may be carried back against previous ring fence profits [going back to a defined number of years]...⁹⁰

The relative simplicity of this tax relief regime, however, does not mean that uncertainty is excluded. Potential changes in legislation, for instance, may well constitute a source of concern. Indeed, such is the degree of uncertainty that “security requirements are generally calculated on a pre-tax basis”,⁹¹ with the unfortunate result that capital which could otherwise be invested is unnecessarily tied up. Uncertainty is also reflected in the fact that “compared with other mature basins... there have been relatively few changes in ownership of assets across the UKCS”.⁹² This is to be lamented, given that asset trade towards end of field life is associated with extension of the asset’s production life.

⁸⁸ HM Treasury, “Decommissioning Relief Deeds: increasing tax certainty for oil and gas investment in the UK Continental Shelf” (July 2012) p. 3. Available online at < http://www.hm-treasury.gov.uk/d/consult_decommissioning_relief_deeds_090712.pdf> accessed 20/2/2013. Hereinafter referred to as the ‘Decommissioning Relief Deeds’ document.

⁸⁹ Ibid 5.

⁹⁰ Ibid 8. The Decommissioning Relief Deeds document specifies that the combined effect of the UK fiscal regime is, presently, a marginal tax rate of 81% on profits from PRT-paying fields and 62% for other fields.

⁹¹ Ibid 9.

⁹² Ibid 11.

The UK government seeks to alter this undesirable situation via the mechanism of decommissioning relief deeds so that:

If the relief a deed holder receives in respect of its costs at the time of decommissioning expenditure is less than the reference amount, the Deed holder will be entitled to claim a shortfall payment from the Government.

This means that while the government doesn't lose the capacity to make future changes to the relevant tax regime, the industry is provided with a mechanism that ensures certainty over the precise amount of decommissioning tax relief.

3.1.7 Decommissioning security agreements

With regards to the question of what forms of security can be said to constitute an acceptable form of security, the Decommissioning Guidelines provide a clear picture:

We require the parties to a DSA to provide security such as cash, irrevocable standby Letters of Credit issued by a Prime Bank, or on demand (performance) bonds from Prime Banks or issued by an Insurer regulated under the Financial Services and Markets Act 2000. For these purposes the security must be issued by a body established in an EU or OECD country with a UK lending or insurance office and which have an AA rating or better as defined by Standard and Poors, Aa2 rating or better as defined by Moodys or an equivalent rating by another recognised rating agency.⁹³

The intention to protect the taxpayer against possible default is easily discernable. This even more so on consideration of the fact that not only must security cover “at least 100% of decommissioning costs... [but also] a risk factor [which in most cases will add 50% to the total cost estimate] to cover the uncertainties surrounding cost calculations”.⁹⁴

⁹³ UK Decommissioning Guidance Notes; *op. cit.*, p. 117.

⁹⁴ *Ibid.*

It is interesting that parent company guarantees (PCGs) are not considered as an acceptable form of security given that, contrary to a standby letter of credit which imposes a primary contractual obligation on the issuer, in the case of PCGs “there remains the possibility that the guarantor might dispute the basis on which the obligation in the underlying contract has arisen”.⁹⁵ This aside from the fact that, where the parent company lacks significant UK assets, this might result in “potential delays in enforcing a PCG through foreign courts”.⁹⁶

⁹⁵ Ibid 118.

⁹⁶ Ibid.

3.2 The Norwegian Approach⁹⁷

3.2.1 Introduction

That Norway “has many of the largest extraction facilities in the world... [and] represents a large fraction of global disposal costs”⁹⁸ makes it a viable example to consider. This said, the point will be made that – notwithstanding the merits of the Norwegian system – it is not necessarily a system that may be adaptable to all countries, especially developing ones (given the level of foresight, budgetary planning and careful fiscal management on the part of the government that it requires).

While Norway has ratified the OSPAR Convention, there remain on the Norwegian continental shelf a vast number of large installations that will eventually need to be removed and whose removal is not compulsorily covered by the aforementioned Convention. There is, therefore, a considerable degree of discretion that may be exercised on the part of the Norwegian government.

3.2.2 The decommissioning process

The first step involves the submission of a detailed decommissioning plan by the licensees (represented by the operator) to the relevant Ministry as per Section 5-1 of the Norwegian Petroleum Act.⁹⁹ The plan must be submitted at the earliest five years and at the latest two years prior to expected termination of the facility (or expiration of the license, whichever comes the earliest).¹⁰⁰ It must evaluate different decommissioning options and then come to a conclusion or what can be described as “an application for the licensees preferred decommissioning option”.¹⁰¹

The decommissioning plan is submitted to the Government and circulated amongst a number of environmental and fisheries organisations. In coming to a decision the ministry makes,

⁹⁷ See, generally, Jon Ødegård Hansen (Ministry of Petroleum and Energy), ‘Facts 2012: The Norwegian Petroleum Sector’ (March 2012). Available online <http://npd.no/Global/Engelsk/3-Publications/Facts/Facts2012/Facts_2012_web.pdf> accessed 26/2/2013.

⁹⁸ Osmundsen and Tveteras; *op. cit.*, p. 1581.

⁹⁹ Act 29 (November 1996, NO. 72) relating to petroleum activities. Hereinafter referred to as the ‘Norwegian Petroleum Act’.

¹⁰⁰ Norwegian Petroleum Act, Section 5-1.

¹⁰¹ Osmundsen and Tveteras; *op. cit.*, p. 1582.

inter alia, considerations relating to safety, environment, the economy and considerations relating to other users of the sea.¹⁰² More often than not, the recommendation of the Ministry to the Norwegian parliament (Stortinget) “lies somewhere between the recommendations from the licensees and the environmental and fisheries organisations”.¹⁰³

It is crucial to note how, in its recommendations to Stortinget, the Ministry emphasises “that each field is unique and that the recommendations are not intended to form a precedent”.¹⁰⁴ Considerations are made on a case-by-case basis, and this is a crucial point given the different factors that may subsist with regards to each case.

3.3.3 The Odin field example

The Odin field reveals that, given the Norwegian Government’s position against leaving installations with their topside intact or to topple them on site, “it is cheaper to take the topside on shore than to dump it”.¹⁰⁵

The decommissioning plan with regards to decommissioning of the topside and modules of the Odin field examined three options, illustrated in *Table 1* below. The licensee’s conclusion supported option (a) and this was agreed to by the Ministry, given that it was both the cheapest and most environmentally friendly option.

Another three options, illustrated in *Table 2*, were examined with regards to decommissioning of the substructure. While the licensee’s conclusion in the decommissioning plan supported toppling and use of the substructure as an artificial reef (the cheapest option), the Ministry opted for the more expensive but more environmentally friendly option of taking the substructure ashore for recycling.

¹⁰² Norwegian Petroleum Act, Section 5-3.

¹⁰³ Osmundsen and Tveteras; *loc. cit.*

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

Table 1¹⁰⁶

Alternative	Estimated Cost (Million USD)
(a) Remove and take ashore for recycling	15.5
(b) Remove and dispose on deepwater	18.5
(c) Placed on seabed as artificial reef	20.4

Table 2¹⁰⁷

Alternative	Estimated Cost (Million USD)
(a) Remove and take ashore for recycling	12.9
(b) Remove and dispose on deepwater	21.5
(c) Placed on seabed as artificial reef	8.4

¹⁰⁶ Ibid 1583.

¹⁰⁷ Ibid.

3.3.4 Tax treatment of decommissioning costs

In so far as tax treatment is concerned, there are generally two different tax regimes that may be adopted (or a combination of the two, as under the UK system examined above):

- i. The first option is to allow oil companies to make appropriations in their yearly tax accounts for future removal costs.
- ii. The second option makes actual (as opposed to forecast) decommissioning costs tax deductible.

The Norwegian system, however, attempts to circumvent the general methods of tax treatment of decommissioning costs and offers instead what has been described in Chapter 2 as a grant system. Under this system the State's share of decommissioning costs is paid directly to the relevant licensees at the time of decommissioning, with the State's share being calculated by reference to "the average effective corporate income tax rate the company has faced on the net incomes from the field".¹⁰⁸ Really and truly, therefore, this system can be said to imitate the effect of tax scheme (i) above¹⁰⁹ - with the crucial difference that, given the *a posteriori* nature of the calculations made, the risk for overestimating decommissioning costs practically disappears.¹¹⁰ At the same time, where the scheme as described allocates an unreasonably low share of costs to the State, the licensee companies may request a review of calculations and on occasion the government has actually upped its share of decommissioning costs, considering particularly "the company's future tax position in Norway"¹¹¹ and therefore applying tax scheme (ii).

A number of observations may be made with regards to the Norwegian grant system:

- As opposed to tax scheme (ii) above, the Norwegian system avoids the scenario of a licensee not being able to utilise the full extent of available tax deduction on the grounds of not being able to generate sufficient income at the particular time of decommissioning.

¹⁰⁸ Ibid 1584.

¹⁰⁹ Ibid.

¹¹⁰ With regards to this point see Parente, Ferreira, Moutinho dos Santos and Luczynski; *op. cit.*, p. 1996. These observe that "advance tax-deductions may give the wrong incentive to companies in the direction of overestimating end-of-leasing expenditures to obtain higher up-front benefits".

¹¹¹ Ibid.

- Given the considerable sudden outlay of monies that will need to be made by the government at the time of decommissioning, there is the risk of economic considerations taking over other (particularly environmental) considerations. This said, “disposal cases reveal more of environmental concern than cost conscience on part of the government”.¹¹²
- A positive point is the avoidance of the situation associated with tax scheme (i) above, where companies might be incentivised to overinflate expected decommissioning costs. The problem of estimating the impact of advances in technology on eventual decommissioning costs is also avoided.¹¹³

All this said, like all other systems the Norwegian system cannot be said not to have its peculiar disadvantages. Foremost amongst these is probably the considerable outlay of cash that will have to be made at one go and the impact this might have upon the government’s decommissioning policies. While the system seems to have worked well in Norway with its sound financial and governance system,¹¹⁴ there is no guarantee that the system can be implemented in an equivalent manner by other States. Indeed, “the Norwegian regulatory regime relies on many assumptions that may not be appropriate to the reality of other economies”.¹¹⁵ It is, after all, a regime which requires intricate budgetary planning and a solid determination on the part of the relevant Government not to direct monies that ought to be reserved for decommissioning costs towards other budgetary demands facing the country at any given point in time preceding actual decommissioning.

3.3.5 The need for alternative liability

It has already been noted in Section 3.1.5 above that in the UK there has been a notable trend of transfer of assets from large to small companies which seek to extend the field life of mature fields via the exploitation of new technologies. Similarly, in Norway there has been detected a change “from a majority of oil and gas companies with solid technical and financial strength, to a diverse selection of well-established and newly established companies

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ See for example the World Bank’s Country Data Report for Norway (1996-2011). Available online at <<http://info.worldbank.org/governance/wgi/pdf/c165.pdf>> accessed 26/2/2013.

¹¹⁵ Parente, Ferreira, dos Santos and Luczynski; *op. cit.*, p. 1997.

with various backgrounds and objectives , and with varying technical and financial strengths”.¹¹⁶

This change in the Norwegian oil industry was a catalyst for the addition of a third paragraph to Section 5-3 of the Norwegian Petroleum Act which aims to ensure that sufficient funds will be available in the eventuality of default, particularly in post sale of interest to smaller companies scenarios:

If a licence or participating interest in a licence has been transferred... the assignor shall be alternatively liable for financial obligations toward the remaining licensees [and ultimately toward the State unless the licensee or some other responsible party makes good for the licensee’s share of decommissioning costs] for the cost of carrying out the decision relating to disposal...¹¹⁷

While, as in the UK, “[t]he assignor’s obligations will exist through subsequent transfers of the license or a participating interest in the license”,¹¹⁸ in the case of Norway alternative liability of the assignor is restricted in two important ways: “for the seller’s share of the costs related to facilities that existed at the time of the transfer”.¹¹⁹ This is to be contrasted with the UK regime, where liability for decommissioning costs remains joint and several.¹²⁰

In this scenario of alternative liability the seller can be said to have “a legitimate need for information from the relevant production licence to continuously evaluate the scope of its alternative liability”.¹²¹ This need may not necessarily be catered for automatically, and it is therefore crucial that both the contract of sale of the given share in the license and the joint operating agreement make provision for this need.¹²²

¹¹⁶ Norwegian Oil and Gas Legal Committee; ‘Norwegian oil and gas recommended guidelines for decommissioning security agreement for removal obligations – use of model clauses’ (August 2010), p. 6. Available online: <

<http://www.norskoljeoggass.no/PageFiles/6400/128%20OLF%20recommended%20guidelines%20for%20decommissioning%20security%20agreement%20for%20removal%20obligations%20-%20use%20of%20model%20clauses%20230810.doc.pdf?epslanguage=no>> accessed 26/2/2013.

¹¹⁷ Norwegian Petroleum Act, Section 5-3.

¹¹⁸ Ibid.

¹¹⁹ Norwegian Oil and Gas Legal Committee; *loc. cit.*

¹²⁰ UK Decommissioning Guidance Notes; *op. cit.*, p. 7.

¹²¹ Norwegian Oil and Gas Legal Committee; *op. cit.*, 7.

¹²² Ibid.

3.3.6 Residual liability

Unlike with the UK regime, where there is an intent to avoid at all costs the situation of the tax payer having to shoulder instances of residual liability, under the Norwegian regime “it may be agreed between the licensees and the owners on one side and the State on the other side that future maintenance, responsibility and liability shall be taken over by the State based on an agreed financial compensation”.¹²³

¹²³ Norwegian Petroleum Act, Section 5-4.

3.4 Thailand: recognition of the need for clarity

Like the UK and Norway, Thailand has always operated via what may be described as a concession or licensing system where offshore structures are owned by the operator and ownership of oil or gas passes to the company at the well's head.¹²⁴ Given that with such systems (particularly as employed in developed countries such as the UK and Norway) it is clear that offshore structures are owned by the oil companies, there is generally no difficulty with concluding that decommissioning is a responsibility of the same companies.

The concession regime in Thailand, however, suffered from several instances of bad drafting which, Adedayo Ayoade observed, at times implied that ownership of equipment (and therefore responsibility for decommissioning) would pass to the government upon depletion of reserves.¹²⁵

This situation is presently on its way to being remedied. Two new sections – Section 80/1 and 80/2 – were recently incorporated into the Thai Petroleum Act.¹²⁶ Section 80/1 determines that: “the concessionaire shall be responsible for the decommissioning... [and must] submit his decommissioning plan together with estimated expenses thereof in order to seek the concurrence of the Director-General in accordance with... the Ministerial Regulations”.¹²⁷ With regards to security, Section 80/2 determines that “the concessionaire shall deposit a security for the decommissioning... in accordance with... the Ministerial Regulations”.¹²⁸

Two observations can be made:

- Firstly, security can be “in the form of cash, Thai government bonds, a bank guarantee, *or any other form*”.¹²⁹ It is submitted that such a provision is too wide and the taxpayer can't be said to be protected to the maximum extent possible: it is clear that some forms of security offer a greater degree of protection to the taxpayer than

¹²⁴ Adedayo Ayoade; *op. cit.*, p. 79.

¹²⁵ *Ibid* p. 80-81.

¹²⁶ This in terms of Petroleum Act (No. 6) B.E. 2550. Available online <http://law.dmf.go.th/detail.php?lan=en&itm_no=I377515290> accessed 27/2/2013.

¹²⁷ Thai Petroleum Act, Section 80/1.

¹²⁸ Thai Petroleum Act, Section 80/2.

¹²⁹ *Ibid*.

others and the Thai provision doesn't quite take this into consideration. The deficiencies of this provision become clear when it is compared to, for example, the UK regime (examined in section 3.1.7 above) which excludes certain forms of security and requires that security be offered by an institution with the requisite credit rating certified by a reputable credit rating agency.

- Secondly, Section 80/1 and 80/2 are in clear need of elaboration by the very Ministerial Regulations mentioned in the two provisions. Both the time frame for producing a decommissioning plan and the time frame for producing security, for example, still need to be determined by the Ministerial Regulations. As of 2012, a Thai Ministry of Energy presentation detailed that these were still in the process of being drafted.¹³⁰ This drafting process must be speeded up if the relevant provisions of law are to have the necessary amount of detail in order to attain a level of meaningfulness in practical situations.

¹³⁰ Thungsuntonkhun Witsarut; Thailand Decommissioning of E&P Installations Project, Ministry of Energy, p. 22. Available online <http://www.ccop.or.th/eppm/projects/40/docs/10_Thailand_decom_2012.pdf> accessed 27/2/2013.

3.5 The UK, Norwegian and Thai regimes: a comparative appraisal

Insofar as financing of decommissioning costs is concerned, the UK - as has been observed in section 3.1 above - adopts a tax relief regime. Tax relief for decommissioning costs is provided at the point when the said costs are incurred and companies are able to carry back against previous ring fenced profits in the eventuality that decommissioning expenditure results in an overall loss for the given year throughout which it occurs. This regime has the disadvantage that a licensee who is responsible for decommissioning might not be able to utilise the full extent of available tax deduction where, given the extent of depletion of resources, he is not able to generate sufficient income at the time of decommissioning. A positive point is the planned introduction of decommissioning relief deeds, which mechanism will introduce a degree of certainty with regards to the actual percentage of tax relief that will be available at the time of decommissioning. It is hoped that decommissioning relief deeds will enable the calculation of security requirements on a post-tax basis and at the same time encourage – with regards to mature fields – transfer of ownership to smaller companies which invest in technology that enables the sweating of such mature fields thereby enabling full utilisation of available resources.

The Norwegian financing system is an interesting one. It manages to reproduce, in practice, the tax effects of the UK regime via its grant system and at the same time manages to avoid some of the problems which plague the UK regime. This said, it has certain problems of its own making, namely the necessity that it creates for formidable budgetary planning and the resilience it requires on the part of governments not to let economic considerations overtake other considerations when it comes to decisions vis-a-vis proposed decommissioning plans. This last risk is a real one, given the considerable outlay that will need to be made by the government at the time of decommissioning. The idea is that the government collects, throughout the lifetime of each of the projects on its continental shelf, funds from the tax revenues of the said projects, putting them aside in order to be able to cater for its extensive share of decommissioning costs when the said time arrives. It is indeed notable – and not to be overlooked – that “as for necessary proceeds to honour its obligations, Norway kept a petroleum fund invested abroad of 150 billion dollars, as of 2004”.¹³¹ It becomes clear that,

¹³¹ Parente, Ferreira, dos Santos and Luczynski; *op. cit.*, p. 1998.

while this system may be working well for the Norwegian government, it might not prove easy to implement in other countries with less rigorous budgetary and governing standards.

A number of observations may be made with regards to the security mechanisms adopted by the UK regime. Firstly, it is not necessary for security to be provided *ab initio*. Rather, the requirement arises on a request by the Secretary of State, in the eventuality that he is not satisfied of the licensee's ability to satisfactorily meet future decommissioning costs. It is submitted that this reliance on the understanding that sizable companies with a positive financial standing will be able to meet decommissioning costs is not the most protective approach with regards to tax payers. It might make sense to consider some sort of compulsory security mechanism generally – but UK policy seems to have veered away from such an approach. At the same time, the tax payer is well protected by an extensive regime of alternative liability, where previous license holders remain liable even after sale of their share in the license (and this independently of any withdrawal of the relevant Section 29 Notice).¹³² The Norwegian system has also opted for an alternative liability system. It is submitted that the Norwegian system is more equitable in that it balances better considerations of fairness and tax-payer protection. This inasmuch as an assignor who sells his share of the license retains liability only with regards to the share he sold, and is not jointly and severally liable in the eventuality of failure on the part of other licensees to cater for decommissioning costs.

With regards to the Thai regime, it may be observed that while it is a positive point that there has been a realisation of the need to amend the regime for the sake of greater clarity and tax payer protection, the apparent reluctance to establish the finer details of the regime is not most encouraging. Indeed, it is submitted that – as the experiences of Norway and the UK reveal – a country's oil industry stands to gain much from amendments to the regulatory regime which result in greater certainty. At the same time, as time progresses and oil reserves start depleting, it becomes harder to affect substantial changes to the country's decommissioning policy. This highlights the need to start off with as clear a regime as possible and, failing this, to effect the necessary amendments without delay.

¹³² See Section 8.3 above.

Chapter 4: Conclusion and Suggestions

4.1 Dedicated Decommissioning Accounts: a proposal

The UK tax relief system and the Norwegian grant system have both been examined in considerable detail throughout Chapter 3 above. It is now proposed to analyse a third system – that of a dedicated decommissioning account which, it is submitted, is a most valid (though under-analysed) alternative that might well prove capable of addressing some of the more troublesome aspects of the aforementioned two regimes.

To adopt the dedicated decommissioning account method as a means of financing decommissioning costs would be to subscribe to what has been described as a project finance approach whereby “the proceeds to cope with decommissioning expenses [are] generated during the lifetime of each project”.¹³³ The idea would be to set up a dedicated decommissioning account at an early stage in the project’s lifetime and to encourage the respective licensees to make contributions to this fund, which will ultimately be used to cover decommissioning costs. While under both the UK and the Norwegian regime the government’s contribution to decommissioning costs occurs towards the end of the project’s life (more pronouncedly so under the Norwegian system – which requires a considerable outlay of funds on the part of the government at the time of decommissioning), it is submitted that under the proposed system the government’s contribution to decommissioning costs would be spread out over the whole of the project’s lifetime, i.e. starting from the very beginning of the production phase. The concept of tax deductibility would still play a fundamental role but rather than concentrating deductions towards the end of the production phase when the decommissioning phase approaches, it is proposed that such a tax deductibility scheme could be spread out widely and used as a means to incentivise licensees to make contributions to the decommissioning fund from early on. As a further incentive, government policy could allow for “any revenue gained from financial application of

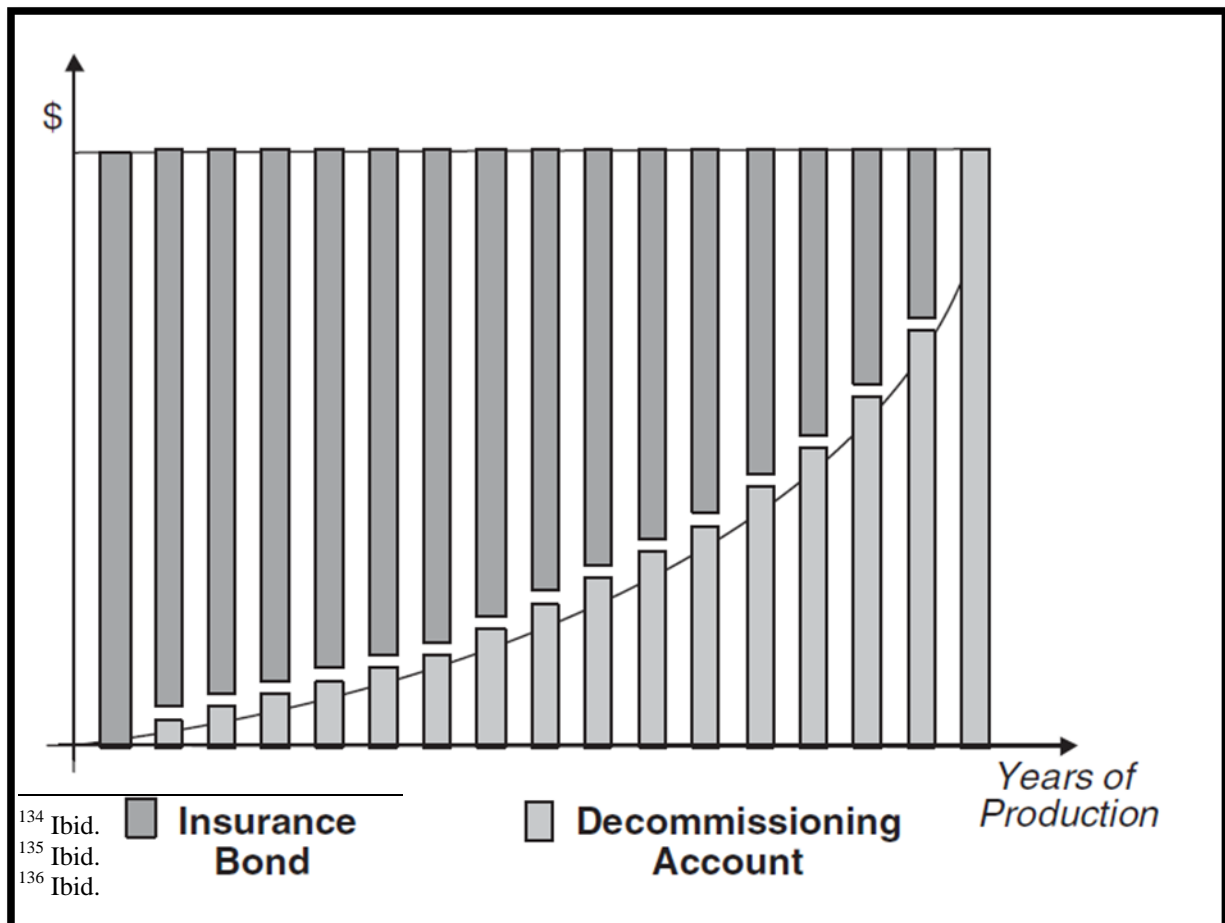
¹³³ Parente, Ferreira, dos Santos and Luczynski; *op. cit.*, p. 1999.

proceeds allocated in the fund (i.e. interest from decommissioning dedicated accounts) [to] be reinvested instead of being subjected to ordinary taxation”¹³⁴.

In order to attain its purpose, access to the decommissioning account would be allowed only as the decommissioning phase approaches and, then again, only for the purpose of covering decommissioning costs.

Considering the importance which governments attach to having strong security mechanisms in place to cover the eventuality of a licensee not being able to meet decommissioning costs, a most visible advantage of dedicated decommissioning accounts is that the contributions made towards such a fund would themselves serve as a means of securing fulfilment of eventual decommissioning obligations. As contributions to the fund increase, expenses towards maintaining expensive security mechanisms can only decrease.¹³⁵ This is illustrated in terms of *Figure 3*¹³⁶ below. Moreover, given that the decommissioning fund will remain attached to the given project independently of any transfers in ownership, the scope for alternative liability and for having the assignor in a given transfer retain a degree of liability post-transfer (as under the UK and Norwegian regime) would be markedly reduced.

Figure 3



4.2 Conclusion

It is evident that “[d]ecommissioning is becoming an increasingly important issue, as many offshore petroleum fields around the world are approaching the time when their reservoirs are exhausted”.¹³⁷ As has been observed in Chapter 1, the international regulatory framework is a rather substantial one which, however, leaves much space for discretion on the part of national governments, particularly with regards to larger installations.

Given the lack of international practise with regards to decommissioning, the statement that national governments enjoy a degree of discretion gains a greater degree of gravitas. It is a discretion which places considerable weight on the shoulder of governments that have to responsibly develop decommissioning polices – whether from scratch or as an improvement on their first-generation policies which did not give much consideration to decommissioning issues.

As more countries gain experience vis-a-vis decommissioning of offshore oil and gas fields, the scope for improvement of decommissioning regimes can only increase. It is then up to governments “to be proactive in introducing new legislation or regulations to cover the lacunae in their laws in relation to sustainable development and appropriate legal/financial structures”.¹³⁸

Finally, the author is very much aware that while this dissertation has dealt with the problem of decommissioning costs (i.e. the financing aspect), there are important maritime law issues underlying the decommissioning of offshore installations which cannot be ignored:

- There are a number of marine environmental law issues: “[t]he substances found in and on a rig such as steel, concrete and residual amounts of heavy metals or hydrocarbons and drill cuttings, may cause severe damage to marine environment”.¹³⁹
- A conflict with the fisheries industry may arise given that, especially where oil platforms are located in areas where fishing takes place, oil rigs may “restrain the passage of fishing vessels and restrict access to fishing grounds”.¹⁴⁰
- Conflicts may also be envisaged with the right of navigation, and a number of incidents have been reported in this regard which are difficult to disregard.¹⁴¹

¹³⁷ Osmundsen and Tveteras; *op. cit.*, p. 1586.

¹³⁸ Adedayo Ayoade; *op. cit.*, p. 199.

¹³⁹ Hossein Esmaeili; *op. cit.*, p. 191.

¹⁴⁰ *Ibid* 229.

These underlying maritime law issues have been discussed at length in a number of academic works,¹⁴² and their importance is not to be underestimated. Rather, these very issues arguably ought to constitute the primary consideration when governments formulate their decommissioning laws and regulations. This said, it is submitted that governments need also to focus, as this dissertation suggests, on ensuring that they have adequate mechanisms in place to be able to deal with decommissioning costs when the relevant time approaches. If this scantily discussed aspect of decommissioning theory is discarded, governments may well find their options to be severely limited at a point when it might be too late to remedy the situation. A comprehensive decommissioning strategy to deal with the underlying maritime law issues therefore requires a solid basis of financial planning from the earliest stage possible.

¹⁴¹ Ibid 236.

¹⁴² Morakinyo Adedayo Ayoade (fn 5) has, for example, produced an important work which focuses on the concept of sustainable decommissioning theory.

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