

Decommissioning offshore installations – legal aspects

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Winner of the Institute's Stanley Gray Award for being the most worthy paper read to or
published by the Institute*



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SYNOPSIS

The seas provide a source of natural resources for man to exploit as well as, unfortunately, a disposal area for the waste products of industry. International law confers rights to States to explore and extract hydrocarbons from the seabed, it also defines their obligations to deal with the situation when exploitation of a particular oil or gas field has ended.

The decommissioning of offshore installations is technically challenging, financially significant and legally sophisticated. This paper aims to provide a better understanding of the legal requirements of decommissioning installations of offshore oil or gas fields. The sources of the legal regimes are identified. The development of the relevant rules of law is reviewed. Application of these rules upon states and individuals is explained. Examples of means of ensuring enforcement, compliance and dispute resolution the rules are provided.

INTRODUCTION

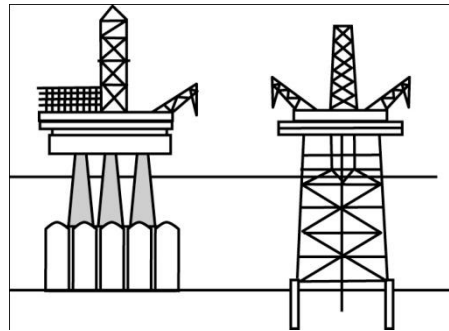
There are some 6,500 offshore installations for oil and gas production worldwide deployed on the continental shelves of more than 50 countries (Ref. 1). These installations can be placed into three different categories as follows:

- Fixed steel platforms (Fig 1). A typical platform consists of a topside, which contains the drilling, processing, utilities and accommodation facilities, and the supporting substructure, or jacket. The jacket is, in turn, fixed onto the seabed by piles.
- Gravity base platforms (Fig 1). The platform consists of topside facilities which are supported by a substructure, usually made of concrete, which sits on the seabed. Their stability is provided by the sheer weight of the substructure.
- Floating production, storage and offloading (FPSO) facilities (Fig 2). A specially-built or converted ship such that crude oil is extracted from production wells on the seabed and transported to the FPSO by flexible risers. The crude oil is then processed and stored on board the FPSO until another tanker comes and takes off the oil to the nearest onshore oil terminal.

Typical weights of these platforms are illustrated below:

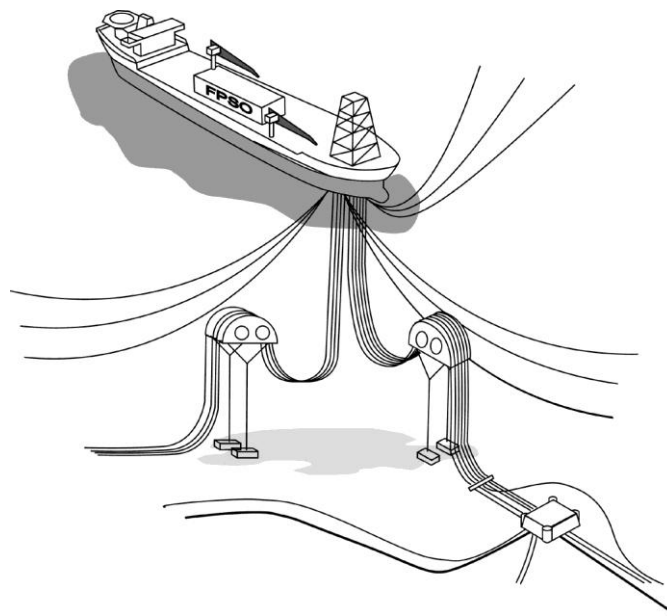
<i>Type</i>	<i>Water Depth, m</i>	<i>Weight of Topsides, tonnes</i>	<i>Weight of Substructure, tonnes</i>
Fixed steel jacket	10 – 200	150 – 30,000	250 – 50,000
Gravity base	70 – 200	10,000 – 55,000	130,000 – 800,000

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Gravity base platform

Fixed steel platform

Fig 1 Fixed platforms*Fig 2* FPSO

The average life of an oil and gas field is 20 – 30 years. When a field reaches the end of its life, its owner has to abandon the field and decommission facilities. The decommissioning of offshore installations entails two operations: firstly, the removal of the installations from the offshore sites; and secondly, the subsequent disposal of the removed structures. The process is technically challenging¹, financially significant² and legally sophisticated.

The law governing decommissioning of offshore structures has been strongly influenced by developments in technology. The influence can be threefold. Firstly, the ability (or lack of) to exercise physical control of the removal of disused installations. Secondly, the ability to extend the economic life of the field as production techniques advance, for example, the availability of the enhanced recovery technology. Thirdly, the better understanding of the environmental impact from various ways of disposing of the structures, for example the

¹ The most recent decommissioning project in the North Sea was the re-float of the Maureen platform which was a gravity based steel structure. It was in operation from 1983 to 1999. The disused structure was re-floated on 26 June 2001. It took engineers six years to plan and complete the removal of the structure from the seabed.

² Reference [2] suggests that decommissioning of the installations in the UKCS in the next fifteen years could cost more than £8.6billion.

benefits of using the disused structures as artificial reefs to create a congenial habitat for fish and other marine biota. It is envisaged that the rules of law in this area will change as new technology becomes available and scientific studies are better understood.³

SOURCES OF LAW

Decommissioning of offshore installations is an obligation placed upon States under international public law. The States, in turn, pass it onto individuals by implementing their international obligations into national law. The sources of international law governing the decommissioning can be placed into three categories; namely, (a) international conventions, (b) customary international law and (c) regulations developed by international non-governmental organisations.

(a) International conventions

Conventions (or treaties or protocols or agreements, as they are also called) are binding agreements between States by virtue of their consent. They are originated from a framework of international negotiation over matters of common interest and the resulting terms are documented in a written instrument.

Article 2 of the 1969 Vienna Convention on the Law of Treaties gives a definition as:

“an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation...”

Conventions are binding only upon the States which are parties to them. The relations between a State party to a convention and non-party States continue to be regulated by customary international law (see below). Individuals and corporations have never been recognised as having the capacity to enter into conventions, whether with States or with other individuals.

Once a convention is agreed and signed, the process of ratification commences. Multilateral conventions may require ratification by a prescribed minimum number of States. This is the formal process by which the State parties declare their acceptance of the terms of the convention and undertake to observe them. Until this procedural process is completed, a State will not be bound by the terms of that convention.

Many conventions contain provisions for an amendment procedure and an amendment will be a matter of following such procedure. In the absence of any prescribed procedure, amendment of a convention can only be effected by an unanimous agreement of the parties⁴. Conventions remain valid and binding until any time limit set down in them expires or, if the parties intended to allow denunciation, until they are denounced, or until the parties conclude a later convention relating to the same subject matter.

(b) Customary international law

The International Court of Justice⁵ (ICJ) described customary law as “general practice accepted by law” by States. In simple terms, it is something that States do because they regard themselves as legally obliged to do it. Convention provisions have a close relationship with custom. This relationship flows in both directions: conventions may give rise to rules of custom and conventions may reflect pre-existing or evolving rules of custom. In *the North Sea Continental Shelf Case*⁶, the ICJ accepted that a norm-creating provision in a convention could indeed generate a rule of customary law which would become binding on third parties.

(c) International Non Governmental Organisations

³ An example of the change of rule of law due to technological development is the definition of the continental shelf. New technology made possible greater exploitation of offshore deposits of minerals. The definition embodied in the 1958 Continental Shelf Convention proved unsatisfactory and it was extended in the 1982 Convention to cover deep sea exploitation.

⁴ Article 39 of the 1969 Vienna Convention

⁵ Asylum Case: *Columbia v Peru* (1950)

⁶ *North Sea Continental Shelf case* [1969] ICJ Rep.1

The United Nations has created a number of international organisations as its agents taking up a consultative and advisory role in the development of international law in various subject areas. The International Maritime Organisation (IMO), which was established in 1958 and with council representatives of 32 states, is an example.

International organisations have published guidelines/standards, which prescribe norms for State conduct. Such publications are recognised as “non-binding” and the provisions stated therein are usually non-mandatory. However, it is clear that the States voting for such non-binding guidelines/standards intend them to be followed in practice. In many cases, these publications are referred to by conventions. Furthermore, these organisations may have direct effect upon the decision-making process by making recommendations, convening conferences and providing machinery for consultation.

HISTORICAL DEVELOPMENT OF RULES OF LAW FOR DECOMMISSIONING

The legal regime of the law of decommissioning offshore installations is to be found in a host of general and specific conventions, global and regional, and in customary international law. Even though a particular State may not be a party to a specific convention, provisions of that convention can serve as customary international law as discussed above. The historical development of these rules of law is outlined below.

Global conventions

1958 Geneva Convention on the Continental Shelf (Geneva), 54 states became parties to the Convention, which came into force in 1964.

The convention opened up the continental shelf for exploration and exploitation of its natural resources and regulated the operation of the installations constructed on the continental shelf including their abandonment after the resources were depleted. The relevant provisions relating to the decommissioning of offshore installations are:

- “The exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interference with the rights of others, including navigation, fishing or the conservation of living resources”⁷; and
- “Any installations which are abandoned or disused must be entirely removed.”⁸

1972 London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 77 states became parties to the Convention, which came into force in 1975.

The convention is applicable to all marine areas worldwide except the internal waters of a coastal state. It regulates the deliberate disposal (dumping) at sea. In 1996, the contracting parties to the London Convention drew up a protocol which represents a thorough revision of the convention. The 1996 protocol, which has not yet come into force, represents a more stringent regime towards dumping.

Dealing with disposal of offshore installations, both the convention and the protocol have the following features:

- They allow dumping of offshore installations, if dumping is found to be the best environmental option.
- Both require a special permit from the coastal State and undergo a stringent environmental assessment process. Factors to be considered for granting permission include: the composition of the waste, the characteristics of the dumping site and method of deposit, the effects on marine life, amenities and other uses of the sea, the practical availability of alternative land-based methods of treatment.

1982 United Nations Convention on the Law of the Sea. “UNCLOS”, 128 states became parties to the Convention, which came into force in 1994.

⁷ Article 5.1 of 1958 Geneva Convention

⁸ Article 5.5 of 1958 Geneva Convention

Two articles are relevant:

- “ 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 organisation. 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”⁹
- “Dumping within the territorial sea and the exclusive economic zone or on to the continental shelf shall not be carried out without express prior approval of the coastal state, which has the right to permit, regulate and control such dumping after due consideration on the matter with other states which by reason of their geographical situation may be adversely affected thereby.”¹⁰

The “competent international organisation” referred to in UNCLOS is IMO which, in 1989, published guidelines and standards. The relevant points are:

- In water depths less than 75m, all installations weighing less than 4,000t in air should be entirely removed. For installations placed on or after 1998, that requirement is extended to water depths of less than 100m. Installation weight excludes that of the topsides.
- For installations placed in over 75m of water or weigh more than 4,000t in air, partial removal is permitted, subject to the existence of a clearance of at least 55m above the submerged remains to ensure safety of navigation.
- Notwithstanding the above removal requirements, installations could be left wholly or partially in place on the seabed following a consideration of a number of factors. They include: safety of navigation and other uses of the sea; the effects on the marine environment, including living resources; the costs; technical feasibility; risks of injury to personnel; and new use for the installations.

Regional conventions

Under Article VIII of the London Convention and Article 12 of the 1996 protocol, parties are required to endeavour to enter into regional agreements which are consistent with the convention and the protocol, and which take into account “characteristic regional features”. These regional conventions are designed to complement the existing international conventions. As an illustration of application of the legal principles, regional conventions covering the North Sea Continental Shelf are highlighted below.

1992 OSPAR Convention - The Oslo and Paris Convention on the Protection of the Marine Environmental of the North East Atlantic, 16 member states became parties to the convention which came into force in 1998.

The OSPAR Convention aims to prevent pollution and to protect the marine environment of the north-east Atlantic, including the North Sea from the adverse effects of human activities. The disposal of offshore installations in the OSPAR maritime area is covered by specific provisions in Article 5 and Annex III of the Convention, as well as by the general obligations set out in Article 2, including the requirement to apply the precautionary principle.

In July 1998, at the OSPAR ministerial meeting in Portugal (Sintra), the section of the convention governing the disposal of offshore installations was reviewed. This led to an agreement on a new regulatory framework – Decision 98/3, which is binding to all parties to the convention.

This decision prohibits the dumping of offshore installations or leaving them wholly or partly in place. The topsides of all installations must be returned to shore. It is recognised, however, that there may be difficulties in removing (a) the “footings” of large steel jackets weighing more than 10,000t; (b) concrete installations; and (c) other installations

⁹ Article 60.3 of 1982 UNCLOS

¹⁰ Article 210.5 of 1982 UNCLOS

posing exceptional difficulties for removal due to structural damage or deterioration. As a result, derogation may be granted if it can be demonstrated that leaving such an installation wholly or partly in place is justified. To apply for derogation, an assessment and consultation process is required to follow.

APPLICATION OF THE RULES OF LAW

The above review reveals that there is a diversity of agreements on the requirements of decommissioning offshore installations generated from various rules of law. The situation is compounded by the fact that not all conventions cover both the removal and disposal aspects of the decommissioning process. The diversity creates inconsistent standards and generates non-uniform State practice. Differences of requirements can be found in the following circumstances.

- (a) Between successive global conventions
- (b) Between global and regional conventions
- (c) Between domestic regulations and international rules

It is necessary to decide which is the governing set of rules in a given circumstance.

Successive global conventions

The rule to decide which global convention applies is given in Article 30 of the 1969 Vienna Convention. It is a matter of priorities. In general, if the provisions of a later convention are not incompatible with those of the earlier conventions, the provisions of later convention prevails.

Regional and global conventions

The regional conventions were entered in order to complement the global conventions (see above). In the case of the North Sea Continental Shelf, in general, it cannot be said that the OSPAR provisions are not compatible with those of the London Dumping and the UNCLOS. Accordingly, in the UK and the other State parties of OSPAR, provisions set out in the 1998 Sintra agreement - Decision 98/3 prevail. However, for states in other regions to which there are no provisions to complement those in the London Dumping and/or UNCLOS, provisions in the global conventions apply.

Domestic regulations and international rules

The international conventions relating to the decommissioning of offshore installations are known as non-self-executing, i.e. they will have no effect at the national level until they are implemented in domestic law. In the UK, the Petroleum Act 1998 gives effect to the international conventions. In general, domestic legislation prevails over international convention. However, there is a presumption that domestic legislation should be interpreted in a manner consistent with the international obligations of the States.

COMPLIANCE AND ENFORCEMENT

The rules of law are of little significance unless they are accompanied by effective means of ensuring compliance, enforcement and dispute resolution. Examples of these means are set out below.

Inter-state claims

The fundamental principle of the public international law is expressed in Article 26 of the Vienna Convention: "Every treaty in force is binding upon the parties to it and must be performed by them in good faith". A State cannot release itself from its treaty obligations whenever it feels like it. If it could, treaties would become worthless.

In the event that a State fails to carry out its obligations concerning decommissioning, another State could advance a claim and that the defaulting State may be held accountable under international law. The inter-state claim is a means to enforce international obligations. Article 33 of the United Nations Charters provides a dispute resolution procedure to deal with inter-state claims. The article places an obligation upon the States to settle their disputes by peaceful means, including the use of negotiation, enquiry, mediation, conciliation, arbitration and judicial

settlement. This includes obtaining a ruling from an appropriate international body, which could be the International Court of Justice.

There is also a dispute settlement procedure under the 1982 UNCLOS where it prescribes an elaborate system defining the use of different resolution means at different stages of the dispute. It also prescribes special arbitral tribunals for different categories of specialised disputes.

State's power to ensure compliance of Individuals

National legislation usually provides means to deal with non-compliance situation. For example, a failure to carry out the duties imposed by the Petroleum Act 1998 will result in paying criminal penalties, including fine and/or imprisonment. A director, manager, secretary or other similar officer may be found guilty of the offence committed by a company corporate.

Third party individuals

Individuals have no rights under international conventions. In general, international agreements cannot be used as the basis for an action by groups or individuals against the state or a public body, nor are they a source of rights and/or duties in legal actions between individuals. Under a national legal system, there are ways to bring an action by individuals. For example, in England and Wales it is possible to bring a private action by way of (a) private prosecution, (b) direct action and (c) judicial review.

(a) Private prosecution

Basic criminal law gives anyone the right to prosecute for criminal offence, unless the specific piece of legislation introducing the offence expressly provides otherwise¹¹

(b) Direct action

Individuals can bring direct actions against the wrongdoers under private civil law for damages and injunctive relief.

(c) Judicial review

This is a procedure which can be used by an individual to challenge decisions made by a public authority. The individual needs to establish that a sufficient number of its members have a personal interest and also there is sufficient locus standi to obtain judicial review. This is a procedure increasingly used by the environmental pressure groups which can be brought before English courts¹² as well as the European Court of Justice¹³.

Non-governmental organisation (NGO)

NGOs can play the role of self-appointed "watchdogs" over national governments, and can thus help in the enforcement of international law through political means or public-interest litigation, to ensure that governments maintain their international commitments.

Product boycott

This technique has been used by pressure groups to achieve their aims of protecting the environment. The Brent Spar fiasco in 1991 is a good example of the effect which can be generated by mounting a campaign to boycott products. The campaign led to a change of decommissioning methods from deep sea disposal to onshore disposal¹⁴.

¹¹ Section 6(1), Prosecution of Offences Act 1985.

¹² R v Secretary of State for Trade & Industry & Others, ex parte Greenpeace Ltd (1999)

¹³ Case C-321/95P Stichting Greenpeace Council (Greenpeace International) and Others v Commission of the European Communities.

¹⁴ Brent Spar: In 1991, Shell decided to decommission the oil platform Brent Spar and announced it would sink the structure in the North Sea. This sparked controversy. Greenpeace argued that the disused platform, which they believe contained hazardous and radioactive substances, should be disposed on land rather than the planned deep sea disposal. Greenpeace activists boarded the platform before Shell could complete the disposal. After three months of mounting protests (including boycotting Shell's petrol stations in Germany and in Holland) and despite the support of the British Government, Shell agreed to recycle the platform at a greater cost.

CONCLUDING REMARKS

Development of the rules of law on decommissioning of offshore installations is a continuous process as technology advances and scientific understanding improves. In future, new conventions will be agreed or existing conventions will be amended by protocol to reflect the latest developments. The legal regime provides an effective means of preserving the global maritime environment by setting out international standards and procedures which can be enforced by a number of ways.

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