# The legal context of petroleum development in New Zealand

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*Petroleum development operates within a legal context that is international and national. Although the domestic regime in New Zealand depends less upon the Common Law than upon the Petroleum Act 1937 and related legislation, the legislation has effect against the background of the Common Law. Petroleum development in New Zealand is controlled by legislation that adapts existing doctrines of property and creates a comprehensive and detailed system of licensing. The licensing regime encompasses not only the right to develop but also the daily functions of production through to the finality of abandonment. This paper is concerned with the legal problems that derive specifically from the nature of petroleum.*

## I. INTRODUCTION

The development of petroleum comprises a wide range of activities from exploration and production through refining, processing and transporting to distribution and final consumption. Each aspect has its own particular problems: some of which are general in character and some of which derive specifically from the nature of petroleum. It is the latter with which this paper is particularly concerned. The relevant activities fall for the most part within the definition of "mining operations" as it relates to "petroleum" for the purposes of the Petroleum Act 1937.[1] Many of the special issues arise from the physical properties of petroleum and the location of the reservoirs from which it is extracted.

The legal regime of petroleum is partly international and partly national or domestic. New Zealand enjoys territorial sovereignty within its territorial limits and a much more limited form of sovereignty on its continental shelf and in its exclusive economic zone. The domestic regime incorporates all the features and concepts of the legal system at large: ownership of the resource in situ, on extraction and after treatment; property rights as the basis for contractual arrangements for development of petroleum; the creation of administrative systems for creating or conceding rights to develop; methods of continuing governmental

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1 Petroleum Act 1937, s. 2(1) "mining operations" and "petroleum" as amended by s. 2 of the Petroleum Amendment Act 1982.

control by regulation of development activities; government enterprise directly or through an organisation like the Petroleum Corporation of New Zealand. These economic and political perspectives of the system generate problems of legal doctrine affecting the Common Law as it relates to property, contract and the special position of the Crown, the application of statutory law in general, the relationship between Common Law and statute and perhaps most importantly the impact of government policy upon such a system as a matter of law. At their most extreme these issues raise the basic questions of the stability of the legal relationships created by this system, the variability of the rights and obligations thereby assumed and the feeling of legal confidence with which commercial decisions may be made. Many of these questions are also relevant for the development of the continental shelf: more often than not they arise in a different way and for this reason require separate treatment.

## II. NEW ZEALAND'S RIGHTS OF SOVEREIGNTY

The doctrine of sovereignty has national as well as international perspectives. The territory of a state, it has been suggested,[2] is the basis for the exercise of legal power by that state: this "principle of the exclusive competence of the state in regard to its own territory" is additionally the point of departure for determining questions of an international character.[3] Both aspects of sovereignty thus rest upon a notion of territory. For the purpose of international law the sovereignty of a state extends to the land territory of the state, its internal waters, its territorial sea and the bed and subsoil of its territorial sea.[4] In relation to New Zealand the expressions "territorial limits" and "limits" mean the outer limits of the territorial sea of New Zealand.[5] The rights of territorial sovereignty of New Zealand extend as far as international law permits. The continental shelf regime applies beyond the outer limits of the territorial sea.

The doctrinal existence of rights of sovereignty is an altogether different question from the method of their exercise. That is influenced as much by economic and political factors as by legal considerations: no doubt more so in many cases. In relation to petroleum development in particular, the tendency before 1950 or so was for the states with known reserves of petroleum to permit by way of concession or some other legal instrument[6] their exploitation and development by the large private entrepreneurs with the necessary financial and technical resources. This began to change with a series of resolutions of the General Assembly of the United Nations emphasising the permanent sovereignty of the territorial state over the natural resources located within its territory[7] and

2 D. W. Greig *International Law* (2nd ed., Butterworths, London, 1976) 155.
3 *Netherlands* v. *U.S.A.* (Island of Palmas case) (1928) 2 R.I.A.A. 829, 838 per Arbitrator Huber.
4 Convention on the Territorial Sea and the Contiguous Zone 1958, 516 U.N.T.S. 205, arts. 1 and 2.
5 Acts Interpretation Act 1924, s. 4 "territorial limits of New Zealand" as inserted by s. 11 of the Territorial Sea and Fishing Zone Act 1965 as amended by s. 33(1) of the Territorial Sea and Exclusive Economic Zone Act 1977.
6 See generally Pierre Barraz "The legal status of oil concessions" (1971) 5 Journal of World Trade Law 609.
7 See generally Ian Browlie "Legal Status of natural resources in international law" (1979) 162 Recueil des Cours, Part I, 253.

culminating in 1974 in article 2 of the Charter of Economic Rights and Duties of States.[8] The effect of article 2 is to clarify the supremacy of the laws of the host state over the activities of transnational corporations within its national jurisdiction. None of these resolutions has direct legislative or other legal effect. They emphasise however the continuing and inalienable power of the territorial state to control and regulate its natural resources. One commentator has so expressed it:[9]

> The description of this sovereignty as *permanent* signifies that the territorial State can never lose its legal capacity to change the destination or the method of exploitation of those resources, whatever arrangements have been made for their exploitation and administration.

Notwithstanding the generality of the concept of permanent sovereignty over natural resources and its lack of precision and enforceability in precise legal terms, it has proved to be a principle of considerable political attractiveness for a number of states. To ignore it might prove to be unwise.

No coastal or other state enjoys general rights of territorial sovereignty over the continental shelf. By virtue of article 2 (1) of the Convention on the Continental Shelf 1958[10] the coastal state exercises sovereign rights over the continental shelf only for the purpose of exploring it and exploiting its natural resources. These rights are exclusive[11] and exist as a matter of law.[12] Natural resources mean the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species.[13] The Convention goes on to confer ancillary powers upon the coastal state and places several limitations upon the exercise of the rights vested in the coastal state. What emerges is a scheme of rights available only for a limited purpose and subject to substantial constraints. So far as New Zealand is concerned, all these rights related to the exploration and exploitation of the continental shelf are vested in the Crown.[14] This has nothing to do with rights of property as such. It may be that the New Zealand legislature could confer or distribute ownership rights. But it has chosen not to do so. The effect of the legislation seems to be simply to delegate to the Crown all the rights available to New Zealand at international law.

## III. OWNERSHIP OF PETROLEUM

### *A. Rights of Property in situ*

Hydrocarbons come in several forms and it is their physical properties that have caused problems for the Common Law. Petroleum in the form of asphalt remains stable in situ but once exposed to the heated atmosphere it begins to

8 United Nations General Assembly, Resolution No. 3281 (XXIX) of 12 December 1974.
9 E. Jiménez de Arechaga "International Law in the Past Third of a Century" (1978) 159 Recueil des Cours, Part I, 9 at 297.
10 499 U.N.T.S. 311.
11 Convention on the Continental Shelf 1958, art. 2(2).
12 Ibid. art. 2(3).
13 Ibid. art. 2(4).
14 Continental Shelf Act 1964, s. 3.

melt. This may lead to instability of the site and affected adjacent landowners may be entitled to a remedy for infringement of their rights to support.[15] If that is so, asphalt is treated as a solid mineral substance belonging to the superjacent surface owner by virtue of the rule cuius est solum eius est usque ad coelum et ad inferos.[16] Hydrocarbons in liquid or gaseous form may be different. Does their fugacious character render them analagous to water or to the atmosphere for the purposes of the Common Law? Is it realistic to apply the rule of cuius est solum to such fugacious substances? The Common Law neither in England nor in New Zealand has provided an answer to this question and the Privy Council on appeal from the Supreme Court of Alberta in Canada has expressed doubts about the relevance of the rule of cuius est solum.[17] The Common Law is now either of historical or residual importance in New Zealand, like in several other Common Law jurisdictions: for ownership of petroleum in situ has since 1937 been vested in the Crown by statute.[18]

It is an oversimplification, however, to state that all petroleum in New Zealand belongs to the Crown. Ownership is not a matter of academic interest: it is the basis of commercial and entrepreneurial decision-making. It is thus important to determine in whom petroleum is vested at each stage of the development process. The Petroleum Act 1937 distinguishes between petroleum in situ and petroleum that has been recovered from its natural condition. The former is governed specifically by the legislation; the latter only inferentially. Section 3 (1) provides that notwithstanding the terms of any other legal instrument petroleum in situ is the property of the Crown whether the superjacent surface of the land has been alienated or not. This is reinforced by section 3 (2) which deems all alienations of land from the Crown to be subject to the reservation of all petroleum in situ to the Crown. On the other hand, it is the Minister of Energy, rather than the Crown, who is invested with the administration of the licensing regime. Does this apparent technical distinction between ownership and administration matter? Though ownership by the Crown may be the technical basis or the point of origin of the statutory licensing regime, the operation of the licensing regime depends upon the provisions of the Act as they relate to the Minister of Energy. If the Act is silent on a particular point and the Minister of Energy is unable to point to a specific provision as the basis for his administrative authority, then the authority to act or transact may arguably rest with the Crown as the statutory repository of rights of ownership of petroleum in situ and as the symbolic agent in New Zealand for the exercise of executive power in the public interest. The distinctive references to the Crown and the Minister of Energy may, it is suggested, have important consequences.

15 E.g. *Trinidad Asphalt Co.* v. *Ambard* [1899] A.C. 594, 598 per Lord Macnaghten.

16 See Blackstone *Commentaries* II, 2, 18.

17 *Borys* v. *Canadian Pacific Railway Co.* [1953] A.C. 217: cf. *N.V. de Bataafsche Petroleum Maatschappij* v. *War Damage Commission* (1956) 23 I.L.R. 810, 815 per Whyatt C.J.

18 Petroleum Act 1937, s. 3.

*B. Transfer of Title to the Developer*

If petroleum in situ belongs to the Crown, when does title pass to the developer? Expressed differently, when is the natural condition of petroleum changed sufficiently so that the petroleum loses its affinity to land and enjoys a form of legal independence adequate to support separate rights of ownership? Although the Civil Law and the Common Law recognised principles intended to deal with problems of this type, it is no surprise that petroleum was not within their contemplation. A profit à prendre, for example, is a right to enter the land of another and to take either a profit from the soil or a part of the soil itself for the use of the owner of the right.[19] The subject matter of a profit must be capable of ownership.[20] Petroleum clearly is capable of ownership. But the title of the Crown is statutory and it may be inappropriate to apply the analogy of a profit à prendre to a situation not readily amenable to the Common Law. Nor is the Common Law doctrine of accession entirely appropriate. Where a corporeal substance is increased or extended by natural or artificial means, the original owner retains ownership of the increased or extended substance.[21] But where a different species or substance is created as a result of the activity the new substance belongs to its creator.[22] Neither is directly relevant to the extraction of petroleum. The application of labour and capital, however, has in some cases been regarded as capable of creating rights of ownership:[23] especially, no doubt, if it takes place with the consent of the original owner and where the original owner receives some kind of compensation for the extraction of the substance originally vested in that person. In that case also the Common Law provides no certain solution.

*C. The Statutory Regime*

What, then, is the relationship between the statutory right of property of the Crown, the licensing regime administered by the Minister of Energy and the title to the petroleum upon extraction? The answer, it would seem, lies in section 14 (1) and (4), section 3 (3) and the definitions of "mining operations" and "petroleum" in section 2 (1) of the Petroleum Act 1937 applied in the rather uncertain context of the Common Law. The holder of a mining licence under the Act has the exclusive right to mine for petroleum on the land in question and the right for that purpose to carry out mining operations.[24] The expressions "mine" and "mining" are not defined but "mining operations" means mining for petroleum and includes a range of activities that are physically and functionally associated with mining: for example, the extraction, production, treatment, processing and separation of petroleum and the construction and operation of associated works.[25] The crucial notion remains the undefined expression "mining". It can mean either the actual winning or extraction of the petroleum or the means used to

19 *Halsbury's Laws of England* (4th ed., Butterworths, London, 1958) vol. 14, p. 115.
20 Ibid. vol. 14, p. 117.
21 Blackstone *Commentaries* II, 26, 404.
22 Ibid. II, 26, 404.
23 Ibid. II, 26, 405.
24 Petroleum Act 1937, s. 14(1)(a).
25 Ibid. s. 2(1) "mining operations" as substituted by s. 2 of the Petroleum Amendment Act 1982.

extract the petroleum. For present purposes the former is the more important: it is moreover part of the inclusive definition of "mining operations" in the Act. The licensee thus clearly has the sole right to win petroleum notwithstanding that it belongs in situ to the Crown or that the superjacent surface of the land belongs to the Crown, the licensee or any other person. The operation of extraction requires the physical application by the licensee of labour and capital to the location of the petroleum. The licensee as a matter of law is required to submit for the approval of the Minister of Energy a works programme for the development of the petroleum;[26] the licensee is required to pay a royalty to the Secretary of Energy in respect of all petroleum produced from the land;[27] and the licensee finally is obliged to compensate inter alios any person having any right, title, estate or interest in any land injuriously affected by the operations of the licensee for all loss, injury or damage so suffered.[28]

The scheme envisaged by the Act appears to borrow several aspects of the various doctrines of the Common Law thereby creating a relationship that is nevertheless sui generis. The effect of these provisions seems to be to confer a right of property upon the licensee when two conditons are fulfilled: first, once the legal requirements placed upon the licensee under this statutory scheme have been satisfied and second, after the petroleum has been physically separated from the natural location in which it was found. Thereupon the petroleum assumes the form of a corporeal substance legally and physically independent of its original owner and location and thence vested in the licensee as the person legally responsible for achieving that state of affairs.

This is mere speculation, of course, for there is nothing in the Act that so provides in express terms. On the other hand there are indications in the legislation at least consistent with this view. Section 14 (4) provides that the holder of a mining licence shall not, by virtue of that fact, have any proprietary or other rights in respect of any petroleum derived from the land except as a result of the licensee's mining operations on that land. This does not say that the licence confers upon the licensee a right of property in the petroleum extracted in terms of the licence. It indicates that rights of property may be acquired only in consequence of licensed mining operations. The implication is therefore that successful mining lawfully carried out under the licence confers, or at least may confer, rights of property upon the licensee.

The Petroleum Act, as the definition of "mining operations" shows,[29] is concerned with more than the extraction of petroleum. It deals, for example, with operations dangerous to life or injurious to health,[30] with the transmission of petroleum by pipeline[31] and with aspects of price adjustment[32] and refining of petroleum[33]

26 Ibid. s. 14A(2).
27 Ibid. s. 18(2).
28 Ibid. s. 39(1).
29 Supra n. 25.
30 Petroleum Act 1937, ss. 41 to 47C.
31 Ibid. Part II.
32 Ibid. s. 18A.
33 Ibid. s. 19.

in New Zealand. Certain of these issues will arise only after the petroleum has been extracted and property may have passed to the developer qua licensee in terms of the foregoing analysis. The legislation addresses this problem in two ways. The definition of "petroleum"[34] provides an exclusive description of the physical substances constituting petroleum for the purposes of the Act. It goes on to include two categories of petroleum as so defined: first, petroleum which has been mined or otherwise recovered from its natural condition and second, petroleum so mined or recovered but which has been returned to a natural reservoir for storage purposes in the same or an adjacent area. The second category is intended, no doubt, to permit what is otherwise known as gas banking. What is important, however, is that petroleum in each of these two categories prima facie attracts all the provisions of the Act as they relate to "petroleum": for example, the necessity for ministerial approval of a works programme[35] related to a gas banking scheme and the subsequent transmission of any gas so conserved.

But, it may be argued, property in petroleum lawfully extracted by the licensee passes to the licensee upon extraction but reverts to the Crown by virtue of section 3 (1) when the petroleum is physically returned to its original location albeit for storage and conservation purposes. Section 3 (3) however provides that despite that possible effect of the definition of "petroleum" in section 2, the expression "petroleum" for the purposes of Crown ownership in section 3 does not include petroleum falling within these two categories. The Crown therefore does not have under section 3 of the Act any rights of property in petroleum which has been mined even if the petroleum has been returned to its original location for storage purposes. This does not, of course, prevent the Crown retaining any right of property that it may have acquired as a result of mining operations conducted by or on behalf of the Crown. These provisions, therefore, to the extent that they distinguish between ownership of petroleum in situ and ownership of petroleum after extraction are also consistent with the implication that lawful extraction carries with it inchoate rights of property.

*D. Petroleum Offshore*

So much for ownership of petroleum located within the land mass of New Zealand: is the position any different offshore? Section 3 (1), it will be recalled, declares all petroleum in situ on or below the surface of any land to be the property of the Crown. "Land" means all land within the territorial limits of New Zealand and includes land below the sea and any other water.[36] "Territorial limits" is a reference to the outer limits of the territorial sea[37] as defined in section 3 of the Territorial Sea and Exclusive Economic Zone Act 1977. Thus petroleum subjacent to all land, whether covered with water or not, measured in a landwards direction from a point situated twelve nautical miles seawards from the baseline of the territorial sea belongs to the Crown by virtue of section 3 (1) of the Petroleum Act as so interpreted. The grant of prospecting and mining

34 Ibid. s. 21 "petroleum".
35 Ibid. s. 14A(2).
36 Ibid. s. 2(1) "land".
37 Acts Interpretation Act 1924, s. 4 "territorial limits of New Zealand".

licences is related in terms to the "land" described in the application for a licence.[38] So the areas of land subject to the Act are exactly the same for the purposes both of the property regime and of the licensing regime: in effect, the bed of the territorial sea, the bed of internal waters, the foreshore, the beds of rivers and lakes and, of course, the land mass of New Zealand. Within these areas the Petroleum Act applies to land covered with water as it applies to land not so covered.

The position is different on the continental shelf. Section 4 (1) of the Continental Shelf Act 1964 applies all the provisions of the Petroleum Act to petroleum in the continental shelf: the exception is section 3. Although "land" in the Petroleum Act becomes a reference to the seabed and subsoil of the continental shelf,[39] the effect of the exclusion of section 3 is to deprive the Crown of any rights of property in petroleum in situ in the continental shelf and no other person is invested with a right of property in such petroleum. Control of the development of the resource is vested in the Crown on behalf of New Zealand.[40] That does not go so far as vesting rights of property in the Crown. The effect of these provisions is that, although there are no rights of property in petroleum in situ, no person may acquire any rights, whether property or otherwise, at any stage of the development on the continental shelf except as a result of the grant of a licence by the Crown under the Act. The difference, then, between petroleum in the continental shelf and petroleum elsewhere within the jurisdiction of New Zealand is section 3. Within territorial limits the Crown is invested with title. The purpose of this provision may well have been to ensure that no other person may present a better claim at Common Law. This would not be necessary in relation to the continental shelf because no other person could claim any rights of property under any legal regime except one created by the Parliament of New Zealand. As Parliament has legislated to confer upon the Crown the exclusive rights over the continental shelf available to New Zealand under international law, any rights of property or any other rights for that matter are dependent upon a grant from the Crown. Despite this technical point of law, there is in practice little real difference between the continental shelf and the territorial regimes of New Zealand.

## IV. THE LICENSING REGIME

### *A. The Petroleum Act 1937*

The licensing regime depends in the last resort upon the prohibition in section 4 (1) of the Petroleum Act 1937. In effect prospecting and mining for petroleum require the appropriate licence under the Act. The only exceptions are an extended seismic survey and a regional reconnaissance survey within the territorial sea or the continental shelf: either survey requires the authorisation of the Minister of Energy and the consent of the licensee where a licence has been granted in respect of the area in question and in the case of the regional

38 Petroleum Act 1937, ss. 5(1) and 12(1).
39 Continental Shelf Act 1964, s. 4(1)(a).
40 Ibid. s. 3.

reconnaissance survey the consent of the Minister of Transport.[41] The obligation to obtain a prospecting or mining licence applies generally: there is no exception: section 4 binds the Crown.[42] The procedure for obtaining a licence begins with an application[43] to the Ministry of Energy accompanied by the fee, the relevant graticulated maps, the information specified in the Regulations and any further information considered necessary by the Secretary of Energy.[44] In particular, in relation to a prospecting licence, this includes the details of the proposed exploration programme, the estimated costs of the programme for the term requested and evidence of the applicant's financial and technical capacities to carry out the programme.[45] In relation to a mining licence the information required includes a report on the deposit of petroleum to be mined, details of the proposed development and production programme, the estimated costs of the programme and a written assessment of its potential environmental impact.[46] Similar information mutatis mutandis is required in respect of an application for extension of the term[47] or of the area of a licence.[48]

Once the information has been submitted, the grant of a licence lies essentially in the discretion of the Minister of Energy. It may moreover be granted on such terms and conditions as the Minister may in his discretion specify and in relation to the whole or any part or parts of the land described in the application.[49] The legislation places few constraints upon the exercise of these ministerial discretions. This is consistent with the purpose of the legislation according to the long title of the Petroleum Act 1937: namely, to make better provision for the encouragement and regulation of mining for petroleum. There are only three important limitations placed by the Act upon the discretion of the Minister: the term of a licence, the prior claim of the holder of a prospecting licence to a mining licence and the right of a holder of a prospecting licence to prohibit the grant of a mining licence to another person.

A prospecting licence has a maximum term of five years.[50] The term of such a licence may be extended, if at all,[51] only once:[52] the extended term shall not exceed the original term of the licence[53] and the area covered by the extended term shall not exceed one-half of the area in the original licence.[54] A mining licence comprises two terms: an initial term and a specified term.[55] The initial term may not exceed four years to run in most cases from the date of the licence[56]

41 Petroleum Act 1937, s. 4(2) and (3).
42 Ibid. s. 4(4).
43 Ibid. ss. 5(1) and 12(1).
44 Petroleum Regulations 1978, regs. 5 and 7.
45 Ibid. reg. 5(1)(d) and (e).
46 Ibid. reg. 7(1)(b), (c) and (g).
47 Ibid. reg. 6.
48 Ibid. reg. 12.
49 Petroleum Act 1937, ss. 5(1) and 12(1).
50 Ibid. s. 6(1).
51 Ibid. s. 6(2).
52 Ibid. s. 6(5).
53 Ibid. s. 6(4).
54 Ibid. s. 6(3)(a).
55 Ibid. s. 13(1).
56 Ibid. s. 13(2)(a).

but exceptionally to a later date adjusted in relation to the preparation and approval of the work programme.[57] The specified term may not exceed forty years from the date of approval of the work programme[58] but there is provision for the period of forty years to be extended by the Minister, either as a matter of right or in exercise of a discretion, by reference to the time required for the economic depletion of the petroleum in relation to the approved work programme.[59]

The two other examples of constraints upon the Minister derive from rights conferred upon the licensee. Section 11 (1) of the Petroleum Act entitles the holder of a prospecting licence to surrender that licence in relation to all or part of the land affected and to receive in exchange a mining licence provided he satisfies the Minister that he has discovered a deposit of petroleum in the land in question and that he will comply with the conditions of a mining licence so granted. This affords reasonable security to the successful prospector who wishes to develop the petroleum which his resources and expertise have identified. This privilege is available, however, only where the holder of the prospecting licence applies under section 12 for a mining licence before the expiry of the prospecting licence. The term of the prospecting licence and its date of expiry may thus be factors crucial to the development of the deposit by the licensee. Section 12 (5) lends support to such a prospector. It provides that if a prospecting licence is in force, no mining licence shall be granted over the land to which the prospecting licence relates to any person other than the holder of the prospecting licence except with the written consent of that licensee. This provision effectively leaves the initiative with the prospecting licensee until that licence expires.

There are provisions of two kinds sometimes included in legislation of this type but clearly absent from the Petroleum Act as it relates to the granting of prospecting and mining licences:[60] namely, procedures involving other persons in the deliberative processes leading to the ministerial determination whether to grant an application for a licence and criteria or guidelines according to which the Minister is expected to make his decision. There is, in other words, no provision for public participation and no indication of policy. However, it may be asked, does the Ministry of Energy Act 1977 or the National Development Act 1979 affect the position of the Minister? The short answer is probably no.

*B. The Ministry of Energy Act 1977*

The Ministry of Energy Act 1977 constitutes the Ministry of Energy. Its functions may generally be described as advisory and deliberative and concerned with planning, coordinating, encouraging and publicising all matters relating to energy in New Zealand. The power to make decisions that have direct legal effect is vested in most cases generally in the Minister of Energy either under the 1977 Act or under the legislation dealing with the source of energy in question, in this case the Petroleum Act 1937. If that is so, it raises the question

57 Ibid. s. 13(2)(c) and (d).
58 Ibid. s. 13(3)(a).
59 Ibid. s. 13(3)(b) and (c).
60 Cf. the procedures for granting a pipeline authorisation.

of the relationship in legal terms between the Minister of Energy and the Ministry of Energy. Subsections (3) and (4) of section 11 of the 1977 Act place certain obligations upon the Ministry. The duty in subsection (3) is deliberative: to take into account all relevant considerations relating to energy when engaged in the advisory and planning functions already mentioned. The range of matters mentioned in the Act is wide: sources of energy;[61] exploitation, production, conservation;[62] industrial, commercial and domestic interests;[63] regional needs;[64] environmental and social factors.[65] Subsection (4) specifically requires the Ministry to engage in particular activities, some of which are positive in character: for example, to promote the exploration for sources of energy,[66] to promote the development of adequate sources of supply of energy for New Zealand[67] and to promote the efficient and economical uses of energy and sources of energy.[68] None of these provisions changes the Ministry into an executive body. But the Ministry will acquire a great deal of information, knowledge, experience and expertise in these matters. This will be available to the Minister. The legislation imposes no obligation upon the Minister in relation to this but the scheme of the legislation quite clearly contemplates that the Minister will rely upon the Ministry for these purposes. It is likely, therefore, that the fulfilment of their duties by the Ministry under the Act will influence the exercise by the Minister of his powers under this Act and under the Petroleum Act. The Minister, in other words, has the power to make decisions that are legally effective: any obligations imposed by the legislation fall upon the Ministry.

### *C. The National Development Act 1979*

When the provisions of the National Development Act 1979 are applied to any specific project, the matter is referred to the Planning Tribunal for inquiry, report and recommendation.[69] The development of the resources of New Zealand, including self-sufficiency in energy, is one of the purposes justifying the application of the Act.[70] The grant of a prospecting or a mining licence under the Petroleum Act is one of the consents specified in the Schedule to the 1979 Act. The petroleum development may for this purpose be onshore or offshore in consequence of the definition of "land" in the National Development Act.[71] In effect, therefore, any petroleum development to which the 1979 Act is applied is subjected to a process of environmental assessment[72] and public scrutiny[73] that would not be required

61 Petroleum Act 1937, s. 11(3)(a).
62 Ibid. s. 11(3)(b).
63 Ibid. s. 11(3)(c).
64 Ibid. s. 11(3)(d).
65 Ibid. s. 11(3)(f).
66 Ibid. s. 11(4)(b).
67 Ibid. s. 11(4)(c).
68 Ibid. s. 11(4)(f).
69 National Development Act 1979, s. 4(1).
70 Ibid. s. 3(3)(a)(i) and (ii).
71 Ibid. s. 2(1) "land".
72 Ibid. s. 5.
73 Ibid. ss. 7 and 8.

under the Petroleum Act. A great deal more information is likely to be generated and a wider range of views expressed when such a development is subject to the National Development Act.

How does the Act affect the final decision? Section 9 (1) restricts the Planning Tribunal to a consideration only of these matters that would have been taken into account if the applicant had applied in the normal way for a prospecting or mining licence. So far as the Petroleum Act is concerned, there are no such restrictions. Section 11 of the National Development Act, however, enables the Governor-General in Council to declare the work to be of national importance and to grant the consents sought by the applicant, in this case the prospecting or mining licence. But before making such a declaration the Governor-General is directed to take into account the report and recommendations of the Planning Tribunal and to consider further the criteria set out in section 3 (3) of the National Development Act. These include, of course, the national interest and the necessity of the project for the development of New Zealand's resources in general and New Zealand's self-sufficiency in energy in particular. The direction to the Governor-General is deliberative only and it is couched in the very broadest terms. Nevertheless it represents a limitation on the decision-making process originating in the National Development Act and not included in the Petroleum Act. In practice it may not affect the nature or substance of the decision whether to grant a prospecting or mining licence. But the mere inclusion of provisions in legislation, however broad in content and notwithstanding that they represent a deliberative function only, add a further dimension to the legal regime that cannot be ignored.

*D. The Development of Public Lands*

There is one further restrictive feature of the Petroleum Act to examine. Its effect is not so much to limit the discretion or decision-making process of the Minister as to require the applicant to obtain another consent. It is not apparently a consent to which the National Development Act may be applied. Section 29 of the Petroleum Act applies to petroleum mining operations on certain classes of land within public control: for example, national parks, public reserves, state forests, the foreshore, the bed of the territorial sea and the continental shelf.[74] Subsection (3) provides that no person shall enter on any such lands or commence or carry on any mining operations thereon without the prior written consent of the appropriate Minister. Conditions may be attached to any such consent.[75] The Minister whose consent is necessary is the Minister responsible for the areas of land in question or for the legislation dealing with such lands:[76] for example, the Minister of Forests in relation to state forest land, the Minister of Transport for the bed of a navigable river or the bed of the territorial sea, the Minister of Lands for a national park, the Minister of Works and Development for a soil conservation reserve. If there is no such Minister,

74 Petroleum Act 1937, s. 29(1).
75 Ibid. s. 29(5).
76 Ibid. s. 29(4).

it is the Minister of Energy. The consent of the appropriate Minister is, of course, additional to the need for a prospecting or mining licence granted by the Minister of Energy under the Petroleum Act.

Which statutory regime applies to the granting of a consent under section 29 (3)? Is it the Petroleum Act or the legislation for which the other "appropriate" Minister is responsible? The purposes and perspectives of the two statutes may be very different. The Petroleum Act affords no clear answer to these questions. The provisions of other energy legislation, however, suggest that it is the policy of the Petroleum Act that applies.[77] The need for the consent of the appropriate Minister, moreover, is contained in the Petroleum Act. On the other hand, the appropriate Minister has the statutory responsibility for administering the other legislation: nor has he any special interest or expertise in the development of petroleum. In the case of proposed petroleum development in a national park, for instance, the function of the Minister of Lands would be to apply the principle of preservation in perpetuity of lands dedicated as a national park.[78] To enable that Minister to consent to petroleum mining under the Petroleum Act, there would presumably need to be evidence that the principle of preservation in the National Parks Act would not be infringed by the petroleum mining operations contemplated by the mining licence. These issues are probably not justiciable nor is a member of the public likely to have locus standi to challenge the decision of the Minister. These questions will be answered in the political arena. The legislation applies just as much, of course, as if the questions were to be resolved in a judicial context.

## V. THE OPERATIONAL REGIME

The need under section 29 (3) of the Petroleum Act for the consent of the appropriate Minister in relation to certain classes of public lands is not strictly part of the procedures for granting a licence. It is nevertheless related to the licensing regime. The same is true of the work programme to be approved by the Minister of Energy under section 14A of the Petroleum Act and the well-drilling operations requiring the consent of the Chief Inspector under Part III of the Petroleum Regulations. Although section 14 (1) (a) of the Petroleum Act confers upon the holder of a mining licence the exclusive right to mine for petroleum and the right for that purpose to carry out mining operations, that is not sufficient authority to engage fully in the development of the petroleum. Certainly no person other than the licensee may engage in any activity related to the petroleum.[79] The Petroleum Act however contemplates a series of related activities from exploration, through extraction and production to processing and final abandonment and each attracts its own regime of control and regulation. A mining licence may be the most extensive source of authority but it is not

77 See the specific power to attach environmentally protective conditions in s. 26(7) of the Mining Act 1971 and in s. 21(6) of the Coal Mines Act 1979. Otherwise, the environment protection perspectives of the legislation dealing with national parks, public reserves and State forests would be effectively nullified.

78 National Parks Act 1980, s. 4(1).

79 Because the mining licence confers "exclusive" rights.

comprehensive: it does not exonerate the licensee from compliance with the rules governing each specific aspect of the total development process.

*A. Approval of a Work Programme*

The work programme is linked to the term of the licence. The initial term of a normal maximum of four years[80] seems to be intended to be the period during which the programme is prepared and approved. During the initial term the licensee is prohibited from commencing the construction of any permanent works or structures.[81] He is obliged to submit to the Minister of Energy a proposed work programme for the development of the petroleum: this includes a description of the location, use and construction schedule of the works, and of the types and quantities of petroleum to be produced and, most importantly, details of the production programme.[82] The estimated costs of the work programme and a plan for financing the programme are elements of the information required of the licensee. Once the work programme, in its original form or after modification, has been approved by the Minister, the licence is extended for the specified term[83] and the work programme constitutes the working obligation of the licensee under the licence for the specified term.[84] The licensee is thereby required to carry out the works and undertake the production of petroleum.[85] If the work programme is not approved, the mining licence is revoked[86] and where the approval was withheld by the Minister because the programme was contrary to the national interest, the licensee is entitled to be reimbursed for the actual costs necessarily and directly spent on the project.[87]

What criteria guide the Minister in deciding whether to approve the work programme? The Minister has three options in relation to the approval of a work programme: either to approve the programme,[88] to withhold approval if development according to the programme would be contrary to recognised good oilfield practice[89] or to withhold approval if production of petroleum according to the production programme would be contrary to the national interest.[90] Any dispute about good oilfield practice may be settled by arbitration.[91] The national interest is a matter solely for the Minister.[92] A licensee whose programme has not been approved, however, is entitled to notification of the decision,[93] the reasons why it is contrary to good oilfield practice,[94] any changes necessary to

80 Petroleum Act 1937, s. 13(2)(a).
81 Ibid. s. 14A(2).
82 Ibid. s. 14A(3).
83 Ibid. s. 14A(11)(a).
84 Ibid. s. 14A(11)(b), first element: see also s. 5(3).
85 Ibid. s. 14A(11)(b), second element.
86 Ibid. s. 14A(12).
87 Ibid. s. 14A(13).
88 Ibid. s. 14A(4)(a).
89 Ibid. s. 14A(4)(b).
90 Ibid. s. 14A(4)(c).
91 Ibid. s. 14A(7).
92 Ibid. s. 14A(9).
93 Ibid. s. 14A(4) and (5).
94 Ibid. s. 14A(6)(a).

meet the requirements of the national interest[95] and a reasonable opportunity to make representations about the work programme.[96] The approval procedures are thus quite complex and potentially time-consuming. They are important. No permanent construction works may be commenced until the programme has been approved and the mining licence extended to a specified term.[97] Only then is the licensee in a secure legal position to proceed with the aspects of the development covered by the licence and the works programme.

*B. Approval of On-site Operations*

The remaining, but by no means unimportant, aspects of the operational regime are regulated under Part III of the Petroleum Regulations 1978. Four specific activities may not be commenced without the consent or approval of the Chief Inspector appointed under section 41 of the Petroleum Act: the drilling of a well;[98] the suspension of well drilling;[99] the completion of a well;[100] the abandonment of a well.[101] The expressions "well" and "drilling" are important. "Well" means a borehole drilled for the purpose of prospecting for petroleum or for obtaining petroleum or a borehole producing or associated with the production of petroleum.[102] "Well drilling" means the drilling of such a well: it includes any operation having these characteristics —

(a) relating to any on-site preparation prior to drilling;

(b) relating to the completion, suspension or abandonment of a well;

(c) relating to the re-entry of a well for any deepening, repair, re-drilling or any other purpose.[103]

Any such operation requires the written consent of the Chief Inspector and such conditions as he thinks fit may be annexed to the consent.[104] The person in charge of the site where these operations are being carried out in addition requires to hold a service permit granted by the Chief Inspector.[105] The qualifications for such a permit are specified in the Regulations.[106] Consent or approval, rather than written consent, is necessary for suspension, completion and abandonment.[107] If the well is offshore, consent to suspension requires the Chief Inspector to consult the Director of the Marine Division of the Ministry of Transport.[108] The Regulations prescribe the procedures for obtaining the consent or approval and the information necessary to be provided in support of the request.[109] The

95 Ibid. s. 14A(6)(b).
96 Ibid. s. 14A(6), final element.
97 Ibid. s. 14A(2).
98 Petroleum Regulations 1978, reg. 39.
99 Ibid. reg. 72(2).
100 Ibid. reg. 71(1).
101 Ibid. reg. 74.
102 Ibid. reg. 2(1) "well".
103 Ibid. reg. 35.
104 Ibid. reg. 39.
105 Ibid. reg. 36(1).
106 Ibid. reg. 36(2).
107 Ibid. regs. 71, 72 and 74.
108 Ibid. reg. 72(2).
109 Ibid. regs. 40(1) and (2), 71(1) and (2), 72(3), 75(1) and 76.

Regulations however are generally silent as to the criteria by which the Chief Inspector reaches his decisions: nevertheless they contain requirements of various kinds that clearly affect the way in which the Chief Inspector discharges his responsibilities.

*C. The Abandonment of a Well*

Consider abandonment as an example. There is, first of all, a general obligation that a well neither completed nor suspended should be "properly" abandoned before the attendant rig is released.[110] The consent of the Chief Inspector is required before the operation of abandonment commences.[111] A written application is made to be accompanied by the relevant information, including the reasons for abandonment and the detailed programme of abandonment.[112] The abandonment programme may be modified by the Chief Inspector or he may attach conditions to any consent he may give.[113] There is provision for verbal proceedings to be confirmed later in writing.[114]

The procedure for abandonment is not left to the discretion of the operator or the Chief Inspector. Regulation 76 contains three regulatory elements. There is first of all a general duty that abandonment shall be performed under strict supervision in accordance with good oil or gas field practice. The standard of generally accepted practice is well precedented and applies, for example, not only to the work programme under section 14A (4) (b) and (5) (b) of the Petroleum Act but also to the construction and operation of well drilling equipment under Regulation 37 of the Petroleum Regulations. Then the Regulation specifies a list of twelve requirements that must be followed with one exception only. Most of the requirements relate to the location of plugs in cased and uncased holes and are drafted in precise and objectively identifiable terms. There are, nevertheless, one or two references to more flexible criteria in terms such as "satisfactory" and "appropriate". This does not detract from the general impression of clearly stated requirements. It is consistent, finally, with the one general exception built into Regulation 76: namely, the qualification that the prescribed requirements must be followed "unless otherwise approved by the Inspector". The effect of this clause, it would seem, is to enable the Inspector to approve an alternative method of achieving the same objective as the specific requirement. The clause does not, it is suggested, enable the Inspector to disregard the requirement that otherwise would need to be followed.

*D. The Enforcement of Regulatory Obligations*

This is fairly typical of the Regulations in general. Obligations derive from specific legal requirements, from compliance with current practice or from limited executive discretion. The need for legal precision is tempered by the desirability of a degree of flexibility to enable a reasonable solution to be found in particular

110 Ibid. reg. 73.
111 Ibid. reg. 74.
112 Ibid. reg. 75(1).
113 Ibid. reg. 75(2).
114 Ibid. reg. 75(3).

sets of circumstances that lack the uniformity so much regarded by the law. The mere existence of an element of flexibility may cause problems of application and enforcement of the Regulations both by and against those responsible for administering the legislation. This is not a problem limited to the drilling of wells, the production of petroleum or any other part of the process of petroleum development. It arises whenever technology and the law come together to create a system that attempts to satisfy the requirements of both disciplines. Technology operates within certain physical restraints: the law is constrained only by its own intellectual limitations. Perhaps it is easier for the law to adapt by reorganising its conceptual and methodological approaches to such matters.

## VI. THE STABILITY OF THE SYSTEM

### *A. Legal Stability*

Although the law is a static social organism at any particular moment of time, it is a system that may be changed at any time. This is true of legal rights and duties as it is of the legal system at large. It may be exceptional for changes in the law to be made retrospective in effect. In relation to energy development projects, however, the possibility of even prospective change is especially significant simply because of the size and duration of the projects. In other words, what certainty of legal stability does petroleum development enjoy? There are at least two dimensions to the problem: the international and the national. The trend of international legal doctrine is in some respects to confirm and emphasise the sovereignty of the host state over its natural resources, its sources of energy and its energy development. This has legal implications, for example compensation for the expropriation by the host state of assets belonging to a foreign enterprise, but the major issues are likely to arise more in the political context. The national aspects of stability are for present purposes more important.

### *B. Variation of Vested Interests*

There is always the possibility of amendment of the regime created by the Petroleum Act. Indeed it has been amended from time to time and will no doubt continue to be so modified. That is fundamentally a political question. There are however provisions in the present legislation whereby the regime may be adapted or modified as it applies to individual entrepreneurs. Petroleum development rights originate only by decision of the Minister of Energy. To what extent can they be changed by decision of the Minister?

There are powers in the Act enabling variation of the status quo in such a way that may not detrimentally affect the interests of the licensee. There is, for example, the power of the Minister to require two or more licensees to cooperate in the unitary development of an oilfield where the land comprised in the licences forms part of a single geological structure.[115] It is open to the Minister in certain circumstances to extend the term of the mining licence to enable completion of the work programme.[116] The area comprised in a licence may be extended by

115 Petroleum Act 1937, s. 40(1).
116 Ibid. s. 13(3)(c).

the Minister but the power is available only on the application of the licensee.[117] The licensee may at any time, on giving the appropriate written notice or in some cases without notice, surrender the licence completely or in relation to a defined portion of the land.[118] Any such voluntary surrender of the licence does not affect the liabilities of the licensee up to the date of the surrender.[119] Mining operations that are immediately dangerous to life or injurious to health may be stopped by notice of the inspector:[120] they may be resumed once the Inspector or a District Court has decided in effect that it is safe to do so.[121] The Minister, finally in this regard, has a general power to modify or suspend a programme of work referred to in a prospecting licence,[122] the approved work programme in a mining licence[123] or any obligations in either such licence on such terms and conditions as he thinks fit. But in these cases the power is available to the Minister only on application by the holder of the relevant licence. But once it has been activated by application, the power of the Minister, it would seem, is not limited to complying with the request of the licensee: the Minister may in his discretion vary it as he sees fit. It may therefore be potentially dangerous for a licensee to apply for a variation if this were the position.

The rate of royalty payments is variable in certain circumstances. It is determined initially by the Minister of Energy and specified in the relevant licence.[124] The rate specified in a mining licence exchanged for a prospecting licence is that specified in the prospecting licence.[125] The Minister has a general power at any time and for any period to waive payment of royalty or reduce the rate of royalty payable under the licence.[126] There is no general power to increase the rate but where the specified term of a mining licence has been extended under section 13 (3), the rate may be increased for the period of the extension.[127] Extension of the term of a licence may be desirable for the licensee in certain circumstances. This must be tempered by the possibility of an increased royalty rate in the future. In the final analysis, however, there is presumably no legal reason why the royalty rate may not be varied either by general legislation or under legislation directed to a specific licence or class of licence.

The Ministerial power in section 27 to revoke a licence is essentially a mechanism for ensuring compliance by the licensee with the relevant legal obligations either under the licence or under the Act. If the Minister has reason to believe that the licensee has not discharged his obligations or has not made reasonable efforts to do so, he may give to the licensee a default notice requiring it to be remedied.[128]

117 Ibid. s. 20.
118 Ibid. s. 26(1).
119 Ibid. s. 26(4).
120 Ibid. s. 47(1).
121 Ibid. s. 47(4)(a) and (b) and (9).
122 Ibid. s. 10 as substituted by s. 4 of the Petroleum Amendment Act 1982.
123 Ibid. s. 15.
124 Ibid. s. 18(3), first element.
125 Ibid. s. 18(3), second element.
126 Ibid. s. 18(4).
127 Ibid. s. 18(5).
128 Ibid. s. 27(1).

If that achieves nothing, a further notice may be served declaring that the licence is revoked.[129] Reasons for the Minister's decision require to be specified[130] and the licensee may appeal against the decision to the Administrative Division of the High Court.[131] Revocation, then, turns upon one of two relatively simple issues. Has the licensee complied with his obligations? Has he made reasonable efforts to do so? There is obviously an element of judgmental discretion involved in the second question to the extent that it raises more than questions of fact and the application to those facts of the relevant obligations. Either question presents a justiciable issue. Responsibility for the state of affairs giving rise to the possibility of revocation, however, remains firmly with the licensee.

*C. Variation of the Rate of Development*

The powers in sections 14B and 14C go far beyond the mere enforcement of legal obligations. The former concerns postponement of petroleum development; the latter acceleration of development. The introductory phrases in subsection (1) of each section suggest moreover that these powers take precedence over anything else in the Act. Section 14B invests the Minister with a power to refuse to extend a mining licence to a specified term where he is satisfied that the rate at which it is proposed to produce petroleum covered by that licence would be contrary to the national interest.[132] The national interest is a matter for the Minister alone.[133] Without a specified term a mining licence lacks the rights essential to the development of the petroleum.[134] Although section 14B (1) does not enable the Minister to deprive the licensee of a specified term after it has been granted, it is sufficient to render the interest of a successful prospecting licensee worthless until the Minister decides in effect to permit the development to proceed. The licensee, however, must be advised by the Minister before the power is formally invoked of any changes to the work programme necessary to meet the national interest.[135] If no such changes are made and the Minister proceeds to exercise the power to postpone development, the licensee is given the choice either of having the right to an extension of the licence for a specified term deferred[136] for the relevant period during which his future interests are protected[137] or of surrendering his rights under the mining licence in return for reimbursement of the costs expended on the project.[138] The commercial interest of the licensee is likely to be seriously affected no matter which decision is made and the licensee's only consolation will be that his interests have been overriden by the national interest.

129 Ibid. s. 27(2), first element.
130 Ibid. s. 27(2), final element.
131 Ibid. s. 27(3).
132 Ibid. s. 14B(1).
133 Ibid. s. 14B(8).
134 Ibid. s. 14A(2).
135 Ibid. s. 14B(6).
136 Ibid. s. 14B(2)(b)(i).
137 Ibid. s. 14B(5).
138 Ibid. s. 14B(2)(b)(ii).

Section 14c seeks to ensure rather than to delay development. The power is available when a discovery has been made by the licensee, the licensee is not carrying out appraisal work nor has applied for a mining licence and the national interest requires development of the petroleum.[139] If the licensee does what the national interest requires, then there will be no need for the Minister to exercise the power in section 14c. If not, then the Minister will either reduce the land covered by the licence to exclude the reservoir of petroleum discovered by the licensee[140] or revoke the licence where the land remaining after excluding the discovery already made would be inadequate for future prospecting.[141] As with section 14B, the Minister determines the national interest[142] and the exercise of the power requires the Minister to reimburse the licensee for the costs of the discovery.[143] In this case also, the criterion for the exercise of the power is finally the national interest: so the national interest is afforded legal precedence.

*D. Predictability*

The pattern disclosed by the enactment of these several powers is one of considerable certainty and stability. A licensee has the capacity to seek some form of release from his obligations by giving up his rights. The particular licensee regime is variable in several ways on the initiative of the Minister but a degree of protection of the licensee's interests is normally provided by the legislation. In one or two more extreme cases the national interest may be given legal predominance, but the licensee is usually given the option to proceed with the development in accordance with the needs of the national interest: otherwise the licence is revoked. The position of the licensee is prone to instability, however, in two sets of circumstances: first, where the licensee is failing to comply with the obligations imposed upon him either by the licence or by the legislation; second, where the national interest has legal priority over the interests of the licensee. The former is relatively easy to predict; the national interest almost impossible to identify unless the policies pursued by the Minister of Energy are clear, consistent and readily accessible to the community at large.

*E. Procedures for Dispute Settlement*

The final aspect affecting the stability of the regime is the nature of the means recognised or created by the legislation for the settlement of disputes. The Petroleum Act contemplates four methods of doing so: by arbitration; by specific reference to a judicial process; where the matter falls exclusively within the determination of the Minister; and where the question is left open for the courts to exercise their normal jurisdiction. Reference to arbitration is the method prescribed by the legislation for solving disputes that are technical in character: for example, the size of the area of land reasonably adequate to enable mining

139 Ibid. s. 14c(1)(a) to (c).
140 Ibid. s. 14c(1)(d).
141 Ibid. s. 14c(1)(e).
142 Ibid. s. 14c(8).
143 Ibid. s. 14c(6).

operations to be carried out in accordance with recognised good oilfield practice;[144] whether the programme for development proposed by the licensee would be contrary to recognised good oilfield practice;[145] where there is a dispute about the costs incurred in exploration and development;[146] where there is a dispute about the selling value of natural gas or about allowances for certain costs in determining that value;[147] and where there is disagreement whether the licensee has substantially complied with the terms and conditions of the licence.[148] Where any of these matters is referred to arbitration, it is deemed to be a submission under the Arbitration Act 1908.[149] If the licensee fails to refer the matter to arbitration under these provisions, the matter is decided by the Minister as he considers just and equitable.[150] Once a decision has been made by an arbitrator, it is final and binding.[151]

The judicial process is specifically nominated on only three occasions, each of which is an example of the traditional adjudicative function. The Administrative Division of the High Court hears appeals against a decision to revoke a licence.[152] The cessation or resumption of dangerous mining operations lies within the jurisdiction of the District Court.[153] All moneys payable to the Crown are recoverable in the normal way in any court of competent jurisdiction.[154] On the other hand, where the legislation invests the Minister with the authority to determine the national interest, his decision is final and binding on the licensee and the jurisdiction of the courts is excluded from these matters.[155] Whether that remains so if the National Development Act is applied to the project is not clear.[156] Where a remedy is neither provided nor excluded, there is no reason to conclude that the parties in dispute may not have recourse to the ordinary jurisdiction of the courts. Many important matters fall into this category, including the procedures governing the licensing and operational regimes, many of the rights and duties of the licensee and some of the restrictions upon the exercise of ministerial power.

### *F. Summary*

The scheme of the Petroleum Act 1937 seems to be twofold: to provide for arbitration in the case of technical matters and to exclude the courts from a determination of the national interest in particular cases. Otherwise the judicial

144 Ibid. s. 11(2) and (3).
145 Ibid. s. 14A(4)(b), (5)(b) and (7).
146 Ibid. ss. 14A(13)(c) or (d) and (14), 14B(2)(b)(ii) and (7), and 14C(6) and (7).
147 Ibid. s. 18(8)(b), (9) and (10).
148 Ibid. s. 47I(2).
149 Ibid. s. 47J(1).
150 Ibid. s. 47J(2).
151 Ibid. s. 47J(3).
152 Ibid. s. 27(3).
153 Ibid. s. 47(4)(b) and (9).
154 Ibid. s. 47K(1).
155 Ibid. ss. 14A(a), 14B(8) and 14C(8).
156 See National Development Act 1979, s. 17 as amended by s. 9 of the National Development Amendment Act 1981.

function remains largely intact. The legislation is thus invested with a certain symmetrical form. Generally it is only the national interest that may legally take precedence over the rights of the particular licensee and it is only the national interest that is excluded from some form of judicial or arbitral determination in the event of a dispute. The Petroleum Act introduces a range of concepts and mechanisms appropriate to its subject matter and it does so in a way that preserves most of the traditional framework of the legal system.