THE SEA-BED

By C. W. HARDERS*

Nearly half a century has gone by since Sir Cecil Hurst invited readers of the *British Year Book of International Law* to consider with him the question—"Whose is the Bed of the Sea ? "[1]

Almost twenty-five years ago, President Truman initiated State action to assert authority over the natural resources of the sea-bed and subsoil of the continental shelf beyond the limits of the territorial sea.[2]

In 1953, Australia contributed significantly to the body of State practice. On 11 September 1953, the Governor-General issued a proclamation declaring the existence under international law of Australia's sovereign rights over the sea-bed and subsoil of the continental shelf contiguous to the coasts of Australia and its Territories for the purpose of exploring and exploiting the natural resources of that sea-bed and subsoil.[3] At about the same time, the Commonwealth Parliament enacted the Pearl Fisheries Act (No. 2) 1953 (Cth) amending the Pearl Fisheries Act 1952-1953 (Cth), which made subject to Australian control foreign nationals and foreign vessels engaging in pearling on the continental shelf. In section 5 of the Principal Act, "pearling" was defined to include—

> the work of searching for or obtaining pearl shell, trochus, bêche-de-mer or green snails

Australia thus acted upon the view that the sovereign rights exercisable by a coastal State over the natural resources of its continental shelf extend not only to mineral and other non-living resources but to certain living resources as well. In 1958, at the first United Nations Conference on the Law of the Sea, Australia took the lead in securing the inclusion of the definition of "natural resources" that appears as paragraph 4 of Article 2 of the Convention on the Continental Shelf:

> The natural resources referred to in these articles consist of the mineral and other non-living resources of the sea-bed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the sea-bed or are unable to move except in constant physical contact with the sea-bed or the subsoil.[4]

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* LL.B. (Adel.), O.B.E.; Deputy Secretary, Commonwealth Attorney-General's Department. The views in this article are expressed by the author in his personal capacity.

[1] (1923) IV *British Year Book of International Law* 34.

[2] Proclamation No. 2667—Policy of the United States with respect to the subsoil and sea-bed of the Continental Shelf—28 September 1945.

[3] Commonwealth Statutory Rules 1901-1956, Vol. V, 5350; see also the further proclamation at p. 5351 as to the continental shelf contiguous to the coasts of the Trust Territory of New Guinea. On the two proclamations, see article "Australia and the Continental Shelf" 27 *Australian Law Journal* 458.

[4] (1964) 499 United Nations Treaty Series 311.

The purpose of this article, however, is not to examine the origins of this definition, the possibilities of its future development, or the continuing steps being taken in Australian domestic law with regard to the living resources of the continental shelf.[5] My object, instead, is to give an account of the study now being made in the United Nations of the exploration and use of the sea-bed and ocean floor, and the subsoil thereof, "beyond the limits of national jurisdiction" and to provide some picture of the pressures of national interest and policy that are inseparable from the making of new rules in the international law of the sea.

The sovereignty of a coastal State over the bed and subsoil of its territorial sea is, of course, long-established in international law and is now declared and codified in Article 2 of the Convention on the Territorial Sea and the Contiguous Zone. Current Australian legal interest in the sea-bed in the area of the territorial sea is concerned with the tantalizing constitutional question, to which the Chief Justice of the High Court and Windeyer J., have recently directed attention in their judgments in *Bonser v. La Macchia*[6], whether authority to control the exploitation of the resources of the bed and subsoil of the territorial sea adjacent to a State resides in the adjacent State or in the Commonwealth or in both the State and the Commonwealth, subject to section 109 of the Constitution.

That a coastal State has sovereign rights for the purpose of exploring the continental shelf and exploiting its natural resources is also clearly beyond dispute. The recent Judgment of the International Court of Justice in the *North Sea Continental Shelf Cases*[7] between the Federal Republic of Germany (which is not a party to the Convention on the Continental Shelf) and Denmark and the Netherlands (which are) has removed all possibility of argument—if indeed any such possibility still remained—that the shelf doctrine as so stated may not be part of customary, as well as of conventional, international law. In the process, the Court has acknowledged the status of the Truman Proclamation of 28 September 1945, both as the starting point of the positive law on the subject and for its enunciation of the principles now reflected in Article 2 of the Geneva Convention on the Continental Shelf.

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[5] See the Continental Shelf (Living Natural Resources) Act 1968 (Cth) which provides machinery for the application of Australian control of any living resources covered by the Convention definition of "natural resources", including, for example the clam found on Australia's north-east continental shelf as well as the four species referred to in the Pearl Fisheries Act 1952-1953 (Cth) which will be repealed when the more extensive Act of 1968 comes into operation.

[6] A case involving the applicability of the Fisheries Act 1952-1966 (Cth) to matters occurring approximately 6½ miles from the coast of New South Wales and raising the interpretation of section 51 (x) of the Constitution. The case was decided on the position before the amendment made to the Fisheries Act in 1967 under which Australia's exclusive fishing limits, but not the limits of the territorial sea, were extended from 3 to 12 miles.

[7] *Federal Republic of Germany* v. *Denmark and Federal Republic of Germany* v. *Netherlands* (1969) 8 *International Legal Materials* 340. See comment on this case, *infra* n. 25.

Speaking shortly after the first United Nations Conference on the Law of the Sea, Sir Kenneth Bailey commented that the international law of the sea had become as dynamically unsettled as the law of physics. Since the close of the second world war, Sir Kenneth said, the law of the sea had "literally been bursting into new shapes".[8] The first Conference had only recently adopted four Conventions, including the Convention on the Continental Shelf and Sir Kenneth Bailey's observation was, I think, as much directed to this product of the Conference, which gave recognition to the national, sovereign rights of coastal States in respect of the sea-bed beyond the limits of the territorial sea, as to any other part of the work of the Conference. It would seem that the process of development is not yet complete. Under pressures of advancing technology and the ability of man to make use of the sea-bed for commercial and military purposes, the United Nations is engaged in a study of the exploration and use of the sea-bed and its subsoil "beyond the limits of national jurisdiction".

At its Twenty-second Session in 1967, the General Assembly of the United Nations established an Ad Hoc Committee on the Sea-Bed, consisting of thirty-five States. The Committee had a mandate for one year. After three meetings, the Committee reported to the General Assembly at its Twenty-third Session in 1968.[9]

Australia was a member of the Ad Hoc Committee. Australia is also a member of the further Standing Committee on the Peaceful Uses of the Sea-bed and the Ocean Floor beyond the Limits of National Jurisdiction, set up by the General Assembly in 1968. The Standing Committee held its first detailed working session at New York in March of this year and on 11 August began a further session preparatory to submitting an interim report to the General Assembly.

Just as the establishment of the rights of the coastal State over its continental shelf beyond the limits of the territorial sea had its origins in a United States Presidential pronouncement, so the current United Nations interest in matters beyond the limits of the continental shelf may be thought to have had its first, though less dramatic, beginnings in the United States. At the commissioning of a United States oceanographic vessel, "The Oceanographer", in 1966, President Johnson said:

> Under no circumstances, we believe, must we ever allow the prospects of rich harvest and mineral wealth to create a new form of colonial competition among the maritime nations. We must be careful to avoid a race to grab and to hold the lands under the

[8] April 1959, Roy Milne Memorial Lecture, "Australia and the Law of the Sea" (1959) 1 *Adelaide Law Review* 1.

[9] Report of the Ad Hoc Committee to study the Peaceful Uses of the Sea-bed and the Ocean Floor beyond the Limits of National Jurisdiction, General Assembly, Official Records, Twenty-third Session, A/7230.

high seas. We must ensure that the deep sea and the ocean bottoms are, and remain, the legacy of all human beings.[10]

The immediate impetus for the current United Nations study, however, came a year later from the initiatives taken by the Representative of Malta, Ambassador Pardo, at the Twenty-second Session of the General Assembly. By Resolution 2340 (XXII), the General Assembly, with Australia's support, set up the Ad Hoc Committee to prepare a study, including a survey of past and present United Nations activity and of existing international agreements, and providing also an account of the scientific, technical, economic, legal and other aspects of the matter. The Resolution called upon the Ad Hoc Committee to give an indication regarding practical means of promoting inter-national co-operation in the exploration, conservation and use of the sea-bed and ocean floor and their subsoil and resources.

The principal paragraph of the Resolution adopted by the General Assembly in 1968,[11] instructs the present Standing Committee:—

(a) To study the elaboration of the legal principles and norms which would promote international co-operation in the exploration and use of the sea-bed and the ocean floor and the subsoil thereof beyond the limits of national jurisdiction and to ensure the exploitation of their resources for the benefit of mankind, and the economic and other requirements which such a règime should satisfy in order to meet the interests of humanity as a whole;

(b) To study the ways and means of promoting the exploitation and use of the resources of this area, and of international co-operation to that end, taking into account the foreseeable development of technology and the economic implications of such exploitation and bearing in mind the fact that such exploitation should benefit mankind as a whole;

(c) To review the studies carried out in the field of exploitation and research in this area and aimed at intensifying international co-operation and stimulating the exchange and the widest possible dissemination of scientific knowledge on the subject;

(d) To examine proposed measures of co-operation to be adopted by the international community in order to prevent the marine pollution which may result from the exploration and exploitation of the resources of this area.

The Resolution also calls upon the Committee to study further, within the context of the title of the item, and taking into account the studies and international negotiations being undertaken in the field of

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[10] 13 July 1966, *Weekly Compilation of Presidential Documents*, Office of the Federal Register, National Archives and Records Service, Washington.

[11] Resolution 2467A (XXIII).

disarmament, the reservations exclusively for peaceful purposes of the sea-bed and ocean floor without prejudice to the limits which may be agreed upon in this respect.

The terms of the United Nations instruments provide an indication of the reasons underlying the action of Malta and the support that it has received from a number of developing countries. Ambassador Pardo has on more than one occasion provided a clear analysis of Malta's objectives in seeking United Nations intervention. He has done so in the First Committee of the General Assembly, in the Assembly itself, in the Sea-bed Committees and in a number of contributions to international journals. Partly because its title provides a key to the initiative, I propose in this summary survey to refer only to Ambassador Pardo's *Round Table* article, "Sovereignty under the Sea—The Threat of National Occupation".[13] Ambassador Pardo there draws attention to the rapid development of technology, making possible the exploration, occupation and exploitation of the world's sea-beds and much of its ocean floor and its use for both commercial and military purposes. The sea covers some one hundred and forty million square miles, or seventy-one *per cent* of the earth's surface. Ambassador Pardo points to the potential economic value of the mineral resources of the deep seas including petroleum and manganese. He urges that these resources be available for exploitation, in the interests of all mankind, under the control of an international authority. He is anxious that these measures should be taken soon because the "continental shelf" is not precisely defined in the Convention of 1958. States may therefore be encouraged to extend the area of national jurisdiction beyond reasonable limits, thereby leaving little, if anything, to be administered for the benefit of all by an international authority. Indeed, some commentators, including Professor Oda of Japan, have suggested that all the submarine areas of the world have been theoretically divided among coastal States according to the definition in the Convention on the Continental Shelf.[14]

The difference between the developments leading to the adoption of the Shelf Convention a little over ten years ago and the background to the current United Nations activity will be immediately apparent. The trend of development up to 1958 reflected the virtually unanimous will of coastal States to extend areas of national jurisdiction. But we now find an appreciable number of coastal States seeking to prevent further extensions of national authority. This is an intriguing situation. In fisheries matters, it would seem that most developing countries continue to see their position as being best safeguarded by an increased recognition

[13] (1968) *Round Table* No. 232, 347-356.

[14] Shigeru Oda, "Proposals for Revising the Convention on the Continental Shelf" (1968) 7 *The Columbia Journal of Transnational Law* 9.

of the special interest that a coastal State has in fisheries adjacent to its coast. In sea-bed mining matters, on the other hand, there is a tendency, as revealed in the sessions to date of the United Nations Sea-bed Committees, to regard the national interest in the earning of revenues as being outweighed by the lack of technical capacity of developing countries to exploit the resources themselves. Hence a disposition on the part of some developing countries, as revealed in the discussions of 1968-1969, to take a new look at how the situation resulting from the advance of technology should be handled, though it would be an extreme over-simplification to suggest that the participating States have ranged themselves into two groups: developed countries on one side and developing countries on the other.

It seems to me that three questions stand out for consideration. There is first the question as to the nature of the legal system that should apply to the exploration for, and the exploitation of, the resources of the sea-bed and subsoil beyond the limits of national jurisdiction. This in turn raises the further question as to the point at which the legal system decided upon should take over from the national jurisdiction of States (in other words, where should the boundary line be drawn between the area subject to national jurisdiction and the area beyond the limits of that jurisdiction). Finally, there is the objective of restricting the use of the sea-bed to use for peaceful purposes, which is receiving concurrent, and more detailed, attention in the Committee on Disarmament at Geneva. All three questions plainly contain a considerable political element.

It is not surprising therefore that the United Nations study should not yet have made a great deal of progress. After all, the Convention on the Continental Shelf was produced following five years of study by the International Law Commission, assisted by the comments of governments on draft Articles prepared in that period, and after consideration by an international Conference attended by most of the then members of the United Nations and of the Specialised Agencies. Moreover, knowledge of the deep sea-bed is still meagre. J. B. R. Livermore of the Commonwealth Department of National Development has noted that, according to the estimate of a respected oceanographer, it would take one thousand vessels twenty-five years to evaluate thoroughly the resources of the floor of the Pacific Ocean alone.[15] But the cautious approach that most of the participating States are continuing to take in the affairs of the Sea-bed Committee obviously stems from the fact that few of them have yet worked out their policy conclusions.

D. H. N. Johnson, the well-known British international lawyer and member of the British delegation of the first United Nations Conference on the Law of the Sea, commented after that Conference that it is

[15] *National Development Quarterly*, December 1968.

essential to realise that an international conference, even if it is nominally a legal conference, having for its task the codification and progressive development of international law, does not take place in a vacuum, and is immune from none of the political strains and stresses of the time. This lesson, in his view, was learned at The Hague in 1930 and it was more than confirmed at Geneva in 1958 when States showed their awareness of this fact of international life by including in their delegations high-ranking politicians and political advisers, as well as lawyers and technical experts. In Johnson's conclusion, the Geneva Conference, "because of the overwhelming importance of the political element, was not a Conference whose outcome the lawyers as such could influence to any great extent".[16] Another distinguished lawyer and delegate to the Geneva Conference of 1958, Max Sørensen of Denmark, similarly emphasised the force of political factors and of the material interests involved, whether of national economy or military security. He also made a plea for greater use of the International Law Commission in the law-making processes of the United Nations.[17]

Sørensen's hope has not been realised. Several important projects—the law of outer space, the question of aggression, the study of the principles of international law concerning friendly relations and co-operation among States, and now the working out of rules concerning the use of the sea-bed beyond the limits of national jurisdiction—have been committed by the General Assembly directly to special committees. These are all projects of a law-making and politically sensitive character and the politically controversial issues tend to come rapidly to the forefront of the discussions. The Sea-bed Committee is no exception.

The observations that I have noted do not at all detract from the importance of the role of the international lawyer in ascertaining, evaluating and interpreting existing rules, whether deriving from custom or from convention, in advising as to ways and means by which international law may be progressively developed and in the working-out and drafting of new international instruments. In all these matters the international lawyer plays a necessary and leading part. But obviously, and particularly in matters pertaining to the law of the sea since they so closely affect the daily activities of States and their nationals, the ultimate decision must often turn upon a consideration and balancing by governments of varied and sometimes conflicting policy interests.

Much has been written, for example, concerning the waters of the Great Barrier Reef and the legal character that those waters have or ought to have. The legal position regarding the Great Barrier Reef, under existing Australian policy, has been stated by Ministers in the

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[16] D.H.N. Johnson, "The Geneva Conference on the Law of the Sea" (1959) *Year Book of World Affairs* 68, 77-78.

[17] M. Sørenson, "The Law of the Sea" (Nov. 1958) *International Conciliation* 195.

Commonwealth Parliament on several recent occasions and is shortly as follows. All islands in the area of the Reef, including reefs permanently above water, are part of the State of Queensland. Along the mainland and around each island there is a territorial sea of 3 miles. Also along the mainland and around each island there is an exclusive fishing zone extending 12 miles from the baseline from which the territorial sea is measured. In making this measurement account is taken, in accordance with Article 11 of the Convention on the Territorial Sea and the Contiguous Zone, of the so-called "low-tide elevations" where these elevations are situated wholly or partly within the territorial sea. In the Barrier Reef area, there are numerous low-tide elevations, namely, areas of land that are surrounded by and are above water at low tide, but are submerged at high tide, that begin inside 3 miles and extend for considerable distances beyond the 3-mile limit measured from the island itself. Finally, the sea-bed and subsoil, extending to the outer limits of the Reef consist either of lands beneath internal waters or the territorial sea, or have the status of continental shelf within the meaning of the Geneva Convention.

There would appear to be sound argument for the view that, as a matter of law, certain substantial areas of the waters within the outer barrier of the Great Barrier Reef could be enclosed as internal waters, in which case Australia's territorial sea and exclusive 12-miles fishing zone would be measured from lines connecting points on the outer barrier. As long ago as 1902, Mr Alfred Deakin, as Attorney-General, expressed the opinion that there was a strong case for regarding waters between the mainland and groups of islands forming a natural appendage to the mainland as territorial waters, even though they might be outside the 3-mile limit. Deakin thought that a strong case could be made out for holding that the waters within the Great Barrier Reef are territorial waters. Except that nowadays one would observe the well-recognized distinction between internal waters and the territorial sea, this statement may be seen as anticipating in a quite remarkable way the principles that were to be enunciated by the International Court of Justice many years later in the *Anglo-Norwegian Fisheries Case*.[18] In the light of that decision, the existence of a naturally formed outer barrier, whose continuity led the draftsmen of the instruments and legislation describing the land territory of Queensland to refer as a matter of course to the outer barrier as "the line of the Great Barrier Reef", and the geographically confused character of the area within the line suggest that action to enclose at least part of the waters of the Reef as internal waters would be justifiable in international law. That no such action has yet been taken shows only too clearly that the legal considerations cannot by themselves be decisive.[18A]

[18] (1951) I.C.J. Reports, 116.

[18A] See, generally, observations by the Attorney-General, Hansard, 30 May, 1968, p. 1793.

I return from this Barrier Reef excursion to note that the Ad Hoc Committee on the Sea-bed, in part because of its exploratory terms of reference and in part because of the reluctance of most participating States, did not come to grips with the question of the commencing point of the area beyond the limits of national jurisdiction. Nor did the Committee debate in any detail the system that should govern exploration and exploitation in that area. At its final meeting in Rio de Janeiro in August 1968, the Committee sought, unsuccessfully, to reach agreement on a set of simple, basic principles that might provide a starting-point for the anticipated Standing Committee.[19] Australia assisted in formulating, and supported, the following draft principles:

(1) There is an area of the sea-bed and ocean floor and the subsoil thereof, underlying the high seas, which lies beyond the limits of national jurisdiction (hereinafter described as "this area");
(2) Taking into account relevant dispositions of international law, there should be agreed a precise boundary for this area;
(3) There should be agreed, as soon as practicable, an international règime governing the exploitation of resources of this area;
(4) No State may claim or exercise sovereign rights over any part of this area, and no part of it is subject to national appropriation by claim of sovereignty, by use or occupation, or by any other means;
(5) Exploration and use of this area shall be carried on for the benefit and in the interests of all mankind, taking into account the special needs of the developing countries;
(6) This area shall be reserved exclusively for peaceful purposes;
(7) Activities in this area shall be conducted in accordance with international law, including the Charter of the United Nations. Activities in this area shall not infringe upon the freedoms of the high seas.

Further discussion of draft principles took place, but without result, at the March, 1969 meeting of the Standing Sea-bed Committee. It remains to be seen whether the session commenced on 11 August will be more productive.[19A]

Perhaps the most controversial issue confronting States—as controversial in its way as the breadth of the territorial sea, on which international agreement has still not been reached—is the question where a boundary should be drawn between the relevant areas, namely, the area beyond, and the area within, the limits of national jurisdiction. Article 1 of the Convention on the Continental Shelf defines the shelf but it does not do so with precision. Article 1 reads:

[19] Report of the Ad Hoc Committee, A/7230, para. 88.

[19A] The meeting in August, 1969 did not reach agreement on a set of principles. The report of the Legal Sub-Committee contains a 'synthesis', which endeavours to isolate the common denominators of agreement. The 'synthesis' emphasizes, however, that for a number of delegations these common denominators were unacceptable in the absence of additional provisions, which in turn were unacceptable to other delegations.

> For the purpose of these articles, the term "continental shelf" is used as referring (a) to the sea-bed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said area; (b) to the sea-bed and subsoil of similar submarine areas adjacent to the coasts of islands.[20]

The International Law Commission had, in its first draft in 1951, proposed a definition referring to "the sea-bed and subsoil of the submarine areas contiguous to the coast, but outside the area of territorial waters, where the depth of the surperjacent waters admits of the exploitation of the natural resources of the sea-bed and subsoil". In 1953 the Commission abandoned this criterion of exploitability in favour of a fixed depth limit of 200 metres. The Commission thought that its first text lacked the necessary precision and that it might have given rise to disputes and uncertainty. Nevertheless, the Commission finally adopted a draft providing for the two criteria that were accepted by the Geneva Conference in 1958 and that are now contained in Article 1 of the Convention. The 200 metres line is generally the point at which the continental shelf in the geological sense comes to an end. It would seem from the history of the provision that the intention was that a coastal State should be entitled, under any circumstances, to exercise sovereign rights over the continental shelf out to the edge of its geological shelf, whatever the distance might be from the land territory of which the shelf is the natural prolongation. It does not seem that this view is affected by observations of the Judges of the International Court of Justice in the *North Sea Continental Shelf Cases*[21] concerning the meaning of such expressions as "contiguous" and "adjacent to". When the Court in its Judgment said that "by no stretch of the imagination can a point on the continental shelf situated, say, a hundred miles, or even much less, from a given coast, be regarded as 'adjacent' to it, or to any coast at all, in the normal sense of adjacency, even if the point concerned is nearer to some one coast than to any other", the Court was not directing its attention specifically to Article 1 of the Convention, nor did it find it necessary in the context of the boundary dispute under consideration to examine State practice either under the Convention or outside it. Australia's geological (200 metres) shelf extends in some places to 200 miles from the coast, and the median line boundary agreed upon by Britain and Norway in the North Sea extends to about 125 miles from the coasts of those respective countries. But it does not seem that the Court's observations were intended to detract from any of these positions, and earlier in its Judgment the Court referred to the various

[20] For the full text of the Convention see (1964) 499 *United Nations Treaty Series* 311-320. See the majority Judgment paragraph 41.

[21] *Federal Republic of Germany* v. *Denmark and Federal Republic of Germany* v. *Netherlands* (1969) 8 *International Legal Materials* 340.

North Sea boundary agreements with apparent approval of the view that the whole of the North Sea sea-bed is "continental shelf" in the legal sense and divisible according to law among the North Sea States.[22]

The definition in Article 1 of the Convention is not, however, open-ended. In its domestic legislation Australia has not acted upon the view that it is.[23]

In the debates in the Sea-bed Committees, Australia has, therefore, acted upon the view that there is an area of submerged lands that lies beyond the limits of national jurisdiction. At the same time, it is generally accepted that the Convention definition is lacking in precision and the view of Malta and the countries that support Malta is that attention should be given to working out a clear and certain boundary. How that task will be undertaken is not clear. One would think not in the Sea-bed Committee, but since 10 June 1969 it has been open to any party to the Convention on the Continental Shelf to seek a revision of any of its terms. If such a request is made it will be for the General Assembly, in accordance with Article 13 of the Convention to "decide upon the steps, if any, to be taken".[24] Strictly speaking, only the parties to the Convention, Australia among them, would be competent to participate in its revision, but the General Assembly will no doubt be asked before long to consider ways and means of co-ordinating (presumably through an international conference) a review of the Convention with its present study of the boundary of the area beyond the limits of national jurisdiction.

In the Ad Hoc Sea-bed Committee, Japan suggested that the limits of national jurisdiction should be fixed at 200 metres. Canada invited attention to the idea that the limits of national jurisdiction should extend to the edge of the continental margin. The National Petroleum Council, an industry advisory body to the United States Secretary of the Interior, takes the view that the sovereign rights of the coastal State already extend under the Shelf Convention to the edge of the margin.[25]

The concept of the continental margin, as described to me in simple terms by the Commonwealth Bureau of Mineral Resources, which has provided the annexed geological cross-section sketch, is as follows: in the broadest sense, the surface of the earth is divisible into continents and ocean basins; the continents are underlain by a thick crust of light rock (the SIAL, about 35 kilometres thick) and the oceans by a thin crust of heavy rock (the SIMA, about 6 kilometres thick); both SIAL and SIMA rest on the mantle, a zone some hundreds of kilometres

[22] See paragraph 4.

[23] See the method of description adopted in the Second Schedule to the Petroleum (Submerged Lands) Act 1967-1968 (Cth) and the map in Appendix 1 to this article.

[24] (1964) 499 *United Nations Treaty Series* 311, 318-319.

[25] Interim Report of the National Petroleum Council, 9 July 1968.

thick. Thus in broad physical terms the boundary between continents and ocean basins occurs where the thick crust of SIAL ends and the thin crust of SIMA begins. This point is found at distances of less than a mile to as much as 800 miles from the coast and occurs at water depths ranging from 2,500 metres to 5,000 metres. The attached sketch shows the continental shelf gradually sloping outwards to about the 200 metres line where the inclination changes noticeably downwards, marking the beginning of the continental slope which in some cases is followed by a continental rise: the whole of this area constitutes the continental margin.[26]

At the meeting of the Standing Sea-bed Committee in March 1969 the representative of Malta introduced a draft resolution proposing that the Committee recommend that the General Assembly make a declaration with respect to the minimum boundary of the area beyond the limits of national jurisdiction. The draft resolution proposes that the General Assembly declare that "the sea-bed and ocean floor and the subsoil thereof adjacent to waters more than . . . nautical miles from the nearest coast and more than 200 metres deep, disregarding rocks and islands without a permanent settled population, unquestionably are and must remain beyond national jurisdiction". The proposal seemingly envisaged that the boundary might ultimately be brought nearer the coast. The proposal coupled a depth criterion with a distance criterion. The distance criterion was left open in the proposal, but the representative of Malta indicated that anything less than one hundred miles would nowadays probably be unacceptable and that it might be necessary to double that distance in order that agreement might be achieved. As to this, the United States representative drew attention to paragraph 41 of the Judgment of the International Court of Justice in the *North Sea Continental Shelf Cases* and raised the question whether 200 miles would be an acceptable distance criterion.[27]

Clearly enough, much work lies ahead before the conflicting interests of States can be reconciled in a formula acceptable to the great majority. Geological features, economic interests and wide-ranging international policy considerations may all be expected to play a part when the attitudes of States eventually come to be determined. Australia, as a vast island continent, has a very real interest in the outcome and it is appropriate that Australia should be participating directly in the studies now in progress. Australia has a very extensive shelf in the geological or 200 metres sense, ranking only behind Canada and the U.S.S.R., and with the United

[26] See map attached in Appendix II to this article, and also, on this subject, the technical working concepts adopted by the Economic and Technical Working Group of the Ad Hoc Committee A/7230 (Annex I) and the technical and scientific papers (referred to in Annex IV).

[27] Cit. *supra* n. 8. See, however, the comments on paragraph 41 of the Court's Judgment at n. 25, *supra*.

States. Australia and Australia's geological shelf, moreover, exhibit features that raise practically the whole range of considerations to which States find themselves giving their attention. The lower eastern half of the Australian shelf is very narrow; to the west and the north-west the shelf is extensive. To the north, the same geological continental shelf lies between Australia and West Irian. To the north-west also, Australia has "opposite" neighbours, but in this area there is not a common shelf. An Australian Territory (Papua) has an adjacent neighbour. Australia also possesses numerous small and uninhabited, but important, islands such as Ashmore and Cartier to the north-west and the Coral Sea islands to the east, that under the Convention have their own continental shelves. Finally, Australia's interests extend both to the living resources of the shelf, which provided the first incentive for Australia's concern with this branch of the international law of the sea, and, now, to its vastly more important mineral resources, which are already being actively searched for and exploited.

In its domestic legislation, Australia has adopted, according to its terms, the definition of "the continental shelf" in Article 1 of the Convention. Section 5 of the Continental Shelf (Living Natural Resources) Act 1968 (Cth), an Act constituting an exercise not only of the fisheries power in section 51 (x) of the Constitution but also of the "external affairs" power section 51 (xxix), provides that the expression "continental shelf" has the same meaning as in the Convention. The Commonwealth and State legislation relating to off-shore petroleum is similarly geared to the Convention definition. The legislation operates in areas adjacent to the States and Territories. In the Petroleum (Submerged Lands) Act 1967-1968 (Cth) for example, the so-called "adjacent areas" are described[28] by metes and bounds, but so as to include only areas of land beneath the territorial sea and areas that have, or during the period of operation of the Act will have, the character of continental shelf within the meaning of the Convention.[29] The metes and bounds referred to in the Second Schedule are shown on the accompanying map and attention is drawn to the footnote which reproduces the effect of the words of limitation in the opening sentence of the Schedule. The broad effect of the method of description adopted is then that the Act cannot operate outside the "picture frames" depicted on the map and that within the "picture frames" the Act will apply only to the bed and subsoil of the territorial sea and to such submerged lands as may at any time, as technology expands, have the character of "continental shelf" within the meaning of the Convention. It must be said, however, that reasons of simplicity and convenience played a part in the selection of the method adopted for

[28] See, for example, the Second Schedule to the Petroleum (Submerged Lands) Act 1967-1968 (Cth).

[29] See the opening words of the Second Schedule and the definition of "the continental shelf" in section 5.

describing the "adjacent areas". Thus, for drafting and administrative reasons, Macquarie Island was brought into a single area with Tasmania. Similarly, Lord Howe Island, which is part of New South Wales, is included in the area adjacent to New South Wales.

In the debates in the Sea-bed Committees, Australia's representatives have expressed the view that the Convention on the Continental Shelf does not purport to divide up the submerged lands of the world among coastal States and that there is accordingly an area of sea-bed beyond the limits of national jurisdiction; further, that, as to that area, the traditional rules of international law are not suitable for achieving the economic and orderly exploitation of its resources. To allow exploitation to be open to all-comers (a system of free-for-all) would lead to conflict and confusion. Drawing upon the experience gained in preparing the Australian off-shore petroleum code, the Australian representatives have also referred to the great number of matters that would need to be provided for in a system of control of off-shore mining activities: not only matters relating to mining, but the question of the general body of law to be applied, and of the means to be provided for its enforcement. If the Australian experience in working for uniformity of mining law among seven governments in the domestic sphere provides any guide, then, obviously, the resolution of all these matters will need much time. On the question of defining a boundary between the area of national jurisdiction and the area beyond national limits, Australia has said that, while the definition of the term "continental shelf" is not precise, the status of the Convention as an international instrument negotiated within the United Nations, nevertheless, cannot be ignored, nor can the fact be ignored that many States have in good faith and in reliance on the Convention enacted legislation to give effect to it and have granted mining rights under the legislation so enacted. Australia has supported the principle of the use of the sea-bed exclusively for peaceful purposes, it being understood that this would not in any way preclude defensive activities that are consistent with international law and the Charter of the United Nations.

It is impossible in the space of this article even to begin to refer to all the legal studies that have been made of the sea-bed outside the United Nations. The law of the sea certainly shows no signs of losing its place at the head of the list of international subjects commanding the attention of universities, of individual scholars and commentators and of the learned legal societies. Two United States reports issued earlier this year are, however of special interest because they illustrate the tremendous interest being shown in all aspects of the marine environment both outside and inside Government circles in that country. The first is the report, published under the title "Our Nation and the

Sea", by the President's Commission on Marine Science Engineering and Resources, an independent organisation that included representatives from the universities, from industry and from the United States Administration. The second is the report of the National Council on Marine Resources and Engineering Development, an internal agency of the Administration, established by the Marine Resources and Engineering Development Act of 1966. The Council functions under the Chairmanship of the Vice-President with the Secretary of State and heads of various agencies as members. The Council has presented three annual reports and it has published a number of legal studies that have been carried out by international lawyers by contract with the Council.

For Australian lawyers the legal studies must embrace both matters of international law and the constitutional questions that have been the subject of judicial consideration in the United States and Canada but that have not yet required the definitive consideration of the High Court of Australia. It would be inappropriate for me, especially at this stage of an article prepared primarily for the purpose of providing information on current international events, to embark upon a discussion of the questions that arise under the Australian Constitution. But may I invite consideration of the following matters:—

(1) Does a State have constitutional authority to control fishing in the internal waters of bays and gulfs and mining for the resources of lands beneath such waters ?

(2) What is the effect, in relation to that question, of the descriptions of the States in the Letters Patent constituting the offices of Governors of the States (and bearing in mind that in only one case, that of South Australia, do the Letters Patent carry a reference to bays and gulfs) ?

(3) What is the effect for constitutional purposes of an increase in the area of internal waters resulting from the employment of the bay closing lines (24 miles) permitted by Article 7 of the Territorial Sea Convention, and from the use of straight baselines of more than 24 miles in accordance with Article 4 of that Convention ?

(4) What is the relevance, if any, to question (3) of section 123 of the Constitution, relating to alteration of the limits of a State ? Is this provision concerned with only an alteration of the land limits of a State ?

(5) Does constitutional authority with respect to fisheries in the territorial sea, and with respect to the mining of the resources of its bed and subsoil, reside in a State, or in the Commonwealth,

or does authority reside in both, subject only to the operation of section 109 of the Constitution ?

(6) What would the effect be, constitutionally, for fisheries and mining purposes, of an increase in the breadth of the territorial sea ?

(7) With respect to the continental shelf, does constitutional authority to control mining reside in the Commonwealth, or in the State, or concurrently in both, subject to section 109 of the Constitution ?

State fishing and mining laws apply in internal waters. In the area of the present 3-mile territorial sea adjacent to a State, State fisheries laws apply. Generally speaking, the Commonwealth has not legislated concerning fisheries in the territorial sea adjacent to a State. An exception is found in section 8 of the Whaling Act 1960 which provides for the application of the Act by proclamation to whaling in those waters. No proclamation has yet been made. The Whaling Act 1960 was passed to give effect to the International Whaling Convention and, constitutionally therefore, the Act is supported by the "external affairs" power without reliance upon the fisheries power in section 51 (x) of the Constitution. The Commonwealth Fisheries Act 1952-1967 (Cth) applies to fishing in the exclusive fishing zone between 3 and 12 miles adopted by Australia in 1967.[30] As to petroleum mining in the area of the territorial sea, Commonwealth and State legislation applies pursuant to a joint scheme under which an endeavour has been made to put the constitutional issues aside. The joint Commonwealth-State scheme also applies to mining for petroleum on the continental shelf beyond the limits of the territorial sea. The Commonwealth has not yet legislated concerning mining for off-shore minerals other than petroleum in the area of the territorial sea adjacent to a State or on the continental shelf. As to the living resources of the continental shelf, the only legislation is Commonwealth legislation (the Continental Shelf (Living Natural Resources) Act 1968).

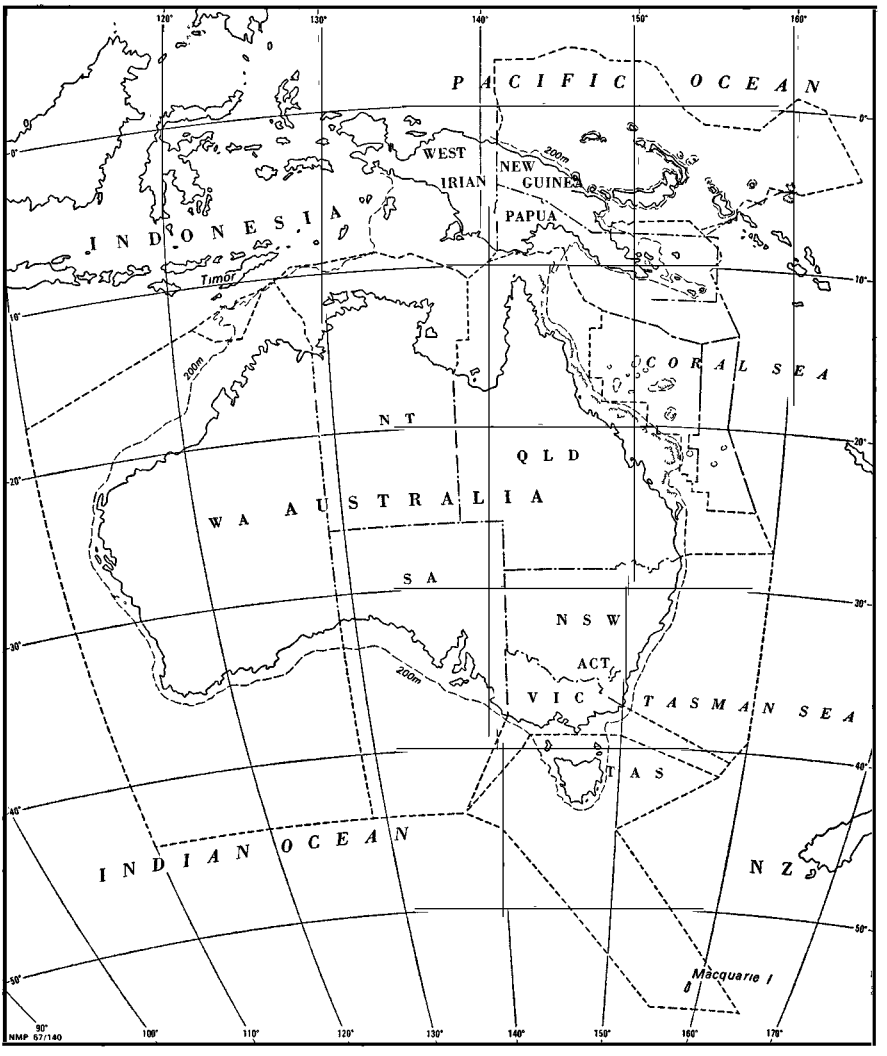
Whose indeed, under the Australian Constitution, is the bed of the sea ? Or, to be more precise, should I say—whose is the bed of the territorial sea ? Commonwealth power over the natural resources of the continental shelf seems to be quite firmly based on section 51 (xxix) of the Constitution, as the Commonwealth has at all times contended, and seems equally certainly to be lacking in respect of the bed and subsoil of internal waters as those waters have existed since Federation (I leave aside the question of the effect of an extension of the area of Australia's internal waters pursuant to the Convention on the Territorial Sea and the Contiguous Zone).

[30] The Commonwealth Act also applies in certain proclaimed waters beyond 12 miles but only to fishing by Australians.

There remain the submerged lands of the territorial sea. The present article was prepared before the decision of the High Court in *Bonser v. La Macchia* and, in any event, this is not the place for an analysis of the judgments given in that case. The case was one involving the meaning and geographical scope of the power conferred on the Commonwealth Parliament by section 51 (x) of the Constitution to make laws with respect of "Fisheries in Australian waters beyond territorial limits". The question of sea-bed rights was not in issue and was not argued. Section 51 (x) however, is one of the very few provisions of the Constitution that may be thought to throw light on the answer to that question, and some of the judgments contain observations that bear upon it. In particular, the Chief Justice and Windeyer, J., although pursuing different approaches, have expressed views supporting the existence of Commonwealth constitutional authority in respect of the bed and sub-soil of the territorial sea. At the same time, the Chief Justice and Windeyer, J., have spoken in terms supporting the existence also of a concurrent State power exercisable under the general power of a State Parliament to make laws for the peace, order and good government of the State, and there are indications in the two judgments that such a concurrent State power would not stop at the 3-mile limit. Kitto, J., on the other hand, and possibly Menzies, J., appear to favour the view that the Commonwealth does not have a general power to control mining inside the 3-mile limit. McTiernan and Owen, JJ., made no comment on the question. Taylor, J., participated in the hearing but died a few days before the High Court gave its decision and no judgment was handed down on his behalf.

In all these circumstances, the question, "Whose is the bed of the territorial sea?", continues, in my view, to be an open question in Australian constitutional law.

APPENDIX I



PETROLEUM (SUBMERGED LANDS) BILL 1967
ADJACENT AREAS

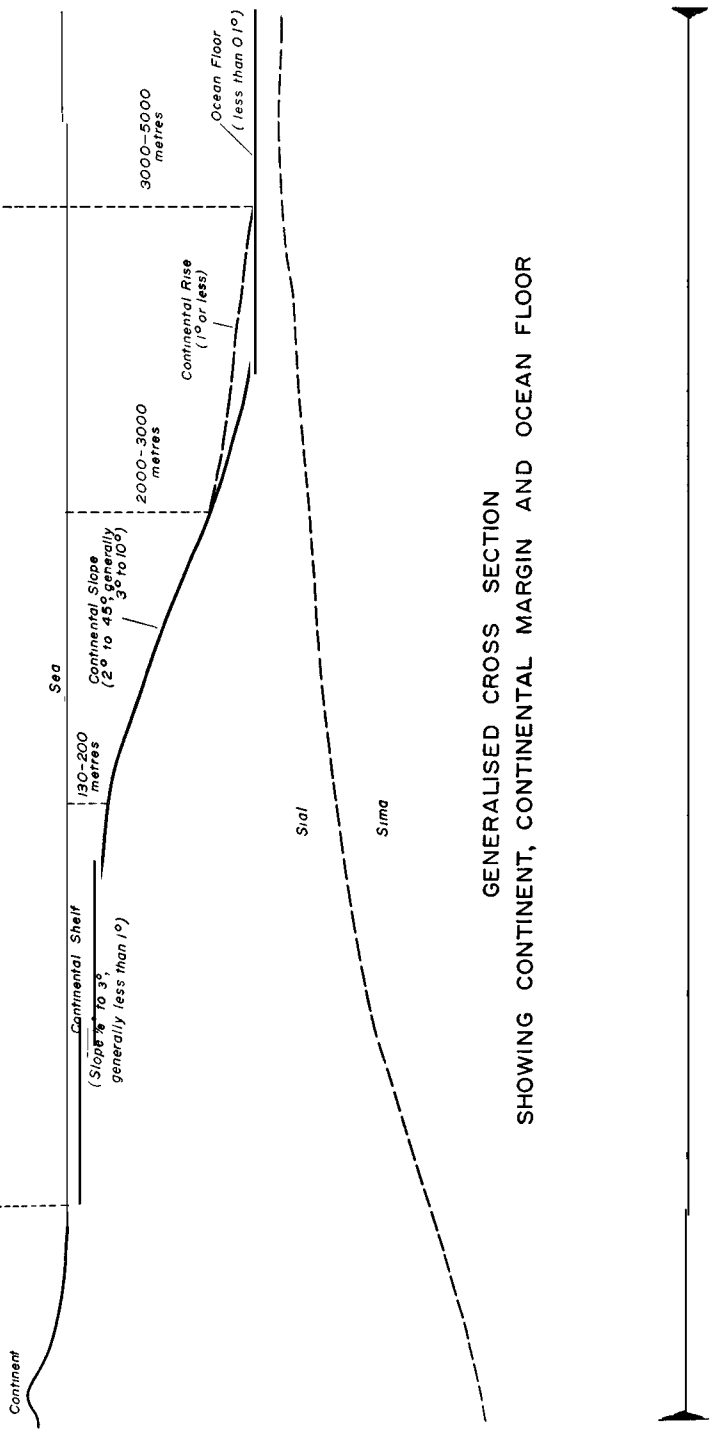
NOTE

The Bill applies only in relation to exploration for, and exploitation of, the petroleum resources of such submerged lands included in the adjacent area as have the character either-

(a) of seabed and subsoil beneath territorial waters, or

(b) of continental shelf within the meaning of the Convention on the Continental Shelf signed at Geneva on 29 April 1958.

APPENDIX II



GENERALISED CROSS SECTION
SHOWING CONTINENT, CONTINENTAL MARGIN AND OCEAN FLOOR