CANADA'S OFFSHORE MINERAL RESOURCES
OTTAWA BRANCH SYMPOSIUM

Contemporary International Law on the Seabed and Ocean Floor

J. A. BEESLEY, Head of Legal Division,
Department of External Affairs,
Ottawa, Ont.

ABSTRACT

This paper reviews contemporary international law concerning the seabed, current developments in the United Nations on the seabed, and the main outstanding problems. It emphasizes the importance that the Canadian government attaches to this area.

JOHN ALAN BEESLEY is a native of Smithers, B.C., and obtained his B.A. and LL.B. from the University of British Columbia in 1949 and 1950. Called to the Bar of British Columbia in 1951, he practised law with Crease & Co., Victoria, until 1956.

Mr. Beesley joined the Department of External Affairs in September of 1956. After holding positions in Tel Aviv and Ottawa, he was named as counsellor of the Canadian Mission to the European Office of the United Nations, Geneva, serving in this post from 1964 to 1967. He is now head of the Legal Division of the federal Department of External Affairs.

The author of "East-West Legal Relations in the U.N.," Mr. Beesley has been a member of the Canadian Delegation to the United Nations on several occasions since 1966. He is now Canadian representative on Seabed Item at the U.N., and has been a member of the Canadian Delegation in various negotiations with the U.S.A. and France on several Law of the Sea matters.

THE PAPER WAS PRESENTED: at an Ottawa Branch Symposium on "Canada's Offshore Mineral Resources," held on February 13, 1969. It was based principally on an earlier paper delivered by A. E. Gotlieb at Queen's University on November 23, 1968.

KEYWORDS: Offshore technology, Mineral resources, Law, Seabed, United Nations, International law, Ocean floor, Continental shelf, Geneva Conventions, Exploratory permits.

C.I.M. TRANSACTIONS: Vol. LXXII, pp. 107-112, 1969.

CONTEMPORARY INTERNATIONAL LAW CONCERNING THE SEABED

A.—Article I, the 1958 Geneva Convention on the Continental Shelf

THERE WAS, until 1958, little law on which to base an argument in favour of or against the right of occupation of the bed of the sea. There existed a few examples of traditional activities on the sea bottom and beneath. Pearl oysters, chanks, coral and sponges had been exploited for a long time and undersea mining from the shore was also well known. Authors made reference to the traditional concepts of *res mullius* and *res communis* in connection with the high seas and concluded that the seabed and the ocean floor and the subsoil thereof were, or were not, susceptible of occupation.

The Truman declarations of 1945 began a new trend in state practice which later resulted, after little more than a decade, in the adoption of the only relevant international convention, the 1958 *Geneva Convention on the Continental Shelf*. There are other rules in existence — national laws and bilateral or multilateral conventions — which have a bearing on the subject and to which I shall return briefly later, but the Geneva Convention is, to a large extent, the embodiment of present customary international law in this field. What that Convention lays down and whether or not it is satisfactory is, in the main, what I shall discuss. I shall also refer to recent developments in the U.N. touching on the principles laid down in the Convention, and thus having important practical implications for countries such as Canada.

The *Geneva Convention on the Continental Shelf*, which is now in force, having been ratified by close to forty states, recognizes that coastal states may exercise certain rights in respect of the resources of their continental shelves. However, the definition of the continental shelf requires careful consideration. Article 1 of the Convention reads:

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

It can be seen that this definition has four main elements, as follows:

(1) the continental shelf consists of the seabed and its subsoil; the superjacent waters are not included;
(2) the continental shelf is adjacent to the coast;
(3) the shelf begins where the territorial sea ends; and
(4) it is limited to a depth of 200 meters or by the so-called "exploitability test."

The first difficulty arises out of the concept of adjacency. This is a crucial concept. What is adjacent? To quote only one definition, that of the Concise Oxford Dictionary, adjacent means "lying near, contiguous to ? 10 miles? 100 miles? or more?

A second problem is raised by the inner limit of the shelf being fixed in relation to the breadth of the territorial sea. It is well known that the *Convention on the Territorial Sea and the Contiguous Zone*, also adopted by the Geneva Conference of 1958, is silent as to the extent of the territorial sea, agreement having proved to be impossible at that time and again in 1960. As matters now stand, this means that the shelf begins at 3 miles for Canada and the United States and at 12 miles for the USSR, while other states maintain that for them it begins at 200 miles.

A third problem — and the most serious difficulty — is found in the double criterion used for the outer limits of the shelf; namely, 200 meters in depth or as deep as a country can actually exploit the resources. Although the inner limit is based on a horizontal concept, that of distance from the shore, the outer limit is a vertical one, that of depth. It was thought by the International Law Commission, the primary U.N. law-making organ, which drafted the original version of the Convention, that, as indicated in its report in 1953, the 200-meter figure represented a sort of general or world average for the depth at which the break between shelf and slope normally occurred. Now it appears that the world average is somewhat less than this. However, the shelf can extend well beyond the 200-meter depth line — as in the case of Canada.

Moreover, it appears that the drafters of the Convention did not think that it would be possible to exploit areas beyond 200 meters for a long time to come. However, we are now aware that actual exploitation of petroleum resources has already taken place at depths of 120 meters and that serious evaluation drilling has been done at 400 meters (off the coast of California). It now appears to be only a question of time and effort before much greater depths are reached.

If a depth of 200 meters is not a practicable criterion, then what of the exploitability test, the second criterion that was proposed by the International Law Commission in its final draft articles and included in the Convention? Does this mean that states will continue to extend their jurisdiction deeper and farther out to sea as technological progress is realized?

It may be surmised that the delegations at the U.N. Conference on the Law of the Sea in 1958 considered that the rules they were establishing were related only to the geological shelf itself and that they were not laying down rules for the exploitation of the deep ocean floor beyond the limits of the shelf or beyond equivalent limits of the seabed where there is no geological shelf, as in the Persian Gulf or off the coasts of parts of Latin America. However, the exploitability principle set out in the Convention has led some authors to conclude — I quote the Japanese author, Professor Oda — that "it can be inferred that, under this Convention, all the submarine areas of the world have been theoretically divided among the coastal states at the deepest trenches."

Professor Oda does not disagree, however, with another author, Professor Henkin, who has written that "No government, I believe, would dare propose this as the interpretation of the Convention; if one did, the other nations would reject it." I shall refer later to the indication that the states represented in the United Nations have already rejected this interpretation.

I should point out that even prior to the first United Nations Conference on the Law of the Sea in 1958, the Canadian view, as expressed in an official publication, was that "precision would not be forfeit . . . if the boundary of the shelf were its actual edge. Where the actual edge might be ill-defined or where there is no shelf in a geographical sense, the boundary might be set at such a depth as might satisfy foreseeable practical prospects of exploitation of the natural resources of the seabed adjacent to a particular state." I shall return to this question later.

B.—Other Articles of the Convention

Bearing in mind this analysis of Article 1, a further insight can be gained from Articles 2, 3, 4, 5 and 7 of the Convention into the precise nature of the rights enjoyed by coastal states over the rather imprecisely defined area just described.

Article 2 states that "the coastal state exercises over the continental shelf sovereign rights" (not, it might be noted, sovereignty) "for the purpose of exploring it and exploiting its natural resources" and — these are my words — for no other purpose. These "sovereign rights" are exclusive, in the following context: that no other state may undertake these activities without the express consent of the coastal state; that these rights do not depend on occupation or any express proclamation; that the rights to be enjoyed do not affect the legal status of the superjacent waters as high seas or that of the airspace above these waters; that the enjoyment of these rights may not impede the laying or maintenance of submarine cables or pipelines on the shelf; and, finally, that exploitation must not result in any unjustifiable interference with navigation, fishing or conservation of the living resources, even though installations, safety zones and other devices are permitted in order to allow for proper exploration and exploitation.

What would seem to emerge from this list of rights is that they are limited in nature and that they are not to interfere with any right previously enjoyed by other states, whether over the waters themselves or

on the very bottom, as in the case of pipelines and cables.

One of the major difficulties encountered in interpreting the Convention has been the determination of the precise nature of the rights which are said to be sovereign and exclusive but are not equivalent to those traditionally arising from effective occupation, that is, ownership. There have been differences of view over the interpretation to be given to those types of living organisms belonging to sedentary species which are considered to be, for the purpose of exploitation, a part of the continental shelf. It has also been argued — although the argument is strained — that one of the possible effects of the concept of limited sovereign rights is that jurisdiction over the shelf does not extend to the freedom to install structures or devices which are unrelated to the "exploration and exploitation of the natural resources" of the shelf; for example, military installations. However, it is already well known that continental shelves are being used for that purpose, even though the nature and extent of these activities are well-guarded secrets. It can easily be seen that states are not likely to ignore their security requirements simply because the Convention is silent or unclear on the subject.

The exploitation of the resources of the seabed gives rise to another difficulty. It is generally assumed that there is bound to be a very large increase of activities on the shelf in the next few decades. Unless the law is made clearer, there is a danger that the economic benefits derived from the shelf resources will be of such a scope as to contribute substantially to the erosion of the legal basis for the free use of the high seas. The provisions of Article 5 of the Convention, which allow the coastal state to erect "safety zones" around the installations and devices used for exploring or exploiting the continental shelf, do not appear to be adequate, from the legal standpoint, to permit coastal states to exercise that degree of jurisdiction and control in the area which is necessary to protect their sovereign rights over exploitation of the resources of the shelf.

Reference must also be made to Article 6, which provides for the delimitation of the continental shelf between two states whose coasts are adjacent to or opposite each other. These rules are important not only from a bilateral point of view, for example, as between Canada and France and Canada and the United States, but also because they represent the only firm limitation to coastal states' jurisdiction.

Article 6 provides that in the absence of agreement and unless another boundary is justified by special circumstances, the boundary between the shelves opposite or adjacent to two states is to be determined by application of the principle of the median or equidistance line. If, therefore, the exploitability test of Article 1 is not sufficient to limit the jurisdiction of the coastal state, eventually it is the equidistance line drawn somewhere in the midst of the ocean which so limits that jurisdiction. Charts have been published showing the result of such a concept. Such a division of the oceans would not only be inequitable, it would also certainly give rise to a new type of territorial conflict as well as to a colonialistic race to capture new resources in distant regions.

In brief, Article 6 is a confusing and, perhaps, inadequately drafted article which is already the subject of an international dispute before the International Court of Justice. I will discuss some of the difficulties arising from this article when I later turn to bilateral issues relating to the seabed which concern Canada.

The conclusion can be drawn from this discussion that the *Geneva Convention on the Continental Shelf* is not fully satisfactory. The Convention remains, however, the only international instrument applicable on a widespread scale. There is no question but that, weaknesses notwithstanding, it embodies a large number of essential rules which, in any event, will have to remain an integral part of whatever new law is developed. In spite of the criticisms being made of the Convention, particularly in U.N. discussions, it is most difficult to offer workable alternatives and the convention must be regarded as a remarkable achievement even if it turns out to be regarded, some years hence, as only a good first try.

C.—Related Legal Aspects

I have referred to a number of legal rights or rules, traditional or otherwise, which have an important bearing on the question of jurisdiction over seabed resources. There are first of all the traditional freedoms of the high seas:

(1) freedom of navigation;
(2) freedom of fishing;
(3) freedom to lay submarine cables and pipelines; and
(4) freedom to fly over the high seas.

Another freedom, which has perhaps a lesser status, is the freedom to undertake scientific research on the high seas.

After enumerating the four freedoms mentioned previously, Article 2 of the 1958 Geneva Convention on the high seas provides an additional rule: "These freedoms, and others which are recognized by the general principles of international law, shall be exercised by all states with reasonable regard to the interests of other states in their exercise of the freedom of the high seas . . . " This is a most important concept to retain and apply.

There is also the question of the prevention of pollution and other hazardous and harmful effects from any activity on the high seas, as illustrated by the recent disaster near Santa Barbara, California.

A more political aspect, but one with important legal consequences, is that of the use of the seabed and ocean floor for peaceful purposes only. This, of course, refers to disarmament and arms control measures. One of the main problems to be faced here is how far the Great Powers are willing to go in setting limitations on the military uses of the seabed which are not imposed on the superjacent high seas. It is likely that the answer to this question will be known only after patient negotiations in the Eighteen-Nation Disarmament Conference in Geneva.

There is also the concept embodied in Article 6 of the 1958 Fisheries Convention which recognizes that "a coastal state has a special interest in the maintenance of the productivity of the living resources in any areas of the high seas adjacent to its territorial sea." This special interest may come to be recognized in respect of all resources and all activities in areas adjacent to a state's coasts. Fish do not respect territorial sea limits, nor do mineral veins or oil pools. From a security point of view, this special interest should be even more evident. In fact, the concepts underlying the Convention on the Continental Shelf, and in particular the concepts of adjacency, seem to be rooted in the notion of the special interests of the coastal state.

DEVELOPMENTS IN THE UN

A.—The United Nations Ad Hoc Committee on the Seabed

The problem of jurisdiction over seabed resources has been the subject of numerous meetings of international jurists and technicians over the last two or three years and has been treated in a very large number of publications, notably in the United States. The most important development to take place in the course of the last two years, however, was undoubtedly the introduction by the Delegation of Malta of an item on the agenda of the 1967 General Assembly (XXII) calling for the "Examination of the question of the reservation exclusively for peaceful purposes of the seabed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction, and the use of their resources in the interest of mankind." This resulted in a Resolution by the General Assembly in December, 1967 establishing an *ad hoc* committee of 35 members, including Canada, for the purpose of preparing a study which would include:

(a) a survey of intergovernmental activities and agreements on the seabed and the ocean floor;
(b) an account of the scientific, technical, economic, legal and other aspects of this item; and
(c) an indication regarding practical means to promote international cooperation in the exploration, conservation and use of the seabed and the ocean floor resources.

The discussions of the committee have already given ample evidence of the practical implications for member states of the U.N. consideration of the problem. The report of the Technical and Economic Working Group of the Committee was perhaps its most notable achievement. It gives a sober view of the geographical and economic realities of the present situation and of the state of man's knowledge of the ocean and its floor, and lawyers and politicians would be well advised to digest its contents. The report of the Legal Working Group was, as expected, the most difficult to prepare. There are, in point of fact, very few principles in that report which were endorsed by all members. It is mostly a summary of the views held by the 35 members on all legal aspects of the problem. This is certainly not surprising when one considers that the adoption of any legal rule at this time might irretrievably tie the hands of those supporting it. Canada, for one, was not prepared to go beyond the enunciation of certain general principles which are by themselves of a very far-reaching nature. These principles, on which only a partial consensus proved possible at the last meeting of the Ad Hoc Committee, read as follows:

(1) There is an area of the seabed 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 agreement on a precise boundary for this area.
(3) There should be agreement, as soon as practicable, on an international regime 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 — and, I might add, the Geneva Law of the Sea Conventions. Activities in this area shall not infringe upon the freedoms of the high seas.

B.—Standing Committee on the Seabed

Last fall, upon the submission of the *Ad Hoc* Committee's report to the Twenty-third General Assembly, Canada joined with a number of other countries (66 of them eventually) in sponsoring a resolution calling for the establishment of a Standing or Permanent Committee to succeed the *ad hoc* group.

Kuwait and Venezuela sponsored a separate resolution (in lieu of an earlier amendment to the main resolution) which requested the Secretary-General to conduct a study on the advisability of establishing such international machinery. (This resolution was eventually adopted, with Canada abstaining.)

Difficulties were encountered in determining the mandate of the new Standing Committee, in particular over the USSR's insistence that every trace of supranationality be removed from the resolution, and their concern that the area to be dealt with in the Standing Committee's future consideration of the reservation for peaceful purposes extend right up to the territorial waters of states (as they proposed, unsuccessfully thus far). (When the negotiations between the co-sponsors and the USSR failed to produce agreement on this latter point, the Soviets abstained on the resolution.)

Further difficulties arose concerning the Committee's composition and size. Lengthy negotiations occurred on these two questions, with the result that, as a compromise, it was finally agreed to create a Committee of 42 members (including Canada), with provision also being made for intra-group rotation at regular intervals.

The resolution creating the new Committee was finally adopted by the General Assembly, with no negative votes and only a few abstentions (including that of the USSR).

Two other important resolutions were also adopted by the General Assembly. One, drafted largely by Iceland and co-sponsored by Canada and other countries, called for international cooperation and a study by the Secretary-General on the problem of marine pollution; the other, drafted largely by the United States and also co-sponsored by Canada and other countries, provided for an International Decade of Ocean Exploration to begin in 1970 under the aegis of the United Nations.

It should perhaps also be noted that several proposals were made, without success, to put a "freeze" on claims to national jurisdiction over the seabed. A number of lists of principles were also proposed, but none was voted on.

THE MAIN OUTSTANDING PROBLEMS

What are the main outstanding problems to be faced at this juncture? What are the basic issues facing the international community, and particularly the new Standing Committee on the Seabed?

Perhaps the most pressing one is the re-definition of those areas which are to remain under national jurisdiction, a matter now covered by the Geneva Convention. The answer to this question will of course also decide what area of the seabed is to be placed under some form of international regime. Many new definitions have been proposed, starting with the depth criterion, which may vary from 200 meters to 550 meters, which certain authors claim to be closer to the geographical nature of the continental shelf, to 1,000 meters, etc. . . . Others have suggested a formula based on distance from the shore: this would obviously please the eight Latin American countries now claiming 200 miles. Others have proposed a mixed depth-distance formula; for instance, 200 meters and/or 50 miles, whichever is more beneficial to the coastal state. (This concept was referred to favourably in a recent report by a U.S. governmental commission).

The difficulty with these definitions is that they are not susceptible to universal application. Although any one formula might be considered as satisfactory for a particular state or group of states, other states could not possibly be satisfied with it. As far as Canada is concerned, a cursory look at the Canadian shelf, and I am referring here to the geological-geographical entity, gives a clear indication of the scope of the problem. The Grand Banks of Newfoundland, which are undoubtedly continental shelf and slope, extend for 300 miles and far exceed the depths envisaged. In many places, the foot of the slope would be found at around 3,500 meters. If one considers that the Flemish Cap is but a natural appendix of our shelf, the distance becomes 400 miles. Is Canada to accept a severe reduction of her continental margin and simply ignore the advantages which nature has bestowed upon her? Our continental margin has been roughly estimated to be equal in extent to 40 per cent of our land territory. We could probably afford to be generous, but the question is how generous and by virtue of what criterion. Obviously, the future economic progress of Canada is at stake and so may be other interests such as security and fishing.

Canada has nevertheless taken the position that, irrespective of what may be permissible under existing customary international law —and, as I said before, it has been argued that, under existing international law, a coastal state can legally extend its jurisdiction to the limits of exploitation, subject only to the median line — the boundaries of national jurisdiction need to be clarified and related to more precise and firmer legal criteria. Canada is not about to claim the large chunk of ocean floor beyond the geographical shelf. However, although we have done some preliminary studies of the Canadian shelf, we are not yet in a position to lay down any rule, because we do not yet know, at least in any precise way, what the over-all picture may be and what type of criteria would meet the widely different geographical circumstances of the rest of the world.

A second most important decision to reach is related to the legal regime which will prevail beyond the new limits of national jurisdiction, once these are established. This is one of the questions which the Seabed Committee has been instructed to study. Here again, many theories have been advanced. The one which at present seems to be the most popular, particularly with smaller states, is the idea of international control. However, such control poses both qualitative and quantitative problems. How detailed should such a new system be? Should it attempt to cover all exploration and exploitation activities in their minutest details, in a way similar to existing national legislation? Or should it just lay down some general rules of the road? It could be confined to simple registration machinery whereby the states undertaking activities on the seabed would simply be required to notify some international agency of their intentions and generally keep the world community informed. Or again, it could imply the establishment of a new international agency with adequate powers to lease areas of the seabed, control all activities therein, collect fees, royalties and other revenues and hold a percentage of these for the developing countries.

It is much too early for anyone to take a definitive stand on these theoretical questions. The few "draft treaties" we have been able to study are far too idealistic and too far removed from the political, technological and economic facts of life to be more than interesting and perhaps useful background documentation. One should not forget that any new system, if it is to prove beneficial to mankind as a whole, will have to be a practical, workable proposition not only from the point of view of world politics but more especially from that of the private entrepreneurs who will undertake such activities on behalf of states. The huge amounts of capital expenditures required for the development of the presumably vast resources of the ocean floor will, in all likelihood, continue to originate with private industry. Without an adequate guarantee of a reasonable return, these funds will be diverted to other more profitable undertakings. This is not to say that the new regime should be fitted to all of the requirements of the mining and petroleum industries; but rather that they are the ones who will do the work and the new regime has to take this into account.

BILATERAL PROBLEMS

Before I conclude, I would like to draw your attention to a series of bilateral questions which have some bearing on the development of international law, but are more particularly of direct concern to Canada and to the United States.

There is now before the International Court of Justice in The Hague a case involving the demarcation of national limits of jurisdiction over a part of the North Sea Continental Shelf between the Federal Republic of Germany on the one hand and Denmark and The Netherlands on the other. The question that has been asked of the Court is: What is the applicable law?

This involves basically an interpretation of Article 6 of the *Geneva Convention on the Continental Shelf*. Germany has been arguing, first, that the line of equidistance was not a general rule of international law and that any delimitation should be based on equity. Lately, the Germans have added that in any event there exist "special circumstances" in the case at hand, and that a boundary line other than one based on the equidistance line is justified. The Dutch and the Danes have been relying mostly on the line of equidistance.

The importance of the impending decision of the Court for Canada can be seen in the fact that Canada is already engaged in negotiations with France in respect of the delimitation of the respective national

jurisdictions over the continental shelf adjacent to the Islands of St. Pierre and Miquelon and that negotiations should soon be initiated with the United States in respect of those offshore areas where our jurisdictions meet. Although I am not at liberty to discuss the substance of these negotiations, the Court's decision could have an impact on them, irrespective of the fact that Canada has not yet ratified the 1958 Convention. If Canada is any example, it would seem that the application of the principles involved in the *Geneva Convention on the Continental Shelf* is giving or is likely to give rise to many bilateral and multilateral disputes as to how to draw the dividing line between competing jurisdictions to the continental shelf of adjacent coastal states. When the apparently simple rules of the article are applied to the extremely varied geographical circumstances in which conflicting claims to a portion of the continental shelf can arise, it becomes quickly apparent that the principles of equitable apportionment which appear to underlie the article seem to be imperfectly formulated. These imperfections become all the more apparent if attempts are made to apply the article to situations where islands lie adjacent to a land mass of another country. There seems little question that the drafters of the International Law Commission's articles and of the Convention itself could not have been fully cognizant of the extraordinary complexities as well as the unusual and, it is submitted, inequitable results that could arise from the application of the equidistance principle.

CONCLUSION

I have attempted to outline some of the basic issues now confronting the international community with respect to the exploration and exploitation of the resources of the seabed and the ocean floor. I hope that I have demonstrated the importance which the Canadian government attaches to the question of jurisdiction over that area of the earth's surface as well as of the extreme complexity of the difficulties to be resolved. We firmly believe that any approach to these difficulties and any attempt at elaborating solutions must be made cautiously and in a realistic manner. It is not being negative to be prudent. It is not to be without idealism or understanding of the plight of the less-developed countries to proceed in such a way as to ensure the orderly development of seabed resources on the basis of sound economic and technical facts. We must move ahead as rapidly as possible, but we must not scrap the existing rules of international law until we are assured that better rules have been devised to replace them.

(Reprinted from The Canadian Mining and Metallurgical Bulletin, May, 1969)

Printed in Canada