LAW OF THE SEA BULLETIN

No. 12 DECEMBER 1988



OFFICE FOR OCEAN AFFAIRS AND THE LAW OF THE SEA

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I. STATUS OF THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA

A. Table of signatures and ratifications as of 31 December 1988

STATES	FINAL ACT SIGNATURE	CONVENTION SIGNATURE <u>a</u> /	CONVENTION RATIFICATION
Afghanistan		18/3/83	
Albania			
Algeria * <u>b</u> /	x	x	
Angola *	x	x	
Antigua and Barbuda		7/2/83 	
Argentina *		5/10/84	
Australia	x		
Austria	x	x x	
Bahamas	x	x	29/7/83
Bahrain	x	x	30/5/85
Bangladesh	x	x	
Barbados	x	x	
Belgium *	x	5/12/84	
Belize	x	x	13/8/83
Benin	x	30/8/83	
Bhutan	x	x	
Bolivia *		27/11/84	
Botswana	x	5/12/84	
Brazil * **	x	х	22/12/88
Brunei Darussalam		5/12/84	
Polonic			
Bulgaria	x	х	
Burkina Faso Burma	X	X	
Burundi	X	X	
Byelorussian SSR *	x x	x x	
Cameroon	x	x	19/11/85
Canada	x	x	
Cape Verde * ** c/	x	x	10/8/87
Central African Republic		4/12/84	
Chad	x	x	
Chile *		_	
Chile * China	x 	X	
Colombia	X	X	
Comoros	x	x 6/12/8 4	
Congo	x	6/12/84 X	
	^		

STATES	FINAL ACT SIGNATURE	CONVENTION SIGNATURE	CONVENTION RATIFICATION
Costa Rica *	x	x	
Côte d'Ivoire	x	x	26/3/84
Cuba * **	x	x	15/8/84
Cyprus	x	x	12/12/88
Czechoslovakia	x 	x 	
Democratic Kampuchea		1/7/83	
Democratic People's Rep. of Kor	сеа х	x	
Democratic Yemen **	x	x	21/7/87
Denmark	x	x	
Djibouti	x 	x	
Dominica		28/3/83	
Dominican Republic	x	20/3/03 X	
Ecuador	x	••	
Egypt **	×	x	26/8/83
El Salvador		5/12/84	
Equatorial Guinea	x	30/1/84	
Ethiopia	x	x	
Fiji	x	x	10/12/82
Finland *	x	x	
France *	x	x	
Gabon	x	x	
Gambia	x	x	22/5/84
German Democratic Republic *	x	x	
Germany, Federal Republic of	x		
Ghana	x	x	7/6/83
Greece *	x	x	
Grenada	x	x	
Guatemala		 8/7/83	
Guinea *		4/10/84	6/9/85
Guinea-Bissau **	x	x	25/8/86
Guyana	x	×	
Haiti	x x	X	
Holy See	x		
Honduras	x	x	
Hungary	x	x	

STATES	FINAL ACT SIGNATURE	CONVENTION SIGNATURE	CONVENTION RATIFICATION
Iceland **	x	x	21/6/85
India	x	x	21,0,03
Indonesia	x	x	3/2/86
Iran (Islamic Republic of) *	x	X	372700
Iraq *	x	x	30/7/85
Ireland	x	x	
Israel	x	•	
Italy *	x	7/12/84	
Jamaica	x	x	21/3/83
Japan	x	7/2/83	21/3/63
	~ 		
Jordan	x		
Kenya	x	x	
Kiribati			
Kuwait **	x	x	2/5/86
Lao People's Democratic Republi		X	273700
Lebanon		7/12/84	
Lesotho	x	x	
Liberia	x	x	
Libyan Arab Jamahiriya	x	3/12/84	
Liechtenstein		30/11/84	
Luxembourg *	x	5/12/84	
Madagascar		25/2/83	
Malawi		7/12/84	
Malaysia	x	x	
Maldives	x	x	
Mali *		19/10/83	16/7/85
Malta	x	x	
Mauritania	x	x	
Mauritius	x	x	
Mexico	x	x	18/3/83
Mana sa			
Monaco	x	x	
Mongolia	ж	x	
Morocco	x	x	
Mozambique	x	x	
Nauru	x	x	

STATES	FINAL ACT SIGNATURE	CONVENTION SIGNATURE	CONVENTION RATIFICATION
Nepal	x	x	
Netherlands	x	x	
New Zealand	x	x	
Nicaragua *		9/12/84	
Niger	x	х	
			14/8/86
Nigeria	x	X	14/0/00
Norway	x	X 1/7/02	
Oman *	x	1/7/83	
Pakistan	x	X	
Panama	x 	X	
Papua New Guinea	ж	×	
Paraguay	×	X	26/9/86
Peru	×		
Philippines * **	x	x	8/5/84
Poland	x	x	
Portugal	x	x	
Qatar *		27/11/84	
Republic of Korea	x	14/3/83	
Romania *	x	x	
Rwanda 	X	X	
Saint Kitts and Nevis		7/12/84	
Saint Lucia	x	x	27/3/85
Saint Vincent and the Grenadin		x	
Samoa	x	28/9/84	
San Marino	••		
		10/7/00	3/11/87
Sao Tome and Principe *		13/7/83	3/11/0/
Saudi Arabia		7/12/84	25/10/84
Senegal	x	X	23/ 1U/ 0 1
Seychelles	x	X	
Sierra Leone		х	
Singapore	x	x	
Solomon Islands	x	x	
Somalia	x	x	
South Africa *	- -	5/12/84	
Spain *	x	4/12/84	

the second secon

STATES	FINAL ACT SIGNATURE	CONVENTION SIGNATURE	CONVENTION RATIFICATION
Sri Lanka	x	х	
Sudan *	x	x	23/1/85
Suriname	x	x	23, 1, 03
Swaziland	Α.	18/1/84	
Sweden *	x	X	
Switzerland	x	17/10/84	
Syrian Arab Republic	•	17710701	
Thailand	x	x	
Togo	x	x	16/4/85
Tonga		Α.	10/ 1/ 00
Trinidad and Tobago	x	x	25/4/86
Tunisia **	x	x	24/4/85
Turkey			
Tuvalu	x	x	
Uganda	x	x	
	• 		
Ukrainian SSR *	x	x	
Union of Soviet Socialist			
Republics *	x	x	
United Arab Emirates	x	x	
United Kingdom of Great Britai	.n		
and Northern Ireland	x		
United Republic of Tanzania **	×	x	30/9/85
United States of America	x		
Uruguay *	·x	x	
Vanuatu	x	x	
Venezuela	x		
Viet Nam	x	x	
Yemen *	x	x	_
Yugoslavia **	x	x	5/5/86
Zaire	x	22/8/83	-
Zambia	x	х	7/3/83
Zimbabwe	x	x	
TOTAL STATES	140	155	36

OTHERS (Art. 305(1)(b),(c),(d),(e) and (f))	FINAL ACT SIGNATURE	CONVENTION SIGNATURE	CONVENTION RATIFICATION
Cook Islands	x	x	
European Economic Community *	x	7/12/84	
Namibia (United Nations Council for			
Namibia)	x	x	18/4/83
Niue		5/12/84	
Trust Territory of the Pacific Islands			
West Indies Associated States	x		
west indies associated States			
TOTAL STATES AND OTHERS	144	159	37

OTHER ENTITIES WHICH SIGNED THE FINAL ACT OF THE CONFERENCE

African National Congress of South Africa Netherlands Antilles Palestine Liberation Organization Pan Africanist Congress of Azania South West Africa People's Organization

Notes

- $\underline{a}/$ Those States which signed the Final Act and/or the Convention on 10 December 1982 are indicated by an "x". Those which signed at a later date are indicated by that date.
- $\underline{b}/$ Those States which made declarations at the time of signature of the Convention are indicated by an asterisk (*).
- c/ Those States which made declarations at the time of ratification of the Convention are indicated by a double asterisk (**).

B. List of ratifications in chronological order and by regional groups

	Date	State/Entity	Regional group
1.	10 December 1982	Fiji	Asian
2.	7 March 1983	Zambia	African
3.	18 March 1983	Mexico	Latin American
4.	21 March 1983	Jamaica	Latin American
5.	18 April 1983	Namibia (United Nations Council for Namibia)	African
6.	7 June 1983	Ghana	African
7.	29 July 1983	Bahamas	Latin American
8.	13 August 1983	Belize	Latin American
9.	26 August 1983	Egypt	African
•	20gubb 1900	-915-	
10.	26 March 1984	Côte d'Ivoire	African
11.	8 May 1984	Philippines	Asian
12.	22 May 1984	Gambia	African
13.		Cuba	Latin American
14.		Senegal	African
		3	
15.	23 January 1985	Sudan	African
16.	27 March 1985	Saint Lucia	Latin American
17.	16 April 1985	Togo	African
18.	24 April 1985	Tunisia	African
19.		Bahrain	Asian
20.	-	Iceland	West European and Other States
21.	16 July 1985	Mali	African
22.		Iraq	Asian
23.	_	Guinea	African
24.	-	United Republic of	African
	oo sopeemser roos	Tanzania	
25.	19 November 1985	Cameroon	African
26.	3 February 1986	Indonesia	Asian
27.		Trinidad and Tobago	Latin American
28.	2 May 1986	Kuwait	Asian
29.	5 May 1986	Yugoslavia	Eastern European
30.	14 August 1986	Nigeria	African
31.	25 August 1986	Guinea-Bissau	African
32.	26 September 1986	Paraguay	Latin American
Ja.	20 September 1900	raragaay	
33.	21 July 1987	Democratic Yemen	Asian
34.	10 August 1987	Cape Verde	African
35.	3 November 1987	Sao Tome and Principe	African
36.	12 December 1988	Cyprus	West European and
37.	22 December 1988	Brazil	Other States Latin American
57.	an December 1900	PEGATI	Lacin Finer real

^{= 36} States and 1 entity (37)

C. <u>Declaration made upon ratification of the Convention</u>

BRAZIL

[Original: English]

"In accordance with article 310 of the United Nations Convention on the Law of the Sea, the Government of the Federal Republic of Brazil makes the following statement:

- (I) The Brazilian Government understands that the provisions of article 301 prohibiting "any threat or use of force against the territorial integrity of any State, or in other manner inconsistent with the principles of international law embodied in the Charter of the United Nations" apply in particular to the maritime areas under the sovereignty or jurisdiction of the coastal State.
- (II) The Brazilian Government understands that the provisions of the Convention do not authorize other States to carry out military exercises or manoeuvres, in particular those involving the use of weapons or explosives, in the exclusive economic zone without the consent of the coastal State.
- (III) The Brazilian Government understands that in accordance with the provisions of the Convention the coastal State has, in the exclusive economic zone and on the continental shelf, the exclusive right to construct and to authorize and to regulate the construction, operation and use of all kinds of installations and structures, without exception, whatever their nature or purpose."

D. Objections to declarations

1. AUSTRALIA*

OBJECTION BY AUSTRALIA TO THE UNDERSTANDING RECORDED UPON SIGNATURE BY THE PHILIPPINES AND CONFIRMED UPON RATIFICATION

On 3 August 1988, the Secretary-General received from the Government of Australia the following objection concerning the understanding recorded by the Philippines:

[Original: English]

"Australia considers that this declaration made by the Republic of the Philippines is not consistent with article 309 of the Law of the Sea Convention, which prohibits the making of reservations, nor with article 310 which permits declarations to be made 'provided that such declarations or statements do not purport to exclude or to modify the legal effect of the provisions of this Convention in their application to that State'.

"The declaration of the Republic of the Philippines asserts that the Convention shall not affect the sovereign rights of the Philippines arising from its Constitution, its domestic legislation and any treaties to which the Philippines is a party. This indicates, in effect, that the Philippines does not consider that it is obliged to harmonize its laws with the provisions of the Convention. By making such an assertion, the Philippines is seeking to modify the legal effect of the Convention's provisions.

"This view is supported by the specific reference in the declaration to the status of archipelagic waters. The declaration states that the concept of archipelagic waters in the Convention is similar to the concept of internal waters held under former constitutions of the Philippines and recently reaffirmed in article 1 of the New Constitution of the Philippines in 1987. It is clear, however, that the Convention distinguishes the two concepts and that different obligations and rights are applicable to archipelagic waters from those which apply to internal waters. In particular, the Convention provides for the exercise by foreign ships of the rights of innocent passage and of archipelagic sea lanes passage in archipelagic waters.

"Australia cannot, therefore, accept that the statement of the Philippines has any legal effect or will have any effect when the Convention comes into force and considers that the provisions of the Convention should be observed without being made subject to the restrictions asserted in the declaration of the Republic of the Philippines."

^{*} Communicated to Member States by Depositary Notification C.N.173.1988.TREATIES-1 of the United Nations Secretariat.

2. PHILIPPINES*

DECLARATION BY THE PHILIPPINES CONCERNING AN OBJECTION BY AUSTRALIA TO THE UNDERSTANDING RECORDED UPON SIGNATURE BY THE PHILIPPINES AND CONFIRMED UPON RATIFICATION

On 26 October 1988, the Secretary-General received from the Government of the Philippines the following declaration concerning the said objection made by Australia:

[Original: English]

"The Philippine declaration was made in conformity with article 310 of the United Nations Convention on the Law of the Sea. The declaration consists of interpretative statements concerning certain provisions of the Convention.

"The Philippine Government intends to harmonize its domestic legislation with the provisions of the Convention.

"The necessary steps are being undertaken to enact legislation dealing with archipelagic sea lanes passage and the exercise of Philippine sovereign rights over archipelagic waters, in accordance with the Convention.

"The Philippine Government, therefore, wishes to assure the Australian Government and the States Parties to the Convention that the Philippines will abide by the provisions of said Convention."

^{*} Communicated to Member States by Depositary Notification C.N.254.1988.TREATIES-2 of the United Nations Secretariat.

II. LEGAL INFORMATION RELEVANT TO THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA

A. Recent national legislation received from Governments

1. BRAZIL

Extract from the Brazilian Constitution on the Organization of the State (Adopted on 5 October 1988)

CHAPTER II ON THE UNION

Article 20

The public domain of the Union shall consist of:

- i. Such property as belongs to the Union at present or may in future be attributed to it;
- ii. Unoccupied lands essential for the defence of the frontiers, military fortifications and works, and federal communication links, and for the preservation of the environment, as provided for by law;
- iii. Lakes, rivers and any waterways which are situated within its domain, or which wash up on more than one State, constitute the frontier with other States, or flow into or originate in foreign territory, as well as riversides and river beaches;
- iv. Islands in rivers and lakes in areas bordering on other countries; ocean beaches; oceanic and continental islands, with the exception of the areas referred to in article 26, II;
- v. The natural resources of the continental shelf and the exclusive economic zone;
- vi. The territorial sea;
- vii. Coastlands and coastal accumulations;
- viii. Potential sources of hydroelectric power;
 - ix. Mineral resources, including the resources of the subsoil;
 - x. Subterranean natural caves and archaeological and prehistoric sites;
 - xi. Land traditionally occupied by the Indians.

- 1. Under the conditions prescribed by law, the States, the Federal District, the Municipalities and the Union's organs of direct administration shall receive a share of the proceeds from the exploitation of oil or natural gas, of water resources for the purpose of generating electric power and of other mineral resources in the respective territories, continental shelf, territorial sea or exclusive economic zone, or financial compensation for such exploitation.
- 2. A 150-km-wide zone along the land frontiers, called the frontier zone, is considered essential for the defence of the national territory and its occupation and use shall be regulated by law.

2. FRANCE

Act of 31 December 1987 concerning the campaign against drug trafficking and amending certain provisions of the Penal Code

(Official Gazette, 5 January 1988, p. 159)

- Art. 9. After article 44 of the Customs Code, insert article 44 bis, to read as follows:
 - "Art. 44 bis. In a contiguous zone lying between 12 and 24 nautical miles measured from the baselines of the territorial sea and subject to delimitation agreements with neighbouring States, the Customs Service may exercise the control necessary to:
 - "(a) Prevent infringement of the laws and regulations which the customs authorities are responsible for enforcing in their sphere of operations;
 - "(b) Punish infringement of these laws and regulations committed in their sphere of operations." $\underline{1}/$
- Art. 10. After article 60 of the Customs Code, insert article 60 bis, to read as follows:
 - "Art. 60 bis. When there is good reason to believe that a person crossing a frontier is transporting narcotic drugs concealed within his body, customs agents may require him to undergo medical examination after first obtaining his express consent thereto.

"In the event of refusal, the customs agents shall make application for a court order to the president of the court of first instance having jurisdiction in the area (<u>tribunal de grande instance</u>) or to a judge designated by him. Such application may be made to the judge by any means.

"The judge may authorize the customs agents to proceed with the medical examination. He shall then appoint a physician to perform the examination as quickly as possible.

^{1/} Customs Code, art. 44:

[&]quot;1. The sphere of operations of the customs authorities shall comprise a maritime zone and land zone.

[&]quot;2. The maritime zone shall consist of the area situated between the coast and a seaward limit situated 12 nautical miles from the baseline of the territorial sea, as determined by a decree (...)."

"The results of the examination reported by the physician, the comments of the person concerned and an account of the proceedings must be included in a report submitted to the judge.

"Any person who refuses to undergo a medical examination ordered by the judge shall be given a sentence of imprisonment for between one month and one year and a fine of from 500 to 15,000 francs." 2/

Art. 11. Article 62 of the Customs Code shall be reworded as follows:

"Art. 62. Customs agents may search any vessel under 1,000 gross register tons situated in the maritime zone within the sphere of operations of the customs authorities and in the zone provided for in article 44 $\underline{\text{bis}}$ under the terms of that article." $\underline{3}$ /

^{2/} Customs Code, art. 60:

[&]quot;For purposes of enforcing this Code, and with a view to detecting smuggling, customs agents may carry out inspections of goods and vehicles and of persons."

^{3/} Former art. 62:

[&]quot;Customs agents may search any vessel under 100 net register tons or 500 gross register tons situated in the maritime zone within the sphere of operations of the customs authorities.

IRELAND

MARITIME JURISDICTION (AMENDMENT) ACT, 1988*

AN ACT TO AMEND THE MARITIME JURISDICTION ACT, 1959 [4th May, 1988]

BE IT ENACTED BY THE OIREACHTAS AS FOLLOWS:

"Principal Act".

1. - In this Act "the Principal Act" means the Maritime Jurisdiction Act, 1959.

Extension of outer limit of territorial seas.

- 2. (1) Section 3 (which specifies the outer limit of the territorial seas) of the Principal Act is hereby amended by the substitution of "12 nautical miles" for "three nautical miles" and the said section 3, as so amended, is set out in Part I of the Table to this section.
- (2) Section 4 (which specifies the baseline) of the Principal Act is hereby amended by the substitution in paragraph (b) of subsection (l) of "12 nautical miles" for "three nautical miles" and the said paragraph (b), as so amended, is set out in Part II of the Table to this section.
- (3) Section 14 (which provides for the adaptation of enactments) of the Principal Act is hereby amended by the insertion in subsection (1) after "three miles" of ", three nautical miles" and the said subsection (1), as so amended, is set out in Part III of the Table to this section.

TABLE

PART I

3. For the purposes of this Act, the outer limit of the territorial seas is the line every point of which is at a distance of 12 nautical miles from the nearest point of the baseline.

PART II

(b) on any low-tide elevation situated wholly or partly at a distance not exceeding 12 nautical miles from the mainland or an island.

^{*} Transmitted by the Permanent Mission of Ireland to the United Nations in a note verbale dated 8 September 1988.

PART III

- (1) References in any enactment to sea areas and waters within three miles, three nautical miles or one league of the coast or shore and cognate expressions shall be construed as references to sea areas and waters lying within the outer limit of the territorial seas.
- 3.- (1) This Act may be cited as the Maritime Jurisdiction (Amendment) Act, 1988.
- (2) The Maritime Jurisdiction Acts, 1959 and 1964, and this Act may be cited together as the Maritime Jurisdiction Acts, 1959 to 1988.
- (3) This Act shall come into operation on the lst day of September, 1988.

Short title, collective citation and commencement.

EXPLANATORY AND FINANCIAL MEMORANDUM

The Bill extends the breadth of the territorial seas of Ireland to 12 nautical miles from baselines, and makes such consequential amendments as are necessary to existing legislation, by amending the Maritime Jurisdiction Act, 1959.

<u>Section 1</u> is a definition provision which states that "the Principal Act", for the purposes of this legislation, is the Maritime Jurisdiction Act, 1959.

<u>Section 2</u> amends the Principal Act by providing that, for purposes of all legislation, the territorial seas of Ireland shall be 12 nautical miles from baselines.

Section 3 contains the short title, collective citation and the commencement date of the legislation. It is proposed that the legislation shall come into force on 1st March, 1988.

FINANCIAL IMPLICATIONS

There will be no direct financial and public service staffing effects consequent on the extension of the territorial seas by the Bill.

4. UNITED STATES OF AMERICA

TERRITORIAL SEA OF THE UNITED STATES OF AMERICA

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

27 December 1988

International law recognizes that coastal nations may exercise sovereignty and jurisdiction over their territorial seas.

The territorial sea of the United States is a maritime zone extending beyond the land territory and internal waters of the United States over which the United States exercises sovereignty and jurisdiction, a sovereignty and jurisdiction that extend to the airspace over the territorial sea, as well as to its bed and subsoil.

Extension of the territorial sea by the United States to the limits permitted by international law will advance the national security and other significant interests of the United States.

NOW, THEREFORE, I, RONALD REAGAN, by the authority vested in me as President by the Constitution of the United States of America, and in accordance with international law, do hereby proclaim the extension of the territorial sea of the United States of America, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Mariana Islands, and any other territory or possession over which the United States exercises sovereignty.

The territorial sea of the United States henceforth extends to 12 nautical miles from the baselines of the United States determined in accordance with international law.

In accordance with international law, as reflected in the applicable provisions of the 1982 Convention on the Law of the Sea, within the territorial sea of the United States, the ships of all countries enjoy the right of innocent passage and the ships and aircraft of all countries enjoy the right of transit passage through international straits.

Nothing in this Proclamation:

- (a) extends or otherwise alters existing federal or State law or any jurisdiction, rights, legal interests, or obligations derived therefrom, or
- (b) impairs the determination, in accordance with international law, of any maritime boundary of the United States with a foreign jurisdiction.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-seventh day of December, in the year of our Lord nineteen hundred and eighty-eight, and of the Independence of the United States of America the two hundred and thirteenth.

B. Treaties

AGREEMENT BETWEEN THE GOVERNMENT OF SOLOMON ISLANDS AND THE GOVERNMENT OF AUSTRALIA ESTABLISHING CERTAIN SEA AND SEA-BED BOUNDARIES*

The Government of Solomon Islands and the Government of Australia;

DESIRING to strengthen the bonds of friendship between the two countries;

RECOGNIZING the need to effect a precise and equitable delimitation of the respective maritime areas in which the two States exercise sovereign rights;

BASING THEMSELVES on the rules and principles of relevant international law and taking into account the United Nations Convention on the Law of the Sea:

HAVE AGREED AS FOLLOWS:

ARTICLE 1

1. Seaward of Australian reefs in the Coral Sea on the one hand and Solomon Islands reefs on the other hand, the line of delimitation between the Australian Fishing Zone and the Solomon Islands Exclusive Economic Zone and between areas of continental shelf over which each State respectively exercises sovereign rights in accordance with international law lies along the geodesics connecting the following points, defined by their co-ordinates, in the order stated:

Point	<u>Latitude S</u>	Longitude E
U	14° 04' 00"	157° 00' 00"
V	14° 41' 00"	157° 43' 00"
R1	15° 44' 07"	158° 45' 39"

- 2. The geographical co-ordinates referred to in this Article are expressed in terms of the Australian Geodetic Datum 1966 (AGD 66) in respect of point U, and in terms of the World Geodetic System 1972 (WGS 72) in respect of points V and Rl. Where for the purposes of this Agreement it is necessary to determine the position on the surface of the Earth of a point, line or area, that position may be determined by reference to either AGD 66 or WGS 72. In the case of AGD 66, that reference shall be in respect of a spheroid having its centre at the centre of the Earth, and a major (equatorial) radius of 6,378,160 metres and a flattening of 100/29825. In the case of WGS 72, that reference shall be in respect of a spheroid having its centre at the centre of the Earth, and a major (equatorial) radius of 6,378,135 metres and a flattening of 100/29826.
- 3. The line described in paragraph 1 of this Article is shown on the maps annexed to this Agreement as Annex 1 and Annex 2.

^{*} Transmitted by the Permanent Mission of Australia to the United Nations in a note verbale dated 2 October 1988.

ARTICLE 2

If any accumulation of liquid hydrocarbons or natural gas, or if any other mineral deposit beneath the sea-bed, extends across the line specified in Article 1 of this Agreement and the part of such accumulation or deposit that is situated on one side of the line is exploitable wholly or in part from the other side of the line, the two Governments will seek to reach agreement on the manner in which the accumulation or deposit may be most effectively exploited and on the equitable sharing of the benefits arising from such exploitation.

ARTICLE 3

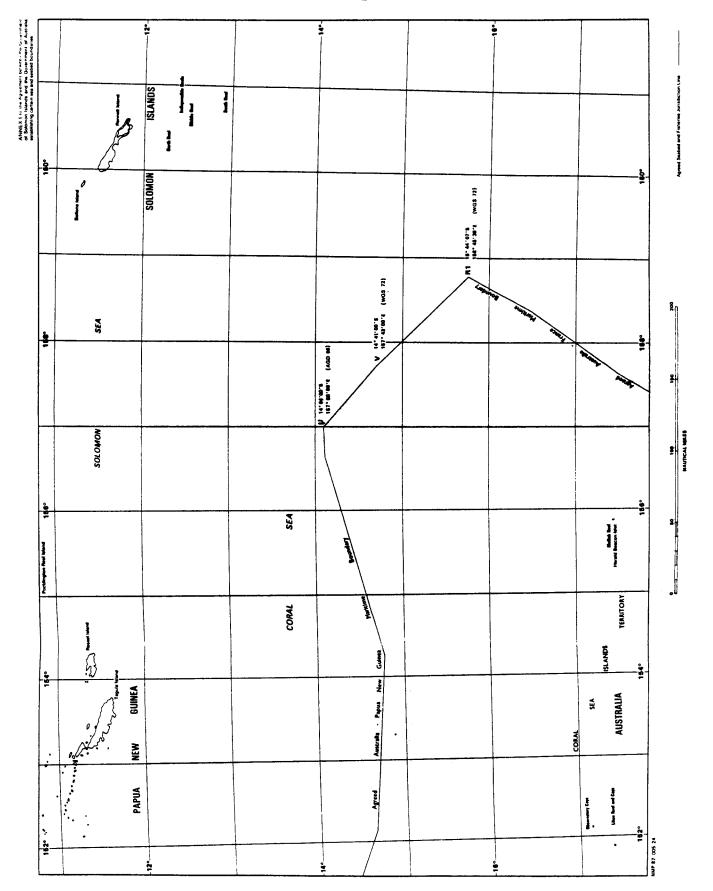
Any dispute between the two Governments arising out of the interpretation or implementation of this Agreement shall be settled peacefully by consultation or negotiation.

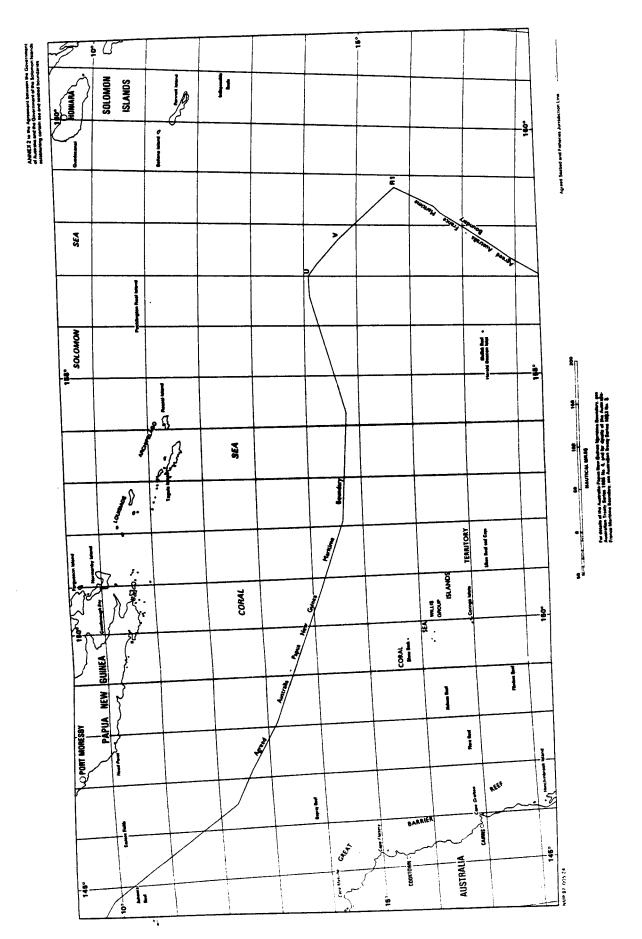
ARTICLE 4

Each Party shall notify the other of the completion of its constitutional procedures necessary to bring this Agreement into force. The Agreement shall enter into force on the day of receipt of the later of those notifications.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE in duplicate at Honiara on 13 September 1988 in the English language.





C. Resolution of interest

GENERAL ASSEMBLY RESOLUTION 43/18

Law of the Sea

The General Assembly,

Reaffirming its resolutions 37/66 of 3 December 1982, 38/59 A of 14 December 1983, 39/73 of 13 December 1984, 40/63 of 10 December 1985, 41/34 of 5 November 1986 and 42/20 of 18 November 1987, regarding the law of the sea,

Recognizing that, as stated in the third preambular paragraph of the United Nations Convention on the Law of the Sea, 1/ the problems of ocean space are closely interrelated and need to be considered as a whole,

Convinced that it is important to safeguard the unified character of the Convention and related resolutions adopted therewith and to refrain from applying their provisions selectively, in a manner inconsistent with their object and purpose,

Emphasizing the need for States to ensure consistent application of the Convention, as well as the need for harmonization of national legislation with the provisions of the Convention,

Considering that, in its resolution 2749 (XXV) of 17 December 1970, it proclaimed that the sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction (hereinafter referred to as "the Area"), as well as the resources of the area, are the common heritage of mankind,

Recalling that the Convention provides the régime to be applied to the Area and its resources,

Emphasizing that no State should undermine the Convention and related resolutions of the Third United Nations Conference on the Law of the Sea,

<u>1</u>/ Official Records of the Third United Nations Conference on the Law of the Sea, vol. XVII (United Nations publication, Sales No. E.84.V.3), document A/CONF.62/122.

Recognizing also the need for co-operation in the early and effective implementation by the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea of resolution II of the Third United Nations Conference on the Law of the Sea, $\frac{2}{2}$

Noting with satisfaction the progress made in the Preparatory Commission since its inception, including the registration in 1987 as pioneer investors of Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER), the Government of India, Deep Ocean Resources Co., Ltd. (DORD) and Yuzhmorgeologiya, whose applications were submitted by the Governments of France, India, Japan and the Union of Soviet Socialist Republics respectively, bearing in mind that such registration entails both rights and obligations,

Noting also with satisfaction the designation by the Preparatory Commission of reserved areas for the Authority from the application areas submitted by the pioneer investors pursuant to resolution II,

Noting also that the Preparatory Commission has decided to hold its seventh regular session at Kingston from 27 February to 23 March 1989 and to hold a summer meeting in 1989, 3/

Noting further the increasing needs of countries, especially developing countries, for information, advice and assistance in the implementation of the Convention and in their developmental process for the full realization of the benefits of the comprehensive legal régime established by the Convention,

Recognizing that the Convention encompasses all uses and resources of the sea and that all related activities within the United Nations system need to be implemented in a manner consistent with it,

Noting with appreciation the important initiative of the Secretary-General in convening an inter-agency meeting on international and regional developments in ocean affairs and law of the sea, $\frac{4}{}$ /

Deeply concerned at the current state of the marine environment,

Taking note of activities carried out in 1988 under the major programme on marine affairs, set forth in chapter 25 of the medium-term plan for the period 1984-1989, in accordance with the report of the Secretary-General, $\underline{5}/$ as approved in General Assembly resolution 38/59 A, and the report of the Secretary-General, $\underline{6}/$

^{2/} Ibid., document A/CONF.62/121, annex I.

^{3/} A/43/718, para. 144.

^{4/} A/43/718, para. 218.

^{5/} A/38/570 and Corr.1 and Add.1 and Add.1/Corr.1.

^{6/} A/43/718.

Recalling its approval of the financing of the expenses of the Preparatory Commission from the regular budget of the United Nations,

Taking special note of the report of the Secretary-General prepared in pursuance of paragraph 14 of General Assembly resolution 42/20,

- 1. Recalls the historic significance of the United Nations Convention on the Law of the Sea as an important contribution to the maintenance of peace, justice and progress for all peoples of the world;
- 2. Expresses its satisfaction at the increasing and overwhelming support for the Convention, as evidenced, inter alia, by the one hundred and fifty-nine signatures and thirty-five of the sixty ratifications or accessions required for entry into force of the Convention;
- 3. <u>Calls upon</u> all States that have not done so to consider ratifying or acceding to the Convention at the earliest possible date to allow the effective entry into force of the new legal régime for the uses of the sea and its resources;
- 4. <u>Calls upon</u> all States to safeguard the unified character of the Convention and related resolutions adopted therewith;
- 5. <u>Also calls upon</u> States to observe the provisions of the Convention when enacting their national legislation;
- 6. <u>Further calls upon</u> States to desist from taking actions which undermine the Convention or defeat its object and purpose;
- 7. <u>Notes</u> the progress being made by the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea in all areas of its work;
- 8. Expresses its satisfaction at the historic decisions of the Preparatory Commission of 17 August 1987 and 17 December 1987 to register the four pioneer investors sponsored respectively by India, France, Japan and the Union of Soviet Socialist Republics and to designate reserved areas for the Authority;
- 9. <u>Looks forward</u> to the early and satisfactory conclusion of the current consultations in the Preparatory Commission on the implementation of the obligations of the registered pioneer investors and the certifying States;
- 10. Expresses its appreciation to the Secretary-General for his efforts in support of the Convention and for the effective execution of the major programme on marine affairs set forth in chapter 25 of the medium-term plan for the period 1984-1989;
- 11. Further expresses its appreciation for the report of the Secretary-General prepared in pursuance of General Assembly resolution 42/20 and requests him to continue to carry out the activities outlined therein, as well as those aimed at the strengthening of the legal régime of the sea, special emphasis being placed on the work of the Preparatory Commission, including the implementation of resolution II of the Third United Nations Conference on the Law of the Sea;

- 12. <u>Calls upon</u> the Secretary-General to continue to assist States in the implemention of the Convention and in the development of a consistent and uniform approach to the legal régime thereunder, as well as in their national, subregional and regional efforts towards the full realization of the benefits therefrom, and invites the organs and organizations of the United Nations system to co-operate and lend assistance in these endeavours;
- 13. Approves the decision of the Preparatory Commission to hold its seventh regular session at Kingston from 27 February to 23 March 1989 and to hold a summer meeting in 1989;
- 14. Requests the Secretary-General to report to the General Assembly at its forty-fourth session on developments pertaining to the Convention and all related activities and on the implementation of the present resolution;
- 15. <u>Further requests</u> the Secretary-General to prepare for the General Assembly at its forty-fourth session a special report on recent developments related to the protection and preservation of the marine environment in light of the relevant provisions of the United Nations Convention on the Law of the Sea;
- 16. <u>Decides</u> to include in the provisional agenda of its forty-fourth session the item entitled "Law of the sea".

41st plenary meeting 1 November 1988

D. National legislation in relation to the Area

1. GERMANY, FEDERAL REPUBLIC OF

The Government of the Federal Republic of Germany wishes to inform the United Nations of the co-ordinates of the licence issued by the Federal Minister of Economics on 29 November 1985 pursuant to the Gesetz zur vorläufigen Regelung des Tiefseebergbaus (Act on the Interim Regulation of Deep Sea-Bed Mining) dated 16 August 1980 (BGB1. I p. 1457) as amended by the Act of 12 February 1982 (BGB1. I p. 136) to the Arbeitsgemeinschaft meerestechnisch gewinnbare Rohstoffe (AMR) authorizing exploration of hard mineral resources of the deep sea-bed.

The licence applies to an area delimited by a line with the following turning points:

```
Starting point
                    1:
                         S 06° 30' / W 90° 50'
                    2:
                         S 06° 30' / W 90° 20'
            to E
            to S
                    3:
                         S 06° 50' / W 90° 20'
            to E
                         S 06° 50' / W 89° 40'
                    4:
            to S
                    5:
                         S 07° 30' / W 89° 40'
            to E
                    6:
                         S 07° 30' / W 89° 20'
                         S 07° 10' / W 89° 20'
            to N
                    7:
                         S 07° 10' / W 88° 40'
            to E
                    8:
            to S
                    9:
                         S 07° 30' / W 88° 40'
            to E
                   10:
                         S 07° 30' / W 88° 20'
            to S
                   11:
                         S 08° 00' / W 88° 20'
            to W
                         S 08° 00' / W 88° 40'
                   12:
            to S
                         S 08° 20' / W 88° 40'
                   13:
            to W
                   14 : S 08° 20' / W 89° 10'
                         S 08° 40' / W 89° 10'
            to S
                   15:
            to E
                   16:
                         S 08° 40' / W 88° 10'
            to S
                   17:
                         S 10° 50' / W 88° 10'
            to W
                         S 10° 50' / W 89° 20'
                   18:
                         S 10° 30' / W 89° 20'
            to N
                   19:
            to W
                   20:
                         S 10° 30' / W 90° 50'
            to N
                   21 :
                         S 10° 00' / W 90° 50'
            to W
                   22:
                         S 10° 00' / W 91° 10'
            to N
                         S 09° 40' / W 91° 10'
                   23:
            to W
                   24 :
                         S 09° 40' / W 92° 40'
            to N
                   25 :
                         S 08° 00' / W 92° 40'
            to E
                         S 08° 00' / W 92° 10'
                   26:
                   27 : S 07° 20' / W 92° 10'
            to N
            to E
                   28:
                         S 07° 20' / W 91° 20'
            to S
                   29:
                        S 08° 00' / W 91° 20'
            to E
                   30 : S 08° 00' / W 90° 40'
            to S
                   31 : S 08° 10' / W 90° 40'
                        S 08° 10' / W 90° 20'
            to E
                   32 :
            to S
                   33 : S 09° 00' / W 90° 20'
            to E
                   34 : S 09° 00' / W 89° 50'
            to S
                   35 : S 09° 30' / W 89° 50'
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36 : S 09° 30' / W 89° 20'
            to E
                  37 : S 08° 20' / W 89° 20'
            to N
                   38 : S 08° 20' / W 89° 50'
            to W
                   39 : S 08° 00' / W 89° 50'
            to N
                   40 : S 08° 00' / W 90° 10'
            to W
                   41 : S 07° 50' / W 90° 10'
            to N
                   42 : S 07° 50' / W 90° 40'
            to W
                   43 : S 07° 30' / W 90° 40'
            to N
                   44 : S 07° 30' / W 90° 50' return to
            to W
                    1 : S 06° 30' / W 90° 50'
starting point
```

These co-ordinates have been published in the <u>Bundesanzeiger</u> (Federal Journal) of 5 August 1988.

I would be grateful if this information could be published by the United Nations as part of the Law of the Sea Bulletin.

2. UNITED STATES OF AMERICA*

By note dated 13 January 1986, the Government of the United States conveyed to the United Nations notices published in the Federal Register of the United States, which provided public notice of the issuance in 1984 by the National Oceanic and Atmospheric Administration (NOAA), United States Department of Commerce, of four licences authorizing deep sea-bed hard mineral resources exploration in specified areas of the east-central Pacific Ocean. Included in the Federal Register notices were the geographical co-ordinates of the deep sea-bed areas within which deep sea-bed hard mineral exploration has been authorized. That note and the related licence notices were printed in the United Nations Law of the Sea Bulletin, No. 7, April 1986.

As a result of negotiations which in July 1987 produced the successful resolution of mine site overlaps, three of the above licences have been modified to incorporate changes in site co-ordinates. These licence amendments are set forth in the attached Federal Register notices.

The Government of the United States requests that this note, and the attached <u>Federal Register</u> notices, be circulated by the United Nations as part of the next <u>Law of the Sea Bulletin</u> prepared by the Office of the Special Representative of the Secretary-General for the Law of the Sea.

^{*} First issued in Bulletin No. 11. Reissued in this Bulletin for technical reasons.

National Oceanic and Atmospheric Administration

Deep Sea-Bed Mining: Approval of Revisions to Mine Site Areas and Publication of Revised Co-ordinates

AGENCY: National Oceanic and Atmospheric Administration, Commerce

ACTION: Notice of approval of amendments to Deep Sea-Bed Mining Exploration Licence areas and publication of revised co-ordinates.

SUMMARY: Pursuant to the Deep Sea-Bed Hard Mineral Resources Act and 15 CFR Part 970, and at the request of the affected U.S. licensees, the National Oceanic and Atmospheric Administration (NOAA) on 22 February 1988 approved revisions to exploration licences USA-2 and USA-3, issued to Ocean Management, Inc. (OMI) and Ocean Mining Associates (OMA), respectively. On 7 and 16 October 1987, at 52 FR 37490 and 52 FR 38504, NOAA published notice of the proposed licence area changes to USA-2 and USA-3 and to exploration licence USA-1 issued to Ocean Minerals Company (OMCO), and a brief explanation of how these area revisions would be accomplished. No comments were received in opposition to approval of the requested revisions. NOAA will announce final action on the proposed revisions to licence USA-1 at a later date.

In accordance with the provisions of 15 CFR 970.512 through 970.514, NOAA has modified the licence terms, conditions and restrictions (TCR (5)) of licences USA-2 and USA-3 to restrict exploration activities so as to reflect the resolution of site overlaps. All other licence TCRs will remain in effect.

USA-2, issued to Ocean Management, Inc.

NOAA published the co-ordinates for the Ocean Management, Inc. exploration licence area at 49 FR 48205 on 11 December 1984. That licence area is now amended, resulting in a change in operating area from approximately 135,100 square kilometres to approximately 112,500 square kilometres; a reduction of approximately 22,600 square kilometres. This amendment is accomplished as follows:

1) The licence area is reduced by OMI relinquishment of the following area:

Turning Points	Latitude (North)	Longitude (West)
1 2 3 4 5 6 7 8	12° 50' 12° 50' 13° 00' 13° 00' 12° 30' 12° 30' 12° 11.6' 12° 11.6'	133° 50' 134° 00' 134° 15' 134° 15' 134° 04' 134° 04' 133° 50'

The above area has been applied for to be added to the licence area of Ocean Minerals Company.

2) The operating area within the original licence area is reduced by adding new paragraphs (b) and (c) to TCR(5) of the licence terms, conditions and restrictions. TCR(5) now provides as follows:

(5) Freedom of the High Seas Requirements

- (a) The licensee shall conduct its exploration activities in a manner which will not unreasonably interfere with the interests of other nations in their exercise of the freedoms of the high seas, as recognized under general principles of international law, such as fishing, navigation, submarine pipeline and cable laying, and scientific research (15 CFR 970.520).
- (b) In particular, pursuant to the resolution of the deep sea-bed mining site overlap between Ocean Management, Inc., and Yuzhmorgeologiya, which is to be implemented as set forth in the agreement of 14 August 1987 between the United States and the Union of Soviet Socialist Republics, Ocean Management, Inc., shall not engage in exploration, and shall not physically interfere with the exploration or commercial recovery activities of other operators, in the following area:

Turning Points	Latitude (North)	Longitude (West)
1	13° 30'	134° 45'
2	13° 30'	133° 50'
3	12° 50'	133° 50'
4	12° 50'	134° 00'
5	13° 00'	134° 00'
6	13° 00'	134° 15'
7	12° 30'	134° 15'
8	12° 30'	134° 04'
9	12° 11.6'	134° 04'
10	12° 11.6'	133° 50'
11	11° 30'	133° 50'
12	11° 30'	134° 45'
1	13° 30'	134° 45'

(c) In the event of actions which may constitute a breach of the above agreement of 14 August 1987, including the understandings related thereto, the State Department, on its own initiative or at the request of NOAA or any affected licensee, will determine within 60 days after such initiative or request, and in consultation with NOAA and any affected licensee, if such a breach has occurred. If this is determined to be the case, the Department of State and NOAA, in consultation with any affected licensee, will take appropriate action to seek to remedy the breach. If such breach cannot be remedied within 90 days after it is determined a breach has occurred, NOAA shall, in accordance with NOAA regulations, remove or modify the restrictions set forth in TCR(5) (b), or take promptly such other action as is appropriate and effective.

USA-3, issued to Ocean Mining Associates.

A. Licence area amendment:

NOAA published the co-ordinates for the Ocean Mining Associates exploration licence area at 49 FR 44938 on 13 November 1984.

That licence area is now amended, resulting in a change in operating area from approximately 156,060 square kilometres to approximately 150,310 square kilometres; a reduction of approximately 5,750 square kilometres. This amendment is accomplished by reducing the operating area within the original licence area, through adding new paragraphs (b) and (c) to TCR(5) of the licence terms, conditions and restrictions. TCR(5) now provides as follows:

(5) Freedom of the High Seas Requirements

- (a) The licensee shall conduct its exploration activities in a manner which will not unreasonably interfere with the interests of other nations in their exercise of the freedoms of the high seas, as recognized under general principles of international law, such as fishing, navigation, submarine pipeline and cable laying, and scientific research (15 CFR 970.520).
- (b) In particular, pursuant to the resolution of the deep sea-bed mining site overlap between Ocean Mining Associates and Yuzhmorgeologiya, which is to be implemented as set forth in the agreement of 14 August 1987 between the United States and the Union of Soviet Socialist Republics, Ocean Mining Associates shall not engage in exploration, and shall not physically interfere with the exploration or commercial recovery activities of other operators in the following area:

Turning Points	<u>Latitude (North)</u>	Longitude (West)
1	14° 45'	128° 12.5'
2	14° 37.5'	128° 12.5'
3	14° 37.5'	128° 9.13'
4	14° 15'	128° 9.13'
5	14° 15'	128° 5'
6	14° 00'	128° 5'
7	14° 00'	128° 10'
, 8	13° 55'	128° 10'
9	13° 55'	128° 15'
-	13° 34.56'	128° 15'
10	13° 34.56'	128° 35'
11	13 54.30 14° 45'	128° 35'
12	14° 45'	128° 12.5'
1	14 42	120 12.0

(c) In the event of actions which may constitute a breach of the above agreement of 14 August 1987, including the understandings related thereto, the State Department, on its own initiative or at the request of NOAA or any affected licensee, will determine within 60 days after such initiative or request, and in consultation with NOAA and any affected licensee, if such a breach has occurred. If this is determined to be the case, the Department of State and NOAA, in consultation with any affected licensee, will take appropriate action to seek to remedy the breach. If such breach cannot be remedied within 90 days after it is determined a breach has occurred, NOAA shall, in accordance with NOAA regulations, remove or modify the restrictions set forth in TCR(5) (b), or take promptly such other action as is appropriate and effective.

B. Proposal for interim preservational reference area:

Ocean Mining Associates (OMA) has submitted to NOAA a request for consultation with the objective of early designation by OMA of an area of approximately 6,520 square kilometres within the area of licence USA-3 as an interim preservational reference area. The co-ordinates delineating the proposed area are as follows:

Turning Points	Latitude (North)	Longitude (West)
1	14° 10'	128° 5'
2	14° 10'	128° 0'
3	12° 55'	128° 0'
4	12° 55'	128° 27.5'
5	12° 32.5'	128° 27.5'
6	12° 32.5'	128° 35'
7	13° 34.56'	128° 35'
8	13° 34.56'	128° 15'
9	13° 55'	128° 15'
10	13° 55'	128° 10'
11	14° 0'	128° 10'
12	14° 0'	128° 5'
1	14° 10'	128° 5'

This proposal is consistent with the approach NOAA is pursuing for monitoring the environmental effects of deep sea-bed mining. NOAA's approach responds to guidance on this subject from a panel of the National Research Council, National Academy of Sciences. NOAA also notes OMA's belief that such a proposal could serve as a catalyst for, and nucleus of, a constructive co-operative program of research, with additional benefits to industry, the nation and the international community.

In view of the above considerations, NOAA believes it is beneficial to pursue OMA's proposal and to examine further the potential designation of the proposed OMA area as a reference area for purposes of environmental research and monitoring.

Dated: 26 February 1988

National Oceanic and Atmospheric Administration

Deep Sea-bed Mining: Approval of Revision to Mine Site Area and Publication of Revised Co-ordinates

AGENCY: National Oceanic and Atmospheric Administration, Commerce

ACTION: Notice of approval of amendment to Deep Sea-bed Mining Exploration Licence area and publication of revised co-ordinates.

SUMMARY: Pursuant to the Deep Sea-Bed Hard Mineral Resources Act and 15 CFR Part 970, and at the request of the licensee, the National Oceanic and Atmospheric Administration (NOAA), on 5 April 1988, approved Revision No. 2 to exploration licence USA-1, issued to Ocean Minerals Company (OMCO). On 7 and 16 October 1987, at 52 FR 37490 and 52 FR 38504, NOAA published notice of proposed licence area changes to USA-1, USA-2 and USA-3, issued to OMCO, Ocean Management, Inc., and Ocean Mining Associates, respectively, and a brief explanation of how these area revisions would be accomplished. No comments were received in opposition to approval of the requested revisions. NOAA noticed approval of revisions to USA-2 and USA-3 on 3 March 1988, at 53 FR 6858.

In accordance with the provisions of 15 CFR 970.512 through 970.514, NOAA has approved additional new exploration areas and has modified the licence terms, conditions and restrictions (TCR (5)) of licence USA-1, to restrict exploration activities so as to reflect the resolution of site overlaps. All other licence TCRs will remain in effect.

NOAA published the co-ordinates for the OMCO exploration licence area at 49 FR 47081 on 30 November 1984. The licence area for USA-1 is now amended, resulting in a change in operating area from approximately 165,533 square kilometres to approximately 168,841 square kilometres; an addition of approximately 3,308 square kilometres. This amendment is accomplished as follows:

(1) The licence area is increased by the addition of the following areas:

Turning Points	Latitude (North)	Longitude (West)
a) 1	13° 29.0'	131° 00.0'
2	13° 20.0'	131° 00.0'
3	13° 20.0'	132° 15.0'
4	13° 29.0'	132° 15.0'
1	13° 29.0'	131° 00.0'
b) 1	13° 00.0'	134° 00.0'
2	12° 50.0'	134° 00.0'
3	12° 50.0'	133° 50.0'
4	12° 11.6'	133° 50.0'
5	12° 11.6'	134° 04.0'
6	12° 30.0'	134° 04.0'
7	12° 30.0'	134° 15.0'
8	13° 00.0'	134° 15.0'
1	13° 00.0'	134° 00.0'

c) 1	11°	30.0'	131°	30.0'
2	11°	00.0'	131°	30.0'
3	11°	00.0'	132°	30.01
4	10°	30.0'	132°	30.0'
5	10°	30.0'	133°	30.0'
6	11°	00.0'	133°	30.0'
7	11°	00.0'	133°	40.0'
8	11°	40.0'	133°	40.0'
9	11°	40.0'	132°	20.01
10	11°	30.0'	132°	00.0
1	11°	30.0'	131°	30.0'

(2) The operating area within the original licence area is reduced by adding new paragraphs (b) and (c) to TCR (5) of the licence terms, conditions and restrictions. TCR (5) now provides as follows:

(5) Freedom of the High Seas Requirements

- (a) The licensee shall conduct its exploration activities in a manner which will not unreasonably interfere with the interests of other nations in their exercise of the freedoms of the high seas, as recognized under general principles of international law, such as fishing, navigation, submarine pipeline and cable laying, and scientific research (15 CFR 970.520).
- (b) In particular, pursuant to the resolution of the deep sea-bed mining site overlap between Ocean Minerals Company and Yuzhmorgeologiya, which is to be implemented as set forth in the agreement of 14 August 1987 between the United States and the Union of Soviet Socialist Republics, Ocean Minerals Company shall not engage in exploration, and shall not physically interfere with the exploration or commercial recovery activities of other operators, in the following areas:

Turn	ing points	Latitude (North)	Longitude (West)
(a)	1	13° 40.0'	128° 35.0'
	2	13° 20.2'	128° 35.0'
	3	13° 20.2'	130° 00.0'
	4	13° 40.0'	130° 00.0'
	1	13° 40.0'	128° 35.0'
(b)	1	12° 50.0'	132° 15.0'
	2	12° 31.1'	132° 15.0'
	3	12° 31.1'	133° 30.6'
	4	12° 50.0'	133° 30.6'
	1	12° 50.0'	132° 15.0'
(c)	1	11° 50.0'	143° 37.9'
	2	11° 00.0'	143° 37.9'
	3	11° 00.0'	145° 00.0'
	4	11° 50.0'	145° 00.0'
	1	11° 50.0'	143° 37.9'

(c) In the event of actions which may constitute a breach of the above agreement of 14 August 1987, including the understandings related thereto, the State Department, on its own initiative or at the request of NOAA or any affected licensee, will determine 60 days after such initiative or request, and in consultation with NOAA and any affected licensee, if such a breach has occurred. If this is determined to be the case, the Department of State and NOAA, in consultation with any affected licensee, will take appropriate action to seek to remedy the breach. If such breach cannot be remedied within 90 days after it is determined a breach has occurred, NOAA shall, in accordance with NOAA regulations, remove or modify restrictions set forth in TCR (5) (b), or take promptly such other action as is appropriate and effective.

Dated: 13 April 1988

III. INFORMATION ABOUT THE PREPARATORY COMMISSION

The Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea, established by resolution I of the Third United Nations Conference on the Law of the Sea, held its sixth regular session at Kingston from 14 March to 8 April 1988 and its meeting in New York from 14 August to 2 September 1988. Prior to these meetings, the General Committee of the Preparatory Commission met in New York from 7 to 18 December 1987 to consider the applications of France, Japan and the Union of Soviet Socialist Republics and registered them as pioneer investors following the registration of India on 17 August 1987.

A total of 159 States or entities had signed the Convention and, under resolution I, paragraph 2, had become members of the Preparatory Commission. Under rule 2 of the rules of procedure of the Preparatory Commission, 15 States or entities became observers, having signed the Final Act. Other States or entities which have signed neither the Convention nor the Final Act might be invited to attend the meetings of the Preparatory Commission as observers.

- A. Meetings of a group of experts and the General Committee convened to examine applications for registration of pioneer investors

 (New York, 23 November-5 December and 7-18 December 1987)
- 1. REGISTRATION OF THE APPLICATIONS OF FRANCE, JAPAN AND THE UNION OF SOVIET SOCIALIST REPUBLICS AS PIONEER INVESTORS UNDER RESOLUTION II*

Following the registration of India as a pioneer investor, the Group of Technical Experts, established pursuant to the Understanding of 5 September 1986 (LOS/PCN/L.41/Rev.1), met from 23 November to 5 December 1987 to examine the applications for registration as pioneer investors under resolution II submitted by: the Government of France, on behalf of the Institut français de recherche pour l'exploitation de la mer (IFREMER), acting on behalf of the Association française d'études et de recherche des nodules (AFERNOD); the Government of Japan, on behalf of the Japanese enterprise "Deep Ocean Resources Development Co., Ltd." (DORD); and by the Government of the Union of Soviet Socialist Republics, on behalf of the Soviet State enterprise "Yuzhmorgeologiya".

The Group of Technical Experts unanimously concluded that the applications submitted by France, Japan and the Union of Soviet Socialist Republics had been submitted in accordance with resolution II, and the statements contained in documents LOS/PCN/L.41/Rev.1, annex, and LOS/PCN/L.43/Rev.1. Further, in respect of the area to be reserved for the Authority and those to be allocated to the applicants as pioneer areas, the Group of Technical Experts also concluded that:

^{*} See Special Issue II of the <u>Law of the Sea Bulletin</u> which contains the relevant documents dealing with the registration of the first group of pioneer investors.

- "(a) Based on the results of investigation and analysis of the data available at the present level of prospecting and exploration for polymetallic nodules, both areas offer similar potentials in terms of finding competitive mine-sites in the respective areas. Accordingly, the estimated commercial value of the area proposed to be reserved for the Authority may thus be considered equal to the estimated commercial value of the area proposed to be allocated to the applicant;
- "(b) The estimated commercial value of the combination of the contributed areas may be considered to be equal to the average of the estimated commercial value of the areas identified by each of the three applicants" (LOS/PCN/L.55).

The reports of the Group of Technical Experts on the three applications were submitted to the General Committee – acting as the executive body on behalf of the Preparatory Commission for the purpose of registration – which met in New York from 7 to 18 December 1987 to consider the applications. The General Committee had before it the reports of the Group and also documents containing information submitted by the three applicants. After a careful and lengthy examination of the reports, the General Committee proceeded to consider and approve the texts of the decisions on registration. On 17 December 1987, by a formal decision of the General Committee, the three applicants were registered as pioneer investors under resolution II (LOS/PCN/97-99).

 CERTIFICATES OF REGISTRATION OF FRANCE, INDIA, JAPAN AND THE UNION OF SOVIET SOCIALIST REPUBLICS ISSUED BY THE SECRETARY-GENERAL





Certificate of Registration

This is to certify that

Pursuant to

The United Nations Convention on the Law of the Sea,

Resolution II of the Third United Nations Conference on the Law of the Sea governing preparatory investment in pioneer activities relating to polymetallic nodules, The statement on the implementation of resolution II of 5 September 1986 and The statement of understanding on the implementation of resolution II of 10 April 1987 of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea, and

Having noted that

The Government of the Republic of France

Has signed the United Nations Convention on the Law of the Sea on 10 December 1982, and, as a certifying State,

Has submitted, on behalf of Institut français de recherche pour l'exploitation de la mer, a French public industrial and commercial corporation, acting on behalf of Association française d'études et de recherche des nodules, an application for registration as a pioneer investor on 22 August 1984 and a revised application on 15 November 1987,

Has undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and

Has undertaken to ensure that the pioneer activities are conducted in a manner compatible with the United Nations Convention on the Law of the Sea, and Pursuant to

The decision of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea to register Institut français de recherche pour l'exploitation de la mer acting on behalf of Association française d'études et de recherche des nodules as a pioneer investor adopted by its General Committee on 17 December 1987 in accordance with the Rules of Procedure of the Preparatory Commission,

Institut français de recherche pour l'exploitation de la mer acting on behalf of

Association française d'études et de recherche des nodules,

Having undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and Having made payment to the Preparatory Commission of the fee for registration as a pioneer investor,

is registered as a Pioneer Investor

and has been allocated the pioneer area, defined in the Schedule hereto, in accordance with the said resolution II and with the aforementioned statements; and By virtue of the aforementioned decision and registration Institut français de recherche pour l'exploitation de la mer. acting on behalf of Association française d'études et de recherche des nodules as a pioneer investor shall have the exclusive right to carry out pioneer activities in the pioneer area in accordance with the said resolution II.

GIVEN UNDER MY HAND and the official seal of the United Nations for and on behalf of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea at United Nations Headquarters,

Secretary-General of the United Nations

Schedule

weer area shall be defined as that bounded by the lines joining the following turning points, the co-ordinates of which are:

Turning Points	Latitude (N)	Longitude (W)	Turning Points	Latitude (N)	Longitude (W)
1.	16°00'	129°18'	10.	13*45'	131°10′
2.	16°00′	128°35'	11.	14°20'	131°10'
3.	15°30'	128°35'	12.	14°20'	131°30'
4.	15°20'	129°18"	13.	14°40'	131°30′
1.	16°00'	129*18'	14.	14°40'	132°00'
			1.	15°20'	132°00'
1.	15°20'	132°00′			
2.	15°20'	131°00'	1.	9°44'56"	151°00'
3.	15°00'	131°00′	2.	9°44'56"	149*30'
4.	15°00'	128°35'	3.	8*40'	149°30'
5 .	13°58'	128°35'	4.	8°40'	149*45'
6.	13°58'	129°10'	5.	8*15'	149*45'
7.	13°55'	129°10'	6 .	8°15'	151°00'
8 .	13°55'	130°00′	1.	9°44'56"	151°00'
9 .	13°45'	130°00°			





Certificate of Registration

This is to certify that

Pursuant to

The United Nations Convention on the Law of the Sea,

Resolution II of the Third United Nations Conference on the Law of the Sea governing preparatory investment in pioneer activities relating to polymetallic nodules, The statement on the implementation of resolution II of 5 September 1986 and The statement of understanding on the implementation of resolution II of

10 April 1987 of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea, and

Pursuant to

The decision of the Preparatory Commission for the International Sea-Bed
Authority and for the International Tribunal for the Law of the Sea
to register the Government of India as a pioneer investor adopted by its
General Committee on 17 August 1987 in accordance with the Rules of
Procedure of the Preparatory Commission,

the Government of India,

Having signed the United Nations Convention on the Law of the Sea on 10 December 1982,

Having submitted an application for registration as a pioneer investor on 12 January 1984,

Having submitted a revised application on 20 July 1987,

Having made payment to the Preparatory Commission of the fee for registration as pioneer investor,

Having undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and

Having, as a certifying State, undertaken to ensure that the pioneer activities are conducted in a manner compatible with the United Nations

Convention on the Law of the Sea,

is registered as a Pioneer Investor

and has been allocated the pioneer area,
defined in the Schedule hereto,
in accordance with the said resolution II
and with the aforementioned statements; and
By virtue of the aforementioned decision and registration
the Government of India as a pioneer investor
shall have the exclusive right to carry out pioneer activities
in the pioneer area in accordance with the said resolution II.

december

day of

GIVEN UNDER MY HAND and the official seal of the United Nations for and on behalf of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea at United Nations Headquarters,

Javier Pérez de Cuéllar Secretary-General of the United Nations

Schedule

The pioneer area shall be defined as that bounded by the lines joining the following turning points, the co-ordinates of which are:

Turning Points	Latitude (S)	Longitude (E)	Turning Points	Latitude (S)	Longitude (E)	Turning Points	Latitude (S)	Longitude (E)
A1	10°45'	73°00′	A27	15°45'	75°15'	A53	11°45'	73°45'
A2	10°45'	74°15′	A28	15°45'	75°00'	A54	11°45'	72*45'
A3	10°30'	74°15′	A29	15°15′	75°00'	A55	11*15'	72*45'
A4	10°30'	74°30′	A30	15°15'	75°15'	A56	11°15′	73°00′
A5	10°15′	74*30*	A31	15°00'	75°15'	A1	10*45'	73°00′
A6	10°15'	75°00'	A32	15°00'	75°00'			
A7	10°00′	75°00'	A33	14°45'	75°00'	A57	10°45'	78°30'
A8	10,000	76°15′	A34	14°45'	74*45'	A58	10°30'	78°30'
A9	10°15'	76°15'	A35	14°30'	74*45'	A59	10°30'	79*15'
A10	10°15'	75°45'	A36	14°30'	73*15'	A60	11°00'	79*15'
A11	10°30'	75°45'	A37	14*15'	73°15'	A61	11°00′	79*00*
A12	10°30'	76°00'	A38	14°15′	73°00'	A62	14°00′	79*00'
A13	10°45'	76°00'	A39	14°00'	73°00'	A63	14°00′	78*45'
A14	10°45'	75°30'	A40	14°00'	73°30'	A64	14°30'	78*45'
A15	11°30'	75°30′	A41	13°45'	73°30'	A65	14°30'	78*15'
A16	11°30'	76°00'	A42	13*45'	73°45'	A66	14°00'	78°15'
A17	11°45'	76°00'	A43	13*30'	73°45'	A67	14*00'	78°30'
A18	11°45'	76°30'	A44	13*30'	74*30*	A68	13°00′	78°30'
A19	13*30'	76°30'	A45	12°30'	74*30*	A69	13.00,	78°15'
A20	13°30'	76°15'	A46	12°30°	74*45'	A70	11°15′	78°15'
A21	13*45'	76°15'	A47	12*15'	74°45'	A71	11°15′	78°00'
A22	13°45'	76°00°	A48	12°15'	75°00'	A72	11°00′	78*00'
A23	14°00'	76*00'	A49	11°45	75°00'	A73	11°00′	78°15'
A24	14°00′	75°30'	A50	11°45'	74°30'	A74	10°45'	78°15'
A25	16°15'	75°30'	A51	11°15′	74*30*	A57	10°45'	78°30'
A26	16°15′	75*15'	A52	11°15′	73°45'			





Certificate of Registration

This is to certify that

Pursuant to

The United Nations Convention on the Law of the Sea,

Resolution II of the Third United Nations Conference on the Law of the Sea governing preparatory investment in pioneer activities relating to polymetallic nodules. The statement on the implementation of resolution II of 5 September 1986 and

The statement of understanding on the implementation of resolution II of
10 April 1987 of the Preparatory Commission for the International Sea-Bed
Authority and for the International Tribunal for the Law of the Sea, and

Having noted that

The Government of Japan

Has signed the United Nations Convention on the Law of the Sea on 7 February 1983, and, as a certifying State,

Has submitted, on behalf of Deep Ocean Resources Development Co., Ltd., a Japanese enterprise, an application for registration as a pioneer investor on 21 August 1984

and a revised application on 12 November 1987,

Has undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and

Has undertaken to ensure that the pioneer activities are conducted in a manner compatible with the United Nations Convention on the Law of the Sea, and Pursuant to

The decision of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea to register Deep Ocean Resources Development Co., Ltd., as a pioneer investor adopted by its General Committee on 17 December 1987 in accordance with the Rules of Procedure of the Preparatory Commission,

Deep Ocean Resources Development Co., Ltd.,

Having undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and Having made payment to the Preparatory Commission of the fee for registration as a pioneer investor,

is registered as a Pioneer Investor

and has been allocated the pioneer area,
defined in the Schedule hereto,
in accordance with the said resolution II
and with the aforementioned statements; and
By virtue of the aforementioned decision and registration
Deep Ocean Resources Development Co., Ltd.,
as a pioneer investor
shall have the exclusive right to carry out pioneer activities
in the pioneer area in accordance with the said resolution II.

GIVEN UNDER MY HAND and the official seal of the United Nations for and on behalf of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea at United Nations Headquarters. This 16th day of May 1988.

Javier Pérez de Cuéllar Secretary-General of the United Nations

Schedule

The pioneer area shall be defined as that bounded by the lines joining the following turning points, the co-ordinates of which are

Turning Points	Latitude (N)	Longitude (W)	Turning Points	Latitude (N)	Longitude (W)
1.	11°00'	149°15'	22.	09°22.5	146°00'
2.	11°00'	148°30'	23.	08°45'	146°00'
3.	10°48.75'	148°30'	24.	08°45'	147°44.8
4.	10°48.75'	147°30′	25.	10°00'	147°44.8"
5.	11°00'	147°30'	26.	10°00'	148°30'
6.	11°00'	147°00′	27.	10°15'	148°30'
7.	10°45'	147°00'	28.	10°15'	149°30
8.	10°45'	146°45'	29.	10°45	149°30'
9 .	11°00′	146°45'	30.	10°45'	149°15'
10.	11°00′	146°07.5'	1.	11°00'	149°15'
11.	11°03.75°	146°07.5'			
12.	11°03.75°	145°48.75'	1.	15°39.	132°55'
13.	10°11.25'	145°48.75°	2.	15°39'	132°00
14.	10°11.25'	146°15'	3 .	15°45'	132°00'
15.	10°22.5′	146°15'	4.	15°45'	131°00'
16.	10°22.5°	146°32'	5 .	15°20'	131°00'
17.	10°07.5°	146°32'	6.	15°20'	132°00'
18.	10°07.5"	146°45′	7.	14°40'	132°00'
19.	09°37.5°	146°45'	8 .	14°17.4′	132°48'
20.	09°37.5°	146°30°	9.	14°17.4′	132°55
21.	09°22.5	146°30'	1.	15°39'	132°55





Certificate of Registration

This is to certify that

Pursuant to

The United Nations Convention on the Law of the Sea,

Resolution II of the Third United Nations Conference on the Law of the Sea governing preparatory investment in pioneer activities relating to polymetallic nodules,

The statement on the implementation of resolution II of 5 September 1986 and The statement of understanding on the implementation of resolution II of

10 April 1987 of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea, and

Having noted that

The Government of the Union of Soviet Socialist Republics

Has signed the United Nations Convention on the Law of the Sea on 10 December 1982, and, as a certifying State,

Has submitted, on behalf of Yuzhmorgeologiya, a State enterprise of the Union of Soviet Socialist Republics, an application for registration as a pioneer investor on 20 July 1983 and a revised application on 15 November 1987,

Has undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and

Has undertaken to ensure that the pioneer activities are conducted in a manner compatible with the United Nations Convention on the Law of the Sea, and Pursuant to

The decision of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea to register

Yuzhmorgeologiya as a pioneer investor adopted by its General Committee on 17 December 1987 in accordance with the Rules of Procedure of the Preparatory Commission,

Yuzhmorgeologiya,

Having undertaken to comply with its obligations under the said resolution II and the aforementioned statements, and Having made payment to the Preparatory Commission of the fee for registration as a pioneer investor,

is registered as a Pioneer Investor

and has been allocated the pioneer area,
defined in the Schedule hereto,
in accordance with the said resolution II
and with the aforementioned statements; and
By virtue of the aforementioned decision and registration
Yuzhmorgeologiya

as a pioneer investor shall have the exclusive right to carry out pioneer activities in the pioneer area in accordance with the said resolution II.

GIVEN UNDER MY HAND and the official seal of the United Nations for and on behalf of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea at United Nations Headquarters,

1616

day of

May

1988.

Javier Pérez de Cuéllar Secretary-General of the United Nations

Schedule

The pioneer area shall be defined as that bounded by the lines joining the following turning points, the co-ordinates of which are:

Turning Points	Latitude (N)	Longitude (W)	Turning Points	Latitude (N)	Longitude (W)	Turning Points	Latitude (N)	Longitude (W)	Turning Points	Latitude (N)	Longinide (W)
1.	12°31.10	133°30.60'	15.	14*40	131°30'	28.	14°15'	128°09.13°	42.	12*31.10	132*15
2.	12°50':	133°30.60°	16.	14°20'	131°30'	29.	14°15'	128°05	7	12°31.10	
3.	12°50'	134°00'	17.	14°20'	131°10	30.	14.00.		1.		133°30.60
4.	13*00'	134°00'	18.	13°45'	131°10'			128*05	1.	10°50'	143°00°
5.	13*00	134°35"	19.	13°45'	130°00'	31.	14°00'	128*10	2.	11*40	143°00'
6.	12°00'	134°35'	20.	13*55	130°00'	32.	13°55	128°10'	3.	11.40.	142°00'
7.	12°00'	134°22,648	21.			33.	13°55	128°15	4.	11°47.375°	142°00'
8.	11°30°	134°22.648"		13°55'	129°10'	34.	13°34.56'	128°15'	5.	11°47.375	141°37"
9.	11°30		22.	13°58'	129°10'	35.	13°34.56'	128°35'	ú.	12°00	141°37'
10.	13*30'	134°45'	23.	13*58	128935	36.	13°20.20'	128°35'	7.	12°00'	141°25,172
		134°45'	24.	14*45'	128°35'	37.	13°20.20'	130°00'	8.	11°25	141°25.172
11.	13°30′ -	133°50'	25.	14°45'	128°12.50'	38.	13°20'	130*00	9.	11°25	141055
12	13°34.805	133°50'	26.	14°37.50°	128°12.50°	39.	13*20'	131.000.	10.	10°50'	141055
13.	13°34.805'	132°00'	27.	14°37.50°	128°09.13'	40.	13*29.	131°00		10°50	143*00
14.	14°40'	132°00'				41	13°29'	132*15	1.	10.30	143-00

B. Report on the sixth session of the Preparatory Commission
for the International Sea-Bed Authority and for the
International Tribunal for the Law of the Sea

Kingston, 14 March-8 April 1988

New York, 15 August-2 September 1988

Plenary

The implementation of the obligations of the pioneer investors and certifying States under resolution II

The Preparatory Commission focused its attention on the obligations, flowing from the registration of the pioneer investors and the certifying States. The issues related, inter alia, to the training of personnel designated by the Preparatory Commission (para. 12 (a) (ii) of resolution II); the implementation of paragraph 12 (a) of resolution II and paragraph 14 of LOS/PCN/L.41/Rev.l, annex, in respect of exploration of a mine-site for the Enterprise; and the payment by the pioneer investors of an annual fixed fee of \$US l million (para. 7 (b) of resolution II) (LOS/PCN/L.67/Rev.l). An informal consultative group was established to deal with the implementation of these obligations. The Group held five meetings; the issues were also discussed in informal consultations under the Chairman of the Preparatory Commission, amongst the various interest groups.

The consultations were conducted in a frank atmosphere and while some progress was made, including the identification and clarification of several issues, more time was required to resolve this matter. Accordingly, the consultative group will resume its discussions at the beginning of the seventh session of the Preparatory Commission.

The preparation of the rules, regulations and procedures relating to the organs of the Authority*

The plenary completed consideration of the draft rules of procedure of the Legal and Technical Commission and of the Economic Planning Commission and provisionally approved all of them with the exception of those relating to elections, decision—making on questions of substance and observers, matters which constitute some of the "hard—core issues" before the informal plenary. Draft rules of procedure of the Assembly and of the Council — which do not fall under the category of "hard—core issues" — were also examined, and several were provisionally adopted.

^{*} See reports of the Chairman of the Preparatory Commission (LOS/PCN/L.62 and Corr.1 and LOS/PCN/L.67/Rev.1).

The plenary also reviewed those draft rules of the Legal and Technical Commission which dealt with special procedures relating to the approval of plans of work. Due note was taken of the relevant provisions in the draft regulations on prospecting, exploration and exploitation of polymetallic nodules in the area (LOS/PCN/SCN.3/WP.6/Rev.l, part IX, sect. 2), but further consideration of this matter was postponed pending informal consultations to be undertaken by the Chairman.

There was time only for a general exchange of views on a working paper dealing with the establishment of a Finance Committee. The principle of establishing such a committee and the qualifications required for membership were generally accepted. However, questions concerning its composition, its precise powers and functions and decision-making were yet to be resolved.

Special Commission 1*

The mandate of the Special Commission is to undertake studies on the problems that would be encountered by the developing land-based producer States likely to be most seriously affected by sea-bed mineral production.

On the issue of the establishment of a compensation fund, there continued to be a divergence of views. Some considered that one should be established to accord with the Convention, while others remained unreceptive to the idea of a universal fund. Still others argued that the Authority should not take any action on compensation funds or other economic adjustment schemes, considering that this would automatically increase the financial burden of the Authority. It is none the less clear that some progress has been made in clarifying the issues involved.

On the issue of isolating the effects of deep sea-bed mining from other factors which may have adverse impacts on the export earnings or economies of developing land-based producers, general agreement emerged that the Authority when established would be in a better position to deal with the complex questions involved. Certain suggestions were made that may help the Authority in implementing assistance measures. After commercial sea-bed production occurs, the developing land-based producers that consider themselves affected by sea-bed production would raise the issue with the Authority, presenting corroborating facts and studies. The Authority would also be expected to keep abreast of the situation by studying the extent of changes in certain aspects.

On the issue of subsidization of sea-bed mining, some delegations held the view that the relevant provisions of the Convention contained a balance of rights and obligations reflecting the consensus reached among the Parties to the General Agreement on Tariffs and Trade (GATT), so that any questions should

^{*} See reports of the Chairman of Special Commission 1 (LOS/PCN/L.58 and LOS/PCN/L.63).

be taken up within GATT. They were also concerned that the system should not be over-protective of land-based mining and endanger proper development of the resources of the area. Other delegations, however, argued that subsidization would distort the metal market and result in premature exploitation of sea-bed resources, loss of competitiveness for the Enterprise and loss of revenues for the Authority. They maintained that it was the intention of the Convention that sea-bed mining should be carried out on a commercial basis.

Projection of metal demand, supply and price is important to the work of Special Commissions 1 and 2, since understandings in this area may have an impact on the timing and pace of development of sea-bed mining. At the New York meeting, an expert from the World Bank gave a preview of the Bank's projection that the growth in demand for the key metals during the 1990s will be lower than that experienced in the 1970s and 1980s.

Special Commission 2*

Special Commission 2 is dealing with the establishment of the Enterprise, the operational arm of the Authority.

The Chairman's Advisory Group on Assumptions also met during the session. It was set up in 1986 to consider whether and when existing models of sea-bed mining viability could be revised, based on metal prices and forecasts.

Its Chairman continues to review the data and information that determine studies of the feasibility of deep sea-bed mining, concentrating on the current situation of the four metals - with particular attention to nickel and copper prices and short-term forecasts. Given the continuous need for data and information on the current status and future projections for supply, demand and price of the four metals, as well as for sea-bed mining technology, it has been proposed that the Secretariat begin to develop a databank, which in time would permit periodic reports on the metals and on developments in technology relating to sea-bed mining.

The Ad Hoc Working Group on Training, established at the end of the spring session in 1987, has succeeded in formulating a set of draft principles and policies that should govern a Preparatory Commission training programme (LOS/PCN/SCN.2/1988/CRP.3). At the beginning of the New York meeting, the Special Commission reviewed this work and concluded that there was basic agreement on principles and policies and that the document would provide the basis for the work to be done by the Group on guidelines and procedures for the implementation of the programme. At the seventh session, the Group will continue this work and will conclude its mandate only when it has examined the whole package of principles, policies, guidelines and procedures for the training programme, in the interests of ensuring overall harmonization and coherent drafting. The Special Commission will then review the results and present a final proposal to the plenary for adoption.

^{*} See reports of the Chairman of Special Commission 2 (LOS/PCN/L.60 and LOS/PCN/L.65).

A first preliminary discussion was held at the summer meeting on the implementation of paragraph 12 (a) of resolution II in respect of exploration of a mine-site for the Enterprise. The co-operation of experts from registered pioneer investors was of great value on that occasion and will help considerably the detailed examination of the subject at the seventh session.

It was noted that the ability of Special Commission 2 to reach firm conclusions and to proceed to make the kind of concrete recommendations that would be of real assistance to the future Enterprise and to States Parties to the Convention is greatly dependent on the manner in which the registered pioneer investors and certifying States carry out their obligations under resolution II, paragraph 12. It was generally noted also that the progress of the work of the Commission depends on the continuing and close co-operation of the pioneer investors and certifying States.

Special Commission 3*

The Special Commission is holding a first detailed reading of the draft regulations on the transfer of technology prepared by the Secretariat (LOS/PCN.SCN.3/WP.6/Add.4), together with amendments submitted by the delegations of Belgium, the Federal Republic of Germany, Italy, Japan, the Netherlands and the United Kingdom of Great Britain and Northern Ireland (LOS/PCN/SCN.3/WP.13/Rev.1). Particular attention has been given to: the scope of the regulations, the use of terms, undertakings in contracts on transfer of technology which the contractor is legally entitled to transfer, as well as those which the contractor is not legally entitled to transfer, and the procedure for obtaining technology. Several of these articles gave rise to discussions on the role of the Council. Some held the view that the Enterprise should not be subjected unnecessarily to decision-making by a political organ such as the Council, since this could result in lengthy delays. Moreover, since the decisions were of a technical nature, invocation of the undertakings could be perceived as an administrative matter to be dealt with by the Secretary-General. Others, however, were of the opinion that since the Enterprise is required to act in accordance with the policies of the Assembly and is subject to the directives of the Council, the Council was the appropriate organ in this case.

Some delegations argued that the sanctions imposed on the contractor for failure to obtain the technology, which it was not legally entitled to transfer, were excessive. They contended that what was required was the existence of mutual trust, since the transfer of technology was not simply a mechanical act but an ongoing process requiring the continuous co-operation of the parties concerned.

^{*} See reports of the Chairman of Special Commission 3 (LOS/PCN/L.59 and LOS/PCN/64).

Special Commission 4*

The Special Commission is mandated to prepare the recommendations regarding arrangements for the establishment of the International Tribunal for the Law of the Sea.

The Special Commission has completed its article-by-article examination of the draft Headquarters Agreement between the International Tribunal for the Law of the Sea and the Federal Republic of Germany, the host country under the Convention, and has begun its examination of the draft Convention/Protocol on the Privileges and Immunities of the International Tribunal for the Law of the Sea (LOS/PCN/SCN.4/WP.6).

The Special Commission has also substantially concluded its consideration of the question of the procedures to be adopted for the prompt release of vessels and crews (contained in LOS/PCN/SCN.4/1987/CRP.22).

The Chairman has been holding informal consultations with interested delegations from all regional groups on matters relating to the seat of the Tribunal, should the Federal Republic of Germany not accede to the Convention before its entry into force. At the summer meeting in New York, consultations were held by the Chairman on the basis of the informal proposal prepared by the Bureau of the Special Commission (LOS/PCN/SCN.4/1986/CRP.21). A certain degree of agreement among delegations from all regional groups on essential elements of the proposal is now apparent, so that the Chairman intends to convene an informal meeting, at an appropriate time, with a view to formulating a common proposal that is likely to be adopted by the Preparatory Commission.

^{*} See reports of the Chairman of Special Commission 4 (LOS/PCN/L.61 and LOS/PCN/L.66).

C. Table of members, observers and participants of the Preparatory Commission a

Sixth session (Kingston and New York)

	Ki	ngston <u>b/</u>	Ne	w York =/
	Member/		Member/	
STATES	Observer	Participant	Observer	Participant
Afghanistan Albania* ^d	М		М	
Algeria	M	x	W	
Angola	M	X	M M	x
Antigua and Barbuda	M	Α.	M	x
Argentina				
Australia	M	X	M	x
Austria	M	x	M	x
Bahamas	М	x	M	x
Bahrain	M		М	
	M		М	
Bangladesh	М	x	 М	x
Barbados	M		M	•
Belgium	M	x	M	x
Belize	M		M	*
Benin	M		М	
Bhutan	 M		м	
Bolivia	M	x		
Botswana	M	Δ.	M M	x
Brazil	M	x		
Brunei Darussalam	M	A	M M	x
Bulgaria	 М			
Burkina Faso		x	М	x
Burma	M M		M	
Burundi	M	x	M	x
Byelorussian SSR			M	
	M 	x	M	x
Cameroon	M	x	M	x
Canada	M	x	M	x
Cape Verde	M	x	M	x
Central African Republic	M		M	
Chad	M		M	

States and other entities which are members or observers of the Preparatory Commission as defined in resolution I, paragraph 2, of the Third United Nations Conference on the Law of the Sea are indicated by an "M" for members or an "O" for observers. Those States or entities indicated by an "x" participated in the session or the meeting.

Held from 14 March to 8 April 1988 at Kingston.

Held from 15 August to 2 September 1988 in New York.

Those States indicated by an (*) signed neither the Convention nor the Final Act.

		ngston	Ne	w York
-	@mber/		Member/	
STATES Ob	server	Participant	Observer	Participan
Chile	М	x	М	x
China	M	x	M	x
Colombia	M	x	M	×
Comoros	M		M	*
Congo	M		M	
Costa Rica	M	x	М	ж
Côte d'Ivoire	M	x	M	×
Cuba	M	x	м	x
Cyprus	M	•	M	•
Czechoslovakia	M	x	M	x
Democratic Kampuchea	 М		 М	
Democratic People's Rep. of Korea		x	M	x
Democratic Yemen	M	•	M	
Denmark	M			X
Djibouti	M	ж	M M	x
Dominica			~	
Dominican Republic			M	
Ecuador	M		M	
Egypt	0	x	0	х
Egypt El Salvador	M	x	М	x
	M 		M 	x
Equatorial Guinea	M		М	
Ethiopia	M		M	
Fiji	M		M	
Finland	M	x	M	x
France	М	x	М	x
Gabon	M	x	м	x
Gambia	M		M	
German Democratic Republic	M	x	M	x
Germany, Federal Republic of	0	x	0	x
Ghana	M	x	M	x
	 М	x	<u>м</u>	x
Grenada	M		М	
Guatemala	M		М	×
Guinea	M	x	М	Α.
Guinea-Bissau	M	22	M	x
	 М	x	 М	
Haiti	M	4	M	
Holy See	0		0	
Honduras	M		M	

	Kingston		New York	
	Member/		Member/	
STATES	Observer	Participant	Observer	Participant
Iceland	М		M	
India	M	x	M	x
Indonesia	M	x	м	x
<pre>Iran (Islamic Republic of)</pre>	M	x	M	X
Iraq	M	x	M	x
Ireland	 М	x	M	x
Israel	0	x	0	•
Italy	M	×	M	x
Jamaica	M.	x	M	
Japan	М	x	M	x x
Jordan	0		0	
Kenya	M	v	M	
Kiribati*	22	X	M	x
Kuwait	М	49	34	
Lao People's Democratic Rep.		x	M	x
			M 	
Lebanon	M		M	
Lesotho	M		M	
Liberia	M	x	M	x
Libyan Arab Jamahiriya	M	x	M	x
Liechtenstein	M		M	
Luxembourg	М		 М	
Madagascar	M	x	M	x
Malawi	M		M	
Malaysia	M	x	M	x
Maldives	M		M	
Mali	M	~	M	х
Malta	M	x	М	x
Mauritania	M		M	 X
Mauritius	M		M	
Mexico	M	x	M	x
Monaço	м		M	
Mongolia	M		M	x
Morocco	M	x	M	x
Mozambique	M	X	М	x
Nauru	M		M	•
Nepal	м		м	
Netherlands	M	x	M	v
New Zealand	M	X	M M	x x
Nicaragua	M	•	M	
Niger	M		M	x
Nigeria	M	x	 М	•
Norway	M	x x	M	x
Oman	M	•	M M	x
Pakistan	M		M M	x
Panama	M	x	M	x
		•	P1	

-	Kingston		New York	
STATES	Member/ Observer	Participant	Member/	Participant
		rararara	Observer	rartitipani
Papua New Guinea	M	x	М	x
Paraguay	M		M	
Peru	0	x	0	x
Philippines	M	x	M	x
Poland	М		M	x
Portugal	 М	х	 М	x
Qatar	M		M	x
Republic of Korea	M	x	M	x
Romania	M		M	•
Rwanda	M		М	
St. Kitts and Nevis	 М			
Saint Lucia	M		M	
St. Vincent and the Grenadine			М	
Samoa	M M		М	
San Marino*	P1		M	
Sao Tome and Principe				
Saudi Arabia	M		M	
Senegal Senegal	M	х	M	x
Seychelles	M	х	М	x
Sierra Leone	M		M	
	M 		M	
Singapore	M		M	
Solomon Islands	M		M	
Somalia	M	x	M	x
South Africa	M		М	44
Spain 	M	x	М	x
Sri Lanka	 М	х	 М	
Sudan	M	x	M	x
Suriname	М			x
Swaziland	М	x	М	
Sweden	M	x	M M	
				x
Switzerland Syrian Arab Republic*	М	x	М	x
Thailand	М		**	
logo	M	X	M	x
longa*	M	x	М	x
-				
Trinidad and Tobago	M	x	M	×
ľunisia	M		M	
lurkey*				
ľuvalu Janda	M		M	
Jganda 	M 	x	M	x
Ukrainian SSR	M	х	 М	x ·
nion of Soviet Socialist Reps	s. M	x	M	x
Inited Arab Emirates	M	x	M	x
nited Kingdom of Great Britai	in			
and Northern Ireland	0	x	0	x
Inited Republic of Tanzania	M	x	М	x
			F-3	•

	Ki	ngston	Ne	New York	
	Member/		Member/		
STATES	Observer	Participant	Observer	Participant	
United States of America	0		0		
Uruguay	M		M	x	
Vanuatu	M	x	M	x	
Venezuela	0	x	0	x	
Viet Nam	M		М	x	
Yemen	<u></u>		м		
Yugoslavia	M	x	M	x	
Zaire	M	x	M	x	
Zambia	M	x	M	x	
Zimbabwe	M	x	M	×	
Observer under rule 3 of the	e Rules of	procedure of	the Preparator	y Commission:	
<pre>ENTITIES (under art. 305 (1)(b),(c), (d),(e) and (f))</pre>					
Cook Islands	M		м		
European Economic Community Namibia (United Nations Cour	M ncil	x	M	x	
for Namibia)	M	x	М	x	
Netherlands Antilles	0		0		
Niue	M		. м		
Trust Territory of the Pacif			12		
Islands	0		0		
West Indies Associated State			O		
W. W. Court of the	-				
NATIONAL LIBERATION MOVEMENT	'S				
African National Congress of	•				
South Africa	0		0	x	
Palestine Liberation	-		J	Α.	
Organization	0		0		
Pan Africanist Congress of					
Azania	0	x	0	x	
South West Africa People's					
Organization	0	x	0		
TOTAL MEMBERS	159	85	159	9 5	
TOTAL OBSERVERS	<u>15</u>	8	<u>15</u>	<u>7</u> (+ 1)	
GRAND TOTAL	174	22	.		
OWEN TOTAL	174	93	174	102 (+ 1)	
	===	===	===	===	

D. Seminar on the current status of developments in deep sea-bed mining technology (New York, 18 and 19 August 1988)

Commercial sea-bed mining, whose introduction was thought to be imminent in the 1970s, is now not expected to begin before the turn of the century, and not before a number of technological obstacles have been overcome and economic factors clarified. This was the conclusion of experts attending a seminar on the current status of developments in deep sea-bed mining technology.

The Seminar, organized under the auspices of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea, was held at United Nations Headquarters on 18 and 19 August 1988. It was addressed by experts in various aspects of sea-bed mining from France, the Soviet Union, Finland, Japan, the Federal Republic of Germany, Canada, Cuba and Norway.

Polymetallic nodules, potato-sized deposits found on the ocean floor at depths between 12,000 and 20,000 feet, were first discovered in 1873 during an oceanic expedition by the HMS <u>Challenger</u>. It was soon determined that in addition to a high content of manganese (thus the popular name manganese nodules) the deposits also contain some 20 other metals, most notably nickel, copper and cobalt.

By the 1960s, the commercial potential of these nodules had been well established, and by the 1970s a number of Western companies were on their way towards developing a system of extracting the nodules from the sea-bed and processing them into metals.

The Seminar was intended in part to assist the Preparatory Commission's Special Commission 3, which has been preparing the rules and regulations to govern sea-bed mining under the terms of the United Nations Convention on the Law of the Sea.

The experts, addressing the Seminar in their personal capacity and not as representatives of their Governments, treated such issues as the availability of prospecting and exploration technologies, availability of mining technology, processing of polymetallic nodules and perspectives for commercial exploitation of sea-bed resources.

Overview of sea-bed mining technology

Jean-Pierre Lenoble, Assistant to the Director-General of Institut français de recherche pour l'exploitation de la mer (IFREMER), after reviewing the history of the discovery of polymetallic nodules, spoke of the difficulties encountered in attempting to mine the resources of the deep sea-bed. Among those difficulties was the sea-bed terrain, which is muddy and uneven, making it an ideal trap for dredging devices that would be used in scooping the nodules before bringing them to the surface.

Problems encountered in properly exploring the sea-bed, combined with the slow nature of that process, had made it difficult to calculate precisely the density of nodule deposits in various parts of the oceans — an important factor in determining the area to be commercially mined. Available technology allowed for exploring only one square kilometre per hour, so that thousands of hours at sea would be necessary to explore the thousands of kilometres left unexplored. More speed was clearly needed, Mr. Lenoble said.

T. R. P. Singh, a member of an engineering consultancy working for India's Department of Ocean Development, said that a further problem was the determination of "mineable deposits". While there was general agreement as to known polymetallic nodule reserves (several billion tons containing almost a billion tons of nickel, another billion tons of copper and 100 million tons of cobalt), the "mineable reserves" — those that could be brought to the surface, processed into metals — had yet to be precisely calculated. Some figures existed, Mr. Singh said, but they had no real meaning and amounted only to "wild guesses".

According to Mr. Singh, "conventional methods (for determining reserves) are unreliable. Global estimates are no problem, but of little relevance. Local estimation is more important for the miner."

Spot-sampling, he continued, was not as reliable or complete as it should have been. On the other hand, maps could be fairly misleading, leading to a situation where once promising areas had to be abandoned.

Noting that the decision to start mining the sea-bed would depend on economic as well as technological factors, Mr. Lenoble indicated that the emergence of a rising, stable market for the metals to be mined from the sea-bed was not expected before the end of the century. The intervening time should be used to develop the technology and to give the diplomats and legal experts the opportunity to work out a harmonious system for sea-bed mining.

Prospecting and exploration technologies

S. G. Shlykov, an engineer and economist with the Ministry of Geology of the Soviet Union, speaking of the availability on the open market of sea-bed mining technology and technology currently under development, described the system now in use by the USSR for the exploration of sea-bed resources. The data collection system, consisting of a 6,000-ton ship carrying five winches, an A-frame to launch tow and recovery vehicles, generators that supply up to 250 kilowatts of power to supply electricity and eight laboratories as well as an on-board computer centre, works in an automated mode around the clock.

Mr. Shlykov said that photography and underwater television survey were used by the towed devices to survey the bottom of the oceans and to determine the characteristics and structure of the sea-bed. A "transit satellite system" was used to determine the ship's exact position. Seismic acoustics - both high and low pressure - were employed to generate sound waves that would determine the location as well as density of nodule deposits.

At the same time, a deep-sea vehicle, lowered to a depth of up to six kilometres, was used to collect samples. All samples were delivered on board the ship for chemical analysis.

Ivan F. Glumov, Chief of the Department of Mineral Resources of the Sea and Ocean of the USSR's Ministry of Geology, told the seminar that, independent of market prices, it was hardly likely that any country would seriously consider mining in the next 15 to 20 years. "The time for mining is not today. There are many problems, especially ecological problems," he stated.

Calling on the Seminar not to forget the lesson of Chernobyl, Mr. Glumov said that the ecological impact of deep sea-bed mining was yet to be determined. Comparisons with offshore oil production were not valid because drilling for oil on the continental shelf could not be compared with dredging the sea-bed for the nodules. Moreover, as no single State could study those potential problems alone, the Preparatory Commission should call on the developed countries to study together the ecological impact of sea-bed mining.

As to the availability of sea-bed mining technology on the open market, Mr. Glumov indicated that anyone wishing to do so could buy the technology developed by the Soviet Union on commercial terms.

Pekka Laxell, Executive Vice-President of the Finnish firm Rauma-Repola Oy, which is active in the development of deep sea technology, spoke of the large range of products now available for deep sea mining. Basically, he said, a mining system would consist of the following: a vessel, a collector and riser (to scoop nodules and bring them to the surface), a pumping system and a control system. While most investment would go into the design and construction of the ship, technological problems were posed by the riser and collector systems due to the nature of the task - dredging, collection and raising to the surface of deposits that lie 5,000 metres under the ocean surface, a task never before faced by man.

A deep-sea research vehicle, resembling a small-scale submarine and capable of operating at depths of up to 6,000 metres or six kilometres under water, was developed by Rauma-Repola in co-operation with the Academy of Sciences of the Soviet Union. The vehicle, shown to the Seminar in scale form, is 7.8 metres long and weighs about 18.7 tons. It is equipped with sampling and measuring devices, navigation and obstacle monitoring systems, underwater telephone and cameras, computer for the processing of the information and a collector that brings up to 300 kilograms of samples to the surface. It can carry up to two scientists and a pilot.

The research vehicle, constructed of ultra-high strength steel, has a life support system that can sustain the crew for 246 hours or roughly 10 days.

Manganese nodule mining systems

The deep sea-bed mining system under development by Japan consists of a collector that is towed by the surface ship. Flexible hoses, pipes and pumps connect the collector to the ship. The complex system is so interdependent that if a single pipe connection fails all equipment will fall to the sea-bed with no hope of recovery, according to Akihiro Masuda, of Japan's Metal Mining Agency, who made the presentation concerning his country's sea-bed mining activities.

After years in search of an efficient mining system, and a research and development budget of 20 billion yen for the period 1981-1989, Japan's Deep Ocean Minerals Association, under the direction of the Agency of Industrial Science and Technology, has settled on a basic mining concept consisting of a "hydraulic dredge with a towed collector".

The Japanese system consists of the following:

A towed collector that dredges nodules, discards sediments and feeds the next lift subsystem with the slurry;

<u>Pump lift equipment</u> consisting of submerged slurry pumping equipment and a submerged motor resistant to water pressure;

<u>Air lift equipment</u> to feed the mining ship with the collected manganese nodules, using compressed air blown into the lift pipe;

<u>Lifting pipe equipment</u> to act as an artery to feed the mining ship with the collected nodules and to be used as the cable to tow the collector.

The Japanese project foresees initial deep-sea testing of the equipment as early as 1989. Small-scale testing, using a scale model in an artificial sea-bed, has already been carried out.

Axel Bath, a marine engineer with the Manganese Nodule Research and Development Project of Preussag, of the Federal Republic of Germany, recalled that a Western consortium had recovered 800 tons of nodules from the Pacific in 1978. Current development efforts were focused on a deep-sea diving campaign to study the sediments on the ocean floor and the performance of the collector mechanism. The next phase of his company's efforts would be on-site testing of a self-propelled collector. The exact date for the test had not been established.

In all, in the Federal Republic the budget for development of technology for manganese nodule recovery was about 300 million marks, with about one third of that amount coming from private sources and the remainder from the Federal Government, he said.

Naturally, Mr. Bath said, Preussag was ready to offer its know-how on the open market on commercial terms. A good example of that readiness was the project undertaken by the firm on behalf of a joint Saudi-Sudanese State mining enterprise to explore the Red Sea for minerals and metals. A documentary shown by Mr. Bath gave details of the project, which studied sediments at a depth of more than 2,000 metres to determine the nature of metal or mineral deposits.

In response to questions from participants at the seminar, Mr. Bath said that in principle his firm would be willing to act as a "service contractor", mining the sea-bed on behalf of an international organization or a developing country.

Processing of manganese nodules

It is generally recognized, and was conceded at the Seminar, that about 75 per cent of the initial investment in a commercial mining operation will be devoted to the processing end of the project. It was also readily agreed at the Seminar that the basic technology for processing of manganese nodules is available and understood.

Bruce McKean, of the Canadian Ministry of Mines, Energy and Resources, said that as a matter of fact many of the basic patents for the processing of nodules would have expired by the time sea-bed mining began, meaning that the technology would be readily available to all. He envisioned a lively competition among many countries such as the Soviet Union, Finland, the Federal Republic of Germany, France, the United States, Canada and Cuba to sell the technology to sea-bed miners.

The question to be asked, he said, was whether the processing technology was mature, to which the answer would be no. Because there was no commercial-level experience against which to judge the technology, many refinements would have to be made in the future. "Bells and whistles are still to be developed."

Likewise, he did not envision any particular difficulties with the training of personnel to carry out the processing operations. Metallurgical and processing engineers would be needed for that task. Unquestionably, he added, on-the-job training would be of great benefit.

Luis Preval, a mining engineer with Cuba's Ministry of Basic Industry, agreed that "there is no mystery in the processing of nodules". The basic task was very similar to the processing of metal ores derived from land-based mines. As a matter of fact, were the nodules to be found on land, they would have been one of the best deposits from a processing point of view. The extraction of the nodules from the sea-bed was a much more difficult proposition than extracting metals from them once they were transported to the processing plant.

The two basic methods for processing land-based ores - heat and chemical separation of the metals from other deposits - would apply in the case of nodules. However, because of their high water content, it would probably prove more economical to use the chemical separation method with the nodules.

The economics of sea-bed mining would depend on more factors than merely the price of metals, Mr. Preval said. For instance, if the processing investment were brought down to about 65 per cent of the total investment, rather than the envisioned 75 per cent, it might prove commercially viable to mine the sea. Also, sustaining metal prices, together with the introduction of metals derived from the sea-bed, would be an important factor. As to the cost of processing, he estimated that it would cost about \$2 to process one pound of nickel from polymetallic nodules. That would have to be compared with the current nickel price of about \$6.60.

Perspectives for commercial exploitation

Jan Markussen, Project Director of Fridtjof Nansen Institute of Norway, gave an overview of the availability of technology, perspectives for commercial exploitation and economic feasibility of sea-bed mining.

Although the four Western consortia virtually stopped all sea-bed mining development activities after 1981, a new type of player had entered the arena - nations or Governments with either supply or political motives behind their engagement, he said. France, India, Japan and the Soviet Union had commenced comprehensive exploration and development projects for exploitation of nodule resources. China had followed suit, carrying out preliminary exploration and techno-economic analyses. The Republic of Korea too had carried out preliminary analyses. Japan planned to carry out integrated "at sea" testing of its mining system around 1992, while India would commence test mining in 1995.

Even though the basic technology for exploration, mining, transport and processing was known, there was no cause to believe that radical changes would not take place in many areas, Mr. Markussen said. Further technical development would be a result of the interplay between the traditional "technological push" and "market pull", with market-driven factors becoming more important as commercial exploitation was approached.

In addition, socio-economic and political factors would come into play. "European and Asian Governments have financed virtually the whole of the technical development that has taken place since 1981, their motive being that of long-term supply considerations", Mr. Markussen said. Growing ecological consideration would represent yet another factor, namely "pull of society".

He expected that technological changes would take place first in the exploration field, which was currently time-consuming and costly. What was needed was a device that was capable of analysing the metal content of nodules on-site and which could measure nodule density and topography. The real technological and economic breakthrough would come when a system was developed that would enable the processing of metals at sea.

"Generally speaking, it will take at least eight to 10 years from the time a country or company has finished preliminary testing of mining, transport and processing technology until a total concept has been developed ready to be applied on a commercial scale," he said. Given the announced plans of Japan and India, as well as indications that the Western consortia would seriously consider resuming development programmes if the current high price for nickel was sustained for the next three years, he said he expected exploitation to commence sometime between the years 2000 and 2005.

Profitability of sea-bed mining did not depend on market-driven factors alone, he continued. "There is a world of difference between what is market-wise a paying proposition and what might be profitable from a socio-economic viewpoint." Any real analysis of the economics and profitability of sea-bed mining would have to take into account new factors such as the willingness of Governments, such as Japan and France, fully to finance development programmes; the influence of low oil prices; the impact of the newly improved metal markets; and technological developments.

Concerning the availability of sea-bed mining technology, he indicated that a number of political, legal and economic factors would come into play. For instance, India, which had started its mining programme at a fairly early stage, would benefit because many mining companies would wish to establish a partnership with it, ensuring it the best technology at the most favourable price.

Not being a signatory to the Law of the Sea Convention might simply rule out a supplier for certain receivers, he said. Restrictions on the export of high technology to Eastern countries was another example of political considerations in the provision of technology. Patents protecting the owners of patent rights to parts of deep sea-bed technology was an instance of legal conditions.

On the whole, Mr. Markussen said, a developing country with the means to buy it would experience no problems in procuring technology, either currently or in the future. However, the problem was that technology could easily turn into "black boxes", imposing as a consequence a heavy dependence on the part of the supplier. To avoid this, detailed knowledge, including a training programme enabling the receiver to master the technology, was essential.

E. List of documents of the General Committee and of the sixth session of the Preparatory Commission

General Committee

LOS/PCN/1987/CRP.19

Draft decision of the General Committee on the application submitted by the Government of France as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [16 December 1987]

LOS/PCN/1987/CRP.20

Draft decision of the General Committee on the application submitted by the Government of Japan as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [16 December 1987]

LOS/PCN/1987/CRP.21

Draft decision of the General Committee on the application submitted by the Government of the Union of Soviet Socialist Republics as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [16 December 1987]

LOS/PCN/L.55

Report of the Chairman of the Preparatory Commission on the meeting of the General Committee held on 7-18 December 1987 to consider the applications submitted by France, Japan and the Union of Soviet Socialist Republics for registration as pioneer investors under resolution II [6 January 1988]

LOS/PCN/97

Decision adopted on 17 December 1987 by the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of France as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea

[6 January 1988]

LOS/PCN/98

Decision adopted on 17 December 1987 by the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of Japan as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea

[6 January 1988]

LOS/PCN/99

Decision adopted on 17 December 1987 by the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of the Union of Soviet Socialist Republics as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [6 January 1988]

LOS/PCN/BUR/INF/R.1

Formal part of the application of India released for the information of the General Committee with the consent of the applicant [11 August 1987]

LOS/PCN/BUR/INF/R.2

Part of the revised application for the registration of the Soviet State enterprise "Yuzhmorgeologiya" as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea, released for the information of the General Committee with the consent of the applicant [4 December 1987]

LOS/PCN/BUR/INF/R.3

Information concerning the revised application of Japan for the registration of "Deep Ocean Resources Development Co., Ltd." (DORD) as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea, released to the General Committee with the consent of the applicant [30 November 1987]

LOS/PCN/BUR/INF/R.4

Excerpts from the application submitted by France for registration as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea released to the General Committee with the consent of the applicant [2 December 1987]

LOS/PCN/BUR/INF/R.5

Chart illustrating the disposition of areas as contained in the applications for registration as pioneer investors of France, Japan and the Union of Soviet Socialist Republics
[8 December 1987]

LOS/PCN/BUR/INF/R.6

Statement submitted by France on its revised application
[10 December 1987]

LOS/PCN/BUR/INF/R.7

Part of the application for registration as a pioneer investor submitted by the Government of Japan of behalf of Deep Ocean Resources Development Co., Ltd. [11 December 1987]

LOS/PCN/BUR/INF/R.8

Chart illustrating the disposition of areas following the decision by the General Committee of the Preparatory Commission to register France, Japan and the Soviet Union as pioneer investors
[16 December 1987]

LOS/PCN/BUR/R.1

Report of the Group of Technical Experts to the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of the Republic of India for registration as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [10 August 1987]

LOS/PCN/BUR/R.2

Report of the Group of Technical Experts to the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of the Republic of France for registration as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [4 December 1987]

LOS/PCN/BUR/R.3

Report of the Group of Technical Experts to the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of Japan for registration as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea [4 December 1987]

LOS/PCN/BUR/R.4

Report of the Group of Technical Experts to the General Committee of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea on the application of the Government of the Union of Soviet Socialist Republics for registration as a pioneer investor under resolution II of the Third United Nations Conference on the Law of the Sea

[4 December 1987]

Sixth session

LOS/PCN/INF/14 Delegations to the sixth session,

Kingston, Jamaica, 14 March-8 April 1988

[31 March 1988]

LOS/PCN/INF/15 Delegations to the meeting of the

Preparatory Commission, New York,

15 August-2 September 1988

[31 August 1988]

LOS/PCN/100 Provisional agenda

[18 February 1988]

LOS/PCN/101 Credentials of representatives to the

sixth session of the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea. Report of the Credentials

Committee [6 April 1988]

LOS/PCN/102 Letter dated 6 April 1988 from the Chairman

of the Group of 77 addressed to the Chairman

of the Preparatory Commission

[7 April 1988]

LOS/PCN/104 Letter dated 19 August 1988 from the

Chairman of the delegation of Brazil

addressed to the Chairman of the Preparatory

Commission

[22 August 1988]

LOS/PCN/1988/CRP.22 Provisional timetable

[14 March 1988]

LOS/PCN/1988/CRP.23 Provisional list of delegations

[22 March 1988]

LOS/PCN/1988/CRP.24 Approval of plans of work

[5 April 1988]

LOS/PCN/1988/CRP.25 List of provisions relating to the frequency

of sessions

[6 April 1988]

LOS/PCN/1988/CRP.26 List of provisions in the United Nations

Convention on the Law of the Sea relating to decisions involving financial implications

[12 August 1988]

LOS/PCN/1988/CRP.27

Provisional timetable [15 August 1988]

LOS/PCN/1988/CRP.28

Provisional list of delegations New York, 15 August-2 September 1988 [23 August 1988]

LOS/PCN/L.56

Current status of deep sea-bed exploration and mining technology.

Paper prepared by the Secretariat
[23 February 1988]

LOS/PCN/L.56/Corr.1

Corrigendum
[23 March 1988]

LOS/PCN/L.56/Corr.2

Corrigendum [24 August 1988]

LOS/PCN/L.57

Report of the Special Representative of the Secretary-General for the Law of the Sea to the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea regarding the registration of pioneer investors under resolution II [16 March 1988]

LOS/PCN/L.58

Statement to the Plenary by the Chairman of Special Commission 1 on the progress of work in that Commission [7 April 1988]

LOS/PCN/L.59

Statement to the Plenary by the Chairman of Special Commission 3 on the progress of work in that Commission [7 April 1988]

LOS/PCN/L.60

Statement to the Plenary by the Chairman of Special Commission 2 on the progress of work in the Commission [7 April 1988]

LOS/PCN/L.61

Statement to the Plenary by the Chairman of Special Commission 4 on the progress of work in that Commission [6 April 1988]

LOS/PCN/L.62

Statement by the Chairman of the Preparatory Commission [7 April 1988]

LOS/PCN/L.62/Corr.1 Corrigendum
[8 April 1988]

LOS/PCN/L.63 Statement to the Plenary by the Chairman of

Special Commission 1 on the progress of work

in that Commission
[1 September 1988]

LOS/PCN/L.64 Statement to the Plenary by the Chairman of

Special Commission 3 on the progress of work

in that Commission
[1 September 1988]

LOS/PCN/L.65 Statement to the Plenary by the Chairman of

Special Commission 2 on the progress of work

in that Commission
[1 September 1988]

LOS/PCN/L.66 Statement to the Plenary by the Chairman of

Special Commission 4 on the progress of work

in that Commission [31 August 1988]

LOS/PCN/L.67/Rev.1 Statement by the Chairman of the

Preparatory Commission [28 September 1988]

LOS/PCN/WP.20/Rev.2 Draft Rules of procedure of the Assembly

of the International Sea-Bed Authority

[25 March 1988]

LOS/PCN/WP.26/Rev.2 Draft Rules of procedure of the Council of

the International Sea-Bed Authority

[30 June 1988]

LOS/PCN/WP.31/Rev.1/Corr.1 (Arabic and English only)

Draft rules of procedure of the Legal and

Technical Commission.

Working paper by the Secretariat.

Corrigendum.

[18 February 1988]

LOS/PCN/WP.31/Rev.2 Draft Rules of procedure of the Legal and

Technical Commission.

Working paper by the Secretariat

[30 June 1988]

LOS/PCN/WP.36/Rev.1/Corr.1 Draft Rules of procedure for the Economic

and Planning Commission.

Working paper by the Secretariat.

Corrigendum.

[18 February 1988]

LOS/PCN/WP.44

List of provisions relating to certain pending issues before the plenary on the

Authority

[8 February 1988]

LOS/PCN/WP.45

The Finance Committee.

Working paper by the Secretariat

[11 August 1988]

LOS/PCN/WP.46

Suggested amendments to the draft Rules of

procedure of the Assembly of the International Sea-Bed Authority

(LOS/PCN/WP.20/Rev.2).

Proposal by the delegation of the European

Economic Community [26 August 1988]

Special Commission 1

LOS/PCN/SCN.1/WP.12

Modalities of the establishment of a compensation fund and/or a system of compensation: financial considerations. Preliminary paper by the Secretariat

[1 March 1988]

LOS/PCN/SCN.1/WP.12/Corr.1

Corrigendum

[13 September 1988]

Special Commission 2

LOS/PCN/SCN.2/WP.14/Add.2

The international venture.

Study submitted by the Republic of Colombia

[18 May 1988]

LOS/PCN/SCN.2/WP.15

Structure and organization of the

Enterprise. Working paper by the Secretariat

[25 February 1988]

LOS/PCN/SCN.2/1988/CRP.3

Draft principles and policies for a

Preparatory Commission training programme

[15 June 1988]

Special Commission 3

LOS/PCN/SCN.3/WP.6/Add.4

Draft Regulations on prospecting, exploration and exploitation of polymetallic nodules in the Area (Draft Regulations on the transfer of technology until ten years after commencement of commercial production by the Enterprise).

Working paper by the Secretariat.

[10 February 1988]

LOS/PCN/SCN.3/WP.6/Add.4/Corr.1

Corrigendum
[22 March 1988]

LOS/PCN/SCN.3/WP.6/Rev.1

Draft Regulations on prospecting, exploration and exploitation of polymetallic nodules in the Area (Parts I-IV). Working paper by the Secretariat as revised by the Chairman [6 June 1988]

LOS/PCN/SCN.3/WP.11/Add.1

Suggested amendments to the draft Regulations on prospecting, exploration and exploitation of polymetallic nodules in the Area (LOS/PCN/SCN.3/WP.6/Add.2). Proposals by the Group of 77 [16 March 1988]

LOS/PCN/SCN.3/WP.13

Suggested amendments to the draft
Regulations on prospecting, exploration and
exploitation of polymetallic nodules in the
Area (LOS/PCN/SCN.3/WP.6/Add.4)
Proposals by the delegations of Belgium,
Germany, Federal Republic of, Italy, Japan,
the Netherlands and the United Kingdom of
Great Britain and Northern Ireland. Part VII
(Transfer of technology until ten years
after commencement of commercial production
by the Enterprise)
[31 March 1988]

LOS/PCN/SCN.3/WP.13/Rev.1

Suggested amendments to the draft
Regulations on prospecting, exploration and
exploitation of polymetallic nodules in the
Area (LOS/PCN/SCN.3/WP.6/Add.4)
Proposals by the delegations of Belgium,
Germany, Federal Republic of, Italy, Japan,
the Netherlands and the United Kingdom of
Great Britain and Northern Ireland.
Part VII. (Transfer of technology until ten
years after commencement of commercial
production by the Entreprise)
[15 August 1988]

Special Commission 4

LOS/PCN/SCN.4/L.10 Chairman's summary of discussions. Revised

draft Rules of the International Tribunal

for the Law of the Sea [19 February 1988]

LOS/PCN/SCN.4/L.11 Chairman's summary of discussions.

Draft Headquarters Agreement between the International Tribunal for the Law of the Sea and the Federal Republic of Germany

[3 March 1988]

LOS/PCN/SCN.4/L.11/Add.1 Chairman's summary of discussions.

Draft Headquarters Agreement between the International Tribunal for the Law of the Sea and the Federal Republic of Germany (LOS/PCN/SCN.4/WP.5 (Parts I and II))

[15 June 1988]

LOS/PCN/SCN.4/L.12 Report of the Chairman on the visit by the

Bureau of Special Commission 4 and officials of the United Nations Secretariat to the

Federal Republic of Germany

(24-28 August 1987) [21 March 1988]

LOS/PCN/SCN.4/WP.5 (Part II) Draft Headquarters Agreement between the

International Tribunal for the Law of the Sea and the Federal Republic of Germany

Part II (Articles 17-28). Prepared by the Secretariat

[26 February 1988]

LOS/PCN/SCN.4/WP.5/Rev.1 Revised draft Headquarters Agreement between

the International Tribunal for the Law of the Sea and the Federal Republic of Germany.

Prepared by the Secretariat

[8 August 1988]

LOS/PCN/SCN.4/WP.5/Rev.1/Corr.1 Corrigendum

[29 August 1988]

LOS/PCN/SCN.4/WP.6 Draft Convention/Protocol on the Privileges

and Immunities of the International Tribunal

for the Law of the Sea.
Prepared by the Secretariat

[23 March 1988]

LOS/PCN/SCN.4/1988/CRP.23 Informal suggested redraft of article 89,

paragraph 4, document

LOS/PCN/SCN.4/WP.2/Rev.1 (Part I).

Proposed by the Secretariat.

Subsection 2. Prompt release of vessels and

crews

[31 March 1988]

LOS/PCN/SCN.4/1988/CRP.23/Rev.1

Informal suggested redraft of article 89,

paragraph 4 (document

LOS/PCN/SCN.4/WP.2/Rev.1 (Part I)).

Proposed by the Secretariat.

Subsection 2. Prompt release of vessels and

crews

[7 July 1988]

LOS/PCN/SCN.4/1988/CRP.24

Informal suggestions relating to the draft Convention/Protocol on Privileges and Immunities of the International Tribunal for the Law of the Sea (LOS/PCN/SCN.4/WP.6). Presented by the delegation of the Federal Republic of Germany

[31 March 1988]

LOS/PCN/SCN.4/1988/CRP.25

Suggested redraft of article 91 (LOS/PCN/SCN.4/WP.2/Rev.1 (Part I)).
Submitted by the delegations of Belgium,
Denmark, France, the Federal Republic of
Germany, Greece, Ireland, Italy, Luxembourg,
the Netherlands, Portugal, Spain and the
United Kingdom of Great Britain and

Northern Ireland [19 August 1988]

LOS/PCN/SCN.4/1988/CRP.26

Suggested redraft of article 6 (LOS/PCN/SCN.4/WP.6).

Submitted by the delegation of Australia

[19 August 1988]

LOS/PCN/SCN.4/1988/CRP.27

Suggested redraft of article 7

(LOS/PCN/SCN.4/WP.6).

Submitted by the delegation of Switzerland

[22 August 1988]

LOS/PCN/SCN.4/1988/CRP.28

Suggested redraft of article 91 in document

LOS/PCN/SCN.4/WP.2/Rev.1 (Part I).

Prepared by the Secretariat

[26 August 1988]

LOS/PCN/SCN.4/1988/CRP.29

Suggested redraft of article 93 (LOS/PCN/SCN.4/WP.2/Rev.1 (Part I)). Submitted by the delegation of Greece on behalf of the delegations of Belgium, Denmark, France, the Federal Republic of Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom of Great Britain and Northern

Ireland

[30 August 1988]

LOS/PCN/SCN.4/1988/CRP.30

Suggested redraft of Article 91 (LOS/PCN/SCN.4/WP.2/Rev.1 (Part I)).
Submitted by the delegation of the United Republic of Tanzania on behalf of the Group of 77 [30 August 1988]

IV. OTHER INFORMATION

A. Communiqué of the Fourteenth Meeting of the Standing Committee of
Ministers responsible for Foreign Affairs of the Caribbean
Community, held at Port-of-Spain on 20 and 21 May 1988*

LAW OF THE SEA

Ministers reviewed the progress being made by the Preparatory Commission for the International Sea-Bed Authority and for the International Tribunal for the Law of the Sea, and noted with satisfaction that France, India, Japan and the Soviet Union had been registered as pioneer investors. They considered this action an important step towards the establishment of the Enterprise – the sea-bed mining arm of the Authority.

They agreed, particularly in the light of the registration, to continue their efforts to encourage all States that had not yet done so to ratify the Convention in order to ensure its entry into force at an early date.

^{*} General Assembly document A/43/399 of 10 June 1988.

B. Denmark brings a case against Norway*

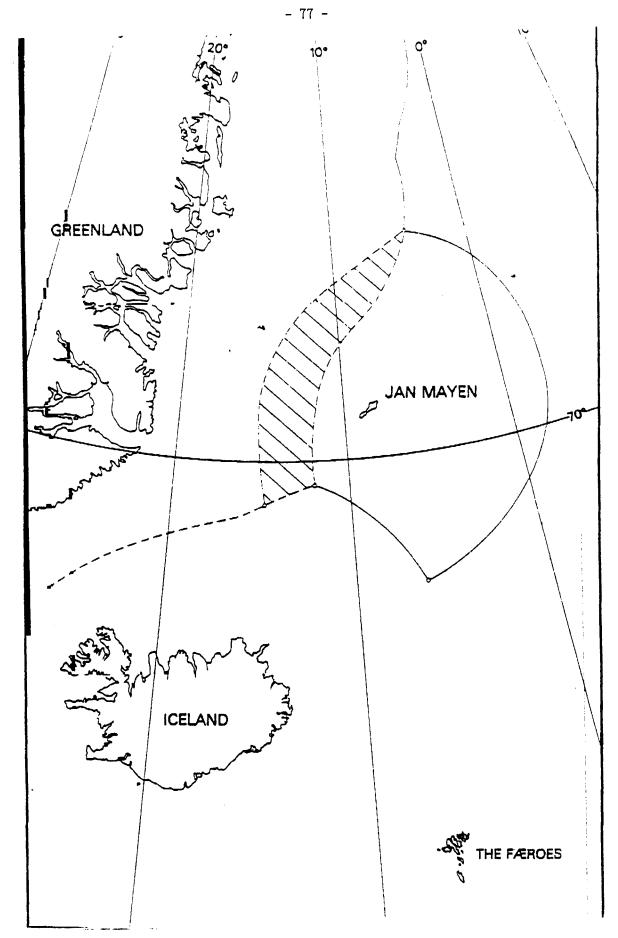
The following information is made available to the press by the Registry of the International Court of Justice.

On 16 August 1988 the Government of Denmark filed in the Registry of the International Court of Justice an Application instituting proceedings against Norway.

In its Application, the Government of Denmark explains that, despite negotiations conducted since 1980, it has not been possible to find an agreed solution to a dispute with regard to the delimitation of Denmark's and Norway's fishing zones and continental shelf areas in the waters between the East Coast of Greenland and the Norwegian island of Jan Mayen, where there is an area of some 72,000 square kilometres to which both parties lay claim [see map on page 77]. It therefore requests the Court:

"to decide, in accordance with international law, where a single line of delimitation shall be drawn between Denmark's and Norway's fishing zones and continental shelf areas in the waters between Greenland and Jan Mayen".

^{*} International Court of Justice communiqué No. 88/18 of 18 August 1988.



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