

file → Mr. SARDANA

PROSPECT AND RETROSPECT OF DEEP SEABED MINING

THE ROLE OF THE PREPARATORY COMMISSION FOR THE INTERNATIONAL SEABED AUTHORITY IN IMPLEMENTING THE PIONEER REGIME.

Commercial exploitation of deep seabed resources, more particularly polymetallic nodules was in the realm of speculation during the 60s. However, today commercial exploitation of deep seabed resources is assessed to be dependent on the interplay between technological, economic, political, legal and environmental factors. Discussions regarding exploitation of the deep seabed resources have to a large extent been characterised by generalisation as if there is only one type of actor. This is not the case. There is big difference between the interested parties regarding technology, financing and motivation. These differences notably are reflected in Part-11 of the Convention of the Law of the Sea as well as Resolution II of 30 April 1982.

Resolution II identifies four consortias which had each spent between 100-250 million dollars in the exploration and development of technology for mining, transport and processing. The Resolution also identifies four States and other entities also as having made substantial assessment in these deep seabed mining. On this basis the regime of pioneer investors was constructed in 1982. The regime was seen as an interim measure and was considered to be the first step in the implementation of the parallel system of exploitation.

The Preparatory Commission for the International Seabed Authority, unlike other similar commissions, was mandated not only to prepare for the establishment of the future International Seabed Authority, but also to shoulder the responsibility for implementing the interim regime. The Commission started functioning from 1983 and has registered significant progress towards the implementation of the regime. It grappled with the problem of overlapping claims and facilitated the registration of the first group of Pioneer Investors - France, India, Japan and Soviet Union, but even so, that Commission is faced with many challenges. The consortia which are controlled by States from North America and Europe have not been brought within the purview of the interim regime because of the decision of the concerned States not to sign the Convention on the Law of the Sea. The consortia see in the contours of the Convention and Resolution II element of compulsory transfer of technology from the industry groups to the UN based Enterprise. Since 1982, consortia have not done anything, but monitoring the international events without taking part in the further exploration and technological development.

Against the above background, it is proposed to do research into the following matters :

- (a) What are the factors which led to optimism regarding the prospects of deep sea mining in the 60s and 70s, but which could not be sustained in the 80s ?
- (b) Which were the interest groups involved in the two phases of the evolution of the deep sea-bed mining regime, i.e. from 1973 to 82 and from 82 to the present ?
- (c) What are the technological developments that led to different perceptions in the two phases ?
- (d) What are the economic and other factors which affect the viability of deep sea-bed mining ?

Research will be based on a study of the following documents:

- (i) The documents of the Third United Nations Convention on the Law of the Sea;
- (ii) The documents of the Preparatory Commission, and
- (iii) The various writings, legal and otherwise, on the work of the UNCLOS and PREPCOM:

On the basis of the above study and a historical analysis, the various factors which could either aid or hinder the development of a deep seabed mining regime would be identified. These include:

- (i) political, such as the attitude of the certain States like USA, UK, FRG towards the Convention regime and its impact on on Part 11 of the Convention.
- (ii) Economic viability of deep seabed mining in terms of metal price, metal use intensity and the time factors.
- (iii) Technological, whether the technology of today will also be the technology of tomorrow ? If not, how far the technology

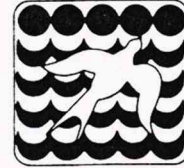
of tomorrow will be removed from that of today ? The prospect of technology transfer for developing countries and to the UN based Enterprises. What is the best way of transferring technology today, e.g. joint ventures, co-development etc.?

- (iv) Legal, whether Part 11 of the Convention can be maintained in its present form. If not, what adjustment or modification would be called for ? Whether any such modification is possible or feasible within the existing legal framework ? If not, what political strategy would need to be adopted ? Whether the Preparatory Commission can handle this task, etc.



Dalhousie University

International Ocean
Institute



I.O.I. - Malta

COPY

Judy make new file

October 12, 1989

file

Dr. M.M.K. Sardana
Joint Secretary
Department of Ocean Development
New Delhi, India

Dear Sardana:

May I ask for your help today?

Could you give me information on what is going on in India in LASER basic research and R&D? Laser application to micro-electronics? Laser application to deep-sea exploration? to ASW? What are the budgets? What are the time-tables? Is there international cooperation? I need the information for a project I am working on (on joint R&D for the Enterprise) with which, hopefully, also the IIT and Japan will be associated. We are doing it for the AALCC. But I thought nobody knows more about LASER than you!

I have not yet made any headway on the matter we discussed, for the reasons you know. But I am not giving up, and shall have the opportunity, next week, for discussing it with the competent person here at the University.

Today I am asking our publisher in New York to send you a little book, written by my father, on India. My father never visited India, and the story is based on an old Indian legend which he got from an Indologist named Zimmer. I think this imaginary India will amuse you. The story also has very modern and scientific overtones.

All the very best. I am looking forward to seeing you again in Jamaica and, hopefully, to hearing from you as soon as possible.

Yours as ever,

Elisabeth Mann Borgese

RECEIVED NOV 09 1989



M.M.K. Sardana,
Joint Secretary
Tel: 362101

Call Knopf

भारत सरकार BY AIR MAIL
महासागर विकास विभाग
महासागर भवन, ब्लॉक 12, सी. जी. ओ. कॉम्प्लेक्स, लोदी रोड,
नई दिल्ली-110 003
GOVERNMENT OF INDIA
DEPARTMENT OF OCEAN DEVELOPMENT
Mahasagar Bhawan, Block 12, CGO Complex, Lodi Road,
New Delhi-110 003 (India)

D.O. No. DOD/JS-Dy/1500/89

दिनांक/Dated October 30, 1989

Dear Madam Borgese,

Thank you very much for your letter of 12th October, 1989. I shall be very eagerly looking forward to receiving the book written by your esteemed father on India. I am sure that India imagined by him will be very close to what India is. You may be interested to know that the greatest Indologist from Germany, Max Muller, also never visited India but his contribution to the Indian thought remains unparalleled till today.

As far as LASER research in India is concerned this is being carried on in various national institutions and also in a number of universities. It is very difficult to estimate exactly what is being spent in this particular field. Indian scientists are very much alive to the application of LASER in the field of micro-electronics and its potential in survey and mapping of the seabed. Because of the nascent stages in certain applications it is also very difficult to make an estimate of the possible applications in near future that the LASER techniques will be put to use. Our scientists and institutions do keep themselves aware of the developments in this field and do have joint research programmes with some of the advance institutions of the world.

I am also looking forward to seeing you again in Jamaica.

With deepest regards,

Yours sincerely,

M. Sardana
(M.M.K. Sardana)

Madame Elisabeth Mann Borgese,
International Ocean Institute,
Dalhousie University,
1321 Edward Street, Halifax,
Nova Scotia, Canada.

File

10 ZCZCUS 06 TXN *EJZ1283
20 IN 3161535.
30 .
40 7 NOVEMBER, 1989
50
60 TO: DR. M.M.K. SARDANA
70 JOINT SECRETARY
90 DEPARTMENT OF OCEAN DEVELOPMENT
100 GOVERNMENT OF INDIA
110 NEW DELHI, INDIA
120
130 FROM: ELISABETH MANN BORGESE
150 INTERNATIONAL OCEANS INSTITUTE
160 1321 EDWARD STREET, HALIFAX
170 CANADA
180
190 TELEX TO: IN 3161535
200 TELEX FROM: 019 21 863 DALUNIV
210
220 DEAR SARDANA:
230
240 COULD YOU PLEASE SEND ME A COPY OF YOUR C.V. I NEED IT. I ALSO
250 HOPE YOU RECEIVED MY OTHER LETTER, WITH THE QUESTIONS ABOUT HIGH
260 TECH IN INDIA.
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290 WARMEST REGARDS,
310 ELISABETH MANN BORGESE

Continue:

10 ZCZCUS 011IOI90 TXN *EJZ1283
20 IN 3161535
30 .
40 11 JANUARY, 1990
50
60 TO: K. SARDANA, DEPT. FOR OCEAN DEVELOPMENT, NEW DELHI, INDIA
70 TLX: IN 3161535
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90 FROM: ELISABETH MANN BORGESE, IOI, HALIFAX, CANADA
100 TLX: 019 21 863
110 FAX: 902 424 1216
120
150 DEAR SARDANA:
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180 I AM GOING TO BE IN DELHI OR THEREABOUTS FROM JANUARY 16 TO 21, AND
190 AM VERY MUCH LOOKING FORWARD TO MEETING WITH YOU AND, IF POSSIBLE,
200 ALSO TO MEETING WITH DR. GAUR.
210
220 I AM GOING TO STAY WITH THE JAGOTA'S AND SHALL GET IN TOUCH WITH YOU.
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240 HAPPY NEW YEAR.
250
260 YOURS CORDIALLY,
270 ELISABETH

Continue:

telex
IN 3161535



Dalhousie University

International Ocean
Institute



I.O.I. - Malta

FACSIMILE TRANSMISSION

To: K. Sardana
Dept. for Ocean Development
New Delhi, India

From: Elisabeth Mann Borgese
International Ocean Institute

Dear Sardana:

I am going to be in Delhi or thereabouts from January 16 to 21, and am very much looking forward to meeting with you asnd, if possible, also to meeting with Dr. Gaur

I am going to stay with the Jagotas, and shall get in touch with you.

Happy New Year,

Yours cordially

Elisabeth

.1

10 ZCZCUS 013FEBIOI TXN *EJZ1283
20 IN 3161535
30 .
40 TO: K. SARDANA, DEPT. FOR OCEAN DEVELOPMENT
90 GOVERNMENT OF INDIA, NEW DELHI, INDIA
100
110 FROM: ELISABETH MANN BORGESE, INTERNATIONAL OCEAN INSTITUTE
130 HALIFAX, NOVA SCOTIA, CANADA
140
150 TLX: 019 21 863
160
170 DATE: 13 FEBRUARY, 1990
180
190 DEAR DR. SARDANA:
200
240 DO YOU HAVE A FAX MACHINE? ELISABETH MANN BORGESE WOULD LIKE TO FAX
260 YOU A QUITE LONG LETTER. PLEASE NOTIFY US AS SOON AS POSSIBLE
270 WHETHER YOU HAVE A FAX NUMBER.
280
290 JUDITH OLSEN
310 FOR E. MANN BORGESE

Continue:



Dalhousie University

International Ocean
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I.O.I. - Malta

TELEFAX MESSAGE

DATE: 13 Feb. 1990

TO: DR. M.M.K. SARDANA

Dept. of Ocean Development.
Govt. of India, New India

FROM: E. Mann Borgese

I.O.I. Halifax
N.S.

OFFICE PHONE:

TOTAL PAGES: 4

FAX NUMBER: 9111 360 779

IF YOU DID NOT RECEIVE THE ENTIRE FAX MESSAGE
PLEASE NOTIFY THIS OFFICE

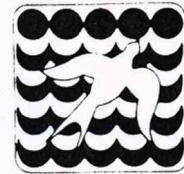
TELEPHONE: 902 424 2038

FAX: 902 424 1216



Dalhousie University

International Ocean
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I.O.I. - Malta

February 12, 1990

*Dr.M.M.K. Sardana
Department of Ocean Development
Government of India
New Delhi, India*

Dear Sardana:

You disappeared, or I disappeared, or we both disappeared, but, in any case, there was no occasion to say good-bye, and I also had wanted to remind you to send me a fuller c.v., with publications, etc.

In the meantime, I went home, and then to London, Paris, and Moscow. And there are some developments to which I would like to draw your attention:

I am just back from the Soviet Union where I attended a conference on naval disarmament. During my stay I had occasion to discuss Law of the Sea matters with the Soviet Delegation (Messrs Imnaze and Pavlovsky) as well as Mr. K.G. Guevorguian, Head of Division, International Law Department, USSR Ministry of Foreign Affairs, and Mr. Igor Yakovlev, Head of the International Law Department of the USSR Ministry of Foreign Affairs.

I started by expressing my deep concern about current efforts to amend the Law of the Sea Convention before its coming into force, to accommodate the interests of some industrialised States. These efforts, I said, are a nonstarter, from every conceivable point of view. First of all, the Prep. Com. has no mandate to amend the Convention, and I think that the article published recently by my very dear and highly respected friend Jean-Pierre Levy in the Annuaire du droit international, trying to demonstrate that the Prep.Com. does indeed have this mandate is very ill conceived. Secondly, look at the political angle: The industrialised countries are in effect asking the developing countries to give up what they, rightly, thought they had conquered in 14 years of hard negotiation. This means a rekindling of the North-South confrontation which would be unfortunate, considering, especially, that alignments in the Prep.Com have subtly shifted, due to the emergence of an interest group: the Pioneer Investors, not foreseen by the Convention and comprising East, West, North, and South. This makes alignments more complex and, therefore, more flexible, and it would not help to return to a rigid North-South confrontation. Thirdly, take a merely pragmatic point of view: The articles, drafted in the 'seventies, setting forth every administrative and financial detail for the management of an industry whose very nature was totally unknown to all of us, obviously are obsolete and inapplicable today. If we tried to redraft them today, they would be equally obsolete fifteen years from now, when ocean mining actually may come into its own. Fourthly, the mere admission that the

Convention is open to change and amendment before coming into force, would open a pandora's box. Before we knew it, we would find ourselves in UNCLOS IV; and UNCLOS IV would be a failure, as UNCLOS II was. It is a miracle that we got this Convention together in the first place. To try to do it again would be a provocation of destiny which might cost us everything we gained the first time 'round.

So. I suggested, it would be best to drop the idea of amending the Convention -- or of drafting a "protocol" which would, in effect, amend the Convention. That is an ill conceived approach.

At the same time, I grant you, we all know that there are defects in Part XI; but we must deal with these without jeopardising the Convention, and without offending and provoking our colleagues from the Third World.

This is what I had to suggest:

(a) an agreement, probably embodied in a Memorandum of Understanding, that some articles which are obsolete today because the economic and scientific and technological situation has changed during the last twenty years NOT BECAUSE WE WANT TO MAKE CONCESSIONS TO THE INDUSTRIALIZED COUNTRIES -- Shall be frozen. We agree not to use them, for the simple reason that they cannot be used today; that they are meaningless; that they do not serve the purpose for which they had been drafted, and that this concerns all of us: North, South, West and East. It is not a matter of confrontation; of one side having to make concessions to the other; it is a question of adjusting the ideas and ideals of the '70s to the economic and scientific realities of the '90s. It is a matter that concerns all of us jointly. The articles to be "frozen" are not all that many. They are parts of Art. 151. they are parts of Annex 3 and Annex 4.

"Freezing" does not mean "amending" nor does it mean "abolishing." It means: not to use what cannot be used, with the intention of re-examining these articles in the light of the situation that will prevail when ocean mining becomes a reality.

The freezing ought to be done by the Prep.Com. There is nothing that could derogate from the right of the Prep.Com. to do that. the Prep.Com. cannot amend or change the Convention. The Prep. Com. is to make rules and regulations to implement the Convention. It is under no obligation to make detailed rules and regulations for every article of the Convention. It could, very well, decide by consensus, that certain articles, in the present situation cannot be implemented, and that rules and regulations must be deferred.

The "unfreezing" ought to be done by the Authority, probably through the

periodic reviews foreseen in Article 154.

To sum up this point: "freezing" would be the formula rather than "amending" or "substituting through a protocol."

My Soviet interlocutors were very open to this approach and said they would promote it in discussions with other interested parties, in particular, of course, the United States. This is what I wanted to bring to your attention.

I should add that I have discussed it also with many friends in Third World countries, including, above all, the Asian African Legal Consultative Committee. Frank Njenga was very explicit in rejecting the idea of the "protocol" or of amending the Convention in any form or fashion before its coming into force. He is quite open minded towards the "freezing" formula the way I explained it above.

I should also add that I have discussed it with my good friend Anton Vratusa of Yugoslavia. Yugoslavia is presently the Chair of the Non-Aligned countries. Yugoslavia also shares my point of view.

Secondly, the discussion with the Soviet colleagues continued, I found it essential that this proposal for "freezing" certain articles ought to go hand in hand with a dynamic process of creating an interim pioneer regime that proves to be beneficial for all concerned. This means, a regime, under the auspices of the Prep. Com., for exploration, technology development, and the development of human resources. As you know, we have developed a model for such a regime in cooperation with the AALCC. This will be introduced in Beijing in March. It also will be announced at the Prep.Com. in March, and there will be a seminar organised in New York in August to discuss it in greater detail with Prep.Com. delegates. You will receive a new draft in a week or so. Our Soviet colleagues (one of whom also will be in Beijing) have copies of this study, and, although they have not had time to study it in detail, in principle they are quite interested in this approach.

Excuse the length of this letter. I know we all share the wish to make this Convention, to which we all have dedicated a large part of our lives, universally acceptable. We may have different ideas as regards the methodology. Here is a new proposal. I would be grateful for your reactions.

All the very best,

Yours as ever,



Elisabeth Mann Borgese

Posted: Wed Feb 14, 1990 4:19 AM AST
From: TEXTRAN.DELIVERY/ADMIN.01
TO: *EJZ1283
Subject: TELEX MESSAGE RECEIVED

Msg: YTQA-0369-5100

3161535 DOD IN
188/90 14:2
FROM: M M K SARDANA JT SECRETARY DOD NEW DELHI
FOR: MR ELISABETH MANN BORGESE
CARE MR JUDITH OLSEN NEW YORK USA

OUR FAX NO. IS 9111 - 360779 (.) THIS REFERS TO YOUR
TLX OF 13 FEB 90(.)

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Dalhousie University

International Ocean
Institute



I.O.I. - Malta
April 9, 1990

*Dr. K. Sardana
Dept. for Ocean Development
Government of India
New Delhi, India*

Dear Dr. Sardana:

I don't know whether you can help in the following matter, but, perhaps you could at least indicate to me to whom I should address myself:

The IOI has applied for consultative status with IMO.

Quite obviously, there are a lot of common interests. We have devoted two big conferences to shipping and navigation (Moscow and Rotterdam), we publish continuously on shipping problems in Ocean Yearbook; shipping, and ports and harbours occupy a major place in all our training programmes; we teach an annual course at WMO in Malmö, and are in close cooperation with IMLI in Malta -- so there is no doubt that we qualify.

Now we need the support of the Indian Delegation at IMO. Could you help us? Your Delegation consists of Shri P.M. Abraham, Shri C.M. Shetye, and Mr. S Narayan (based in London). Do you know any of them? Could you draw their attention to this upcoming decision and put in a good word for us.?.

This year we also get consultative Status, category B, at UNESCO!

There is still another point I want to bring to your attention: In July/August we are organising a Class A training programme (similar to the one in Madras) in Finland, in cooperation with their oceanographic institution and also Rauma Repola. We can only accept 15 participants for this very intensive programme. Do you want to nominate a participant. it is going to be a particularly interesting programme, because we are going to have distance-learning facilities so that we will invite great experts in all parts of the world to communicate with the participants -- two hours every week.

That is it for today. I am looking forward to hearing from you.

All the very best,

Yours as ever,

*Elisabeth Mann Borgese
Professor*

1-800-361-8434

M4 #31

2311

sent by telegram

Dr. K. Sardana
DII 305 Bandara Road
New Delhi, India

Dear Dr. Sardana:

On behalf of the International Ocean Institute and Dalhousie University I would like to invite you to address the participants of our B91 Training Programme here at Dalhousie. I understand you are going to be in New York. Perhaps you could arrange your flights in such a way as to stop here on your way from London to New York, or on your way back. There are also direct flights from New York to Halifax and back daily. Please let us know your schedule as soon as possible so that we can plan your visit. With all good wishes,

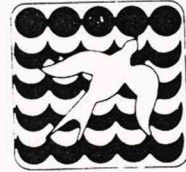
Elisabeth Mann Borgese

file



Dalhousie University

International Ocean
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1.97 - Malta 1991

Dr. K. Sardana
Department for Ocean Development
Government of India
New Delhi, India

Dear Kumar:

I am enclosing a long letter I just wrote to Dr. Gaur.

If you agree with my reasoning -- could you follow up?

We missed you very much at the last session of Prep.Com. in Jamaica. Your absence sent a negative signal.

I will be in New York for one week and hope to see you. Otherwise in Lisbon, in November!

With all good wishes,

Yours as ever,

Elisabeth Mann Borgese