In Search of Common Nodules at UNCLOS III

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For over two years the Third United Nations Conference on the Law of the Sea (UNCLOS III) has been disappearing into holes as regularly as Lewis Carroll's hapless White Rabbit. Paradoxically, it has achieved this notoriety after completing negotiations on over eighty-five percent of a modern legal regime for the oceans, including subjects initially considered the most important and difficult. As is well known, the issue so formidable in snatching failure from the jaws of success is the legal order for deep seabed mining. And, indeed, it has become a formidable dragon, armored in infinite complexity, nurtured by technocrats, and breathing the fire of a hundred ideologies. It is even rumored that any Head of Delegation so bold as to venture into the Committee I text with its labyrinthine annexes, cross-references, and negotiating history would be instantly turned into a pillar of "assured access" or "new economic order," depending, of course, on preference.

Not surprisingly, the fearsome demeanor and demonstrated appetite of the Committee I dragon have produced a legion of prudent naysayers who alternately ascribe near invulnerability to the dragon and denigrate the virtues of the treaty princess held captive on its abyssal plain.1 Of greater consequence, "Seabeds," as it is

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affectionately called, has sapped the energies of Conference leaders and sown doubt within delegations and foreign offices.

It would not be prudent to predict whether and when “Seabeds” will be tamed. It is certain, however, that it can be tamed and that it is in the common interest to do so. UNCLOS III is one of the most important Conferences of our time. All mankind shares a common interest in a just and modern legal order of the oceans. This is not some starry-eyed dream or trite phrase that rolls off the tongue nicely only to be forgotten with equal ease. It is an achievable reality that can bring enhanced utilization of ocean resources, protection of shared interests in navigational freedom, improved protection for the ocean environment, and reduction in political tensions. Indeed, UNCLOS III can do even more. It can help lay the groundwork for a North-South detente necessary for successful resolution of global problems. And it can breathe new life into a sagging United Nations system.

What then can be done to tame “Seabeds”? Without pretense of an instant solution, I believe there are certain procedures that can enhance the chances of success. In addition, it is important that there be widespread Conference understanding of the principal remaining substantive issues in the Committee I debate. At this stage of Conference work, there is simply no escape from the necessity that all associated with the negotiation become familiar, in detail, with the deep seabed issues. In the remainder of this article, I will briefly set out the views of one friend of the Conference on both approach and substance in taming the seabed issue.

I. The Approach to a Committee I Accommodation

Each of the following procedures would facilitate successful Conference resolution of the deep seabed problem:

1. Participants should recognize Conference strengths and achievements as well as Conference shortcomings. The Law of the Sea Conference has been extraordinarily successful in resolving eighty-five percent of the issues necessary for a just and modern legal regime for the oceans. This includes such difficult political issues as fishing rights, transit passage of straits (with submerged transit and overflight), mid-ocean archipelagoes, protection of the ocean environment, and dispute settlement, among other issues. The Conference also is fortunate in having dedicated leadership and in developing innovative informal consensus procedures focusing on “Negotiating Texts.” At the same time, however, it has not done a good job of focusing on a common framework for a deep sea-
bed settlement and of developing a specific negotiating package on the seabed issues. All participants can share in the blame for this failure, as well as in the credit for the considerable Conference success.

2. Participants should realistically recognize the difficulty of the negotiations and the time required to conclude a comprehensive law of the sea agreement. Negotiating a new regime for two-thirds of the earth’s surface with about 150 countries is a difficult and time-consuming process. Given the complexity of the issues, good progress has been made in the five substantive (and one procedural) sessions to date. This does not mean that the Conference should relax, but it does mean that it should not accept characterizations of “failure,” and that it should keep in perspective the time likely to be required to reach a final comprehensive agreement. A more realistic measure of Conference progress is whether at each session remaining differences are being significantly reduced. Judged by this criterion, excellent progress was made at Caracas in 1974 and at Geneva in 1975, but progress has been disappointingly slow since then.

3. The Conference should focus on the deep seabed impasse, but not neglect the five to ten as yet unresolved non-seabed issues. The deep seabed impasse is certainly the principal Conference drag and as such deserves major Conference emphasis. Moreover, once the seabed issues are resolved, negotiations are likely to proceed more rapidly on the remaining non-seabed issues. Nevertheless, these non-seabed issues should also be systematically narrowed, including remaining disagreements about the status of the economic zone, highly migratory species, marine mammals, landlocked States’ access to living resources within neighboring economic zones, delimitation of the edge of the continental margin beyond 200 miles and related revenue sharing, marine scientific research, dispute settlement (including scope of jurisdiction and composition of the tribunal), and final clauses.

4. Participants should avoid exaggerated pessimism and simplistic solutions. The Conference will fail only if Conference participants accept failure. There are difficult problems ahead that may take several years to resolve. Expectations, however, are at such a point that it will be tempting to view protracted negotiation as failure. The criterion should always be whether significant progress is being made and whether there is reason to believe further progress can be made. Conference participants also should avoid simplistic solutions and illusory instant fixes. Speculation about a “mini-treaty” on deep seabed mining outside the Law of the Sea
Conference is at this time neither realistic nor helpful. Similarly, the perennial talk of separation of Committee I issues for subsequent agreement, while rational if such separation could be agreed upon, should not be relied upon as a substitute for the hard work necessary to achieve a Committee I settlement.

5. Participants should set aside unproductive debate about past procedures. The debate on the extent of the changes made in the Committee I text at the conclusion of the last session is neither wholly informed nor productive. If the Conference is to succeed, Committee Chairmen must fairly incorporate in the text progress made in informal groups. In this respect the Committee I text was disappointing, although more closely based on the underlying Evensen texts than is popularly supposed. The more serious problem is that the Evensen effort, so helpful on the economic zone, did not produce a realistic compromise. In fact, some have said that the Informal Composite Negotiating Text (ICNT) changes performed a service in making explicit what was only implicit in the Evensen texts. In any event, debate on these issues is unhelpful. The real issue is how does the Conference move forward from the present ICNT?

6. Heads-of-Delegation should do their Committee I homework. It is impossible to understand adequately the deep seabed problem without a careful article-by-article analysis of the Committee I text and each of its component problems. In the past, all too frequently this work has been left to junior delegation members. As the most difficult remaining Conference issue, the seabed impasse must receive the attention of Heads-of-Delegation. Once the necessity of detailed mastery is accepted, it will be found that there is nothing inherently more difficult in the seabeds issue than in other Conference problems.

7. The Conference should eschew rigid ideology for pragmatic

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2. Id. at 393-94.
4. The texts are reprinted in I DOCUMENTS OF THE THIRD UNITED NATIONS LAW OF THE SEA CONFERENCE: NEW YORK SESSION 1977, at 310-61 (R. Platzöder ed. 1977). Minister Evensen has made major contributions to the work of the Conference, including chairing informal consultations leading to the preparation of highly successful texts on the economic zone, the continental margin, and protection of the marine environment.
5. Research associates at the Center for Oceans Law and Policy have prepared an article-by-article comparison of the Evensen texts and the ICNT. The results show that the ICNT is largely based on the Evensen texts, although altering the already unacceptable texts in several important respects to make them even more unrealistic.
solutions. Philosophical opposition to a functioning Enterprise or to a dual system as splitting the common heritage is debilitating. Such ideological rigidities must be set aside if progress is to be made.

8. The Conference must understand and accept bottom-line constraints on deep seabed agreement. Developed countries have repeatedly stressed that any system to be acceptable must provide assured access. Perhaps because they have been willing to discuss ambiguous formulations such as those of the Evensen texts, the fundamental meaning of assured access has been obscured. Make no mistake, however; there is no possibility of the United States Senate accepting a law of the sea treaty that does not provide real assured access to deep seabed minerals and restrict Authority jurisdiction to seabed mining and associated environmental concerns. Similarly, from a developing-country perspective, an agreement almost certainly must provide a genuinely workable Enterprise, fair revenue sharing, and reasonable economic protection for existing developing-country producers of seabed minerals.

9. At the earliest possible time, the Conference should focus on a commonly accepted general framework for access. One of the difficulties with the Committee I negotiation is that it has been slow to arrive at a commonly accepted general framework for resolution of the Committee I problem. The key to overall accommodation, and the single most important feature in structuring any seabeds package, is the access system. Yet uncertainties abound as to whether the system of access will be a unitary joint venture system, a dual system, a “mixed system,” or some other system. Aside from the ambiguity of these generalities, such continued uncertainty makes it impossible to focus on the essential details of compromise within a common framework. Despite its ponderous beginning, the Committee I negotiation does seem finally to be focusing on a dual system as the common framework: that is, a system providing for balanced development both through an Enterprise and through national activities with assured access. It has long seemed to many associated with the negotiation that this system is the only real basis for successful compromise.

10. The Conference should focus on an overall package of specific amendments to the ICNT. Generalities, such as “dual system,” “Evensen plus,” and “assured access,” provide little guidance in working out an overall compromise. Similarly, Committee I issues are an interlinked matrix with the access system affecting institutional arrangements and so forth. Under these circumstances, real guidance requires that the Committee I negotiations proceed on the basis of a specific package of amendments
to the entire Committee I text and annexes. Further efforts at consideration of individual problems in isolation are likely to be unproductive.

11. *The Conference should seek to promote an active and useful work program for Committee I negotiations*. The key to a useful work program is early focus on a specific package of amendments offering a realistic basis for agreement. Such a package could be discussed informally in a small group, or it could be developed through behind-the-scenes shuttle diplomacy among interested participants. The Conference need not rely completely on procedures that depend on large sessions for progress. Indeed, an initial package may even be more likely to arise through informal dialogue. Such a package could then be the basis of sustained inter-sessional work.

12. *The Conference should avoid premature voting or artificial deadlines*. A great strength of UNCLOS III is that it has proceeded on the basis of broad consensus. Indeed, this is almost certainly the only way that the Conference can be successful. Consensus procedures, however, are slow and frustrating for all sides. As time goes on, pressures to resolve remaining difficulties through voting are likely to build. Such procedures could be fatal, unless premised on broad support from all regions and principal groupings. Similarly, artificial deadlines do little to promote agreement and could stimulate out-of-control voting or even trigger Conference collapse as deadlines are passed.

Useful procedures are those which promote active negotiation on unresolved issues and which incorporate the results in an improved ICNT. When the work of a Committee is completed to the general satisfaction of all regional groups, a single Committee vote up or down on the package could formalize the consensus procedures. And when all Committees have completed their work in a manner that has the agreement of all regional groups, the treaty as a whole could be ready for a single vote up or down in the Conference as a whole. It seems likely that even with an active work schedule, the Conference may still take several additional sessions to complete its work. Without relaxing genuine efforts to conclude remaining issues, then, the Conference should realistically accept that successful conclusion may take some time.

13. *The Conference should avoid overreaction to national legislation on deep seabed mining*. National legislation on deep seabed mining is virtually a certainty before final conclusion of a law

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of the sea treaty. In the United States, it seems likely that such legislation will pass the House of Representatives during or shortly after the 1978 Geneva Session and will be enacted within the following year. Legislation in other developed countries is likely to follow. Little will be accomplished by time-consuming debates about such legislation. The Conference must realize that deep seabed legislation does not signal lessened developed-nation interest in comprehensive agreement, but is rather the inevitable result of real and understandable pressures. These pressures derive from the following factors:

— The United States and other developed nations have never accepted a seabed moratorium, and at least the United States has publicly pledged since 1973 to work for such legislation unless a satisfactory treaty were concluded sooner.

— As prototype operations and further experimental work continue, domestic environmental groups have sought an adequate framework for environmental protection.

— Within the United States, observers of all persuasions are united in deploiring the lack of realism of the Group of 77's position on deep seabed mining. Seabed legislation is not a threat in this regard; it is evidence of a reality too long misperceived—that a seabed agreement which fails to provide assured access has zero chance of Senate approval.

— Even with quick agreement on a law of the sea treaty, the treaty would not take effect before 1980-85. In the meantime, firms will require an assured legal regime in order to make the sizeable investments necessary to begin commercial production.

— Early efforts to consider provisional application of a deep seabed agreement that perhaps could have met some of these pressures seem to be increasingly complex and unlikely.

Moreover, from the standpoint both of meaningful and early implementation of the common heritage of mankind and of the global interest in environmental protection of the deep seabeds, national legislation is probably the only way to get the process moving. As such, it may well be that developing nations will end up as substantial beneficiaries of such legislation if a good treaty can be negotiated. In short, the common interest in moving forward is greater than extremist rhetoric would suggest, provided that such legislation is clearly interim or transitional and that it reflects a continued commitment to a reasonable deep seabed
agreement. The reality of such legislation also means that the Conference must add to its Committee I agenda a provision for blending existing operations into a treaty regime.

II. The Substance of a Committee I Accommodation

A. The Framework for Accommodation

As the preceding discussion of approach illustrates, a balanced development system that meets both developing country interests in a workable Enterprise and developed country interests in assured access seems to be a more likely framework for accommodation than a "unitary joint venture" system or other approach. Despite the apparent preference of some vocal private pundits and at least one mining firm for a unitary joint venture system, such a unitary system has substantial problems for all sides. These include:

— From a developing-nation standpoint, any unitary joint venture system acceptable to developed nations is likely to risk domination of the Enterprise by developed nations.

— From a national perspective in developed nations, assured access to seabed minerals is the principal interest, rather than pursuit of seabed profits or a seabed technological lead. Yet any unitary joint venture system likely to be acceptable to the Group of 77 seems unlikely to provide assured access.

— A unitary joint venture system is likely to upgrade the importance of Authority decisionmaking procedures and could make this already difficult issue even more difficult.

— A unitary joint venture system is likely to stress detailed rules and regulations more than a balanced system, and as such is likely both to be more rigid and to restrict an Enterprise more than would a balanced system.

— The Conference itself has intuitively headed toward a balanced or dual system as the most likely accommodation, even though movement in that direction has been retarded by confused cross-currents toward other systems and by ideological resistance to a dual approach. At this point, a dual or balanced system is closer

8. Pending seabed legislation in the United States, both in the House and the Senate, see note 7 supra, is clearly interim or transitional in nature and is poles apart from the highly nationalistic legislation first introduced in the early 1970's.

9. Reasonable profit and return on investment, of course, is a prerequisite for realistic assured access. The point is that developed-nation interests do not necessarily coincide in all respects with the positions of particular mining firms.
to the center of the negotiations than any other approach, even though no group embraces it warmly.

B. A Balanced Development System

Paradoxically, though many Conference leaders have felt since the Sea-Bed Committee meetings that a dual or balanced system was the most likely framework for accommodation, there has never been a model of such an approach available to the Conference. To meet this need, a team of experts working under the auspices of the Center for Oceans Law and Policy has recently completed a package of seabed amendments to the ICNT illustrating a "balanced development system." This package of amendments is attached as an appendix to this article. For the United States and other developed nations, the package is likely to be a rock-bottom accommodation. Though the mining industry might not support it, I believe that such a package probably could pass the Senate. Similarly, the package has been carefully structured from the Revised Single Negotiating Text, the Evensen texts, the ICNT, and subsequent intersessional work to accommodate the concerns of the Group of 77 in so far as possible in building a realistic package.

This package should not be taken as permitting no deviation, but if the Center experts are correct in their estimate of the fine balance required, any changes in the direction of developed or developing nations would need to be balanced by corresponding changes in the other direction. Unlike many of the purely dual proposals, this package could also be realistically called a mixed system, since it envisages an assured access system along with a truly effective Enterprise and incentives highly likely to foster joint ventures with the Enterprise, should the Authority prefer at any time to proceed through such joint ventures.

This "balanced development system" (or indeed any probable dual or mixed system) can be illustrated by the table on the following page.

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Illustrative Balanced Development System

Benefits for Developed Nations
I. Scope of Authority limited to seabed mining.
II. An effective “assured access” system providing:
   — clear acceptance of balanced system
   — clear limitation of the Authority role vis-à-vis “assured access” system
   — assurance of nondiscrimination between systems.
III. Provision for operations commenced prior to entry into force of the treaty.

Common Interests
I. Limitation of system benefits to treaty parties.
II. Balanced decisionmaking structures including:
   — adoption of access system that lowers the profile of the decisionmaking issue
   — balance between the Assembly and Council
   — balance in Council membership and voting.
III. An effective dispute settlement mechanism.
IV. Reasonable antimonopoly provision.
V. Avoidance of open-ended and unworkable provision for review.

Benefits for Developing Nations
I. Economic protection for developing-country land-based producers of seabed minerals.
II. An effective Enterprise system providing:
   — financing for first operation
   — incentives for joint ventures likely to make such ventures at least as attractive as independent operations under the “assured access” system
   — workable technology transfer to the Enterprise
   — reservation of sites for the Enterprise and developing countries: the “banking system.”
III. Fair revenue sharing from the non-Enterprise system, including royalties on seabed production and profit sharing.
The principal features of this diagram illustrate the central issues in a deep seabed settlement and can be summarized as follows:

1. Benefits for Developed Nations

   (a) *Scope of authority limited to seabed mining.* It is an essential feature of the developed-nation position that the scope of the Authority jurisdiction or Committee I coverage should extend only to seabed mining in areas beyond national jurisdiction. This scope issue has a number of dimensions including clear retention of the present high seas status of the water column, exclusion of non-minerals issues from Authority jurisdiction (such as scientific research, except to the extent that the Authority wishes to engage in scientific research on its own), and restriction of Authority jurisdiction over minerals to mining rather than processing or marketing (except for Enterprise processing and marketing with respect to its own mining operations).

   (b) *An effective “assured access” system.* The core of the developed nation interest in deep seabed mining is to preserve access to seabed minerals. It should be recalled in this connection that the developed nations share broad agreement that, in the absence of a satisfactory law of the sea treaty, such access is a high seas freedom. Thus, any agreement must provide assured access. That means clear political acceptance of an assured access system and assurance of nondiscrimination between systems (except for certain tax exemptions and financial incentives specifically built into the Enterprise system to ensure its workability and attractiveness). A possible assured access system might incorporate specific requirements of the “site banking system,” specified revenue sharing, and limited Authority discretion as specified in the treaty over the areas of balanced growth, accommodation of uses, environmental protection, and work requirements.

   (c) *Provision for operations commenced prior to entry into force.* If, as now seems inevitable, at least prototype mining operations will go forward pursuant to national legislation before entry into force of a seabed agreement, some provision must be made for interfacing these existing operations with a new treaty. Initially, provisional application was considered the best way to deal with this problem. Its complexity and potential for delay, however, suggests that a better approach might be for the Group of 77 to swallow hard and negotiate a reasonable grandfather clause for existing operations. Any provision should, to the extent possible, track treaty obligations for the assured access system.
2. Benefits for Developing Nations

(a) Economic protection for developing-country land-based producers of seabed minerals. Despite studies that indicate there is little risk of harm to copper and nickel markets from deep seabed mining, developing countries heavily dependent on sales of such minerals for export earnings have remained concerned. Provision for reasonable economic protection would seem to be one of the most important issues from a developing-country-producer perspective. Consuming nations, including many developing countries, however, do not want rigid restrictions that could cripple any potential economic benefits flowing from deep seabed mining. There is little point in the common heritage concept if it is merely a scheme to prevent development of deep ocean mineral resources. A two-fold mechanism for reasonable protection would seem an appropriate balance. First, the Authority and all interested parties are encouraged to seek balanced growth, efficiency, and stability of markets for nodule minerals through appropriate commodity stabilization agreements or other arrangements for seabed minerals. During a ten-year interim in which such agreements can reasonably be expected to be established, protection would be achieved by a provision that production from the entire Area would not exceed the projected cumulative growth segment of the world nickel market. This in effect "grandfathers" existing land-based production for ten years. Second, if despite this combined mechanism, a developing land-based producer should suffer severe adverse effects on export earnings caused by activities in the Area, the Economic Planning Commission could recommend appropriate adjustment compensation to the affected nation.

(b) An effective "Enterprise" system. Just as developed nations have insisted on assured access, developing nations have consistently sought an international Enterprise able to mine for its own account. Any balanced system must also accommodate this need, even though an Enterprise is no more to the liking of developed nations than an assured access system is to developing nations. An effective Enterprise system requires: (1) initial financial assistance to get an Enterprise underway; (2) workable technology transfer for the Enterprise including, most importantly, incentives for joint ventures; and (3) assurance of fairness in sites through reservation for the Enterprise and developing countries. The first of these requirements can be effectively met by provision for loan guarantees for the first Enterprise operation. The second, to be effective, requires sufficient incentives to attract freely negotiated joint ventures to the Enterprise system. This should be accom-
plished if the Enterprise enjoys immunity from national taxation and also is able to offer better financial terms than the fixed royalties and profit sharing under the assured access system. Under such a system, technology transfer could be expected to take place immediately, as at least some of the mining firms opt for a freely negotiated joint venture with the Enterprise. Finally, assurance of fairness in sites is provided by use of “the banking system” device, which requires all applicants under the assured access system to put up two equivalent sites, one to be selected by the Authority for Enterprise activities. This is also an additional subsidy to the Enterprise in the amount of the prospecting and initial exploration costs expended by the firms in putting up a second site.

(c) **Fair revenue sharing from the non-Enterprise system, including royalties on seabed mining and profit sharing.** Implementation of the common heritage principle suggests that, in addition to an Enterprise system, there should also be fair sharing of revenues from the assured access system. The best means of implementing this sharing would seem to be a two-fold system of reasonable royalties on seabed mining and profit sharing. The royalty is a “front end load” and as such must be kept small, about two percent of the value of the nodules mined, if it is to be practical. Such a royalty would help counterbalance the uncertainty of relying on profits alone. In turn, profit sharing has greater ability to generate substantial revenues, and provided that it does not inhibit an initial minimum return necessary to attract seabed mining capital, it probably could be structured as high as fifty percent. In figuring return on investment and profits, of course, any royalties must be included as costs.

From the standpoint of the overall accommodation, such a balanced system (an Enterprise together with fair revenue sharing under an assured access system) would mean that roughly three-fourths or more of all seabed mining benefits would accrue directly to the international community through the Authority, without impairing the assured access required by developed nations.

3. **Common Interests**

(a) **Limitation of system benefits to treaty parties.** It would seem to be strongly in the common interest to limit distribution of common heritage benefits to nations adhering to the treaty. Otherwise a few nations might even establish rival mining operations (or serve as flags of convenience for such operations) and simultaneously claim benefits under the treaty.

(b) **Balanced decisionmaking structures.** By carefully specifying
and restricting areas of Authority discretion over the assured access system, resolution of decisionmaking issues is made somewhat easier than if developed nations were required to rely entirely on decisionmaking structures for protection. This interrelation between the access system and decisionmaking procedures is key and explains why the access system is a better starting point for accommodation than discussion of decisionmaking structures. Even with such a system, however, it is important to both developed and developing nations to have balanced decisionmaking procedures, both in terms of Council and Assembly roles and in terms of membership and voting in the Council.

(c) An effective dispute settlement mechanism. A strong dispute settlement mechanism for compulsory resolution of disputes arising under the deep seabed chapter is strongly in the interest of all parties. Under any form of realistic seabed accommodation the balance will be delicate. Thus it seems likely that through time both developed and developing countries will benefit from an effective dispute settlement provision. The myth that dispute settlement is only for the benefit of developed nations assumes a completely unrealistic deep seabed accommodation. In any more realistic accommodation, developing-nation participants will find that they benefit at least as much as developed nations.

(d) Reasonable antimonopoly provision. If at any time there are competing applicants for the same seabed site (and category of minerals), it would seem reasonable for the Authority to consider as a factor in selecting among the applicants the extent to which any applicants are already engaged in production from the area. This would not be an unworkable, rigid quota provision, but it would enable the Authority to consider the desirability of spreading the benefits around in cases of competing applications. Such a provision is of interest to some developed as well as developing nations.

(e) Avoidance of open-ended provision for review. The Kissinger proposal for a subsequent twenty-five year review of operation of the seabed systems has been seriously misinterpreted and may have been unhelpful even as conceived. It seems intended either to postpone agreement on the hard issues or to lessen objections because it is felt that concessions are only temporary. Neither possibility is helpful. If it is the first possibility, any effort to achieve ambiguous resolution of the seabed issues and to leave the issues to subsequent negotiation would be a serious error for all
sides. Congressional spokesmen have been unanimous in stressing that an ambiguous review provision would almost certainly cause any seabed accommodation to fail. Understandably, every nation wants to know what it is agreeing to when it approves an important treaty. And if it is the second possibility, any notion of an agreement through time to phase out an assured access system is as unrealistic as an agreement to phase out an Enterprise. A seabed review provision, of course, which adopts the normal treaty review rule that the parties can always get together to consider treaty changes and make recommendations, would seem to be unobjectionable.

III. Conclusion

If all nations will approach the seabed issue with a sense of realism as to the minimum requirements for accommodation, there is no reason why “Seabeds” cannot be tamed, and in a reasonable time. Realism alone, however, will not be enough. The Conference must also focus on a common framework and an overall package for a Committee I accommodation. Until such a realistic common framework and package emerges to focus the negotiations, it is likely that progress will be only incremental. I hope that in this regard the illustrative package prepared at the Center for Oceans Law and Policy and appended to this article can be useful.
Appendix

PACKAGE OF AMENDMENTS TO THE INFORMAL COMPOSITE NEGOTIATING TEXT ILLUSTRATING A BALANCED DEVELOPMENT SYSTEM *

Suggested Amendments to ICNT Part XI, Annex II, and Annex III

Art. 133
add new d:
(d) States Parties to this Convention means Contracting Parties.

Art. 134
delete paragraph 1 and insert:
1. This part of the present Convention shall apply to the sea-bed and ocean floor and subsoil thereof beyond the limits of national jurisdiction, hereinafter called the "Area."

Art. 135
insert after Area (last line):
"as High Seas"

Art. 137
delete in paragraph 2:
"on whose behalf the Authority shall act."
add new paragraph 4:
Except as provided in this part nothing in the Convention shall give the Authority the right to interfere with uses of the Area, compatible with international law.

Headline: Section 3. "Conduct of Activities in the Area" is moved from between Articles 142/143 to between Articles 143/144.

* Team leaders in preparation of this illustrative package were Jutta Stender, Philip Stopford, and Dr. Rüdiger Wolfrum. A further draft of the package of amendments, together with background explanatory material and a comparative synopsis of the RSNT, the Evensen texts, and the ICNT, will be published shortly as Center Policy Study No. 1:3 (March 1978). The Center, pursuant to its usual practice, takes no position on this proposal and also would like to thank the many experts who have commented on it and offered suggestions.
Art. 143

delete paragraph 1 and insert:

(a) States, irrespective of their geographical location, as well as competent international organizations, shall have the right to conduct marine scientific research in the Area.

(b) The Authority may itself conduct scientific research in the Area and may enter into agreements for that purpose.

Art. 144

add new paragraphs 2 and 3:

2. (a) If the Authority so requests, every entity as specified in Article 151 paragraph 2(ii) after having concluded a contract according to paragraph 4 of Annex II (the Contractor) shall undertake to negotiate in good faith an agreement making available to the Enterprise under license at market value,* the same technology used, or to be used, by the Contractor in carrying out activities in the area.

(b) If the Authority requests such an agreement and the negotiations do not lead to an agreement within a reasonable time, the matter shall be referred to binding arbitration in accordance with the provisions of Annex VI of the present Convention to determine whether the negotiations have been conducted in good faith.

3. Unless agreed otherwise the Enterprise shall only receive this technology for the purpose of carrying out its own activities in the Area and shall ensure that no technology transferred pursuant to paragraph 2 of this Article is in any way disseminated to third parties.

Art. 150

delete all and insert:

Activities in the Area shall be carried out in accordance with

* The standard "market value" may well need elaboration or change in order to protect the companies concerned. The intent is to develop a standard that would fully reimburse companies for any technology transferred. The most important technology transfer devices under this package, of course, are the ability of the Authority acting pursuant to Art. 151.3 to enter into any agreement, including joint ventures, for the development of that part of the area reserved for the Enterprise, and the financial incentives to encourage such joint ventures.
the provisions of this Part of the present Convention in such a manner as to foster healthy development of the world economy and balanced growth of international trade and specifically with a view to ensuring:

(a) orderly and safe development of the resources of the Area,
(b) just and stable prices, remunerative to producers and fair to consumers, for raw materials originating in the Area which are also produced outside the Area, and increasing the availability of these minerals so as to promote a reasonable equilibrium between supply and demand,
(c) security of supplies to consumers of raw materials originating in the Area which are also produced outside the Area,
(d) the transfer of revenues pursuant to Article 151.6(ii),
(e) the protection of developing countries from substantial adverse effects on their economies or on their export earnings resulting from a reduction in the price of an affected mineral to the extent that such reductions are caused by activities in the Area, through the following:

A. The Authority, acting through existing forums or such new arrangements or agreements as may be appropriate and in which all affected parties participate, shall take measures necessary to achieve the growth, efficiency and stability of markets for those classes of commodities produced from the Area, at prices remunerative to producers and fair to consumers. All Parties shall cooperate to this end. The Authority and all States Parties involved in deep seabed exploitation shall have the right to become a party to any such arrangement or agreement resulting from such conferences as are referred to above. The participation by the Authority and States Parties involved in deep seabed exploitation in any organs established under the arrangements or agreement referred to above shall be in accordance with their respective production in the Area and in accordance with the rules of procedure established for such organs.

B. (i) The Authority may limit in an interim period, specified below, total recovery of minerals from nodules in the Area so as not to exceed the projected cumulative growth segment of the world nickel market. The cumulative growth segment for the purpose of this Part of the present Convention shall be computed in accordance with subparagraph (iii) below. The interim period referred to above shall be the period until such new arrangements or agreements referred to in subparagraph A of this article take effect, provided that
such period shall not exceed 10 years beginning on 1 January 1980.

(ii) The Authority shall carry out the decisions taken by such organs as referred to in subparagraph (A) above so as not to discriminate between the Enterprise and parties, entities or persons referred to in Article 151 paragraph 2(ii).

(iii) The rate of increase in world nickel demand projected for the interim period referred to in subparagraph (i) above shall, for the first five years of the interim period, be the annual constant percentage rate of increase in world demand during the 20-year period to 1 January 1980. The calculation of such rate of increase in world nickel demand shall be made by application of the least squares method using definitive data from the latest 20-year period prior to that date, and for which such data are available. Thereafter this rate of increase shall be adjusted every five years on the basis of a recalculation applying the aforesaid method and using definitive data from the latest 10-year period prior to the commencement of any such five-year period, and for which such data are available.

C. Following recommendations from the Council on the basis of advice from the Economic Planning Commission, the Assembly shall establish a compensatory system of economic adjustment assistance for developing countries which suffer substantial adverse effects on their export earnings or economies resulting from a reduction in the price of an affected mineral or the volume of that mineral exported, to the extent that such reduction is caused by activities in the Area.

Art. 151 New Title: Systems of Exploitation

delete all and insert:

1. Activities in the Area shall be carried out both by the Authority and by States Parties in accordance with the provisions of this article as well as other relevant provisions of this Part of the present Convention and its annexes.

2. The Activities in the Area are carried out:

(i) by the Enterprise in accordance with this Part of the Convention.

(ii) by States Parties or State Entities or persons natural or juridical which possess the nationality of States Parties, or are effectively controlled by them or their nationals, when sponsored by such States, or any group of the foregoing in accordance with this Part of the Convention.

3. Nothing in this Part of the Convention prohibits the Authority from entering into any agreements, including
joint ventures, for the purpose of jointly developing that Part of the Area reserved for the Enterprise under Annex II paragraph 4(j)(i).

4. (i) The Authority shall only exercise such control over and inspection of those entities specified in Paragraph 2(ii) above as is necessary to ensure compliance with Articles 145, 147, 150, and 151 paragraphs 7 and 8, rules, regulations and procedures adopted pursuant to Annex II, paragraphs 11(b)(1) through (7), and the contract concluded in accordance with paragraph 4 of Annex II of the present Convention.

(ii) The Authority in exercising its powers under paragraphs 2(i), 3 or 4(i) above shall avoid any discrimination.

5. Agreement for activities in the Area as specified either in paragraph 4(d) or in paragraph 4(j)(ii) of Annex II shall provide for security of tenure. Accordingly, they shall not be cancelled, revised, suspended or terminated except in accordance with paragraphs 12 and 13 of Annex II.

6. (i) The Authority shall establish a system for the equitable sharing of benefits derived from the Area amongst States Parties taking into special consideration the interests and needs of the developing countries among them and particularly those that are landlocked and geographically disadvantaged.

(ii) The benefits referred to in subparagraph (i) above are those that accrue in accordance with paragraphs 7 and 8 below, Article 82 of the present Convention and paragraph 9(a) of Annex III, after the deduction of all the administrative and other costs of the Authority.

7. (i) After first allowing an annual rate of return on their investments of 10% the Authority shall receive 50% of the net profits derived from activities in the Area undertaken by parties, entities or persons in accordance with paragraph 2(ii) above.

(ii) The net profits shall be computed in accordance with paragraph 7 of Annex II of the present Convention.

(iii) The Authority shall also receive royalties in an amount equal to 2% of the market value of the minerals recovered.

8. A reasonable license fee shall be levied by the Authority on those parties, entities, or persons referred to in paragraph 2(ii) which shall not exceed the administrative costs of processing and granting an application for a contract.
Art. 152
delete all and insert:
The Assembly, with the approval of the Council, may undertake a general and systematic review of the manner in which the international regime of the Area established in the present Convention has operated in practice and may recommend to States Parties measures and procedures which will lead to the improvement of the operation of the regime.

Art. 153
delete

Art. 155
delete from paragraph 1 in lines 2 and 3 the phrase:
"particularly with a view towards the administration of the resources of the Area."

Art. 158
delete all and insert:
1. The Assembly shall have the power to establish the general policies that are to be pursued by the Authority in conformity with the provisions of this Part of the present Convention on any questions or matter within the competence of the Authority except with respect to those powers and functions which are specifically entrusted to the Council under this Part of the present Convention.
2. The powers and functions of the Assembly shall be:
   (i), (ii) same as ICNT
   (iii) The election, in conjunction with the Council, of the 11 members of the Sea-Bed Disputes Chamber from among the members of the Law of the Sea Tribunal.
   (iv)-(xvi) same as ICNT
add new (xvii):
   (xvii) Adoption, upon the recommendation of the Council on the basis of advice from the Technical Commission, of rules and regulations for the protection of the marine environment in accordance with Article 145 of this Convention.

Art. 159
delete all and insert:
1. The Council shall consist of 36 members of the Authority elected by the Assembly, the election to take place in the following order:
   (a) six members from the countries which have made the greatest contributions to the exploration for, and the exploitation of, the resources of the Area, as demonstrated by substantial investments or advanced tech-
nology in relation to resources of the Area, including at least one State from the Eastern (Socialist) European region.

(b) six members from the countries which are the major importers of the categories of minerals to be derived from the Area.

(c) six members from the countries which on the basis of production in areas under their jurisdiction as a percentage of their export earnings are major exporters of the categories of minerals to be derived from the Area, including at least two developing countries.

(d) the same as Art. 159 paragraph 1(d) ICNT.

(e) twelve members elected in accordance with the principle of equitable geographical representation. For this purpose, the geographical regions shall be Africa, Asia, Eastern Europe (Socialist), Latin America, and Western Europe and Others. Members elected under this subparagraph shall be eligible for re-election.

2. same as Art. 159 paragraph 2 ICNT

3. Elections shall take place at regular sessions of the Assembly, and each member of the Council shall be elected for a term of four years. In the first election of members of the Council, however, one half of the members elected in accordance with subparagraph 1(d) and (e) above shall be chosen for a period of two years.

4. delete and insert:

   Members shall be eligible for re-election; but with regard to the categories of members in subparagraphs 1(d) and (e) due regard shall be paid to the desirability of rotating seats.

5.-9. same as Art. 159 paragraphs 5-9 ICNT.

Art. 160

delete all and insert:

1. The Council is the Executive organ of the Authority and shall have the duty to carry out the powers and functions entrusted to it under this Part of the present Convention.

2. The Council shall:

   (i), (ii) same as ICNT

   (ii bis) Elect, in conjunction with the Assembly the 11 members of the Sea-Bed Disputes Chamber from among the members of the Law of the Sea Tribunal.

   (iii)-(viii) same as ICNT
(ix) Issue directives to the Enterprise and exercise control over its activities.
(x), (xi) delete
(xii) same as ICNT but delete "1 (g)" and insert "1 (e)."
(xiii) same as ICNT, but delete "1(g)D" and insert "1 (e)C."
(xiv)-(xviii) same as ICNT

Art. 163
insert in paragraph 2 new (i bis):
(i bis) Negotiate agreements for the transfer of technology in accordance with Art. 144 of this Convention.
(v) delete and insert:
Make recommendations to the Council where appropriate with regard to the carrying out of the Authority's functions with respect to the protection of human life in accordance with Article 146 of this Convention.
(viii) delete "annex II" and insert "paragraph 6 (ii) of Article 151."
(x) delete all after "Inspect" in line one and insert:
activities in the Area in accordance with Article 151.
(xi) add at end:
"provided that any such orders are approved by the Council within 60 days."
(xiv) delete

Art. 169 insert new 1 bis:
While exercising its functions according to Articles 145, 146, 147 and 150 of this Convention, the Authority shall avoid any discrimination between the Enterprise and the parties, entities or persons as specified in Art. 151 paragraph 2(ii) of this Convention.

4. Change the word "receive" in line 3 to: "acquire"

Art. 170
2. delete (line 1-3) "including . . . determine"
insert after Area:
as specified in Article 82, Article 151 paragraphs 7 and 8, and paragraph 9(a) of Annex III of this Convention as well as any voluntary contributions.

Art. 172
2. delete all and insert:
The expenses referred to in paragraph 1 of this article shall be met in accordance with paragraph 6(ii) of Article 151 out of the General Fund. In the event that the General Fund is insufficient to balance the expenses referred to in paragraph 1 above, the balance of such expenses shall be
met out of the contributions by the members of the Authority in accordance with the scale of assessments adopted by the Assembly in accordance with subparagraph 2(vi) of Article 158 of this Convention.

Art. 173
delete

Art. 189
insert in paragraph 1(ii) after “States Parties” in line 2:
“or between any of the above and the Enterprise.”

Art. 191
delete
insert new Art. 192 bis:

Art. 192 bis:
Any parties, entities or persons as referred to in Art. 151 paragraph 2(ii) of this Convention which may have begun deep seabed mining activities before this Convention enters into force shall have security of tenure as if they had received a contract in accordance with paragraph 4 of Annex II provided that:
(i) The site exploited shall not exceed 40,000 sq. kilometers and shall be brought into commercial production within 5 years;
(ii) They accept the revenue sharing obligation of article 151 paragraph 7 of this Convention and transfer to the Authority any amounts due from the commencement of exploitation;
(iii) They provide the Secretary General of the United Nations or, after the Convention enters into force, the Authority with the co-ordinates of a mine site which shall be reasonably estimated to be of equal commercial value to that site which the entity exploits. Other entities wishing to take advantage of this Article shall respect those sites, as reserved according to paragraph 4(j)(ii) of Annex II, and those sites under exploitation; and
(iv) They ensure the effective protection of the marine environment from serious harmful effects through the utilization of the best available technology economically achievable or the suspension of activities where appropriate and, after this Convention enters into force, accept the obligation in Article 145 to protect the marine environment.
(v) They negotiate, after the entry into force of this Convention, for transfer of technology pursuant to Article 144 of this Convention, if the Authority so requests.
Annex II

Delete "and processed substances" in headline to paragraph 1.

1. delete and insert:
   Title to the minerals shall be passed upon recovery of the minerals to those entities specified in Art. 151 paragraph 2 and in accordance with paragraph 4 below.

2. (a) delete from "marine environment" (line 5) through "prospecting" (line 8).
   (b) delete

3. delete

4. New Heading: Qualification and Selection of Applicants
   (a) delete and insert:
      The Authority shall adopt provisions describing in necessary detail the procedure for establishing relations between the Authority and a party, entity or person acting pursuant to Article 151.2(ii). These provisions shall be in full accord with this Part of the Convention.
   (b) Every applicant without exception shall undertake to comply with and to accept the obligations of control and inspection as specified in Art. 151 paragraph 4 of this Convention.
   (c) Applications for a contract shall be submitted sealed to the Authority and opened at monthly intervals at previously announced times. Contracts shall cover all stages of exploration and exploitation. If the applicant for a contract applies for a specific stage or stages, however, the contract may only comprise such stage or stages.
   (d) Subject to the satisfactory fulfillment of subparagraphs (b), (c) and (j)(i) of this paragraph, the Authority shall within three months of the date of the opening conclude a contract with the applicant. The Authority shall accord the Contractor the exclusive right to explore and exploit the contract area in respect of the specified category of minerals and shall ensure that no other entity operates in the same contract area in a manner which might interfere with the operations of the Contractor.
   (e) The Authority shall not, during the continuance of a contract, permit any other entity to carry out activities in the same area for the same category of minerals. The Contractor shall have security of tenure in accordance with Article 151, paragraph 5 of this Convention.
   (f) If in the opinion of the Authority an application fails in any respect to meet the requirements specified above the Authority shall within 21 days of the opening notify the applicant of such failure, shall give the applicant the oppor-
tunity to rectify the failure within 28 days and within three months of the receipt of an amended application meeting such requirements shall conclude a contract with the applicant.

(g) Whenever the Authority receives at the same opening more than one application in respect of substantially the same area and category of minerals, the selection of the applicant shall be made on the basis of the following criteria:

(i) The extent to which any of the applicants have prospected or made expenditures in connection with the site applied for in the relevant part of the Area;

(ii) The fulfillment of obligations to the Authority under any previous contracts; and

(iii) Due regard to equitable participation of different contractors in deep seabed mining.

(h) If the applicant has entered into a contract with the Authority for separate stages of operations, he shall have a priority among applicants for a contract for subsequent stages of operations with regard to the same area and resources; provided, however, that where the applicant's performance according to Art. 145 of the Convention has not been satisfactory, such priority may be withdrawn.

(i) The same procedure as referred to above in subparagraph (g) shall be established if the applications received by the Authority at the same opening cannot all be accommodated within the limits established pursuant to Art. 150, subparagraph (e)(B)(i).

(j) (i) When applying for a contract for exploration only, or for exploration and exploitation, in accordance with this paragraph, the applicant shall indicate the coordinates of two areas consistent with the provisions of paragraph 11(b)(i) below, of estimated equal commercial value, either of which may be designated by the Authority as the contract area. The one not so designated shall be reserved for the Enterprise.

(ii) Same as paragraph 5(j)(ii) ICNT Annex II but delete “this” in line two and insert after “subparagraph” in line two “(1) above.”

(iii) Same as paragraph 5(j)(iii) ICNT Annex II but delete “of . . . above” (2d/3d line) and delete “shall” in line five and insert “may.”

5. delete

6. delete and insert:

(a) When circumstances have arisen, which in the opinion of a
contracting party, render the contract inequitable or make it impracticable or impossible to perform, the Authority, if requested, shall enter into negotiations to adjust it to new circumstances in the manner prescribed in the contract.

(b) Any contract entered into may only be revised if the parties involved have given their consent.

7. delete and insert:

(a) The Authority shall adopt regulations in accordance with this paragraph for the determination of the net profits derived from the area as referred to in Art. 151 paragraph 7 of this Convention.

(b) The net profit shall be the market value of the minerals recovered from the Area after deduction of development and operating costs. For this purpose, the market value shall be the product of the quantity of the recovered minerals produced and the average price for those minerals during the relevant account period. When the Authority determines that an international commodity exchange provides a representative pricing mechanism, the average price on such exchange shall be used. In all other cases, the Authority, after consultation with the Contractor, shall determine in good faith the average price, based on reasonable market criteria.

(c)(i) A. Development costs shall comprise: all expenditures incurred prior to the commencement of commercial production from the contract area which are directly related to the development of the productive capacity of the contract area, including, inter alia, costs of machinery, equipment, ships, building, land, roads, exploration and feasibility studies and other research and development construction, interest, required leases, licenses, and, subsequent to the commencement of commercial production, similar costs required for the replacement of equipment and machinery, maintenance and improvement of productive capacity and improvement of performance less proceeds from the disposal of capital assets.

B. Same as paragraph 7(d)(iii)(C)(2) ICNT Annex II

(ii) Operating costs shall comprise all expenditures incurred in the operation of the productive capacity of the contract area, including, inter alia, expenditures for wages, salaries, employee benefits, supplies, materials, services, transportation, sale of products, interest, utilities, purchases, royalties, and overhead and administrative costs specifically related to
the operation of the contract area and any net operations loans carried forward from prior accounting period;

(iii) The annual rate of return on investments for the purposes of Article 151 paragraph 7 subparagraph (i) shall be computed by . . . *

8. Same as paragraph 8 ICNT Annex II except insert at the end of the first sentence "as provided in Article 151 paragraph 4 and this Annex."

9. delete

10. delete

11.(a)(1) delete

   (2) (vii) add at end "pursuant to paragraph 8."

   (viii) add at end "pursuant to Article 151 paragraph 4."

   (ix) delete

   (x) add at end "pursuant to paragraph 14."

   (xii) delete

   (xiii) delete "mining standards . . . resources and"

   (line 1/2)

   (xiii) delete

   (xiv) delete

   (3) delete

   (4) delete

(b)(1) delete last sentence

(2)(iii) delete last sentence and insert "The duration of exploitation rights under a contract pursuant to paragraph 4 of this Annex shall not be less than 20 years."

12.(c) delete after "until" in line 3 and insert "the matter has been adjudicated adversely to the contractor by the Sea-Bed Disputes Chamber."

13. delete

Annex III

9. delete and insert:

   (a) Subject to (b) below, all net disposable income generated by the Enterprise shall be transferred quarterly to the Authority. Net disposable income means in this context any surplus after deduction of all development and operating costs as defined in paragraph 7 of Annex II of this Convention and all other costs incurred by the Enterprise while carrying out its responsibilities under this Convention.

   (b) Same as paragraph 9(b) ICNT Annex III

   (c) Same as paragraph 9(c) ICNT Annex III

* This clause remains to be developed.
10. delete and insert:
   (a) The funds and assets of the Enterprise shall comprise:
       (i) Amounts transferred in accordance with Art. 151 (6)(ii) and 158(2)(vi)
       (ii)-(iv) Same as paragraph 10 (a) (ii-iv) ICNT Annex III
       (v) delete
       (vi) Same as paragraph 10 (a) (vi) ICNT Annex III
       (b)-(d) Same as paragraph 10 (b)-(d) ICNT Annex III