## THE PREPARATORY COMMISSION

1986-87 was a crucial year in the history of the Preparatory Commission and the progressive implementation of the ocean mining regime established by the Convention.

While the early 'eighties had been characterized by a divergence into two separate regimes — the regime established by the Convention and adhered to by the vast majority of States, and a mini-regime based on a "reciprocal understanding" between a few developed ocean mining states, in particular, the USA, FRG and UK, outside the framework of the Convention — 1986 marked a turning point. The direction now was towards the negotiation of a universally recognized regime.

Negotiations were first conducted among the "Pioneer Investors" under the Convention regime, to eliminate overlapping claims to seabed mine sites, in accordance with Resolution II, adopted by UNCLOS III together with the Convention. These negotiations were difficult indeed, considering that the overlaps, especially between the Soviet and French claims were very substantial, covering as much as 60 percent of the total areas claimed. Where there is a will, however, there is a way, and this issue was resolved satisfactorily to all parties, in the Arusha agreement of February 1986.

What remained was the problem of overlaps with the "potential applicants," -- i.e., the four consortia referred to in Resolution II and domiciled not only in signatory states (Belgium, Canada, Italy, Netherlands) but also in nonsignatory States: USA, FRG and UK, which had no direct interest in making compromises.

France and Japan had solved their overlap problems with these Consortia in the framework of the "mini treaty." Thus the final and greatest problem, the problem that was politically most sensitive, was to resolve overlaps between the Soviet Union and the consortia and their States.

No matter how difficult, also these negotiations were successful in the end: culminating in an agreement, in August, 1987, which the Secretary-General of the U.N. described as the most important event in the development of the Law of the Sea since the signing of the Convention.

It was this agreement, fully endorsed by the nonsignatories, including, explicitly, the Government of the United States, that opened the way towards the implementation of a unified, universally recognized regime for seabed mining under the United Nations Convention on the Law of the Sea.

It was this agreement that opened the way to the registration of the first group of Pioneer Investors: India, on August 17, 1987: the 20th anniversary, precisely, of the day (August 17, 1967) on which Malta requested the inclusion of an item on the question of the reservation of the seabed for peaceful purposes. The registration of France, Japan, and the USSR followed on December 31, 1987.

II.

With this, the work of the Preparatory Commission entered into a new phase: an operational phase, during which it will have to

- . make arrangements for the training of personnel from developing countries, so that they can participate in the work of the Enterprise;
- ensure that the Enterprise will have the necessary technology as soon as the Convention comes into force;
- . make arrangements for the detailed exploration of the first mine site assigned to the  ${\tt Enterprise}$  .

All this is to be done in accordance with paragraph 12 of Resolution II.

How are these operational responsibilities to be discharged by the Preparatory Commission which, thus far, has no executive experience, no funding, no technology?

It is difficult to decide, for instance, who should be "trained" -- by whom, when, at whose expense, for what purpose, at this time when it is assumed that ocean mining is "uneconomical" and may not be initiated on a commercial scale until some time into the next century. More ink has been spilled on this question of "training" over the past dozen years than on most other questions. In 1986, the Second Special Commission of the Prep.Com. appointed a group of experts to re-study the question and come up with some recommendations. The International practical Institute, well known by now for its training activities, is a member of this Group of Experts. The IOI submitted a paper, which is reproduced on p. of this volume. The essence of the proposal is simple and can be summarized in a few sentences.

- 1. Seabed mining will become economical, not in response to "market forces" which may never fully overcome the depression which, in this sector, is structural rather than cyclical, but as a consequence of technological development. Seabed mining technology is High Technology which cannot be developed by the private sector on purely commercial criteria, but must be developed by private/public cooperation, on an international scale, to reduce costs and share risks.
- 2. The training of manpower is an essential part of the process of technology development.
- 3. The development of technology, including the training of manpower must be geared to present, ongoing activities: i.e., the exploration of the first mine site of the Enterprise, and limited by the requirements of this specific and concrete task. Not more than 15 persons from developing countries need to be trained as scientists, engineers, managers, during the first year (hopefully, 1988/89). This

must be, and can be, done on the oceanographic ships and in the laboratories of the "Pioneer Investors," and at their expense.

- 4. A programme for exploration, technology development, and training should be prepared by the Pioneer Investors in cooperation with the Prep.Com.
- 5. Additional training, to generate a pool of expertise in developing countries should be undertaken by the U.N. and institutions like the IOI, but this is clearly beyond the responsibilities of the Pioneer Investors under paragraph 12 of Resolution II.

It is very encouraging indeed that the "Pioneer Investors" have already agreed to make joint arrangements for the exploration of the first mine site for the Enterprise. They have also submitted a joint proposal for the training of manpower which takes up the basic idea of the IOI paper. The joint proposal of the Pioneer Investors is reproduced on p. of this volume. The paper stresses that seabed mining technology at the commercial level does not yet exist, hence there can be no training in this sector; it is quite clear, however, that highly sophisticated exploration technology as well as various mining technology concepts do exist and will be tested and improved during the exploration phase. This indeed is one important aspect of the exploration phase, the other being the precise definition of the resource and its environment.

The initial technology would be brought to the joint undertaking by the Pioneer Investors. It would be "transferred" at fair commercial prices. It is in the testing and upgrading of this technology that the "trinees" should be given the opportunity fully to participate. Technology development and training thus would be closely linked. The jointly developed technology would be "owned" in common, to be used later on by the Enterprise — part of the Common Heritage.

This takes us a good part of the way towards the implementation, in whatever modified form, of the proposal put forward in the Colombian Working Paper which is reproduced on p. of this volume. The Colombian paper resumes, adapts, and further elaborates a concept first put forward by the Delegation of Austria in a series of papers entitled JEFERAD (Joint Enterprise For Exploration, Research And Development). The gist of that proposal was that the only way in which the Prep.Com could effectively impelement the famous paragraph 12 of Resolution II was to create an operational entity in the form of a joint venture between ocean miners (first of all, pioneer investors) and the Prep.Com itself, sharing risks and costs: the latter amounting to some 200 million dollars over a five-year period or \$40 million a year, of which the ocean miners should pay one half while the other half should be provided by the Prep.Com. through UNDP, World Bank, regional banks, or other appropriate funding agencies. The Prep.Com.'s share of control in the venture would be 50 percent and it would use this control to guarantee the full participation of developing countries on the board of directors of the Joint Venture, and through all levels of operation. The arrangement would be benericial to the ocean mining States who would save 50 percent of investment in R&D; it would be beneficial to developing countries who would be enabled to fully participate in this international venture in R&D in High Technology; and it would be beneficial for the Authority and the Enterprise which would be fully prepared to enter the production stage as soon as the Convention comes into force.

The Colombian proposal distinguishes two phases of operation: a first phase, prior to the entering into force of the Convention; and a second phase beginning thereafter. Activities during the first phase would be limited to exploration, technology development and training. A number of options for the structuring and financing of these activities are presented, each with a summary cost/benefit analysis. They might provide a flexible framework for the

joint arrangements already foreseen by the Pioneer Investors. The second phase would start upon the entering into force of the Convention, with the establishment of the "International Enterprise" -- a joint venture between the Enterprise and the ocean miners, based on the technology development, the training, and the exploration activities of the previous phase. This venture would then submit to the Authority a plan of work for an integrated mining project.

The Colombian proposal provides for the possibility of delinkage between phases I and II, in case Phase I was a failure or the Enterprises has other, more attractive options (which is very unlikey indeed). There is, on the other hand, also the possibility that Phase I — exploration, R&D, and development of human resources—continues into the second phase, if conditions for commercial production are not yet mature at the time the Convention enters into force.

The approach here outlined has some additional advantages. It empirically answere a question that perplexed Delegations during these last sessions: Given the present economic constraints and uncertainties: what should be the initial shape of the Enterprise? A "nuclear" Enterprise, perhaps inadequately reflecting the provisions of Part XI and Annex IV of the Convention?

initial shape of the Enterprise would determined by the activities themselves. A Governing Board and a Director-General would have to be elected Convention, accordance with Annex IV of the infrastructure and staff would be in place, not less, and not more, than needed for ongoing activites. The mine site, the oceanographic ships, the labs, the data bank, the management, the planners, the work teams of engineers, scientists, economists, of the joint enterprise that was carrying out the exploration of the site, the upgrading of the technology and the development of the human resources needed.

Another advantage would be that East-West-South-North cooperation in the development of deep-sea technology, involving practically the whole range of High Technologies of the Third Industrial Revolution, would be a confidence-building measure of quite considerable importance. The internationalisation of this development would guarantee that these technologies would be used for exclusively peaceful purposes — without military classifications and secrets. An undertaking of this sort would be a major contribution to our common security.

Utopian? The simple logic of what happened in the summer, 1987, session of the Prep.Com. pushes us in this direction.

When? How soon?

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Perhaps, in accordance with the founding principle of the IOI, we are thinking three years ahead in time. But the break-through has already happened. How long it will take to spell out and articulate all the consequences is a relatively secondary question.

The other achievements of this year's Session are summarized in the reports as well as in Dr. Jagota's comprehensive survey.

It should be noted that, as planned by outgoing Prep.Com. President, Joseph Warioba, Prime Minister of Tanzania, the election of Jose Luis Jesus of Cape Verde as second President of the Prep.Com. coincides with the beginning of this new phase of the work.Com. The Prep.Com., and the world, owes a debt of gratitude to President Warioba who has steered the work of the Prep.Com and the implementation of the Convention through the first and most difficult phase. To Jose Juis Jesus go our fervent wishes for success and achievement during this new and exciting phase of our work.