Joint Ventures for Deep Seabed Mining Operations

Günther Jaenicke*

Five years ago, at the Symposium on the Law of the Sea in Kiel (10-14 July 1990), I pleaded for a greater role of joint-venture arrangements between the Enterprise of the International Seabed Authority and mining companies of industrialised States for the exploitation of those areas of the international seabed which are "reserved" for mining ventures of the Enterprise or developing States under Art. 8 of Annex III of the Convention on the Law of the Sea¹. Such joint ventures would allow the Enterprise or the respective developing country to benefit immediately from the mining experience, the processing facilities, and the access to the international market of potent national or multinational mining companies, and there would be no need for the costly building up of a full-fledged mining enterprise with the same operational capacity as the industrial joint-venture partner has at its disposal. This does not exclude that the Enterprise or the respective developing country, through close cooperation with the industrial joint-venture partner, will in course of the time acquire the necessary technical, industrial and managerial knowledge so that at a later stage they may start a mining venture of their own, provided that such a venture would be considered desirable and economically viable.

^{*} Professor Emeritus, Dr. jur., Scientific Member of the Max Planck Society.

¹ Günther Jaenicke, Joint Ventures for Sea-Bed Activities: A Viable Alternative, in: Law of the Sea at the Crossroads: The Continuing Search for a Universally Accepted Regime, Veröffentlichungen des Instituts für Internationales Recht an der Universität Kiel, Vol. 113 (1991), 165–173.

This idea has gained entry into the recent Agreement of 28 July 1994 on the Implementation of Part XI of the Convention². The Agreement expressly prescribes that the Enterprise shall conduct its initial deep seabed mining operations through joint ventures³. The Agreement prescribes further that the Enterprise shall be established as an operating agency not earlier than the moment when the first commercial exploitation of a mine site will have been authorized or the first application for a joint-venture operation with the Enterprise has been received by the Council of the International Seabed Authority, and that it will then lie within the competence of the Council to regulate establishment, structure and functions of the Enterprise for this purpose. Under the policy directives of the Agreement⁴ which are aimed at minimizing the costs to States Parties for establishing the organs of the Authority and at making these organs cost-effective within their functional needs, it can be assumed that the personnel and equipment of the Enterprise will be kept to the absolute minimum necessary for the protection of the interests of the international community represented by the Enterprise. Although the Agreement has made the joint-venture option obligatory for the initial operations of the Enterprise only, this does not exclude the continuation of this practice if that had been found the most economic way for conducting mining operations by the Enterprise on the "reserved areas" of the international seabed.

Already at the Second (1984) Session of the Preparatory Commission for the Establishment of the International Seabed Authority, the German Delegation had submitted a proposal for a model joint-venture agreement between the Enterprise and an industrial mining company or consortium⁵. This proposal was based on a study undertaken by the Institute for Foreign and International Economic Law in Frankfurt am Main which had been able to draw on a previous research project of the Institute on Mining Ventures in Developing Countries⁶ where, among others, numerous mining contracts between national or transnational mining companies and developing countries had been examined and analysed for the purpose of elaborating the legal framework of such contracts and the trends of their

² UN Law of the Sea Bulletin, Special Issue IV (16 November 1994); Bundesgesetzblatt 1994 II, 2565.

³ Annex, Section 2, para. 2.

⁴ Annex, Section 1, paras. 2-3.

⁵ Doc. LOS/PCN/SCN.2/WP.5 (25 October 1984).

⁶ Günther Jaenicke/Erich Schanze/Wolfgang Hauser, A Joint Venture Agreement for Seabed Mining, published in: Studies in Transnational Law of Natural Resources, Vol. 5 (1981).

development⁷. Of course, deep seabed mining ventures have their special political, economic and legal environment and joint-venture arrangements have to take account of these specialties, but many problems facing the negotiators of mining contracts between transnational mining companies and developing countries repeat themselves in negotiating joint-venture arrangements in the field of deep seabed mining and may be resolved along the same lines. I shall return to some of these key problems later.

The Second Special Commission of the Preparatory Commission for the Establishment of the International Seabed Authority had occasionally discussed elements of joint-venture arrangements with the Enterprise on the basis of the German and various other proposals, but had not come to definite conclusions as to the terms of such contracts. The Secretariat of the United Nations had, on the basis of the discussion, prepared a "Draft Basic Joint Venture Contract" as a working paper for further discussion8. The draft of the Secretariat incorporated a number of issues that had been dealt with in the German and other proposals, but did not address all problems and leaves much to the negotiations between the parties, in particular the decision-making procedure, the financing of the operations, the profit-sharing problem, and the mechanisms for conflict avoidance. The Secretariat's paper had been discussed by the Second Special Commission in greater depth at the resumed eighth session (1990) of the Preparatory Commission, but the discussion remained more or less tied to the draft articles of the working paper⁹.

Among the points that had been raised in the discussions of the Second Special Commission, the following may be mentioned:

- 1) The question whether the joint venture would take the form of a contractual or an incorporated joint venture;
- 2) the applicable law applied to the contract and to the operating company formed by the joint venture partners;
 - 3) the ratio of capital participation of the joint venture partners;
- 4) the conditions for terminating or revising the contract (breach of contract, bankruptcy, change of circumstances);
 - 5) the settlement of disputes mechanisms.

⁷ Mining Ventures in Developing Countries, in: Studies in Transnational Law of Natural Resources, Vols. 1 and 2 (1979), 1981.

⁸ DOC.LOS/PCN/SCN.2/WP.18 (August 1990).

⁹ The suggestions and recommendations that had been made in the Second Special Commission with respect to the Secretariat's draft articles have been presented in a paper of the Secretariat of 14 August 1994, annexed to the Final Report of the Second Special Commission (Doc.LOS/PCN/SCN.2/WP.18/Rev.1).

Before I go into some key problems of such joint-venture arrangements, I would like to put forward some basic assumptions which form the scenario for such arrangements:

First, it can be assumed that deep seabed mining will not become economically feasible within the forseeable future. The Committee of Technical Experts which had been charged by the Preparatory Commission to make an assessment of the time when commercial production from deep sea mining may be expected to commence, concluded in its report of 1 February 1994¹⁰ that deep seabed mining will not take place before 2000 and that it is unlikely to take place before 2010. The Group noted that land based supplies of the metals in the nodules were adequate and that it was very difficult to forecast when deep seabed resources would be both needed and price competitive in view of the still unknown costs and the enormous investment involved. It must be assumed that deep seabed mining will not commence as long as world demand can be satisfied more economically from land based resources.

Second, in order to become competitive, joint ventures for deep sea mining must not be loaded with additional and unnecessary financial burdens as would be done by building up the Enterprise as an expensive fullfledged mining enterprise with the same technical and managerial capacity as its industrial joint-venture partners have at their disposal. The technical and managerial part of seabed mining as well as the processing of the minerals and marketing of the metals derived therefrom should rather be left to the potent and experienced industrial joint-venture partner. At its start the Enterprise will have no funds at its disposal for investing in mining ventures. The Agreement of 28 July 1994 on the Implementation of Part XI of the Convention abolished the obligation of the States Parties, contained in Art. 11 para. 3 of Annex IV of the Convention, to fund the first mine site of the Enterprise, and States Parties shall in future be under no obligation to finance any of the operations in any mine site of the Enterprise or under its joint-venture arrangements¹¹. Thus, the Enterprise will have no privileged position and will have to raise the necessary capital for its mining operations on the international financial markets as any other mining company. Therefore, the Enterprise should, at least during the pioneer phase of seabed mining, function as a purely administrative organ of the International Seabed Authority representing and controlling the economic interests of the international community in

¹⁰ Doc.LOS/PCN/BUR/R:32.

¹¹ Annex to the Agreement, Section 2, para. 3.

the joint venture. For this task a small-sized institution will suffice, with a very limited, but highly efficient administrative staff. On the other hand, it will be incumbent on the industrial joint-venture partner to provide the technical equipment and the technical and managerial staff for the mining operations and to act as the operator of the mining business of the joint venture. Thus, the role of both joint-venture partners will differ as to the means at their disposal and the form of their participation in the mining venture; but both will share the common interest in running a cost-effective and profitable venture.

Third, each seabed mining venture will be a most singular activity. This is due to the specific topography of the individual mine site and the multiple technological problems and environmental hazards created thereby. In particular, the environmental hazards have increasingly become the target of widespread concern and will require cautious action and may lead to considerable and unforseen expenses. Under such conditions it is not possible to make a reliable assessment whether and when a particular mining venture will become cost-covering even under favorable marked conditions. It cannot be expected that a deep seabed mining venture will immediately yield a profit, nor can it be anticipated when it will eventually become profitable. These circumstances will induce the joint-venture partners to proceed cautiously and to wait with investments until a reliable assessment can be made with respect to the necessary expenditures under the prevailing market conditions.

On the basis of these general conclusions as to the prospects and special modalities of deep seabed mining I would like to deal with some problems that will face the negotiators of joint-venture contracts between the International Seabed Authority's Enterprise and industrial mining companies or consortia:

First, there is the much debated question whether a contractual or an incorporated joint venture should be chosen. The use of these terms needs some clarification. Clearly, the joint venture must be based at the outset on a contractual arrangement between the two joint venture partners which will, among others, determine whether the mining operations on the seabed, including the transportation of the extracted minerals to the processing plant, will be undertaken directly by the industrial joint venture partner or by a separate incorporated mining company the shares of which are hold by both joint venture partners, but may also partly be sold on the international financial market in order to raise more capital. In international mining practice, the latter construction has been preferred for various reasons. It was, therefore, also chosen in the Model

Joint Venture Contract drafted in the Second Special Commission of the Preparatory Commission. This construction is particularly advisable in deep seabed mining in view of the huge investments required and the unpredictable liabilities that may be incurred. These are particularly strong reasons to incorporate the operating company and provide it with a separate juridical personality in view of its participation in the commercial and financial markets. This establishes, among others, a clear-cut separation between the operations and assets of the operating company and those of both joint-venture partners.

Second, the incorporation of an operating company will solve part of the problem of the applicable law with respect to the mining operations of the company. As the joint-venture company, if its operations are restricted to the mining stage on the high seas, does not operate under a national jurisdiction, the joint-venture partners are free to select the most convenient country for the company's juridical seat and incorporation, as well as for the applicable law. With respect to the law which will apply to the basic contract between the joint-venture partners, the terms of such contract should regulate the rights and obligations of both joint-venture partners as exhaustively and explicitly as possible in order to forestall disputes between them about the interpretation and application of the joint venture arrangement. In addition, the basic contract should provide for conflict avoidance mechanisms which have been proved helpful in the international mining practice. Beyond that, the joint-venture partners are free to select the applicable contract law. The terms of the basic jointventure contract and any other law which may have been declared applicable by the joint-venture contract partners, remain of course subject to those provisions of the Convention on the Law of the Sea which regulate deep seabed mining operations.

Third, a specifically complex problem of the joint-venture contract will be the financial participation of both joint-venture partners and the connected formulas relating to the sharing of profits and losses. Apart from the input of monetary capital, there may be controversies about the value of the equipment, the technology, and the exploration results provided by the national or multinational mining company and, on the side of the Enterprise, the value of the exploitable mine site brought in by the Enterprise. With respect to the sharing of profits and losses, a major problem will be how to determine a fair selling price for the extracted minerals under the assumption that the joint-venture contract will be restricted to the mining stage only and the processing of the extracted minerals and the selling of the metals derived therefrom on the international markets will

be left to the industrial joint-venture partner, unless a separate processing plant will be established in some country and the joint venture will be extended to the processing and marketing stage. If the joint venture has been restricted to the mining stage, the difficulty arises from the fact that there exists no international market price for the minerals extracted from the deep seabed, which would allow the fair price to be calculated for the minerals transferred to the industrial joint-venture partner for processing and marketing. Therefore, a formula must be found to assess that part of selling value of the processed metals that must be attributed to the mining stage. Such a fair formula might be the proportion of the investments made and the operating costs incurred on either stage up to the sale of the processed metals. Para. 8 of Art. 13 of Annex III of the Convention on the Law of the Sea contains an example of such a revenue-splitting calculation between the mining and the processing stages of a deep seabed mining venture.

Fourth, the different functions and responsibilities of the industrial partner and the Enterprise in the joint venture will have to be taken account of by the rules on decision-making within the operating company. Assuming that the mining operations will be the exclusive responsibility of the industrial joint-venture partner, this will require the executive board or the manager of the operating company to be nominated and recalled at the instance of the industrial joint-venture partner, irrespective of the capital share in the company. The statute of the company will have to provide for this right of the industrial joint-venture partner which is a necessary consequence of its primary responsibility for the mining business within the joint venture. This does not exclude the establishment of a supervisory board with members nominated by both joint-venture partners for the approval of such decisions of the executive board over which either joint-venture partner would wish to exercise direct control.

Fifth, the joint-venture contract should give specific attention to the problem of conflict resolution, and more particular, to mechanisms of conflict avoidance. It is not sufficient to provide for judicial arbitration because then the differences between the parties have already evolved into an open legal conflict which might harm the relations between the joint-venture partners or even lead to the break-up of the joint venture. Therefore, the joint-venture contract should provide for a set of institutionalized procedures for resolving differences between the joint-venture partners in such key questions as investment or equally important operational policies:

- a) Such a mechanism for conflict avoidance which has become a wide-spread practice in modern land-based mining joint ventures, is the establishment of a general investment plan. This plan will have to be agreed directly between the joint-venture partners and will serve then as the normative framework for the decision-making within the operating company. This plan may be changed by agreement between the joint-venture partners, but at any event will provide policy guidelines for the working of the operating company and, if clear and detailed enough, will provide the common ground for the intentions of both parties in respect to the operations of the company. The general investment plan will set normative limits for the operational decisions taken by the company.
- b) Another useful device for conflict avoidance is the establishment of an institutionalized renegotiation procedure within the contractual framework of the joint-venture contract. This procedure may help to adjust those terms of the joint-venture contract or of the general investment plan which have been rendered impracticable or inequitable to one of the joint-venture partners. The renegotiation procedure may start with the forming of an "internal" special renegotiation committee and, if settlement has not been reached upon the recommendations of the committee, the case may then be carried before an "external" board of conciliators. Such a renegotiation procedure is of particular importance in the case of joint ventures with the Enterprise because the Convention on the Law of the Sea expressly provides 12 that an agreement establishing a joint venture with the Enterprise can only be revised by mutual consent of parties, unless the contract itself provides for a special procedure for its revision.
- c) A further device for conflict avoidance is the agreed delegation of a so-called "neutral" member with special expertise in the supervisory board of the operating company in addition to the commissioned members nominated by either joint-venture partner. The "neutral" member may serve as an internal conciliator in cases of divergent opinions in the supervisory board. This set-up would make it possible to resolve differences between the joint-venture partners relating to operational policy already within the operating company before they evolve into an open conflict between the joint-venture partners.

Sixth, it is assumed that in the initial phase of the activities of the Enterprise the joint venture will cover only the mining stage (i. e. the recovery of the minerals from the seabed). There are several reasons for this restraint: The amount of investment and operating capital will be much

¹² Annex III, Art. 11 para. 1, Art. 19 para. 2.

lower than in the case of a joint venture that will comprise also the processing of the minerals and the selling of the metals. This will facilitate the financing of the first generation of mining ventures. It does not seem advisable to burden the Enterprise in its initial operations with the additional personal, technical, and financial problems of the processing and marketing stages. From the point of view of economics, the establishment of a separate processing plant and a marketing organisation does not seem justified on the basis of the exploitation of only a few mine sites in the initial stage of the activities of the Enterprise. Finally, only the mining stage falls under the jurisdiction of the International Seabed Authority; the further stages (transport, processing, and marketing) are beyond its jurisdiction and require a different legal structuring of the joint-venture arrangement, taking into account the legal environment of the country where the processing plant will be installed.

I would like to add some general comments on the usefulness as well as on the prerequisites of joint-venture arrangements in deep seabed mining.

First, the trend to joint-venture arrangements in land based mining has been furthered by the increasing capital requirements and the dependence of the mining project on vertical integration into the market. The lack of available capital and access to the markets has led most developing countries to seek cooperation with potent industrial firms which have the capital, the managerial knowledge and the access to the markets at their disposal. A like situation presents itself for the Enterprise of the International Seabed Authority or developing countries which intend to exploit the mine sites attributed to them under the provisions of the Convention at a minimum of risk.

Second, a joint-venture arrangement is characterised by sharing ownership, risks, profits and losses, and decision-making with respect to the investments made by the joint-venture partners. Such an arrangement requires the pursuance of parallel interests, the existence of commonly shared economic perspectives and mutual confidence among the joint-venture partners. The primordial object of joint ventures in seabed mining is the most cost-effective exploitation of a deep seabed mine site at a minimum of capital risk. This requires that each joint-venture partner should contribute to the joint venture what he can best and with minimum costs provide in respect of exploitable resources, capital, technology, managerial quality and other necessary input. Therefore, it does not seem necessary, at least not at the initial stages of deep seabed mining, to build up the Enterprise of the International Seabed Authority as a fully equipped industrial enterprise. It will suffice to provide it with the neces-

sary staff for controlling the activities of the operating company and protecting the interests of the international community represented by the International Seabed Authority and its Enterprise.

Third, all this does not exclude, as I said before, that the Enterprise might in future develop into a full-scale mining enterprise which will then be able to undertake mining ventures on its own without the cooperation of an industrial joint-venture partner. It may, however, be questioned whether it will be recommendable and achievable to build up an enterprise which will be able to compete effectively with the national or multinational industrial mining companies on the international market. The institution of the Enterprise of the International Seabed Authority had originally been conceived, for ideological reasons, as an alternative to the national profit-oriented mining enterprises, as an institution committed to pursue common interests of the international community. Under the socalled "parallel system" the Enterprise was to secure part of the benefits accruing from seabed mining for the international community, and in particular for the developing countries which were not considered able to compete effectively with the industrialised countries in this field. These ideological considerations have, at least presently, lost their weight. By the provisions of the recent Agreement Relating to the Implementation of Part XI of the Law of the Sea Convention, the Enterprise has now been put on an equal competitive level with industrial mining companies 13. What remains, is the function of the Enterprise to exploit the so-called "reserved areas" of the deep seabed for the benefit of the international community, and in particular for the benefit of the developing countries. As long as this function can be fulfilled more cost-effectively by jointventure arrangements with industrial mining companies than by Enterprise going alone, there seems to be no immediate need to establish the Enterprise as a full-fledged mining company which would burden the member States of the International Seabed Authority with additional costs for as long as the Enterprise had not become self-supporting.

¹³ Annex to the Agreement, Section 2, para. 4, 1st sentence: "The obligations applicable to contractors shall apply to the Enterprise".