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13 June 2019
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A STUDY ON ISSUES RELATED TO THE OPERATIONALIZATION
OF THE ENTERPRISE

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General Introduction.

This is a Study of issues relating to the operation of the Enterprise, in particular on the legal, technical and financial implications for the International Seabed Authority and for States Parties to the United Nations Convention on the Law of the Sea, taking into account the provisions of the Convention, the 1994 Agreement relating to the Implementation of Part XI of the Convention and the regulations on prospecting and exploration for cobalt-rich ferromanganese crusts and polymetallic sulphides and nodules in the Area.\footnote{This Study is based on terms of reference pursuant to the request of the Council recorded in the statement of the President of the Council of the International Seabed Authority on the work of the Council during the nineteenth session of the Authority (ISBA/19/C/18, para. 16).} During the 20\textsuperscript{th} session, in July 2014, the Commission considered a note by the secretariat\footnote{ISBA/20/LTC/12, annex.}, in which the draft terms of reference for the study was included. The Commission made preliminary observations on the draft terms of reference. In recognition of the complexity of the issues, as well as the relative priority to be given to those matters, it was suggested that the secretariat follow an incremental approach in carrying out the various components of the study. Part I of the Study explores the legal implications, while Part II deals with the technical and financial aspects. It should, however, be emphasized that all three aspects are closely interrelated. Thus, the two parts of the study are to be read in conjunction with each other.

\section*{PART I OF THE STUDY}
\textit{Legal Implications: Operationalizing the Enterprise}

\subsection*{I. The Enterprise: Relevant Legal Instruments and Provisions}

1. The notion of the Enterprise was initially conceived in a 45-article working paper submitted by thirteen Latin-American and Caribbean countries to the Committee on the Peaceful Uses of the Seabed and the Ocean Floor Beyond the Limits of National Jurisdiction at its 1971 Session.\footnote{Refer to Part II of the Study for further discussion on this.} This idea, which eventually was taken up and extensively deliberated on at the Third United Nations Conference on the Law of the Sea (UNCLOS III), was eventually incorporated into Part XI of the United Nations Convention on the Law of the Sea 1982(UNCLOS 82). The provisions of Part XI, including those related to the Enterprise, were subsequently modified by the 1994 Agreement relating to the Implementation of Part XI of the
United Nations Convention on the Law of the Sea of 10 December 1982 (1994 Implementation Agreement). The Enterprise is thus an entity created by the relevant provisions of the UNCLOS 82 and the 1994 Implementation Agreement. The mining code consisting of regulations for certain seabed minerals are also applicable to the mining activities of the Enterprise.

2. The UNCLOS 82 provisions that relate to the Enterprise are mainly covered by Article 170 and Annex IV (the Statute of the Enterprise), although there are other provisions in the UNCLOS 82, 1994 Agreement and the Mining Code that refer to the Enterprise. Article 170 identifies the Enterprise as an organ of the Authority that shall carry out activities in the Area directly, as well as the transporting, processing and marketing of minerals recovered from the Area. It also points out that it would within the framework of the international legal personality of the Authority, have the legal capacity as provided for in the Statute of the Enterprise (Annex IV). It stresses that the Enterprise shall act in accordance with the UNCLOS 82 and the rules, regulations and procedures of the Authority, as well as the general policies as established by the Assembly, and shall be subject to the directives and control of the Council. This Article also points out that the Enterprise shall have its principal place of business at the seat of the Authority, i.e. Kingston, Jamaica. It further refers to how the Enterprise shall be provided with the funds required to carry out its functions, as well as how it shall receive technology. Annex IV, consisting of 13 articles, goes into a bit more detail as regard the purposes of the Enterprise; its relationship to the Authority; limitation of liability of members of the Authority for acts or obligations of the Enterprise; its organizational structure; the composition, powers and functions of its Governing Board; the election of the Director-General, his or her status, powers and functions, including the power in relation to recruitment and employment of staff for the Enterprise, as well as their responsibilities as staff of the Enterprise; location of the Enterprise; when and how it submits and publishes its reports and financial statements; the allocation of its net income; various ways it could raise its funds; how it would carry out its operations and its legal status, privileges and immunities. As pointed out earlier, it is vital to note that some of

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these provisions of the UNCLOS 82 have been modified by the 1994 Implementation Agreement and thus the provisions of these two Treaties, including those concerning the Enterprise, must necessarily ‘be interpreted and applied together as one instrument.’\(^5\) The 1994 Agreement declares that ‘in the event of any inconsistency between [the 1994 Agreement] and Part XI, the provisions of the [1994 Agreement] shall prevail’ and that certain provisions of the UNCLOS 82 ‘shall not apply.’\(^6\)

3. The 1994 Agreement, which was adopted because certain developed Countries refused to ratify the UNCLOS 82 because of some aspects of Part XI, though called an Implementation Agreement, is actually an amending instrument as it made certain fundamental changes to the regime as enunciated in the UNCLOS 82. It amended the provisions on the Enterprise,\(^7\) Transfer of technology,\(^8\) Economic assistance,\(^9\) Decision making in the institutions,\(^10\) Production policy,\(^11\) Financial terms of contracts\(^12\) and the Review conference.\(^13\) It also amended the institutional framework by merging some institutions and including new institutions such as the Finance Committee.\(^14\)

4. Additionally, there is the Mining Code, which would be relevant to the Study of the Enterprise, including the Regulations on Prospecting and Exploration for Polymetallic Nodules; the Regulations on Prospecting and Exploration for Polymetallic Sulphides and the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts.\(^15\) These Regulations

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\(^5\) Article 2(1) of the 1994 Agreement
\(^7\) Section 2 of the Annex to the Agreement
\(^8\) Section 5 of the Annex to the Agreement
\(^9\) Section 7 of the Annex to the Agreement
\(^10\) Section 3 of the Annex to the Agreement
\(^11\) Section 6 of the Annex to the Agreement
\(^12\) Section 8 of the Annex to the Agreement
\(^13\) Section 4 of the Annex to the Agreement
\(^14\) Section 1, para.4 and section 2, para.1 of the Annex to the Agreement
\(^15\) The Mining Code also includes certain Recommendations, namely the Recommendations for the guidance of contractors on the content, format and structure of annual reports, ISBA/21/LTC15; Recommendations for the guidance of contractors for the reporting of actual and direct exploration expenditure, ISBA/21/LTC/11; Recommendations for the guidance of
are intended to elaborate on the provisions of the UNCLOS 82 and the 1994 Implementation Agreement.\textsuperscript{16} Currently, the International Seabed Authority (ISA) is developing the Regulations on Exploitation of Mineral Resources in the Area.\textsuperscript{17}

5. Furthermore, another legal instrument referred to in this Study is the Headquarters Agreement between the ISA and Jamaica, which has provisions relevant to the Enterprise, including provisions related to the principal office of the Enterprise; its legal status; its position as regard judicial process, immunity of its properties and assets and its rights, privileges and immunities as well as waiver of its immunity; its respect of the laws of Jamaica; exemption from direct and indirect taxation and financial facilities available for it in Jamaica.\textsuperscript{18} Also, the Agreement indicates that the provisions as applicable to Enterprise may be supplemented by a special agreement concluded in future between the Enterprise, when operationalized, and the Government of Jamaica.\textsuperscript{19}

6. The Protocol on the Privileges and Immunities of the ISA is another relevant instrument that elaborates on the privileges and immunities of the ISA and its officials, including the Director-General of the Enterprise when it is operationalized.

7. Moreover, there are the ISA Rules of Procedures (RoPs), especially that for the Assembly and the Council, which includes as part of the items of the provisional agenda of the regular sessions, the reports of the Enterprise.

8. Additionally, the Study also refers to relevant provisions of the Vienna Convention on the Law of Treaties (VCLT) 1969, especially the provisions on the interpretation of treaties, as aid to seek to clarify and interpret unclear provisions of relevant Treaties that relate to the Enterprise.\textsuperscript{20}

\textsuperscript{16} Articles 160(2)(f)(ii) and 162(2)(o)(ii) of UNCLOS 82
\textsuperscript{17} The latest version at the time of this study is the Revised Draft Regulation on Exploitation of Mineral Resources, ISBA/24/LTC/WP.1/Rev.1 of 9 July 2018
\textsuperscript{18} See Articles 17 -25
\textsuperscript{19} Article 47
\textsuperscript{20} See Articles 31, 32 and 33 of the Vienna Convention on the Law of Treaties (VCLT) 1969
II. Legal Issues on the Enterprise

9. This section would explore certain key legal issues that would be of interest as regards the Enterprise, while the subsequent section would concentrate on seeking to address the specific legal questions raised in the Terms of Reference (ToRs) contained in the Annex to ISBA/20/LTC/12.

A. Introduction and background on the Enterprise

10. The Enterprise is a unique entity established by specific international legal instruments mentioned earlier. It is particularly exceptional in the sense that under the relevant instruments it is an organ of an international organization, the International Seabed Authority (ISA), yet at the same time it is conceived to engage in commercial deep seabed mining activities in the Area. Although, the Enterprise is to act in accordance with the general policies of the Assembly and the directives of the Council, it is to enjoy autonomy in the conduct of its operations. The complicated legal issues are mainly as a consequence of Enterprise's unique international legal status as an international institution as well as a commercial operation entity.

11. The Enterprise has at various times been described as ‘a unique undertaking in the history of international cooperation’; ‘the first completely internationally operated commercial in the world’, the operating arm of the Authority’ having a ‘sui generis status’, the ‘mining arm’ of the Authority; ‘an international mining corporation’; ‘supranational mining company’, ‘the commercial arm’ of the Authority and ‘a global public mining operator’. The Enterprise could be said to be comparable at the international stage to a state-owned mining corporation. Whatever the description may be, if the Enterprise is to operate efficiently and effectively, the ISA would have to address certain key issues, including the task of insulating, as

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21 The Enterprise is however not a principal organ See Articles 158(2) and 170(1) of UNCLOS 82
22 See for instance, Article 153(2)(a); Article 3 of Annex III and Annex IV of UNCLOS 82 and Section 2(2) of the Annex to the 1994 Agreement.
23 See Article 2(2) of the Annex IV of UNCLOS 82
27 Hugo Caminos, Law of the Sea, (Routledge, 2016) p.349
much as possible, the appointment process for crucial positions in the Enterprise (in order to attract high calibre and competent staff) and its operations from the vicissitudes of ISA politics. The autonomy of the Enterprise under the relevant treaties when operationalized is therefore vital and would have to be adhered to in practical terms, especially as regard decisions on its commercial operations.

11. The Enterprise as an organ of the ISA, when operationalized, would have the function of carrying out mining activities in the Area directly, as well as the transporting, processing and marketing of minerals recovered from the Area. From this, it would be seen that the commercial activities of the Enterprise are not intended to be limited only to direct mining activities in the Area, but also extends, under the UNCLOS 82, to the transporting, processing and marketing of minerals recovered from the Area. As regard, the latter there is nothing in the UNCLOS 82, as modified by the 1994 Agreement, to suggest that these activities should be limited to only minerals recovered in the Area by the Enterprise. A proposal to restrict the Enterprise to transporting, processing and marketing only minerals recovered by it from the reserved areas was rejected during the UNCLOS III. Therefore, the Enterprise when operationalized could under the relevant Treaty provisions transport, process and market minerals recovered in the Area by any other mining entities. This would allow the Enterprise when it is operationalized to be a diversified and vertically integrated commercial entity.

12. The ITLOS Seabed Chambers in its Advisory Opinion on Responsibilities and Obligations of States sponsoring Persons and Entities with respect to activities in the Area, emphasizing that activities in the Area should be distinguished from transporting, processing and marketing of minerals, stated as follows:

Some indication of the meaning of the term “activities in the Area” may be found in Annex IV, article 1, paragraph 1, of the Convention. It reads as follows: The enterprise is the organ

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29 Article 170(1) and Article 1 of Annex IV of UNCLOS 82
31 Vertical Integration is used in the sense that a commercial entity controls more than one stage of the supply chain.
of the Authority which shall carry out activities in the Area directly, pursuant to article 153, paragraph 2(a), as well as the transporting, processing and marketing of minerals recovered from the Area. This provision distinguishes “activities in the Area” which the Enterprise carries out directly pursuant to article 153, paragraph 2(a), of the Convention, from other activities with which the Enterprise is entrusted, namely, the transporting, processing and marketing of minerals recovered from the Area. Consequently, the latter activities are not included in the notion of “activities in the Area” referred to in Annex IV, article 1, paragraph 1, of the Convention.  

13. According to the Seabed Dispute Chamber “activities in the Area”, in the context of both exploration and exploitation in the Area would include the recovery of minerals from the seabed and their lifting to the water surface, including the evacuation of water from the minerals, as well as the preliminary separation of materials of no commercial interest and their disposal as sea. Furthermore, it would include drilling, dredging, coring, excavation, disposal, dumping and discharge of waste, sediments or other effluents in the course of these activities, as well as the construction and operation or maintenance of installations, pipelines and other devices related to such activities. In addition, it would include shipboard processing immediately above a mine site of minerals derived from that mine site. The Chamber went on to explain the aspects of processing and transportation as follows:

“Processing”, namely, the process through which metals are extracted from the minerals and which is normally conducted at a plant situated on land, is excluded from the expression “activities in the Area”. This is confirmed by the wording of Annex IV, article 1, paragraph 1, of the Convention as well as by information provided by the Authority at the request of the Chamber. Transportation to points on land from the part of the high seas superjacent to the part of the Area in which the contractor operates cannot be included in the notion of “activities in the Area”, as it would be incompatible with the exclusion of transportation from “activities in the Area” in Annex IV, article 1, paragraph 1, of the Convention. However, transportation within that part of the high seas, when directly

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33 Paras. 83 and 84
34 Paras. 94 and 95
35 Paras. 85 and 87
36 Para. 88
connected with extraction and lifting, should be included in activities in the Area ... this applies, for instance, to transportation between the ship or installation where the lifting process ends and another ship or installation where the evacuation of water and the preliminary separation and disposal of material to be discarded take place. The inclusion of transportation to points on land could create an unnecessary conflict with provisions of the Convention such as those that concern navigation on the high seas.\textsuperscript{37}

However, the Chamber did not engage with the marketing side of the supply chain, presumably because this was not directly relevant to the Advisory Opinion.

14. The Enterprise is also intended to play the crucial role of facilitating the participation of developing States in deep seabed mining in the Area, as it is able to carry out such mining activities in the reserved areas in association with developing States.\textsuperscript{38} During the informal consultations, which eventually led to the adoption of the 1994 Implementation Agreement, the UN Secretary-General pointed out that ‘...it should be recognized that the Enterprise was intended to provide an opportunity for all States, especially developing States, to participate in deep seabed mining.’\textsuperscript{39} Furthermore, the African group in the ISA had noted in a recent statement that ‘the Enterprise is the only mechanism by which the vast majority of developing States can participate in the activities in the Area ... and that they welcome ‘...any moves towards the realization of the Enterprise, as envisioned in UNCLOS as the key mechanism by which developing countries can directly participate in and maximize benefits from activities in the Area.’\textsuperscript{40}

A. **Interim Status of the Enterprise under the 1994 Agreement**\textsuperscript{41}

15. Three main principles are set forth in the 1994 Agreement namely:

\textsuperscript{37}Paras.95 and 96
\textsuperscript{38}Article 8 of Annex III of UNCLOS 82 and Section 1 para.10 of the Annex to 1994 Agreement.
\textsuperscript{39}Para.5 of Information Note concerning the Secretary-General’s informal consultation on outstanding issues relating to the deep seabed mining provisions of the UN Convention on the Law of the Sea, New York, 23 July 1991, pp.24 of the
\textsuperscript{40}Paras 11 and 14, Statement by Algeria on behalf of the African Group, Request for consideration by the Council of the African’s Group’s operationalization of the Enterprise, 6 July 2018
\textsuperscript{41}See further discussion in Part II of the Study on the Interim Status of the Enterprise in relation to Financing of the Enterprise.
• **Common Heritage of Mankind** – the fundamental and overarching principle of the regime, which still remains core under the 1994 Agreement;\(^{42}\)

• **Cost Effectiveness** – this principle applies in relation to establishing organs and subsidiary bodies, as well as the frequency, duration and scheduling of meetings;\(^{43}\)

• **Evolutionary Approach** – this principle entails a gradual process in the setting up and functioning of organs and subsidiary bodies, which would take into account the functional needs for such organs and subsidiary bodies, so they may effectively discharge their respective responsibilities at various stages of the development of activities in the Area.\(^{44}\)

16. As part of the cost effective and evolutionary approaches, the 1994 Agreement downgraded the Enterprise from being an autonomous organ of the ISA to becoming a part of the Secretariat of the ISA, with an interim Director-General to be appointed by the Secretary-General of the ISA from within the staff of the ISA. It is to perform what appear to be merely administrative type functions, including monitoring and reviewing trends and developments relating to deep seabed mining activities, including an analysis of metal market conditions, prices, trends and prospects; assessing the results of marine scientific research in the Area, as well as deep seabed mining technological developments and approaches to joint-venture operations.\(^{45}\)

17. It was noted by the final report of the Periodic Review that no interim Director-General has been appointed since 2012,\(^{46}\) and the report made the following recommendation:

The Legal and Technical Commission should be requested to continue to address the issue of the operationalization of the Enterprise as an important matter in the light of developments with respect to deep-sea mining. However, the appointment of an Interim

\(^{42}\)Article 311(6) of UNCLOS 82 and the preamble to the 1994 Agreement reaffirming that the Area and the resources therein are the common heritage of mankind. For discussions on when the CHM has a peremptory character (jus cogens, see Egede, *Africa and the Deep Seabed Regime: Politics and International Law of the Common Heritage of Mankind*, op.cit. pp.70-71

\(^{43}\)Section 1, para.2 of Annex to 1994 Agreement

\(^{44}\)Section 1, para.3 of Annex to 1994 Agreement. These main Principles key across the discussion in this Study.

\(^{45}\)Section 2, para.1 of the Annex to the Agreement

\(^{46}\)See Final report on the periodic review of the International Seabed Authority pursuant to article 154 of the United Nations Convention on the Law of the Sea, ISBA/23/A/3 of 8 February 2017, Para.21. The last Interim Director-General of the Enterprise was then the Principal Legal Officer of the ISA, who retired at the end of February 2013 and since March 2013 no Interim Director-General has been appointed.
Director-General of the Enterprise would not be advisable at this point in time.\textsuperscript{47}

The latter part of the recommendation, ‘…the appointment of an Interim Director-General (D-G) of the Enterprise would not be advisable at this point in time’, is unclear as no convincing reason for this recommendation was provided in this report.\textsuperscript{48} It is imperative, as provided by the 1994 Agreement, that an interim D-G is appointed as quickly as possible. First, the provisions of the 1994 Agreement on the appointment of an interim D-G by the S-G of the ISA by using the word ‘shall’ makes it mandatory that such appointment be made from the staff of the ISA to oversee the listed functions of the Enterprise. Second, the requirement by the 1994 Agreement that the S-G makes the appointment of the interim D-G from amongst the existing staff of the ISA would meet the cost-effectiveness threshold of the Agreement. Third, the failure to make such appointment as quickly as possible would make it rather difficult to progress towards the operationalization of the Enterprise since the interim D-G has a crucial role to play in the oversight of its functions while it is a part of the Secretariat, which would eventually form the basis for the independent functioning of the Enterprise.\textsuperscript{49}

18. The final report on the interim review also points out that due to the current low staffing level in the Secretariat, there is the potential for conflicts of interest between the responsibilities of an Interim D-G and senior staff of the Secretariat.\textsuperscript{50} An earlier report of the S-G of the ISA had explored this issue in some details and put forward two alternative options. First possible option was to increase the size and capacity of the Secretariat to establish an independent unit under the leadership of an appointed Interim D-G. The alternative option put forward by the Secretariat report was to authorize the appointed interim D-G to appoint from outside the Secretariat an eminent person, with the appropriate experience and qualifications, as special representative, who would report to the Council periodically, and also retain appropriately

\textsuperscript{47}See Recommendation 12 of ISBA/23/A/3

\textsuperscript{48}Especially since Prof. David Johnson, Prof. Philip Weaver, Dr Vikki Gunn, Mr Wylie Spicer QC, Ms Sara Mahaney, Prof. Dire Tladi, Prof. Angel Alvarez Perez and Mr Akuila Tawake, \textit{Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154: Final Report}, 30 December 2016, had indicated from the review respondents that there was some support for appointing an interim or ad hoc Director General, para.6.3 at p.25.

\textsuperscript{49}See Section 2 para.1 of the Annex to the Agreement. See Statement by Algeria on behalf of the African Group, Request for consideration by the Council of the African’s Group’s operationalization of the Enterprise, 6 July 2018, Para. 17 raising concerns that there is currently no interim Director-General.

\textsuperscript{50}Para.21 of ISBA/23/A/3. See also the Considerations relating to a proposal by Nautilus Minerals Inc. for a joint venture operation with the Enterprise: Report by the Secretary-General, ISBA/19/C/6 of 4 April 2013, Paras.12-19 and Considerations relating to a proposal by the Government of Poland for a possible joint-venture operation with the Enterprise: Report of the Secretary-General, ISBA/24/C/12 of 25 May 2018
qualified technical and legal consultants to act and conduct negotiations on behalf of the Enterprise.\textsuperscript{51} The latter approach, would appear to be a more reasonable and realistic option. The former option would be rather problematic, especially as regard whether this would comply with the ‘cost-effective’ and ‘evolutionary’ principles, as enunciated in the 1994 Implementation Agreement. It is however crucial that such special representative is given wide-ranging powers to take practical steps to make good progress on the operationalization of the Enterprise.

\textbf{C. Independent Functioning of the Enterprise under the 1994 Agreement}\textsuperscript{52}

19. Under the 1994 Agreement, there are two possible alternate triggers to the independent functioning of the Enterprise, namely either:

- Receipt by the Council of an application for a joint-venture operation with the Enterprise; or
- Upon the approval of a plan of work for exploitation for another entity.\textsuperscript{53}

It is important to note that in the case of the second trigger event (i.e. the approval of a plan of work for exploitation for any qualified entity) there is no requirement under the 1994 Agreement for there to be a specific joint venture proposal with the Enterprise before the Council.\textsuperscript{54} Once either of these trigger events occurs, the Council is required to take up the issue of the independent functioning of the Enterprise, and if satisfied that joint venture operations with the Enterprise are in accord with “sound commercial principles” to issue a directive for such independent functioning.\textsuperscript{55}

20. In 2012 Nautilus Minerals Inc., a company incorporated in Canada, presented a proposal to the S-G of the ISA to enter into negotiations to form a joint venture with the Enterprise for the purpose of developing eight of the reserved area blocks in the Clarion-Clipperton Zone.\textsuperscript{56} However, the Council took the view, at the time that it was premature for the

\textsuperscript{51}Paras 16 and 17 of ISBA/19/C/6
\textsuperscript{52}This is developed further in Part II of this Study in relation to the Operationalization of the Enterprise vis-à-vis the financing aspects.
\textsuperscript{53}Section 2, para.2 of the Annex to the Agreement.
\textsuperscript{54}Ibid, paras.6-8
\textsuperscript{55}Ibid. See below a discussion on the concept of ‘sound commercial principles.’
\textsuperscript{56}Proposal for a Joint Venture Operation with the Enterprise: Report by the Interim Director-General of the Enterprise, ISBA/19/C/4 of 20 March 2013
Enterprise to function independently.\textsuperscript{57} Presumably, although this was not explicitly stated, this was based on the Council not considering that this proposal accorded with “sound commercial principles”.\textsuperscript{58}

21. Recently, the S-G of the ISA has received an expression of interest from the Secretary of State for the Ministry of the Environment of Poland, to enter into negotiations to form a joint venture with the Enterprise.\textsuperscript{59}

22. Under the 1994 Agreement there are several conditions that would need to be satisfied for the Enterprise to operate as an independent entity. First, one of the trigger events mentioned above must exist. Second, the Council is under a legal obligation, upon the occurrence of either of these trigger events, to take up the issue of the independent functioning of the Enterprise. Third, the Council would have to consider if joint venture operations with the Enterprise accord with ‘sound commercial principles.’ Four, if the Council is satisfied that joint venture operations with the Enterprise accords with ‘sound commercial principles’ it is mandatory that it issues a directive for such independent functioning. This provision is unclear whether it refers to joint venture operations generally or to a specific joint-venture proposal. A careful reading of the relevant provision would appear to suggest that this may depend on the particular trigger event that is applicable. If it is the trigger event of a proposal to enter into a joint venture with the Enterprise, then it could be interpreted to mean that the Council would consider that specific joint venture proposal.\textsuperscript{60} However, if it is the second trigger event (i.e. the approval of a plan of work for exploitation by another entity) it would perhaps mean the Council would need to consider joint venture operations generally as there may not be a specific joint venture proposal before it. With the latter trigger event, it would appear that the Council must take up the Enterprise's independent functioning without delay. The purpose would appear to be that the Enterprise would immediately be given the opportunity to be actively involved in the parallel system of mining as soon as exploitation begins. Finally, such directive must be issued pursuant to Article 170(2) of UNCLOS 82, which states that the Enterprise “shall be subject to

\begin{footnotesize}
\textsuperscript{57}Para. 16 of Statement of the President of the Council of the International Seabed Authority on the work of the Council during the nineteenth session, ISBA/19/C/18 of 24 July 2013
\textsuperscript{58}Ibid.
\textsuperscript{59}See Considerations relating to a Proposal by the Government of Poland for a Possible Joint-Venture Operation with the Enterprise: Report of the Secretary-General, ISBA/24/C/12 of 25 May 2018. See Part II of this Study for further discussions on the proposal of the Polish government.
\textsuperscript{60}Ibid, para. 9
\end{footnotesize}
directives and control of the Council.”

23. The 1994 Agreement appears to undermine the advantageous position given to the Enterprise under the UNCLOS 82 in relation to other entities involved in deep seabed mining in a number of ways. For instance, it takes away any preferential treatment for the Enterprise by insisting that the obligations applicable to other contractors shall similarly apply to the Enterprise. Also, that the Enterprise would have to submit an application for a plan of work, which upon its approval shall be in the form of a contract concluded between the Authority and the Enterprise.61 Also, a contractor that has contributed to the ISA a reserved area would have the right of first refusal to enter into a joint-venture arrangement with the Enterprise for exploration and exploitation of that site. It is not clear from this provision if a contractor that refuses to enter into a joint-venture arrangement with the Enterprise for exploration would still be entitled to a right of first refusal for the exploitation stage. In the view of the authors of this study that would be an onerous interpretation of this provision as the exploration and exploitation stages of mining should be regarded as merely different stages of the same process of mining a particular site. Thus, when a contractor has been given a right to first refusal at the exploration stage and chooses not to take up the joint venture offer such contractor should not be allowed to have ‘another bite at the apple’ of having another opportunity to exercise the right of first refusal at the exploitation stage.

D. Funding the Enterprise62

24. The 1994 Implementation Agreement also excludes the obligation of States Parties to fund a mine site of the Enterprise and is emphatic that none of the States Parties shall be under any obligation to finance any of the operations in any mine site of the Enterprise or under its joint-venture arrangements.63 But nothing in the 1994 Agreement precludes any States Parties from voluntarily choosing, if it so wishes, (for instance by way of non-obligatory voluntary contributions, interest free loan Agreement entered into with the Enterprise or equity investment), to finance any of the operations or joint-venture arrangements of the Enterprise.64

61 Section 2, para.4 of the Annex to the Agreement
62 This is developed further in Part II of this Study in relation to the Operationalization of the Enterprise vis-à-vis the financing aspects.
63 Section 2, para.3 of the Annex to the Agreement
64 See Article 11 of Annex IV of UNCLOS 82 on Finances of Enterprise
25. It is important to note that the Enterprise, as an organ of the ISA, within the framework of the international legal personality of the ISA, has such legal capacity as conferred on it by its Statute set out in Annex IV of the UNCLOS 82.65

**E. Transfer of Technology and Enterprise**

26. The 1994 Agreement excludes the mandatory obligation to transfer technology to the Enterprise.67 It, however, provides that the Enterprise and developing States seeking for deep seabed mining technology shall obtain such technology on ‘fair and reasonable commercial terms and conditions on the open market, or through joint-venture arrangements.’68 If the Enterprise or developing States are unable to obtain the deep seabed mining technology, the ISA may request all or any of the contractors and their sponsoring State(s) to cooperate with it in facilitating the acquisition of such technology by the Enterprise or its joint venture, or by a developing State(s) ‘seeking to acquire such technology on fair and reasonable terms and conditions, consistent with the effective protection of intellectual property rights.’69 It would appear that this establishes an obligation, at least on the part of Sponsoring States, to cooperate in good faith.70 The S-G of the UN during the Informal Consultations had urged as follows:

“States Parties should undertake in good faith to assist the Enterprise to become a viable commercial entity and to engage successfully in deep seabed mining operations. States sponsoring deep seabed mining operations shall agree to take effective measures consistent with this obligation.”71

**F. Enterprise and Liability issues**

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65 See Articles 136, 170(2) and 176 of UNCLOS 82
66 This is developed further in Part II of this Study in relation to the Operationalization of the Enterprise vis-à-vis the technological aspects
67 Section 5, para.2 of the Annex to the Agreement
68 Section 5, para.1(a) of the Annex to the Agreement
69 Section 5, para.1(b) of the Annex to the Agreement
70 See Articles 157(4) and 300 of UNCLOS 82. For an interesting analysis of the duty to cooperate see Margaret A. Young and Sebastian Rioseco Sullivan, “Evolution through the Duty to Cooperate: Implications of the Whaling Case at the International Court of Justice”, (2015) 16 Melbourne Journal of International Law, pp.1-33
27. The Enterprise, like any other operator in deep seabed mining, has responsibilities that may lead to liabilities under the relevant legal instruments. When the Enterprise becomes operationalized serious consideration would have to be given to the issue of its legal liability for its operations, whether as a joint venture partner or perhaps eventually in the future, after its initial operations, as a sole operator, if it so chooses. Although the Enterprise is an organ of the ISA, the UNCLOS 82 provides that the ISA shall not be liable for its acts or obligations, just as the Enterprise would not be liable for acts or obligations of the ISA. Neither would State members of the ISA, merely by reason of their membership, be liable for the acts or obligations of the Enterprise. This obviously raises the issue of the exact nature of the liability of the Enterprise when it is operationalized. Article 22 of Annex III of UNCLOS 82 states: ‘[t]he contractor shall have responsibility or liability for any damage arising out of wrongful acts in the conduct of its operations, account being taken of contributory acts or omissions by the Authority. Similarly, the Authority shall have responsibility or liability for any damage arising out of wrongful acts in the exercise of its powers and functions, including violations under article 168, paragraph 2, [violations of the rule that the Secretary-General and his staff shall not have any financial interest in mining activities in the Area and rule on confidentiality, even after termination of their functions, as regard industrial secret, proprietary data or any other confidential information coming to their knowledge by reason of their employment] account being taken of contributory acts or omissions by the contractor. Liability in every case shall be for the actual amount of damage.’ (words in the bracket refer to article 168, paragraph 2 which is included here for ease of reference.)

28. The extent of the Enterprise’s liability for mining operations would need to be further examined and eventually clarified when it is operationalized. With the Enterprise basically put on the same status as a contractor by the 1994 Agreement, it would mean that, similar to contractors, it would have responsibility or liability for damages arising out of any wrongful acts in the conduct of its operations. Would the Enterprise have liability for wrongful acts?

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72 Articles 145 and 209 of UNCLOS 82. Also see for instance, Common Regulations 5 and Part V of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, ISBA/19/C/17; the Regulations on prospecting and exploration for polymetallic sulphides in the Area, ISBA/16/A/12/Rev.1; the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11.

73 Articles 2(3) and 3 of Annex IV of UNCLOS 82

74 See for instance, Common Regulation 32 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in
arising from the operations of its joint venture partner(s)? It would seem that the Enterprise’s liability would depend on the nature and specifics of the joint venture agreement negotiated between it and such joint venture partner(s).

29 Would the ISA be responsible or liable for an act of the Enterprise, if it is acting as a contractor? Although, further study may be needed to explore the various ramifications of the liabilities of the Enterprise when it is operationalized, a reasonable interpretation of Articles 2(3) and 3 of Annex IV vis-à-vis Article 22 of Annex III of UNCLOS 82, is that as a general rule the ISA would not be liable for actions or acts of the Enterprise. However, as an exception, the ISA would have some liability under Article 22 of Annex III if there has been contributory wrongful acts or omissions of the ISA, as well as when the damage has arisen as a result of wrongful acts by the ISA in the exercise of its powers and functions.  

30. The guidance provided by the ITLOS Advisory Opinion No.17 of 2011 on liability is not directly relevant in clarifying the responsibilities or liabilities of the ISA vis-à-vis the Enterprise since this Advisory Opinion applies mainly to responsibilities or liabilities of sponsored entities, of which the Enterprise is not. However, it is important to note that though Article 139 of the UNCLOS 82, which was heavily relied upon by the Seabed Disputes Chamber in its Advisory Opinion, applies mainly to liability of States Parties for their activities and their sponsored entities, the provision does indicate that an International Organization may also incur liability for its failure to carry out its responsibilities under Part XI. Would the Enterprise, though a commercial entity, by reason of it being part of the ISA be regarded as part of an International Organization that could incur liability as an operator in deep seabed mining? If so, what would be the extent of its liability under Part XI of UNCLOS 82, as modified by the 1994 Agreement, and general international law? This would need to be clarified.

G. Enterprise and Immunity Issues

the Area and related matters, ISBA/19/C/17; the Regulations on prospecting and exploration for polymetallic sulphides in the Area, ISBA/16/A/12/Rev.1; the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11.

75 See Article 139(2) of UNCLOS 82 and Paras. 169, 171 of ITLOS Advisory Opinion No.17
76 See Art. 139(2) and (3)
77 See Art.304 of UNCLOS 82
31. The Enterprise has the capacity to be a party to legal proceedings, so actions may be brought against it in a court of competent jurisdiction in the territory of a State Party to the UNCLOS 82. Such action may be brought against the Enterprise in the court in the territory of a State Party where either it has an office or facility or it has appointed an agent for the purpose of accepting service or notice of process or it has entered into a contract for goods or services or it has issued securities or it is otherwise engaged in commercial activity. The UNCLOS 82 confers certain immunities on the Enterprise in the territories of States Parties to enable it carry out its functions, which may, where necessary, be effected by special agreements between the Enterprise and such States Parties. The properties and assets of the Enterprise, wherever it is located and by whoever held, shall be immune from all forms of seizure, attachment or execution(such as an interim order made in third party debt order, otherwise known as a garnishee order in some jurisdictions, proceeding and an interim charging order) before the delivery of final judgment against it. Also, similarly its properties and assets shall be immune from requisition, confiscation, expropriation or any other form of seizure by either executive or legislative action.

32. States Parties to the UNCLOS 82 are required to grant to the Enterprise equivalent immunities to that accorded to entities engaged in similar commercial activities. It should be noted, that a number of States do not grant immunity to State owned entities engaged in commercial activities. They would only grant immunity to governmental entities with regard to governmental activities.

33. However, it must be mentioned that a few States still apply the absolute immunity rule...

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78See Article 13(2)(c) and 3(a) of Annex IV of UNCLOS 82. See also Art.19(1) of the Headquarters Agreement between the ISA and Jamaica.
79Article 13 of Annex IV of UNCLOS 82. See also Art.47 of the Headquarters Agreement between the ISA and Jamaica.
80Article 13(3)(b) and 4(a) of Annex IV of UNCLOS 82. Also, Arts.19(2) and 20(1) of the Headquarters Agreement between the ISA and Jamaica.
81Article 13(4)(d) of Annex IV of UNCLOS 82. Also Art.22(1) of the Headquarters Agreement between the ISA and Jamaica.
which grants complete immunity even to State-owned companies engaged in commercial activities. Such States would be expected to ensure that this absolute immunity applies similarly to the Enterprise. Yet, it is important to note that States Parties may choose to accord special immunities to the Enterprise without any obligation to provide similar immunities to other commercial entities.

34. The Enterprise may waive any of the immunities conferred upon it by UNCLOS 82 or by special agreement entered with States Parties.

35. Additionally, the Protocol on the Privileges and Immunities of the International Seabed Authority, 1998, confers on the Director-General of the Enterprise certain immunities, such as immunity from legal process for words, spoken or written, and all acts performed in an official capacity, as well as immunity from personal arrest or detention for acts in an official capacity. It also points out that the Director-General, his or her spouse and minor children shall be accorded the same immunities accorded to diplomatic envoys in accordance with international law.

H. Enterprise and seat of business

36. The Enterprise’s principal place of business shall be at the seat of the ISA i.e. Jamaica. It may however establish other offices and facilities in the territory of any State Party with the consent of that State Party. The Enterprise may negotiate with host countries where it has its offices or facilities for exemption from direct or indirect taxes. The ISA already has a Headquarters Agreement with the government of Jamaica, which provides that the principal place of business of the Enterprise business would be Jamaica.

I. Enterprise and Governance

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83 Yilin Ding, “Absolute, Restrictive, or Something More: Did Beijing Choose the Right Type of Sovereign Immunity for Hong Kong?” (2012) 26 Emory Law Review, pp.997-1037
84 Article 13(4)(d) and (e) of Annex IV of UNCLOS 82
85 Article 13(7) of Annex IV of UNCLOS 82. Art.25 of the Headquarters Agreement between the ISA and Jamaica
86 Article 8. Also see Vienna Convention on Diplomatic Relations (VCDR) 1961
87 Article 170(3). Article 7 of the Headquarters Agreement
88 Article 8 of Annex IV of UNCLOS 82
89 Article 13(5) of Annex IV of UNCLOS 82
90 Article 17
91 This is developed further in Part II of this Study in relation to the Operationalization of the Enterprise vis-à-vis the
37. Under the 1994 Agreement, the Enterprise is regarded as a part of the Secretariat of the Authority, with an interim Director-General appointed by the Secretary-General of the ISA from within the staff of the Authority. It is interesting to note that the Secretary-General under this provision is not required to liaise with any other organ of the ISA in making this appointment.

38. Once the Enterprise becomes autonomous the UNCLOS 82 requires that it would have a substantive Director-General and a fifteen-member Governing Board. An attempt during the UNCLOS III to ensure that the selection of the Board, for a certain period, be made by the major contributors to the funds of the Enterprise was scuttled by the Group of 77, which insisted that the Board should be elected by the Assembly.\(^92\) Under the UNCLOS 82 the members of the Governing Board are to be elected in their personal capacity by the Assembly, upon the recommendation of the Council, for a period of four years and eligible for re-election, although consideration is to be paid to the principle of rotation of membership amongst nominees from different states parties.\(^93\)

39. The day to day running of the Enterprise, inclusive of the organization, management, appointment and dismissal of the staff, is vested in the Director-General. The Director-General is to be elected for a fixed term, not exceeding five years, by the Assembly, upon the nomination of the Governing Board and the recommendation of the Council; and may be re-elected for further terms. Although not a member of the Board, the Director-General is directly responsible to the Board, and may participate in its meetings, as well as those of the Council and the Assembly when they are dealing with matters concerning the Enterprise; but has no right to vote.\(^94\)

40. The staff of the Enterprise are to be persons of the highest standard of efficiency and technical competence, but due regard is required to be paid to the importance of recruiting staff on an equitable geographical basis.\(^95\)


\(^93\) See Article 5 of Annex IV of UNCLOS 82. The members of the Governing Board are to continue in office until their successors are elected. See Article 6 of Annex IV of UNCLOS 82 for the powers and functions of the Board.

\(^94\) Art.7 (1) and (2) of Annex IV of UNCLOS 82

\(^95\) Art.7 (3) of Annex IV of UNCLOS 82. See Part II of the Study on staffing in an operationalized Enterprise.
J. Operationalization of Enterprise and the Mining Code

41. Under the 1994 Agreement the obligations applicable to contractors shall apply to the Enterprise and it is required to apply for a plan of work for mining like any other contractor. This principle of equality of treatment between the Enterprise and contractor is not so far applied in the preparation of mining code. The Enterprise did not have an opportunity to participate in the preparation of Regulations on prospecting and exploration for polymetallic nodules, for polymetallic sulphides, or for cobalt-rich crusts, even though it is a principal stakeholder. Nor does it have a role in the preparation of the current Draft Regulations on exploitation of mineral resources of the Area. Since these Regulations are germane to the activities of the Enterprise, it is important that the Assembly should give serious consideration to remedy the situations regarding (i) Regulations already adopted and (ii) current preparation of regulations for exploitation. If operationalization of the Enterprise is envisaged, its perspectives must be reflected in these Regulations.

K. Knowledge of Relevant National Law

42. The Enterprise, when operationalized would have its principal place of business in Jamaica and would also have the powers to establish offices or facilities in other countries, particularly if incorporation of a joint venture is involved. Knowledge of relevant national laws and regulations particularly regarding tax, employment and insurance would be required. The Enterprise and its employees are required under UNCLOS 82 to respect local laws and regulations in any State or territory in which the Enterprise or its employees may do business or otherwise act.

43. The States Parties may have to update or include in their deep seabed mining legislation provisions which are relevant to the operations of the Enterprise within their territories.

96Section 2 para.4 of the Annex to the 1994 Agreement
97This concern had been raised by the African Group in its Request for Consideration by the Council of the African Group’s Proposal for the Operationalization of the “Enterprise”, 6th July 2018 at paras.18-23
98Article 21 of the Headquarters Agreement
99Article 13(4)(c ) of Annex IV of UNCLOS 82
100The authors are not aware of any national legislation dealing with deep seabed mining that specifically engages with the
44. The Authority's database on national legislation should also include those laws and regulations of States Parties relevant to joint venture arrangements between their State entities or companies and the Enterprise.

III. **Answers to specific legal questions raised in the Terms of Reference**

45. This section would seek to address the specific questions raised in the Terms of Reference (ToRs) contained in the Annex to ISBA/20/LTC/12

A. **Analyze and assess options and approaches available to joint ventures operations;**

46. The Enterprise has the legal capacity to, inter alia, enter into contracts, joint arrangements and other arrangements, agreements. Under the 1994 Agreement the Enterprise is obliged to carry out its initial deep seabed mining operation through joint ventures. However, in theory, nothing precludes that the Enterprise, after its initial operations, from engaging in deep seabed mining operations as a sole operator, if it so wishes. According to one of the summaries of the Secretary-General’s informal consultation on outstanding issues relating to the UNCLOS 82 deep seabed mining it was stated:

47. There is also agreement that the Enterprise might begin operations through a joint venture arrangement as a means of minimizing costs to States Parties. This is not intended to reduce the future operational options of the Enterprise, nor affect its autonomy.

48. However, whether it would be economically feasible for the Enterprise to engage in sole

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101 This is developed further in Part II of this Study in relation to the Operationalization of the Enterprise vis-à-vis the technological and financing aspects.

102 Article 13(2)(a) of Annex IV of UNCLOS 82

103 Section 2 para 2 of the Annex to the 1994 Agreement

operations in the future is a different matter as joint ventures have the advantages of allowing entities to share the burden and risks of the project, as well as allowing an entity without the required capital and technology to leverage off another entity with such financial and technological capabilities. Neither does the 1994 Agreement preclude the Enterprise, after its initial operations, from entering into other types of joint arrangements, apart from joint ventures, including production sharing contracts.\textsuperscript{105}

49. For its initial operations an operationalized Enterprise, under the 1994 Agreement may enter into joint ventures with States or other entities or even both. Opinions appear to differ on whether such a joint venture operation could cover all the activities within the remit of the Enterprise or whether it must necessarily be limited to only mining activities in the Area.\textsuperscript{106} To understand the arguments and implications thereof, it is necessary to bear in mind that “[a]ctivities in the Area” is defined in the UNCLOS 82, as: “all activities of exploration for, and exploitation of, the resources of the Area.”\textsuperscript{107} However, for activities in the Area (i.e. mining activities), its partners are limited to States Parties to the UNCLOS 82 and other entities sponsored by such States Parties.\textsuperscript{108} States which are not parties to the Convention and the Agreement and entities that are not sponsored by States Parties are excluded. Yet, it would appear that this eligibility requirement would not apply to such operations as to transportation, processing and marketing of the recovered minerals, if the Enterprise wishes to enter into joint venture arrangements.

50. The exact nature of joint venture arrangements that the Enterprise may undertake is not specifically prescribed in the UNCLOS 82 and 1994 Agreement. Neither do these treaties precisely define what the joint ventures are meant to be. Domestic commercial joint ventures are commonly used in numerous industries, including the extractive industry and include a wide range of arrangements. Generally speaking, a joint venture ‘contemplates an enterprise

\textsuperscript{105} Articles 9(1) and 11(1) of Annex III of UNCLOS 82. It must, however, be noted that the reference in Article 11(2) and (3) to the Contractor having to fund the joint arrangements under Article 13 of the same annex no longer applies. See Section 8 para.2 of the Annex of the 1994 Agreement.

\textsuperscript{106} See also Yuwen Li, Transfer of Technology for Deep Sea-Bed Mining: the 1982 Law of the Sea Convention and Beyond, (Martinus Nijhoff, 1994), p.262. Li cites Jaenicke in ‘Joint Ventures for Sea-Bed Activities: A Viable Alternative’ in R. Wolfrum(ed.)(1991), pp.165-173 as taking the position that the joint venture should be just for mining activities in the Area, while Ballah and Orrego Vicuna in their comments during discussions also in Wolfrum(ed.)(1991) at pp.181 and 183 take the view that such joint venture may also include the processing and marketing aspects.

\textsuperscript{107} Article 1(3). Also see Article 133 defining resources in the Area.

jointly undertaken, that is an association of such joint undertakers to carry out a single project for profit; that the profits are to be shared, as well as the losses, though the liability of a joint adventurer for a proportionate part of the losses or expenditures of the joint enterprise may be affected by the terms of the contract.\textsuperscript{109} Therefore, this leaves flexible the options available to the Enterprise. The Enterprise may negotiate a suitable and appropriate joint venture arrangement that would meet its needs for funding, technological, scientific knowledge, involvement of developing States etc.\textsuperscript{110}

51. Three primary forms of joint ventures commonly used in domestic commercial operations may be mentioned here to illustrate some of the legal issues involved: the incorporated or ‘equity’; the unincorporated or ‘contractual’ and partnership (including limited partnerships) joint ventures. It is not assumed that any of these forms will be suitable for the needs of the Enterprise. The appropriate form of joint venture must be consistent with its legal status as an international entity, as well as a commercial entity. And such joint venture will make the best use of its assets, the reserved area. This been said the special features of the different types of joint ventures would be highlighted below.

52. The incorporated joint venture involves the Enterprise and its joint venture undertaker creating a new corporation or company having a separate juridical personality from the owners, with the owners investing funds (or other considerations of value e.g. assets, goodwill etc. – for instance, for the Enterprise, there would presumably be some value in the exploitable reserved sites that it brings into the arrangement). Each party would receive equity shares reflecting their investment.

53. The unincorporated joint venture would involve both parties entering into a contract, whilst each party retains their own separate legal personality and rights. The obligations to contribute funds, equipment, expertise and any other resources would be spelt out in a binding contract. There would appear to be more risk with the unincorporated joint venture as it opens the joint venture participants to full liability for actions of the joint venture. However, the


\textsuperscript{110} Ibid
unincorporated joint venture does provide greater opportunities for direct involvement by the joint venture participants. 111

54. The joint venture partnership is distinct from the incorporated joint venture in that it is created by way of an agreement between the joint venture undertakers, rather than through the rules of a statute as in the case of the incorporated joint venture. Consequently, there is no requirement that the partnership should be registered to bring it into existence. However, it is important to note that once a joint venture partnership is created, such partnership would be governed by the applicable partnership legislation of the country where the joint venture partnership operates. The joint venture partnership is also different from the contractual joint venture. Unlike the latter a formal partnership is entered into by the joint venture undertakers of a joint venture partnership. Generally, for a joint venture partnership the liability of each partner is unlimited. It is important to note that in a joint venture partnership each of the joint venture partner acts as not only as principal, but also as agent for the other joint venture undertakers. As agents each joint venture partners would be required to exercise their decisions with a view to promoting the best interests of the partnerships as a whole. However, it must be noted that in some jurisdiction there is also provision for limited joint venture partnerships which may limit the liability of the joint venture partners. The latter may be created, similarly to the incorporated joint venture, by way of specific domestic legislation, which allow for creation of such limited partnership. Usually, such limited partnership is formed when a declaration of limited partnership is filed with the appropriate registrar, as required by the applicable legislation.

55. It is relevant to mention that the Regulations on Polymetallic Sulphides and Cobalt-rich Ferromanganese Crusts specify that an applicant for a plan of work may elect either to contribute a reserved area or to offer an equity interest in a joint venture arrangement. 112

56. When those Regulations were under preparation, it was argued that polymetallic sulphides and cobalt-rich ferromanganese are three-dimensional in nature and are said to be difficult to identify two sites of equal estimated value. Two options were thus provided in these Regulations. But no such options were included in the Regulations for polymetallic nodules or

112 See Common Regulations 16 and 19 of Regulations for Sulphides and that for Cobalt-rich Ferromanganese Crusts
in the Convention or the Agreement. 113
Concerns have been expressed that no such options are mentioned in the Regulations for polymetallic nodules and that the lack of such options may have impact on the participation of developing countries in such ventures. 114 Whether the respective Regulations should be aligned was the subject of a Note prepared by the Secretariat in 2018. 115 The Note examined all the issues involved and one of the issues raised in the Note was that:

“...If an alignment were made, an applicant would have the choice between contributing a reserved area and offering an equity interest in a joint venture arrangement. The question then arises as to how this could be reconciled with the provisions of annex III, article 8, of the Convention, which only refers to the designation of a reserved area, to give effect to the parallel system in the case of polymetallic nodules. The Commission [Legal and Technical Commission] should therefore consider whether an alignment is possible without amending that article.” 116

In that connection, it was stated in the Note of the Secretariat as follows:

“If the regulations were aligned and future applicants elected to offer an equity interest rather than contributing reserved areas, this would have an impact on the reserved areas available for applications for approval of plans of work for exploration. The possibility of having fewer reserved areas in future would mean fewer opportunities for developing States to participate directly in activities in the Area, either in applying for the approval of plans of work or in sponsoring entities for the same purpose. Furthermore, the equity interest option would not result in the generation of data and information that would be available to the Enterprise or a qualified applicant from a developing member State of the Authority through the reserved area option.” 117

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113 ISBA/7/C/2 of 29 May 2001, para.12
114 “‘Issues related to the possible alignment of the Authority’s regulations on prospecting and exploration concerning the offer of an equity interest in a joint venture arrangement’, Note prepared by the ISA Secretariat, ISBA/24/LTC/4, 6 February 2018
115 Ibid
116 Ibid, Para.25
117 Ibid, Para.17
57. It has been pointed out that ‘[t]he development of scientific, technical, and operational expertise for developing States (as envisioned under, inter alia, Articles 143, 144 and 148 of the LOSC) will therefore not be a direct outcome of the joint-venture option, which only considers an equity interest as a tangible outcome.’

58. This study therefore takes the view that careful thought of possible legal implications of a formal alignment of the Regulations, especially in view of its potential adverse impact on the direct participation of the Enterprise and developing States in activities in the Area, and further steps need to be taken to elaborate further on the terms and conditions of the equity participation option.

(b) Clarify the concept of “sound commercial principles”

59. The concept of “sound commercial principles,” though utilized in UNCLOS 82; the 1994 Agreement and the revised draft Exploitation Regulations is not explicitly defined in any of these legal instruments. In seeking to clarify the concept, it would therefore be helpful to resort to the treaty interpretation rules as set forth in the Vienna Convention on the Law of Treaties (VCLT) 1969. The VCLT states that a Treaty should be interpreted in good faith in accordance to its ordinary meaning. However, such ordinary meaning should be interpreted in context (including taking into consideration the text, incorporating its preamble and annexes, as well as any subsequent agreement or instrument related to the treaty or subsequent practice of the States) and should also be interpreted in the light of the Treaty’s objects and purposes.

60. A scrutiny of the UNCLOS 82 and the 1994 Agreement, indicates the concept of “sound commercial principles” is utilized in two specific contexts – the operation of the Enterprise and the development of the Area. Therefore, any interpretation to clarify the meaning of this concept

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118 Aline Jaeckel, Jeff A. Ardron and Kristina M. Gjerde, ‘Sharing benefits of the common heritage of mankind – Is the deep seabed mining regime ready?’ (2016) 70 Marine Policy, pp.198-204 at 201
119 On the implications of this on funding the operationalized Enterprise see Part II of this Study under ‘Other Funds’.
120 Article 1(3) of Annex IV of UNCLOS 82
121 Sections 2 para.2 and 6(1)(a) of the Annex to the 1994 Implementation Agreement
122 Draft Regulation 2(3) of ISBA/24/LTC/WP.1/Rev.1, 9 July 2018
should be done with these contexts in mind. Furthermore, in clarifying the concept of “sound commercial principles” with regard to the Enterprise it is helpful to interpret this in the context of a key objective and purpose of this unique commercial entity, which is to facilitate the participation of developing States in deep seabed mining.125

61. It has been said that the Enterprise is “a mechanism [for developing States] for translating into reality, so to speak, the idea of the common heritage of mankind.”126 Furthermore, in a recent proposal of the African Group of the ISA proposal on the Enterprise, had indicated that it is “…the only mechanism by which the vast majority of developing States can participate in activities in the Area’ and the operationalization of this unique commercial entity ‘would go some way to safeguard the ‘common heritage’ and ‘benefit to humankind’ principles espoused by Part XI of the Convention.”127

62. Therefore, in seeking to clarify the concept of “sound commercial principles” it is imperative to situate the concept in the context of the particular entity that it is to be applied to. For instance, what may be regarded as “sound commercial principles” from the point of view of a private commercial company may not exactly be the same as in the context of the Enterprise. The maximization of profits for its investors could be said to be the main motivation and object of most private commercial companies and thus the concept would have to be interpreted in the context of such motivation.

63. On the other hand, the Enterprise when operationalized (although generating profit would obviously be on the agenda so there could be monetary benefits for distribution amongst member States), its primary motivation, based on the parallel system, would be the operationalization of the Common Heritage principle,128 in such a way as to assist developing States to engage in deep seabed mining.129 Nothing in the UNCLOS 82 and the 1994 Agreement indicates that the Enterprise’s ability to make maximum profit during its initial operations would be regarded as a key prerequisite in determining whether it is operating in accordance

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125 Article 8 of Annex III of UNCLOS 82
127 African Group’s Proposal for the Operationalization of the “Enterprise”, 6 July 2018 at Paras.11 and 12
128 Articles 136 and 311(6) of UNCLOS 82, as well as preamble 2 of the 1994 Implementation Agreement
129 See Articles 8 and 9(2) of Annex III and Article 148 of UNCLOS 82
with “sound commercial principles”; so long as it is a commercially viable entity, able to operate autonomously from political interference and in a cost effective manner without having to rely on financial support from the ISA and member state.\textsuperscript{130}

64. An exploration of the travaux preparatoires of the UNCLOS 82 and the 1994 Agreement in this regard would be helpful in clarifying the concept of “sound commercial principles.” A perusal of the statements made by delegates in the UNCLOS III and the informal consultations leading to the 1994 Agreement relating to “sound commercial principles” would be helpful in identifying the critical points to look out for in understanding the concept. During the UNCLOS III the statements in relation to this concept appear to highlight the critical importance of the Common Heritage principle, as well as the commercial viability and autonomy of the Enterprise in determining if it is operating in accord with “sound commercial principles”. For instance, the Mauritius delegation at the UNCLOS III stated as follows:

“Countries belonging to the Group of 77 felt that it was essential to have an effective and viable Enterprise, which must be managed according to sound commercial principles, unfettered by the special considerations of any region. ... There must be a link between the autonomy of the Enterprise and the Council’s decision-making process.”\textsuperscript{131}

65. Although there is no precise definition of “sound commercial principles”, this concept would have to be interpreted and understood in the light of the following parameters, based on the provisions of Part XI of the UNCLOS 82 and 1994 Agreement:

- **Common Heritage principle**, as the fundamental overarching principle governing the regime;\textsuperscript{132}
- **Autonomy** of the Enterprise to make effective commercial decisions without political influence;\textsuperscript{133}

\textsuperscript{132} Articles 136 and 311(6) of UNCLOS 82, as well as preamble 2 of the 1994 Implementation Agreement
\textsuperscript{133} See Article 2(1) and (2) of Annex IV of UNCLOS 82 making it clear that while the Enterprise is obliged to act under the general policies of the Assembly and the directives of the Council it shall enjoy autonomy in conducting its operations.
- **Cost-effectiveness** in relation to the operations of the Enterprise (it should be a position to generate enough revenue to finance its running cost and to run its operations efficiently without a need to be subsidized by the State Members);  

- **Evolutionary approach** in its operationalization (for instance, an evolutionary approach to staffing, accommodation and its initial operation);  

- **Commercial viability**. It has been identified that commercial viability would entail a number of considerations, such as: What is the management structure? Is the management sound? Are funds available? Does it have access to the resources that it intends to develop? Has it or can it obtain the necessary technology? Will it have access to a market for the resources and what are the prospects of that market?  

(c) Suggest the possible form and content of the directive to be issued by the Council for the independent functioning of the Enterprise.

66. The 1994 Agreement requires that the independent functioning of the Enterprise shall be by way of a directive issued by the Council. The Council is meant to act alone in issuing this directive without any direct involvement from the other principal organs of the ISA. This does not mean that the Assembly may not deliberate or make recommendations that the Council does so. Presumably, the Council may request the Legal and Technical Commission, its subsidiary organ, to make recommendations on the independent functioning of the Enterprise before it eventually issues such directive. But this is not mandatory. From the UNCLOS 82 it is clear that the Council is able to either make decisions or issue directives or make recommendations depending on the matter it is dealing with. There is, however, no precise definition in either the UNCLOS 82 or the 1994 Agreement on what a ‘directive’ is. While a directive is definitely not intended to be a recommendation, the difference between a directive

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134 Section 1 of the Annex to the 1994 Implementation Agreement.  
135 Section 1 of the Annex to the 1994 Implementation Agreement. See Section 2 para. 1(h) of the Annex to the 1994 Agreement that reflects that there should be different managerial options for the administration of the Enterprise at different stages of its operations. See Part II of this Study which discusses possible proposals for funding and staffing an operationalized Enterprise.  
136 Section 2 para.2 of the Annex to the 1994 Implementation Agreement.  
137 Section 2 para.2 of the Annex to the 1994 Implementation Agreement  
138 Article 165(2)(a) of UNCLOS 82  
139 See for instance, Article 161(8) of UNCLOS 82  
140 See for instance, Article 162(2)(i) of UNCLOS 82  
141 See for instance, Article 162(2)(n) of UNCLOS 82
and a decision of the Council is unclear. It is suggested that guidance on what a ‘directive’ is may be obtained from the European Union’s Lisbon Treaty which defines a directive of the European Union as follows:

“A directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods”.

67. In essence, a directive could be regarded as a binding instrument, not a recommendation, which sets the goal and the deadline for achieving such goal, leaving the discretion as to how this is done to the entity to which the directive is addressed. This interpretation of a directive would be a reasonable one in the context of directives of the Council to the Enterprise. For instance, the directive, as required under Section 2 paragraph 2 of the 1994 Agreement, could set the goal for the independent functioning of the Enterprise, providing a target date for doing so, while leaving the practical details on the implementation to the relevant parts of the ISA, including the interim D-G and Special Representative of the S-G, working closely with the States Parties.

68. No specific template has been provided in the 1994 Agreement as regard the directive to be issued by the Council for the independent functioning of the Enterprise. Appendix 1 of this Study contains a template which is based on the relevant provisions of the 1994 Agreement and the interpretation given to such directive as stated above.

(d.) Define the extent of control to be exercised by the Council and identify the appropriate nature of its directives in order to safeguard the Enterprise’s autonomy as an independent commercial entity;

69. Under the UNCLOS 82, the Enterprise, although required to act under the directives and control of the Council, is meant to enjoy autonomy in its operations. The key challenge with this is how to insulate the Enterprise’s operations from political interference. A possible

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142 In plain English ‘a directive’ may be either an ‘authoritative order or instrument issued by a high-level body or official’ or, on the other hand, something ‘serving or intended to guide, govern or influence.’ See https://www.merriam-webster.com/dictionary/directive
143 Article 170 and Article 2(1) of Annex IV of UNCLOS 82
144 Ibid, Article 2(2) of Annex IV
balance may be that the directive would allow the Council to set for the Enterprise policy targets, of course in line with the UNCLOS 82 and 1994 Agreement, while allowing the Enterprise the autonomy in its operations as it works towards achieving such policy goals set by the Council. Thus, in formulating such directives, the Council would need to keep in mind the objective of sound commercial principles.  

(e). Identify gaps, if any, in the current regulatory and procedural regime and suggest ways, including the formulation of appropriate regulatory and procedural measures, to ensure proper and independent operations of the Enterprise-

70. Prior to the Enterprise’s independent functioning, the 1994 Agreement requires that an interim Director-General should be appointed from the staff of the ISA to oversee the functions stated in the Agreement. Eventually, when the Enterprise begins functioning independently a substantive Director-General is to be elected. Such D-G would be the legal representative and chief executive of the Enterprise, directly responsible to the Board for the conduct of the operations of the Enterprise and could participate, without the right to vote, in the meetings of the Assembly and the Council whenever these organs are dealing with matters concerning the Enterprise.  

It is interesting to note that, although the current rules of procedure (ROPs) for both the Assembly and the Council, make provision for the inclusion in their provisional agenda Reports from the Enterprise, there are no specific provisions for the interim D-G, and subsequently the substantive D-G, to participate in the meetings of the Assembly and Council. This is a gap in the ROPs for the Assembly and the Council that would need to be corrected.

(f). Identify gaps, if any, in existing general policies of the Assembly that are relevant to the operation of the Enterprise and suggest measures for addressing such gaps.

71. Under the UNCLOS 82, the Assembly is empowered to establish “general policies in conformity with the relevant provisions of the Convention on any question or matter within the competence of the Authority.” Further, as specifically related to the Enterprise it is said that

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146 Section 2 paragraph 1 of Annex to the 1994 Agreement.
147 Article 7(2) of Annex IV of UNCLOS 82
148 Article 160(1)
the Enterprise shall act not only in accordance with the UNCLOS 82 and the various rules, regulations and procedures of the ISA, but also the general policies established by the Assembly.\textsuperscript{149} However, under the 1994 Agreement it is provided that ‘[t]he general policies of the Authority shall be established by the Assembly in collaboration with the Council.’\textsuperscript{150} It is not evident from this provision of the 1994 Agreement the degree of collaboration with the Council that would be required for the Assembly to establish such general policies. Moreover, it is not clear if the Assembly would have to collaborate with the Council in establishing general policies as regard the Enterprise. An interpretation of the provisions of Article 170(2) of the UNCLOS 82 and the 1994 Agreement could be that such collaboration between the Assembly and Council is required in relation to the establishment of general policies by the former with respect of the Enterprise. Another perspective is that Article 170(2) of the UNCLOS 82, which is not specifically excluded by the Agreement, appears to create clear separation of powers between the Assembly and the Council as regard the Enterprise which arguably is not consistent with the need of such collaboration. Under this provision the Assembly is meant to establish general policies for the Enterprise to act, while the Council, on the other hand, is meant to issue directives and exercise control over it. It is arguable that the requirement of such Assembly collaboration with the Council under the 1994 Agreement would not apply where explicit provisions of the UNCLOS 82, such as Article 170, make it clear that the two organs should have distinct and exclusive roles.

72. So far, the Assembly has not established any general policies directed towards the operationalization of the Enterprise. It is suggested that the Assembly should begin by establishing general policies with regard to representation by the interim Director-General of the Enterprise or such representative as may be appointed (for e.g. the Special Representative for the Enterprise) at relevant meetings of the Council and Assembly of the ISA, which would have an impact on the Enterprise. Additionally, when the Enterprise is eventually operationalized further general policies would need to be established by the Assembly as regard implementation of the parallel system as prescribed in Article 153 of UNCLOS 82. Also, the Assembly would need to establish general policies in other key areas.\textsuperscript{151}

\textsuperscript{149} Article 170(2)
\textsuperscript{150} See section 3 paragraph 1 of the 1994 Agreement
\textsuperscript{151} Such as the election of the substantive Director-General of the Enterprise and governing board of Enterprise(for e.g. how many candidates should be recommended by the Council to the Assembly, what key qualifications would be required, how many times should they be reelected) Article 160(2)(c ) of UNCLOS 82 and Articles 5 and 7 of Annex IV; the transfer of
Suggest and elaborate on the criteria, qualifications and standards for nomination of the Director General and election of the members of the governing board;

73. The 1994 Agreement merely requires the interim D-G to be appointed from among the staff of the ISA without stating any required qualifications for such a person. The last interim DG was a lawyer; however, it is unclear if this was taken into consideration in making this appointment. In view of the task of the interim D-G, it is suggested that the S-G should intentionally seek to appoint a staff of the ISA with relevant qualifications, such as legal, management, accounting, financial or relevant technical qualifications. Additionally, for the substantive D-G, the UNCLOS 82 merely states that the Assembly shall, upon the recommendation of the Council and the nomination of the Governing Board, elect the Director-General of the Enterprise, without specifying any particular qualifications for such individual.152

74. Furthermore, the UNCLOS 82 requires that due regard be paid to the principle of equitable geographical representation in electing the members of the Governing Board of the Enterprise. It also states that in electing members of the board regard should be paid to electing members that have the highest standard of competence, with qualifications in relevant fields, ‘so as to ensure the viability and success of the Enterprise.’153 Again, the UNCLOS 82 does not give specific examples of the relevant qualifications, (For example those relevant to mining and processing of mineral resources, oceanology, protection of the marine environment, economic, financial or legal matters etc.). Moreover, it would be helpful to have on the Governing Board persons with vast practical experience of acting as board members of major multinational corporations. Additionally, in electing board members due regard should be paid to ensuring that at every point in time the board is composed of persons having a wide-range of relevant qualifications and experiences.

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152 Ibid, Article 7(1) of Annex IV
153 Ibid, Article 5(1) of Annex IV
(h). Identify and formulate criteria for the rules of procedure of the governing board of the Enterprise and the code of conduct of its members;

75. The Enterprise would have to develop rules of procedure for the governing board covering areas such as: Frequency of Meetings; Venue of Meetings; Notification of Meetings; Quorum for Meetings; Decision-making and voting; Election of a Chairperson from among the members, including term, functions and powers; Participation of Director-General at Meetings; Appointment of a Secretary to the Governing Board; Agenda of meetings, including who draws up and communicates the agenda; Various committees of the governing board, such as: investment assessment committee, governance committee, operations committee, audits committee, ethics committee; Rules relating to conflict of interest and confidentiality; Record keeping and Minutes of Meetings; Remuneration of members of governing board; Languages of the Meetings and Relationship with governments and sources external to Enterprise.

76. On the Code of Conduct of Members of the governing board of the Enterprise this could include: Respect for the individual; Creating a culture of open and honest communication; Setting the tone from the governing board – modeling from the top and demonstrating by example the behavioral expectations of Enterprise; Upholding the laws of the countries where the Enterprise operates; A dedication to ethical, fair and vigorous competition; Respect for proprietary information of others; Avoiding conflicts of interest; Issues on receiving financial and other gifts; Accountability and transparency; Accurate public disclosures; Personal use of Enterprise resources and the need to comply with UNCLOS 82, 1994 Implementation Agreement, Mining Code and Rules of Procedure.

154 Art.5(6) of Annex IV
155 Article 5(6) of Annex IV
156 Article 5(7), Ibid
157 Article 5(8), Ibid
158 Article 7(2) of Annex IV
159 Article 5(5) of Annex IV
160 Article 7(4) of Annex IV
PART II OF THE STUDY

Technical and Financial Implications

77. Whilst Part I of the present study deals with the “legal implications”, this part deals with the technical and financial implications.

78. As mentioned in Part I of the Study, mandatory financial support from the States for the first Enterprise operation and the transfer of technology provisions included in the Convention were eliminated by the 1994 Agreement. The practical implication of these provisions of the Agreement is; (a) the Enterprise, although meant to be an international mining company, is not provided any initial funds for mining operations; (b) the Enterprise is to obtain its technology related to mining from the open market. However, the Agreement, as identified in Part I of this Study, provides that the Enterprise shall conduct its initial deep seabed mining operations through joint ventures. The Agreement has provisions which may assist the Enterprise in obtaining technology from the market. Also, according to Section 2, paragraph 1 of the Annex to the Agreement, the functions of the Enterprise are to be performed by the Secretariat of the Authority (“Secretariat”) until such time as it begins to operate independently of the Secretariat. This provision implicitly points to availability of manpower resources and technical resources which may facilitate operationalizing the Enterprise.

79. The uniqueness and newness of the nature and objective of the Enterprise and of the resources and the technology required for mining for resources in the Area and processing them, can introduce immense complexity and all for utmost innovativeness with regard to all aspects of the Enterprise’s operation, particularly the technological and financial aspects.

80. Additionally, to exacerbate the matter, there are no initial funds or technology at the disposal of the Enterprise, nor manpower and technical resources, except for what is provided by the Secretariat. The operationalization of the Enterprise under these circumstances can pose


162 Refer to the discussion in Part I of the Study on this
daunting challenges which may call for creative and ingenious approaches.

I. Recent Developments of Seabed Minerals in the international Area relevant to the consideration of funding and technological requirements of an operationalized Enterprise

A. Minerals in the international seabed Area

81. Currently, three types of minerals are known to occur in the Area – polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts. Discovered in 1863, the economic possibilities of polymetallic nodules were published in a study in 1965 by Mero.\(^\text{163}\) He predicted that polymetallic nodule mining should be a sound business proposition in the future. There are various metals of commercial interest contained in these “polymetallic” minerals, of which nickel, copper, cobalt and manganese are prominent; there are also small quantities of other valuable metals like molybdenum and vanadium. These metals are used in capital goods, raw materials for industries, consumer durables and many consumer goods. The technologies for mining and processing polymetallic nodules have been under development for a number of years and are yet to be tested at a large scale.

82. While polymetallic nodules, small round balls strewn on the seabed, occur in two-dimensional space, polymetallic sulphides occur on and around hydrothermal vents and are three-dimensional in nature. Discovered first in 1948, they contain significant amounts of copper, zinc, lead, iron, silver and gold. The world markets for these metals and for products containing these metals are considerable. The technologies for commercial mining and processing are yet to be tested at a large scale.

83. Cobalt-rich ferromanganese crusts, on the other hand, grow on hard-rock substrates of volcanic origin by the precipitation of metals dissolved in seawater in areas of seamounts, ridges, and plateaus, and occupy large areas on top of these relatively high topographical features. Similar in general composition to polymetallic nodules, cobalt-rich ferromanganese crusts are attracting investment in exploration, primarily because of their higher content of cobalt, platinum, and rare earth elements, besides nickel and manganese. The commercial interest in crusts is relatively recent. The experience of processing technology development of polymetallic nodules would help processing crusts; however, mining technology for these

minerals is likely to be more complex than for polymetallic nodules.

84. Currently these minerals are produced from land deposits within national jurisdiction and are likely to continue in that way until seabed production is competitive to land production. Some analysts believe that seabed minerals recovered from national jurisdiction are likely to take place before those from the international Area due to distance, costs and procedural and technical requirements. But, others consider that qualities and quantities speak well for those in the Area. As mentioned earlier in Part I of the Study, access to seabed mineral resources, security of strategic metals may be the prime objectives for those States, including land-locked States, who perceive seabed mining through the Enterprise is a tangible goal to benefit from the Common Heritage.

B. Contracts and contractors

85. While the Enterprise is not operational yet, starting in 2001, over the past seventeen years, the Authority has entered into 15-year contracts for exploration for polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts in the international seabed Area with **twenty-nine (29) contractors**. These contractors are private companies or State-owned companies, sponsored by States Parties or groups of States Parties. Because the original 15-year contracts expired, in 2017 seven of the contracts for exploration for polymetallic nodules were granted 5-year extensions. The conclusion of contracts allows these contractors to explore specified parts of the floor of deep oceans under the Authority.

86. Seventeen of the 29 contracts are for exploration for polymetallic nodules in the Clarion-Clipperton Fracture Zone (CCZ) (16 contracts) and Central Indian Ocean Basin (1 contract). There are seven contracts for exploration for polymetallic sulphides in the South West Indian Ridge, Central Indian Ridge and the Mid-Atlantic Ridge, and five contracts for exploration for cobalt-rich ferromanganese crusts in the Western Pacific Ocean. A list of these contractors can be found in a Fact Sheet of the Authority entitled “Contractors for Seabed Exploration”. Since 2008, the Council has approved six applications for exploration for polymetallic nodules in reserved areas in the CCZ, each sponsored by a States member of the Authority.

87. In sum, the commitment was a parallel system of two tracks. Only the contractual side has been well developed after 20 years of implementation of the system. The time is now to
II. Operationalization of the Enterprise: Financial and technical requirements

A. Financial Requirements

88. The financial requirements of the Enterprise will arise to meet its (a) administrative costs and (b) operational costs. The administrative costs can be subdivided into: (i) staff/personnel costs; (ii) non-personnel administrative costs; and (iii) conference servicing costs. As explained below, these administrative costs will be incurred as the Enterprise becomes operational as well as when it is fully operational. Further, these costs would be measured in light of functional needs of the Enterprise as it takes each of the four steps indicated in section VI (particularly paragraph 128).

89. Staff costs or personnel costs are composed of remuneration to staff, common staff costs and fees to consultants. Non-staff administrative costs relate to expenditure items such as travel, communications, library, printing, supplies and materials, information technology, office furniture and equipment, etc. Conference servicing costs, in the case of the Enterprise, will pertain to servicing its Governing Board.

90. Operational costs relate to costs of deep seabed mining projects. The Enterprise is to conduct its initial deep seabed mining operations through joint ventures. Therefore, it is presumed in the present study that the operational costs of the Enterprise at the initial stage will be borne by the joint ventures, i.e., by the partners of the Enterprise in the joint ventures, or by the joint ventures themselves, without any financial implications for the Enterprise. This follows logically from the rationale behind the “joint venture provision” in the Agreement in place of the provision in the Convention dealing with the “funds necessary to explore and exploit one mine site” and related downstream activities.

91. The functional needs of the Enterprise is based on the particular phases in which it

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engages. The general sequence of phases in mining ventures are: pre-prospecting activities \(\rightarrow\) prospecting activities \(\rightarrow\) exploration activities \(\rightarrow\) exploitation (production) \(\rightarrow\) transportation \(\rightarrow\) processing \(\rightarrow\) marketing (sometimes, the activities may overlap in the sequence).

92. The focus here is the re-prospecting activities which involve desk work of analysis of data and information available in public domain on resources in a large area as well as analysis of data and information on the resources, relevant technology, the industry and the market. As mentioned, data and information resulting from prospecting activities, to a large extent, will be included in the material on reserved areas submitted to the Authority. But, there is desk work required utilizing such data and information.

93. With this contextual background, as a mining company in joint ventures, to be operational, the Enterprise must: (a) perform the administrative work of setting itself up (fulfilling all the legal and administrative requirements for initiating a commercial entity); (b) be able to perform “desk work” related to the pre-prospecting phase; (c) be able to perform “desk work” utilizing the data and information for the reserved areas (most probably, resulting from prospecting activities), related to the resource, technology and the environment; (d) be able to perform “desk work” on the basis of data and information, if any, shared by its joint venture partners (relating, potentially, to pre-prospecting, prospecting and exploration phases); and (e) be prepared to be an effective partner in joint ventures both managerially and technically, including putting in place technical personnel who could be trained by the joint venture partners to participate in mining related activities. This is consistent with any start-up mining company, starting with joint ventures.

94. As an international mining corporation, the Enterprise to be operational, must: (a) be assisted, as needed at the outset, for its setting up its organizational model and the relevant bodies to be in place; (b) be in a position to service such bodies; and (c) perform the administrative work required for an international mining corporation to commence functioning effectively.
B. Technical Requirements

95. The technical requirements of the Enterprise, to be operational, will arise from the needs of technical expertise for accomplishing the above broad categories of functions. Taking a general interpretation of “technical expertise”, this study includes requisite managerial expertise, expertise in legal, economic, financial, scientific and environmental fields, information technology expertise and administrative expertise. With respect to mining ventures, at this stage, the specific requirements are for joint venture negotiation, mining project management, mining project finance and for mobilizing technical capability related to mining projects (most probably an exploration project initially). This would be in line with the requirements of the Enterprise’s preparatory work for projects. It should be added that, at this stage, no requirements for operational technology or technical expertise will arise, because such requirements are to be met through joint ventures.

III. The Enterprise’s “initial operations” through joint ventures

A. Joint Ventures under the Agreement

96. As mentioned in Part I of the Study, the 1994 Agreement lays down that the Enterprise “shall conduct its initial deep seabed mining operations through joint ventures.” The subject of joint ventures takes therefore the centre stage in the operationalization of the Enterprise. The financial and technological implications of the initial operations of the Enterprise are integrally related to the nature, scope and most importantly, terms of the joint venture agreements. The critical importance of the choice of partners and negotiations with them for joint venture agreements comes to the fore. Certain parameters and guidelines should be considered in this regard

97. The form of the operations is limited to joint ventures. The Enterprise may do so with States Parties or other entities sponsored by them or both. More than one operation may be envisaged and it is for the Enterprise to decide. This means more opportunities and choices for seeking the best terms and conditions for its initial operations it desires.

98. Those contractors who have contributed a reserved mine site may be the first category of

165 Section 2, paragraph 2 of Annex to 1994 Agreement.
candidates to be considered since not only they are familiar with the mine sites they contributed but also they have a right of first refusal to the reserved sites. In addition, those mine sites are supposed to be of equal value to the contractors own mine sites. As such, they have been prospected and may well possess useful or proprietary data and information about the resources involved.

99. For all practical purposes, the project may have to begin most likely with exploration but the negotiation may pertain to all the subsequent stages of exploitation, transportation, processing and marketing etc. so as to provide an overall and long term assessment. All these constitute part of the decision-making process of the Enterprise for choosing the operations and partners.

100. Which specific resources (polymetallic nodules, polymetallic sulphides and/ or cobalt-rich ferromanganese crusts) should be mined is also an important consideration. In making the choices, various factors have to be taken into account; they range from financial and technical capability of the candidates, market prospect of the metals to be mined, to benefit sharing and to who are likely to be the potential competitors. The specific resources that a given contractor is seeking are relevant to the Enterprise's choice of partners. Take Poland's expression of interest for example, it has already a contract for exploration of polymetallic sulphides. It is relevant to know what resources it may offer for its proposal under consideration.

101. The Enterprise may negotiate a suitable and appropriate arrangement that would meet its needs for funding, technology, technological and scientific knowledge, as well as for involvement of developing States. It is also important to recognize that some potential candidates may be primarily interested in accessing seabed metals for security reasons rather than commercial production.

102. The processes leading to the initial operations of the Enterprise may be as follows: issuance of a directive by the Council → formation of the Governing Board of the Enterprise → appointment of the Director-General of the Enterprise → negotiations for a joint venture agreement (between the Enterprise and the potential partner) → if an agreement is arrived at, submission to the Governing Board → approval by the Governing Board → implementation of
the joint venture agreement. In view of the urgency of the matter, Member States may wish to deliberate on how the processes can be expedited.

IV. Operationalization of the Enterprise through step-by-step progression based on functional needs of the Enterprise at each of the four steps

A. Guiding Principles: Cost-effectiveness, evolutionary approach and step-by-step progression

103. Operationalization of the Enterprise must follow the “prescriptions’ provided in the Agreement: “in order to minimize costs to States Parties, all organs … shall be cost-effective”; and, “[t]he setting up and functioning of the organs … shall be based on an evolutionary approach, taking into account the functional needs of the organs … concerned in order that they may discharge their respective responsibilities at various stages …” of deep seabed mineral development. 166

104. The guiding principles for operationalization of the Enterprise are therefore as follow:

(a) costs to States Parties are to be minimized;
(b) cost-effectiveness is to be achieved;
(c) an evolutionary approach is to be followed;
(d) the evolution is to take into account the functional needs;
(e) the functional needs relate to effective discharge of responsibilities;
(f) the responsibilities are linked to the various stages of deep seabed mineral development.

105. These guiding requirements are interrelated and complementary to each other in their implementation. The fulfillment of these requirements is linked to the functional needs of the Enterprise as a mining company and as an international entity with unique legal status. A step by step progression based on Enterprise’s functional needs is suggested so as to ensure the progression is evolutionary.

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166 Agreement, Annex, Section 1, paragraphs 2 and 3.
B. Step-by Step Progression based on Functional Needs

106. The “functional needs” of the Enterprise are recognized in the Agreement and are enumerated in its Annex, Section 2, and paragraph 1. They fall under the broad categories of: (a) performing “desk work” related to the pre-prospecting phase; (b) performing “desk work” utilizing the data and information for the reserved areas, related to the resource, technology and the environment; and (c) being prepared to be an effective partner in joint ventures both managerially and technically. It also appears from the paragraph that the assignment of responsibility of performing the functions and the corresponding institutional arrangement have been tailored to the needs of minimization of costs. This is precisely the approach taken in the present study in moving forward from paragraph 1 to operationalization of the Enterprise.

(i) Four Steps of Progression to Operationalization

107. The identification resulted from a number of considerations: (a) logical progression from the current situation to the situation when the Enterprise becomes operational; (b) a realistic assessment of the stage of deep seabed mineral development at a given time; and (c) best judgment about operationalizing the Enterprise as a mining company and as an international organization.

Step 1: The current arrangement, reinforced, before the Interim Director-General of the Enterprise is appointed
Step 2: The Interim Director-General is appointed and he/she is functioning
Step 3: Subsequent to the issuance of the directive by the Council
Step 4: Subsequent to the appointment of the Director-General – Immediate period

108. In each step, the functional needs are examined. However, the listing of the functional needs at each step is not to be taken as exhaustive or exact. The listing reflects the best knowledge and analytical expertise mobilized so far, and in no sense, a final listing. At the same time, there is no suggestion being made that all the listed functional needs under each step are to be met at the same time; circumstances may be such as to allow a considerable degree of flexibility about the exact timing during the “duration of a step” when a given functional need has to be fulfilled.
(ii) **Staff/Personnel Requirements**

109. Attempts are made to appraise staff/personnel requirements, to meet the functional needs at each step. Since there may be a considerable degree of flexibility about the exact timing when a given functional need has to be fulfilled, staff/personnel requirements are also to be viewed in that light. In any case, manpower requirements are highlighted for two basic reasons: (a) an idea about such requirements may provide Member States a reliable basis to assess whether the Enterprise at each step would meet the goals set above for the present study, i.e., minimization of technical and financial requirements of the Enterprise, on the one hand, and ensuring the viability of the Enterprise, on the other, particularly bearing in mind that the Enterprise has commercial responsibilities to be fulfilled; and (b) staff/personnel costs account for a lion’s share of the total administrative costs. Point (b) is evident if one looks at the administrative budget of the Authority – an average of 80 percent of total administrative costs of the Authority are for staff costs (“Established posts”, “Common staff costs” and “Consultants”).

110. The necessary qualifications of staff are also briefly approximated below. Wherever deemed practicable, use of external experts, for specified assignments and for relatively short periods as well as at the lowest rates possible without sacrificing quality, to fulfill the assignments is envisaged. The appointment of the Special Representative from outside the Secretariat of the Authority for the purpose of conducting negotiations on behalf of the Enterprise provides a valuable example in terms of personnel costs of the Enterprise. Finally, the review by a group of external experts of the Authority under article 154 of the Convention, mentioned earlier, pointed to the efficacy and cost-effectiveness of a mechanism *a la GESAMP* (Group of Experts on the Scientific Aspects of Marine Pollution). Such a mechanism allows for mobilizing the services of a group of experts from the international organizations combined with a group of external experts, to address a set of related functions in a progressive sequence over time. The costs are for servicing the meetings of the combined group and are usually borne by the international organizations and often by States.

111. Subject to various constraints, including those of workload and work responsibility as

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well as of autonomy of the Enterprise, the relevant staff of the Authority is to be “shared”, albeit on a part time basis. (See the discussion below on “autonomy” and “independence” of the Enterprise and “conflict of interest” between the staff of the Authority and of the Enterprise.)

112. Quantification of personnel/staff costs has not been included. The United Nations common system’s salary scale could have been used. However, it was felt that for a commercial mining company like the Enterprise, corporate emoluments are pertinent. An effort was made to conduct a survey to obtain relevant data from contractors and sponsoring States. Because of the limitation of time, the effort has remained incomplete. This is an area which could be pursued further.

113. For each step, some idea is presented about the non-staff administrative requirements. Also, indication is given about conference servicing requirements.

114. For each step, preliminary observations are made about technical requirements of the Enterprise. Since, at the initial stage, the needs for technology for in-the-field activities and also for most “desk top” tasks related to in-the-field activities are expected to be met through joint ventures, technical requirements of the Enterprise would be for technical expertise for it to be operational as a mining company, focusing on preparedness for operational activities, including training. However, the start-up mining company also has to have requisite managerial and technical personnel in place. Technical requirements will also arise from requisite functions to be performed for the Enterprise to be operational as an international organization, particularly for servicing the Governing Board and following up on the work directed by it. Most of the technical requirements would, then, be obvious from the discussion about technical personnel.

C. Issues of Staff linkage to the Secretariat of the Authority

115. It is envisaged in the present study that, in relation to requirements for staff, non-staff administrative items as well as conference servicing, the Enterprise will have linkage with the Secretariat under Steps 1-4. This kind of linkage will not affect autonomy of the Enterprise but will cut costs on services and provide better management to avoid overlapping services of a
technical nature (e.g., interpretation and translation services). Such institutional arrangement is consistent with minimizing costs to States Parties and selecting the least-cost option.

116. It is apparent, the work programmes and corresponding budgetary allocations of the Authority have a direct bearing on the functional needs of the Enterprise at all the four Steps, as the Agreement has entrusted the Secretariat of the Authority to perform certain functions on behalf of the Enterprise. The full performance of such functions is therefore the responsibility of the Authority to reflect them in the work programs, corresponding staff requirements and requisite budgetary allocations of the Authority so as to enable such functions to be carried out.

117. As discussed, the appointment of the Interim Director-General was ended in 2012 following the retirement of the previous IDG, and no further appointment has been made. The Letter dealing with the “Period Review of the Authority under Article 154 of the Convention” (ISBA/23/A/3) pointed out that the failure to make such appointment as quickly as possible would make it rather difficult to progress towards the operationalization of the Enterprise since the Interim Director-General has a crucial role to play in the oversight of performance of the functions of the Secretariat that would form the basis for the eventual operationalization of the Enterprise. Accordingly, Steps 2 and 3 envisage the engagement of the Interim Director-General.

118. Indeed, all the assigned functions under steps 1 to 3 need to be achieved because: the “desk work” needed for the pre-prospecting phase and also carried out on the basis of in-the-field prospecting work is an essential task as a mining company. This type of “desk work” is particularly suitable in the case of the reserved areas. The current functions of the Enterprise assigned to the Secretariat under the Agreement fall under “desk work” for mining; in particular, “assessment of available data relating to prospecting and exploration”, “assessment of technological developments” and “evaluation of information and data relating to [reserved] areas” can prepare the Enterprise as a deep seabed mining company.

119. This administrative linkage to the Secretariat is also strongly supported by the objective of cost minimization to States Parties because: (a) the Enterprise is an organ of the Authority; (b) the Authority already has existing infrastructure suitable for international organizations; (c)
the Headquarters Agreement between the Authority and the Government of Jamaica includes certain provisions which yield advantages for the Enterprise; (d) there may be externalities which can be taken advantage of; (e) similarly, there may be economies of scale which may be taken advantage of; and (f) possible additional workload, hence cost, can be avoided.

120. On two occasions, in connection with the proposals related to joint venture with the Enterprise, by Nautilus and Poland, respectively, the Secretariat raised the issue of the independence of the Enterprise (and relatedly and implicitly, the issue of autonomy of the Enterprise). The Secretariat stated that in order to preserve the notional independence of the Enterprise and to avoid any potential conflict of interest for the Secretary-General, the Agreement provides that the functions of the Secretariat with regard to the Enterprise are to be performed under the oversight of an Interim Director-General, who is to be appointed by the Secretary-General from within the staff of the Secretariat. In practice, however, the Secretariat stated, such independence is difficult to achieve, given the very small size and limited capacity of the Secretariat. In particular, since the staff member so appointed may report and is accountable to the Secretary-General, there is potential for conflict of interest. Nonetheless, the Secretariat added that “[s]hould a joint-venture proposal be submitted to the Council in 2019, and should the Council decide to proceed with the proposal, it may also wish at that time to consider an alternative model for the governance of the Enterprise during the interim period, in accordance with the Convention and the Agreement. Such an alternative model would need to allow for the provision of independent legal and financial advice to the Council through the interim Director-General of the Enterprise, or his or her representative, taking into account considerations of transparency, cost-effectiveness and independence.”168

121. The present study values and agrees with the Secretariat's suggestion to authorize the Interim Director-General to appoint from outside the secretariat a Special Representative and such other technical and legal advisers as may be necessary (for example, consultants and legal firms), who will be independent of the Secretariat of the Authority for the purposes of conducting negotiations with Poland on behalf of the Enterprise. This type of mechanism would also ensure that the Secretary-General and the Secretariat avoid any potential conflict of interest and are thus able to provide impartial advice and support to members of the Council.

168ISBA/24/C/12, op. cit.
To further ensure transparency and accountability, it is also suggested that the Council may also wish to consider requiring the Special Representative to report on a regular basis, for example, every six months, to a representative group of members of the Council (as an example, the Presidency and the Bureau) to review the progress of joint venture negotiations.

122. In the absence of the Interim Director-General, the Secretary-General appointed in 2018 the Special Representative from outside the Secretariat. The present study suggests that the Interim Director-General is to be appointed at Step 2 and Step 3. In Step 4, the present study calls for increasing the size and capacity of the Secretariat to establish an independent unit within the Secretariat under the leadership of the newly appointed Director-General of the Enterprise.

123. In appraising the personnel requirements, utmost effort has been made to minimize the financial requirements though sharing on a part time basis staff from within the Secretariat. Such sharing of personnel can fall under “technical assistance” by the Authority to the Enterprise. As far as practicable, outside experts, when required, are to be hired for the shortest possible time at the minimum possible rate.

124. It should make clear that the personnel linkage to ISA Secretariat under step 4 and the functions to be performed thereunder are administrative type functions. They are not operational activities. Consequently, such kind of administrative arrangement with the Authority would not affect or impair the autonomy or independent operation of the Enterprise.

V. Operationalizing the Enterprise - financial and technical requirements to meet the step-by-step functional needs

125. This Section addresses under each step, what is involved, functions to be performed, personnel needs and qualifications, and other administrative requirements and Conferences,

A. Step 1: The current arrangement, reinforced, before the Interim Director-General of the Enterprise is appointed

126. The current arrangement consists of three parts: (a) engagement of a Special Representative of the Secretary-General for the purpose of conducting negotiations on behalf of
the Enterprise with Poland; (b) preparation of the present study; and (c) continuation of the performance of the functions of the Enterprise by the Secretariat of the Authority. The arrangement needs to be reinforced in order for it to be more effective and for preparing for Step 2. Such reinforcement is expected to involve: (a) strengthening the role of the Special Representative, including engagement of necessary technical and legal advisers who will assist him/her in conducting negotiations on behalf of the Enterprise with Poland or any other potential joint venture partner which may come forward; (b) following up on and completing the study on the issues related to the operation of the Enterprise, and formulating concrete actionable recommendations on the basis of the completed study; and (c) fullest possible performance of the functions of the Enterprise currently being pursued. It should be emphasized immediately that if Step 1 is taken, all these functions will be applicable in the case of Step 2 also.

**Specific functions under Step 1.** The following functions are to be performed:

(a) Engaging a Special Representative to conduct negotiations on joint ventures on behalf of the Enterprise

(b) Following up on the Special Representative’s report

(c) Completing the study on the operation of the Enterprise, drawing up concrete actionable recommendations

(d) Ensuring, as practicable, that the Special Representative finalizes the negotiations with Poland for a joint venture and the final proposal is considered by the LTC and the Council

(e) Preparing rules, regulations and procedures on sound commercial principles (Note that Part I of the present study lays the groundwork for preparing such rules, regulations and procedures. It maintains that this concept would have to be interpreted and understood in the light of the following parameters, based on the provisions of Part XI of the Convention and the Agreement: the common heritage principle; autonomy of the Enterprise to make effective commercial decisions without political influence; cost-effectiveness in relation to the operations of the Enterprise; evolutionary approach in its operationalization; and commercial viability.)

(f) Arranging for independent information, advice and assistance to the LTC and the Council in their consideration of the joint venture proposal(s), approval of such proposal(s) and examination if such proposal(s) accord with sound commercial principles, as applicable
Performing to the fullest extent possible the functions assigned to the Secretariat on behalf of the Enterprise, paying special attention to assessment of approaches to joint ventures and study of managerial policy options for the administration of the Enterprise; Preparing and implementing a work programme to this end, as practicable.

Arranging for preparing and providing inputs, on behalf of the Enterprise, to the LTC and the Council in their deliberations on the development of the Mining Code, including, in particular, on the provisions on financial payment and equity participation.

Preparing for Step 2: Identifying possible Interim Director-General from within the staff of the Authority; Identifying possible legal and technical staff to be placed at the disposal of the Interim Director-General on a sharing basis; Preparing a work programme for the Enterprise for the first period under Step 2; Preparing a preliminary budget for the first period under Step 2; In collaboration with relevant personnel of the Authority, reviewing the work programme and the budgetary allocation for the Authority for the financial period 2019-2020, for achieving savings to accomplish the functions (a)-(i) above and, if necessary, for requesting additional budgetary allocation through programme budget implication studies; Exploring ways and means of funding for the initial period under Step 2.

127. **Staff/Personnel requirements under Step 1:** Following the approach of the present study, the minimum staff requirements are appraised as follows:

i. Special Representative of the Secretary-General to conduct negotiations, and also to coordinate with the external experts, listed below.

ii. External experts (Consultants -2) to complete the study on the operation of the Enterprise.

iii. Use of the personnel of the Authority, on a short-term basis to attend to the other functional needs above.

iv. Administrative support to be provided by the Secretariat of the Authority.

**Non-staff administrative items under Step 1:** Such items, e.g., travel of the Special Representative and consultants, if necessary, are expected to be covered under the budget of the Authority.

**Conference servicing under Step 1:** This will not be pertinent because the Governing Board is not formed yet.

**Technical requirements under Step 1:** Technical requirements will relate to the technical
expertise of the Special Representative and the technical requirements of the external experts for assisting the Special Representative in completing the study on the operationalization of the Enterprise, particularly in the financial and legal areas.

B. Step 2: The Interim Director-General is appointed and he/she is functioning

128. A logical progression from Step 1 is to Step 2 when the interim Director-General of the Enterprise is appointed. As can be recalled, since March 2013, there has not been any interim Director-General.

Specific functions under Step 2. True to the letter and spirit of the provision of the Agreement (Annex, Section 2, Paragraph 1), the Interim Director-General is to be appointed from within the staff of the Authority.

129. It is recommended that for this purpose, the Secretary-General is requested as soon as possible, to create an additional post within the Secretariat in order to enable the Secretary-General to appoint the Interim Director-General from that position taking into consideration the current limited number of staff employed whose existing duties would make it extremely difficult, if not impossible, for them to assume the work associated with the position of IDG. The unit headed by the IDG, although physically located within the Secretariat would be autonomous of the Secretariat and provide for the arm’s length approach and independence of the IDG as provided for in the 1994 Agreement. At the same time consideration should also be given to the creation of a position of administrative support to the IDG to assist him in the performance of his duties. Step 2 builds upon this, and accordingly, the listing below elaborates on this:

(a) Intensifying (and completing, as far as practicable) the performance of the functions entrusted to the Interim Director-General under the Agreement

(b) The duties and responsibilities of the Special Representative appointed under Step I to be absorbed by the IDG.

(c) Ensuring, as practicable, that the IDG finalizes the negotiations with Poland for a joint venture and the final proposal is considered by the LTC and the Council, if it did not
occur already under Step 1

(d) Arranging for independent information, advice and assistance to the LTC and the Council in their consideration of the joint venture proposal(s), approval of such proposal(s) and examination if such proposal(s) accord with sound commercial principles, if it did not occur already under Step 1 and as applicable

(e) Elaborating the principles of “common heritage of mankind” and “benefit to mankind as a whole” and devising ways and means of applying them through the Enterprise

(f) Preparing an annotated compilation of all the provisions of the Convention, the Agreement and the Mining Code which have a direct and indirect bearing on the Enterprise

(g) Reviewing the general policies of the Assembly and the directives of the Council in order to determine, inter alia, how such policies and directives will be implemented by the Enterprise, to identify any gaps, and to initiate filling those gaps

(h) Drawing up a list of matters on which rules, regulations and procedures are to be drafted, and initiating the drafting of the same (Note that rules, regulations and procedures of the Governing Board itself will include matters related to its meetings and conduct of such meetings and decision-making there; election of its officials; various committees under it; code of conduct of the members; etc.)

(i) Initiating consultations immediately with States Parties so that voluntary contributions from them is explored most vigorously

(j) Initiating consultations immediately with the LTC and the Council for the utilization of the reserved areas with a focus on raising finances for the administrative expenses so that the Enterprise can be operationalized (such consultations may deal with: (a) exploration contract for the reserved areas; (b) joint ventures for exploration of the reserved areas;

(k) Preparing for Step 3: Finalizing a draft directive for the Council for the purpose of the Enterprise; Assisting, if necessary, the Council in issuing the directive with regard to the Enterprise; Initiating the work on rules, regulations and procedures on various matters related to the Enterprise, as set forth in the Convention and the Agreement, particularly on administrative, financial and personnel matters

**Staff/Personnel requirements under Step 2:** The Interim Director-General is to be provided with requisite technical and legal advisory services and administrative support.
i. Interim Director-General: Part I of the study provides guidance about qualifications of the Interim Director-General. It is suggested that the S-G should intentionally seek to appoint a staff of the ISA with relevant qualifications, such as legal, financial or relevant technical qualifications. Additionally, for the substantive Director-General, who would take up a high-profile role, which in essence would amount to combining the role of a Chief Executive of an international mining corporation with that of a high-ranking diplomat of an international organization. He/She would also need other skills and qualities, such as managerial and executive skills; leadership; communication skills, as well as the highest qualities of political judgement, tact and integrity.

ii. Assistant to the Interim Director-General

iii. Use of Staff from the Secretariat with legal, technical and financial, and administrative expertise, on a short-term sharing basis on a short to medium term basis

C. Step 3: Subsequent to the issuance of the directive by the Council

130. It is assumed that Step 3 will kick in only after the oft-referred directive is assured by the Council. The directive will trigger a considerable extent of functions, many of which are related to the formation and operation of the Governing Board of the Enterprise. It can be recalled that under the Convention, Annex IV, article 4 calls for a Governing Board of the Enterprise, and then article 5 lays down a number of provisions regarding, among others, the membership of the Board and decision making by it. Article 5 goes on to list the powers and functions of the Board. The negotiations on joint ventures, the provision of inputs in the legislative development process, and preparation of rules, regulations and procedures required for the functioning of the Enterprise will be carried out in tandem.

Specific functions under Step 3. Specific functions follow from the above. A listing is below.

(a) Providing Secretariat assistance in formation of the Governing Board: support, as requested, for the process of nomination and submission of nomination; Assistance in election of members of the Board (The Convention requires that due regard be paid to the principle of equitable geographical representation in electing the members. It also states that in electing members of the Board regard should be paid to electing members that
have the highest standard of competence, with qualifications in relevant fields, so as to ensure the viability and success of the Enterprise. Part I of the present study maintains that having members of the Board with practical experience of acting as board members of major multinational corporations would be useful. In electing board members due regard should also be paid to ensuring that the board is composed of persons having a wide-range of relevant qualifications and experiences.)

(b) Servicing the Governing Board: Preparing rules of procedure; Arranging for meetings; Providing information, assistance and advice, as requested; Assistance in conducting meetings; Maintaining proceedings of meetings

(c) Assisting in the discharge of the functions of the Governing Board

(d) Forming and managing a Joint Venture Negotiation Team

(e) Conducting negotiations for joint venture proposals, if any other potential joint venture partners make offers

(f) Completing all interim period functions: Preparation of consolidated reports on trends and developments related to deep seabed mining activities and on world metal market; Completing data compilation on resource assessment; Completing data collection and analysis, and compilation of data on technology assessment

(g) Continuing assisting the LTC and the Council in deliberation on legislative development, including provision of inputs to the economic modeling exercise related to the financial payment system

(h) Reviewing the environmental provisions as they are to be applied to the Enterprise; Further refining Templates for Environmental Impact Assessment and Environmental Impact Statement, if deemed necessary

(i) Completing the report on approaches to joint ventures and on strategies for joint venture negotiations

(j) Continuing efforts initiated in Step 2 regarding mobilization of finances for the Enterprise

(k) Preparing a database on sources of trained personnel and training programmes, as well as on data on marine science

(l) Preparing for Step 4: Providing support, as needed, for nomination and election of Director-General; Preparing a firm timetable and agenda for Step 4; Preparing rules, regulations and procedures for administrative, managerial, financial and personnel
matters, including draft rules in respect of the organization, management, appointment and dismissal of the staff of the Enterprise, to be submitted to the Council;
Accomplishing preparatory work for the recruitment and employment of the staff, including opening a roster of candidates, and determination of their condition of service;
Preparing the budget for the first period under Step 4; Assisting in establishing rules, regulations and procedures regarding terms and conditions concerning joint ventures, authorizing joint venture negotiations, and approving the results of such negotiations;
Developing a website

**Staff/Personnel requirements under Step 3.** Staff requirements are same as in Step 2, with following additions/modifications.

i. Interim Director-General

ii. Special Assistant to the Interim Director-General

iii. Consultants (2) with legal, technical and financial expertise, on a short-term basis, for the purpose of providing advice and assistance in the legislative development process

iv. Use of Staff from the Secretariat with legal, technical, financial and IT expertise, on a medium-term sharing basis, particularly to complete all the work related to the functions assigned to the Secretariat by the Agreement

v. Use of Administrative Staff from the Secretariat, on a medium-term sharing basis, particularly for developing various administrative, financial, and personnel-related rules, regulations and procedures

**D. Step 4: Subsequent to the appointment of the Director-General – Immediate period**

131. This is the step when the Enterprise becomes operational and commences functioning as a mining entity and an international organization. The present study still retains it as linked to the Secretariat as an independent administrative unit within it (see the reasoning above; also refer to the discussion in Part I of the study on the independence of the Enterprise from the Secretariat and on its autonomy). However, Member States may wish to deliberate if at this step, the Enterprise should become a separate entity being independent of the Secretariat and having autonomy from the Authority. Member States may also wish to bear in mind that The Headquarters Agreement between the International Seabed Authority and the Government of Jamaica includes provisions which are relevant for the Enterprise, including provisions related
to, in particular, the principal office of the Enterprise, exemption from direct and indirect taxation, and financial facilities available to it in Jamaica. Also, the Agreement indicates that that the provisions as applicable to the Enterprise may be supplemented by a special agreement concluded in future between the Enterprise, when operationalized, and the Government of Jamaica. Although the Enterprise can have other offices in any other country, the present study is not taking this into consideration at this stage because of its focus on operationalizing the Enterprise.

132. At this step, the Director-General of the Enterprise is appointed. He/She, following Convention, Annex IV, article 4, will have “the staff necessary for the exercise of [the Enterprise’s] functions”. For the paramount purpose of minimization of costs, a minimal core group of staff necessary for the exercise of its functions are considered in the present study. It can be mentioned here that in the past, both in the Conference and in the Preparatory Commission (through the work of its Special Commission 2 which was entrusted with the matters related to the Enterprise), attempts have been made to estimate the personnel requirements of the Enterprise. Special Commission 2 presented an estimate for a so-called “Nucleus Enterprise” in document LOS/PCN/SCN.2/WP.12, which relied on an estimate of an “expert core group”, presented in document LOS/PCN/SCN.2/WP.7. Both the documents dealt with the administrative staff and operational staff of the Enterprise. The present study, however, leaves the matter of operational staff to joint ventures, although it envisages training for the staff of the Enterprise by joint venture partners so that in due time, the staff of the Enterprise can participate in operational activities. The present study maintains that a core group of staff, judiciously selected, can lay the groundwork for an established and well-functioning Enterprise.

133. **Specific functions under Step 4.** First, the Enterprise is to set itself up, both as a mining company and as an international organization. In addition, as a mining entity, its main function at this stage is to prepare for mining activities through joint ventures. The functional needs are to have capability for participating in project management, for mobilization of start-up finance, and for mobilizing technical capability for training. The Enterprise has also to start functioning as an international organization under appropriate administrative, financial and personnel rules, regulations and procedures. In addition, it has to service the Governing Board efficiently.
134. At this step, the functions of the Enterprise, based on the relevant provisions of the Convention, the Agreement and the Mining Code, can be identified as follows:

(a) Servicing the Governing Board, including: provision of information, advice and assistance, in particular in: drawing up formal written plans of work; approving the annual budget of the Enterprise; preparing an annual report to be submitted to the Council; borrowing funds and furnishing such collateral or other security to be determined by the Board itself

(b) Managing the Enterprise, including, in particular, the organization, management, appointment and dismissal of the staff of the Enterprise

(c) Hiring and managing a minimal core group of personnel with legal, technical and financial expertise, with a special focus on joint venture negotiations, provision of inputs in legislative development of the Authority, and participation in deep seabed mineral deep seabed mineral projects, and also with administrative and information technology expertise

(d) Putting together an in-house joint venture negotiating team (see above), to be complemented by external experts; Initiating contacts with and hiring (as consultants), as necessary, external experts and firms, for the purpose of joint venture negotiations

(e) Preparing strategies for negotiations for joint venture proposals and agreements, especially the terms and conditions on financing and technology

(f) Evaluating reserved areas with a view to identifying attractive areas for joint ventures

(g) Assessing potentials for joint ventures with various partners, as allowed by the Convention, the Agreement and the Mining Code; Assessing potentials of high “win-win” joint venture negotiations, and under favourable conditions, initiating such negotiations

(h) Preparing for managing joint venture projects, as called for in joint venture agreements

(i) Collaborating with the Secretariat of the Authority, including providing inputs, in all required areas, particularly in the consideration of the Draft Regulations on the Exploitation of Mineral Resources of the Area and providing inputs to economic and financial modeling of seabed mineral development;

(j) Assisting, as needed, in servicing the Assembly, the Council and the Legal and Technical Commission in matters related to the Enterprise,
(k) Exploring and vigorously pursuing sources of funds, particularly voluntary contributions from States Parties, and perhaps from large philanthropic foundations
(l) Consulting with the Authority about financial incentives for joint ventures
(m) Developing, in collaboration with joint venture partners, contractors, sponsoring States, and the Authority, training programmes for the personnel of the Enterprise
(n) Finalizing the Templates for Environmental Impact Assessment (EIA) and Environmental Impact Statement (EIS), as necessary
(o) Strengthening, updating and maintaining the databases on trends and developments related to deep seabed mining activities, world metal markets, resource assessment and technology assessment; Reviewing the provisions of the Headquarters Agreement, as applicable to the Enterprise
(p) Finalizing and adopting administrative, financial and personnel-related rules, regulations and procedures as well as operating manuals
(q) Preparing strategies for recruiting and developing staff at Step 5
(r) Preparing the annual budget of the Enterprise
(s) Assisting, as requested, the Council to appoint an independent auditor; Having records, books and accounts of the Enterprise audited annually
(t) Preparing requisite reports and financial statements: Preparing annual reports containing audited statements of its accounts to be submitted to the Council; Preparing, at appropriate intervals, summary statements of its financial position and profit and loss statements showing the results of the operations of the Enterprise; Preparing and arranging for publishing annual reports and other appropriate reports; Distributing all reports, including financial reports, to the Members of the Authority
(u) Developing databases on legal aspects of joint ventures and on international mining law and national mining law in selected countries

135. **Staff/Personnel requirements under Step 4.** Although at Step 4, the Enterprise is envisaged as an “administrative unit” within the Secretariat of the Authority, Member States may, nevertheless, need to bear in mind the provisions of article 7 of Annex IV of the Convention, on “Director-General and staff of the Enterprise”. The staff of the Enterprise are to be persons of the highest standard of efficiency and technical competence, but due regard is required to be paid to the importance of recruiting staff on an equitable geographical basis.
VI. Sources of financing for the Enterprise

136. This Section will identify the sources of finances. For ease of reference they are grouped in the following categories: sources indicated in the constituent instruments, possible sources from potential partners of joint ventures and possible sources in the financial markets.

VI. Sources of finances for the Enterprise as indicated in constituent instruments

A. Sources of finance as indicated in the Convention, the Agreement and Mining Code

139. The Convention, in Annex IV, article 11, stipulates that the funds of the Enterprise shall include:

(a) amounts received from the Authority;
(b) voluntary contributions made by States Parties for the purpose of financing activities of the Enterprise;
(c) amounts borrowed by the Enterprise;
(d) income of the Enterprise from its operations;
(e) other funds made available to the Enterprise to enable it to commence operations as soon as possible and to carry out its functions.

This list of sources can be used as a guide for the discussion. Where appropriate, they will be examined in light of applicable provisions in the Agreement and the mining code.

1. Amounts received from the Authority

137. This source requires careful examination. The Agreement, Annex, Section 2, paragraph 1 assigned a number of functions of the Enterprise to the Authority, and performance of such functions is to be covered through administrative expenses of the Authority. Performance of such functions in turn is essential for operationalizing the Enterprise, as explained in Section VI above and detailed in Section VII above. “Amounts received [by the Enterprise] from the Authority”, can then be the in-kind equivalent of funds to cover the performance of those functions.

138. Under the “funds of the Authority”, consideration may be given to: (i) “fees or charges
for processing and administering contracts, for exploration and also for exploitation under Article 171, subparagraph (b) ; and (ii) “funds which remain after payment of administrative expenses of the Authority” under Article 173(2)(iii).

139. The excess funds indicated in (ii) above is not an option at present since they are not on the agenda and since current deliberations regarding the mining code indicate no such possibility.

140. Turning now to (i) above regarding charges and fees paid by contractors, The possibility should be considered in the light of the recommendation made by the external experts when they carried out the first periodic review of the Authority pursuant to Convention’s Article 154. The recommendation was for discussions to be held with the States Parties with a view to increasing financial support for the Secretariat. This could include, in their view, allowing the Authority to ring fence the additional fees levied on contractors, with the aim of employing more professional staff to administer an increasing workload rather than offsetting States Parties’ contributions. “Ring fencing” means assigning money, fund, etc. to one particular purpose, so as to restrict its use elsewhere. In this case, the “additional fees” concerned those levied on contractors to cover the costs of the administration and supervision of contracts and of reviewing annual reports. This additional income was used to offset the annual contributions of the States Parties rather than being used for the purpose for which they were collected. Three questions can still be raised in that context: (a) could the “increasing workload” have included the “full performance” of the functions of the Enterprise assigned to the Secretariat, or conversely, instead of “offsetting State Parties’ contributions”, could the contributions have been utilized to employ additional staff for performing fully the functions of the Enterprise assigned to the Authority; (b) is it possible to levy other kind of fees/”charges” within the boundaries of the three legislative instruments and the political realities; and (c) can such fees/”charges” be sources of funds for the Enterprise under the “source” being discussed here.

141. For mobilization of the required resources, several approaches can be explored. Firstly, the Secretariat can carry out an in-depth analysis of the approved budget for the Authority for

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169 Final Report prepared by Seascape, op.cit.
the financial period 2019-2020 for the purpose of achieving utmost economy in the utilization of resources and thus realizing savings which could be used for the fullest possible performance of the functions of the Enterprise. Secondly, the Secretariat may review the budget thoroughly with a view to reorganizing, streamlining and prioritizing the existing work programme to accommodate adequate reflection of the performance of the functions of the Enterprise. Thirdly, an expeditious review can be made of the terms of reference of the Endowment Fund with a view to utilizing funds from there for the purpose of the functions of the Enterprise, given the fact that “marine scientific research” has a direct and indirect bearing on most of the functions of the Enterprise. Finally, and as a last resort, the Secretariat may consult with the Finance Committee as to additional appropriation for the purpose at hand, on the basis of a “programme budget implication” study prepared on an urgent basis.

142. For the sake of completeness of the picture, the following provision of the Convention should be borne in mind. Paragraph 4 of article 11 of Annex III stipulates: “The funds, assets and expenses of the Enterprise shall be kept separate from those of the Authority. This article shall not prevent the Enterprise from making arrangements with the Authority regarding, facilities, personnel and services and arrangements for reimbursement of administrative expenses paid by either on behalf of the other.”

2 Voluntary contributions made by States Parties for the purpose of financing activities of the Enterprise

143 Voluntary contributions are made by States on the basis of their own freely taken decisions. It may be useful to cite various precedents of other international and regional institutions, specifically financial institutions, which have been financed in whole or in part by voluntary contributions of States. The World Bank, as well as regional development banks such as the Inter-American Development Bank, the Asian Development Bank and the African Development Bank, have all been financed initially with voluntary contributions from Member States. There are examples of voluntary contributions in the United Nations milieu in the “Law of the Sea” context. Two prominent examples of trust funds are the Endowment Fund of the Authority itself, and the Hamilton Shirley Amerasinghe Memorial Scholarship Fund administered by the Division for Ocean Economics and the Law of the Sea (DOALOS) of the United Nations Headquarters.
144. The Enterprise shall have its principal office in Jamaica. An in-kind voluntary contribution has already been made, in a sense, for the purpose of operationalizing the Enterprise, by one State, i.e., Jamaica. Such contribution is implicit in the Headquarters Agreement between the Authority and the Government of Jamaica, which includes provisions relevant for the Enterprise, in particular related to the principal office of the Enterprise, exemption from direct and indirect taxation, and financial facilities available to it. Also, it is indicated in the Agreement that the provisions as applicable to the Enterprise may be supplemented by a special agreement concluded in the future between the Enterprise, when operationalized, and the Government of Jamaica. At this time, a potentially significant cost minimization measure is the availability of the office premises “free of rent” and free of many other charges. Member States may wish to bear in mind the importance of such voluntary contribution, and may assist the Enterprise to be operationalized, and then indicate that when it is operationalized, further contribution may be forthcoming.

145. Voluntary contribution from States parties may also be considered in kind such as waving fees, import and export duties or other taxes. These measures may be relevant in the context of establishing branches, incorporation of joint ventures or purchasing goods and equipment.

3. **Income of the Enterprise from its operations**

146. This source will be applicable at a later stage when the Enterprise starts earning income from its deep seabed mining projects. This source is not helpful for the initial stage. Also, beyond the initial stage, once the Enterprise earns net income, a portion of such net income can be retained as reserves of the Enterprise, as determined by the Assembly upon the recommendation of the Governing Board of the Enterprise.\(^{170}\) It will then be possible for the Enterprise to use a part or whole of such reserves for financing its operations, of course, subject to the approval of its annual budget by its Governing Board. That is, it can plough back the whole or part of the profits into its capital, and thus be the source of its own financing, which may reduce its dependence on outside sources partially or even fully.

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\(^{170}\)Convention, Annex IV, article 10, paragraph 2.
147. The Enterprise’s initial projects are to be conducted through joint ventures, the present study assumes that any operational costs of the joint ventures will be borne by joint venture partners or by joint ventures themselves. The question to be explored is whether funds from partners of joint ventures may also be obtained to cover administrative costs. It may be recalled that at the very first stage of Nautilus proposal to enter into negotiations for a joint venture with the Enterprise, there was indication by Nautilus that it would bear all project related costs and that it was willing to bear the risk and **any and all costs associated with completing the programme for development of the business proposal for the joint venture** with the Enterprise. Such costs were estimated at that time at $550,000 for a 3-year period. Two points are clear from this: (a) even at the stage of making “a proposal to enter into negotiations to form a joint venture with the Enterprise”, the prospective partner may be willing to bear any and all costs related to the deep seabed mineral project, freeing the Enterprise from the burden of mobilizing project-related finances; (b) the negotiations for the joint venture agreement itself may offer a wide scope for the partner bearing all costs related to the project, such as further prospecting, exploration, etc. The Interim Director-General, when is appointed, should explore with Poland and other potential partners regarding additional financial contributions.

C. Utilizing “Equity interest” in Joint Ventures on polymetallic sulphides and cobalt-rich ferromanganese crusts

148. As mentioned, 11 out of 12 applicants had elected to offer a minimum of 20% equity interest in a joint venture arrangement for exploitation of polymetallic sulphides or for cobalt-rich ferromanganese crusts, in lieu of providing a reserved area. Only the Russian Federation opted for contributing a reserved area for exploration for cobalt-rich ferromanganese crusts. Since 20% equity interest is the minimum, it is possible that a higher percent may be negotiated. In monetary terms, the funds involved are considerable, even though this option will only be available at the exploitation stage of such resources. Russia’s option is however available to provide a mine site for exploration of ferromanganese crust. Whether this would exclude any equity arrangement should be explored. Indeed, whether equity interest would also be possible in joint venture for polymanganese nodules should equally be explored.
D. Issuing Exploration Contracts

149. Since 2008, the Council has approved six applications for the exploration for polymetallic nodules in reserved areas in the CCZ, each sponsored by a State Member of the Authority. They pertain to: Nauru Ocean Resources Inc. (sponsored by Nauru), Tonga Offshore Mining Limited (sponsored by Tonga), Marawa Research and Exploration Ltd. (sponsored by Kiribati), Ocean Mineral Singapore Pte. Ltd. (sponsored by Singapore), Cook Islands Investment Corporation (sponsored by the Cook Islands) and China Minmetals Corporation (sponsored by China). Currently, the size of available reserved areas is 770,729.9 km² in the CCZ and 158,853 km² in the Indian Ocean. With an exploration area of 75,000 km² per contract, this represents the possibility of 12 contracts for exploration for polymetallic nodules in reserved areas. Additionally, there is the possibility of one contract for exploration for cobalt-rich ferromanganese crusts.

150. One of the possibilities is for the Authority to issue “exploration contracts” for some of these reserved areas. It may be possible for the Authority, on behalf of the Enterprise, to obtain some kind of financial payment from the contractors for the right to explore and at the same time, retaining its rights to the minerals. These contracts can be outcomes of negotiations between the Authority and the respective contractors. It is presumed that such contracts would be issued, as directed by the Council on the basis of recommendations of the LTC.

At present, these contractors are paying a $500,000 application fee and an annual overhead fee of $60,000 beginning 2019 from $47,000. Whether additional or separate fees, charges or payment could be envisaged would require action or authorization from the competent organs of the Authority. Further study may be required.

151. It should be noted that there are instances of exploration contracts between Governments and mining companies which raise funds for granting exclusive exploration rights to mining companies. For example, in the “Mineral Exploration Agreement between the Republic of Liberia and Craton Developments Inc.”, provision is made of an “annual payment … for the grant or renewal of the Exploration License” and more importantly, of “annual lump sum payments to the Government”. The preamble makes it clear that “all rights related to the exploration for and exploitation of … minerals pertain exclusively to the Republic”. The preamble further states that “the Government is determined to accelerate the development of
the mining industry of Liberia and therefore desires to promote the development of minerals which may exist in exploration areas for the economic and social benefit of Liberia” (emphasis added). To give an example in respect of a developed country, in the U.S.A., exploration contracts in certain American Indian lands contain a provision for a minimum “annual rental payment in consideration for the exclusive right to explore on the Lands” (emphasis added).

E. Exploring Possibilities in Connection with the Right of First Refusal

152. Another possibility to mobilize funds for the initial operations is to explore how existing contractors’ right of first refusal to enter into a joint venture with the Enterprise may be utilized for that purpose. This right of first refusal is provided in the 1944 Agreement: “[a] contractor which has contributed a particular area to the Authority as a reserved area has the right of first refusal to enter into a joint-venture arrangement with the Enterprise …” While this right of first refusal gives the relevant contractor an edge, it also provides the Enterprise with an opportunity to obtain the best terms it desires. So if a given contractor does not exercise the right, the Enterprise is freed to go to the others. If the contractor is interested at all to form a joint venture with the Enterprise, serious negotiations will follow. True, the decision is with the contractor but the right of first refusal also force it to consider serious the Enterprise's offer. The potential is there for the Enterprise. Even if the negotiation turns out uneventful, the Enterprise gains experience and knowledge which will help its negotiation with the other contractors.

153. The Enterprise may find developing countries more amenable to joint venture offers for a number of reasons: (a) many of them are experiencing high rate of growth in demand for metals; (b) they may benefit more from the incentives and exemption of payments to the Authority associated with joint ventures with the Enterprise; and (c) they have a different perspective regarding “common heritage of mankind”. This avenue should be explored.

154. There is also a suggestion to consider offering joint venture arrangements with some or

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173 Agreement, Annex, section 2, paragraph 5.
all of the contactors involved so as to have more choices and opportunities to seek the best terms for the operations. The probabilities of some contactors agreeing to the offers without exercising the “first refusal” right are said to be high for the simple reason that it is the easiest way to get access to another mineral site. This option requires the Enterprise to possess the requisite personnel and expertise to carry out negotiations at multiple fronts.

VII. Financial implications for the Authority and for States Parties

155. “Costs to States Parties” is the leading issue in relation to any institutional arrangement under the Convention and the Agreement, a fact that is very pointedly and succinctly evident in the title of Section 1 of the Annex to the Agreement: “Costs to States Parties and Institutional Arrangements”. The legislative history of the provisions related to the Enterprise bears out the preeminence of the issue of “Costs to States Parties” – it was also the leading issue in the consultations of the Secretary-General of the United Nations in arriving at the Agreement from the Convention. Section 1, very fittingly, prescribes the application of the principle of cost-effectiveness and an evolutionary approach in “the setting up and the functioning” of any organ or subsidiary body of the Authority, which includes the Enterprise. This was also emphasized in the terms of reference given to the study. (See paras. 1 and 4, ISBA/20/LTC/12, 12 June 201.

156. It was thus natural that in the preparation of the present study on operationalizing the Enterprise as a viable entity, the primary consideration was minimization and, if at all possible, elimination of any costs to States Parties. Utmost effort was made to that end. The present study, however preliminary it is in nature, was able to identify a number of areas which Member States may wish to keep under active and serious consideration for the purpose of minimizing costs to the Authority and to States Parties. No quantitative estimate could be presented due to limitation of time, but a number of qualitative suggestions are offered in the present study, which are aimed at being helpful to the Authority and States Parties.

157. Firstly, the functions of the Enterprise entrusted to the Secretariat of the Authority need to be performed to the fullest extent possible and as expeditiously as practicable. This will reduce the costs of operationalizing the Enterprise because performance of these functions lessens the functional needs of the Enterprise that are to be met for this purpose. The Secretariat, under the guidance of Member States can (a) prepare a work programme required for the full
performance of the functions; (b) realize maximum savings by exercising utmost economy, and utilize such savings for the execution of the work programme in (a) above; (c) review its current work programme to streamline, reorganize and prioritize work so that the work programme in (a) above can be accommodated; and (d) if (b) and (c) turn out to be inadequate, as a last resort, request for minimal additional appropriations on the basis of appropriate programme budget implication study.

158. Secondly, it should be explored if the financial payment system under the Mining Code can be devised in such a manner as to garner funds from contractors which could be utilized for operationalizing the Enterprise.

159. Thirdly, vigorous efforts should be initiated immediately for mobilizing voluntary contributions from States Parties for the purpose of operationalizing the Enterprise. Depending on how successful the drive is, the amount raised may be sufficient enough to eliminate costs to States Parties, resulting from assessments, altogether.

160. Fourthly, private sources like foundations, institutions, civil society, etc. could be approached for contributions for the purpose of the Enterprise.

161. Fifthly, joint ventures with the Enterprise can include favourable terms so as to cover the administrative costs of the Enterprise for it to be operational.

162. As can be seen from the previous Section, the above sources followed guidance from the Convention, the Agreement and the Mining Code. However, before the Enterprise becomes operational, a mechanism may have to be devised for collecting funds from some of the sources identified above. Perhaps mechanisms like “ring fencing” and establishing a Trust Fund can be explored.

163. If the above suggestions are helpful, Member States, the Secretariat of the Authority and the Enterprise can explore the suggested sources of resources and funds, and depending on the extent of success in such exploration, costs to the Authority or to States Parties may be minimal, even nil.
VIII. Sources of Technical expertise for the Enterprise

164. The Enterprise will require enabling technical expertise in order to become operational.

168. An examination of the functions, requisite personnel and their qualifications, can provide a guide as to what kind of technical expertise would be needed. Broadly speaking, technical expertise will be needed for: (a) accomplishing the administrative tasks; (b) carrying out “desk work” related to the pre-prospecting and prospecting phases; (c) developing and executing joint venture proposals and, as applicable, joint venture agreements; (d) preparing to be an effective partner in joint ventures, including carrying out “desk work” utilizing the data and information provided through joint ventures; and (e) preparing to be a functional international organization. The technical requirements of the Enterprise will be most critical in terms of the requisite technical expertise of the Director-General and the “core personnel” under Step 4 above.

A. Trained personnel

165. The Enterprise may obtain trained personnel from the “graduates” of the training programmes of the contractors and the “graduates” of the training programmes of the Authority.

166. The Secretariat maintains databases on training programmes of the contractors and of the Authority. The Secretariat also maintains databases on the trainees who participated in those programmes.

B. Contractors’ Training Program

167. Contractors with the Authority have a legal obligation to provide and fund training opportunities for trainees from developing States and the personnel of the Authority. The legal basis for the requirement stems from the provisions of the Convention and the Agreement and is set out in the standard terms of contracts. The purpose of the obligation is to ensure that personnel from developing States are provided with appropriate operational expertise to enable them to participate in deep seabed mining.

168. The regulations for exploration of each of the three minerals in the Area contain a
provision on training which stipulates that each contract shall include as a schedule a practical programme for the training of personnel of the Authority and developing States. The training programme itself is to be drawn up by the contractor in cooperation with the Authority and the sponsoring State or States, in accordance with the recommendations for guidance issued by the LTC. For each contractor, the negotiated training programme is included in the contract for exploration. Training programmes shall focus on training in the conduct of exploration, and shall provide for full participation by such personnel in all activities covered by the contract. Such training programmes may be revised and developed from time to time as necessary by mutual agreement.174

169. The contents of the training programmes of the contractors will show the relevant technical expertise available. Subject to mutual agreement, the training programmes could be revised to include training of technical expertise required by the Enterprise, the technical personnel envisaged in step 4 are at the senior level. They may not be obtained from the training programs. Government ministries or agencies of the sponsoring States, contractors and the sponsoring States would be good sources of information and guidance regarding technical personnel required by the Enterprise. The various institutions which collaborate with the contractors to implement the training programmes can also be tapped.

C. Authority's Training Programs

170. The Authority has responsibilities to promote marine scientific research in the Area and to encourage capacity building of developing States in deep sea research and technology. Currently, the Authority attempts to fulfill this responsibility in three main ways. The training

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174 The training opportunities are divided into three general types: at-sea training, bursaries or fellowships, and engineering training. Of particular relevance to the Enterprise's needs include: multidisciplinary approach to marine mineral development, integrating physical, chemical, geological, ecological and societal aspects and including nature conservation and sustainable development; marine minerals project management; multidisciplinary training in the field of polymetallic nodules project management including exploration, value chain and economic factors; survey of seabed minerals; mineral deposits of the international seabed Area including cobalt-rich ferromanganese crusts; technical means and prospects for mining; methods used for the prospecting and exploration of marine minerals; investigative techniques for cobalt-rich ferromanganese crusts by developing investigative planning skills; geological modeling about metals of commercial interest in polymetallic nodule deposits of the CCZ; calculation of metal content in nodules; deep-sea technology; methods and technology required in exploration for cobalt-rich ferromanganese crusts; introduction to mining and processing technologies; processing of seabed mineral samples; metallurgical processing; marine environment studies; environmental strategies for exploration and mining; preservation and protection of marine environment; deep ocean environment studies; determination of environmental baseline; oceanology; marine ecology; marine geology; engineering geology; economic geology; geology and mineral resources of the international seabed Area; geo-oceanography; marine geophysics; geophysical survey; marine geochemistry; deep sea marine biology; marine biodiversity; etc. end of footnote]
programmes of the contractors, described above, is one. The second way is through the use of the Endowment Fund for Marine Scientific Research in the Area, established by the Authority in February 2008. The Fund aims to promote and encourage the conduct of marine scientific research in the Area for the benefit of mankind as a whole, in particular by supporting the participation of qualified scientists and technical personnel from developing countries in marine scientific research programmes and offering them opportunities to participate in training, technical assistance and scientific cooperation programmes. The third way is the Authority’s internship programme. One of the twofold purposes of this programme is to enable the Authority to benefit from the assistance of qualified students and young government officials specialized in various skills within the scope of the activities of the Authority. The internship programme can be tailored to the technical requirements of the Enterprise. However, availability of requisite interns may entail similar difficulties as in the case of the training programmes of the contractors. Individuals who participated these programs may have the expertise that the Enterprise needs.

D. Cooperating Institutions

171. The Secretariat has established a network of cooperating institutions with universities, scientific institutions, contractor and other entities for marine scientific research activities. Members of the network may also be helpful sources of information and guidance about technical personnel of the Enterprise. The network includes the National Oceanography Centre (United Kingdom); the National Institute of Ocean Technology (India); the French Institute for the Exploitation of the Sea (IFREMER); the Federal Institute for Geosciences and Natural Resources (Germany); the Natural History Museum (United Kingdom); Duke University (USA); and InterRidge, an international, non-profit programme promoting interdisciplinary studies of oceanic spreading centres.

172. A roster of candidates for staffing of the Enterprise can be opened, based on the information available in the above databases and also initiating a “talent search”. In preparing such a roster, following guidance should be considered: (a) the Enterprise, in consultation with Member States, can draw up a list of experts and advisers, from among whom the requisite personnel of the Enterprise can be tapped; (b) on the basis of cooperation from contractors, such experts can be engaged for a short time to learn from the experience and work of contractors; (c) such experts can be instrumental in preparing the final roster; (d) in due time, some of such
experts may agree to work for the Enterprise as its personnel. This mechanism will ensure the combination of technical expertise, managerial skills and familiarity with the Enterprise and the international legislative framework, including the relevant intergovernmental bodies.

173. The Enterprise can take advantage of its access to the global market for skilled personnel. This also enables it to hire technically qualified personnel at competitive prices. Similarly, obtaining the services of external experts at globally competitive prices may be another advantage.

IX. Technical implications for the Authority and for States Parties

174. The technical implications for the Authority of implementing the above four steps, as elaborated under Section VII, for making the Enterprise operational are: (a) to put personnel in place, with requisite technical expertise, as discussed above; (b) to make available the services of such personnel to the Enterprise, on a part time or full time basis (perhaps as “technical assistance”); (c) to assist the Enterprise in hiring personnel with requisite expertise, from among the “graduates” of the training programmes of the contractors and also of the Authority itself; (d) to take advantage of the “revision provision” with respect to the training programmes of the contractors, of course by mutual agreement, in order to tailor them to the needs of the Enterprise for technical expertise; (e) to assist the Enterprise in finding suitable candidates from the network of contacts developed through cooperation with the contractors, sponsoring States and institutions; and (f) to assist the Enterprise in preparing a roster of potential candidates with the requisite technical expertise.

175. The implications for States Parties are minimal. Such implications may involve: (a) collaborating with the Authority and the contractors sponsored by them, in developing training programmes addressing the needs of the Enterprise for technical expertise; (b) encouraging contractors sponsored by them to assist the Enterprise find personnel with requisite expertise; (c) assisting the Enterprise in preparing the roster of potential staff; and (d) if possible, arranging for the services of experts to be available for the Enterprise at favourable terms.

X. Conclusions

176. The most significant conclusions are embedded in the respective Sections of the study.
One conclusion, which is implicit throughout the discussion in the study but may be gainfully reiterated here, relates to the process rather than the products. At this time, because of prolonged delay, inaction and the resultant sense of urgency, it is imperative that the cooperation among Member States, the Authority and contractors needs to be extensive, intensive, and above all, effective, for the Enterprise to be operational, at the most cost-effective manner.
Appendix 1

Content and Form of the directive to be issued by the Council for the independent functioning of the Enterprise

The Council of the International Seabed Authority:

Whereas

1. Upon receipt of an application for a joint operation by [name of the entity] on [the precise date of receipt of the application] (or, as the case may be, there has been an approval of a plan of work for [name of the entity] on [the precise date of the approval of the plan of work] the Council took up the issue of the consideration of the independent functioning of the Enterprise;

2. After careful consideration the Council is convinced that the joint venture proposal for the initial joint venture operation with the Enterprise accord with sound commercial principles;

3. The Council is satisfied that all the requirements of section 2 paragraph 2 of the Annex of the 1994 Agreement has been complied with.

The Council pursuant to Article 170(2) of the UNCLOS 82 and Section 2 paragraph 2 of the Annex to the 1994 Implementation Agreement hereby issues this directive that:

4. By this directive the Enterprise shall begin functioning independently from the Secretariat as of the day of [indicate here the precise date when the Enterprise shall begin to function independently];

1. The Enterprise shall conduct its initial deep seabed mining operation through joint venture with [name of eligible entity named in the joint venture proposal] as required by Section 2 paragraph 2 of the Annex to the 1994 Implementation Agreement;

2. Subject to paragraph 2 above, the Enterprise shall carry out activities in the Area directly,
pursuant to article 153, paragraph 2 of the UNCLOS 82, as well as the transporting, processing and marketing of minerals recovered from the Area;

3. In carrying out its purposes and its functions, the Enterprise shall act in accordance to the UNCLOS 82, as modified by the 1994 Implementation Agreement, and the rules, regulations and procedures of the Authority, as well as the general policies established by the Assembly, and shall be subject to the directives and control of the Council as provided in the UNCLOS 82, as modified by the 1994 Agreement;

4. Subject to paragraph 4 above the Enterprise shall enjoy autonomy in the conduct of its commercial operations;

5. In developing the resources of the Area, the Enterprise shall, subject to the UNCLOS 82, as modified by the 1994 Agreement, operate in accordance to sound commercial principles.

6. Every six months from the date of this directive, the interim Director-General shall submit a report to the Council on the practical implementation of this directive and, where appropriate and available, provide data on such implementation.