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Item 11 of the provisional agenda*

**Review of the environmental impact assessment statement
submitted by contractors**

Review of the environmental impact assessment statement submitted by Beijing Pioneer Hi-Tech Development Corporation

Note by the secretariat

1. On 22 October 2024, the Secretary-General of the International Seabed Authority received an environmental impact statement (EIS) from Beijing Pioneer Hi-Tech Development Corporation (BPC) relating to the proposed joint test of a deep-sea collector and a buffer station to be conducted within BPC's polymetallic nodule contract area located in the Western Pacific Ocean. The technical trial is proposed to be conducted in the second half of 2025, as envisaged for the period 2025 to 2029 under BPC's programme of activities for the second five-year period.
2. According to the contractor, the statement was prepared on the basis of the Recommendations for the guidance of contractors for the assessment of the possible environmental impacts arising from exploration for marine minerals in the Area (the Recommendations).
3. Pursuant to paragraph 33 of the Recommendations, the technical tests proposed by BPC are activities that require a prior environmental impact assessment, as well as an environmental monitoring programme to be carried out during and after the specific activities, in accordance with paragraphs 33 and 38 of the Recommendations. In accordance with paragraph 34 of the Recommendations, the EIS and the information set out in paragraph 38 of the Recommendations are to be submitted to the Secretary-General at least one year in advance of the activity taking place.
4. According to the statement, the objective of the trial is to test and validate the "Manta II" collector machine. BPC also proposes to continue monitoring the potential environmental impacts in different phases before, during and after the test.
5. BPC plans to use a 1:5 scale polymetallic nodule deep-sea collector in combination with a buffer station for a combined test in a 500 m × 500 m area in the south of Magoshichi-no-Hoshi Seamount in Block M2 of its contract area. Based on the characteristics of the test equipment and environmental baseline studies, the Collector Test Area (CTA), Impact Reference Zone (IRZ), and

* ISBA/30/LTC/L.1.

Preservation Reference Zone (PRZ) were selected. Testing does not include the recovery of collected nodules by e.g., a riser system. The nodules will be disposed on the seabed after collection.

6. In addition, BPC will deploy deep-sea environmental impact monitoring systems in the IRZ and the PRZ to collect environmental monitoring data during and after the test. At the same time, surveys related to the potential impacts of nodule collection will be carried out to develop preventive measures for potential future deep-sea exploitation plans, and to provide design basis for the development of responsible nodule collection technology. This environmental monitoring programme is proposed to be divided into four phases: (i) phase I: the environmental baseline surveys before the test; (ii) phase II: environmental monitoring (i.e. temperature, salinity, pressure and seawater chemistry using CTD profilers; bottom currents using lowered acoustic doppler current profiler and current meters; turbidity plume and megafauna using AUV, noise using hydrophones, deposition chemistry micro-organisms using multicorer, organism using the lander system) during the test in the second half of 2025; (iii) phase III: recovery of the environmental monitoring equipment after the test and the post-test environmental monitoring to be conducted in 2026; and (iv) phase IV: long-term environmental monitoring in the 3rd, 5th, and 7th year after the test, respectively.

7. In alignment with paragraphs 65 and 66 of the Recommendations, the EIS should describe stakeholder¹ engagement activities that took place during the process, including the consultation timelines, consultation methods and publication milestones. In addition, the EIS should list any stakeholders that were consulted and describe the process by which they were identified.

8. Furthermore, in accordance with paragraphs 41(c) and 69 of the Recommendations, the Legal and Technical Commission will review the EIS for completeness, accuracy and statistical reliability. In line with paragraph 41 (b) of the Recommendations, in order to assist the Commission in that regard, the secretariat performed a completeness check of the EIS against the template contained annex III to the Recommendations.

9. As a result of the completeness check, the secretariat requested BPC to provide the following additional information:

(a) **Description of the proposed activity.** BPC was requested to provide more details on the technical design of the collector, i.e. the pick-up process ('collection travel mode', 'throat channel flow', 'suction hydraulic'), depth intersection, pumps, the locomotion, collection speed, sensors, sampled sediment, the weight of the collector and how BPC can guarantee that the collector will only remove (or disturb) the top 6cm of sediment. The secretariat would like BPC to provide the details of whether the collected PMN will be left on the seafloor, and the dropping will be done randomly once the reservoir in the buffer station is filled or there will be dedicated dropping places identified. In addition, BPC was asked to provide more information on the following: the defined 'standard size' for collected PMN, the potential impacts from the discharge of the buffer station and how it will be examined, the buffer station will remain stable on the seabed or towed behind the collector, and the kind of locomotion of the buffer station and its potential impact on the seabed. BPC has to ensure that the PRZ and IRZ are used and displayed correctly throughout the EIS.

(b) **Description of the existing physico-chemical environment.** The secretariat suggested that BPC should indicate regional, seasonal patterns in the upper layers, including if mid-waters are affected by wind-driven currents, and will BPC consider mid-water discharge for the future. The PRZ is about 78km away from the CTA, not the IRZ (according to Fig. 3.2) and BPC was asked to clarify this. The plume modelling approach needs to be checked against existing

¹ "Stakeholder" means a natural or juristic person or an association of persons with an interest of any kind or with relevant information or expertise.

and potentially changing oceanographic conditions and it would seem necessary to include a wider zone in the monitoring programme to exclude potential changes in the current regime.

(c) **Description of the existing biological environment.** The secretariat suggested that BPC to provide further explanation on what data is available for nodule fauna, since the nodule fauna in the test area and its surroundings will be significantly impacted during the test, and how nodule fauna will be sampled and studied in its 2025-2026 cruises. BPC was requested to submit all data used to support the EIS as soon as possible to facilitate further review of the EIS.

(d) **Assessment of impacts on the physico-chemical environment and proposed mitigation.** More information should be provided on the sampling test, including the test itself and the monitoring results, how similar is the sampling test to the collector test, and why Zone B displays greater meiofauna abundance than other zones. BPC was requested to provide the location of its contract area in Figure 7-14 of the EIS, and to explain what remediation tests in Table 7-6 of the EIS entail.

(e) **Accidental events and natural hazards.** BPC is strongly encouraged to include in its safety plan a requirement, that, in the event of any emergency, ISA Secretary-General must be informed immediately.

(f) **Environmental management, monitoring and reporting.** The secretariat suggested that BPC to provide further details for the monitoring to be conducted during phases III and IV, and how the monitoring results will be compared with the environmental baseline data collected before the test. BPC was requested to ensure that the number of stations described in the first paragraph of section 9.2.5.1 matches the Figures in Table 9-5. Furthermore, the test will be a good opportunity to collect empirical data for assessing the impacts of the proposed activity and to validate the predictions presented in the EIS. Given the limited sample size for most biological variables in the environmental baseline studies, in particular for the benthic communities, BPC was requested to explain how the sampling effort will be enhanced before, during and after the test, so that the data collected can support a statistically reliable analysis of the impacts caused.

10. BPC was requested to respond to the aforementioned requests by 19 February 2025, that is, within 30 days or request for a reasonable extension of this period as stipulated in the Recommendations.

Review by the Commission

11. The review of the EIS, along with other available information provided by BPC, will be initiated by the Commission at its next meeting, in March 2025.

12. Pursuant to the Recommendations, the Commission is invited to:

- (a) Review the EIS for completeness, accuracy and statistical reliability;
- (b) Report to Council on the results of the review;
- (c) Provide recommendations to the Secretary-General as to whether the EIS should be incorporated into the programme of activities under the exploration contract of BPC.