

Informal Working Group (IWG) on Test Mining and Pilot Mining

Intersessional Period

March – June 2026

Annex I

Draft Regulations relevant for Test Mining and Pilot Mining

15 June 2026

This document is presenting draft regulations relevant for Test Mining and/or Pilot Mining and, in particular, any suggested/potential text amendments that have been proposed or considered by members or the Co-Facilitators of the IWG during the intersessional period March-June 2006.

The document is using as a basis the version of the “Further Revised Consolidated Text” which has been discussed at the 1st Part of the 31st Session of the Council (ISBA/31/C/CRP.1/Rev.2 - issued on 15 February 2026).

Any suggested/potential amendments to the text are highlighted in yellow.

Text boxes below selected paragraphs set out the rationale for suggested/potential amendments.

Regulation 7

Form of applications and information to accompany a Plan of Work

3.~~bis~~ An application shall contain sufficient information to demonstrate that the Applicant has ~~{or will have}~~ access to the necessary financial and technical capability and resources to carry out the proposed Plan of Work, and shall be accompanied by the following:

[...]

~~{(d) bis a~~ Test Mining ~~study prepared in accordance with Regulation 48~~ ~~ter~~ Report with all information obtained from test mining activities conducted during Exploration in accordance with the requirements of the applicable Standard and taking into account relevant Guidelines. [In cases where an applicant utilizes [mature] ~~[demonstrated]~~ mining technology that has been internationally validated, there shall ~~b~~ be no requirement to conduct Test Mining. Instead, the applicant shall provide supporting materials in relation to the [mature] ~~[demonstrated]~~ mining technology when submitting the application];~~}~~

Text addition suggested by the Co-Facilitators to address requests for inclusion of a reference to the applicable Standard and relevant Guidelines.

Regulation 11

~~Publication and review of the Environmental Plans / {Alt. Publication, notification, and review of the Application}~~

1. The Secretary-General shall, within 7 Days after determining that an application for the approval of a Plan of Work is ready to progress pursuant to regulation 10, ~~{taking into account the confidentiality of the data}~~, place the Environmental Plans and all non-confidential parts of the Test Mining Report, if applicable ~~submitted~~, including any supporting material, on the Authority's website for a period of ~~[at least 90 Days]~~ ~~consideration of an application by the Authority, and~~ consult with all States and Stakeholders in accordance with regulation 93~~ter~~~~bis~~ on the application[, Environmental

Plans and the non-confidential parts of all other documents accompanying the application pursuant to regulation 7].

Text amendments suggested by the Co-Facilitators to improve readability of this paragraph.

The Co-Facilitators note that DR 11 still needs to be aligned with the stipulations provided by DR 93ter with regards to procedures for stakeholder consultation.

2. bis The Secretary-General shall provide the [application,] Environmental Plans, and the non-confidential parts of the Test Mining ~~study Report~~, if applicable, and comments submitted pursuant to paragraph 1(a), together with any responses by the Applicant provided pursuant to paragraph 2bis, and any other relevant additional information to the Commission and request the Commission to provide its comments on the ~~[m]-[Environmental Plans and the non-confidential parts of the Test Mining Study]~~, if applicable, ~~[within 90 Days]~~[in a timely manner].

3. The Commission shall, as part of its examination of an application under regulation 12 and assessment of Applicants under regulation 13, examine the [application,] Environmental Plans and the non-confidential parts of the Test Mining ~~studyReport~~, if applicable, [and] the comments submitted under paragraph 1(a) ~~[and 1.bis]~~, taking into account the consultation submissions received under regulation 93~~terbis~~, the ~~Applicant's or Contractor's~~ written response prepared under regulation 93~~terbis~~, paragraph 9, together with any revisions and responses provided by the Applicant under paragraph 2bis, and any additional information provided by the Secretary-General under paragraph 2bis, and shall provide its comments to the Secretary-General.

~~57.~~ The report of the Commission on the [application,] Environmental Plans [, and the non-confidential parts of the Test Mining Report] or revised plans shall be published on the Authority's website in accordance with regulation 92, and shall be included as part of the reports and recommendations to the Council pursuant to regulation 15.

Regulation 12

Rules for considering applications

4. In considering the proposed Plan of Work, the Commission shall take into account:

(c) ~~a~~Any previous operating record of the Applicant, including in relation to Exploitation activities within other jurisdictions, as well as the Applicant's performance during the Exploration stage, including the quality

of annual reports and baseline data, and the ~~results of test Exploitation activities~~ Test Mining Report;

Regulation 13

Assessment of ~~A~~ applicants and application

9. In considering whether an application provides for effective Protection of the Marine Environment, the Commission shall determine:

(e) Whether the Test Mining Report [, if required pursuant to Regulation 7.] is in accordance with the applicable requirements set out in the applicable Standard and taking into account relevant Guidelines and demonstrates that the test mining activities:

(i) Support the information provided in the present application for the approval of a Plan of Work for Exploitation;

(ii) Did not cause harmful effects on the Marine Environment; and

(iii) Were conducted under appropriate technical, spatial and temporal conditions, in accordance with any applicable Recommendation from the Commission;

Text addition suggested by the Co-Facilitators with a view to clarify that the requirements for conducting Test Mining and for preparing a report from Test Mining activities will be set out in the applicable Standard and relevant Guidelines.

Regulation 25

Documents to be submitted prior to [commercial] production

1. At least 12 months prior to the proposed commencement of Commercial Production [~~Sustained Large-scale Recovery Operations~~], the Contractor shall provide to the Secretary-General a [bankable] Feasibility Study prepared in accordance with ~~[Annex] and Good Industry Practice, and~~ the applicable Standard and taking into ~~f~~account the Guidelines [as well as ~~the results of the Test [Pilot] Mining studyReport and the updated Environmental Plans,~~ pursuant to regulation {48 ~~ter-Alt.bis~~}, paragraph 2 or 3, ~~as applicable,~~ and in accordance with Annex [IV ter]. ~~and the Secretary General shall submit this matter to the Commission.~~

Regulation 46

[The] Impact Assessment [Process]

3. The [process for] Environmental Impact Assessment shall:

(a) be based on relevant ~~[and representative]~~ environmental baseline data ~~[based on sufficient scientific information]~~ in accordance with ~~[applicable]~~ Standards ~~[and Regional Environmental Management Plans]~~ and taking into account the Guidelines;

~~[[e] Be subject to an independent [scientific] assessment prior to the submission of the proposed Environmental Impact Statement to the Authority;]]~~

~~[(ef) Take into account the results from Test Mining activities conducted during Exploration, [in accordance with Regulation 48 ter];]~~

Regulation 48

Environmental Impact Statement

3. The Environmental Impact Statement shall be in a form, ~~[and entail all elements,]~~ prescribed by the Authority in ~~[Annex IV]~~ and the ~~[applicable]~~ Standard and ~~[taking into account]~~ the ~~[applicable]~~ Guidelines, and shall:

~~[(a) bis be based on sufficient baseline environmental data and results of the performed Test Mining activitiesStudy, where applicable;]~~

Text amendments suggested by the Co-Facilitators to address a minor editorial omission and to streamline language throughout the regulations (i.e., replacing “Test Mining Study” with “Test Mining activities”).

(b) demonstrate that the proposed Exploitation is in accordance with all ~~[relevant]~~~~[applicable]~~ environmental Standards ~~and consistent with the applicable Regional Environmental Management Plan~~ and ~~[taking into consideration]~~ the Authority’s environmental ~~[goals and] objectives]~~ ~~and [[taking into consideration]] the relevant Regional Environmental Management Plan, [[environmental baseline data]]~~ as well as any ~~[Test Mining activities conducted during Exploration;]~~ ~~[or relevant data from any Test Mining activities]~~ ~~[additional objectives set by the Contractor]~~ ~~[additional objectives as set by the Contractor]~~ [and any results of the performed Test Mining ~~activitiesStudy~~, where applicable];

Text amendments suggested by the Co-Facilitators:

* to reflect language agreed by the IWG on REMPs with regards to referencing REMPs,

* to reflect that currently under DR 44ter reference is made to only *one* Environmental Goal of the Authority, and

* to streamline language throughout the regulations (i.e., replacing “Test Mining Study” with “Test Mining activities”) and (ii).

(b alt) demonstrate that the proposed Exploitation is in accordance with all applicable environmental Standards and the Authority's environmental goal and objectives and consistent with the applicable Regional Environmental Management Plan, and taking into account the environmental baseline data as well as any additional objectives set by the Contractor and any results of the Test Mining Report, where applicable.

Alternative wording for paragraph 3(b) suggested by one delegation, slightly amended by the Co-Facilitators, with a view to improve readability of the paragraph.

Regulation 48 ter ~~Alt.~~

Pilot Mining

[1. Unless otherwise provided, nothing in this regulation shall exempt the Applicant or Contractor, as the case may be, from conducting Test Mining before the submission of a Plan of Work for Exploitation.]

[1. Alt. Unless otherwise provided, nothing in this regulation shall exempt the Applicant or Contractor from conducting Test Mining and Pilot Mining.]

One delegation has proposed an alternative paragraph 1 which would set out the obligation to conduct both "Test Mining" and "Pilot Mining". In the alternative version, the last part of paragraph 1 ("before the submission of a Plan of Work for Exploitation") has been left out and transferred to the amended definitions (Alt. 1) of Test Mining and Pilot Mining to clarify further the difference between these.

21. Subject to this regulation and the applicable Standard, a Contractor shall conduct "Pilot Mining" before starting any Commercial Production under an Exploitation Contract. Information gathered through Pilot Mining shall be compiled in a Pilot Mining ~~R~~Report in accordance with the applicable Standard and taking into account the Guidelines.

~~32.~~ Pilot Mining is conducted by a Contractor in its preparation for commencement of Commercial Production, and to assist the Commission in its ~~[evaluation]~~ ~~[validation]~~ of the Feasibility Study.]

The Co-Facilitators wish to note that, depending on the final version of the definition of “Pilot Mining” in the Schedule, paragraph 3 may not be needed.

43. The purpose of ~~the~~ Pilot Mining is to:]

~~(i) validate that the proposed mining equipment is commercially and technically appropriate;~~

~~(ii) ensure that the Environmental Impacts and Effects of the activity are in accordance with the Environmental Impact Statement [and the conditions of the Exploitation Contract][, and to inform the Plan of Work]; and~~

~~(iii) prove the technical capabilities of the [Applicant][Contractor] to carry out its activities in accordance with the [Exploitation Contract] [Plan of Work].]~~

~~[validate that the proposed mining equipment is commercially and technically appropriate and the effects of the activity, in particular with regard to the Protection of the environment, operates as described in the Environmental Impact Statement/Plan of Work.]~~

Text amendments suggested by one delegation to set out in the paragraph also the need for the Applicant/Contractor to prove its technical capabilities (cf. (iii), above), and to structure the paragraph with a view to improve its readability.

The Co-Facilitators have added to this proposal references to the “Contractor” and the “Exploitation Contract”.

54. Pilot Mining ~~in the Area~~ requires a prior approval by the Commission ~~[and Council]~~ and shall be carried out with reasonable regard for other activities in the Marine Environment, in accordance with articles

One delegation is questioning the need to include this paragraph, as Pilot Mining would be part of the Exploitation Contract.

One delegation is suggesting that Pilot Mining should require prior approval by the Commission only, with the reference to the Council to be deleted.

One delegation is suggesting to add a reference in this paragraph also to the “Exploitation Contract”.

87 and 147 of the Convention, and in accordance with the Exploitation contract and the applicable Standard and taking into account the Guidelines, in particular to ensure effective protection for the Marine Environment from harmful effects in accordance with article 145 of the Convention.]

6. A validation monitoring system shall be established by the Contractor, in line with the Environmental Management and Monitoring Plan [and the requirements set out in the applicable Standard [and taking into account the Guidelines], in order to monitor [, once Commercial Production has started,] whether the requirements of the Plan of Work are complied with. In case of non-compliance, regulation 52 will apply.

6. Alt. The Contractor shall establish a Validation Monitoring System for a specified period of time, in line with the requirements set out in the

Several delegations have raised the need to include a reference to the applicable Standard and relevant Guidelines.

At least two delegations, however, are referring to the term “Validation Monitoring” with the understanding that this would be required “once Commercial Production begins”, and with the objective to confirm whether the predicted outcomes of the Plan of Work are as expected.

One delegation has offered an alternative version of paragraph 6.

applicable Standard and taking into account the Guidelines, in order to monitor the environmental impacts and effects of Pilot Mining.

[6bis. The Authority shall make arrangements, prior to the conduct of any Pilot Mining activities by a Contractor, for an independent scientific review of the Pilot Mining report prepared by the Contractor, in line with the requirements set out in the applicable Standard and taking into account the Guidelines. The outcome of the independent scientific review of the Pilot Mining report shall inform the review by the Commission as set out in paragraph 9bis. of this regulation.]

The Co-Facilitators drafted this paragraph 6bis - as a placeholder to reflect the request for inclusion of a provision for “independent (scientific) review of Pilot Mining reports” and “independent (real-time) monitoring”.

During the IWG online meeting on 2 June, no delegation expressed support for inclusion of “independent (real-time) monitoring”. Hence, only the language reflecting the requirement for an “independent scientific review” of Pilot Mining reports has been retained by the Co-Facilitators.

75. Any gains from ~~Mineral~~ Resources which have been collected during Pilot Mining shall be paid to the ~~Environmental Compensation Fund, as established by Regulation 54~~ mechanism for the sharing of benefits to be established by the Authority.

86. If a Material Change has been determined in accordance with regulation 25 ~~and or~~ 57, paragraph 2, the ~~Council~~ Commission shall determine whether and on which aspects any additional Pilot Mining may have to be undertaken ~~based on the recommendations of the Commission~~ in order to ~~provide sufficient information to~~ satisfy the requirements of paragraph ~~3~~ 2 above. In this case, paragraphs ~~2~~ 4 and ~~4~~ 3 above apply.

One contractor is suggesting that paragraph 8 should assign the determination on the need for additional Pilot Mining to the Commission rather than the Council.

97. After the Pilot Mining, the Contractor shall submit to the Commission within ... days a Pilot Mining ~~Report~~. The Pilot Mining ~~Report~~ shall provide information on the findings from the Pilot Mining, in accordance with the applicable Standards and taking into account the Guidelines. On this basis, the Contractor shall accordingly update its Environmental Plans [all relevant plans, including the Environmental Plans and the Mining Workplan]. The Pilot Mining ~~Report~~ and the updated Environmental Plans [all updated plans, including the Environmental Plans and the Mining Workplan] shall mutatis mutandis be subject to regulation 11 and provide the Commission with required information for its assessment according to regulation 13.

9bis. The Commission shall, without undue delay within 60 days, review the findings of the Pilot Mining ~~study~~ Report [and the updated Environmental Plans] [all updated plans, including the Environmental Plans and the Mining Workplan] and make appropriate recommendations to the Council.

The Co-Facilitators suggest to sub-divide this paragraph into 9 and 9bis with a view to clearly set out the different roles of the Applicant/Contractor and the Commission.

One delegation has provided textual proposals on this paragraph, including with regards to specifying the range of “plans” that would need to be updated by the Contractor and to clarify the nature of the “assessment” by the Commission.

One Contractor is suggesting to replace the phrase “without undue delay” with a fixed time period of 60 days to avoid regulatory ambiguity.

One Contractor is suggesting that paragraph 9bis should empower the Commission to make a direct determination rather than recommendations to the Council.

One delegation considers paragraphs 9, 9bis and 10 repetitive, but has not presented specific proposals for amending the text.

108. The Council shall, [without undue delay][within 60 days], consider the findings of the Pilot Mining ~~study in light of the Environmental Impact Statement/Plan of Work based on the recommendation of the Commission Report and~~ [the updated Environmental Plans][any updated plan, including the Environmental Plans and the Mining Workplan] based on the

One delegation has provided textual proposals on this paragraph.

One Contractor is suggesting to replace the phrase “without undue delay” with a fixed time period of 60 days to avoid regulatory ambiguity.

~~recommendation of the Commission and in accordance with the procedure set out in regulation 16.~~ If the findings of the Pilot Mining and [the updated Environmental Plans][any updated plans, including the Environmental Plans and the Mining Workplan] are in accordance with the ~~Environmental Impact Statement/Plan of Work~~ criteria set out in regulation 13, the Council shall make an affirmative decision and notify the Contractor through the Secretary-General. Thereafter, the Contractor may commence Commercial Production in accordance with the Exploitation Contract.}

[10bis. If the [Commission][Council] determines that the findings of the Pilot Mining or [the updated Environmental Plans][any updated plans, including the Environmental Plans and the Mining Workplan] are not in accordance with the criteria set out in regulation 13, the Council shall notify the Contractor accordingly through the Secretary-General.]

Several delegations have requested clarification regarding the process in case of negative results of Pilot Mining.

The Co-Facilitators have not received any specific textual proposals, but instead preliminarily drafted paragraph 10bis - as a placeholder - with a view to address this issue. The Co-Facilitators note that the process subsequent to a negative decision still would need to be elaborated further.

[11. The provisions under regulations 12 to 16 shall apply mutatis mutandis to paragraphs 8 to 10 in this regulation.]

Two delegations have questioned whether it is possible to apply regulations 12-16 *mutatis mutandis* and, in particular, whether the assessment set out in regulation 13 can be applied to paragraphs 8 to 10.

One delegation stated that not all provisions of DRs 12-16 will apply *mutatis mutandis* to paragraphs 8-10, but only some of them. The proposed amendments to paragraphs 9 and 10 already contain references to DR 11 and the criteria of DR 13. If these would be agreed, it seems we might not need paragraph 11.

[12. Pilot Mining shall not equate to Commercial Production as defined under regulation 27 and in the Schedule.]

One delegation questions whether this paragraph is needed in addition to paragraph 2.

Another delegation states that the purpose of this paragraph is not clear.

Other delegations expressed support for its inclusion.

Annex II

Mining Workplan

(d) Details of the equipment, methods and technology expected to be used in carrying out the proposed Plan of Work, including the results of ~~[Test Mining]~~ conducted ~~,-[or relevant data from any demonstrated Test Mining activities] [as applicable]-~~ and the details of any tests and Pilot Mining to be conducted in the future, as well as any other relevant

information about the characteristics of such technology, including processing and environmental safeguard and monitoring systems, [and electricity or other energy supply] together with details of any certification from a conformity assessment body;

Annex IV

Environmental Impact Statement

{Provide a description of Methodologies, for collecting and analyzing baseline and “Test Mining” data and assessing the potential Environmental Impact and Environmental Effects from the proposed operations and alternatives considered.}

Annex IV in general:

To support inclusion with references to “Test Mining” (now in suspense document) into Standards and Guidelines.

Schedule

<p>{“Pilot Mining”}</p>	<p>means an <i>in situ</i> operating of the integrated system of all equipment and all related process steps, including collector, raiser and release techniques, for exploitation activities in a Contract Area under appropriate technical, spatial and temporal conditions which provides evidence concerning, inter alia, environmental impact, commercial capacity, duration of operations to validate feasibility of future Commercial Production.</p>
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“Test Mining-ALT”

means the *in situ* use and testing of a fully integrated and functional mining system, including collection systems and water discharge systems.

Alt. 1:

Pilot Mining means an *in situ* testing of the integrated and full-scale mining system, including collector, riser and release techniques, and all related process steps in compliance with the Exploitation Contract and before the start of Commercial Production.

Test Mining means an *in situ* testing of the integrated and full- or reduced-scale mining system, including collector and water discharge systems, in compliance with an approval by the Legal and Technical Commission and before an application for an Exploitation Contract.

Alt 2.:

Pilot Mining means *in-situ* operation under an Exploitation Contract of the fully integrated mining system (collector, riser, processing, discharge), conducted over a defined spatial and temporal scale, after successful Test Mining phases. Its purpose is to validate — under production-like conditions — system performance, commercial throughput, environmental impacts, and operational sustainability. The outcomes are documented in a Pilot Mining Report, which provides the evidentiary basis for assessing feasibility before any decision on full-scale Commercial Production.

Test Mining means *in-situ* testing operations under an Exploration Contract carried out in clearly defined successive stages — component-level testing (e.g., individual collector, riser, processing/discharge modules), then small-scale integrated system testing, and finally a test of a fully integrated mining system (collector, riser, processing, discharge) over a limited area and duration. The purpose is to build system maturity, reduce risk, and generate real-world data, minimize technical, and environmental risk, and generate empirical data to support future exploitation planning. All results must be documented in a Test Mining Report that would be part of the submission in a Plan of Work for Exploitation.

Two delegations have offered alternative definitions of “Pilot Mining” and “Test Mining”.