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Twenty-eighth session
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Item _10 of the provisional agenda of the Council

Draft text for the payment system, including revised draft regulations on exploitation of mineral resources in the Area

Revised draft Part VII, revised draft Appendix IV and draft Standard and Guidelines

Prepared by the Chair of the Open-ended Working Group of the Council on the financial terms of a contract under article 13, paragraph 1 of Annex III to the United Nations Convention on the Law of the Sea and under section 8 of the Annex to the Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (OEWG)

1. During the meetings of the Council in July and November 2022, delegations and observers discussed and provided verbal input to the Chair's text of July 2022 ([Annex to the Chair's briefing note of 13 June 2023](#)). Subsequently, written proposals were submitted using the template provided by the Secretariat. Based on that, I have prepared this revised text ("the Chair's revised text") to assist in the discussions in the Open Ended Working Group.
2. The Chair's revised text harbors a multi-layer and top-down approach, progressing from general proposed changes to Part VII and Appendix IV of the draft regulations, to more specific operational issues and matters in the proposed draft standard on the calculation and determination of the royalty rates and draft guidelines in respect of the administration and management of royalties.
3. The structure and approach of the Chair's revised text is identical to the structure of the [Chair's text of July 2022](#) and remains composed of four enclosures:
 - (a) Enclosure I: Part VII, Financial terms of an exploitation contract and some inclusions from Part I (Regulation 1), Introduction, Part III (Regulations 23, 27, 38 and 39), Rights and obligations of Contractors and Part IX (Regulation 89), Information-gathering and handling;
 - (b) Enclosure II: Appendix IV, Determination of a royalty liability;
 - (c) Enclosure III: Draft Standard; and
 - (d) Enclosure IV: Draft Guidelines in accordance with Regulations 65 and 95 in respect of the administration and management of royalties prescribed in Part VII.
4. I refer the participants for the introduction to my previous text to avoid repetition.

Enclosure I
Part VII
Financial terms of an exploitation contract

Section 1 General

Regulation 62
Equality of treatment

The Council shall, based on the recommendations of the Commission, apply the provisions of this Part in a uniform and non-discriminatory manner, and shall ensure equality of financial treatment and comparable financial obligations for Contractors.

Explanation / comment

- One delegation has proposed to delete Regulation 62 and instead include a general statement in draft Regulation 1, to ensure all regulations are applied in a uniform and non-discriminatory manner, which would cover all Regulations.
- I note that the proposal submitted to replace this text in Regulation 1 is not a complete replacement for Regulation 62 as it does not include the requirement on the Commission to “ensure equality of financial treatment and comparable financial obligations for Contractors”.

Regulation 63
Incentives

1. The Council may, taking into account the recommendations of the Commission, provide for incentives, **[in accordance with the Standards and taking into account the Guidelines] including financial incentives**, on a uniform and non-discriminatory basis, to Contractors to further the objectives set out in article 13 (1) of annex III to the Convention.
2. Furthermore, the Council may provide incentives, ~~including financial incentives~~, to those Contractors entering into joint arrangements with the Enterprise under article 11 of annex III to the Convention, ~~and developing~~ including to developing States or their nationals, to stimulate the transfer of technology thereto and to train the personnel of the Authority and of developing States.
3. The Council shall ensure that, as a result of the incentives provided to Contractors under paragraphs 1 and 2 above, Contractors are not subsidized so as to be given an artificial competitive advantage with respect to land-based miners.

[4. Any incentives shall be fully compatible with the policies and principles under Regulation 2.]

Explanation / Comment

- One delegation proposed that the Standards and Guidelines include a clear definition and explanation of “financial incentives”.
- I invite the view of the delegations as to what that definition should include.
- One delegation proposes to remove the explicit reference to financial incentives, on the basis that it is not consistent with Article 13 of Annex III, and is not consistent with best practice. The delegation considers that The Authority should be encouraging efficient, low cost, profitable contractors that can and should pay taxes: not inefficient high-cost contractors that can only mine if they receive financial incentives.
- UNCLOS Article 11, Annex III includes a references to financial incentives.
- There is a proposal to include an express reference to incentives being compatible with Regulation 2.

Section 2 Liability for and determination of royalty

Regulation 64 Contractor shall pay royalty

1. A Contractor, from the date of commencement of Commercial Production, shall pay a royalty in respect of the mineral-bearing ore sold or removed without sale from the Contract Area as determined in appendix IV to these regulations [pursuant to paragraph 1 of section 8 of the annex to the Agreement].
- ~~2. The date of commencement of Commercial Production, will be the date notified according to Regulation 27(2).~~

Explanation / comment

- For the purpose of royalty calculations, it will be necessary to point to a specified date on which Commercial Production commenced for each Contractor. Pursuant to Regulation 27(2), the Contractor must notify the Secretary-General of the date of commencement of Commercial Production. The Secretary-General will then notify the members of the Authority.
- The draft Regulations currently include a definition for Commercial Production, drawn from UNCLOS as a place-holder, with a footnote that “a clearer definition of commercial production will be needed”.
- The current definition of Commercial Production is as follows: **“Commercial Production” shall be deemed to have begun where a Contractor engages in sustained large-scale recovery operations which yield a quantity of materials sufficient to indicate clearly that the principal purpose is large-scale production rather than production intended for information-gathering, analysis or the testing of equipment or plant.** *FN: This wording is taken from article 17 (2) (g) of annex III to the Convention. Article 17 (1) (b) (xiii) of annex III to the Convention requires the Authority to provide for a definition of commercial production, reflecting the objective criteria under article 17 (2) (g). A clearer definition of commercial production will be needed.*
- Delegations have commented that an accurate date of commencement of Commercial Production will be important to ensure appropriate returns to the ISA, among other things. Participants have commented that it does not make sense for the ISA to ask the contractor to identify when they have started commercial production, without properly defining what that means. In addition, the date of commencement should be independently verified, rather than relying solely on the contractor self-reporting.
- I propose to delete paragraph 2 and include new text on commencement of Commercial Production at Regulation 27 that: (i) provides greater specificity and an objective standard of assessment, to be included in Standards, and (ii) allows for verification and confirmation by the Authority.
- I note that if the definition of Commercial Production in the Schedule to the Regulations is amended, this text may require consequential harmonization amendments.

Regulation 65 ~~Secretary-General may issue Guidelines~~

- ~~1. The Secretary General may, from time to time, issue Guidelines in accordance with regulation 95 in respect of the administration and management of royalties prescribed in this Part.~~

~~2. The Secretary General shall consider all requests for the clarification of any Guidelines issued under paragraph 1 above, or on any other matter connected with the administration and management of a royalty and its payment.~~

Explanation / comment

- A delegation has proposed deleting this regulation on the basis that the draft Regulations 94 and 95 already provides the Commission with the powers to make Standards and Guidelines.

Section 3

Royalty returns and payment of royalty

Regulation 66

Form of royalty returns

A royalty return lodged with the Secretary-General shall be in the form prescribed by any Standards or ~~the~~ Guidelines and signed by the Contractor's designated official.

Explanation / Comments

- Some delegations have proposed that this regulation also include a reference to Standards.
- Regulations 94 and 95 set out the test for what should be included in Standards and what should be included in Guidelines.

Regulation 67

Royalty return period

A royalty return period for the purposes of this Part is a half-year return period, from:

- 1 January to 30 June; and
- 1 July to 31 December.

Regulation 68

Lodging of royalty returns

1. A Contractor shall lodge with the Secretary-General a royalty return for each Mining Area not later than 90 Days after the end of the royalty return period in which the date of commencement of Commercial Production occurs, and thereafter not later than 90 Days after the end of each subsequent royalty return period for the duration of the exploitation contract.
2. In connection with any joint venture arrangement or a consortium of Contractors, one royalty return shall be submitted by the joint venture or consortium.
3. A royalty return may be lodged electronically.

Regulation 69

Error or mistake in royalty return

A Contractor shall notify the Secretary-General promptly of any error in calculation or mistake of fact in connection with a royalty return or payment of a royalty.

Regulation 70

Payment of royalty shown by royalty return

1. A Contractor shall pay the royalty due for a royalty return period on the Day the royalty return is required to be lodged.

2. Payments to the Authority ~~may~~ shall be made in United States dollars or other foreign currency which is freely convertible.
3. All payments made to the Authority shall be made gross net and shall be free of any deductions, transmission fees, levies or other charges.
4. ~~The Council may approve the payment of any royalty due by way of instalment where special circumstances exist, in accordance with relevant Standards, that justify payment by instalment, taking account of rules, regulations and procedures of the Authority that provide for incentives, on a uniform and non-discriminatory basis, to Contractors.~~

Explanation / Comment

- One delegation has proposed deleting paragraph 4, as it considers that there are no circumstances where delayed payment should be approved. Another has expressed concerns about ambiguity of the language.
- I have proposed deleting the paragraph.

**Regulation 71
Information to be submitted**

1. A royalty return shall include the following information for each royalty return period, in accordance with the Standard and taking into account the Guidelines:
 - (a) The quantity in ~~wet metric tons~~ dry metric tons of mineral-bearing ore recovered from each Mining Area;
 - (b) The quantity and value by Mineral in ~~wet metric tons~~ dry metric tons of the mineral-bearing ore shipped from the Mining Area; The value and the basis of the valuation (by Mineral) of the mineral-bearing ore sold or removed without sale from the Mining Area, as verified by a ~~suitably-qualified person~~ Suitably Qualified Person and supported by a representative chemical analysis of the ore by a certified laboratory;
 - (c) Details of all contracts and sale or exchange agreements relating to the mineral-bearing ore sold or removed without sale from the Contract Area; and
 - (d) A calculation of the royalty payable in accordance with section 3, including any adjustment made to the prior royalty return period and a declaration signed by a designated official of the Contractor that the royalty return is accurate and correct.
2. In respect of a final royalty return period ending on the date of expiry, surrender or termination of the exploitation contract, the Contractor shall provide:
 - (a) A final calculation of the royalty payable;
 - (b) Details of any refund or overpayment of royalty claimed; and
 - (c) The quantity and value (by Mineral) of all closing stocks of the mineral-bearing ore.
3. Within 90 Days from the end of a Calendar Year, the Contractor shall provide the Secretary-General and the sponsoring State or States with a statement from an auditor or certified independent accountant that the royalty calculation for that Calendar Year:
 - (a) Is based on proper accounts and records properly kept and is in agreement with those accounts and records; and
 - (b) Complies with these regulations and is accurate and correct.

Explanation / Comment

- Regulation 71 originally required reporting of wet metric tons (WMT). The modelling assumes reporting and assays are done on the basis of dry metric tons (DMT). It refers to 'dewatered' nodule ore. The suggested mark-up in paragraphs (1)(a) and (b) of Regulation 71 is intended to reflect that thinking.

- Regulation 71 also refers to sale or removal without sale from the Mining Area. For accuracy and consistency, weighing and sampling should take place at the same Valuation Point (as defined in Appendix IV) irrespective of whether there is a sale.
- Reference is made to “the value of the ore” in (1)(c) and (2)(c) of Regulation 71. It is suggested adding clarity that valuations of ore are all by “Mineral”, to avoid potential loopholes and contractors arguing a distinction between ore and Mineral valuations. The Guidelines should break this down even further and require distinctions by Metal.
- One delegation has proposed to further clarify the definition and difference between dry and wet nodules and the conversion method between wet metric tons and dry metric tons in the Standards, so that the data of dry metric tons can be reasonably given at the valuation point of the mining area during the operation.
- I am advised by experts that the most reliable measure to ensure consistency in analysis is to use DMT. Contractors should be required to submit information on both the WMT and DMT collected from the area, but calculations of royalties will need to be against DMT.
- One delegation has proposed to define Suitably Qualified Person, and another has proposed a new Annex XI (in relation to DR94) to cover how independent experts are identified to be a point of reference throughout the Regulations wherever independent experts are called for.
- I invite delegations to make proposals on that drafting.

Regulation 72

Authority may request additional information

The Secretary-General may, by notice to a Contractor who has lodged a royalty return, request the Contractor to provide, ~~by the date stated in the notice~~ by the date stated in the notice, which shall be no later than 90 days from the date of the notice, information to support the matters stated in the royalty return.

Explanation / Comment

- One delegation proposes it would be more reasonable if there is a defined time limit for the provision of the information. Taking into account the relevant provision in the draft Regulations and the time normally required in practice for contractors to prepare the information, 90 days is proposed.
- I have proposed drafting that provides some flexibility/discretion for shorter timeframes, but ensures it will be provided no later than 90 days.

Regulation 73

Overpayment of royalty

1. Where a royalty return shows any overpayment of royalties, a Contractor may apply to the Secretary-General to request a refund of any such overpayment.
2. Where no such request is received by the Secretary-General within 90 Days of the due date of submission of the relevant royalty return, the Authority shall carry forward any overpayment and credit it against a future royalty amount payable under this Part, or, if the contract has expired, refund the amount within 90 days.
3. Any request to reduce a royalty-related amount payable by a Contractor must be made within five years after the Day the relevant royalty return was lodged with the Authority.
4. Where any final royalty return shows an amount to be refunded, the Secretary-General shall refund such amount within 90 days provided he or she determines that such refund is properly due. The Secretary-General may request, and the Contractor shall provide, such additional information or confirmation, as he or she considers necessary to determine that such refund is correct and due to a Contractor.

Explanation / Comment

- One delegation has proposed that relevant contents be added to paragraph 2 to deal with the situation that the contract has expired and no future royalty is needed. For example, if the contractor does not request a refund of any such overpayment within 90 days, and the contractor does not need to pay any future royalties upon expiration of the contract.
- I have proposed text to address this situation, reflecting the time limits proposed in the preceding regulation.

Section 4

Records, inspection and audit

Regulation 74

Proper books and records to be kept

1. A Contractor shall keep and maintain, at a place agreed by the Contractor and the Secretary-General, complete and accurate records relating to the Minerals recovered in order to verify and support all returns or any other accounting or financial reports required by the Authority in relation to Exploitation.
2. The Contractor shall prepare such records in conformity with internationally accepted accounting principles that verify, in connection with each Mining Area, inter alia:
 - (a) Details of the quantity and grade of the Minerals recovered from each Mining Area;
 - (b) Details of sales, shipments, transfers, exchanges and other disposals of the Minerals from the Mining Area, including the time, destination, value and basis of valuation and the quantity and grade of each sale, shipment, transfer, exchange or other disposal;
 - (c) Details of all eligible capital expenditure and liabilities by category of expenditure and liability incurred in each Mining Area; and
 - (d) Details of all revenues and operating costs associated with activities in the Mining Area.
3. A Contractor shall supply and file such records at such times as may be required by the Authority under these regulations and within 60 Days of the receipt of any such request from the Secretary-General.
4. A Contractor shall maintain all records for the duration of the contract and a period of [...] years following the expiry or cancellation of the contract and make such records available for inspection and audit under regulation 75.

Explanation / Comment

- This Regulation refers to Minerals recovered from the Mining Area, as opposed to mineral-bearing ore recovered. I suggest including additional detailed requirements in the Guidelines to also refer to “mineral-bearing ore” and “Metals”, given that it is for record keeping purposes. This will aid auditing and analysis. It seems particularly appropriate given the level of detail of this Regulation (i.e. with respect to operating costs, and with respect to transfers and disposals).
- Additionally, these Regulations require Contractors to keep records of quantity and grade of Minerals recovered from the Mining Area, and the details of shipments from the Mining Area. This supports the formulation of a royalty based on weight and sampling at a Valuation Point, and calculation of the royalty based on weight and assays per shipment, as drafted here.
- One delegation proposes with respect to paragraph 4, in order to improve the practical operability, it is recommended to clarify the retention period of such books and records, and whether they should be retained after the closure of mining activities.
- I have proposed additional language to address the concern raised by China, and welcomes proposals from the parties on how long records should be retained for audit after completion of the contract.

Regulation 75

Audit and inspection by the Authority

1. ~~The Secretary-General may audit the Contractor’s records~~ The Secretary-General, or Council, may request an audit of the Contractor’s records.

2. Any such audit shall be undertaken at the Authority's sole cost and shall be performed by an Inspector in accordance with Part XI of these regulations.
3. An Inspector may, in connection with a liability for a royalty payment:
 - (a) Inspect the mining and on-board processing facility with a view to verifying the accuracy of the equipment measuring the quantity of Mineral ore sold or removed without sale from the Contract Area;
 - (b) ~~Inspect, audit and examine any documents, papers, records and data available at the Contractor's offices or on board any mining vessel or Installation~~ Inspect, audit and examine any relevant documents, papers, records and data;
 - (c) Require any duly authorized representative of the Contractor to answer any questions in connection with the ~~inspection~~ audit and provide any missing documents, papers, records and data; and
 - (d) Make and retain copies or extracts of any documents or records relevant to the subject matter of the ~~inspection~~ audit and provide a Contractor with a list of such copies or extracts.
4. The Contractor shall make available to an Inspector such financial records and information contemplated as reasonably required by the Secretary-General to determine compliance with this Part.
5. Members of the Authority, in particular a sponsoring State or States, shall, to the best of their abilities, cooperate with and assist the Secretary-General and any Inspector in the carrying out of any audit under this regulation, and shall facilitate access to the records of a Contractor by an Inspector and assist in the exchange of information relevant to a Contractor's obligations under this Part.

Explanation / Comment

- As mentioned in the Drafting Note to Regulation 74, this Regulation also refers to Minerals recovered from the Mining Area, as opposed to mineral-bearing ore recovered. It is recommend including additional detailed requirements in the Guidelines to also refer to "mineral-bearing ore" and "Metals".
- (See also Drafting Note in relation to Regulation 74).
- This Regulation as drafted suggests the possibility of some assaying of samples on-board the harvesting and/or transfer vessel. While the Valuation Point is the point that might be used as the weighing and sampling point, it is possible that detailed assaying of the samples is likely to take place at onshore facilities, and the grade will then be attributed retrospectively to the Valuation Point for the purpose of calculating the royalty on that shipment. It is therefore important to prescribe the appropriate parameters for independent assaying in the Guidelines.
- Some delegations have proposed that the Secretary-General (as the chief administrative officer of the Authority), or the Council, may request an audit of the contractor's records, rather than directly perform the audit function.
- I have made a change to address that.
- Some delegations have proposed that a financial audit should be undertaken by an independent auditor or accountant, rather than an Inspector.
- I propose that if there is support for that proposal, adjusting the qualifications and functions of an Inspector, to require an independent auditor or accountant, could be addressed in Part XI itself, which contains provisions on Inspectors' functions.
- One delegation has proposed to remove location from the documents so as to not raise questions of control of the Authority.
- I have adjusted the language to remove the question of location as a determinative factor.

Regulation 76

Assessment by the Authority

1. Where the Secretary-General so determines, taking into account the relevant guidance provided by the Council and following any audit under this Part, or by otherwise becoming aware that any royalty return is not accurate and correct in accordance with this Part, the Secretary-General may, by written notice to a Contractor, request any additional information that the Secretary- General considers reasonable in the circumstances, including the report of an auditor.
2. A Contractor shall provide such information requested by the Secretary- General within 60 Days of the date of such request, together with any further information the Contractor requires the Secretary-General to take into consideration.
3. The Secretary-General may, within 60 Days of the expiry of the period prescribed in paragraph 2 above, and after giving due consideration to any information submitted under paragraph 2, make an assessment of any royalty liability that the Secretary-General considers ought to be levied in accordance with this Part.
4. The Secretary-General shall provide the Contractor with written notice of any proposed assessment under paragraph 3 above. The Contractor may make written representations to the Secretary-General within 60 Days of the date of such written notice. The Secretary-General shall consider such representations and shall confirm or revise the assessment made under paragraph 3 above.
5. The Contractor shall pay any such royalty liability within 30 Days of the date of the determination made by the Secretary-General under paragraph 4.
6. Except in cases of fraud or negligence, no assessment may be made under this regulation after the expiration of 6 years from the date on which the relevant royalty return is lodged.

Section 5

Anti-avoidance measures

Regulation 77

General anti-avoidance rule

1. Where the Secretary-General reasonably considers that a Contractor has entered into any scheme, arrangement or understanding or has undertaken any steps which, directly or indirectly:
 - (a) Result in the avoidance, postponement or reduction of a liability for payment of a royalty under this Part;
 - (b) Have not been carried out for bona fide commercial purposes; or
 - (c) Have been carried out solely or mainly for the purposes of avoiding, postponing or reducing a liability for payment of a royalty; then the Secretary- General shall determine the liability for a royalty as if the avoidance, postponement or reduction of such liability had not been carried out by the Contractor and in accordance with this Part.
2. The Secretary-General shall provide the Contractor with written notice of any proposed determination under paragraph 1 above. The Contractor may make written representations to the Secretary-General within 60 Days of the date of such written notice. The Secretary-General shall consider such representations and shall determine the liability for a royalty for the original or revised amount.
3. The Contractor shall pay any such royalty liability within 30 Days of the date of the determination made by the Secretary-General under paragraph 2.
4. If the Contractor incurs in a non-compliance of payment of a royalty in accordance with this Part, the Council shall suspend or rescind the Contract pursuant regulation 103 of these Regulations.

Explanation / Comment

- One delegation has proposed to add an additional paragraph to address cases where the contractor repeatedly fails to comply with its payment duties, namely that the Council shall be entitled to terminate the contract in accordance with DR 103. This suggestion is made in support of DR 80, which only provides for conventional (pecuniary) penalties.
- I have included language that would allow the Council to sanction both the termination and suspension of the contract and shall have the power to impose conventional penalties for breaches of the Contractor.

Regulation 78

Arm's-length adjustments

1. For the purposes of this regulation:
 - (a) "Arm's length", in relation to contracts and transactions, means contracts and transactions that are entered into freely and independently by parties that are not related parties; and
 - (b) "Arm's-length value", in relation to costs, prices and revenues, means the value that a willing buyer and willing seller, who are not related parties, would agree is fair under the circumstances.
2. Where, for the purposes of calculating any amounts due under this Part VII or any associated Standard or Guidelines, any costs, prices and revenues have not been charged or determined on an arm's-length basis, pursuant to a contract or transaction between a Contractor and a related party, the [Secretary- General] [Council] may adjust the value of such costs, prices and

revenues to reflect an arm's-length value [, taking into account the recommendations of the Commission] in accordance with internationally accepted principles.

[2alt 1. Where, for the purposes of calculating any amounts due under this Part VII, any costs, prices and revenues have not been charged or determined on an arm's-length basis, pursuant to a contract or transaction between a Contractor and a related party, the Council may propose to adjust the value of such costs, prices and revenues to reflect an arm's-length value, taking into account the recommendations of the Commission, in accordance with internationally accepted principles.]

2alt 2. Where, for the purposes of calculating any amounts due under this Part VII, any costs, prices and revenues have not been charged or determined on an arm's-length basis, pursuant to a contract or transaction between a Contractor and a related party, the Secretary-General may make recommendations to the Commission on the adjustment of the value of such costs, prices and revenues.]

3. The Secretary-General shall provide the Contractor with written notice of any proposed adjustment under paragraph 2 above. The Contractor may make written representations to the Secretary-General within 60 Days of the date of such written notice.

Explanation / Comment

- Delegations have proposed various language surrounding paragraph 2 surrounding the roles of the Secretary-General, Council and Commission in calculating amounts.

Section 6 Interest and penalties

Regulation 79

Interest on unpaid royalty

Where any royalty or other amount levied under this Part remains unpaid after the date it becomes due and payable, a Contractor shall, in addition to the amount due and payable, pay interest on the amount outstanding, beginning on the date the amount became due and payable, at an annual rate calculated by adding 5 per cent to the special drawing rights interest rate prevailing on the date the amount became due and payable in accordance with Appendix IV.

Regulation 80

~~Monetary penalties~~ Monetary penalties and suspension or termination of exploitation contract

Subject to regulation 103 (6), and depending on the seriousness of the breach, the Council may impose a monetary penalty or suspend or terminate the exploitation contract in respect of a violation under this Part or of the contract.

Explanation / Comment

- Delegations have proposed language to allow for termination or suspension of the exploitation contract, if this part or if the contract, has been violated.
- I have included language to reflect proposals for a range of penalties for violations.

Section 7

Review of payment mechanism

Regulation 81

Review of system of payments

1. The system of payments adopted under these regulations and pursuant to paragraph 1 (c) of section 8 of the annex to the Agreement, consistent with Articles 154, 160(2) and 162(2)(o) of the Convention, and unless otherwise decided by the Council, shall be reviewed by the Council five years from the first date of commencement of Commercial Production in the Area and at intervals thereafter as determined by the Council, taking into account the level of maturity and development of Exploitation activities in the Area.
2. The Council, based on the recommendations of the Commission, ~~and in consultation with Contractors~~, may revise the system of payments ~~in the light of changing circumstances~~ and following any review under paragraph 1 above, taking into account the economic viability of the project save that any revision shall only apply [to existing exploitation contracts by agreement between the Authority and the Contractor] [after five years of commercial production have been completed under that exploitation contract].

Explanation / Comment

- One delegation has commented that Regulation 81 provides that changes to the system of payments can only be applied to existing exploitation contractors with the contractor's consent. Contractors are unlikely to agree for changes to the system of payments that reduce their profits to apply to existing exploitation contracts. Thus, if for example, after the Exploitation Regulations are approved, it becomes apparent that Contractors are exploiting loopholes in the Exploitation Regulations to minimise their payments to the Authority then the Authority would have little ability to close these loopholes and contractors' tax avoidance could continue unabated for the duration of the 30 year term of the exploitation contract. If contractors do not agree to changes to the system of payments applying to their existing exploitation contracts, then this effectively provides contractors with fiscal stability and protects them from changes in the payment system for the entire thirty years of the exploitation contract.
- I have proposed removing the compulsory requirement to consult with Contractors and the explicit consideration of changing circumstances. This does not preclude consultation with contractors, but allows for greater flexibility in such circumstances as where such consultation would be difficult.
- One delegation has commented that fiscal stability for the term of the exploitation contract does not conform to international best practice. This view has recently been confirmed by an IGF Report² which states: 'Periodic review of financial terms of extractive industry contracts is increasingly seen as best practice. Stabilisation of the financial terms for the tenure or a contract (up to thirty years in this case) **is not.**' (emphasis added).
- The OECD Guiding Principles on Durable Extractive Contracts³ is a good reference for best practice in extractive industry taxation. Paragraph 54 of this guideline argues that Governments should not necessarily include fiscal stability clauses and that where they do they should be limited to specific fiscal terms (not all fiscal terms), should be for a limited period of time (not the full term of the exploitation contract) and that contractors should pay a premium for fiscal stability.
- One delegation proposes that the Draft Regulations should be amended to limit the fiscal stability afforded to contractors. The simplest way to do this would be to allow changes in the structure of the payment regime and changes in the rates of fiscal instruments to be applied to existing contracts after five years of commercial production had been completed under the license. Thus, if commercial production started under an Exploitation Contract in 2025, and the system of payments was amended in 2028, these amendments would not apply to that Exploitation Contract until 2030.

Regulation 82

Review of rates of payments

1. The rates of payments under an existing system of payments shall be reviewed by the Council five years from the first date of commencement of Commercial Production in the Area and at intervals thereafter as determined by the Council [and every five years thereafter, applying to all contractors that have commenced Commercial Production, unless otherwise determined by the Council], taking into account the Resource category and the level of maturity and development of Exploitation activities in the Area.
2. The Council, based on the recommendations of the Commission ~~and in consultation with Contractors~~, may adjust the rates of payments in the light of such recommendations ~~and consultation~~, taking into account the economic viability of the project, save that any adjustment to the rates of payments may only apply to existing exploitation contracts [from the end of the Second Period of Commercial Production reflected in appendix IV to these regulations] [after five years of commercial production have been completed under that exploitation contract].
3. Without limiting the scope of any review by the Council, a review under this regulation may include an adjustment to the Applicable Royalty Rate under appendix IV and the manner and basis of the calculation of a royalty [, including triggers for price-based royalties].

Explanation / Comment

- One delegation has proposed to remove contractor consultation, for reasons set out at Regulation 81.
- I have removed that language to allow for greater flexibility.
- One delegation has proposed 5 year periodic reviews. DR 82 currently states that rates shall be reviewed five years following the first date of commercial production and at intervals thereafter as determined by the Council. It also states that “the adjustment of rates of payments may only apply to existing exploitation regulation contracts from the end of the Second Period of Commercial Production reflected in appendix IV to these regulations”. However, while paragraph 1 (C) of section 8 of the Annex to the Agreement indicates that “a change to a system of payments may apply to existing contracts only at the election of the contractor” no such requirement is laid out regarding a change to rates. The fiscal stabilization provisions currently included in DR 82 are inconsistent with current global norms, as evidenced by the 2020 OECD Guiding Principles on Durable Extractive Contracts. It is proposed to have a simple, regular review of rate of payments every 5 years following the commencement of Commercial Production in the Area.
- One delegation has proposed triggers for price-based royalties. The regulation should be clear about what constitutes a review of system of payments vis-à-vis a review of rates of payment. A review of rates of payment should explicitly include reference to price “triggers” under variable royalty rate regimes.

Section 8

Payments to the Authority

Regulation 83 Recording in Seabed Mining Register

1. All payments made by the Contractor to the Authority under this Part are non-confidential.
2. All payments received by the Authority from Contractors shall be recorded in the Seabed Mining Register.

Regulation 83 bis

Beneficial Ownership

1. A Contractor shall submit information to the Secretary-General to be included in a Beneficial Ownership Registry in accordance with relevant standards and guidelines.
2. The Beneficial Ownership Registry shall be published through the Seabed Mining Register.]

Explanation / Comment

- One delegation has proposed a new Regulation 83 bis with the following explanation: A Beneficial Ownership Registry at the ISA would be in line with best practice. Standards/Guidelines could be used to introduce thresholds for reporting on beneficial ownership (e.g., a significant beneficial owner could be those holding at least 10% ownership of a contractor).

Other Relevant Draft Regulations in Parts I, III and IX

Part I

Introduction

Regulation 1

Use of terms and scope

...

[(8) These regulations shall be applied to all members of the Authority and Contractors, as applicable, in a uniform and non-discriminatory manner.]

Part III

Rights and obligations of Contractors

Regulation 23

Transfer of rights and obligations under an exploitation contract

1. A Contractor may transfer its rights and obligations under an exploitation contract in whole or in part only with the prior consent of the Council, based on the recommendations of the Commission and with notification to the sponsoring State or States.
2. ~~An application for consent to transfer the rights and obligations under an exploitation contract shall be made to the Secretary-General jointly by the Contractor and transferee. The Contractor and transferee shall jointly inform the Secretary-General of any application to transfer the rights and obligations under an exploitation contract. The Secretary-General shall transmit that application to the Commission, which shall give its recommendation to the Council.~~
3. The Commission shall consider the application for consent to transfer at its next available meeting, provided that the documentation has been circulated at least 30 Days prior to that meeting.
4. ~~The Commission shall [consider whether] [ensure that] the transferee~~ In recommending approval of the transfer, the Commission shall ensure that the transferee :
 - a. Meets the requirements of a qualified applicant as set out in regulation 5;
 - b. Has submitted a certificate of sponsorship as set out in regulation 6;
 - c. Has submitted a form of application as set out in regulation 7 if the Secretary-General considers that there is a Material Change to the Plan of Work;
 - d. Has paid the administrative fee as set out in appendix II;
 - e. Meets the criteria set out in regulation[s 12 (4) and] 13[(4)], and has provided Environmental Plans that comply with regulation 13 (4) (e); and
 - f. Has deposited an Environmental Performance Guarantee as set out in regulation 26.
5. The Commission shall not recommend approval of the transfer if it would:

- a. Involve conferring on the transferee a Plan of Work, the approval of which would be forbidden by article 6 (3) (c) of annex III to the Convention; or
 - b. Permit the transferee to monopolize the conduct of activities in the Area with regard to the Resource category covered by the exploitation contract.
6. Where the exploitation contract is subject to an encumbrance registered in the Seabed Mining Register, the Commission shall not recommend consent to ~~sanction~~ the transfer unless it has received evidence of consent to the transfer from the beneficiary of the encumbrance.
7. Where the Commission determines that the requirements of paragraphs 4, 5 and 6 above have been fulfilled, it shall recommend approval of ~~confirm~~ the ~~application for consent~~ ~~transfer~~ to the Council. In accordance with article 20 of annex III to the Convention, the Council shall not ~~unreasonably~~ withhold ~~consent to a~~ ~~sanctioning of the~~ transfer if the requirements of this regulation are complied with.
8. A transfer is validly effected only upon:
- a. Execution of the assignment and novation agreement between the Authority, the transferor and the transferee;
 - b. Payment of the prescribed transfer fee pursuant to appendix II; and
 - c. ~~Recording by the Secretary-General of the transfer in the Seabed Mining Register.~~
9. The assignment and novation agreement shall be signed on behalf of the Authority by the Secretary-General or by a duly authorized representative, and on behalf of the transferor and the transferee by their duly authorized representatives.
10. ~~The terms and conditions of the transferee's exploitation contract shall be those set out in the standard exploitation contract annexed to these Regulations that is in effect on the date that the Secretary-General or a duly authorized representative executes the assignment and novation agreement.~~

Explanation / comment

- I have included the proposal received to make it a requirement to notify the sponsoring State/s.
- I have proposed a new paragraph 2 that incorporates the key components of the original text and new text proposals from the parties: (i) joint action for informing; (ii) informing the Secretary-General of the “application for consent” not informing of the “transfer” itself; and (iii) including the obligation on Secretary-General upon being informed (which addresses how that application moves from the Secretary-General to the Commission for consideration, and to the Council for the granting of consent.
- I have not included the proposal to change “consider” to “review and confirm” as text proposal would *obligate* the Commission to confirm transfers, and removes the discretion of the Commission to consider whether the other requirements of this regulation have been met.
- I have included the proposal to change “consider” to “ensure” as it confers much stronger obligations on the members, and greater powers on Commission, and (ii) clarifying that this is required in the context of making a recommendation for approval.
- I have not included the proposal to use “sanction” in the chapeau, as proposed in early comments, as it may be confused with the term of art in public international law.
- Noting early comments in this section, I have retained the original text of “recommend approval of the application for consent to the Counsel” for consistency within the Chair’s revised text, and for clarity.
- I have proposed to not adopt the proposal from the early comments to caveat withholding

consent with “unreasonably”, as it is ambiguous as to what it adds to the text, which already requires that consent not be withheld if the conditions are met.

- I propose to retain the Recording by the Secretary-General of the transfer in the Seabed Mining Register.
- I have not included the proposal to change 5(b), as there is a distinction between possibility (“permit”) and certainty and intent (“would”). The appropriate consideration for the Commission is whether the transfer would permit monopolization, not whether there would be monopolization. If the proposal regarding monopolization were to be accepted as proposed by the submission, it would be straying into the territory of domestic legislation as to what constitutes a monopoly, which is beyond the remit of the Regulations.
- There has been a proposal for the terms of the exploitation contract to be updated to reflect those in effect at the time of the transfer. The commercial effect of this new paragraph would be that the transferee could obtain its rights on different terms to those on which the transferor held those rights. This is effectively a retrospective application of changes to the standardized exploitation contract, where otherwise the changes would not have applied.

Regulation 27

Commencement of production

1. Where the requirements of regulation 25 are satisfied and the Contractor has lodged an Environmental Performance Guarantee in accordance with regulation 26, the Contractor, consistent with Good Industry Practice, shall make commercially reasonable efforts to bring the Mining Area into Commercial Production in accordance with the Plan of Work.
- ~~2. Once Commercial Production has begun, the Contractor shall promptly notify the Secretary-General of the date of commencement of Commercial Production. Upon notification, the Secretary-General shall notify members of the Authority, in particular coastal states in close proximity to the Mining Area, that Commercial Production has begun and the location of the Mining Area.~~
- ~~2bis Once the Contractor determines that it is engaging in sustained large-scale recovery operations which yield a quantity of materials in excess of the thresholds specified in the Standards, the Contractor shall promptly notify the Secretary-General of the proposed date of commencement of Commercial Production together with supporting documentation and other evidence as specified in the Standards. The Secretary-General shall transmit the notification and supporting documentation and evidence to the Commission, which shall consider the proposal and supporting materials and approve or reject the Contractor’s proposed date.~~
- ~~3 Promptly following approval or rejection by the Commission, the Secretary-General shall, as applicable, confirm the date of commencement of Commercial Production to the Contractor, or notify the Contractor of the rejection and invite the Contractor to re-submit its proposed date of commencement of Commercial Production under Regulation 27(2).~~
- ~~4. Upon confirmation, the Secretary-General shall notify members of the Authority, in particular coastal states in close proximity to the Mining Area, that Commercial Production has begun and the location of the Mining Area.~~
- ~~5. The date of commencement of Commercial Production, will be the date confirmed to the Contractor according to Regulation 27(3).~~

Explanation / Comment

- See explanation under Regulation 64.
- In response to comments from a number of delegations regarding the need for specificity with respect to Commercial Production, I propose to delete paragraph 2 and include new text on commencement of Commercial Production at Regulation 27 that: (i) provides greater specificity and an objective standard of assessment, to be

included in Standards, and (ii) allows for verification and confirmation by the Authority.

- I note that if the definition of Commercial Production in the Schedule to the Regulations is amended, this text may require consequential harmonization amendments.

Regulation 38

Annual report

1. A Contractor shall, within 90 Days of the end of each Calendar Year, submit an annual report to the Secretary-General, ~~in such format as may be prescribed from time to time in the relevant Guidelines, covering~~ regarding its activities in the Contract Area and reporting on compliance with the terms of the exploitation contract.
2. Such annual reports shall be in accordance with relevant standards and guidelines and include:
 - (a) Details of the Exploitation work carried out during the Calendar Year, including maps, charts and graphs illustrating the work that has been done and the data and results obtained, reported against and noting variance from the approved Plan of Work;
 - (b) The quantity and quality of the Resources ~~recovered~~ extracted during the period and the volume of Minerals and metals ~~produced~~ recovered, marketed and sold during the Calendar Year, reported against the Mining Workplan;
 - (c) Details of the equipment used to carry out Exploitation, and in operation at the end of the period, if different from the Plan of Work;
 - (d) An annual financial report, in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants, of the actual and direct Exploitation expenditures, which are the capital expenditures and operating costs of the Contractor in carrying out the programme of activities during the Contractor's accounting year in respect of the Contract Area, together with an annual statement of the computation of payments paid or payable by the contractor to the Authority, governments, state enterprises, and other contractors, as well as payments and other forms of financial benefit received by the contractor from Sponsoring States, and reported against the Financing Plan;
 - ~~(e) Health and safety information, including details of any accidents or Incidents arising during the period and actions taken in respect of the Contractor's health and safety procedures; Information on compliance with health, labour and safety standards;~~
(e) bis Details of any accidents or Incidents arising during the period
 - (f) Details of training carried out in accordance with the Training Plan;
 - (g) The actual results obtained from environmental monitoring programmes, including observations, measurements, evaluations and the analysis of environmental parameters, reported against, where applicable, any criteria, technical Standards and indicators, including environmental objectives and standards, pursuant to the applicable Regional Environmental Management Plan and the Environmental Management and Monitoring Plan, together with details of any response actions implemented under the plan and the actual costs of compliance with the plan;
 - (h) A statement that all risk management systems and procedures have been followed and remain in place, together with a report on exceptions and the results of any verification and audit undertaken internally or by independent competent persons, [appointed or employed by the Contractor];
 - (i) Evidence that insurance is maintained, including the amount of any deductibles and self-insurance, together with the details and amount of any claims made or amounts recovered from insurers during the period;

- (j) [Details of any changes made in connection with subcontractors engaged by the Contractor during the Calendar Year;]
- (k) The results of any Exploration activities, including updated data and information on the grade and quality of Resources and reserves identified in accordance with the International Seabed Authority Reporting Standard for Reporting of Mineral Exploration Results Assessments, Mineral Resources and Mineral Reserves;
- (l) A statement that the Contractor’s Financing Plan is adequate for the following period; and
- (m) Details of any [proposed] [significant] modification to the Plan of Work [and the reasons for such modifications].

[(2)bis. The Secretariat shall arrange for the effective management of the submitted information in order to overcome existing gaps in knowledge concerning the marine ecosystems including their sensitivity and resilience, the determination of environmental quality standards and appropriate exploitation equipment.]

- 3. Annual reports shall be published in the Seabed Mining Register, except for Confidential Information, which shall be redacted. [To this end, Contractors shall structure the annual reports such that any Confidential Information can be clearly identified and extracted.]

Explanation / Comment

- This Regulation has been included for reference as it reflects the requirement for the Guidelines to elaborate on the annual reporting requirement.
- One delegation has proposed additional text with the following explanation: Standards and/or Guidelines for the Annual Report and the Annual Financial Report will be needed. Guidelines are likely to be needed for more than just formatting of the Annual report. Standards and Guidelines could, among other areas, incorporate evolving best practices regarding financial disclosure in the extractives sector. These could, for example, specify internationally accepted accounting principles to be used (i.e., Generally Accepted Financial Practices (GAAP) or International Financial Reporting Standards (IFRS)), the definition of what constitutes a “direct Exploitation Expenditure”, and the definition of a “payment and other forms of financial benefit” (e.g., subsidies, deductions, etc.). Contractor payments to contractors (including the Enterprise), state enterprises, States, and Sponsoring States should be disclosed publicly in line with terrestrial mining best practices. This is in line with International standards, like the Extractives Industries Transparency Initiative (EITI), and national best practices, such as the Extractives Sector Transparency Measures Act (ESTMA) in Canada which requires that certain businesses involved in the commercial development of oil, gas and minerals report the payments they make to governments in Canada and abroad. Payments to the contractor from Sponsoring States should also be disclosed. This information will be needed to determine the effective tax rate for contractors and to enable reviews of the system of payment.
- Thresholds for such information disclosure requirements may need to be defined.
- This information should be made accessible through the Seabed Mining Register.
- Necessary amendments are needed to DR 89 regarding confidentiality.
- Necessary amendments may be needed to DR 83 Recording in Seabed Mining Registry
- “State enterprises” is referred to in AGXI/A/S6(1)(d)(ii). However, something more definitive may be needed into the Schedule or Standards/Guidelines. Payments to sponsoring states will be important for determining a nodule transfer price in the future.

Regulation 39

Books, records and samples

1. A Contractor shall keep a complete and proper set of books, accounts and financial records, consistent with internationally accepted accounting principles, which must include information that fully discloses actual and direct expenditures for Exploitation, including capital expenditures and operating costs and such other information as will facilitate an effective audit of the Contractor's expenditures and costs.
2. A Contractor shall maintain maps, geological, mining and mineral analysis reports, production records, processing records, records of sales or use of Minerals, environmental data, archives and samples and any other data, information and samples connected with the Exploitation activities in accordance with the Authority's data and information management policy.
3. ~~To the extent practical, a~~ A Contractor shall keep, in good condition, a representative portion of samples or cores, as the case may be, of the Resource category, from each sample collection period identified in the Standard and Guidelines, together with biological samples, obtained in the course of Exploitation until the termination of the [the exploitation contract] [Closure Plan]. Samples shall be maintained taking into account the relevant Guidelines, which shall provide the option for the Contractor to maintain them itself or to have such maintenance performed on its behalf in whole or in part by a third party.
4. Upon request of the Secretary-General, the Contractor shall deliver to the Secretary-General for analysis a portion of any sample or core obtained during the course of Exploitation activities.
5. A Contractor shall, subject to reasonable notice, permit full access by the Secretary-General to the data, information and samples.

Explanation / Comment

- Accurate samples are integral to the correct calculation of royalties. The collection and storage of samples will be essential to accountability, royalty calculation, and auditing. Removing the words "to the extent practicable" will allow for a stronger obligation, commensurate with the level of obligation ascribed to the keeping of other records (the other record keeping obligations are not qualified by the inclusion of the words "to the extent practicable").
- The Regulation as currently drafted references the Guidelines for the purposes of detailing storage requirements for the samples; however, it should also link to the draft Guidelines in the present Chair's text for the purposes of how many samples should be collected, how often they should be collected, at what points/times during the loading of a Shipment samples should be collected, and other relevant matters.

Part IX

Information-gathering and handling

Regulation 81

Review of system of payments

1. The system of payments adopted under these regulations and pursuant to paragraph 1 (c) of section 8 of the annex to the Agreement shall be reviewed by the Council five years from the first date of commencement of Commercial Production in the Area and at intervals thereafter as determined by the Council, taking into account the level of maturity and development of Exploitation activities in the Area.

2. The Council, based on the recommendations of the Commission, and in consultation with Contractors, may revise the system of payments in the light of changing circumstances and following any review under paragraph 1 above, save that any revision shall only apply to existing exploitation contracts by agreement between the Authority and the Contractor.

Regulation 82

Review of rates of payments

1. The rates of payments under an existing system of payments shall be reviewed by the Council five years from the first date of commencement of Commercial Production in the Area and at intervals thereafter as determined by the Council, taking into account the Resource category and the level of maturity and development of Exploitation activities in the Area.
2. The Council, based on the recommendations of the Commission and in consultation with Contractors, may adjust the rates of payments in the light of such recommendations and consultation, save that any adjustment to the rates of payments may only apply to existing exploitation contracts from the end of the Second Period of Commercial Production reflected in appendix IV to these regulations.
3. Without limiting the scope of any review by the Council, a review under this regulation may include an adjustment to the Applicable Royalty Rate under appendix IV and the manner and basis of the calculation of a royalty.

Regulation 89

Confidentiality of information

1. There shall be a presumption that any data and information regarding the Plan of Work, exploitation contract, its schedules and annexes or the activities taken under the exploitation contract are public, other than Confidential Information.
2. "Confidential Information" means:
 - (a) Data and information that have been designated as Confidential Information by a Contractor in consultation with the Secretary-General under the Exploration Regulations and which remains Confidential Information in accordance with the Exploration Regulations;
 - (b) Data and information relating to personnel matters, the health records of individual employees or other documents in which employees have a reasonable expectation of privacy, and other matters that involve the privacy of individuals;
 - (c) Data and information which have been categorized as Confidential Information by the Council; and
 - (d) Data and information designated by the Contractor as Confidential Information at the time it was disclosed to the Authority, provided that, subject to paragraph 5 below, such designation is deemed to be well founded by the Secretary-General on the basis that there would be substantial risk of serious or unfair economic prejudice if the data and information were to be released;
3. "Confidential Information" does not mean or include data and information that:
 - (a) Are generally known or publicly available from other sources;
 - (b) Have been previously made available by the owner to others without an obligation concerning its confidentiality;
 - (c) Are already in the possession of the Authority with no obligation concerning its confidentiality;
 - (d) Are required to be disclosed under the Rules of the Authority to protect the Marine Environment or human health and safety;

- (e) Are necessary for the formulation by the Authority of rules, regulations and procedures concerning the protection and preservation of the Marine Environment and safety, other than equipment design data;
- (f) Relate to the protection and preservation of the Marine Environment, [provided that] [unless] the Secretary-General may agree that such information is regarded as Confidential Information for a reasonable period where there are bona fide academic reasons for delaying its release;
- (f)alt. Relate to the protection and preservation of the Marine Environment, provided that the Secretary-General may designate such information as Confidential Information for a reasonable period, subject to such conditions as may be appropriate, where the Commission agrees that there are bona fide academic reasons for delaying its release on the terms proposed by the Secretary-General and the decision including the reasons are reported to Council;
- or
- (g) Are an award or judgment in connection with activities in the Area (save in relation to any Confidential Information contained in such award or judgment which may be redacted);
- (h) [Relate to contractor payments to the Authority, governments, state enterprises, other contractors, as well as payments and other forms of financial benefit received by the contractor from Sponsoring States;
- (i) Relate to beneficial ownership of contractors;
- (j) Relate to Sponsorship Agreements or other contractual arrangements between contractors and Sponsoring States; or]
- (k) The Contractor to which the data and information relates has given prior written consent to its disclosure.
- (l) The area to which the data and information relates is no longer covered by an exploitation contract; provided that following the expiration of a period of 10 years ISBA/25/C/WP.1 56/117 19-04869 after it was passed to the Secretary-General, Confidential Information shall no longer be deemed to be such unless otherwise agreed between the Contractor and the Secretary-General, [in accordance with the relevant Guidelines] and save any data and information relating to personnel matters under paragraph 2 (b) above.
4. Confidential Information will be retained by the Authority and the Contractor in strictest confidence in accordance with regulation 90 and shall not be disclosed to any third party without the express prior written consent of the Contractor, which consent shall not be unreasonably withheld, conditioned or delayed, save that Confidential Information may be used by the Secretary-General and staff of the Authority's secretariat, as authorized by the Secretary-General, and by members of the Commission as necessary for and relevant to the effective exercise of their powers and functions.
5. In connection with paragraph 2 (d) above, a Contractor shall, upon transferring data and information to the Authority, designate by notice in writing to the Secretary - General the Information or any part of it as Confidential Information. If the Secretary-General objects to such designation within a period of 30 Days, the parties shall consult upon the nature of the data and information and whether it constitutes Confidential Information under this regulation. During the consultations, the Secretary-General shall take into account any relevant policy guidance from the Council. Any dispute arising as to the nature of the data and information shall be dealt with in accordance with Part XII of these regulations.
6. Nothing in these regulations shall affect the rights of a holder of intellectual property

Explanation / comment

- One delegation has proposed amendments to Regulation 89 with the following explanation: Contractor payments to the Authority, governments, state enterprises, other contractors, as well as payments received by the contractor from Sponsoring States, should be disclosed

publicly in line with terrestrial mining best practices. This is in line with International standards, like the Extractives Industries Transparency Initiative (EITI), and national best practices, such as the Extractives Sector Transparency Measures Act (ESTMA) in Canada which requires that certain businesses involved in the commercial development of oil, gas and minerals report the payments they make to governments in Canada and abroad. Payments to the contractor from Sponsoring States should also be disclosed. This information will be needed to determine the effective tax rate for contractors and enable reviews of the system of payment. Sponsorship Agreements should also be fully disclosed. A definition for these may be required in the Schedule: use of terms and scope. Beneficial ownership of contractors should also be disclosed as per best practice.

- Thresholds for such information disclosure requirements may need to be defined.
- This information should be made accessible through the Seabed Mining Register.
- State enterprises are referred to in AGXI/A/S6(1)(d)(ii). However, something more definitive may be needed into the Schedule or Standards/Guidelines. Payments to sponsoring states will be important for determining a nodule transfer price in the future.

Enclosure II

Appendix IV

Determination of a royalty liability

Appendix IV sets out the methodology for the calculation of a royalty payable under Regulation 64 in respect of the categories of resources. It is indicative and presented for discussion only at this time.

Several updates have been made since the last version of Appendix IV. Therefore, I have replaced the Appendix in its entirety.

In the present appendix:

Aggregate Relevant Metal Value means the aggregate of the Relevant Metal Values for each Relevant Metal calculated in accordance with the [applicable](#) Standard.

Applicable Royalty Rate means the royalty rate set out in the [applicable](#) Standard, which may be by a decision of the Council following any review under these regulations.

Average Listed Price means the average listed price for a Relevant Metal, calculated in accordance with the [applicable](#) Standard.

Average Grade means the average metal content of the Relevant Metal calculated in accordance with the [applicable](#) Standard.

Relevant Metal means a metal contained in the mineral-bearing ore identified and determined in accordance with the [applicable](#) Standard.

Relevant Metal Value(s) means the gross market value(s) of a Relevant Metal calculated in accordance with the [applicable](#) Standard.

Valuation Point is the first point of transfer of the mineral-bearing ore by delivery onto a vessel transporting the ore out of the Contract Area. In the instance where the transfer of mineral-bearing ore onto another vessel does not take place, the valuation point shall be on board the original vessel before it leaves the Contract Area.

Explanation / Comment

- In relation to the Valuation Point, further specificity may be required in the Guidelines to clarify as to when, during the transferring process, weighing and sampling may take place, given that it is likely to be a continuous process over hours, or days, to load a single shipment onto the transport vessel.
- Some delegations have proposed to add “applicable” before each standard as there may be different Standards which apply to the various matters listed as defined terms in Appendix IV.
- I have made that change.
- Some delegations have proposed additional text for Valuation Point, with the following explanation: There are scenarios where the ore remains in the hold of the collector ship and is transferred directly out of the area without being transferred onto a transport ship. It is also possible that the ships sink with the mineral-bearing ore in their hold. We recommend amending the definition of “Valuation Point” accordingly and recommend that any associated Guidelines also reflect this possibility.
- I have included text to address that possibility.

1. The Authority shall set a royalty rate

The Authority shall set an Applicable Royalty Rate in respect of the royalty to be paid by the

Contractor to the Authority for Minerals which constitute polymetallic nodules, as set out in the Standard and taking into account ~~the~~ any Guidelines.

[Ibis Additional Minerals

Additional Minerals shall be included in the calculation of the royalty should evidence become available that such minerals are being profitably extracted.

The Legal and Technical Commission shall recommend to the Council for decision whether additional Minerals shall be included.

The inclusion of additional Minerals in the determination of the royalty shall constitute a review of rates of payments as described in Regulation 82.]

Explanation / Comment

- Regulation 64 prescribes that a royalty will be paid by the Contractor. This paragraph 1 now establishes who will set and collect the royalty, and how it will be calculated. The paragraph only concerns polymetallic nodules. To maintain long term adaptability, it directs the details to the Standard and Guidelines.
- One delegation has proposed removing the reference to Guidelines.
- I propose to retain, as it gives greater flexibility of options (including, for example, for worked examples in Guidelines). Regulations 94 and 95 set out when standards will be used and when guidelines will be used. I consider that the original text proposal, which would require the Authority to consider the Guidelines, would make consideration of the Guidelines (and therefore compliance with the Guidelines), binding.
- Delegations have proposed different options for addressing additional metals. This is one such proposal, another is at the “Relevant Metals” section. I also invite views of the delegations on whether such updates could fall within the broader review and update mechanism contemplated under DR 81 and 82.
- I invite the submissions of delegations on preferred approach for additional metals.

2. Calculation of royalty payable

The royalty payable to the Authority for each royalty return period shall be the product of the Applicable Royalty Rate multiplied by the Aggregate Relevant Metal Value for that royalty return period, calculated in accordance with the Standard and taking into account the Guidelines.

Explanation / Comment

- Regulation 64 prescribes that a royalty will be paid; paragraph 1 of Appendix IV above states that the rate will be set by the Authority. This paragraph 2 establishes how the royalty payment will be calculated.
- To maintain long term adaptability, it directs the details to the Standard and Guidelines.
- One delegation has proposed removing the reference to Guidelines.
- I consider that while most matters could be included in Standards, there is a role for Guidelines. Guidelines can be more easily changed than Standards, and therefore can be kept current with industry practice, to ensure that the Authority is applying best practice and most current industry practice. They may also be useful for matters such as worked examples.
- I consider that the original text proposal, which would require the Authority to consider the Guidelines, would make consideration of the Guidelines (and therefore compliance with the Guidelines), binding.



Enclosure III

Draft Standard

In the present Standard:

First Period of Commercial Production means a period of 5 years following the date of commencement of Commercial Production.

Explanation and comments

For administrative purposes it should be considered whether it would be preferable if the First Period of Commercial Production was to end at the end of a royalty return period.

Listed Price means:

1. For copper, nickel and cobalt: the price (in United States dollars), quoted for the Relevant Metal in the Official Listing relating to that Relevant Metal for the relevant period.
2. For manganese: the price (in United States dollars), quoted for medium-carbon ferromanganese in the applicable Official Listing for the relevant period, the result of the following calculation:

$$(0.1 \times \text{EMM Price}) + (0.4 \times \text{LC FeMn Price}) + (0.4 \times \text{MC FeMn Price}) + (0.1 \times \text{HC FeMn$$

Price) where:

~~(a) EMM Price means the price (in United States dollars), quoted for electrolytic manganese metal in the applicable Official Listing for the relevant period;~~

~~(b) LC FeMn Price means the price (in United States dollars), quoted for low-carbon ferromanganese in the applicable Official Listing for the relevant period;~~

~~(c) MC FeMn Price means the price (in United States dollars), quoted for medium-carbon ferromanganese in the applicable Official Listing for the relevant period; and~~

~~(d) HC FeMn Price means the price (in United States dollars), quoted for high-carbon ferromanganese in the applicable Official Listing for the relevant period.~~

Explanation / Comment

- Once the relevant indices have been settled, the applicable units for each quotation should be confirmed. It should also be confirmed that the relevant indices do in fact quote the prices for the relevant periods that are reflected by the draft Standard and Guidelines.
- To reflect the discussions of the OEWG, for manganese I have proposed text which features a medium-grade manganese reference price. This also reflects the new work done by MIT in their updated modelling. I invite further discussion on this point, noting that one delegation proposed using only the electrolytic manganese price as the reference price, while another submission proposed eventually moving to a nodule ore price as opposed to a composite based on individual metals prices.
- To expand further on the relevant delegation's proposal to use an official listing of EMM only rather than the composite calculation originally proposed based on MIT's earlier modelling, the explanation for that proposal is as follows: *The MIT model*

*assumed, and included costs and royalty rates consistent with this assumption, that manganese was processed to the electrolytic manganese metal (EMM) grade. If the royalty rates proposed are levied on a base containing different/lower manganese prices then the conclusions from the MIT model are no longer relevant and the royalty rates should be revised upwards to maintain ISA revenues. Likewise, the proposed minimum acceptable royalty rates assume that the royalty is levied on a base using the EMM price. If there is a change to the manganese price used then the royalty base will be lower and payments to the ISA will be lower, and we will then revise its minimum acceptable royalty rates upwards to maintain acceptable revenues for humankind. It is important to understand that the regulations are not dictating what manganese grade processors process manganese to. The royalty regulations are simply determining a base on which the royalty is applied. There is no reason that the Draft Regulations cannot use the EMM price for that base. Trying to understand exactly what grade processors will process manganese to is likely to be a fruitless and unconstructive task that will only serve to delay the Draft Regulations. Reasons for this include: a.) some nodules may be processed to the EMM grade, while others will be processed to a lower grade, b.) different contractors will sell nodules to different processors, and not all processors will process nodules to the same grade, c.) some contractors may not even know the full downstream sales and processing chain. They will sell unprocessed nodules and are not legally responsible for what happens to the metal in those nodules downstream. In short, the main criteria for the royalty base are that it is simple to calculate, easy to audit and results in significant revenues for the ISA. In addition review **Issue 3: The Valuation of Manganese** from the African Group Speaking Notes on the Payment Regime submitted by 15 January 2023 for further commentary to consider.*

Official Listing means the quoted or published price of the Relevant Metals as specified for each Relevant Metal in the Guidelines.

Explanation and comments

The reference to the Guidelines is to provide greater flexibility for future changes. The Guidelines also provide for a determination to be made by the Authority or Council (as determined during the negotiations) as to a new index, should the current one cease to be published.

Second Period of Commercial Production ~~means the period commencing on the day following the last day of the First Period of Commercial Production.~~ means a period of [x] years commencing on the day following the last day of the First Period of Commercial Production.

Third Period of Commercial Production means the period commencing on the day following the last day of the Second Period of Commercial Production.

Explanation / Commentary

- Delegations have proposed to define all periods of Commercial Production.
- I have proposed text to this effect.
- As additional context, the two periods of Commercial Production were intended to reflect the two-stage ad valorem nature of Option 4, with the royalty rate increasing for the second period (namely the duration of the contract following an initial 5 year ramp up).

Shipment means each shipment of mineral-bearing ore by a vessel transporting the ore out of the Contract Area.

1. Relevant Metals

- (a) For the purpose of polymetallic nodules and appendix IV, [during the first period of commercial production] Relevant Metals will be copper, nickel, cobalt and manganese [only].
- (b) During the second period of commercial production and subsequent periods of commercial production relevant metals will include copper, nickel, cobalt and manganese and may include other metals and substances, but only if there is substantial evidence that such other metals and substances are being processed from mineral-ore mined under the exploitation contract and are substantially increasing the value of polymetallic nodules mined in the area and in such case additional Standards will be published providing for the inclusion of these other metals and substances in aggregate relevant metal value.]

Explanation / Comment

- Delegations have proposed different options for addressing additional metals. One proposal is to include text at Appendix IV. Another is here in the “Relevant Metals” section. Or could such updates fall within the broader review and update mechanism contemplated under DR 81 and 82.

2. Calculation of Average Grade

1. In respect of each Relevant Metal, the Average Grade shall be the metal content of that Relevant Metal expressed as a percentage per dry metric ton of mineral-bearing ore in a Shipment.
2. The metal content of each Relevant Metal shall be determined based on samples of the mineral-bearing ore collected at the Valuation Point in accordance with the sampling and assaying procedures set out in the Standards and any Guidelines.

Explanation / Commentary

- This provides for the royalty to be calculated based on the actual (sampled) metal content of each individual Shipment based on a number of samples taken at the Valuation Point during the loading of the transport vessel. This approach approximates the reality of the operations and the likely basis on which the product will be sold on a commercial basis.
- The MIT model assumed a consistent grade / content for each metal due to the fact that, for the purposes of analysing financials, MIT used the average composition and kept this constant. However, in practice the Contractors would need to measure actual composition for reporting and royalty calculations.
- One delegation has proposed removing the reference to Guidelines.
- I consider that while most matters could be included in Standards, there is a role for Guidelines. Guidelines can be more easily changed than Standards, and therefore can be kept current with industry practice, to ensure that the Authority is applying best practice and most current industry practice. They may also be useful for matters such as worked examples.
- I consider that the original text proposal, which would require the Authority to consider the Guidelines, would make consideration of the Guidelines (and therefore compliance with the Guidelines), binding.

3. Calculation of Average Listed Price

The Average Listed Price for a Relevant Metal shall be the Listed Price for the Relevant Metal for the month during which loading of that Shipment commenced.

Explanation and comments

This calculates the royalty based on the market price applicable to each individual Shipment and avoids averaging market pricing across periods or Shipments. In calculating the price for each Shipment, it is preliminarily proposed that the average price is reported for that month (or some other period, if the OEWG agrees), on the basis that this approach is similar to that used in the pricing of bulk commodities in commercial contracts (i.e. the 'quotational period').

The model uses a single price over a 12-month period because future price forecasts don't exist on a more granular basis; and it should be noted that the model makes no reference to the time periods for calculating royalties in practice. MIT's modelling has demonstrated that more accuracy (with respect to reflect actual market prices) is achieved by not averaging prices over long periods of time.

4. Calculation of Relevant Metal Value and Aggregate Relevant Metal Value

1. The value of the mineral-bearing ore for a royalty return period shall be the Aggregate Relevant Metal Value for that period.
2. The Aggregate Relevant Metal Value for a royalty return period shall be the aggregate of the Relevant Metal Values for each of the Relevant Metals for that period.
3. The Relevant Metal Value for each Relevant Metal during the royalty return period shall be calculated as follows:
 - (a) For each Shipment:

Quantity x Average Grade of the Relevant Metal x Average Listed Price for the Relevant Metal
 - (b) For the royalty return period:

the aggregate of the Relevant Metal Values for each Shipment [which commenced loading] in the royalty return period

Where:

- (i) Quantity means the quantity (in dry metric tons) of the mineral-bearing ore in each Shipment [which commenced loading] in a royalty return period and calculated in the light of the applicable Guidelines.
- (ii) Average Grade is calculated in accordance with this Standard and in the light of the applicable Guidelines.
- (iii) Average Listed Price is calculated in accordance with this Standard and in the light of the applicable Guidelines.

5. Determination of the Applicable Royalty Rate

The Applicable Royalty Rate shall be:

~~Two-stage variable ad valorem~~

1. For the First Period of Commercial Production, [~~2-3~~ %]; and

[1alt For the First Period of Commercial Production, [12%]; and]

2. For the Second Period of Commercial Production, a rate no less than [~~5~~-7.5 %] and no greater than [~~9~~-12.5 %] determined by reference to the table below and the Notional Relevant Metal Value:

[2alt For the Second Period of Commercial Production, a rate no less than [12%] and no greater than [25%] determined by reference to the table below and the Notional Relevant Metal Value:]

Where:

- (a) Notional Relevant Metal Value means the [average Aggregate Relevant Metal Value per dry metric ton across all Shipments during the royalty return period].
- (b) The [average Aggregate Relevant Metal Value per dry metric ton across all Shipments during the royalty return period] shall be calculated by dividing the Aggregate Relevant Metal Value for that royalty return period by the total Quantity shipped during that royalty return period.

Notional Relevant Metal Value [(as may be adjusted in accordance with the <i>Standards and Guidelines</i>)]	Applicable Royalty Rate for Second Period of Commercial Production
Less than [US\$850] [<u>US\$ 510</u>] per dry metric ton ($x < [\del{US\$850/t}] [\u{US\$ 510/t}]$)	[5 -7.5 %] [alt [12%]]
Greater than or equal to [US\$850] [<u>US\$ 510</u>] per dry metric ton but less than [US\$925] [<u>US\$ 580</u>] per dry metric ton ($[\del{US\$850/t}] [\u{US\$10 X/t}] \leq x < [\del{US\$925/t}] [\u{US\$ 580/t}]$)	[6 -8.75 %] [alt [15.3%]]
Greater than or equal to [US\$925] [<u>US\$ 580</u>] per dry metric ton but less than [US\$1,000] [<u>US\$ 650</u>] per dry metric ton ($[\del{US\$925/t}] [\u{US\$ 580/t}] \leq x < [\del{US\$1,000/t}] [\u{US\$ 650/t}]$)	[7 -10 %] [alt [18.5%]]
Greater than or equal to [US\$1,000] [<u>US\$ 650</u>] per dry metric ton and less than [US\$1,075] [<u>US\$ 720</u>] per dry metric ton ($[\del{US\$1,000/t}] [\u{US\$ 650/t}] \leq x < [\del{US\$1,075/t}] [\u{US\$ 720/t}]$)	[8 -11.25 %] [alt [21.8%]]
Greater than or equal to [US\$1,075] [<u>US\$ 720</u>] per dry metric ton ($[\del{US\$1,075/t}] [\u{US\$ 720/t}] \leq x$)	[9 -12.5 %] [alt [25%]]

Explanation / Comment

- The applicable rates and thresholds provided are placeholders and I invite further discussion on this issue.
- The new proposed rates and thresholds reflect the new work done by MIT in the updated model, noting however that the rates and thresholds need to be considered alongside other proposals which still require further discussion, including that relating to an additional royalty as proposed in the OEWG and in two submissions received from delegations.
- In particular, one delegation proposed changes to the rates and the proposal to move to a one-stage rather than two-stage model. The alternative text rates reflected here are based on that submission, which notably referenced an EMM price for the manganese component, and also proposed an additional royalty. The proposed alternative rates should be considered in that context.
- The drafting here provides for the variable rate to be set based on the average market price per DMT for all Shipments during the 6-month royalty return period. Although the MIT model uses an annual price so that the rate is constant over the year and does not change for each Shipment, this was because the model was not intended to address the royalty calculation periods. In practice, applying this formulation, the rate will be re-calculated every six months to reflect market prices over that period.
- Reflection should be given to the issue as to whether the Guidelines should address inflationary (or other applicable) increases to the Notional Relevant Metal Value amounts specified in the table. Alternatively, another approach may be to simply amend the table in this Standard from time to time to reflect appropriate price increases in the future.

Enclosure IV

Draft Guidelines in accordance with Regulations 65 and 95 in respect of the administration and management of royalties prescribed in Part VII

Official Listings

1. Official Listing in respect of copper means [appropriate reference to be determined].
2. Official Listing in respect of nickel means [appropriate reference to be determined].
3. Official Listing in respect of cobalt means [appropriate reference to be determined].
4. Official Listing in respect of manganese: [appropriate reference to medium-carbon ferromanganese be determined].
 - ~~(a) in respect of [electrolytic manganese metal] means [appropriate reference to be determined];~~
 - ~~(b) in respect of [low carbon ferromanganese] means [appropriate reference to be determined];~~
 - ~~(c) in respect of [medium carbon ferromanganese] means [appropriate reference to be determined]; and~~
 - ~~(d) in respect of [high carbon ferromanganese] means [appropriate reference to be determined].~~

Explanation and comments

This definition could be moved directly into the Standard if preferred. It has been included here to provide greater flexibility for future changes.

As identified in the past, manganese presents a challenge. There is currently no accepted market index price because the manganese product, form and value relative to reference prices remain highly uncertain. The new text in relation to manganese reflects the discussions of the OEWG with respect to a medium-grade manganese reference price. This also reflects the new work done by MIT in their updated modelling. I invite further discussion on this point, noting that one delegation proposed using only the electrolytic manganese price as the reference price, while another submission proposed eventually moving to a nodule ore price as opposed to a composite based on individual metals prices.

Replacement of Official Listing

If:

1. any of the indices or publications listed as an Official Listing ceases to be published or determinable for a period of [one month] and there are reasonable grounds on which to conclude that the index or publication will continue not to be published on a consistent basis in future; or
2. any of the indices or publications listed as an Official Listing does not, in the opinion of the [Council] fairly and reasonably, whether due to persistent errors or omissions, a change in its methodology or for any other reason, reflect the fair market price of the Relevant Metal,

then the [Council] may determine a replacement Official Listing for the Relevant Metal, which shall be:

- (a) the price for the Relevant Metal quoted on a recognized international mineral

exchange or market;

- (b) the published price for the Relevant Metal in a publication recognized for quoting or publishing prices of metals in an international market; or
- (c) based on recommendations of the Commission [and following consultation with Contractors], a formula determined by the Council.

Worked example of royalty calculation

The following provides a worked example of the calculation of the royalty in accordance with regulation 64, appendix IV, the applicable Standard and these applicable Guidelines. This is for illustrative purposes only.

Explanation / Comment

- To be considered whether the worked example should be retained in the Guidelines.
- The example will need to be updated and refined as changes are made to the proposed drafting, and if required, more detail could be added. For example, it could include changes to the Average Grade rather than the consistency shown in the example below, and adjustment of Shipment sizes and frequency to more closely emulate a typical nodule mining operation.
- Pending further discussion with members, the worked example has simply been updated to reflect the rates and thresholds proposed in this text, and does not yet take account of different delegations' submissions, including on an additional royalty.

1. Calculation of royalty payable (see Appendix IV)

Applicable Royalty Rate multiplied by the Aggregate Relevant Metal Value

$$= \underline{2.3\%} \times \underline{\text{US\$1,591,760,000}} \underline{\text{US\$1,035,262,000}} = \underline{\text{US\$31,835,200}} \underline{\text{US\$31,057,860}}$$

(First Period of Commercial Production) Or

$$= \underline{8.11.25\%} \times \underline{\text{US\$1,591,760,000}} \underline{\text{US\$1,035,262,000}} = \underline{\text{US\$127,340,800}} \underline{\text{US\$116,466,975}}$$

(Second Period of Commercial Production, if two stage variable ad valorem)

2. Applicable Royalty Rate (see Standard)

If during First Period: $\underline{2.3\%}$

If during Second Period: $\underline{8.11.25\%}$ (two stage variable ad valorem)

where $\underline{8.11.25\%}$ based is on a Notional Relevant Metal Value of $\underline{\text{US\$1,061/t}}$
 $\underline{\text{US\$690/t}}$ (as per table in Standard)

Notional Relevant Metal Value

= Aggregate Relevant Metal Value / total Quantity

$$= \underline{\text{US\$1,591,760,000}}$$

$$\underline{\text{US\$1,035,262,000}} /$$

$$1,500,000\text{DMT}$$

$$= \underline{\text{US\$1,061}} \underline{\text{US\$690}} \text{ per ton}$$

3. Aggregate Relevant Metal Value (see Standard)

Aggregate Relevant Metal Value = the aggregate of the Relevant Metal Value for each Relevant Metal during the royalty return period

= Relevant Metal Value for copper + Relevant Metal Value for nickel +
 Relevant Metal Value for cobalt + Relevant Metal Value for manganese

= US\$180,400,000 + US\$469,300,000 +
 US\$185,200,000 + ~~US\$756,860,000~~
US\$200,362,000

= ~~US\$1,591,760,000~~
US\$1,035,262,000

Relevant Metal Value for Copper:

1. For each Shipment of copper:

Quantity x Average Grade of the Relevant Metal x Average Listed Price for the Relevant Metal

2. For the royalty return period:

the aggregate of the Relevant Metal Values for each Shipment which commenced loading in
 the royalty return period

3. Therefore, assuming 3 Shipments:

	Quantity (DMT)	Average Grade (%)	Average Listed Price (US\$/t)	Relevant Metal Value (US\$)
Shipment 1	450000	1.10%	9500	47025000
Shipment 2	500000	1.10%	10500	57750000
Shipment 3	550000	1.10%	12500	75625000
Aggregate for royalty return period				180400000

Relevant Metal Value for Nickel:

1. For each Shipment of nickel:

Quantity x Average Grade of the Relevant Metal x Average Listed Price for the Relevant Metal

2. For the royalty return period:

the aggregate of the Relevant Metal Values for each Shipment which commenced loading in
 the royalty return period

3. Therefore, assuming 3 Shipments:

	Quantity (DMT)	Average Grade (%)	Average Listed Price (US\$/t)	Relevant Metal Value (US\$)
Shipment 1	450000	1.30%	22000	128700000
Shipment 2	500000	1.30%	26000	169000000
Shipment 3	550000	1.30%	24000	171600000
Aggregate for royalty return period				469300000

Relevant Metal Value for Cobalt:

1. For each Shipment of cobalt:

Quantity x Average Grade of the Relevant Metal x Average Listed Price for the Relevant Metal

- For the royalty return period:

the aggregate of the Relevant Metal Values for each Shipment which commenced loading in the royalty return period

- Therefore, assuming 3 Shipments:

	Quantity (DMT)	Average Grade (%)	Average Listed Price (US\$/t)	Relevant Metal Value (US\$)
Shipment 1	450000	0.20%	55000	49500000
Shipment 2	500000	0.20%	62000	62000000
Shipment 3	550000	0.20%	67000	73700000
Aggregate for royalty return period				185200000

Relevant Metal Value for Manganese:

- For each Shipment of manganese:

Quantity x Average Grade of the Relevant Metal x Average Listed Price for the Relevant Metal

- For the royalty return period:

the aggregate of the Relevant Metal Values for each Shipment which commenced loading in the royalty return period

- Therefore, assuming 3 Shipments:

NOTE: Price based on the following:

(0.1 x EMM Price) + (0.4 x LC FeMn Price) + (0.4 x MC FeMn Price) + (0.1 x HC FeMn Price)

	Quantity (DMT)	Average Grade (%)	Average Listed Price (US\$/t)	Relevant Metal Value (US\$)
Shipment 1	450000	28.40%	1500 <u>490</u>	191700000 <u>62622000</u>
Shipment 2	500000	28.40%	2000 <u>475</u>	284000000 <u>67450000</u>
Shipment 3	550000	28.40%	1800 <u>450</u>	281160000 <u>70290000</u>
Aggregate for royalty return period				756860000 <u>200362000</u>