

Title: Transparency in the operations of the International Seabed Authority: an initial assessment

Abstract

In the governance of natural resources, transparency is widely viewed as desirable, in order to avoid ill effects including corruption and inequities in the benefits derived from the resources. This paper considers the International Seabed Authority (ISA), which is charged with managing deep seabed mining in the Area beyond national jurisdictions as part of the common heritage of humankind. The methodology of this assessment follows that of Clark et al. (2015) in their assessment of Regional Fisheries Management Organisations (RFMOs) using a battery of 34 scored questions, of which 30 were found applicable to this study. Two additional questions specific to the ISA are also considered. This assessment finds that while the ISA exhibits some good transparency practices, it generally scores much lower than the high seas fisheries management bodies. Across the three evaluation categories, concerning availability of information, participation in decision-making, and access to outcomes, the ISA's overall score was found to be 44%, as compared to 77% for the RFMOs. The current practices of RFMOs may therefore serve as examples of how specific operations of the ISA could be improved. It is suggested that the ISA needs to develop concrete policies concerning transparency, including: to presume that information is non-confidential unless otherwise determined; to make mining contracts publicly available; to allow observer access to pre-determined portions of the Legal and Technical Commission, and Finance Committee meetings; and, to publish annual reports of the Contractors' activities, including compliance in seabed exploration and exploitation operations and their associated environmental impacts.

Keywords

Transparency, International Seabed Authority, deep-sea mining, seabed mining, RFMO, common heritage of mankind

1. Introduction

Transparency is widely recognised as a necessary component of good governance, in state governments as well as international institutions.^{1,2,3} The link between (non-) transparency and corruption is seen as an ongoing issue, and forms the core research of well-established non-governmental organisations, including Transparency International,⁴ the Natural Resources Governance Institute,⁵ and the U4 Anti-Corruption Resource Centre.⁶ In the extractive resource industries in particular, transparency is emphasised with regard to improving governance ills.⁷ In the concluding chapter of the comprehensive multi-authored book, *Escaping the Resource Curse*, the editors highlight the recurring importance of transparency as an “important step to resolving the multiple problems emanating from oil and gas holdings.”⁸ As a first step, transparency is seen as a necessary (but alone insufficient⁹) condition toward achieving political, fiscal, and environmental accountability in natural resource governance.¹⁰ Naturally, many other factors, especially strong institutions, will play a role in the good governance of natural resources.¹¹ However, without transparency, the details concerning allocation of national natural resources to private operators, ensuing environmental impacts, and regulatory compliance, will remain unknown and those responsible unaccountable.

In what is known as the Area beyond national jurisdictions under the United Nations Convention on the Law of the Sea (UNCLOS), all rights in the resources are vested in humankind as a whole, on whose behalf the International Seabed Authority (ISA) acts.¹² Financial and other economic benefits derived from activities in the Area, including deep-seabed mineral mining (DSM mining), shall be shared equitably by the ISA,¹³ again for the benefit of humankind.¹⁴

The ISA came into existence in 1994, upon the entry into force of UNCLOS, and became fully operational as an autonomous international organisation in 1996. UNCLOS (article 154) requires the ISA Assembly to undertake every five years “a general and systematic review of the manner in which the international regime of the Area established in this Convention has operated in practice.” Despite this requirement, the first ISA review has only just begun, in part because DSM mining as a commercially viable industry has been much slower to develop than was anticipated at the time that UNCLOS was negotiated. An interim report commissioned to independent consultants is expected for consideration by the ISA Assembly at its twenty-second session in July 2016 with the final report due in 2017.¹⁵

As tracked by Ardron et al. (2014), transparency as a principle of governance began to enter into the general discussions of international marine management organisations (mainly fisheries bodies) starting in the mid- to late 1990s.¹⁶ In the case of fisheries, the Food and Agricultural Organization of the United Nations voluntary *Code of Conduct for Responsible Fisheries* was finalised in 1995, and says that, “States and subregional or regional fisheries management organizations and arrangements should ensure transparency in the mechanisms for fisheries management and in the related decision-making process.”¹⁷ Similar language is included in the binding 1995 United Nations Fish Stocks Agreement, which says that, “States shall provide for transparency in the decision-making process and other activities of subregional and regional fisheries management organizations and arrangements,”¹⁸ which is reiterated in subsequent UN General Assembly Resolutions.¹⁹ For DSM mining, however, there have not

42 been similar international drivers towards transparency. After reviewing ISA Assembly
43 documents (available from 2000 to 2013), Ardron et al. (2014) note that the ISA, “seldom or
44 never mentioned transparency...”²⁰ Of the 14 fourteen global and regional marine treaty bodies
45 examined in that study, the ISA reportedly discussed transparency least of all.

46 In this paper, the ISA’s practices are for the first time assessed for their transparency, and are
47 compared with the high seas fisheries sector also operating in areas beyond national
48 jurisdictions. In the past decade, high seas fisheries management bodies have come under
49 increasing scrutiny and criticism from civil society,²¹ as well as academics,²² which has arguably
50 played a role in their reform, albeit with many issues still outstanding.²³ This assessment of the
51 ISA, it is hoped, will inform the work of the ongoing ISA review, as well as the development of
52 its exploitation regulations. The improved policies of the high sea fisheries bodies can provide
53 examples to the ISA of where changes may be feasible, or in some cases necessary, while being
54 aligned with international good practices.

55

56 **2. Methods**

57 The assessment follows, as far as possible, the questions and scoring system laid out by Clark et
58 al. (2015), which were used to examine basic elements of transparency in the operations of
59 regional fisheries management organisationsⁱ (RFMOs).²⁴ Although no assessment of
60 transparency across RFMOs had been performed before, there were other RFMO assessments
61 which included elements of transparency, from which the authors drew inspiration for many of
62 their questions. As described in their paper, these included mainly, Lodge et al. (2007),²⁵ Cullis-
63 Suzuki and Pauly (2010),²⁶ and Gilman and Kingma (2013).²⁷ Reflecting the three pillars of the
64 Aarhus Convention on Access to Information, Public Participation in Decision-Making and
65 Access to Justice in Environmental Matters,²⁸ the authors divided their questions into three
66 broad categories, which will be followed here: i) availability of data and basic information; ii)
67 public participation in decision-making; and iii) access to outcomes and justice. The questions
68 were revised several times as their analysis progressed and new information came available.
69 The scoring system they developed deducts points (negative scores) in some cases, as can be
70 seen, for example, in questions (Q) 1 and 2 in Table 1, in the next section. Points are deducted
71 when the organisation does not adhere to what the authors, based on their literature review,
72 viewed as established best practices, which in the case of Q 1 & 2 mean having a website and
73 posting on it general contact information.

74 Of the 34 questions posed in the Clark et al. (2015) study, four are deemed not applicable to
75 the ISA in its current stage of development, and are noted below. Two new questions were
76 created to address other issues relevant to the ISA.

ⁱ The study also included the International Whaling Commission (IWC) and the Commission for the Conservation of Antarctic Marine Living resources (CCAMLR); however for simplicity of language, this paper will refer to them all as RFMOs.

77 Unless otherwise noted, the resultant scores are derived from reviewing the ISA web site,²⁹ the
 78 operational rules of the ISA bodies,³⁰ the ISA Mining Code³¹ (henceforth to be used as a
 79 shorthand for the collective body of regulations already in place, concerning mineral
 80 exploration), as well as UNCLOS and its 1994 Implementing Agreement.³² Following the
 81 methods of Clark et al. (2015), the ISA secretariat was contacted for a factual review, and to
 82 answer specific questions not found on the web site. Unlike the Clark et al. (2015) study, which
 83 looked at 11 organisations, this study considers only one, and thus further explores the
 84 rationale behind the scores assigned to the questions as well as producing recommendations
 85 specific to the ISA.

86

87 3. Results

88 3.1 Availability of data and basic information

89 The questions in this section can be sub-divided into two sub-themes: access to general
 90 information (Table 1, Q 1-4), and access to data (Table 1, Q 5-9, excluding 6). The ISA, like many
 91 RFMOs, received full marks on access to general information. However, regarding access to
 92 data, the ISA received only three out of a possible eight points, on par with the lowest-scoring
 93 RFMO.

94 Though the ISA does provide up-to-date maps of the contracted exploration areas (Table 1, Q 5
 95 & 8), its 'Central Data Repository' does not contain any data from contractors.ⁱⁱ The data
 96 contained the repository come in 169 separate spreadsheets from historical scientific cruises,
 97 some of which contain just a few records (e.g. file LONSPF8007 has just three data), without
 98 metadata concerning sampling methods, contact information, or any references to papers or
 99 reports that explain the data. The most recent cruise dataset is from 1998. Thus, for Q 8 (are
 100 the data up to date?) a score of 1 was given, reflecting that average of 2 out of 2 for the maps,
 101 but 0 out of 2 for the scientific data.

102

Table 1: Questions 1-9, concerning availability of data and basic information

Questions (from Clark et al. 2015)	RFMO range	Mean RFMO score	ISA score
1. Does the organization have a web site? (No = -1; yes, but it is incomplete or difficult to navigate = 0; yes and it is easy to use / fully operational = 1)	All 1	1	1
2. Does it list the staff members and contact information for the Secretariat? (No= -1; Yes=0)	-1 to 0	-0.1	0
3. Does the organization list its members, cooperating non-	All 1	1	1

ⁱⁱ For the month of January 2016, the ISA data portal web site was down. The author does not know whether this is a common occurrence.

members, and/or observers? (Members and cooperating non-members/observer states, IGOs & NGOs = 1)			
4. Is there public online access to current regulations including conservation measures? (No= -1; yes but disorganized/not in one location= 0; yes and easy to find= 1)	0 to 1	0.9	1
5. Are summary data available publicly on the internet? (Y=1)	0 to 1	0.9	1
6. Is there an observer data collection/monitoring program for most fisheries? (Y=1, N=-1)	-1 to 1	0.5	na⁺
7. Are scientific / observer data available at a resolution/scale such that they can be used in independent scientific analyses? (Full resolution data available on web=5; general resolution available on the web=2; some incomplete data on the web= 1; secretariat will provide research-quality data upon request=+2)	1 to 4	2.1	1
8. Are the data up to date? (2012 or older=0, 2013=1, 2014 or later=2; if summary data differs from downloadable data, use average score of the two)*	0.5 to 2	1.5	1[*]
9. Do the data come with metadata and/or description of their origins and collection methods? (Y=1)	0 to 1	0.8	0[*]
Sub-total (excluding Q 6) out of a possible range of to -3 to 12	7 to 11	8.1	6

Strikethrough text indicates a question that was deemed not applicable to this study. [#]To account for the intervening time since the Clark et al. (2015) study, two years were added to the scores in question 8. ⁺na = not applicable. ^{*}See text for explanation. NGO = non-governmental organisation; IGO = inter-governmental organisation.

103

104 **3.2 Participation in decision-making**

105 In this section, the questions largely focus on the ability of non-governmental organisations
106 (NGOs) to observe and participate in meetings (Table 2, Q 10-15; 20-21), as well as information
107 about the meetings themselves (Table 2, Q 16-19). Note that although the ISA rules sometimes
108 use the word “public”, general public access to meetings is not meant; rather, it is presumed
109 that any observer will be associated with an accredited NGO or IGO (inter-governmental
110 organisation).³³ Indeed, the questions in Table 2 reflect this presumption, as it is also the case
111 for RFMOs.

112 The ISA received 2.5 out of a possible 4 on the first five questions in this section (Table 2, Q 10 –
113 14), falling short of a maximum score because a minority of Parties (i.e. States) can block an
114 observer’s application from being accepted, and because it was not clear how NGOs should
115 apply for observer status. (Although not immediately obvious, the application letters from
116 other NGOs can be found in the Assembly meeting documents.) However, the ISA score
117 dropped further in the latter half of this section when it came to questions of which meetings
118 were open to observers, how they may participate, and what information from meetings is
119 available to the public.

120 Meetings of the Assembly and Council are open to observers unless otherwise specified,³⁴ but
 121 meetings of the Legal and Technical Commission (LTC) and the Finance Committee are not.³⁵
 122 The wording of Q 15 (Table 2) does not quite capture the nuances of how NGOs may participate
 123 in the ISA. Only when invited by the Chair and approved by the Assembly, may they may make
 124 an intervention in Assembly.³⁶ In Council they may only participate upon the Council’s invitation
 125 and only “on questions affecting them or within the scope of their activities.”³⁷ Therefore, half
 126 points were awarded for this part of Q 15. Unlike governmental and inter-governmental
 127 observers, written statements produced by non-governmental observers will not be translated
 128 into all official languages, and it is up to the NGO observers to make enough copies for the
 129 meeting.³⁸ Therefore half points for this part of Q 15 were awarded. To date, NGO observers
 130 have not been allowed to serve on sub-committees, and thus no points were given for this part
 131 of Q 15.

132 All ISA meeting summary reports are available on its website. However, these reports do not
 133 include attributed statements, do not provide information on the nature of the discussions, nor
 134 the various positions that were put forward. For official LTC documents, documents with an L.
 135 (limited) or R. (restricted) symbol are confidential. Other official documents of the LTC can be
 136 seen on the website. However, all contractor annual reports and contract applications
 137 submitted to the LTC are treated as confidential (R. or L. designations).³⁹ The LTC summary
 138 reports to Council, which are meant to support their recommendations (e.g. to approve an
 139 application from a State / contractor), do not detail the rationale behind their
 140 recommendations. Therefore, while full points were given for Assembly and Council documents
 141 (1 point total) and for an historical time series (1 point), a half score was given for the LTC’s
 142 reporting, adding up to 2.5 in Q 17.

143 Acceptance of observers to the ISA is by consensus, and therefore a minority of Parties can
 144 potentially block an observer’s application from being accepted. However, the ISA has to date
 145 been welcoming to observers, and has never turned any away. Therefore, while technically a
 146 score of -1 could have been applied to Q 14, it was increased by half a point (-0.5), based on the
 147 precedent set by its practices to date.

148

Table 2: Questions 10-21, concerning participation in decision-making

Questions (from Clark et al. 2015)	RFMO range	Mean RFMO score	ISA score
10. Does the organization allow for non-governmental observers? (N= -1, Y=3)	All 3	3	3
11. Is a procedural description/required forms of how to become an observer available on the website? (Y=1)	0 to 1	0.9	0
12. Are the criteria exclusive/stringent (Only allowing a few organizations)? (Y= -1)	All 0	0	0
13. Does it take longer than a year to receive observer status? (Y = -1)	All 0	0	0

14. Can a minority of parties prevent a NGO from obtaining observer status? (Y= -1)	-1 to 0	-0.5	-0.5*
15. How may NGO observers participate? (Can make presentations/comments= +0.5, Allowed to author/co-author meeting documents= +0.5, Can serve on sub-committees, working groups, panels etc.= +1)	0.5 to 2	1.2	0.5*
16. Does the organisation publish a schedule of upcoming meetings? (Yes= 1)	All 1	1	1
17. Are meeting reports available to the public? (General Assembly/Council= +1, Scientific/technical/environmental = +1, both historic and current documents are available= +1, Meeting documents are available= +1. For compliance committee docs, see III.2)	1 to 4	3.2	2.5*
18. Does the organization include an attendance list in meeting documents? (Y= 1)	All 1	1	0.5⁺
19. Are there attributed statements in meeting documents? (Y= 1)	0 to 1	0.9	0
20. Which meetings are open to observers? (General Assembly/Council= 1, Scientific/technical/environmental= +1, Compliance= +1)	1 to 3	2.6	1
21. Are observers ever asked to leave meetings? (never to seldom=1, occasionally=0, more than occasionally=-1)	All 1	1	1
Sub-total out of a possible range of -5 to 17	12.5 to 17	14.5	9.0

Strikethrough text indicates a question that was deemed not applicable to this study. ⁺Q 18: Attendance is recorded only for the Assembly. ⁺na = not applicable. *See text for explanation.

149

150 **3.3 Access to outcomes**

151 This last section has four sub-themes: reporting on objectives, organisational performance,
152 compliance, and dispute resolution. For a number of the questions, the ISA received partial
153 scores, as will be explained below. The first three questions in Table 3 assume that natural
154 resource exploitation is being actively managed; however in the case of the ISA, the
155 Exploitation Code (Mining Code) is not yet established. Nevertheless, these questions were still
156 considered because it is necessary to good governance of the seabed that the ISA have a sense
157 of what its exploitation and conservation objectives are, and how these can be measured,
158 reported upon, and balanced, before mineral exploitation begins. Since 2010, exploration
159 contracts approved by the ISA have more than trebled, from 8 to 27. Notwithstanding this
160 noticeable increase in mining interest, there has been to date no reporting on the state of the
161 mineral resources and the environment (Table 3, Q 24), nor any baseline environmental
162 analyses, nor any summaries of annual contractor activities.

163 As discussed above, UNCLOS (article 154) stipulates a performance review every five years after
164 its entry into force, and yet 22 years have passed (20 years since ISA began its operations)

165 before the first ISA performance review is planned to begin. The responses to Q 25 to 29 need
 166 to be read in this light. Whilst the ISA is currently beginning a review, the body is much more
 167 than ten years old (the cut-off for this question), and hence a score of -0.5 was applied to Q 25
 168 (Table 3). While most other ISA reports have been made public, and indeed it will be difficult for
 169 Assembly to discuss it otherwise, it was decided that a point to this question could not be
 170 assigned before the fact, and it was removed from the analysis (Table 3, Q 26). Furthermore, it
 171 is hard to predict what Council and the Assembly will do with it, and hence Q 28 (Table 3) was
 172 also deemed not applicable, at this time. The review is being carried out by external
 173 independent consultants, but the Review Committee itself is made up of the ISA President and
 174 Bureau of the Assembly, and hence a score of 1 out of 2 was applied to Q 29 (Table 3)
 175 concerning the make-up of the review committee and its independence.

176 Although compliance is normally associated with resource exploitation, there are also
 177 requirements for contractors with exploration contracts, including the requirement to submit
 178 an annual report on their progress, technical and scientific findings.⁴⁰ However, to date these
 179 reports have been kept confidential. Furthermore, the ISA has not reported whether the
 180 contractors have been in compliance with their contractual obligations. The ISA does, however,
 181 keep track of States that have passed national mining legislation, which earned it one point for
 182 Q 31.⁴¹ Because only exploration is occurring, the equivalent of fisheries “monitoring, control,
 183 and surveillance” does not yet fully exist in the ISA, and hence Q 32 was deemed not applicable.

184

Table 3: Questions 22-34, concerning access to outcomes and justice

Questions (from Clark et al. 2015)	RFMO range	Mean RFMO score	ISA score
22. Does the organisation publicly identify its objectives? (Yes= 1)	All 1	1	0.5*
23. Does the organisation have publicly available quantitative indicators against which its outcomes can be assessed (e.g. "targets")? (Yes= 1)	0 to 1	0.5	0
24. Does the organization produce regular reports on the state of the resource/environment over time (e.g. OSPAR's Quality Status Report) and/or the organization's progress towards meeting its objectives? (Reports on some aspects of the state of the resource/environment (e.g. specific stock status) = 1, Comprehensive (e.g. including by-catch reduction, etc.) = +1, Qualitative reporting against objectives = +1, Quantitative reporting against indicators = +1)	1 to 4	2.7	0.5*
25. Has the organization undergone a performance review? (Yes = 1, none = 0, none and the org is more than 10 years old = -1)	0 to 1	0.8	-0.5*

26. Are the findings of the performance review(s) publicly available online? (Y = 1)	0 to 1	0.8	na**
27. Has the organization agreed to a regular schedule of performance reviews? (Y = 1)	0 to 1	0.8	0.5*
28. Has the organization responded to the performance review? (Y=1)	0 to 1	0.5	na ⁺
29. Are there some independent evaluators involved in the performance review? (Yes= 1; majority independent = +1)	0 to 2	1.6	1*
30. Are compliance reports publicly available? (Summary=1, detailed report = 2)	1 to 2	1.7	0
31. Are there lists of compliance measures taken by parties and/or lists of infractions (e.g. national implementing legislation, “white” and/or “black” lists, lists of vessels under investigation, successful prosecutions, etc.)? (One point per list, up to 2 points.)	1 to 2	1.6	1
32. What are the MCS [monitoring, control, and surveillance] requirements on Contracting Parties / Flag States? (No requirements = -1, voluntary reporting = 0, mandatory reporting = 1, independent verification of reporting = +1)	1 to 2	1.1	na ⁺
33. Is dispute resolution covered in the Rules of Procedure or Convention text? (Y= 1, N= -1)	-1 to 1	0.7	1
34. Should disputes occur, are records of disputes and their outcomes available? (Not available= -1, Upon request from Secretariat= 0, Available on website= 1)	0 to 1	0.5	1
Sub-total out (excluding Q 26, 28, 32) of a possible range of -2 to 16	12 to 16 [#]	11.9 [#]	5.0
<u>GRAND TOTAL</u> out of a possible range of -10 to 45	32 to 38	34.7 (77%) [#]	20.0 (44%)

Strikethrough text indicates a question that was deemed not applicable to this study. ⁺na = not applicable. [#]Range and mean for this section and the grand total exclude one new RFMO (SPRFMO) which was still establishing its rules and procedures. ⁺na = not applicable. *See text for explanation.

185

186 3.4 Two supplementary questions

187 While belonging to the broad constellation of international maritime organisations charged
188 with managing resources and protecting the environment,⁴² the ISA has some powers and
189 obligations that set it apart, notably that: 1) it may, and has, entered into commercial contracts
190 with its States Parties; and, 2) it is required to equitably share financial and other economic
191 benefits derived from the activities undertaken in the Area.⁴³ The two new questions in Table 4
192 begin to address these unique attributes.

193 ISA exploration contracts are currently not publicly available in either full or summary form.
 194 While it is known that the Mining Code (as it existed the time of signing) is attached as part of
 195 these contracts, what is not revealed are the plans of work of the contractors, including
 196 planned environmental studies; and, the financial commitments of contractors. As noted
 197 above, annual contractor progress reports are also treated as confidential, available only to the
 198 Secretariat and LTC, but not available to Council, Assembly, or the public. Without this
 199 information, it is impossible to assess whether contractors have been meeting their obligations.
 200 Thus, S1 was assigned a score of zero.

201 A benefit-sharing mechanism has not yet been established by the ISA, and hence it is not
 202 possible to judge its transparency. However, the practices and policies of the ISA with regard to
 203 its other finances –i.e. its current fiscal transparency– can be taken as an indication of what
 204 might be expected in the future, should the status quo remain. The Finance Committee of the
 205 ISA historically published few meeting documents (typically about four a year), and none with
 206 specific financial information. However, 2015 was very different with more meeting documents
 207 (nine) published, including the proposed 2015 budget (albeit as an annex to another document
 208 with another name⁴⁴), as well as financial information on its Endowment Fund.⁴⁵ Nevertheless,
 209 the ISA audited statement, while on the agenda, is still not to be found in the published
 210 documents of the Finance Committee. Available records show Council and Assembly regularly
 211 urging States Parties to pay outstanding fees, but actual figures are not published. A score of
 212 0.5 was assigned to S2, mainly due to the increased number of Finance Committee documents
 213 available in 2015, some of which contain some financial information.

214 Overall, in this new section, the ISA scored 0.5 out of a possible total of 4.

215

Table 4: Supplementary questions S1 & S2, concerning contracts and finances

Questions	RFMO range	Mean RFMO score	ISA score
S1. Are ISA contracts publicly available? (0= not at all; 1 = some portions; 2= mostly or entirely.)	na	na	0
S2. Does the ISA publish its financial transactions, including monies received from contractual fees, resources rents and taxes; monies spent, invested, or shared; as well as outstanding debts and arrears? (0 = not at all; 1 = some portions; 2 = mostly or entirely.)	na	na	0.5
Sub-total out of a possible range of 0 to 4	na	na	0.5
na = not applicable.			

216

217 **4. Discussion**

218 Transparency has come to be seen as a keystone in the good governance of natural resources
219 on land, and increasingly so in the sea as well. While there are several legal, policy, and
220 operational distinctions between high seas fisheries management and the regulation of DSM
221 mining in the Area, none of these should affect the overall degree of transparency in their
222 respective operations. Indeed, there are legal obligations unique to the Area, and bio-physical
223 conditions particular to the deep-sea environment, which may suggest that for DSM mining
224 management there is a justifiable expectation for greater transparency than for fisheries. In
225 areas beyond national jurisdiction, fishing is articulated as one of seven high seas freedoms,⁴⁶
226 though not an unfettered one.⁴⁷ As noted in the introduction, there is still an obligation for
227 RFMOs to report and to share information and data. Although States may exploit the natural
228 resources of the seabed beyond national jurisdiction, deep-sea mining is not articulated as a
229 freedom; rather, article 136 of UNCLOS states that the Area and its resources are the “common
230 heritage of mankind”, and in article 140, activities must be carried out “for the benefit of
231 mankind as a whole”. This unique wording, found nowhere else in UNCLOS, would suggest that
232 DSM mining is seen as a special situation that should presumably proceed carefully and in the
233 best interests of humanity. This unique legal situation strongly suggests governance practices
234 which enhance the public’s access to information, meetings, and outcomes. Further, while
235 fisheries resources are, if managed properly, renewable, deep-seabed minerals are not being
236 replenished on a human time scale, notwithstanding the geologically rapid growth of SMS
237 deposits. Additionally, the deep-sea marine environment is poorly studied, but what little is
238 known suggests that some deep-sea organisms and ecology could be particularly vulnerable to
239 disturbance. Consequently, concerned scientists have repeatedly called for greater protections
240 from DSM mining.^{48,49,50} This all suggests that the management of DSM mining should have at
241 least as much, if not greater, transparency than in fisheries.

242 However, the ISA scored noticeably lower than the lowest regional fisheries management
243 organisation. With the two new ISA-specific questions added, the ISA overall score is 42%. For
244 just the 30 Clark et al. (2015) questions considered, the ISA receives an overall score of 44%.
245 The RFMO scores, with the “not applicable” questions removed (and one new RFMO excluded),
246 ranged from 71% to 84% with a mean value of 77% (Figure 1). For each of the three sections,
247 the ISA sub-total is also lower than the lowest RFMO for that section. The ISA scores exceed the
248 RFMO average on just four of the 30 questions (Q 2, 4, 5, 34). Never does the ISA score for a
249 question exceed that of the highest RFMO score. For all questions, but one, at least one RFMO
250 received a full score, and as the mean values indicate, often several scored quite highly. For the
251 one question that was not fully met (Q 7: Are scientific / observer data available at a
252 resolution/scale such that they can be used in independent scientific analyses?), the highest
253 RFMO score was 4 out of 5; whereas the ISA scored 1.

254

255 [insert Figure 1 about here]

256

257 The ISA received two partial negative scores of -0.5 (Q 14, 25), concerning the ability of one or
258 more Parties to block an observer’s application, and the considerable delay before the ISA
259 embarked on its performance review.

260 The above assessment covers basic procedures concerning transparency. That all but one
261 question had been fully met by at least one RFMO, suggests that these questions are aligned
262 with current RFMO good practices, and are readily achievable. As Clark et al. (2015) note,
263 RFMOs have come under repeated criticism for being not transparent enough, and thus for
264 their initial analysis the standard was set rather low, to test for “very basic elements of
265 transparency” (p 164). It is therefore all the more striking that applying these basic and general
266 criteria, the ISA received just under half of the possible points, 29 percentage points less than
267 the lowest scoring RFMO and 43 percent less than the highest.ⁱⁱⁱ

268 As suggested above, some of the lower scores can probably be explained by the ISA still
269 readying itself for commercial DSM mining. However, over its 20 years of operations, it has
270 developed core rules, procedures, and operations. The rules of procedure for the LTC include
271 five clauses on confidentiality, including a written oath that members must sign (rule 11.2).⁵¹
272 Likewise the mining code devotes several clauses to confidentiality. There are no rules
273 regarding access to information in any of the ISA’s procedures. Nevertheless, UNCLOS (Annex 3,
274 article 14) stipulates that environmental and safety related data shall not be considered
275 proprietary, and this one transparency stipulation is reflected in the ISA Mining Code:

276 “Data and information that is [sic] necessary for the formulation by the Authority of
277 rules, regulations and procedures concerning protection and preservation of the marine
278 environment and safety, other than proprietary equipment design data, shall not be
279 deemed confidential”.^{52,53,54}

280 Yet, no environmental (or safety) data provided by contractors have to date been made publicly
281 available. In a 2014 ISA-contracted review, the state of the ISA database, which contains older
282 data from scientific institutions, was roundly criticised. The review noted, *inter alia* that “The
283 database was last updated in 2008, and the most recent data set in the cruise section is a cruise
284 that took place in 1998. It does not offer access to any data from any contractor. The reason for
285 this is not clear.”⁵⁵

286 It should also be noted that the ISA does not have procedures to determine confidentiality.
287 Neither the ISA Secretariat nor the LTC have taken on the role of determining whether data and
288 documents marked as confidential by contractors are indeed so. Rather, its existing internal
289 guidance appears to leave that critical role with the contractor; that is, if a contractor deems
290 information sensitive or confidential, then it is treated that way.⁵⁶

291 Overall, the ISA’s standing in participation in decision-making is 5.5 points lower (9.0) than the
292 lowest RFMO score (14.5 out of a possible 17. In the Clark et al. (2015) study, five RFMOs

ⁱⁱⁱ Adding questions relevant to the ISA lowered the score further. This phenomenon was noted in Clark et al. when looking at studies specific to a single RFMO, where again the scores were lower, due to the ability of the questioners to probe issues specific to the organisation.

293 achieved more than 90% of the possible points in this section, with one achieving 100%, as
294 compared to the ISA's score of 56%.

295 Regarding access to outcomes, as in the other sections, the ISA ended up with a notably lower
296 score than the RFMOs, achieving just 7.5 out of a possible 19 points; i.e. 37.5%, whereas low
297 ranking RFMOs achieved scores with percentages in the 60s and two high ranking ones
298 achieved over 80 percent. However it should be noted that because commercial mining (unlike
299 fisheries or whaling) has never occurred, the results to some degree reflect the ISA's relatively
300 less mature institutional structures for reporting on outcomes.

301 There are some signs that the ISA is improving the transparency of its practices. In the spring of
302 2014, it undertook its first-ever public consultation, in this case for the development of
303 exploitation regulations, which was followed up with a second consultation in 2015. (However,
304 whilst a third public consultation was expected to occur in 2016, it is currently unclear whether
305 it will proceed –indicating that transparency still elicits divided opinions within the LTC.) The
306 number of Finance Committee documents available on the ISA website has recently increased
307 from just in four available in 2013 and 2014 to nine in 2015. Therefore, while the assessment
308 results suggest that “the glass is less than half full” (44% or 42%, as explained above), there are
309 some signs that the water level is perhaps rising. In this constructive context, and in light of the
310 ongoing ISA performance review, the following section offers specific recommendations.

311

312 **5. Recommendations**

313 **5.1 Availability of data and basic information**

314 Stemming from the results of the survey as described above, this section provides some
315 recommendations. They are by no means exhaustive of mechanisms to improve access to
316 information, participation, or judicial review, but do represent a starting point.

- 317 1. Develop a comprehensive access to information policy, including *inter alia*:
- 318 a. overarching principles to be adhered to by the ISA and its contractors;
 - 319 b. the presumption of non-confidentiality unless otherwise determined;
 - 320 c. rules and procedures by which to determine confidentiality; and,
 - 321 d. procedures through which confidential data and information may be released over
322 time (embargo).

323 Given that it is already clear that environmental and safety related data cannot be deemed
324 confidential, the ISA should:

- 325 2. Make publicly available environmental and safety related data provided to it by contractors:
- 326 a. in a defined electronic format;
 - 327 b. at the spatial resolution in which they were provided;
 - 328 c. including geospatial attributes; and,
 - 329 d. metadata where they exist (including, for example, data collection methods).

330 In order to facilitate data collation and standardisation, the ISA is encouraged to continue its
331 work on data standards, and:

- 332 3. Prepare clear guidance to contractors on data standards, including:
- 333 a. acceptable defined electronic data formats;
 - 334 b. required level of detail & resolution;
 - 335 c. required attributes; and,
 - 336 d. which of the generally recognised metadata standards may be followed.

337 **5.2 Participation in decision-making**

338 Given the valuable roles that external experts, stakeholders, and the public can play,
339 particularly when the ISA must balance its mandate to protect and preserve the environment,
340 oversee the common heritage of humankind, and regulate DSM mining, it is recommended to:

- 341 4. Establish greater public participation in the ISA's meetings through:
- 342 a. providing on its website a user-friendly application form for observers;
 - 343 b. providing space in the agendas of Assembly and Council meetings for public input;
 - 344 c. allowing observers to attend pre-determined portions of Finance Committee and
345 LTC meetings;
 - 346 d. allowing observers to serve on sub-committees; and,
 - 347 e. encouraging all ISA organs, and the LTC in particular, to better engage with external
348 expertise and organisations, through requests for advice.

349 **5.3 Access to outcomes and to justice**

350 As part of the ISA transitioning to the regulation of commercial mining, it will need to clarify
351 what its desired outcomes are (commercial, environmental, benefit-sharing, etc.), and how
352 these will be measured. Therefore it is recommended that the ISA:

- 353 5. Develop objectives concerning well-regulated DSM mining, including:
- 354 a. indicators for each objective;
 - 355 b. a programme to measure these indicators; and,
 - 356 c. annual publication of the results.

357 Given that exploration and exploitation of deep-sea mineral resources are in the interest of all
358 humankind, and that contractors are already required to submit annual reports of their
359 activities, the ISA is urged to:

- 360 6. Publish annual compliance reports concerning contractors and their required activities,
361 including:
- 362 a. contractor activities in the Area;
 - 363 b. compliance with the ISA's rules and regulations;
 - 364 c. any reportable accidents, infractions, or other issues; and if so,
 - 365 d. what actions were (are being) taken to resolve the situations.

366 Given the generally recognised importance of human health and safety, and the protection and
367 preservation of the marine environment, in customary international law and in UNCLOS, as well
368 as the status of the Area as the common heritage of humankind, the ISA is advised to:

369 7. Develop “whistleblower” rules protecting those who speak out concerning issues of public
370 interest, such as human health and safety, the protection and preservation of the marine
371 environment, and financial corruption.^{iv}

372 **5.4 Contractual and financial transparency**

373 Given the special legal status of the Area, and the powers invested in the ISA, it is
374 recommended that the ISA:

375 8. Make contracts with States Parties and contractors available to the public, excluding only
376 proprietary information as determined per Recommendation 1, above.

377 9. Establish financial public reporting rules, drawing upon internationally recognised best
378 practices, including those of the Extractive Industries Transparency Initiative,⁵⁷ the Equator
379 Principles,⁵⁸ the International Finance Corporation,⁵⁹ and others as appropriate.

380 **6.0 Conclusion**

381 As the deep sea minerals exploitation regulations are being readied, and the ISA undertakes its
382 first organisational review, it is an appropriate time to pause and consider its accomplishments
383 so far. Much institutional development has been achieved. Looking to the future, however,
384 particular care will be required to ensure that decisions made now do not unduly jeopardize the
385 options of future generations to both a healthy marine environment and to the mineral wealth
386 of the deep seabed. Public access to information, decision-making, compliance reporting and
387 justice, would greatly improve the chances of the ISA achieving long-term regulatory success.

388

389 **Acknowledgements**

390 The author would like to thank the two anonymous reviewers, as well as H. Ruhl, D. Jones, N.
391 Clark, and the ISA Secretariat for their helpful comments on an earlier version of this
392 manuscript. (Remaining errors are of course the author’s alone.) This work forms part of the
393 Managing Impacts of Deep-sea reSource exploitation (MIDAS) project funded by the European
394 Union Seventh Framework Programme (FP7/2007-2013) grant agreement n° 603418.

395

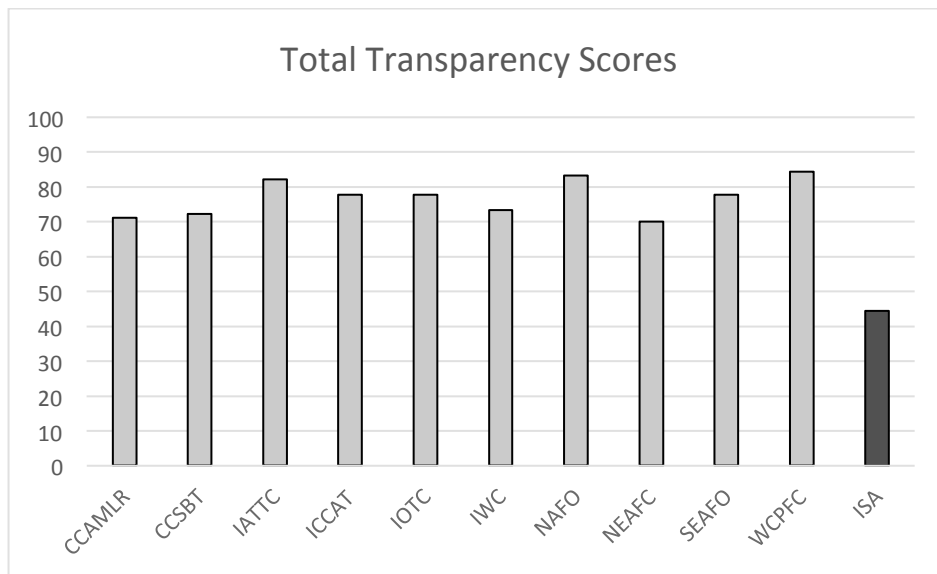
396 **Figures**

397 **Figure 1: Overall score of the ISA as compared to RFMOs.** The y axis is percentage of total
398 possible scores. The x axis acronyms are as follows: CCAMLR, Commission for the Conservation

^{iv} There are several examples of national whistleblower legislation which could serve as models; e.g. the UK’s Public Interest Disclosure Act 1998: <http://www.legislation.gov.uk/ukpga/1998/23/contents> accessed Feb. 2016.

399 of Antarctic Marine Living Resources; CCSBT, Commission for the Conservation of Southern
400 Bluefin Tuna; IATTC, Inter-American Tropical Tuna Commission; ICCAT, International
401 Commission for the Conservation of Atlantic Tunas; IOTC, Indian Ocean Tuna Commission; IWC,
402 International Whaling Commission; NAFO, Northwest Atlantic Fisheries Organizaton; NEAFC,
403 North East Atlantic Fisheries Commission; SEAFO, South East Atlantic Fisheries Organisation;
404 WCPFC, Western and Central Pacific Fisheries Commission. Because the South Pacific Regional
405 Fisheries Management Organisation (SPRFMO) was new at the time of the original Clark et al.
406 analysis, with some policies still unfinished, it was removed from their final results (though it
407 was assessed in the sub-sections).

408



409

410

-
- ¹ Nye JS. Globalization's democratic deficit: how to make international institutions more accountable. *Foreign Affairs* 2001; 80(4): 2-6.
- ² Hollyer JR, Rosendorff BP, Vreeland JR. Democracy and transparency. *Journal of Politics* 2011 ; 73(4): 1191-1205.
- ³ Ardron JA, Clark N, Seto K, Brooks C, Currie D, Gilman E. Tracking 24 years of discussions about transparency in international marine governance: where do we stand? *Stanford Environmental Law Journal* 2014; 33(2): 167-190.
- ⁴ [<http://www.transparency.org/>], accessed Jan. 2016.
- ⁵ [<http://www.resourcegovernance.org/>], accessed Feb. 2016.
- ⁶ [<http://www.u4.no>], accessed Jan. 2016.
- ⁷ Eigen P. Fighting corruption in a global economy: transparency initiatives in the oil and gas industry. *Houston Journal of International Law* 2006; 29(2): 327-354.
- ⁸ Humphreys M, Sachs J, Stiglitz J. Concluding chapter, in *Escaping the resource Curse*. New York: Columbia University Press ; 2007: 432 pp, at p. 357.
- ⁹ Stevens P, Lahn G, Kooroshy J. *The resource curse revisited*. Chatham House, the Royal Institute of International Affairs; 2015. 49 p.
- ¹⁰ Kolstad I, Wiig A. Transparency in oil rich economies. U4 Anti-Corruption resource Centre, Issue 2:2007. 27 p.
- ¹¹ Mehlum H, Moene K, Torvik R. Cursed by resources or institutions?. *The World Economy* 2006; 29(8): 1117-31.
- ¹² UNCLOS, article 137(2). Opened for signature 10 Dec 1982 and entered into force 16 Nov 1994; 1833 UNTS 397.
- ¹³ UNCLOS, article 157(1).
- ¹⁴ UNCLOS, article 140(1). On this particular matter see Bourrel M, Tiele T. *The common heritage of mankind as a means to assess and advance equity in deep sea mining*. [This issue].
- ¹⁵ Decision of the Assembly regarding the first periodic review of the international regime of the Area pursuant to article 154 of the United Nations Convention on the Law of the Sea, ISBA/21/A/9/Rev.1, 29 September 2015.
- ¹⁶ Ardron JA, et al. (2014), op. cit.
- ¹⁷ Food and Agricultural Organization of the United Nations. Code of conduct for responsible fisheries. 1995. Articles 6(13), 7(1) & (9).
- ¹⁸ United Nations, Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. UN General Assembly, Doc. A/CONF.164/37, September 8, 1995, 36 pp.
- ¹⁹ E.g. UNGA. A/RES/64/72, 4 December 2009 [Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments]. Official record 19 March 2010.
- ²⁰ Ardron JA, et al. (2014), op. cit., p 182. [<http://www.fao.org/3/a-v9878e.pdf>], accessed April 2016.
- ²¹ E.g. the extensive publications of the High Seas Alliance at: [<http://www.savethehighseas.org/publications/>], accessed Feb. 2016.
- ²² Cullis-Suzuki S, Pauly D. Failing the high seas: a global evaluation of regional fisheries management organizations. *Marine Policy* 2010; 34: 1036-1042.
- ²³ Weaver PPE, Benn A, Arana PM, Ardron JA, Bailey DM, Baker K, Billett DSM, Clark MR, Davies AJ, Durán Muñoz P, Fuller SD, Gianni M, Grehan AJ, Guinotte J, Kenny A, Koslow JA, Morato T, Penney AJ, Perez JAA, Priede IG, Rogers AD, Santos RS, Watling L. The impact of deep-sea fisheries and implementation of the UNGA Resolutions 61/105 and 64/72. Report of an international scientific workshop, National Oceanography Centre, Southampton; 2011, 45 pp. [<http://hdl.handle.net/10013/epic.37995>], accessed March 2016.
- ²⁴ Clark N, Ardron JA, Pendleton L. Evaluating the basic elements of transparency within regional fisheries management organizations. *Marine Policy* 2015; 57: 158–166.
- ²⁵ Lodge M, et al., 2007. Recommended best practices for RFMOs, Report of an Independent Panel to Develop a Model for Improved Governance by RFMOs. Chatham House, The Royal Institute for International Affairs, London, UK.

-
- ²⁶ Cullis-Suzuki S, et al. (2010), op.cit.
- ²⁷ Gilman E, Kingma E. Standard for assessing transparency in information on compliance with obligations of regional fisheries management organizations: validation through assessment of the Western and Central Pacific Fisheries Commission. *Ocean & Coastal Management* 2013; 84: 31-9.
- ²⁸ Aarhus Convention, 1998. Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. United Nations Economic Commission for Europe (UNECE). Adopted on 25 June 1998 and entered into force on 30 October 2001. UNTS registration no. I-37770.
- ²⁹ ISA website: [<https://www.isa.org.jm/>], accessed Jan. 2016.
- ³⁰ Individual rules will be referenced separately, but all rules of the ISA “organs” can be found here: [<https://www.isa.org.jm/legal-instruments>], accessed Jan. 2016.
- ³¹ Individual articles will be referenced separately, but the collected Mining Code can be found here: [<https://www.isa.org.jm/mining-code>], accessed Jan. 2016.
- ³² Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, adopted on 28 July 1994, entered into force 28 July 1996; 1836 UNTS 3.
- ³³ Rules of procedure of the Assembly of the International Seabed Authority. International Seabed Authority Basic Texts, 2nd edition. Jamaica: International Seabed Authority; 2012. Observers are covered in Section XVI, rule 82.
- ³⁴ Ibid., Assembly rule 82; see also and Council rule 39; Rules of procedure of the Council of the International Seabed Authority. International Seabed Authority Basic Texts, 2nd edition. Jamaica: International Seabed Authority; 2012.
- ³⁵ Ibid., LTC rule 6 and Finance Committee rule 31; Rules of procedure of the Legal and Technical Commission and Rules of procedure of the Finance Committee. International Seabed Authority Basic Texts, 2nd edition. Jamaica: International Seabed Authority; 2012.
- ³⁶ Ibid., Assembly rule 82(5).
- ³⁷ Ibid., Council rule 75.
- ³⁸ Ibid., Assembly rule 82(6).
- ³⁹ Ibid., LTC rules 11-13 inclusive.
- ⁴⁰ Decision of the Council of the International Seabed Authority relating to amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters, ISBA/19/C/17, 22 July 2013, Regulation 6.
- ⁴¹ ISA national legislation database: [<https://www.isa.org.jm/national-legislation-database>], accessed Jan. 2016.
- ⁴² For a comprehensive overview of these management bodies see: Ardron JA, Warner R. International marine governance and protection of biodiversity, in Smith HD, Suarez de Vivero JL, and Agardy TS (eds). *Handbook of Ocean Resources and Management*. London: Taylor & Francis/Routledge, London, UK, Chapter 4; see also, Ardron JA, Rayfuse R, Gjerde K, Warner R. The sustainable use and conservation of biodiversity in ABNJ: what can be achieved using existing international agreements?. *Marine Policy* 2014; 49: 98-108.
- ⁴³ UNCLOS, article 140(2).
- ⁴⁴ Proposal to enhance the budget presentation for the financial period 2017-2018 in the light of the International Public Sector Accounting Standards submitted by the Finance Committee, ISBA/21/FC/6, 9 June 2015.
- ⁴⁵ Status of the International Seabed Authority Endowment Fund for Marine Scientific Research in the Area and possible options for its future management and investment, ISBA/21/FC/5, 4 June 2015.
- ⁴⁶ UNCLOS, article 87.
- ⁴⁷ Brooks CM, Weller JB, Gjerde K, Sumaila R, Ardron J, Ban NC, Freestone D, Seto K, Unger S, Costa DP, Fisher K, Crowder L, Halpin P, Boustany A. Challenging the ‘right to fish’ in a fast-changing ocean. *Stanford Environmental Law Journal* 2014; 33(3): 289-324.
- ⁴⁸ Van Dover CL. Tighten regulations on deep-sea mining. *Nature (Comment)* 2011; 470:31–33.
- ⁴⁹ Barbier BB, Moreno-Mateos D, Rogers AD, Aronson J, Pendleton L, Danovaro R, Henry L, Morato T, Ardron JA, Van Dover CL. Protect the deep sea. *Nature (Comment)* 2014; 505 (7484): 475–477.
- ⁵⁰ Wedding LM, Reiter SM, Smith CR, et al. Managing mining of the deep seabed. *Science* 2015; 349: 144–145.
- ⁵¹ Rules of procedure of the Legal and Technical Commission, op. cit.
- ⁵² Decision of the Assembly of the International Seabed Authority relating to the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11, 22 October 2012.

⁵³ Decision of the Assembly of the International Seabed Authority relating to the regulations on prospecting and exploration for polymetallic sulphides in the Area, ISBA/16/A/12/Rev.1, 15 November 2010.

⁵⁴ ISBA/19/C/17, 22 July 2013.

⁵⁵ Seascope Consultants Ltd. Review of Implementation of the Environmental Management Plan for the Clarion-Clipperton Zone - Report to the International Seabed Authority; 2014. [<http://isa.org.jm/files/documents/EN/20Sess/LTC/CCZ-EMPRRev.pdf>], accessed Jan. 2016.

⁵⁶ Information sensitivity, classification and handling. Secretary-General's bulletin. ISBA/ST/SGB/2011/03, 28 January 2011. See para. 20(a): "Information deemed sensitive shall include the following: documents created by the Authority, received from or sent to third parties, under an expectation of confidentiality."

⁵⁷ [<https://eiti.org/>], accessed Jan. 2016.

⁵⁸ [<http://www.equator-principles.com/>], accessed Jan. 2016.

⁵⁹ [http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/performance+standards/environmental+and+social+performance+standards+and+guidance+notes], accessed Jan. 2016.