



WORKSHOP ON THE DEVELOPMENT OF STANDARDS AND GUIDELINES FOR THE MINING CODE

13- 15 May 2019, Pretoria, South Africa

Background Information Note

1 May 2019
Prepared by Office of Legal Affairs

Participants are invited in advance of the workshop to reflect on their own experiences and on the approaches to the development and use of standards and guidelines under national and international regulatory frameworks; to list possible standard and guideline source materials and reference documents that could assist the Authority; and consider processes for their further development or adoption. This will help contribute to rich and constructive discussions during the workshop, and in the compilation of a workshop report. Questions to be addressed during the workshop are also presented in this document for participant information and preparation, as well as the Legal and Technical Commissions' terms of reference.

I. Introduction

1. The purpose of this note is to provide participants of the Pretoria workshop with background information on the development and delivery of standards and guidelines under the Authority's Mining Code and in particular the objectives and expected output of the workshop in order to help manage participant expectations and input to the workshop programme. The terms of reference of the workshop, as endorsed by the Legal and Technical Commission, are set out at Annex I to this note.

II. Objectives and deliverables of the workshop

2. The objectives of the workshop are:

(i) To establish a prioritised list of standards and guidelines, with reference sources, that will be required to support the implementation of the exploitation regulations; and

(ii) To develop a process for the development of the standards and guidelines.

3. The delivery of these objectives will be achieved through a series of expert presentations, panel discussions and active working sessions to address specific questions. As requested by the Commission, the workshop will also focus on compiling a list of "environmental standards", as well as an associated development process.

4. In addition to the delivery of the above objectives, the workshop also aims to:

- Outline what is understood by a risk-based approach to regulation
- Provide a better understanding of how regulators approach the use, adoption and reference of standards in a national context, particularly in connection with natural resource and environmental regulation
- Understand the parameters to the setting of standards and guidelines from an engineering and a science-based perspective
- Provide the groundwork for subsequent technical development, including addressing the gaps and challenges in document development.

5. As noted on a number of occasions by the Authority and stakeholders, there exists a wealth of experience and documentation on standards and guidelines across parallel industries, as well as documentation, process and procedures developed under the Authority's exploration regulations. Equally, contractors engaged in exploration activities will have considered and generated technical specifications and practices which should be also considered as valuable input into the development and delivery process.

6. A drafting group will be convened from 16-17 May 2019 to compile and deliver a report capturing the workshop discussions and suggestions, as well as a list of reference documents, flowcharted development processes and indicative timelines for documentation delivery. It is

envisaged that the report of the workshop will be a valuable resource for the Legal and Technical Commission to help it put together a work programme and recommendations for the Council in relation to standards and guidelines development.

III. Consideration of Standards and Guidelines by the ISA Council, February 2019

7. In February 2019, a number of discussion documents were presented to, and discussed by the ISA Council relating to common themes arising from stakeholder submissions to the draft regulations. Document [ISBA/25/C/3](#) discussed the content and development of standards and guidelines and contained an indicative list of standards and guidelines to support implementation of the draft regulations.

8. During its consideration of document [ISBA/25/C/3](#), Council members made a number of observations in connection with standard and guideline development. These included:¹

- Consistent and in accordance with Part XI of the Convention
- The development of standards by thematic themes
- Issues of terminology used in [ISBA/25/C/3](#) to capture criteria and thresholds for environmental quality status
- Open and transparent process for development
- Compatibility with current technical levels and knowledge, and avoid frequent changes
- Not all documents require a formal process for development
- Draw on existing and generally accepted international standards
- Clarity required on the relationship between best available techniques, best environmental practice and standards
- What determines the mandatory versus recommendatory nature of a document?
- Standards should be seen as a “floor not a ceiling”
- The flexible nature of guidelines to support delivery of technical and administrative requirements under the regulations i.e. not to overburden the content of the regulations, where content is more appropriately reflected in reference documents.

9. Additionally, a number of delegations spoke to the prioritisation of documentation under the regulatory framework i.e. what is to be developed in parallel with the regulations, and what can be left for subsequent consideration. Providing guidance on the process for an application for a plan of work for exploitation was seen as key; other priority areas for development could include an assessment framework relating to environmental indicators and thresholds, guidelines for environmental assessments, and for environmental management and monitoring.

IV. Legal framework: Standards and Guidelines under the Draft Exploitation Regulations

10. In adopting and implementing the regulations, the Authority must, for the exercise of its functions under part XI of the United Nations Convention on the Law of the Sea, incorporate “mining standards and practices, including those relating to operational safety, conservation of the resources and the protection of the marine environment”.²

11. The revised draft exploitation regulations ([ISBA/25/C/WP.1](#)) reflect a number of new and modified provisions relating to standards and guidelines. This includes a new regulation 45, specifying the subject matter for the development of “environmental standards” and modified text in

¹ See also paragraphs 14-19 of the Statement by the President of the Council on the work of the Council during the first part of the twenty-fifth session ([ISBA/25/C/17](#)).

² Annex III, article 17 (1) (b) (xii), of the Convention.

regulation 94 (Adoption of Standards) and regulation 95 (Issue of Guidelines). The presumption is that standards adopted by the Council have legally binding effect, whereas guidelines (technical or administrative in nature) issued by the Commission or Secretary-General are recommendatory in nature. The regulatory text in each case also requires the Commission to take into account the views of relevant stakeholders. For ease of reference, the text of these 3 regulations is presented at Annex II to this note.

12. The Authority, contractor-base and other stakeholders have an important role to play in the promotion of “standardisation” through the use of standards to deliver a level playing field and a robust and credible regulatory and operational framework.

V. Standard and Guideline development priorities

13. The annex to ISBA/25/3 pioneered a first and indicative list of standards and guidelines (principally guidelines) to be drawn up by the Authority and based on a review of the draft exploitation regulations. The list is reproduced as Annex III to this document in the form of an output table required by the Commission.

14. In addition to suggested reference sources, the output table seeks workshop input on reference sources (e.g. existing standards or guidelines) as well as those documents that should be prioritised and an indicative timeline.

15. While it will be challenging to set specific target deadlines for document delivery, it is felt that there are 3 document development phases that should be considered as part of workshop discussions, namely:

- (1) Documents to be put in place (or largely complete) by the time of the adoption of the draft regulations (July 2020);
- (2) Documents to be put in place prior to the receipt of and consideration of a plan of work for exploitation; and
- (3) Documents to be put in place before monitoring or mining activities commence in the Area.

16. To this end, the secretariat has provided an initial and indicative order of priority in the output table contained at Annex III based on the above phases. These are presented for consideration by the workshop participants.

17. It is acknowledged that the document list may not be exhaustive or may contain documents that have no place on the list. This will be addressed during the workshop.

VI. Workshop format and questions to be addressed

18. Over the 3-day workshop, a number of facilitated working sessions will target the specific deliverables required by the Commission through a number of questions to be addressed by such sessions, and plenary feedback.

19. Working session 1 (Day 1): this working session will be structured to provide output from smaller working groups. The format of the session will be the World-Café style approach allowing all participants the opportunity to share their thoughts, experience and ideas on the following:

- (1) Break-out Q1: (i) Examine the draft list of documents and identify those which lend themselves to the development of standards. (ii) What additions or deletions should be made to the ISBA/25/C/3 list, with a particular focus on a comprehensive list of “environmental standards”?

- (2) Break-out Q2: What existing resources exist that might be useful reference or source material for each of the items on the ISBA/25/C/3 list?
 - (3) Break-out Q3: What are the indicators that a document will be mandatory or recommendatory?
 - (4) Break-out Q4: Review the suggested prioritized order of the items on the ISBA/25/C/3 list and suggest any amendments.
20. Working session 2 (Day 2): this working session will address a suggested process or processes (and questions presented by the Commission) for the development of technical standards and guidelines. In order to focus discussion, the process for 2 documents will be considered, namely:
- (1) A process for the development of an assessment framework for mining discharges (see regulation 50(1)(a); and
 - (2) A process for the development of guidelines for environmental impact assessment and preparation of an environmental impact statement.
21. Working session 3 (Day 3): this working session (split into 2 parts) is intended to address the specific challenges in the design and delivery of “environmental standards”, including:
- (1) To what extent existing environmental standards and guidelines developed by competent bodies and accreditation organisations can be adapted and applied to regulate/guide environmental management of exploitation activities?
 - (2) What are the information needs to ensure a science-based approach to the development of environmental standards and guidelines?
 - (3) What are the best environmental practices currently being developed and implemented by the deep-sea mining industry and what are the challenges to implement standards and guidelines from the industry's perspective?³
22. Working session 4 (Day 3): this working session will revisit indicative timelines for delivery as a result of prior working group and other discussions.

VII. Reference and source materials

23. As part of the workshop programme, and beyond, the secretariat encourages participants to supply details of appropriate reference documents and materials that the Commission and secretariat may draw upon during development and drafting processes. Links to or copies of such documents may be emailed to ola@isa.org.jm.

VIII. Key documents

- Draft regulations on exploitation of mineral resources in the Area (unedited advance text) ([ISBA/25/C/WP.1](#))
- Draft regulations on exploitation of mineral resources in the Area (note by the Commission to the Council) ([ISBA/25/C/18](#))
- Content and development of standards and guidelines for activities in the Area under the Authority’s regulatory framework ([ISBA/25/C/3](#))
- Towards an ISA Environmental Management Strategy for the Area ([ISA Technical Study no: 17](#))

³ These 3 questions remain under development, together with driving sub-questions for discussion.

TERMS OF REFERENCE FOR WORKSHOP ON STANDARDS AND GUIDELINES

Objectives of the workshop

1. To establish a prioritised list of standards and guidelines, with reference sources, that will be required to support the implementation of the exploitation regulations.
2. To develop a process for the development of the standards and guidelines.

Terms of reference

1. Standards and Guidelines

The workshop is requested to:

- Examine the draft list of documents (see the annex to ISBA/25/C/3) and identify those which lend themselves to the development of standards;
- Suggest additions or deletions to the list, with a particular focus on “environmental standards”;
- Indicate/suggest relevant reference sources for each suggested standard and guideline;
- Indicate which standards and/or guidelines should be prioritised for development; and
- Suggest indicative timelines for the prioritised documents.

The workshop will draw on and share experiences from national regulatory approaches, other international organisations and accreditation bodies. Council members also suggested certain considerations for prioritisation.

2. Process for development

The workshop is requested to outline a process for the development of standards and guidelines, and address the following questions:

- Who initiates the process?
- Who develops the content of the standards and guidelines?
- What could be the recommended content of such standards and guidelines (can template be developed)?
- Who reviews the content (including the process for review)? and
- Who approves the content?

Selected regulatory text from the Draft Regulations on Exploitation of Mineral Resources in the Area (ISBA/25/C/WP.1)

<p>Regulation 45</p> <p><i>Development of Environmental Standards</i></p>	<p>Environmental Standards shall be developed in accordance with regulation 9 4 and shall include the following subject matters:</p> <ul style="list-style-type: none"> (a) Environmental quality objectives, including on biodiversity status, plume density and extent, and sedimentation rates; (b) Monitoring procedures; and (c) Mitigation measures.
<p>Regulation 94</p> <p><i>Adoption of Standards</i></p>	<p>1. The Commission shall, taking into account the views of recognized experts, relevant Stakeholders and relevant existing internationally accepted standards, make recommendations to the Council on the adoption and revision of Standards relating to Exploitation activities in the Area, including but not limited to standards relating to:</p> <ul style="list-style-type: none"> (a) Operational safety; (b) The conservation of the Resources; and (c) The protection of the Marine Environment, including standards or requirements relating to the Environmental Effects of Exploitation activities and referred to in regulation 45. <p>2. The Council shall consider and approve, upon the recommendation of the Commission, the Standards, provided that such Standards are consistent with the intent and purpose of the Rules of the Authority. If the Council does not approve such Standards, the Council shall return the Standards to the Commission for reconsideration in the light of the views expressed by the Council.</p> <p>3. The Standards contemplated by paragraph 1 above may include both qualitative and quantitative standards and include the methods, process or technology required to implement the Standards.</p> <p>4. Standards adopted by the Council shall be legally binding on Contractors and the Authority and may be revised at least every 5 years from the date of their adoption or revision, and in the light of improved knowledge or technology.</p>
<p>Regulation 95</p> <p><i>Issue of Guidelines</i></p>	<p>1. The Commission or the Secretary-General shall, from time to time, issue Guidelines of a technical or administrative nature, taking into account the views of relevant Stakeholders. Guidelines will support the implementation of these Regulations from an administrative and technical perspective.</p> <p>2. The full text of such Guidelines shall be reported to the Council. Should the Council find that a Guideline is inconsistent with the intent and purpose of the Rules of the Authority, it may request that the guideline be modified or withdrawn.</p> <p>3. The Commission or the Secretary-General shall keep under review such Guidelines in the light of improved knowledge or information.</p>

Annex III – Output table

S/N	Subject Matter	Regulation (ISBA/25/C/WP.1)	Reference sources	Priority ⁴	Indicative timeline
PERFORMANCE STANDARDS					
1.	Assessment framework Guidelines (generic) for a risk-based approach to the development and assessment of environmental thresholds and indicators	Annex VII		[1]	
PLAN OF WORK / EXPLOITATION CONTRACT					
2.	Preparation of an application Guidelines for the preparation and assessment of an application for the approval of a plan of work for exploitation	DR7, DR13–16, DR25 and annexes I–III		[1]	
3.	Use of exploitation contract as security Guidelines for the application and assessment for use of an exploitation contract as security	DR22		[2]	
4.	Insurance Guidelines for insurance requirements under an exploitation contract and placing of insurance risk	DR 36		[1]	
5.	Modification Guidelines for the process modifying a plan of work and on the meaning of material change	DR 25 and DR 57		[2]	
6.	Training Guidelines for the preparation of training plans and capacity-building	DR 7(3)(g)		Ongoing	

⁴ Indicative development priority:

[1] Documents to be put in place (or largely complete) by the time of the adoption of the draft regulations (July 2020);

[2] Documents to be put in place prior to the receipt of and consideration of a plan of work for exploitation;
and

[3] Documents to be put in place before monitoring or mining activities commence in the Area.

SAFETY, LABOUR AND HEALTH⁵					
7.	Management systems Guidelines for the application of health and safety management systems	DR 30(6)		[1]	
8.	Safe operation Guidelines for the safe management and operation of mining support vessels	DR 30 and DR 32		[1]	
9.	Maritime security Health, safety and maritime security plan	Annex VI		[1]	
SEABED MAPPING					
10.	Mapping Guidelines for mapping seabed habitats and resources in the Area	Not applicable		[2 but relevant?]	
ENVIRONMENTAL ASSESSMENT					
11.	Scoping reports Guidelines for the preparation of scoping reports	Not applicable		N/A	
12.	Baseline data Guidelines on the expected scope and standard of baseline data collection	Annex IV		[1]	
15.	Risk assessment Guidelines on tools and techniques for hazard identification and risk assessment	Not applicable		[1]	
16.	Impact assessment Guidelines for environmental impact assessment and preparation of an environmental impact statement	DR 47 and Annex IV		[1]	

⁵ Note: matters relating to human health and safety, including supplemental rules, regulations and procedures will be advanced initially by the ISA in conjunction with relevant international organizations including the International Maritime Organization.

ENVIRONMENTAL MANAGEMENT AND MONITORING					
17.	Management system Guidelines for the development and application of environmental management systems	DR 46 and Annex VII		[2]	
18.	Management plan Guidelines for the preparation of environmental management and monitoring plans	DR 48 and Annex VII		[2]	
19.	Monitoring Guidelines for the monitoring and evaluation of and reporting of results for the environmental effects of activities in the Area	DR 51(a) and Annex VII		[3]	
20.	Pollution Guidelines for the control of pollution	DR 49		IMO discussion	
21.	Closure Guidelines for the preparation of closure plans and post-closure monitoring and evaluation	Part VI		[3]	
22.	Environmental guarantee Guidelines for the form and calculation of an environmental performance guarantee	DR 26		[3]	
TRANSPARENCY IN ENVIRONMENTAL DECISION MAKING					
23.	Access to data Guidelines for access to environmental data and information	DR 2(e)(v)		[1]	
24.	Participation Guidelines for procedures for stakeholder participation in activities in the Area	DR 2(e)(vii) and DR 11(1)(a)		[2]	

OTHER USERS OF THE MARINE ENVIRONMENT					
25.	Reasonable regard Guidelines for the practical application of reasonable regard for other activities in the marine environment	DR 31		[2]	
26.	Marine Scientific Research Guidelines on protocols for the conduct of marine scientific research in the Area	DR 1(4)		[2]	
EMERGENCY RESPONSE AND INCIDENTS					
27.	Emergency response plans Guidelines for the preparation and implementation of an emergency response and contingency plan	DR 33, DR 53 and Annex V		[1]	
BOOKS, RECORDS AND SAMPLES					
28.	Records and samples Guidelines for the keeping of books, records and samples	DR 39 and DR 74		[3]	
29.	Accounting principles Guidelines on internationally accepted accounting principles	DR 74(2)		[3]	
CONCEPTS AND DEFINITIONS					
30.	Good industry practice Guidelines for the application of good industry practice	Schedule 1		[1]	
31.	Best available techniques Guidelines on the application of best available techniques	DR 44(b) and Schedule 1		[2]	
32.	Best environmental practice Guidelines on the application of best environmental practice	DR 44(b) and Schedule 1		[2]	

33.	Best available scientific evidence Guidelines on the application of best available scientific evidence	DR 44(c) and Schedule 1		[2]	
34.	Commercial production Guidelines on criteria for determining the date of commercial production	Schedule 1		[1]	
35.	Serious harm Guidelines on the interpretation of serious harm	Schedule 1		[3]	
36.	Change of control Guidelines on a change of control	DR 24		[3]	
37.	Risk of incidents Guidelines on the interpretation of “as much as reasonably practicable”	DR 32		[2]	
PLAN OF WORK/EXPLOITATION CONTRACT					
38.	Renewal Guidelines for the preparation and assessment of an application to renew an exploitation contract	DR 20		[3]	
39.	Transfer of rights and obligations Guidelines for the application and assessment on the transfer of rights and obligations under an exploitation contract	DR 23		[3]	
40.	Annual and other reporting Guidelines for annual and other reporting requirements under an exploitation contract	DR 38		[3]	
41.	Review Guidelines for the review of activities under a plan of work	DR 58		[3]	

42.	Expiration of contract Guidelines on information to be submitted upon expiration of an exploitation contract	DR 91		[3]	
LABOUR					
43.	Labour Guidelines for the adoption of international labour rules and standards	DR 30		To advance with IMO/ILO	
SAFETY, LABOUR AND HEALTH					
44.	Safety assessment Guidelines for formal safety assessment	Not applicable		[2] to advance with IMO	
ENVIRONMENTAL MANAGEMENT AND MONITORING					
45.	Technology Guidelines for the use of remote monitoring technology	DR 102		[3]	
46.	Performance Assessment Guidelines on the conduct of performance assessments	DR 52		[3]	
47.	Adaptive management Guidelines on the use of adaptive management measures	Annex VII		[2]	
EMERGENCY RESPONSE AND INCIDENTS					
48.	Notifiable events Guidelines for protocols relating to notifiable events	DR 34		[3]	
FINANCIAL TERMS					
49.	Royalty returns Guidelines for the preparation and processing of royalty returns	DR 64 and Appendix IV		[3]	

COMPLIANCE AND ENFORCEMENT

50.	Compliance Guidelines for plan of work compliance			[3]	
51.	Enforcement and penalties Guidelines for enforcement under the regulations and the setting and application of monetary penalties	DR 103(6)		[2]	