



## MODULE 4, LESSON 6

### DEVELOPMENT AND IMPLEMENTATION OF REGIONAL ENVIRONMENTAL MANAGEMENT PLANS IN THE AREA

#### LECTURE NOTES

##### Slide 1

Good morning! My name is Wanfei Qiu and I'm the programme manager for marine environment at ISA secretariat. It is a pleasure to give you an overview of regional environmental management planning in the Area.

##### Slide 2

This lecture will cover 3 main parts: a brief introduction to regional env. management plans, or REMPs, an overview of progress to date in developing and implementing such plans, and a reflection on the experiences and next steps in future processes.

##### Slide 3

I will first start with a brief introduction.

##### Slide 4

As you all know, an important part of ISA's mandates is to ensure effective protection of the marine environment from harmful effects which may arise from activities in the Area, under Article 145 of the UN Convention on the Law of the Sea. To this end, the Convention requires ISA to **adopt appropriate rules, regulations and procedures**.

##### Slide 5

To fulfill this mandate, ISA is focusing on several strategic directions, as outlined in the ISA's Strategic Plan and High Level Action Plan. These include the adoption of legal framework, the development of regional environmental assessment and management plans, access to env information, and environmental monitoring and impact assessment.

In my presentation, I will focus on one priority, which is to develop, implement and keep under review REMPs for all mineral provinces in the Area, where exploration or exploitation is taking place. Such plans are important tools for maintaining biodiversity, and ecosystem structure and function at the broader, regional scale.

### **Slide 6**

So what are the REMPs? The REMPs are plans established by the decision of the Council of ISA, on recommendations from the Legal and Technical Commission. Such plans are developed to support informed decision-making by the Authority, sponsoring states and contractors, in a way that balances resource development with conservation. In particular, such plans provide a clear and consistent mechanism to identify areas or sites that need to be protected, as well as other measures, for the protection of the marine environment.

### **Slide 7**

I will now move to the progress in the development and implementation of REMPs.

### **Slide 8**

The process for developing REMPs started more than a decade ago, with the adoption by the Council of the first environmental management plan for the Clarion-Clipperton Zone in 2012. Building on this experience, the Council of ISA has encouraged the development of REMPs in other priority regions, where there are exploration contracts, as shown in the map.

In the recent meetings, the Council of ISA has taken note of a strategy prepared by the SG for the development of REMPs. This was followed by a programme of work to be implemented by the secretariat, through the organization of a series of expert workshops.

The Council has also highlighted the need for further development of a standardized approach for REMP development, review and approval, and currently this work is being undertaken by the Legal and Technical Commission.

### **Slide 9**

**Now let me give a concrete example of the development and implementation of REMPs.** The environmental management plan for the Clarion-Clipperton Zone, or CCZ was adopted by the Council in 2012. The CCZ covers an area of around 6 million sq km<sup>2</sup> in the Central Pacific Ocean. The plan established goals and operational objectives to be implemented at various scales, and a network of 13 areas of particular environmental interest (or APEIs), which are protected from future mining activities. These APEIs are designed to protect biodiversity and ecosystem structure and function across the region. The REMP also includes provisions for the review of the APEI network, based on newly available data and built on results from expert workshops.

### **Slide 10**

Based on such provisions, an expert workshop was held in 2019 in Friday Harbour, United States to review scientific information. Using newly available data collected by ISA contractors and scientists, workshop participants conducted a comprehensive synthesis of biodiversity and other environmental parameters in the CCZ.

On this basis, a habitat classification model was developed to assess the coverage of the APEI network. The workshop results also supported the original design approach for the APEI network, by using key environmental variables, such as water depth, POC fluxes and topography, which are key drivers of biodiversity in the CCZ.

**Slide 11**

Drawing on the results of the 2019 workshop, the Legal and Technical Commission of ISA conducted a review of the implementation of the CCZ env. Management plan. The review recognized progress made since 2012, and identified future actions to be implemented to advance the objectives of the plan.

In particular, four additional APEIs were approved by the Council in 2021, based on the results of the review, to further enhance the connectivity of the APEI network. This increased the total area of protection in the CCZ from 1.4 to nearly 2 million sq. km.

**Slide 12**

Building on the experience in the CCZ, progress has also been made in developing REMPs in other regions, including the northern Mid-Atlantic Ridge.

Three expert workshops have been held from 2018 to 2020, in collaboration with various partner organizations. Similar to the CCZ workshop, a large volume of environmental data and information for this region was gathered and discussed in the workshops.

**Slide 13**

Based on the results from such expert workshops, the Legal and Technical Commission has prepared a draft REMP, which is under further review. The development of the draft REMP in the MAR recognised the differences in terms of regional environmental characteristics, and potential environmental impacts from future activities, as we move from the CCZ to Mid-Atlantic Ridge. Key goals and objectives largely same as CCZ.

The identification of areas/site in need of protection drew on scientific criteria developed by other organizations. Such areas aim to protect sensitive ecosystems such as hydrothermal vents and ecologically important areas such as fracture zones, from future mining activities. includes non-spatial measures and priorities for future research.

**Slide 14**

A similar process has already under way towards the development of a REMP in the Northwest Pacific region. This region features complex geography, and different types of habitats such as seamounts and abyssal plains. Activities are being undertaken by 4 ISA contractor in the region, for the exploration of two types of mineral resources.

Two expert workshops have been held to advance the discussion of scientific tools and approaches underlying the development of a future REMP in the Northwest Pacific region, and an additional workshop is being planned.

**Slide 15**

Finally, the process has also been initiated for the Indian Ocean, with the convening of the 1<sup>st</sup> expert workshop to review environmental data and information in the region.

### **Slide 16**

Overall, the progress to date in the development and implementation of the REMPs in the Area includes the following:

- 1 REMP established and reviewed for the Clarion-Clipperton Zone
- 1 REMP drafted for the northern Mid-Atlantic Ridge, which is under review by the Legal and Technical Commission
- 2 REMPs under development for the NW Pacific and Indian Oceans
- The LTC is also working on a standardized procedure for REMP development, approval and review

### **Slide 17**

Throughout this progress, there have been significant efforts to engage with experts and other stakeholders. Since 2018, seven expert workshops have been convened by ISA to advance the development of REMPs in the priority areas. Over 300 participants from 50 countries participated in the expert workshops. The outcomes of the expert workshops provided the scientific information and elements for the Legal and Technical Commission in developing the REMPs.

### **Slide 18**

I will now move to the final part on the experiences, lessons learnt and next steps.

### **Slide 19**

Nearly two decades of experiences in developing the REMPs highlighted a few important lessons. First, there are important differences in different regions, in terms of environmental characteristics, future mining technology, as the nature and scale of env. Impacts. The REMPs must be tailored to different regional contexts, and there is not a one-size fits all approach that would work for all regions.

Second, collaboration with existing scientific initiatives have proven to be effective, such as ISA's engagements with the Deep CCZ Project and European Union's Atlantic REMP project.

Third, drawing on experiences in other organizations, such as FAO and CBD, can speed up the process and make sure we build on existing efforts and practices.

Finally, development of the REMPs are long-term and learning-by-doing processes. Plans will be subject to continuous review, and adaptive management is important to make sure that the plans stay current, reflect best available scientific knowledge, and the latest developments in technology and activities.

### **Slide 20**

We also face important challenges, including the need for the generation and exchange of environmental data to address data gaps, for long-term investment to support continuous implementation and review of REMPs, and the need for complementarity and collaboration with other organizations.

**Slide 21**

Looking forward, ISA is prioritizing the development of standardized approaches for REMP development, standardized procedure and template for REMPs. Which will provide the blue print for future REMPs in the priority regions .

Finally, efforts are being implemented by ISA to contribute to other global instruments and processes, such as SDG14 and the newly adopted BBNJ agreement.

ISA will also to facilitate collaboration between and among contractors and MSR community, under the umbrella of the REMPs.

ISA has over 15 years of experience in developing and implementing REMPs, has established a process driven by science and reflects the concerns of members and stakeholders, and has developed tools and methodologies for regional env. management. We look forward to further contributing the knowledge and experiences in global biodiversity conservation initiatives.

Thank you.