DEEP DIVE

MODULE 1, LESSON 5

THE AREA: RESPONSIBILITIES AND OBLIGATIONS OF SPONSORING STATES

LECTURE NOTES

May I present myself in a few words, my name is Rüdiger Wolfrum I am an academic, but I served twenty-one at the International Tribunal for the Law of the Seas. I am to speak about seabed mining since the deadline is coming close, there are a lot of conferences on deep seabed mining; just today I received an invitation to participate in one. My presentation for today, will cover three parts:

1. First, I shall describe the procedure for developing the mining code. This will be brief.
2. Second, I shall analyze the provisions in the code concerning the protection of coastal States and even more intensively the marine environment, putting it in perspective to the existing international environmental law, I mean the hard law, not political statements on one or the other conference and
3. third and final, I will speak about the possibility or the proposal to have a moratorium, or as it has been flagged occasionally, a precautionary pause concerning deep seabed mining.

The basis of my talk, are the rules of the International Seabed Authority, the Law of the Sea Convention, as well as the regulations of the draft Mining Code.

Let me come to my first part, namely the procedure concerning the development of the Mining Code. The draft Code was developed by the Legal and Technical Commission, which is the appropriate body of the International Seabed Authority, over the last six years including several rounds of global stakeholder consultations. It was not somebody in a quiet chamber drafting that code. This code has been established with a lot of context with NGOs, Governments, representatives of various interest groups etc.

This text as recommended by the Legal and Technical Commission was submitted to the Council in 2019, which is a master text in quotation marks, which exists in all languages applicable to the Law of the Sea.

The Council of the Seabed Authority started the consideration of the draft in 2020. However, in December of 2021 the Council adopted a roadmap in accelerating the work with a view to completing the Code by July 2023. This involves, as evident, increasing the duration and frequency of the Council meetings to fifty days per year, as well establishing four informal working groups on

environment, financial issues, and reports of these working groups are all on the website, but frankly speaking, this is still a work in progress.

Some groups are more advanced than others. During 2020 to 2021, the Legal and Technical Commission worked virtually to produce ten (10) draft standards and guidelines, the phase one standards and guidelines to support the code. These are yet to be considered by the Council. In addition to the Code, the Secretariat has produced numerous important reports and studies including on benefit sharing, the Environmental Compensation Fund, which by the way was proposed by the International Tribunal for the Law of the Sea, the Seabed Disputes Chamber to which at that point, I belonged.

Further, there was the discussion on the report on the intersection of responsibilities with IMO as far as shipping is concerned and ILO as far as the conditions workers on deep seabed mining and processing are concerned and many other issues.

There are many studies on the environmental impacts, so it is difficult to pinpoint a single one. They all come from different backgrounds and come also to different conclusions. I recommend to everyone of you, that you only consider those reports, which don't work, by leaving out certain facts. I will explain some of them in this course.

The anticipated impact of deep seabed mining and the first phase of processing is the same as was indicated to, or assumed in 1980 - seafloor impact, namely the impact by the machines or the robots on the deep seabed and on the living organisms there, and the sediment plume dispersal; what effect will be generated by the sediment input into the ocean after the first processing phase. All the other issues of the potential environmental impacts are limited, and are not much different from the impact navigation has.

Contrary to the media and the NGO reports, the understanding of these impacts has not changed since the 1980s. What I reported, is the view of the International Seabed Authority, but I make it my own.

As indicated right at the beginning, some opponents to deep seabed mining have argued in favour of a moratorium or a pause to reconsider the risks. The proponents of moratorium are unclear as to what they expect to achieve and how they will change the insight we have so far. I believe this should be very well spelled out before one requires a new period for further considerations or research.

One should however, and this is my criticism, [but I will come back to that later] on those who argue in favour of a moratorium, also [consider] the impact of a moratorium, [and] on those who rely on deep seabed mining and this has not been mentioned in the report I will present at the end of my talk. Due to the financial contribution, which has kept the Seabed Authority alive and the research so far undertaken but this is a matter to which I will come back.

Draft mining code

Let me now turn to my second part, namely the analysis of the draft mining code. First of all, we should speak about which of the resources, which are going to be mined. According to the Law of the Sea Convention and personally I regret this limitation, these are only mineral resources, I will come to that in a second. Biological resources are unfortunately excluded, although I would like to emphasize that also the biological resource of the deep seabed belong to what is referred to as the common heritage of mankind. This was a mistake of the Law of the Convention and life would have been easier if biological resources would have been included at the beginning. But until 1982, there was only limited knowledge about life in the deep sea. Still, this could have been easily amended, but it has been decided to come to another conference and another instrument which will be parallel to existing Part XI regime on deep seabed mining and the disputes which will arise from that, I can already mention, but that is not the point here.

Types of resources

There are three types of resources, first one are Polymetallic nodules. Polymetallic nodules are round concretions of manganese and iron hydroxides that cover vast areas of the seabed floor, but are most abundant on abyssal plane at water depths of 4,000 to 6,500 meters. They form through the aggregation of layers of iron and manganese, hydroxides around central particulars such as rock, shell or very frequently the tooth of a shark. They range in size few millimeter to tens of centimeters. Mostly, they have a potato shape and not much bigger than a medium potato. Growth of these nodules is extremely slow, at the rate of millimeters per million years and they remain on the seafloor often partially buried on a thin layer of sediment, but, and this is important, one does not have to penetrate the seafloor to harvest such nodules. One mechanism to harvest them is like a vacuum, but you can imagine, technically that is a challenge to vacuum in 5,000 meter depths of the ocean.

In addition to manganese and iron, they can contain and they always contain, nickel, copper and cobalt in a commercially attractive concentrations, as well as traces of other valuable metals such as molybdenum, zirconium and rare earth. The exploitation of manganese nodules is economically feasible with the three main minerals - manganese, nickel and cobalt, exceed twenty percent of the nodule. You may believe that this is a low percentage; it is not. There are nickel deposits which are harvested and only contain 0.2 percent of nickel and you can imagine, or calculate yourself, what is more sustainable. By exploiting nickel of 0.2 percent or harvesting nodules which contain more than 2 percent occasionally, seven to eight percent of nickel alone.

There are polymetallic sulphides, these are hydrothermally formed deposits of sulphides and accompanying minerals resources in the Area. They contain sulfur and concentrations of metals again, copper, lead zinc, gold and silver. They are distributed along the mid ocean ridges in the ocean, in the Pacific, Atlantic and in the Indian ocean. The content of minerals is significantly higher than of polymetallic nodules. Occasionally, they contain up to 30 or even more percent of one mineral, metals I should rather say.

The third one least known are cobalt rich crust. Cobalt rich crusts form on the flanks of the sea mountains where oceans currents keep parts of strips exposed, allowing minerals to precipitate out of cold seawater on the rocks' surface over million of years. Along with magnesium and cobalt

they contain copper, nickle and platinum, the last one in traces. Still more 0.2 percent, I can assure you.

Actually, polymetallic nodules are known since the 18th, probably the 19th century. They were discovered by British research vessels, after the Napoleonic war and they were rediscovered in some British museums where they rose a particular interest. It was redetected during the third conference on the Law of the Sea.
The main area for deep seabed mining for a long time, considered the only one, was the Clarion Clipperton Zone that represents roughly about 1.6 percent of the world oceans. Of this, about 30 percent has been set aside as protected areas or to use the term about, areas of particular environmental interest. Of the reminder, about 21 percent has been reserved for deep seabed mining, exploration but only about 30 to 50 percent of that might be feasibly one day be mined. In part, because each contractor must identify set-aside areas that have similar habitats and stable biota to the mining areas. They are meant to be comparative area to compare, those areas where there is mining taking place and other where it is not and only the difference between the two, will give us a very clear picture about the impact, the negative impact deep seabed mining is going to have. The existence of these areas has not been mentioned in the opinion which I will deal with at the end of my talk.

This means, if all Clarion Clipperton contract areas were to be developed, this would amount to an area of approximately 0.1 to maximum 0.2 percent of the world's ocean floor. This has not been mentioned in the opinion, since it makes us feel as if the whole deep ocean is at risk. For the Clarion Clipperton Zone, the International Seabed Authority has developed a mechanism, I quote, regional environmental plans, under which areas of particular environmental interest, have been established.

So far, on the basis of three regulations on polymetallic nodules, polymetallic sulfides and cobalt rich crusts, the International Seabed Authority has concluded 31 exploration contracts, which the contractors have an option also to apply for an exploitation contract with, 22 contractors. The partner here being States, State enterprises, or entities sponsored by States; 19 on polymetallic nodules, 7 on polymetallic sulfides and 5 on crusts.

What I should mention is that the States being active States or State Enterprises or as sponsoring States belong to developing as well as developed States. It is not all developed State. For example, China and the Russian Federation belong to those who are very strong in deep seabed mining, although at the beginning of the third UN conference on the Law of the Sea, they were not particularly, let me say engaged in this issue, but today the People's Republic of China is one country with the highest investment in deep seabed mining.
Having said that, let me move on to the next point. Who is meant to benefit from deep seabed mining or if you want, from mineral resource activities? First, please don't forget that the Area, with a capital "A" - is an area which is for the benefit of mankind as a whole or as will flag it today, humankind.
The International Seabed Authority, is the organization, which acts on behalf of the international community, not only on behalf of the States having become parties to the Law of the Seas Convention, but also to the others and actually it is meant to serve the population of this generation

and the future generations to come without distinction as to whether States are members of that convention or not.

Why has this system been developed?

The idea of the common heritage principle was developed as a counterpart to the idea that first come first serve, therefore the technically most advantaged States would take their share of the minerals on their own. It is meant to develop not only formal equality amongst States but also substantial equality amongst States. This can only be achieved by doing the whole business, in which all States have the right to become members and these members are equal and through channeling deep seabed mining through this organization means that those who are members participate equally while their membership in the International Seabed Authority. This is quite an innovative step. Let me read out to you and I am sorry to bother you with that, with regulation number 2 in this respect: it says, in furtherance of and consistent with Part XI of the convention which means the Law of the Seas Convention and the agreement which means the implementation agreement, the fundamental policies and principles of these regulations are inter alia:

A. "Recognize that the rights in the resources of the area" as I said only mineral resources "are vested in mankind as a whole on whose behave the Authority shall act."

This probably reflects the relevant Article of the Law of the Sea Convention and it continues to say in Article 150 0f the Convention "be carried out in such a manner as to foster healthy development of the world economy and balanced growth of international trade, and to promote international cooperation for the over-all development of all countries, especially developing States, and with a view to ensuring" and then comes a long list of principles to be followed.

I believe this is an impressive statement and this is the guidance for the deep seabed mining. Now, there also procedural consequences namely, this is clearly spelt out, the States have to cooperate amongst each other and with the International Seabed Authority to achieve this end.

Another very important aspect is the protection of the environment of coastal States. There is, and this is to be understood, a certain concern of coastal States that their coasts may be polluted due to deep seabed mining. The closer you are to a potential mining site, the more you may consider this being a risk. This is well taken care of as the Coastal States have certain rights to making their views heard and they can stop certain activities if they believe that they might end up in harm to the environment which includes everything, namely fishing, marine research, tourism or whatsoever.

Let me move on the draft Code. It establishes a certain amount of procedural issue, sounds very technical, sounds very boring, but the Code is based upon one premise, not to wait until we have our first damage but rather to prepare against risky activities, this is actually the full implementation of the precautionary principle.

Therefore, there are certain rules where the potential operators have to do something before they get their license to do deep seabed mining, including processing. Procedurally, one has to distinguish between application of the Enterprise, as the entity which works for the International Seabed Authority, a State or a State Enterprise or individual entities sponsored by a State party. For example, Nauru has sponsored a particular entity. I will come to that for this is a very important

element in the system. We speak about seabed mining as a parallel system in part, undertaken by the Enterprise on behalf of the International Seabed Authority and the other side, by States, State Enterprises and individual entities sponsored by a State party.

Let me already here, explain why we have the sponsorship system. There was in 1982, the fear that international law would not be fully implemented on the national level. Therefore it was held that the State should be obliged to ensure this implementation by international law and sponsoring means nothing else but the State behind the operator guarantees that this operator will truly fulfil the commitments which come with a contract and at the end of day may even be responsible or liable for damages either to coastal States or to other entities which undertake activities on the seas.

Therefore, one of the most important elements is that an individual private entity has to produce a certificate of sponsorship; this is Regulation 6. Each application by a State Enterprise or one of the entities referred to the in Regulation 5 (1b), shall be accompanied by a certificate of sponsorship issued by a State, of which it is national or whose nationals it is effectively controlled. These are points which are of relevance and before anything starts moving you have to show and prove that there is a sponsoring State behind such an activity.

The next point, which is equally as important, namely that the state which is sponsoring State declares that the sponsoring State, and I quote "assumes the responsibility" in the Code with Articles 139, 153 (4) of the Convention and Article 4, paragraph 4 of Annex 3 to the Convention. This reiterates what is part in parcel of the Law of the Sea Convention. Having said that, we see that the sponsoring State system is one essential element in ensuring that the responsibilities which go with deep seabed mining or consequent thereof are truly fulfilled.

The applicant has also to produce its environmental plan. This is to be found in Regulation number 11. This plan indicates, and is written by the entity concerned, what are the plans of the entity or the industry to ensure the proper protection of the environment against damages as a consequence of deep seabed mining. This is a long declaration to be made, but that is not all. This environmental plan is publicized and over a certain period everybody or nearly everybody can comment upon it. Therefore NGOs, environmental experts, can comment upon such an environmental plan and request modifications, improvement and whatsoever. We have this, which I may say, also in Germany, such a system when it come to the construction of streets, industry nuclear power plants and whatsoever. The same system is being applied here. This moves the question of responsibility before any activity can commence. This is the advantage of this precautionary approach and if you look into the ICJ judgement between Paraguay and Argentina the so-called Pulp Mill case, there you can see, if you look at the dissenting opinions, the ICJ did not apply such a precautionary set approach but today, it is common knowledge that this has to be done this way.

Before an applicant can start processing, he must produce other plans. He must show its prior so to speak, behaviour, this so-called applicant performance guarantee. It must produce a plan of work and here the Commission, the Legal and Technical Commission, can and will have to comment upon this. The Commission will make recommendations in this respect and these recommendations together with a plan will be scrutinized by the Council. I refer to Regulation

number 16. Let me here explain to you a particularity, when this Convention was adopted, there was a fear that political reasoning may impact the decisions of the Council. Therefore, the Legal and Technical Commission, these are experts on these grounds, propose that this application should be accepted, this acceptance must not be confirmed by the Council by the other way around. The Council can, and there is a very clear rule on the majority, only reject it. You need a certain amount of members of the Council to say no to a proposal in those by the Legal and Technical Commission. Further, and I will go into this detail, it is clear that the applicant also has to propose a certain amount of financial rules etc. The fees and taxation are quite significant, also the applicant must prove that it is a financially safe entity, so when it comes to the disaster or an accident that this entity can do the clean-up which will come at the end.

The end result will be an exploitation contract, Regulations 17 and 18 and 20. I won't go into further details in this respect. This contract will in detail, regulate what, in which area, the applicant can do the exploitation of mineral resources and this is not part of my lecture, there is also a possibility to limit the production, so as to not to disturb the world market. We have calculations by experts, from the mining field, would already cover the consumption of certain of the minerals, for world consumption, but let's leave this. Apart from all that, the applicant must provide an environmental protection guarantee. This is to be found in Regulations 26, 27, 28 and 52. The naming of that is a little bit misleading; this is something very simple. The applicant has to deposit a significant amount of money which will be used in the case the applicant has produced environmental harm either to the neighbouring countries of the marine environment as such. This is one element and the other element is the Environmental Compensation Fund, which has been established by the International Seabed Authority, upon the recommendation of the International Tribunal for the Law of the Sea and the Seabed Dispute Chambers in its advisory opinion.

Let me go a little bit now into the responsibility business. Let's assume the applicant is a State, their responsibility for any damage whatsoever is the responsibility of that State, that's very simple. We have the necessary rules already in general international law, they are repeated in the Convention here. The same is true in respect of State enterprise, for damages resulting from the activities of State Enterprises are attributable to the State concerned. Now we come to the more complicated issue, the responsibility of States having sponsored these activities. There is one rule of international law you better know. In general, the State is not responsible for activities of a private actor, or to say, damages not attributed in this case to a state. This is a rather complicated situation. The general belief is that the State cannot guarantee everything what is happening on its soil. Unless now, and we come to the unless, if a State agrees to certain private activities or accepts a certain private activity, then these activities may result in State obligations. I give you one case, in the Tehran hostages case, the revolutionary guards occupied the guards US embassy. The revolutionary guards are private however, Iran's Khomeini, recompensed what had been happening and that made the damage which had occurred, a damage which was to be attributed to the State of Iran. Just to give you the background. Now how is the situation in respect of the of the sponsoring State? If, let's say a company like Kennecott Copper, produces damage, it is first and foremost the responsibility of Kennecott Copper to undo the damage occurred to the marine environment. This is a well-known situation of the tanker accidents, we had a problem too, that the oil spilled had to be taken away in the many tanker accidents we have had in the past; this is a well-established system.

If however this is a particularity in the system, this Kennecott Copper is unwilling or not able to do so, anybody can step in, do the cleaning up and send the bill to Kennecott Copper. This is unique, we don't have any other international environmental system which does it this way except one, and let me tell you that most of the environmental rules here in the draft Code are developed somewhere else namely in the Antarctic context. The Madrid protocol and the following Annexes are so to speak, the blueprint which the International Seabed Authority has further developed and what you have in front of you with the draft Code is the most advanced environmental protection system in the world. There is nothing much more advanced that this one. This one should take into consideration.

Having said that, the sponsoring State will be liable, in spite of that State does not have responsibility in respect to private doings. If that State, has not done due diligence to ensure that such damage or misconduct will not occur. Therefore, if the State can prove that all its internal rules fully reflect what is required under this protection regime, then let's say Germany would have to be responsible and would have to live up to the liability issue which may come out of it. This is a very important element which goes far beyond everything that we have in international environmental law so far.

Let me also say that for sure the International Seabed Authority, has a right to monitor activities even to inspect activities and in that respect, cooperate with the State concerned, flag state etc. This whole system covers:

a. The exploitation of the deep seabed, the lifting of the nodules for example
b. The transporting them from the site to the coast and
c. On the ship to do the first processing, heating these nodules and the dust which is separated from the nodules will be thrown back into the sea.

And here we have the second significant risk, which has to be reduced to the maximum possible. Apart from that, this is my last point, on these issues the Seabed Authority can issue penalties, and these have to be enforced by the sponsoring States of the State and the States have no right to refuse to enforce these penalties. They, so to speak, have to act directly on behalf of the International Seabed Authority.

Therefore, let me conclude this point, it's not the end, namely we have a watertight system on the protection of the environment of neighbouring States and other marine environment as such which has a normative side, a procedural side, the implementation side and the enforcement side. This goes far beyond national law and international law we have in place. If, however, deep seabed mining will not be undertaken under the authority of the International Seabed Authority, what will happen? very simple, part of these nodules or resources you will also find on the extended continental shelf of coastal States and deep seabed mining will be undertaken under the umbrella of mining national resources. And the international community has zero influence on what coastal States do in this respect. Therefore, if this system is being rejected or even postponed, this will only increase the deep seabed mining, in quotation mark, by States which have extended continental shelves.

Please consider what is less risky or what is more risky. Let me come to my last point in part 3 as I announce namely, the moratorium, the precautionary pause. In June 2022 more than 400 marine scientist and policy experts from 44 countries, signed a petition stating that International Seabed Authority should not make any decisions about any deep seabed mining until scientist have a better understanding of what is at stake and all possible risks are understood. This requires permit holder to undertake 3 years of environmental impact assessment before it will grant it commercial license, this is already inbuilt. These 3 years are already part-and-particle of the game. Nevertheless, the scientists believe they need more so it has been said. I believe this is beyond the point. I mentioned at the beginning that in Clarion Clipperton Zones, the same will be happening in the Pacific, there are reserved areas where there is possibility to compare the development in the areas with mining and areas without mining, This is the only way to really find out what are the risks involved or the consequences of the risk. This cannot be done on the purely theoretical level. Therefore, what is being is expected is being better than if mining rather than postponed until whatsoever.

This opinion I have in front of me has been published and argued in favour of not to start with commercial deep seabed mining. There are several mechanisms to achieve a postponement. This opinion does not mention that deep seabed mining will only take place in a small part of the ocean floor. The opinion seems to suggest that deep sea ocean mining threatens the life of the deep seabed in general, this is not sustainable. The main argument seems to be that the paucity of a rigorous scientific information, financial problems of ISA and the leg of arrangements concerning equitable sharing of benefits, is required under UNCLOS. Sure it is, but this can be achieved if one considers that there is an urgency to move more quickly. The arguments are at one side, in my view, are not at all convincing. The opinion does not take into account, that this precautionary principle which is being asked for in the opinion, is fully embedded in the Regulations and it is being developed progressively so that the scope of the precautionary principle is much clearer than it is under general international law, so far.

The same is true of the environmental impact assessment; it is much more rigorously to be applied than under than under the existing rules of international law. And finally, this is also true, in respect of the ecosystem approach, an approach according to which the ecological system as such is to be taken into account. The ecosystem was introduced international environment law by CAMLR, the Convention on Marine Living Resources in the Antarctic.
Apart from that, the opinion does not take into account that those with an exploration license have paid their fees every year, in the expectation that if their exploration comes to proper results, will lead to an exploitation. This is a property situation and postponing would mean these entities have to be compensated.

The finances to be gained, are to be distributed equitably and it would be well if these would go to the African and Asian States. They are certainly in need of additional financial resources. And that was the deal which was struck in 1982 in New York when the Convention was adopted. Thank you very much for your attention.