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Permanent Mission of Algeria  
to the International Seabed  
Authority

البعثة الجزائرية الدائمة  
لدى السلطة الدولية  
لقاع البحار

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Statement on behalf of

**The African Group**

by

Mr. Mehdi REMAOUN

First Secretary

At the

**25<sup>th</sup> Session of the Council of the International Seabed Authority**

**Agenda item 11: Financial Model**

Kingston, 25<sup>th</sup> February 2019

I have the honour to deliver this statement on behalf of the African Group.

As this is the first time the African Group is taking the floor under your presidency, we would like to express our pride to see you presiding over the Council in this historical 25<sup>th</sup> session of the International Seabed Authority (ISA). This session marks the quarter century anniversary of the ISA.

Like in 2018, this year, meetings of the Council will take place in two parts. This is happening while the Authority is at a milestone step as we move ahead with the development of the exploitation regulations. Needless to say that you will have the full support of the African Group in order to steer the Council towards a successful session.

**Madam President,**

Let me turn to the item under consideration. Before getting into the substance of the comparative report of MIT and the report of the informal open-ended working, the African Group would like to thank MIT for their work. We also thank your predecessor, Ambassador Olav Myklebust of Norway, both for the work he has done last year as Council President, and for having chaired last week the two-day meeting of the open-ended informal working group to discuss the financial model.

Like the chair of the informal working group stated in its briefing note dated 3 December 2018, we also believe that holding such a meeting was not an ideal scenario, and we add, especially for representatives from developing countries. Moreover, we wish to register our concern on the fact that the meeting was called relatively late, which prevented some of us to attend. However, we understand that it was for reasons beyond the chair's control. We believe that the idea of an informal working group was to work inter-sessionally; if it was to meet as late as last week, we think that it would have been more appropriate to meet in the course of this week. The whole Council would have benefited from the presentations by MIT and could have interacted and asked questions on the report. It would have been highly appreciated if chairs and coordinators of regional groups were consulted before taking such a decision on the date of the informal meeting.

Given that the African Group was not able to express its position during the informal meeting last week, for reasons I stated before, and bearing in mind the mandate and purpose of the open-ended working group, we would like to take this opportunity to:

- First, remind some general points regarding the African Group's position;
- Second, share our views on the MIT comparative report, including by raising some questions;
- Third and last, share our views in light of the discussion held in the informal working group meeting last week.

**First, on the general points regarding the African Group position:**

1. The African Group wishes to ensure that deep-sea mining only occurs if it is demonstrably beneficial to mankind.
2. A key component of achieving that goal is a payment regime that:
  - a.) fairly compensates mankind for the loss of resources to common ownership; and
  - b.) does not give, through a lower burden of taxation, a competitive economic advantage to deep-sea mining compared to conventional mining. This is strongly supported by the Implementing Agreement which states that the rates of payment for deep-sea mining should be within the range of those prevailing for onshore mining.

**Second, on the MIT comparative report:**

1. MIT concluded that the method (discounted cash flow analysis) used by the models was broadly similar. This appears to be a fair conclusion.
2. MIT concluded that the African Group's economic model had a higher post-tax internal economic rate of return (IRR) of 27% when the royalty is 2%/4% than MIT's economic model. This is mainly explained by differences in the ramp up (early year's production) and nodule value (mainly due to prices). This also appears to be a fair conclusion.
3. The ramp up requires more detailed investigation. A ramp up refers to production being less in the first few years than in later years. The African Group model assumed no ramp up and assuming some ramp up might be more realistic. However, the ramp up assumed

by MIT is the slowest (and affects profits the most negatively) of the ramp up in any of the models reviewed. We are not aware of any technological reason for including a ramp up. In addition, when we included the modest ramp up from the Singapore workshop, it had a limited impact on the results and conclusions of the model. The African Group would be happy to amend its model to include some ramp up, if after due discussion, there is agreement on this. We note that the MIT model has the biggest ramp up of any of the models discussed. Including ramp up included in other models in the African Group model has a much smaller impact on the results.

4. The difference in nodule value is mainly due to metal prices (differences in metal content and yield have a smaller difference). The African Group's price assumptions were arguably conservative being based on spot/current prices and giving a nodule value below that given by the 10-year average of metal prices. In addition, MIT initially assumed a nodule value of approximately \$1,223 per tonne. But then revised this down to \$897 per tonne. The African Group's price assumptions give a nodule value of \$974 per tonne, which is within the range given by MIT's two estimates.

The African Group would like now to raise some questions addressed to MIT:

- 1.) MIT's initial price forecasts, using the African Group's assumptions about metal content and yield, appear to give a nodule value of approximately \$1,223 a tonne. The revised price forecasts give a much lower nodule value of \$897 per tonne. What is the economic reason for MIT significantly downgrading future metal price forecasts?
- 2.) MIT initial forecast Electrolytic Manganese Metal at \$3,500 a tonne. The price in the most recent MIT model is \$1,640 per tonne. That is the forecasted price which has been more than halved. Could MIT explain the economic logic behind this? And also explain how much of the decrease in price is due to supply from deep-sea mining itself?
- 3.) The difference in nodule value between the MIT and African Group's model is about 11%. This is mainly but not exclusively due to differences in price. This seems to be a very moderate difference in long-term price forecasts. What is an acceptable difference in price forecasts given the inherent uncertainty of future prices?

- 4.) The MIT model did not report the ISA's share of profits. This is an important result; can it be included in all any future presentations and models?
- 5.) There is some debate about the extent of sponsoring State tax. Can the MIT model include a sensitivity analysis to different possible rates of sponsoring State tax?
- 6.) None of the models included a comparison to rates of payment for land-based mining. We would request that future versions of the MIT model include example of land-based mining tax regime for comparison.
- 7.) MIT's previous models have included a royalty and a profit share. There has been some discussion of the advantages and disadvantages of these instruments. A royalty where the royalty rate varies with nodule value could also be considered; this has some of the advantages of a profit share but requires less auditing capacity. Could such a price varying royalty be included in the model?
- 8.) When can the underlying MIT model be shared with stakeholders?
- 9.) Suggestions for moving forward include:
  - a. A debate and decision on the principal, overarching goal of the payment regime;
  - b. Ensuring that the model includes scenarios showing a range of metal prices and nodule values; with at least one scenario having as high prices as MIT initially forecasted (e.g. nodule value of \$1,223 per tonne);
  - c. A detailed examination of sponsoring state taxes, with the sponsoring state tax being properly delineated from the rate of corporate income tax;
  - d. All future models to ensure that the ISA's share of profits and sponsoring state's share of profits are reported;
  - e. Modelling of a price variant royalty rate; and
  - f. Modelling of land-based payment regimes in the model.

We have more detailed nine important points and we do not want to miss this occasion to raise them. These points concern, 1/ the Goal of the Payment Regime, 2/ The sensitivity and uncertainty of the economic model, 3/ Price Assumptions, 4/ Sponsoring State Tax Assumptions, 5/ Rates of payment within the range of those prevailing for land-based mining, 6/ Reporting of the Model's results, 7/ Negotiating Financial Terms, 8/ Profit Share, and 9/ Encouraging first-movers. For the sake of time, we will include these points in the version of this statement to be published on line. Hard copies are also made available in the room.

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## **African Group's detailed Comments on the Economic Models and Payment Regime**

### **Point 1: Goal of the Payment Regime**

In the African Group's view, prior to designing the payment regime, there has to be an explicit and transparent decision from the International Seabed Authority concerning the overarching goal the payment regime is trying to achieve.

There are a number of possible goals a payment regime could be aiming to achieve, and there is a tension, and a certain degree of conflict, between these goals. Moreover, different goals speak to different rates for the taxes in the payment regime.

Overarching goals that the payment regime might seek to achieve which are in tension include:

1. not constraining or inhibiting commercial deep-sea mining;
2. maximising overall International Seabed Authority revenue;
3. ensuring deep-sea mining only ever occurs if there is substantial compensation to mankind for the loss of resources to common ownership;
4. ensuring that the rates of payment and overall burden of taxation for deep-sea mining is the same as for land-based mining; and,
5. ensuring that deep-sea mining is constrained to a level where there is no impact on commodity prices or loss of revenue for countries with land-based mines.

These goals are potentially in conflict and do not speak to the same tax rates in the payment regime.

Our view is that the two goals most explicitly supported by UNCLOS are: a.) ensuring substantial compensation to mankind for the loss of resources to common ownership; b.) ensuring rates of payment that are within the range of those given by land-based mining and c.) ensuring deep-sea mining is constrained to a level where there is no loss of revenue for governments from land-based mines.

Despite this, and no decision being taken on the overarching goal of the payment regime, events have proceeded as if the overarching goal of the payment regime is to ensure deep-sea mining is not inhibited.

We believe that such an approach should be reevaluated. We do not agree with an approach of setting the rate of the royalty or other taxes so that post-tax profits exceed the level contractors say they require to invest.

Such an approach implicitly implies that the overarching goal of the payment regime is to not inhibit deep-sea mining. We do not agree with that goal or that approach.

We would, therefore, like to suggest that a working group is set up to review UNCLOS and the implementing agreement in order to determine the overarching goal of the payment regime.

Once this goal, or goals, have been agreed, the payment regime should be designed based on those goals.

## **Point 2: The sensitivity and uncertainty of the economic model**

The analysis done by MIT demonstrates that the internal economic rates of return in the economic models are sensitive to their assumptions, especially concerning metal prices. In contrast, contractor's post-tax profits are not highly sensitive to the rate of the royalty within a reasonable range.

Specifically, in the African Group model:

a.) including MIT's original price forecasts increases the IRR from 27% to 39%; but

b.) quadrupling the royalty from 2%/4% to 8%/16% only reduces the IRR from 27% to 25%.

It, thus, makes little sense to fine-tune the rate of the royalty in the payment regime to a particular post-tax IRR or hurdle rate.

In our view, it will be very hard to completely remove this sensitivity and uncertainty from the model. Economic models are nearly always very sensitive to assumptions about prices and costs. Forecasting commodity prices of four metals for the next twenty-five years is clearly going to be subject to significant uncertainty. Costs are also going to be subject to a high degree of uncertainty given that commercial deep-sea mining has never been undertaken.

Put another way:

a.) if we fine-tune the royalty to forecasted profits over 25 years; and

b.) then our forecast of profits is a bit wrong which is very likely given uncertainty in prices - then we are going to end up stuck with a royalty that is at completely the wrong rate.

### **Point 3: Price Assumptions**

The post-tax internal economic rate of return in the African Group model and MIT model are both sensitive to assumptions about the nodule value, which is mainly driven by differences in metal prices.

It is worth investigating the price forecasts but it is also important to recognise that a range of metal price forecasts are available and that there is no absolutely correct answer.

For example, the MIT paper shows that a 11% reduction in nodule value in the proxy African Group model leads to nearly a 4% reduction in the post-tax IRR. While a 20% increase in metal prices and nodule value in the MIT model leads to increase in the post-tax IRR of over 4%.

These are relatively small differences in future metal prices. For example, take crude oil, a widely traded commodity that huge resources go into forecasting. If one forecaster said my long-term price forecast for oil is \$50 a barrel, and another forecaster said my forecast is \$60 dollar a barrel, then that is a 20% difference in price. And yet neither are wildly optimistic or controversial forecasts of the oil price.

We would also note that MIT have significant revised their price assumptions downwards. More specifically - using the African Group assumptions for nodule composition and yield- then:

- a.) MIT's initial price forecast based on statistical analysis of observed prices gives a nodule value of \$1,223 a tonne;
- b.) MIT's current prices forecast gives a nodule value of \$897 a tonne;
- c.) ten-year average prices give a nodule value of \$1,031 a tonne;

The written explanation included in MIT's presentation for this large downwards revision in prices was:

'Previous Analysis Relied on Statistical Analysis of Observed Prices: Does not align with current expert thinking, Updated Analysis is Based on Structural Price Forecasts from Major Firms'

We would like to understand better:

- why MIT revised their price forecasts down by such a significant amount?
- why prices are forecasted to be lower than in the past given that deep-sea mining is being presented as a way of meeting increasing demand?
- what the IRR would be with a 2%/4% royalty in MIT's model with its original forecast of metal prices?
- the impact a single deep-sea mining operation is having on Electrolytic Manganese Metal prices?
- who are the major firms whose price forecasts are being relied upon by MIT? And please could these forecasts and the method behind them be shared with the working group.

#### **Point 4: Sponsoring State Tax Assumptions**

The African Group model and MIT model include a sponsoring State tax rate of 25%. This seems to be based on some average of corporate tax rates in sponsoring States. In our view, this is incorrect and is much too high.

Land based miners broadly speaking potentially have to pay taxes in two jurisdictions, namely where mining occurs and where their head office is resident for corporate tax.

Deep-sea miners have to potentially pay taxes in three jurisdictions, namely where mining occurs, to the sponsoring State and where their head office is resident for tax purposes.

So there is one additional tax paid by deep-sea miners. But it is not corporate income tax in either the sponsoring State or where their head office is based, which is additional compared to land-based miners: it is the specific sponsoring State tax.

It seems not correct to include corporate income tax in the model. There are three reasons for this:

First, corporate income tax is levied on the corporation and not the mine. Losses from one mine can be deducted from profits of another mine, reducing the overall burden of taxation. So it is not a tax on the mine's profits.

Second, corporate income tax is not additional. Land-based miners are also potentially liable for corporate income tax where their head office is located. Although, the details of tax rules might exclude foreign income in some circumstances to a greater or lesser extent and/or taxes where the mine is located might be creditable or deductible from corporate income tax in the head office to a greater or less extent.

Third, models of the burden of taxation for land-based mines do not include corporate income tax where head office is located; they only include taxes where the mine is located. Otto et al's (2000) study that concluded that the overall burden of taxation on land-based miners was 40% to 70% was modelling taxes where the mine is located: it did not include corporate income tax from where the head office of the miner was located.

The sponsoring State tax is any specific payment for sponsorship negotiated by the sponsoring State for sponsorship and an argument could be made for including this in the model. Sponsoring States are in a weak position to negotiate a large sponsoring fee/tax as they do not own the resources and the contractor can be sponsored by any ISA member State, including developing ones.

Our view, based on discussions with sponsoring States, is that this additional tax is unlikely to exceed 1% of profits. This is the maximum rate that should be included in the model.

However, we would also issue a clarion call for transparency. When all contractors and all sponsoring States have published details of all their tax and sponsorship arrangements then the 1% figure could be amended in light of this information.

We would also like to ask that ISA requests that all sponsoring States share their sponsorship tax rates.

**Point 5: Rates of payment within the range of those prevailing for land-based mining**

The Implementing Agreement explicitly states that the rates of payment under the system shall be within the range of those prevailing in respect of land-based mining of the same or similar minerals [Section VIII, para. 1(a) and 1(b) of Implementing Agreement]. A sensible interpretation of the phrase “rates of payment” is that the governments/authorities share of profits from mining should be the same for deep-sea mining in the Area as it would be for land-based mining.

For reference, publically available studies show that the Government’s share of profits from land-based mining is normally in the range of 40% to 70%. The African Group model showed that with a 2%/4% royalty the Government’s share of profits was 6%. This is not in the range of rates of payment for land-based mining.

To date, the MIT economic model has not calculated the ISA’s percentage share of profits at all. Going forward, this will be an important result to include in all future reports.

**Point 6: Reporting of the Model’s results**

To date, the MIT model has concentrated on the internal economic rate of return post-tax. It has also reported ISA’s revenues. Going forward, it will also be important for the model to report a range of other indicators the most important of which are: a.) the ISA’s share of profits; b.) the contractor’s share of profits; and c.) the sponsoring State’s share of profits.

### **Point 7: Negotiating Financial Terms**

We would ask what is meant by using the model to negotiate financial terms? Our understanding was that the main financial terms would be included in the regulations and not negotiated. Is there now a proposal to negotiate important financial terms, like the rate of the royalty, with individual contractors?

### **Point 8: Profit Share**

There have previously been discussions concerning a royalty and profit share. A royalty is simple and easy to implement, but is also inflexible and not progressive. In contrast, a profit share requires more tax administration and audit capacity, but is less regressive and less likely to inhibit investment. Noting the strong opposition to the profit share in some quarters, a possible compromise is to have a royalty rate that varies with metal prices or nodule value. Could such a price varying royalty be included in the next MIT analysis, if any?

### **Profit 9: Encouraging first-movers**

We would question whether first-movers should be encouraged. Deep-sea mining is not a new industry: it is a new process in the very old industry of mining. Land-based mining is capable of supplying the world with necessary minerals and if deep-sea mining is a more expensive and less efficient way of supplying metals it should not be subsidised to be competitive.

In addition, the fact that there are already 29 exploration contracts, demonstrates that there is significant interest and competition for deep-sea mining. This should also be seen in the context of MIT concluding that a single deep-sea mine would significantly reduce manganese prices.

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### **Madam President,**

**Third and last point,** the African Group would like to share its views in light of the discussion held in the informal working group meeting last week. I would like to remind the Council that the African Group comprises the 47 Member States to the ISA, therefore the notion of majority and minority should take into account this element when I am speaking on behalf of the Group.

With regard to the royalty rate varying across periods of commercial production, the African Group notes that the logic for this is the assumption that the ISA has a lower discount rate than

contractors. In our opinion a lower discount rate should not simply be assumed, and until the ISA formally adopts a discount rate it would be simpler for discussions to proceed based on a non-time varying rate.

On the system of payment, the African Group continues to strongly favour a combination of a royalty and profit-sharing mechanism. We are mindful of the strengths and weaknesses of each system. We recall that there have previously been discussions concerning a royalty and profit share. A royalty is simple and easy to implement, but is also inflexible and not progressive. In contrast, a profit share requires more tax administration and audit capacity, but is less regressive and less likely to inhibit investment. Noting the concerns over the profit share by some delegations, a possible compromise is to have a royalty rate that varies with metal prices or nodule value. The range of royalty rates that vary with prices would of course, have to result in overall rates of payment in the range of land-based mining and provide fair compensation to mankind for the loss of nodules to common ownership. We would appreciate if such a price varying royalty be included in the next MIT analysis, if any.

The African Group would also like to offer some comments on what it does and does not consider fair compensation to mankind. The African considers that the ISA receiving 2% of the value of nodules, even in the short-term, does not represent fair compensation to mankind for the loss of resources to common ownership. In addition, we have briefly reviewed the figures put forward last week by MIT in their 113-slide presentation. The figures presented show that in net present value terms the total compensation to Mankind with a 2% and then 6% royalty would be \$490 million. This represents just \$2.93 million for each of the ISA's 167 members (excluding the EU) over the 30-year life of the exploitation contract. This means that each of these ISA members would receive on average in net present value terms approximately \$97.8 thousand per year. The African Group does not consider that this is fair compensation to mankind.

The African Group also notes that MIT presented convincing analysis that a single deep-sea mine would cause a drop in Electrolytic Manganese Metal and Low Carbon Ferromanganese prices. Some African countries are significant miners of manganese and any drop in prices will thus negatively affect the value of their exports. UNCLOS provides for compensation to developing countries for losses in their export earnings due to deep-sea mining in the Area. The

African Group thus urges the Secretariat and the LTC to speed up the already requested study on this issue.

On the review of the payment mechanism and review of the rates of payment, the African Group looks forward to offering detailed comments when this issue is discussed further.

Regarding the process moving forward, if no funding is available to support participation from members of the African Group, we prefer that meetings of the open-ended working group be held during the session of the Council, otherwise any outcome document from discussions in such format shall not have any standing for us. One of the elements that arise from the principle of Common Heritage of Mankind is the common management of the Area.

We understand that there is a timeline to respect, but there are also other constraints and we should avoid rushing without a proper and meticulous regulatory process. We would like to recall, in this regard, words pronounced by Peter Thomson, Special Envoy of the UN Secretary-General for the Ocean, at the Ocean Day in Davos last month, “There is a UN decade for Ocean science, which has been agreed to by 193 countries [...] in the General Assembly in December 2017, and that decade will run from 2021 to 2030 [...] why would’nt we give that decade its full run before we start even thinking about disturbing the seabed of the high seas, we are talking moratorium of 10 years in that case”. These words are food for thought to all of us.

To conclude, the African Group kindly requests that this statement be part of the official record of this meeting.

I thank you.