

Advisory Review of the SEA for Transport Options
for Corridor Sands Limitada, Mozambique

17 September 2004

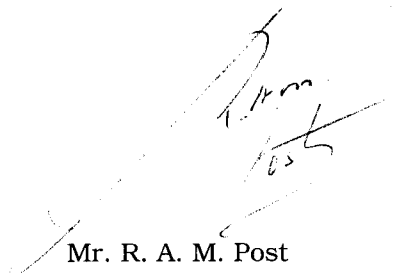
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Advisory Review of the SEA for Transport Options for
Corridor Sands Limitada
- Mozambique -

Advice submitted to the Minister for Co-ordination of Environmental Affairs of
Mozambique (MICOA), by a working group of the Commission for
Environmental Impact Assessment in the Netherlands

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Utrecht, 17 September 2004

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MAIN OBSERVATIONS OF THE ADVICE

1. The Commission is impressed by the rapid progress made by Mozambique in pursuing strategic environmental assessment on a national scale. However, the present SEA report would have realised a substantial gain in credibility through the inclusion of preferably quantitative background material to support the decisions to discard certain options and select others. For future SEA cases of equal importance, the Commission recommends to include such background material.
2. The SEAs proposal for options 3 and 4 for the long-term development of the national transport infrastructure as linked to the mining activities in this region, provide CONDES with an urgent challenge to actively facilitate strategic planning in order to ensure that mining products will reach the coast on permanent infrastructure as soon as a twenty years license for a temporary infrastructure would have expired. The Commission thinks that it is important that a national land use and development plan be elaborated for the coastal zone, which identifies key large-medium size development initiatives for which pre-feasibility studies could be undertaken and for which funding could be sought. The Commission recommends balancing the development of the mining sector with the development of other sectors like tourism, agriculture and fisheries.
3. In the view of the Commission, the time frame proposed for strategic planning as presented in the process action plan of the SEA (Chapter 8) is too stringent and needs adjustment, in order to provide ample time for indispensable background study and dialogue. The Commission recommends that the pre-feasibility study and the strategic Environmental assessment of options 3, 4 should and possibly additional options should be combined, that Terms of Reference for this SEA process should be developed within a time span of one year and that the whole process should be allowed adequate overall time space.
4. Whatever option is pursued, the Commission recommends making optimal arrangements between the government and the mining company to minimise negative impacts and derive maximum benefits for Mozambique and the local population. These can be negotiated as part of the contract between the mining company and the government as proposed in the present SEA.
5. The Commission has the opinion that the present SEA does not fully spell out the attribution tasks with regard to monitoring and evaluation. Aware of the legal dispositions on monitoring and evaluation, the Commission recommends to include roles and responsibilities on monitoring and evaluation in the contract referred to under point 5.

1. INTRODUCTION

1.1 General

1.1.1 Corridor Sands transport options

On 16 September 2002 the Ministry for Co-ordination of Environmental Affairs of Mozambique (MICOA) environmentally licensed the establishment and operation of a heavy mineral sands mining activity in Chibuto in the Gaza province of Mozambique. The activity includes the establishment of a high-tension power connection, the realisation of a rail link to Matola harbour and the establishment of a bulk cargo facility at the Matola harbour. By the end of 2002, WMC¹ became the sole shareholder of Corridor Sands Limited (CSL), the Maputo (Mozambique) based mining company that will exploit the Chibuto mine.

CSL proposed the Alternative Export Option (AEF, now renamed Chongoene Export Facility, CEF) as their preferred option for the import of inputs and export of the products. This option includes the construction of a 65 km long fenced private haul road from the smelter to Chongoene beach, a bulk cargo facility (Materials Handling and Storage Facility) behind the frontal dunes at Chongoene beach and a 1,2 km long, 20 meters above mean sea level lattice structured private jetty, to be built perpendicular to the coast-line, capable of docking 25.000-45.000 tonnes (DWT) Handymax sized Vessels.

Corridor Sands Limited is in favour of the CEF as it indicates, it would generate substantive savings in capital expenditure and operational costs of transportation and exportation of its products and required inputs, facilitate further expansion and minimise risks of down-time, as well as enhance the company's control of the operations (letter to MICOA of 16 January, 2003).

The proposed CEF has considerable (ecological, economical and social) impact and is subject to Environmental Impact Assessment under Mozambican environmental legislation. MICOA is the government agency competent to provide the environmental licence for the activity. In addition, MICOA has to approve the Scoping Guidelines for the EIA for the activity. Considering the complexity of the issue in relation to the decision to be taken, MICOA asked the Netherlands Commission for EIA (NCEIA) to assist MICOA in this EIA procedure.

Responding to the request and in view of the multitude of sectors involved and long-term interests at stake, the NCEIA advised to engage in a Strategic Environmental Assessment for the transport options to be developed. In addition, NCEIA provided non-binding advice on the SEA-process that MICOA

¹ WMC Resources Ltd is derived from the original company founded in Australia in 1933. Until November 1995, the company was known as Western Mining Corporation Holdings Ltd. In 1995 it changed to WMC Limited. In December 2002, WMC Limited split up into two separate companies: WMC Resources Ltd and Alumina Limited. WMC Resources Ltd is the full name of the company.

could apply in this specific case². MICOA responded positively to the advice and initiated the SEA-process in the month of May 2003.

The NCEIA expresses its gratitude towards DANIDA for financially facilitating this SEA process and NCEIA's contribution to that process.

1.1.2 Mandate for this advice

MICOA has asked the NCEIA to provide advice on technical review (process and substance) of the SEA document (see appendix 1).

1.1.3 Review of the draft SEA and the final SEA

In order to formulate advice on the draft SEA report, the NCEIA fielded a working group of specialists in the fields of SEA-processes, transport economy, tourism, hydrology and port and bulk facility environmental aspects (see appendix 2). The NCEIA visited Mozambique from 6 to 10 October 2003 (see appendix 3 for the programme) and held consultations with MICOA, the process facilitator, the project consultants and five individual stakeholders. At the time of the visit, the SEA-process was still ongoing. The NCEIA presented its first review findings on the draft SEA in a stakeholder meeting that took place during the mission.

In the guideline stage, the NCEIA had visited the proposed site of establishment of the AEF and the adjacent zones designated for tourism development. During this mission a the Hydrologist of the NCEIA team visited the Baragem area.

On the 7th of June 2004 the NCEIA received the final SEA report.

1.2 Summary of April 4th 2003 NCEIA advice on SEA-process

The NCEIA proposed to create a structure of three groups in this SEA process. The group of competent authorities that make the decision on the transport option(s) to be developed, the decision preparing platform of stakeholders that was recommended to manage the SEA process and its funds³ and that would provide terms of reference to the third group, the experts. This third group would execute the studies that would provide the knowledge (the background studies) on the basis of which the platform would propose or discard options. To facilitate the functioning of the group of competent authorities and the decision-preparing platform, the NCEIA proposed to appoint a process facilitator.

² Advisory guidelines on a two-step approach for selecting a bulk cargo transport option for Southern Gaza Province, Netherlands Commission for EIA, April 4th, 2003, ISBN 90-421-1152-6.

³ Advisory guidelines on a two step approach for selecting a bulk cargo transport option for Southern Gaza Province. Paragraph 4.1.2

For the SEA process, the NCEIA proposed the following steps:

- Step 1: Obtaining decision-makers' commitment to the process and its results;
- Step 2: Decision-makers group defining the scope (determine the limits to the freedom to develop alternatives);
- Step 3: Defining the problem and objectives of and guidelines for the process
- Step 4: Formulating the SEA/advice through joint fact finding (impact assessment) in an iterative process of repeated stakeholder discussions, background study and informing the decision-makers group
- Step 5: Quality review of information underlying the SEA/advice
- Step 6: Decision-making

1.3 Approach proposed for the review

1.3.1 **Focus on the process as well as on the facts**

SEA is an approach that enables better decision-making on strategic issues by linking knowledge and information (the facts) to strategic decision-making processes. Therefore, the NCEIA focuses its review on the process of decision preparation and decision-making and on the facts (underlying information, background studies).

1.3.2 **The process**

World-wide, there is still limited experience with the use of SEA by governments of developing countries and with SEA in a development context. The fact that the competent authorities of all sectors concerned have shown their commitment to engage in a joint process of strategic planning is an accomplishment.

The NCEIA appreciates that MICOA, for valid reasons, has not completely followed the ambitious process approach as proposed by the NCEIA in its advice April 4th. The NCEIA will highlight in the present advice the consequences of the changes applied. Additionally, it will analyse the consequences of non-availability of certain foreseen results of process steps for the SEA-report/advice to the decision-makers. Finally, it will review the process based on the internationally accepted criteria of transparency and participation, which underlay the NCEIA's advice of April 4th.

Aware that this SEA will not be a one time event in Mozambique, the NCEIA recommends taking stock of the lessons that can be learnt from this SEA-process by thoroughly evaluating the decision-making process with all individual contributors involved after decision-making.

The evaluation of the process is based on the SEA-report, meetings with MICOA and some of the stakeholders and the platform meeting at the Kaya Kwanga on Friday 10 October 2003.

1.3.3 The facts

The NCEIA reviews the facts on scientific soundness and completeness, making use of international practice and examples.

2. REVIEW FINDINGS

2.1 The Process

2.1.1 Review of the SEA-process steps

The steps of the process, as proposed by the NCEIA, were intended to help increase the relevance of the SEA to the actual decision-making process. Whether this goal was achieved can only be evaluated by the decision-makers and their representatives. There are no international standards and best practice is linked to the national tradition of decision-making processes. In addition, NCEIA has considerable distance to Mozambican decision-making traditions and processes and the process that has actually taken place has not been documented in detail in the SEA report. Relying only on impressions, the observations made hereafter should therefore be regarded as indicative suggestions.

2.1.1.1. Process steps 1, 2 and 3

The NCEIA greatly appreciates the way in which MICOA has implemented steps 1 and 2. As to the knowledge of the review team, step 2 has not led to a physical document inviting the Stakeholder Platform to formulate advice on the transport options and giving guidelines for the formulation of such advice (step 3). MICOA obtained commitment to the SEA process of those decision-makers that did not attend the first meeting by visiting them and explaining the intention of the SEA.

Having heard the results of the decision-makers group meeting during the mission in October 2003, the NCEIA has the impression that the facilitator was able to effectively manage the risk that the SEA report might not be relevant to the decision-makers.

2.1.1.2. Step 4

The physical results and the results in terms of shared perceptions of the approach for step 4 as recommended by the NCEIA would have been:

- 1. Background studies are commissioned, executed and produced. These studies substantiate the choices the platform makes in developing and proposing (or discarding) options to the decision-makers;*

2. *A SEA report/advice to the decision-makers group which includes as annexes the underlying studies;*
3. *At any one moment in the process, the various stakeholders in the platform develop consensus on the options to be discarded and the options to be proposed;*
4. *The approach provides feedback to and from the decision-makers group that stays informed and can provide interim guidance on development of scenario's and alternatives. This feedback mechanism also gives the stakeholder-platform a certain level of confidence about the acceptability to the decision-makers of the result of its work.*

The review team observes the following with regard to the physical results of SEA-process step 4 as adopted in the present SEA procedure and its results in terms of shared perceptions:

1. The SEA report considers, assesses and proposes and discards transport options;
2. Background studies (see under 2.1.1.3);
3. The report is endorsed by the stakeholders on the platform and by the decision-makers group.

2.1.1.3. Process credibility

SEA processes range from multi-stakeholder workshops assessing impacts of options or scenario's purely on the basis of perceptions and judgement of the participating experts to option and scenario development backed up with extensive scientific study. The NCEIA has the opinion that the depth of the analyses in an SEA-process depends on the importance of the decision to be made. Generally speaking, decisions with far-stretching consequences require more comprehensive SEA-processes than decisions with lighter consequences. The NCEIA considers the consequences of the decisions that must be made on the basis of this SEA-process to be far-reaching, since they may significantly affect the development options of the southern part of Mozambique's. The credibility of a SEA-process increases when the choices made in the SEA are backed up with quantitative scientific evidence in background studies.

The SEA report does not provide the technical, economic and financial details (in quantitative and qualitative background documents) that enable verification whether the justification given for selecting option 2 and discarding option 1 is based on scientifically sufficiently sound analysis⁴. The NCEIA, basing itself on best western practice, has the opinion that the credibility of this specific SEA and the selection of the preferred short term option from options 1, 2, 5 and 6, would substantially have gained in

⁴ The NCEIA notices that in its Kaya Kwanga meeting of 10 October 2003 the platform has decided that financial and economic background studies would be commissioned to back-up the proposal made in the draft SEA-report. Having reviewed the final SEA report, the NCEIA concludes that it does not include the referred background studies. Also, the final SEA does not include the recommended provision of equal level background information on the risks for each of the options of the Limpopo Hydrology and combined effect of floods and raised sea levels in the event of a cyclone from the Indian Ocean.

credibility if quantitative and qualitative background information would have been included.

2.1.2 Review of the transparency of the process

The NCEIA observes:

- Announcements in the press invited stakeholders directly to the process. Preparatory meetings made it clear to the participants what the objectives and the status of the process were. The participants made further decisions collectively, making these decisions (and their justification) transparent to all.
- MICOA prepared and dispersed the draft SEA report to the participants. Although the participants received the draft SEA shortly before the platform meeting of October 10th 2003, they have provided feedback on the draft. The NCEIA found that at least part of the feedback has been considered in the final SEA.
- The recommendation made by the NCEIA to include in the final SEA comparative financial and economic analyses of the short-term options received agreement in the platform meeting⁵ but has not been given a follow-up in the final SEA report. In the light of improving the transparency of the process, the NCEIA recommends to make public the reasons for not following-up on the recommendation in the final decision.
- The progress made in the Bilene stakeholder workshop in order to develop joint perceptions between stakeholders has led to a clear proposal for a compromise solution and, thus, was successful in achieving its primary objectives.

2.1.3 Review of the level of participation

The NCEIA observes that:

- the group present at The Bilene stakeholders workshop represented all major interests with respect to the export facilities of CSL;
- the majority of the participants actively participated and voiced their opinions if they did not agree with the decision-making process at the workshop;
- the participants contributed their expertise and knowledge and they developed new perceptions about the preferable options for the export of the mining ore;
- MICOA has confirmed that during the entire SEA process CONDES members have been extensively informed on option development and impact assessment through their representatives in the decision-makers group.

⁵ on 10 October 2003 at the Kaya Kwanga in Maputo

The NCEIA concludes that there was an adequate level of participation in this SEA process.

2.1.4 Overall conclusions on the process

With regard to the SEA process for Corridor sands Transport Options, the NCEIA summarises its opinion as follows:

1. It greatly appreciates the fact that the decision makers committed themselves to a multi-sector strategic planning process.
2. It has the opinion that the SEA-process as adopted is acceptable for the present situation but acknowledges that inclusion of preferably quantitative background material would have given the process and the final decision substantially more credibility.
3. Review of the SEA process on participation and transparency was to some extent limited by the absence of written material and the lack of opportunities to interview some important stakeholders. Still, the NCEIA has the opinion that the process has been sufficiently transparent. With regard to the participation in the process of high-level decision-makers, the NCEIA accepts the confirmation of MICOA that CONDES members have been informed adequately throughout the SEA process.
4. It acknowledges that the process has been an exemplary learning exercise for all concerned. It congratulates the Mozambican Government and MICOA with this first SEA for a national scale strategic planning process.

2.2 Technical review of information underlying the alternative options

With regard to the review of the background information, the NCEIA observes:

1. that apart from the study on the potential of tourism development in de area, the SEA does not include background studies.
2. that additional social, environmental and economic information on the options 3 and 4 will become available with time in the respective SEAs and EIAs that will be done for these options.

2.3 Technical review of the environmental considerations sector-wise

The stakeholder platform enabled a sector wide approach where each option was assessed on the basis of the environmental measures that would have to be taken for environmentally sound decision-making.

The NCEIA considers this a useful exercise that clearly identifies the fields in which the sector ministries and decentralised levels of government will have to co-operate with MICOA.

In appendix 5 the NCEIA makes detailed observations with regard to the environmental considerations presented in the SEA-report.

3. RECOMMENDATIONS

3.1 Recommendations for decision-making

For decision-making the NCEIA recommends:

1. to include in the decision of CONDES a clear identification of the tasks and competencies of the different ministries in the implementation of the recommendations of this SEA. In the view of the NCEIA, at least the following policy fields should take part in that process: mining, transport, agriculture, spatial planning, biodiversity, tourism and environment.
2. to identify in the decision of CONDES the entity that is responsible for co-ordinating the implementation of the transport policy resulting from the SEA and propose rules for the functioning of this entity.
3. to address in the decision of CONDES the way CONDES has used the SEA report and this independent advisory review of the SEA report.
4. if CONDES follows up on the recommendation of the SEA report, the NCEIA recommends to facilitate the immediate start of activities on planning and strategic environmental assessment of long term solutions for along coast transport options.

3.2 Recommendations for future SEA processes

The NCEIA recommends for future SEA cases:

1. making SEA processes for decision of equal importance more credible than the present SEA by making them more comprehensive by making:
 - a. the development and selection of options (scenario's) an iterative process between the decision-makers and the decision preparing platform
 - b. each iteration (decision to maintain or discard options) supported and substantiated by technical, economic and financial⁶ background studies.

⁶ e.g.: the NCEIA considers the issue of transport of mining ores in south eastern Mozambique to be a strategic question that must be answered in balance with transport needs of agriculture, development options for tourism etc. The infrastructure needed for that transport is then a secondary issue. The answers should be based as much as possible on sound arguments. In similar cases, the NCEIA advises to make use of modern methods for assessment of economic costs and benefits of alternative transport options and their implications for all sectors.

The NCEIA is aware that this recommendation implies that more time and funds need to be allocated.

2. to increase transparency by providing in SEA reports copies of minutes and any other written outcome of all workshops, meetings and other communications.
3. making the lead agency or lead ministry the owner and manager of the SEA process and furnish MICOA with the responsibility to provide SEA guidance to that agency (ministry)
4. to consider splitting-up the issues addressed into levels of strategic importance. The more strategic, the higher the management level that should discuss these matters⁷.

3.3 Background notes on environmental considerations sector-wise

Background notes for the various sectors are contained in the background notes annexed to this advisory review. Notes formulated in relation to the present SEA report are meant to serve future SEA studies and the EIA study made for the selected option.

⁷ In the view of the NCEIA, the high level strategic issues are in this case the development of a north-south axis and the way the government deals with foreign investors in the mining sector in particular, in order to prevent irreversible (market) processes that lead to an unstoppable domino effect in the use of land in the ecologically sensitive coastal zone.