



Netherlands Commission for
Environmental Assessment

MOZAMBIQUE (D2B15MZ01)

Quick Scan on Environmental Pre-Feasibility and Scoping Study (EPDA) for Beira Port Access Road



8 December 2017
Ref: 7206



Advice of the Secretariat

To Netherlands Enterprise Agency (RVO.nl)/ D2B

Attn Mr Willem Timmerman

CC Ms Fenna Houkamp, Ms Tamar Schrofer, Mr Bas Schilperoort, Ms Christina van der Heden

From The Netherlands Commission for Environmental Assessment (NCEA)

Date 8 December 2017

Subject **Quick Scan on Environmental Pre-feasibility and Scoping Study (EPDA) for Beira Port Access Road in Mozambique – D2B15MZ01**

By: the Secretariat of the Netherlands Commission for Environmental Assessment – Mr Gijs Hoevenaars, quality control by Ms Ineke Steinhauer

Reference 7206

Contact:

W: www.eia.nl

T: +3130 234 76 60

E: ncea@eia.nl

Table of contents

1.	Introduction.....	2
1.1	Approach to this Quick Scan	2
1.2	Request of the Netherlands Enterprise Agency (RVO)	2
2.	Key observations.....	3
2.1	Conformity with national EIA procedure.....	3
2.2	Quality of technical content.....	3
3.	Detailed observations.....	4
3.1	Justification of the project	4
3.2	Current situation.....	4
3.3	Entrance to the port	5
3.4	Current land use	5
3.5	Size of the project.....	5
3.6	Assessment of alternatives.....	6
3.7	Comparison of alternatives	8
3.8	Road design.....	8
3.9	Effects of the project.....	8
3.10	Origin of sand.....	9
3.11	Type of alternatives	9
3.12	Other.....	9

1. Introduction

1.1 Approach to this Quick Scan

The Port of Beira is the second largest port in Mozambique. In 2003, the World Bank advised to look at the infrastructure around the port of Beira. The construction of the Beira port access road is identified by relevant stakeholders as one of the priority projects of the Beira Masterplan 2035. By significantly improving the access to the port and from there to national roads, an increase of cargo entering the port can be expected, as well as improvements on safety, travel time and prevention of cargo being deteriorated or lost.

The objective of the project is to:

- improve port access;
- improve road safety and the living conditions in Beira;
- attract investors and stimulate industrial and economic development;
- improve cooperation between the port authority and the municipality of Beira.

The project was classified as Category A project for which an Environmental and Social Assessment (ESIA) needs to be executed (ref. no. 860/DA/252). Part of the ESIA process is an Environmental Pre-feasibility and Scoping Study (EPDA report) to determine potential 'fatal flaws' of the activity, and to define the scope of the ESIA. The EPDA report includes the Terms of Reference for the ESIA.

For this Quick scan the following documents have been considered:

- Volume I: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE BEIRA PORT ACCESS ROAD, MOZAMBIQUE, ENVIRONMENTAL PRE-FEASIBILITY AND SCOPE DEFINITION STUDY, VOLUME I – FINAL REPORT, October 2017.
- Volume II: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE BEIRA PORT ACCESS ROAD, MOZAMBIQUE, ENVIRONMENTAL PRE-FEASIBILITY AND SCOPING STUDY, VOLUME II – PUBLIC PARTICIPATION PROCESS REPORT, October 2017.
- Volume III: NON-TECHNICAL SUMMARY, BEIRA PORT ACCESS ROAD PROJECT ENVIRONMENTAL IMPACT ASSESSMENT PROCESS – EPDA PHASE. October 2017.
- Formulation Plan Port Access Road 24-03-2016.
- Feasibility study Multi Criteria Analysis 30-10-2017.
- NCEA Screening PSD/Drive on E(S)IA requirements & IFC PS for 7206 Beira Port Access Road, Mozambique, D2B15MZ01, April 2016.

1.2 Request of the Netherlands Enterprise Agency (RVO)

The Dutch funding agency (RVO) has requested the opinion of the Netherlands Commission for Environmental Assessment (NCEA) on the completeness and overall quality of the documents. It will not be a detailed review, but the main focus will be on whether there are crucial shortcomings and/or serious mistakes. For the review the NCEA has looked at the Mozambican ESIA requirements and IFC Performance standards.

RVO intends to take a decision on whether or not to continue with this project in December. Therefore they have asked the NCEA to submit this Quick Scan preferably on December 8. However, as NCEA will visit Mozambique the week thereafter, it was suggested to RVO to try

and align the NCEA review with the review that the Ministry of Lands, Environment and Rural Development (MITADER) will have to perform. This would offer the possibility to compare findings, and discuss this face-to-face during the visit. The outcomes of this discussion will be communicated to RVO on December 15 at the latest.

2. Key observations

2.1 Conformity with national EIA procedure

Law No. 20/97 establishes the ESIA process as one of the fundamental instruments for environmental management. Decree No. 54/2015 defines the ESIA process, including the EPDA, Public Participation Process and environmental license issuance.

Art. 10 of this Decree mentions the content requirements of an EPDA. The Draft EPDA was updated to reflect and respond, issues and concerns collected through public participation.

Furthermore, the EPDA is developed in line with IFC Performance Standards.

Road design will be in accordance with the Southern African Transport and Communication Commission (SATCC) Code of Practice, and the South African National Roads Agency (NRA) Geometric Design Guidelines.

Volume II contains a list of Interested and Affected Parties (I&AP), including government institutions, NGOs and private companies. They have also been invited to the EPDA public meeting. However, the NGOs that are mentioned are associated with trade. Environmental NGOs, e.g. aiming at nature conservation were not involved in the process. The same goes for communities of people that will be affected by the project. There is no evidence that their leaders were involved in the public participation process. This is not in line with the General Directive for Public Participation in the EIA Process (approved by Ministerial Diploma No. 130/2006). This is especially relevant because the project may lead to population displacement including the loss or disturbance of economic activities like rice growing, and fishing. Besides the regular issues associated to roads and pedestrian safety, the road may be an access barrier to coastal lowlands and mangrove areas.

- The NCEA therefore recommends to add to the Terms of Reference that NGOs for environmental protection and potentially affected communities and their leaders will be specifically invited to join the public participation process for the ESIA.

2.2 Quality of technical content

The EPDA is well written and clearly structured. It contains a lot of detailed information that can be used for the ESIA report itself as well. However, as stated in the EPDA itself, one of its most important functions is to assess whether there are fatal flaws with regard to the project. To this end the EPDA lacks information with regard to the justification of the project, the size of the project and, most importantly, the current situation of the project area. It fails to demonstrate whether there are specific areas where any activity that can cause significant negative impacts will not be authorized.

3. Detailed observations

3.1 Justification of the project

The Beira Port Access Road is part of the plans for the development of the Beira transport corridor, which has been conceived within the framework of the port expansion plans of Mozambique Railways (CFM). The Beira Port Access Road is also mentioned in the Beira Master Plan 2035 as well as in 'several National and Local Policy Documents', but this is not further substantiated (p. 32).

Apparently it is already decided in earlier plans that there should be a new Port Access Road. The EPDA however does not specify what exactly has been decided and what is still open to discussion and decision-making. Because of this, the justification for the project (why this project?) is not explicitly addressed in the EPDA. It should be clear which percentage of the goods coming from the port are destined for the city of Beira, which percentage for the region and which percentage is destined to be transported abroad.

- The NCEA recommends to specify in the EPDA to what degree decision-making with regard to this project has already taken place. It should be clear in the Terms of Reference which questions remain open and need further assessment. If the decision on the project of a new Port access road as such has already been justified by earlier plans or decisions this should be made explicit in the ESIA, and thus requires no further assessment in the ESIA.

The earlier decision-making is also relevant with regard to the question of cohesion between the road and the extension of the port. In other words, is the road needed for the facilitation of the current situation or is it a first step to an extension of the port? The EPDA does mention the possibility that more cargo will be transported from the port.

- The NCEA recommends to clarify whether the new road is only needed to resolve current traffic problems or whether it is intended to facilitate a future extension of the port. If the road is intended as inseparable part of the extension, the EPDA should consider the road and the extension as one project.

3.2 Current situation

The baseline assessment does not focus on the most relevant aspects for the project, such as current traffic jams. It provides a lot of detailed information on e.g. the temperature in the region and the number of hospitals.

It is however more relevant that the EPDA indicates where there are bottlenecks in the current situation. For example, with regard to noise it states that there are 'no exceedances of the WHO/WB guidelines' (p. 75), but this is not substantiated. With regard to floods, the EPDA mentions that the lower basin is often subject to flooding during the rainy season (p. 92). The extend of these floods in the studied area however remains unclear. For this project, figure 6.28 is not of the right level of detail to be taken into account in the ESIA.

For traffic there should be research into the severity, exact location and particular time-frames of the current congestion problems.

- The NCEA recommends to review the description of the current situation and focus on the most important features that will be affected by the project, such as traffic jams, noise and floods. As a rule of thumb, the baseline assessment should be limited to those issues which are of crucial importance to the questions to ESIA will address and the decisions to be taken.

3.3 Entrance to the port

Only one alternative considered in the EPDA mentions the fact that the entrance to the port will be moved to another location (the exit will remain on the current location). The EPDA does not make clear why it should be moved and why the entrance and exit of the port must be located in different locations. This may lead to more traffic on different locations. If one of the goals of the project is to prevent or reduce hindrance of traffic in the city of Beira, both the entrance and exit should be situated at a distance as far as possible from the city itself.

- The NCEA recommends to specify in the EPDA whether the relocation of the entrance of the port has already been decided on and when it will be executed. If the relocation is certain, it should be taken into account in all alternatives. The EPDA should also stipulate in that case that the ESIA will describe the new routing for each alternative.

3.4 Current land use

One of the key elements to assess the impacts of a project is the current land use of the studied area. Whether it is agriculture, housing, nature or something else, this is vital for the question whether there are fatal flaws for the project. In the Mozambican legislation, fatal flaws are described in Annex V of the Decree as specific areas where any activity that can cause significant negative impacts will not be authorized. Therefore, it is essential that the EPDA specifies if such areas are situated in the studied area. Paragraph 6.2.2 seems to suggest that the only protected area in Mozambique is a designated Ramsar site, that is located outside of the project area. P. 104 suggests that there are mangroves in the studied area and mentions 'relatively protected areas'.

The EPDA does not contain a clear figure, map, photo or assessment of the current lands use. Paragraph 6.3.7 of Volume I deals with the current land use, but does not give many insights. It is therefore difficult to assess whether and how many communities, protected flora and fauna species will be affected by the various alternatives. It is equally difficult to assess whether any specific areas will be affected that can cause fatal flaws.

- The NCEA recommends that the EPDA specifies how the studied area is currently used. Moreover, it recommends to indicate whether areas that can cause fatal flaws are situated in the studied area.

3.5 Size of the project

To be able to assess the impacts of a new port access road it is required to get a sense of the size of the project. This is even more crucial, given the fact that the road is expected to attract even more transport of goods once it is opened. Therefore, it should be estimated how many transport movements the project should facilitate and what size of increase of transport movements is expected.

The EPDA stipulates that the Beira Port Access Road will be a 'single lane carriageway' road, 'following traffic report recommendations'. On the other hand, in various studies the question of the number of lanes is left open. The number of lanes is heavily dependent on the expected transport movements. The EPDA should therefore include more information to this point.

- The NCEA recommends to estimate in a quantitative manner how many transport movements the project should facilitate.

Apart from the number of goods it should also be clear which type of goods will be transported on the new road. It is specifically necessary to know whether dangerous or hazardous goods will be transported on the road.

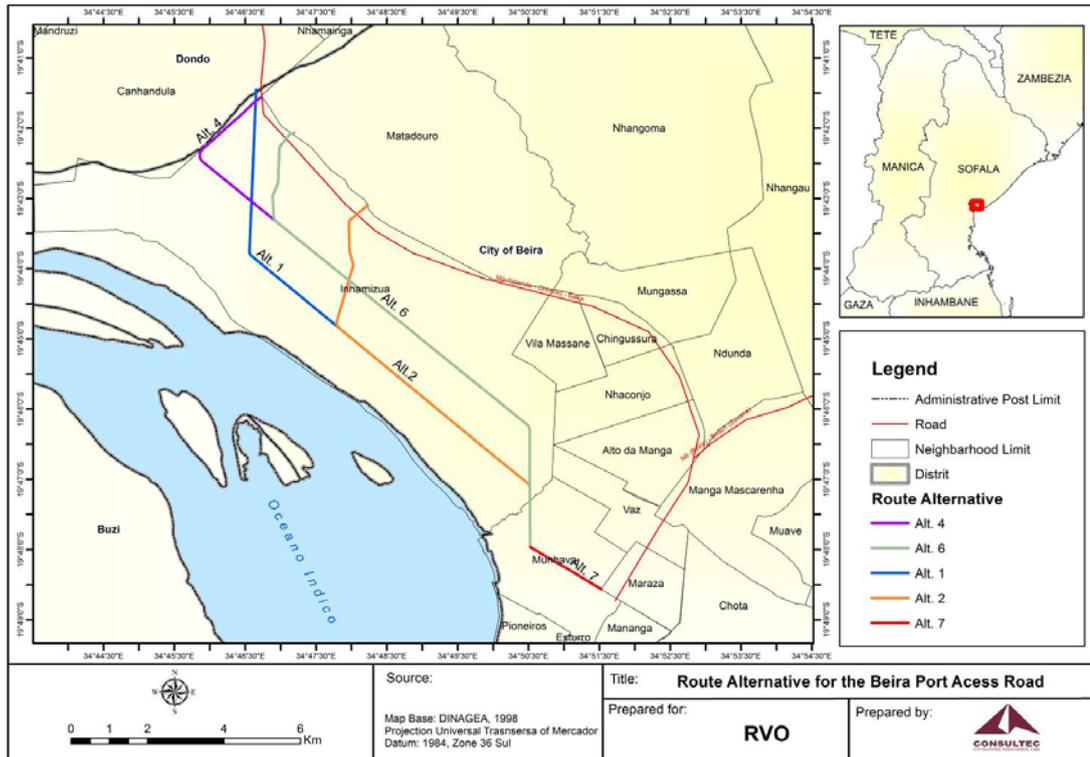
- The NCEA recommends to describe which type of goods will mostly be transported on the new road.

3.6 Assessment of alternatives

After the project description (4.2.1) the EPDA immediately continues with the location and routing of the various alternatives (4.2.2 and 4.2.3). Nine possible options were considered, but only the following five alternatives will be further assessed in the ESIA:

- Route A1: Runs through the planned port expansion area, parallel to the Pungue River.
- Route A2: Shorter version of Route A1, that can be seen as first stage in developing Route A1.
- Route A4: Runs parallel to the existing pipeline and lies approximately 1 kilometer north of Route A1. It has a curve at the University.
- Route A6: Shorter version of Route A4, that can be seen as first stage in developing Route A4.
- Route A7:
 - Rehabilitation of Kruss Gomes Road that will connect the EN6 to the present port entrance and exit.
 - In future the entrance will move to another location. To separate incoming and outgoing traffic it is necessary to replace the existing unpaved road that runs in line with the Kruss Gomes road by a paved road.

According to the EPDA, Route A6 is the preferred alternative.



Although the EPDA mentions ‘conditioning factors’, ‘physical limitations’ and ‘critical locations’ (4.2.3), the EPDA does not describe which nine alternatives have initially been identified and why four of them have been discarded ‘for technical and environmental/social reasons’. These reasons should be included in the EPDA for each alternative. Furthermore, the EPDA should substantiate why mitigation is not possible.

The EPDA should contain a clear figure with all ‘physical limitations’ and ‘critical locations’, and all nine considered alternatives.

This is especially relevant since in earlier studies less or even more alternatives were considered, e.g. in the Formulation Plan Port Access Road 24-03-2016 (“The Scoping Study presents three main alternatives, with variants. (...) The conjugation of these alternatives with the equated variants leads to 9 different possibilities and costs indicated.

The Technical Department of the Beira Municipality (CMB) has studied yet another solution (alternative 4), which is partly coincident with the Scoping Study’s Alternative 1.”) and the Feasibility study Multi Criteria Analysis 30-10-2017 (considers only four alternatives: A1, A2, A4 and A6).

- The NCEA recommends to include the substantiation of the development of the different alternatives to be able to assess whether all relevant reasonable alternatives were considered. Furthermore, the reasons why certain alternatives will not be considered in the ESIA should appear in the EPDA.

3.7 Comparison of alternatives

Paragraph 4.2.3.4 contains an 'Analysis of alternatives' by stating for each alternative its main advantages and disadvantages. This is quite difficult to read because different aspects are taken into account and it is not clear how they are weighed. A Multi Criteria Analysis would provide much more insights, using the same weighed factors for each alternative. In this respect, the NCEA refers to the recent Feasibility study Multi Criteria Analysis of 30-10-2017.

- The NCEA recommends to include a Multi Criteria Analysis in the EPDA in which all the alternatives are scored for all relevant and weighed factors, in order to visualize how the different alternatives relate to each other.

3.8 Road design

Apparently the Port Access Road is a primary road (under the management of the national roads authority) that requires a protection zone of 30 m on each side of the road (p. 34). The idea is to avoid, as much as possible, the need to resettle infrastructure. The EPDA should therefore not advise to reduce the width of the protection zone (as has been done in chapter 10) because this is conflicting with national legislation.

- The NCEA recommends that the Terms of reference stipulate that the road design complies with (inter)national norms.

3.9 Effects of the project

- Ethnicity, religion and language (6.3.3)/Demographics (6.3.4)/Education (6.3.5)/Basic Services and Infrastructure (6.3.9): not relevant for the project.
 - Health (6.3.6) is relevant, but not with regard to health facilities, but to health risks as a consequence of the road project.
 - Land use (6.3.7) is relevant, but with regard to the question whether the project will lead to changes of the land use. For example, p. 100 states that the project area contains agricultural (e.g. rice) fields.
 - Housing (6.3.8) is relevant, but not the housing type. It should deal with the question whether people should be moved. How many people live in the project area and where exactly? Paragraph 6.3.5 is not very informative with regard to this aspect.
 - Economic Baseline (6.3.10) is relevant, but with regard to the question whether the project will have significant impacts on the (un)employment rate in the area.
- The NCEA recommends to use the EPDA to scope the ESIA process to the most relevant aspects with regard to the project.

3.10 Origin of sand

Apparently, the supply of sand is needed for the construction of the road in marshy lands. The impacts of the use of sand is dependent on the type of sand that is used and its origin. The EPDA does not contain any information, except from stating that sand is a construction material that is required. However, the extraction and transport of sand in itself can have significant impacts. Sand mining (either onshore or offshore) requires an environmental management plan (Decree 26/2004) by the Ministry of Mineral Resources, which needs to be approved by MITADER. Depending on whether the project developer will mine the sand or buy it, this requirement applies to the project developer or the seller (if this party would not yet already have a mining concession).

- The NCEA recommends that the Terms of reference are made more explicit with regard to the origin of the sand needed for the construction of the road and whether this in itself has significant impacts.

3.11 Type of alternatives

The ESIA needs facilitate the decision-making with regard to the location of the road, and the actual road design of the chosen alternative.

For the actual design of the chosen alternative there are alternatives as well. The EPDA mentions that different solutions are under study (p. 34), but does not explicitly mention which solutions.

- The NCEA recommends to clearly distinguish between alternatives with regard to the location of the road and with regard to the road design. For both types of alternatives, the EPDA should be explicit which alternatives will be assessed in the ESIA.

3.12 Other

On p. 32 there are several statements that are not further substantiated. The EPDA should clearly state the arguments on which they are based. E.g.:

- The road is said to reduce traffic demand on the recently improved EN6. In what way? Is this necessary?
 - The road will remove traffic from Beira Town Centre, and consequently reduce travel times. In what way?
 - The road is 'likely' to bring about a reduction in the frequency and severity of road traffic collisions.
- The NCEA recommends to either delete non-substantiated statements or to substantiate them.