

## APPENDICES

With the Advice on Terms of Reference for the EIA of  
Land Reclamation Vilufushi, Thaa Atoll, Maldives

(Appendices 1 to 7)

## APPENDIX 1

### Letter from FMO dated 31st of March 2005 in which the Commission has been asked to submit Advice on Terms of Reference for the EIA of Land Reclamation Vilufushi, Thaa Atoll, Maldives

Letter with request for advice d.d. 31 March 2005

—Oorspronkelijk bericht—

Van: Anton van Elteren [<mailto:A.van.Elteren@fmo.nl>]

Verzonden: 31 maart 2005 14:55

Aan: Arend Kolhoff

CC: Roel Vriezen

Onderwerp: ORET: EIA Reconstruction of Vilufushi Island, Thaa Atol, Maldives

Dear Arend,

As just discussed, here are some remarks / questions with respect to your input in the above-mentioned project.

Boekalis has submitted an application for an ORET grant for the dredging & land reclamation works on the Vilufushi Island. We would like to obtain the advise of the Netherlands Commission for EIA on the EIA process and content.

An IEE for the project is already available. A paper copy of this is underway to you.

Although ORET supports quick processing of the grant application, it is felt that potential environmental (and social) impacts should be properly addressed.

We would like to have your advise on the following steps required to ensure that environmental and social matters are taken into account satisfactory. We hope that in your advise the following questions can be answered.

1. The IEE suggests that 'full' EIA is not necessary. Would you agree with that, looking at the Maldivian Guidelines for EIA? Would it not be advisable to execute the proposed elements (survey of existing situation - sensitive areas -, consultation of fishermen, development of management and monitoring plans) in the framework of an EIA procedure, so that it is clear what the consequences are when dredging and construction activities start? Of course such procedure should take into account the urgency of the project.
2. Should the EIA not also look into bathymetry and flow patterns that may change as a result of the dredging of the borrow area, but especially as a result of the enlargement of the island? Are there any risks of erosion at other islands, or erosion of sub-surface sensitive areas? Could there be any influence at the water quality inside the lagoon (altered replenishment)? It appears that this issue is only marginally addressed in the IEE. Would hydrological modelling be required?
3. Should the EIA not also look into the existing situation with respect to (hazardous) waste and other sources of pollution possibly dispersed by the tsunami, and the risk of covering up those pollutions by the reclamation works?
4. What would be the best way to work together with the World Bank Coral Reef Impact Assessment Programme and the World Bank Biodiversity Survey and Recovery Plans?
5. What would be the social impacts of the project? Any risk of disputes with respect to the execution of work by local inhabitants?
6. What would be the optimal timing of the EIA? Would it be feasible to have such EIA done and decided upon before the actual dredging and reclamation starts?

As discussed, the idea suggested by you of a desk-study type advice supported by a local expert who could travel to the project site together with myself seems an excellent approach. Such expert would then also be able to exchange views with the technical expert that will be asked to review the project (desk study) on behalf of ORET.

We would like inform you that according Information available to us, the World Bank is working on Strategic environmental assessment of overall rehabilitation and reconstruction on the Maldives. In our view it could be an advantage if the Commission would take part in that as well...

We look forward to your valued input. Please do not hesitate to contact me should you require any further clarification. FMO Investment Officer is Roel Vriezen, tel 070 314 9875.

Kind regards, Anton van Elteren

## APPENDIX 1 (continued)

### **E-mail from FMO dated 8<sup>th</sup> of June 2005 in which the Commission has been asked to submit Advice on Terms of Reference for the EIA of Land Reclamation Vilufushi, Thaa Atoll, Maldives**

**Mali d.d. 8 Juni 2005**

—Oorspronkelijk bericht—

Van: Postbus Environment & Social [<mailto:environment.social@fmo.nl>]

Verzonden: 08 juni 2005 17:50

Aan: C.Veraart@boskalis.nl

CC: C.Kootstra@boskalis.nl; H.R.vanittallie@boskalis.nl; r.klompjan@boskalis.nl; Ineke Steinhauer; r.van.den.berg@fmo.nl

Onderwerp: ORET Vilufushi Boskalis - evaluation mission

Dear Christian,

Good to hear that the mission is welcomed. The following describes the details.

Kind regards, Anton van Elteren

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Please be informed that FMO/NIO-ORET, for the purpose of evaluating environmental and social aspects of the Boskalis grant application related to the dredging & reconstruction works on Vilufushi, intends to visit the Maldives.

It should be stressed that FMO seeks to work together closely with the Maldives government to make sure that matters are taken up in the most efficient way, however safeguarding basic environmental and social requirements following FM/NIO-ORET policies. In this way, procedures can be optimally aligned, taking into account the procedures and requirements of all parties.

FMO will be joined by four representatives of the Netherlands Commission for Environmental Impact Assessment, who will support FMO in defining the guidelines for environmental impact assessment as required and later evaluating the environmental impact statement, and the monitoring of the execution as necessary.

For your information, responsible Investment Officer with FMO/NIO-ORET is Mr. Rodolphe van den Berg, phone + 31 70 314 0511.

To benefit most of the trip, we hope that the visit to the Maldives can include the following elements:

1. Discussions with the government representatives of the relevant Ministries: Ministry of Finance and Treasury, Ministry of Planning and National Development, Disaster Management Centre, Ministry of Environmental and Construction.

2. Field visit to Vilufushi Island, to observe the current situation onshore and offshore.

3. To discuss with local population. It is understood that people now live on another island, so maybe we should visit that island as well.

4. Discussions with the local representative of the World Bank.

Subject of these discussions and observations would be:

5. The procedure for environmental impact assessment. Follow-up on the Initial Environmental Examination. Balancing on the one hand speedy execution to provide rehabilitation quickest and on the other hand exercising due caution to prevent environmental and social mistakes. Finding out what information is already available.

## APPENDIX 1 (continued)

6. **Scoping** the relevant environmental and social requirements to be taken into account: physical, ecological, social.

7. **Define** the procedures for proper consultation. Definition of target population groups. To be aligned with speedy execution of the environmental impact assessment process.

8. **Alignment** with other initiatives and setting the stage for accelerated follow-up initiatives of a similar nature.

9. **A separate subject:** Investigating the possibility and desirability for Strategic Impact Assessment; the Netherlands Commission for Impact Assessment may be able to support the Maldivian government in this. Note that this is not directly related to the Vilufushi rehabilitation; it has been agreed that this will not hamper or delay the grant application procedure now under evaluation.

**Practical aspects:**

10. **A mission** is now scheduled to depart from the Netherlands Sunday, June 19, arriving at Malé in Monday, 20 June 8.10 AM.  
**Departure** on Thursday, 23 June, 9.20 AM.

11. **Participants:**

**Mr. Kees-Jan Beek**, chairman Netherlands Commission for Environmental Impact Assessment

**Ms. Ineke Steinhauer**, secretary Netherlands Commission for Environmental Impact Assessment

**Mr. Rinus Vis**, dredging expert

**Mrs. Trudi van Ingen**, social expert

**Mr. Anton G. van Elteren**, FMO Senior Environmental Specialist

12. **Proposed itinerary:**

**Monday, 20 June:** Discussion with government representatives as listed under 1.

**Tuesday, 21 June:** Visit to Vilufushi island, onshore and offshore observation / visit neighbouring island to interview local population - would interpretation be required or is it possible to discuss with local population in English?

**Wednesday, 22 June:** t.b.d., for instance discussion with local World Bank representative.

**Of course** this may all be subject to change, and we welcome suggestions from the Maldives government.

**We hope** that you are able to help us to make this trip a success in order to smoothly process the grant application. Please do not hesitate to contact us any time should you wish to discuss this with us or need any further clarification.

Kind regards,

Anton G. van Elteren

## APPENDIX 2

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# Draft Advice of the Secretariat

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**To** FMO  
**Attn** Mr. A. van Elteren, Mr. Rodolphe v.d. Berg  
**CC**  
**From** Mr. Reinoud Post (Technical Secretary - Netherlands Commission for Environmental Impact Assessment)  
**Date** 15 April 2005  
**Subject** Review of the Initial Environmental Evaluation (IEE) for the land reclamation at Vilufushi Island, Thaa Atol, Maldives

By: Secretariat of the Netherlands Commission for EIA

Advice 2005-008

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## 1. INTRODUCTION

A dredging Firm has submitted an application for an ORET grant for the dredging & land reclamation works related to a land reclamation project on the tsunami stricken Vilufushi Island at the Thaa atoll in the Maldives. In answer to the Maldives Environmental Legislation, Environmental Dredging Consultancy (EDC) has prepared an Initial Environmental Evaluation.

Seen the urgent need to reestablish Vilufushi's population, that was temporarily evacuated to Guraidhoo Island, ORET supports quick processing of the grant application. However, FMO feels that potential environmental (and social) impacts should be properly addressed and contacted the Commission for advice.

## 2. FMO'S QUESTIONS

FMO would like to have advice on the following steps required to ensure that environmental and social matters are taken into account satisfactorily. FMO hopes that in the advice the following questions can be answered.

*quote*

1. The IEE suggests that 'full' EIA is not necessary. Would you agree with that, looking at the Maldivian Guidelines for EIA? Would it not be advisable to execute the proposed elements (survey of existing situation - sensitive areas -, consultation of fishermen, development of management and monitoring plans) in the framework of an EIA procedure, so that it is clear what the consequences are when dredging and construction activi-

ties start? Of course such procedure should take into account the urgency of the project.

2. Should the EIA not also look into bathymetry and flow patterns that may change as a result of the dredging of the borrow area, but especially as a result of the enlargement of the island? Are there any risks of erosion at other islands, or erosion of sub-surface sensitive areas? Could there be any influence at the water quality inside the lagoon (altered replenishment)? It appears that this issue is only marginally addressed in the IEE. Would hydrological modelling be required?
3. Should the EIA not also look into the existing situation with respect to (hazardous) waste and other sources of pollution possibly dispersed by the tsunami, and the risk of covering up those pollutions by the reclamation works?
4. What would be the best way to work together with the World Bank Coral Reef Impact Assessment Programme and the World Bank Biodiversity Survey and Recovery Plans?
5. What would be the social impacts of the project? Any risk of disputes with respect to the execution of work by local inhabitants?
6. What would be the optimal timing of the EIA? Would it be feasible to have such EIA done and decided upon before the actual dredging and reclamation starts?

*unquote*

### **3. OBSERVATIONS ON THE IEE**

The secretariat of the Commission has contacted the Ministry of Environment and Construction (MEC) of the Maldives, asking for a copy of the Environmental Protection and Preservation Act (EPPA, unofficial translation) and a copy of the EIA regulations. The latter not being available in English translation, the MEC has sent us a copy of the guidance document on EIA, stating that this document implicitly and fully addresses the regulation. In the contact, the MEC made clear that it was unaware of the initiative for which the IEE had been prepared and did not have a copy of the IEE

The secretariat did not dispose of the technical documents underlying the IEE. FMO has indicated it would send the technical documentation ASAP.

The secretariat has also obtained a copy of the post tsunami National Recovery and Reconstruction Plan (NRRP) of the Maldives.

Based on the EPPA, the guidance document and the NRRP as reference documents, the secretariat has the following observations:

- Setting of the initiative: the initiative appears to be part of a broader project of strategic nature: The New Host Islands project. That project foresees:
  - The enlargement of five different islands in the Maldives;
  - Concentration of economic and social infrastructure (port facilities, housing, collective facilities, defence against rise of the sea water level) on these islands in order to make them economically viable and socially attractive;
  - Transmigration of populations of non viable islands (no basis for acceptable livelihood) to the enlarged island.

The secretariat of the Commissions holds the opinion that the initiative proposed to the FMO cannot be judged separately from the broader 'mother initiative'.

- The assumed 'mother project' is specifically suited to be formulated in combination with a Strategic Environmental Assessment. It is even not impossible that an SEA has been or is being prepared for this mother project, in which the choice of the islands that will be extended and the environmental, social and economic impacts have been addressed.
- In its request the FMO refers to the EIA guidelines of the Maldives as normative for answering the question whether a full fledged EIA is necessary for this initiative. The secretariat has some doubts whether the entity that submitted the present IEE to the FMO has formally engaged an EIA procedure in the Maldives. The guidance for EIA prescribes that MEC provides specific guidelines for an IEE. The present IEE does neither mention this fact, nor does it reproduce such guidelines. In addition, MEC indicated by telephone that it is not aware of any initiative for Vilufushi. Also, seen the contents of the guidance on EIA, it can safely be assumed that such guidelines would ask for social and economic impacts of the initiative, aspects not addressed in the present IEE.
- In addition to what has been stated in the previous point: according to the EIA guidance, it is not the IEE that concludes whether a full fledged EIA is necessary. The regulation attributes the competence on deciding whether an EIA is necessary to the licensing agency in concurrency with the MEC.
- Answering the possible question whether EIA would be required for this initiative on the basis of the World bank screening guidelines<sup>1</sup>, the answer would probably be positive on the following grounds: The island is enlarged to app. four times its original size; the original inhabitants will be confronted with a considerable influx of populations, port facilities and coastal defence works will be established, dredging and land filling will take place in vulnerable coral area's.
- From the secretariat in Utrecht it is impossible to give a credible answer to the technical questions put forward in the request of the FMO. The secretariat has insufficient technical background data on both the initiative and on the situation on the spot as to feel confident in answering such questions. An expert team site visit must be the basis for establishing guidelines for an EIA, if the government of the Maldives judges an EIA compulsory.
- Timing of an EIA: the guidance on EIA of the Maldives clearly states that the EIA process is engaged after conclusion of the bidding process. This has, however, the inconvenience that possible alterations of the initiative triggered by the EIA, cannot influence the bids. This, in practice, will result in unwillingness to accept

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<sup>1</sup> FMO usually applies World bank guidelines for screening, scoping and review of EIA's

any changes to the initiative and will greatly decrease the usefulness of EIA. In the views of the secretariat, EIA should be concluded and have had its influence on decision-making on the project and its design and implementation methodologies before any works are undertaken.

#### **4. ADVICE**

In view of the above, the secretariat advises the FMO:

- To verify with the relevant authorities in the Maldives:
  - who is the proponent of this initiative;
  - whether the initiative is indeed part of the New Host Islands Policy;
  - whether an EIA or SEA has already been done for the initiative or for the formulation of the New Host Islands policy.If an EIA or SEA has already been done, that EIA or SEA can be taken into consideration in judging the need to do also an EIA for the activity as proposed in the IEE.
- To verify with the entity that submitted the IEE whether this entity has formally engaged an EIA in the Maldives.

Depending on above verifications, two situations may prove to exist:

1. The entity that has submitted the IEE to the FMO has engaged a formal EIA in the Maldives, (but not included the specific guidelines in the IEE and not yet submitted the IEE to the MEC and the licensing agency for appraisal:
    - The secretariat advises to propose the entity that submitted the IEE to the FMO to also submit the IEE to the MEC and the licensing agency for appraisal and decision making on the need for full fledged EIA. If this initiative is part of a broader 'mother project' and an SEA for the mother project has been, or is being prepared, MEC and the licensing agency can take the fact into account in judging the need for an EIA for this initiative.
  2. No formal EIA process has been engaged:
    - The secretariat advises to consult the MEC and the licensing agency on its views with regard to the need to do full fledged EIA for this initiative. If this initiative is part of a broader 'mother project' and an SEA for the mother project has been, or is being prepared, this can be taken into account in judging the need for an EIA for this initiative.
- If FMO would like to apply World Bank standards for screening the need of full fledged EIA for making available ORET funding for this project, the secretariat advises to field an expert mission to perform that screening (and, in case of the need to do EIA, scoping).



Such screening should not neglect the visions of the licensing agency and the MEC. Therefore, the secretariat advises the proposed mission to hold consultations as mentioned under point 1 or 2.

- If full EIA is found to be compulsory and the proposed activity is part of a New Host Islands project and an EIA or SEA has not been done for that broader project, the mission could discuss with the competent authorities the relevance and use of going through an SEA that would cover all elements of the project.
- To visit the World Bank office in Male and collect information on possible World Bank initiatives in order to promote coherence and coordination.

## APPENDIX 3

### **Project information and composition of the Commission's working group**

**Proposed activity:** A Netherlands dredging company applied for ORET-grants for a dredging and land reclamation project on the tsunami stricken Vilufushi Island at the Thaa atoll in the Maldives. This has been done at the request of the Ministry of Finance and the Ministry of Planning and Development in the Maldives.

The proposed project aims at creating a safer and larger island for the Vilufushi residents, who were temporarily evacuated to Buruni island, as well as for the population of some other smaller nearby islands. The project involves increasing the level of a part of the existing island and the reclamation of a part of the surrounding shallow reef flats, to provide extra land for residential purposes. The surface of the island will be increased to over 4 times its present size. In addition, construction of about 2000 m. of revetment around the island is planned, as well as a new fishing harbour. The harbour will include 350 m. of breakwater and 350 m. of quay wall. The required amount of sand is estimated at about 1.1 million m<sup>3</sup>. The required equipment comprises a medium sized cutter suction dredger, a pipeline system and various bulldozers and wheel loaders.

**Categories:** DAC/CRS codes: 41010, Environmental management and protection

**Project numbers:** Netherlands Commission for EIA (NCEIA): 060

**Procedural information:**

Receipt e-mail with request for Advice	: 31 March 2005
Site visit to Maldives by the Working Group	: 20-23 June 2005
Submission of Final Draft Advisory review	: 27 June 2005

**Significant details:** An Initial Environmental Evaluation (IEE) has been prepared in March 2005. This has been submitted to the Maldives authorities and to FMO Finance for Development, as the ORET-program is executed by FMO, on behalf of the Dutch Ministry of Foreign Affairs.

FMO invited the Netherlands Commission for EIA, to advise on Terms of Reference for the EIA process and contents of the proposed project. These ToR will have to be ready before 1 July 2005, as this is the planned contract date. FMO will then provide a conditional approval for the dredging company to start preparatory work, including a.o. sand surveys. These ToR can be used at the same time by the Ministry of Planning and the Ministry of Finance to comply with the Maldives Environmental legislation, which requires that 'the proponent shall determine the scope of the proposed project and submit ToR (for the EIA) to the Ministry of Environment for approval'. By the end of August, the final decision is planned to be taken by FMO to start dredging and land reclamation works. By then, there will have to be an approved EIA-report and Environmental Management Plan. This implies a review by the Ministry of Environment of the EIA-report. The Commission for EIA has been asked by FMO to perform a review as well. It is intended to align both requirements to the maximum extent.

**Composition of the working group of the Commission for EIA:**

Mr. Klaas Jan Beek  
Mr. Rinus Vis  
Ms. Trudy van Ingen

**Technical secretary:**

Ms. Ineke Steinhauer

## APPENDIX 4

### Working programme 20-23 June 2005

#### Monday 20 June

- 09.00 Arrival working group Male airport, meeting with Mr. Christian Veraart, contractor (dredging firm)
- 10.30 Ministry of Planning and National Development, Mr. Ahmed Mohamed (director development planning) and Mr. Mohamed Ihmad
- 11.30 Ministry of Environment and Construction, Mr. Amjad Abdulla (deputy director strategic policy) and staff
- 12.45 Ministry of Atolls Development, Mr. Adam Moosa (director)
- 13.45 Ministry of Fisheries, Agriculture and Marine Resources, Mrs. Aminath Shafia (director), Mr. Mohamed Shainee (assistant director) and staff
- 14.30 Ministry of Finance and Treasury, Mr. Riluan Shareef (executive director) and staff

#### Tuesday 21 June

- 07.00-18.00 Site visit to Vilufushi and Buruni, interviews with local population including the Island Chiefs and Women's Association for Development. Site visit was accompanied by Christian Veraart (contractor), Mr. Mohamed Ihmad (Ministry of Planning and Development) and Mr. Gill Marshall (UNDP).

#### Wednesday 22 June

- 09.00 Housing and Urban Development Board, Mr. Mohamed Faiz (assistant director), Mrs. Fahtimath Rasheed (assistant director planning), Mr. Ibrahim Rafeeq (director general)
- 10.30 Working group meeting
- 12.15 Ministry of Fisheries, Agriculture and Marine Resources
- 13.30 Drafting of Terms of Reference
- 15.00 Debriefing at the Ministry of Environment and Reconstruction
- 16.30 Finalizing Terms of Reference
- 19.00 Debriefing at the Ministry of Finance and Treasury

#### Thursday 23 June

- 07.00 Departure

## **APPENDIX 6**

### **List of documents used**

#### **Available prior to site visit to the Maldives**

- Initial Environmental Evaluation, Land reclamation Thaa Vilufushi Maldives, March 2005.
- National Recovery and Reconstruction Plan, programs and projects, Ministry of Planning and National Development, March 2005.
- Law No. 4/93, Environmental Protection and Preservation Act of Maldives
- Draft Environmental Impact Assessment (Information Handbook) in the Republic of Maldives, May 2004
- Article ADB review, Maldives Tourists Lead Recovery, April 2005
- Technical information on the project by dredging company, feasibility study, 21 March 2005
- Examples of advisory reports by the Commission on sand mining in Sri Lanka (2002)

#### **Received during site visit to the Maldives**

- State of the Environment, Maldives 2005, Ministry of Environment and Reconstruction
- First National Communication of the Republic of Maldives to the United Nations Framework Convention on Climate Change, 2001, Ministry of Home Affairs, Housing and Environment
- National Biodiversity Strategy and Action Plan of the Maldives, 2002, Ministry of Home Affairs, Housing and Environment
- EIA report Hulhumale land reclamation.

#### **Web-sites and references**

- <http://www.atolls.gov.mv/>
- <http://wbln0018.worldbank.org/institutional/manuals/opmanual.nsf/OPolw?OpenView>