

## APPENDICES

With the Supplementary Advice on Terms of  
Reference for SEA Polo de Desarrollo (Puerto Busch)

- Bolivia -

(appendices 1 to 5)

## APPENDIX 1

### Letter dated 30 June 2004 with request for advice from MDS Bolivia

DE : URNMA-

NO. DE FAX : 2331273

15 JUL. 2004 04:05AM

## Ministerio de Desarrollo Sostenible

La Paz, 30 de junio de 2004  
**MDS-VRNMA No.1726/2004**

Señores  
**COMISION DE EVALUACION AMBIENTAL ESTRATEGICA**  
Holanda.-

De mi mayor consideración:

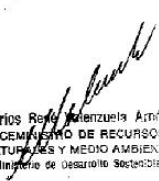
Conocedores del programa de trabajo que desempeña esa Comisión, me es grato dirigirme a ustedes con el fin de invitarlos a elaborar los Términos de Referencia y Supervisión de la Evaluación Ambiental Estratégica en el área de Puerto Busch, Departamento de Santa Cruz y del Salar de Uyuni, Departamento de Potosí.

Puerto Busch tiene importancia estratégica para Bolivia; su habilitación tendrá incidencia positiva en la importación y exportación de nuestros productos lo que generará ahorro de costos y competitividad con otros mercados, además del aprovechamiento de la infraestructura existente y muchos otros aspectos que nos llevan a priorizar el Estudio Ambiental Estratégico; caso similar ocurre con el Salar de Uyuni, de gran importancia en la explotación de Ulexita, litio, potasio y otros minerales que posibilitarán el desarrollo de esas áreas deprimidas del país, aportando con progreso y generación de divisas.

Al la espera de sus noticias y agradeciendo de antemano su atención a la presente, reciban ustedes las consideraciones de mi mayor estima.

Atentamente,

cc.: file CEAE - Holanda  
CVA/avm

  
Carlos René Valenzuela Aráoz  
VICEMINISTRO DE RECURSOS  
NATURALES Y MEDIO AMBIENTE  
Ministerio de Desarrollo Sostenible

## APPENDIX 2

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# MEMO-borrador

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**A :** Ministerio de Desarrollo Sostenible, Viceministerio Recursos Naturales y Medio Ambiente (DGMA), La Paz, Bolivia y La Embajada de los Países Bajos, La Paz, Bolivia

**Attn :** Sr. Gonzalo Mérida y Sr. Carlos Valenzuela

**CC :** Miembros del grupo de trabajo de La Comisión EIA: 'Recomendación acerca de TdR EAE Polo de Desarrollo (Puerto Busch), Bolivia

**De :** Sra. Ineke Steinhauer (Comisión para la Evaluación de los Impactos Ambientales)

**Fecha :** 26 de Noviembre 2004

**Sujeto :** **Informe sobre las discusiones realizadas con el Vice Ministerio de Recursos Naturales y Medio Ambiente (DGMA), la Embajada Holandesa y la Prefectura de Santa Cruz, Bolivia**

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### 1. INTRODUCCIÓN Y ANTECEDENTES

Acontecimientos desde la entrega del borrador de los TdR Puerto Busch, preparado por la Comisión holandesa para EIA:

1. entrega final borrador en ingles (1-10-04) por la Comisión a DGMA
2. entrega final borrador en español (14-10-04) por la Comisión a DGMA
3. difusión y recepción de observaciones, comentarios y sugerencias por DGMA (15-10-04 hasta 29-10-04)
4. envío de observaciones, comentarios y sugerencias a la Comisión (22-10-04 hasta 8-11-04)
5. respuesta preliminar de la Comisión a las observaciones recibidas (12-11-04): "En general estamos de la opinión que los comentarios no nos dan razones de peso para adaptar o cambiar nuestro informe borrador. Hemos preparado una pequeña presentación en ppt. (anexo 1) donde damos muy en breve nuestras observaciones concerniendo los comentarios recibidos. Los comentarios tienen una buena respuesta por parte del MDS mismo, y de SERNAP y WWF. Falta la parte pública de los demás ministerios y sectores. Del sector privado si recibimos comentarios (Interproyectos, y CADEX ya en una etapa anterior (copia informal de la Embajada))".

Aparentemente el informe borrador ha sido mandado solamente a los actores mas importantes en Santa Cruz con un lapso muy corto para mandar comentarios.

## 2. ACCIONES A TOMAR

- El informe borrador ha sido entregado de nuevo (19-11-04) a los representantes de la Prefectura de Santa Cruz (actor clave). Ellos darán sus comentarios **antes de 15 de diciembre 2004**
- El DGMA convocará una reunión a **fines de noviembre** con el Ministerio de Desarrollo Económico (mas específicamente con el Viceministerio de Industria, Comercio y ..., también actor clave) para recibir comentarios al informe borrador y discutir pasos siguientes
- DGMA debería mantener registro de asuntos tal como:
  - como ha sido la socialización del informe
  - a quiénes ha sido mandado con que lapso de tiempo
  - cuantos comentarios recibieron y de quien
  - que es la opinión de DGMA sobre los comentarios
- La Comisión para EIA propone publicar el informe pre-borrador final en su sitio-web como unos TdR preliminares para el Polo de Desarrollo (Puerto Busch). El informe da los argumentos con los cuales se puede hacer la selección acerca del alcance general de la EAE en términos de 1) determinación del plan conductor y 2) determinación del nivel de la EAE. Recién después de esta selección se elaborará los TdR específicos.
- La Comisión brindará asistencia a la formulación de los TdR específicos:
  - cuando han sido recibidos los comentarios de la Prefectura de Santa Cruz, del MDS (DGMA) y del Ministerio de Desarrollo Económico (Viceministerio de Industria, Comercio y ...) acerca del plan conductor y del nivel de la EAE. Esto es de suma importancia para la apropiación de esta EAE
  - hará uso de los apéndices 8 y 9 de su informe y de los comentarios recibidos de las diferentes instancias
  - período previsto para elaborar estos TdR mas específicos (**15-22 diciembre 2004**)
  - preparará además unos TdR para el perfil de los expertos que se necesitan a nivel de la Prefectura para realizar la EAE Puerto Busch (o tal vez hay que darle al estudio otro nombre, dado las sensibilidades) para ser ajustados por DGMA y Prefectura
- DGMA y Prefectura de Santa Cruz (Gonzalo Mérida, Ricardo Saucedo) definen la estructura operativa dentro de las próximas semanas y la Prefectura buscará personas hasta fin del año 2004 para el equipo/la unidad EAE
- La EAE Puerto Busch empieza inicios de 2005 con unos TdR específicos que darán el mandato al equipo
- La Comisión EIA provee capacitación en EAE inicios de 2005 para los equipos EAE Puerto Busch y Uyuni, representantes del MDS y Prefecturas, otros sectores (públicos y privados), ONGs y personas 'high level'. La Comisión preparará un borrador para los contenidos de un tal curso/taller y lo mandará a DGMA y Embajada para comentarios.

## APPENDIX 3

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

**Proposed activity:** In July 2004, the Ministry of Sustainable Development in Bolivia (MDS) invited the Netherlands Commission for Environmental Impact Assessment (EIA), to assist MDS with the start of the introduction of Strategic Environmental Assessment (SEA) in Bolivia. The objective of the involvement of the Commission is to assist in developing methodologies for pilot SEAs, thus generating a replicable model and recommendations for the realisation and institutionalisation of SEAs in Bolivia.

The first activity was to assist MDS in defining Terms of Reference (ToR) for the execution of a pilot SEA in the area of influence of the Polo de Desarrollo Sur-este (south-eastern spearhead of development) of Santa Cruz, Bolivia. The Commission visited Bolivia in September 2004 and presented its advisory report on 30 September 2004. This report presents preliminary ToR for both the process and contents of the SEA. It also provides recommendations for the institutional capacity needed to undertake this pilot SEA. The advisory report has been distributed by MDS to several stakeholders in Bolivia, of which a number has sent their observations.

In November 2004, the Commission visited Bolivia for a second pilot SEA, Salar de Uyuni. During that occasion, discussions were held with representatives of the Vice Ministry of Natural Resources and Environment (VMNRMA), the Netherlands Embassy and the departmental government (Prefectura de Santa Cruz) on the ToR for the Polo de Desarrollo Sur-este. Following these discussions, the Commission offered to assist in two tasks:

- Further specification of the preliminary ToR once decisions have been taken on the leading planning process and the corresponding level of the SEA.
- Suggestions for the set up and management of the SEA study, including the profile of SEA experts who will undertake the SEA.

**Categories:** DAC/CRS codes: 21010 Transport policy and administrative management, 21040 Water transport, 41010 Environmental Policy and administrative management, 41040 Site preservation.

**Project numbers:** Netherlands Commission for EIA (NCEIA): 056

#### **Procedural information:**

Receipt fax with request for Advice	: 15 July 2004
Receipt draft work plan / ToR for SEA Puerto Busch	: 3 September 2004
Site visit to Bolivia by the Working Group	: 5-11 September 2004
Receipt of EIA Puerto Busch	: 6 September 2004
Submission of Final Draft Advisory review (in English)	: 30 September 2004
Submission of Supplementary ToR	: 4 February 2004

**Significant details:** For the further specification of the ToR for the assessment and reporting, the Commission suggests to take the presently proposed activities as point of departure, and apply a layered approach; each layer has to be superimposed on the next one in order to describe consequences. The following layers and steps may be distinguished:

**Layer 1: Economic Activities:** causing positive and negative impacts in the region.

1. Make an inventory of all proposed large-scale economic activities in German-Busch province.
2. Describe activities in terms of location, planned interventions, projected economic outputs, and expected direct social and environmental impacts.

**Layer 2: Responses in the social environment:** society responds to economic activities

3. What do these combined economic activities mean for the population development of the province? Will there be spontaneous and/or organised migration into the area?
4. What are the consequences for urban development (space and facilities needed at certain locations).

**Layer 3: Infrastructure needs:** economic and social development requires infrastructure.

5. What (new or improved) infrastructure is required to facilitate the economic and social development as projected above.

**Layer 4: Land, water and natural resources:** constraints and opportunities imposed by the physical environment.

6. Project the above layers on a physical resources map indicating present land-use, land property rights and ecosystem services.
7. Identify and map environmental and social impacts of layers 1-3, location, area of influence.
8. Start iterative participatory process of defining alternatives, and measures for mitigation and compensation.

For the set up and management of the SEA, the Commission gives suggestions for the profile of the core study team and implementation arrangements and costs.

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





Mr. Klaas Jan Beek  
Mr. Roel Slootweg  
Mr. Hans (J.) D.G. Van Duijne  
Mr. Maarten J.E. Volgers

**Technical secretary:**

Ms. I.A. Steinhauer

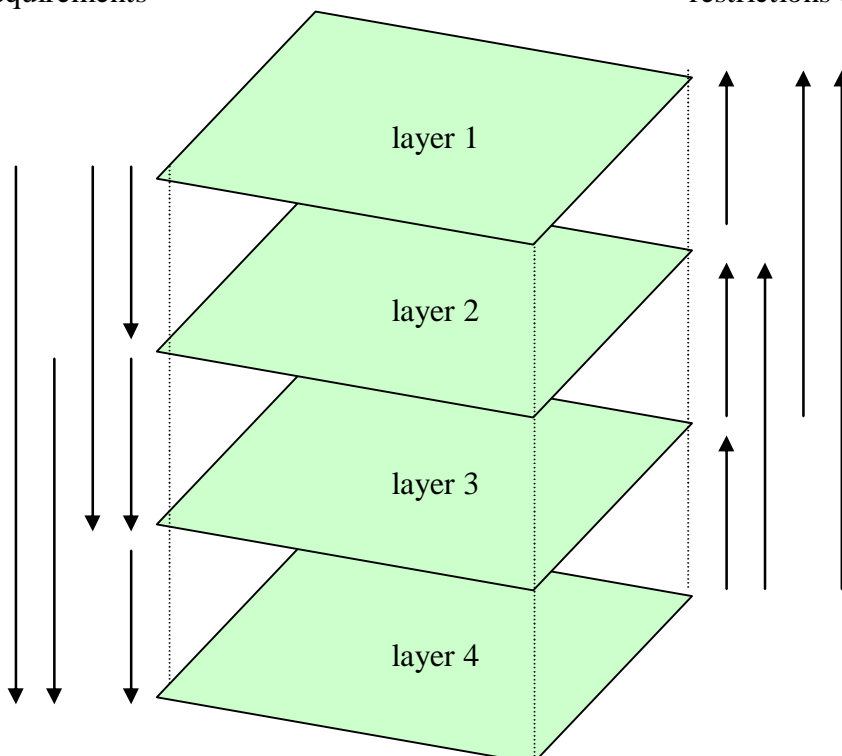
## APPENDIX 4

### The layered approach for Polo de Desarrollo Sur-Este

		Time horizon
<b>Layer 1 (= trigger): proposed activities</b>		
<b>Layer 2: social environment</b>		10- 40 years
<b>Layer 3: infrastructure</b>		25 – 100 years
<b>Layer 4: land, water &amp; natural resources</b>		50 – 500 years

impacts & requirements

restrictions & opportunities



## **APPENDIX 5**

### **Further approximation of problem analysis**

#### **Analysis of political situation**

National: The Republic of Bolivia has a long history in obtaining sovereign access to the Pacific and Atlantic Oceans. This issue is not only of economic importance, but is part of Bolivian cultural heritage and its history. The Bolivian people (and politicians) already struggle more than 100 years to deal with the loss of parts of the territory to neighbouring countries. A free access to the sea is an exponent of these territorial losses and will, in a way, compensate for these losses.

Regional: The department of Santa Cruz is a new developing region. The first road from Santa Cruz to La Paz has been constructed in the nineteen fifties. The development of the Department has, since then, accelerated rapidly. First mainly in terms of agricultural products such as sugar, soy, timber and cattle. More recently gas production and export to Argentina and Brazil brought the department of Santa Cruz to the first exporting department of Bolivia. Few within the department however are benefiting from its wealth.

Local: The province of German Busch is the most eastern province of Bolivia. Its municipalities of Puerto Quijarro and Puerto Suárez lie some 600 km from the department capital Santa Cruz and have developed a strong independent position. Their orientation is towards Brazil and in particular Corumbá. The physical distance and the rudimentary infrastructure leads to independent development from the departmental and the national level of governance. Any development in this region should be beneficial to the local political environment. The collaboration between the municipalities of Puerto Suárez and Puerto Quijarro is rather fragile and could be improved. The indigenous people living in the region are Ayoreos and Chiquitanos. These groups mainly live in the rural south-eastern part and the National Parks of Otuquis and San Matias.

#### **Analysis of socio-economic situation**

The socio-economic situation of the Department of Santa Cruz has developed rapidly. The region required more labour forces and consequently people from the highlands moved to the lowlands to work in agriculture, cattle and timber industry. Moreover, oil and gas exploration and exploitation and its infrastructure attracted more industry. The Brazilian shield has not been explored to its full extent, but preliminary investigation shows interesting potential, like the iron ore reserves of Mutún.

Due to a number of recent events, the Puerto Suarez/Quijarro area is facing a rapid and erratic development of economic activities. The activities planned for the coming decade are large scale and present a high development potential for the area. The expected increase in economic activities will lead to an influx of people into the region, either invited as labour force for the planned activities, or spontaneous because of the expected increase in economic activities and opportunities to make a living.



Driving forces behind the present rapid development of economic activities in the region are:

- Exploitation of natural gas in the department of Santa Cruz, exported by pipeline to Brazil through Puerto Suarez. The available gas provides raw material for fertiliser (urea) production, and energy for gas-fired electricity plants, in its turn providing electricity for multiple activities.
- The rapid expansion of soy bean production in the department of Santa Cruz needs an exit to international markets. Bulk transport over water is economically most sensible. The harbours on canal Tamengo presently provide the only outlet to the Ocean through the Paraguay river; this outlet experiences several physical (draught, obstacles) and procedural (Brazilian customs) constraints that need to be solved.
- A combination of high world market prices for iron and available energy makes exploitation and upgrading of the Mutún iron ore reserves economically feasible. Mining, upgrading and exportation facilities are planned.

Because of the unplanned nature of the present developments in an area with a relatively poor and undereducated population, and a sensitive environment with biodiversity values of international importance, the risk of major negative impacts is real. Furthermore, the diversity of planned activities in a relatively small area entails major risks of interference, and cumulative or synergistic impacts. Moreover, these developments take place in a strategically attractive area, near the border of Brazil, causing problems with the ownership of properties (land speculation), and conflicting land-use (between the national parks and the local development). The tourism industry is one of the sectors that is still to be developed and offers opportunities.

#### **Analysis of environmental situation**

The Commission provided an overview of ecosystem services of the Bolivian Pantanal in appendix 7 of its September ToR.