CENTRAL COMISSION FOR THE NAVIGATION OF THE RHINE

INLAND WATERWAY TRANSPORT IN TIMES OF GLOBALISATION
PREPARATORY WORKSHOP AND SIDE EVENT

PARAGUAY-PARANÁ INLAND WATERWAY

MARSEILLE (France), 13 MARCH 2012

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BRAZIL
GENERAL OVERVIEW

• Transport planning in Brazil is guided by the *National Plan of Logistics and Transport* (PNLT in portuguese)

• The main objective of this plan is to provide the country with a more balanced transport matrix by the year 2025.

Source: PNLT / MT
GENERAL OVERVIEW

• To achieve that, priority is being given to railways and waterway transport (inland navigation and cabotage)

• To consolidate the priority for waterway transport, a *Strategic Plan for Inland Navigation* (PHE in portuguese) in the main brazilian river basins is on the way.

• There is also provision for a Dutch technical assistance
GENERAL OVERVIEW

• Brazil Inland Waterway Characteristic: High Potential and Low Use

• There are 60000 km of inland waterways and only 13000 km are used

• Inland waterway transport is limited mainly to agricultural and mineral goods

• 45 million tons are transported by brazilian waterways every year

• Potential: about 180 million tons (source: ANTAQ)
BRAZIL’S INLAND WATERWAY MAIN PROBLEMS

• Insufficient regulatory framework

• Lack of integration with other transport modes

• Maintenance dredging required

• Long procedures to get environmental licenses

• Construction of hydroelectric plants without locks
PARAGUAY-PARANÁ INLAND WATERWAY
11 Main Inland Waterways

- Amazon Basin
- North-eastern Basin
- São Francisco Basin
- Tocantins Araguaia Basin
- Paraguay-Paraná Basin
- Tietê-Paraná Basin
- Southeast Basin
- South Basin
The Paraguay-Paraná inland waterway is one of the most extensive and important continental axes of political, social and economic integration.

It cuts through half of South America, stretching from the city of Caceres, in Mato Grosso, to Nova Palmira, Uruguay.

It has 3442 kilometers, with 2,202 km to the border with Paraguay and Argentina.

The Paraguay-Paraná inland waterway runs through five countries: Brazil, Bolivia, Paraguay, Argentina and Uruguay.
<table>
<thead>
<tr>
<th>Country</th>
<th>Length (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brasil</td>
<td>890</td>
</tr>
<tr>
<td>Brasil/Bolívia</td>
<td>58</td>
</tr>
<tr>
<td>Brasil/Paraguai</td>
<td>322</td>
</tr>
<tr>
<td>Paraguai</td>
<td>557</td>
</tr>
<tr>
<td>Paraguai/Argentina</td>
<td>375</td>
</tr>
<tr>
<td>Argentina</td>
<td>1,240</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,442</strong></td>
</tr>
</tbody>
</table>
INTERNATIONAL NAVIGATION AGREEMENTS

• Prata Basin Treaty, 04/23/69

• Inland Waterway Intergovernmental Committee - CIH, 08/89
  (Incorporated into the Brasilia Treaty System, 10/1991)

• River Transport Agreement, 06/26/1992

• “Modernization Program of the Navigation Conditions on the Paraguai-Paraná Waterway (Cáceres Port/ Nova Palmira Port)”

• Decree nº. 2716, of 8/10/1998 promulgates the River Transport Agreement by Parana-Paraguay Inland Waterway (Cáceres Port/ Nova Palmira Port)
Ministério dos Transportes
Secretaria de Política Nacional de Transportes

Paraguay – Paraná Inland Waterway

Tramo 1
Cáceres/Corumbá
679 km

Tramo 2
Corumbá/Pt. Murtinho
531 km

Tramo 3
Pt. Murtinho/Assunção
602 km

Tramo 4
Assunção/Santa Fé
1.040 km

Tramo 5
Santa Fé/Nova Palmira
590 km
Inland Waterways’ Main Ports

TERMINAL INTERMIDIAL - Cáceres MT
TERMINAL INTERMIDIAL - Corumbá MS
TERMINAL GRANEL QUÍMICA - Ladário MS
TERMINAL NUEVA PALMIRA - Uruguay
PARAGUAY-PARANA RIVER TYPICAL CONVOY
## Inland Waterway Cargo Transport

### Tabela 2.1. Transporte de cargas na hidrovia do Paraguai por navegação interior internacional e linha de carga, em toneladas e TKU - 2010

<table>
<thead>
<tr>
<th>Linha</th>
<th>Exportação</th>
<th>Importação</th>
<th>Total (t)</th>
<th>%</th>
<th>Total (tku 10^6)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corumbá (MS) – Argentina</td>
<td>2.775.819,20</td>
<td>0,00</td>
<td>2.775.819,20</td>
<td>71,19%</td>
<td>1.411.078,41</td>
<td>68,32%</td>
</tr>
<tr>
<td>Ladário (MS) – Argentina</td>
<td>1.008.326,00</td>
<td>0,00</td>
<td>1.008.326,00</td>
<td>25,86%</td>
<td>592.552,66</td>
<td>28,69%</td>
</tr>
<tr>
<td>Corumbá (MS) – Paraguai</td>
<td>79.752,00</td>
<td>0,00</td>
<td>79.752,00</td>
<td>2,05%</td>
<td>46.019,69</td>
<td>2,23%</td>
</tr>
<tr>
<td>Porto Murtinho (MS) – Uruguai</td>
<td>22.820,74</td>
<td>3.579,52</td>
<td>26.400,26</td>
<td>0,68%</td>
<td>15.159,29</td>
<td>0,73%</td>
</tr>
<tr>
<td>Ladário (MS) – Uruguai</td>
<td>5.766,87</td>
<td>0,00</td>
<td>5.766,87</td>
<td>0,15%</td>
<td>358,24</td>
<td>0,02%</td>
</tr>
<tr>
<td>Porto Murtinho (MS) – Argentina</td>
<td>0,00</td>
<td>3.083,82</td>
<td>3.083,82</td>
<td>0,08%</td>
<td>191,57</td>
<td>0,01%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.899.148,14</strong></td>
<td></td>
<td><strong>100,00%</strong></td>
<td></td>
<td><strong>2.065.360,05</strong></td>
<td><strong>100,00%</strong></td>
</tr>
</tbody>
</table>

### Tabela 2.2. Transporte de cargas na hidrovia do Paraguai por navegação interior internacional por país de origem/destino em toneladas - 2010

<table>
<thead>
<tr>
<th>Parceiro comercial</th>
<th>Exportações brasileiras</th>
<th>Importações brasileiras</th>
<th>Total (t)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARGENTINA</td>
<td>3.784.145,20</td>
<td>3.083,82</td>
<td>3.787.229,02</td>
<td>97,13%</td>
</tr>
<tr>
<td>PARAGUAI</td>
<td>79.752,00</td>
<td>0,00</td>
<td>79.752,00</td>
<td>2,05%</td>
</tr>
<tr>
<td>URUGUAI</td>
<td>28.587,60</td>
<td>3.579,52</td>
<td>32.167,12</td>
<td>0,82%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.892.484,80</strong></td>
<td><strong>6.663,34</strong></td>
<td><strong>3.899.148,14</strong></td>
<td><strong>100,00%</strong></td>
</tr>
</tbody>
</table>

Source: ANTAQ / MT
Growth Acceleration Program - PAC

**TOTAL INVESTMENT**
R$ 78,4 million

- Located Dredging (R$ 3,9 million)
- Located Dredging Passo do Jacaré (R$ 6,0 million)
- Dredging and Sinalization (5 years cycles): Corridor’s studies and projects Works and Services (R$ 62,0 million)
- Cargo Terminals: Studies and Projects (R$ 6,5 million)

Source: SEGES / MT

Paraguay – Paraná Inland Waterway
The inland waterway has been used mainly to transport iron ore from Brazil to Argentina.

It has great potential to drain the production of soybeans and other products (from the states of Mato Grosso, Mato Grosso do Sul and Goiás).

For this, investments are needed in roads and railways connecting the city of Cáceres to the producing regions.

Ports of Santos and Paranagua are already saturated. Paraguay – Paraná could be a good alternative.

Paraguay – Paraná: it is truly MERCOSUL’s main inland waterway.
Thank You!

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