Portuguese cooperation with Spain on transboundary water management

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### Total Water Resources

<table>
<thead>
<tr>
<th>RIVER BASIN</th>
<th>Total Área (km²)</th>
<th>Portugal</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINHO/MIÑO</td>
<td>17.080</td>
<td>850</td>
<td>16.230</td>
</tr>
<tr>
<td>LIMA/LIMIA</td>
<td>2.480</td>
<td>1.180</td>
<td>1.300</td>
</tr>
<tr>
<td>DOURO/DUERO</td>
<td>97.600</td>
<td>18.600</td>
<td>79.000</td>
</tr>
<tr>
<td>TEJO/TAJO</td>
<td>80.600</td>
<td>24.800</td>
<td>55.800</td>
</tr>
<tr>
<td>GUADIANA</td>
<td>66.800</td>
<td>11.500</td>
<td>55.300</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>264.560</td>
<td>56.930</td>
<td>207.630</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Portugal</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>19</td>
<td>81</td>
</tr>
<tr>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>17</td>
<td>83</td>
</tr>
<tr>
<td><strong>22</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>
Sharing water resources

37 AH (> 10 MW)

264 AH (< 10 MW)

6130 MW

RH Douro/Duero
1864 Treaty defining the international rivers as international border in between both countries, it also reinforced the importance of a common management and use of the water resources.

In 1906 Portugal and Spain signed an act on terrestrial borders from Miño/Minho river in the north to the Guadiana and Caia river mouth in the south.

in 1927 the first Agreement on the hydro-electric potential use within the international area of the Douro/Duero river was signed.
Albufeira, Portugal
30 October 1998
Albufeira Agreement: Structure

Institutional regime (Articles 20, 23)
Exchange of information (Articles 5, 6, 7, Annex I)
Transboundary impacts (Articles 8, 9 and Annex II)
Quality and pollution (Articles 13, 14)
Water uses (Article 15)
Exceptional situations (Articles 17, 18 and 19)
Flow regime (Article 16, Additional protocol and annex)
Albufeira Agreement: Management

Conference of the parties, integrated by National/Regional Ministers from both countries.


The CADC is supported by thematic expert working groups.
Management Structure (it could be better...)
Other exemple of Iberian cooperation
River basin management plans
(\textsuperscript{\textcopyright}coordinated
Minho / Lima
Douro
Tejo
Guadiana
Successful cooperation in Minho-Lima


• **CARISMA**: The main objective of the project is to develop actions to maintain and improve the excellent state of conservation of the transboundary rivers Trancoso and Laboreiro. Activities include: Water quality and quantity monitoring, improve water purification, recovery and conditioning of riversides and environmental education.

• **TEAM MIÑO**: Transfer of tools for implementing the Water Framework Directive in transitional and coastal waters of the NW of the Iberian Peninsula, in order to harmonize the management plans of Spain and Portugal to the international waters of the River Miño.

Future integrated river basin management plan 2015
Advantages of cooperation

- The long cooperation in the exploitation of shared resource (hydro-power potential) resulted on a mutual knowledge of the norms, technologies and methods applied in both countries. Also, personal relations among engineers, officials and experts of both countries have been created,

- During the periods of extreme flows, particularly in the case of large floods, it has gradually been felt the need to coordinate the respective strategies on reservoirs exploitation.

- Jointly evaluation of transboundary environmental impacts of hydraulic projects;

- Participation on the development of research projects.
What do we need for the future?
3 open issues...

ISSUE 1: Freshwater resources availability may be a limitation to economic development? Is there a limit? And alternative water sources?

ISSUE 2: On shared river basins, how to manage the typical temptation “first come-first served”? Cumulative effects (SEA...)

ISSUE 3: The minimum volume agreements < = > how far we need to go to face scarcity? And quality? And environmental flows?
Conclusion

Water treaties
Co-evolution

Old days

Co-policing

Co-development

Co-operation

Co-management

Future times

2008-present

2015

Old days
10th EUROPEAN CONFERENCE ON THE IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE
European Group of Basin Organizations EUROPE-INBO
Istanbul – Turkey – 17 to 19 October 2012

Teşekkür ederiz

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