Is LADM ready for maritime domain?
-
Case study Croatia

Veljko Flego, dipl. ing.
dr. sc. Miodrag Roić
Irena Benasić, dipl. ing.
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• LADM in maritime domain
• Registers in the maritime domain
• Modeling of registers
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Introduction

- UNCLOS sets the sovereignity framework
- Complex interests and stakeholders
- Definition of limits and boundaries
- Extension of existing “onshore” registers
- Marine cadastres establishment

Marine data is used in spatial planning, Integrated coastal zone management, National spatial data infrastructure…

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LADM in maritime domain

- LADM out-of-the-box
- New classes proposed:
  - **RRRs**: State Right, Private Right, Latent Right, Common Right…
  - **Spatial Extent**: Natural Resources, Legal Space Tunnel…
- Adopting LADM elements in IHO hydrographic and navigation standards:
  - spatial elements, parties, tenure
Registered areas & Zones

- REAL PROPERTY
- TERRITORIAL UNITS
- CONCESSIONS
- PROTECTED AREAS
- FISHING ZONES
- DESIGNATED ZONES
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Registration use cases

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Class models: Cadastre

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Register of concessions on maritime domain

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### Classes matching

<table>
<thead>
<tr>
<th>Register</th>
<th>Administrative unit</th>
<th>Main RRR</th>
<th>Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadastre</td>
<td>parcel</td>
<td>tenure</td>
<td>tenant/owner</td>
</tr>
<tr>
<td>Land book</td>
<td>parcel</td>
<td>ownership</td>
<td>right holder</td>
</tr>
<tr>
<td>Territorial units</td>
<td>territorial unit</td>
<td>jurisdiction</td>
<td>administrative authority</td>
</tr>
<tr>
<td>Concessions on maritime domain</td>
<td>concession area</td>
<td>concession</td>
<td>concession beneficiary</td>
</tr>
<tr>
<td>Exploration fields</td>
<td>exploration field</td>
<td>permit</td>
<td>permission beneficiary</td>
</tr>
<tr>
<td>Exploitation fields</td>
<td>exploitation field</td>
<td>permit</td>
<td>permission beneficiary</td>
</tr>
<tr>
<td>Fish and other marine farms</td>
<td>farm</td>
<td>privilege</td>
<td>privilege holder</td>
</tr>
<tr>
<td>Pollutants</td>
<td>outfall</td>
<td>concession</td>
<td>registration subject</td>
</tr>
<tr>
<td>Protected areas</td>
<td>protected area</td>
<td>protection restrictions</td>
<td>competent authority</td>
</tr>
<tr>
<td>Cultural heritage</td>
<td>site/zone</td>
<td>protection restrictions</td>
<td>competent authority</td>
</tr>
<tr>
<td>Fishing zones*</td>
<td>fishing zone</td>
<td>privilege</td>
<td>privilege holder</td>
</tr>
<tr>
<td>Spatial plans*</td>
<td>designated area</td>
<td>right of use (latent)</td>
<td>beneficiary</td>
</tr>
</tbody>
</table>
LA_BAUUnit specializations

- Connections to cadastral parcel and concession area

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LA_RRR and LA_Party specializations

- Can be identified in all registers

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LADM core concession model

- Includes different registers
Conclusion

- Maritime domain registration is covered by multiple registers
- LADM pattern can be applied
- Some new classes could be useful
- Multi register environment and temporal component should be more considered in future
Thank you.