WP4. Multi-scale tools, methods and models for integrated assessment  
Task 4.5. Economic Assessment Tools

<table>
<thead>
<tr>
<th>Tool: Environmental Territorial Diagnosis (ETD) (Draft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Factsheet gives an overview of the Environmental Territorial Diagnosis tools, one of the tools developed within the PEGASO project for coastal and marine assessment.</td>
</tr>
</tbody>
</table>

**Background and objectives**

**Context:** PEGASO approach is multi issues in support to the implementation of the ICZM protocol in the Mediterranean and needs to the Black Sea. It is not an answer to a problem oriented approach addressed in an integrated way. In that wide context of integrating issues and operational constraints (budget, knowledge), greening the territorial diagnosis tool appears as an appropriate tool to answer PEGASO's objectives. This tool is called Environmental Territorial Diagnosis (ETD).

**Background:** The territorial diagnosis is an inventory on a given territory that lists problems, strengths and weaknesses, economic social and ecological issues, taking into account the diversity of stakeholders. It aims at providing explanation on the past evolution and assessment of the future one. It will aim at understanding the territorial system, being here the costal and marine territory. There is no real defined method as territorial diagnosis is not an end in itself but rather a step in a more global approach.

In a context of intensification of uses on coastal and marine areas leading to conflict uses and increasing pressures and impacts, greening the territorial diagnosis (the Environmental Territorial Diagnosis) will underline territorial dynamics and environmental issues. The aim of the ETD will be to identify main environmental issues in a territory and their links with the territorial dynamics under a Pressure Impact framework.

**Tool's contribution to ICZM / Integrated Assessment**

It will allow analyzing stakeholders' behaviors in terms of uses of shared natural resources for a site, according to the interest for these resources from an economic and ecological point of view. This tool is part of the problematic about the economic information for environmental issues.

<table>
<thead>
<tr>
<th>What it can do</th>
<th>What it can’t do</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A characterization of the economic weight of actors, especially for activities relying on natural resources uses, at ecosystemic scales.</td>
<td>• Giving a global equilibrium of the economic activity. The Economic Table is built in a part in terms of balance and economic equilibrium (partial balances). It is somewhere a degraded Green I/O matrix.</td>
</tr>
<tr>
<td>• Indicators of economic development within the study area, including social and environmental dimensions of development.</td>
<td></td>
</tr>
<tr>
<td>• Cartography of the social area by economic descriptors through the construction of an economic table.</td>
<td></td>
</tr>
</tbody>
</table>

**Implementation Process**

Identify (i) the key natural resources attached to the territory, (ii) the different functions associated, (iii) main territorial dynamics linked to resources management and (iv) role of stakeholder in this dynamics and resources management. The approach starting on natural resources is ending on the territory.

**Step 1:** implement an institutional mapping (in a participative and collaborative way) according to issues and related resources; Optional: SWOT analysis;

**Step 2:** gets a characterization of actors’ economic weight for each activity weighing over these resources (activities based on direct or indirect uses of site shared resources)...

**Step 3:** ...at an ecosystemic scale, according to boundaries linked to natural resources uses (river basins, sub-river basins...), to cultural or economic logics, etc.
By rebuilding existing statistical information at the scale of natural resources management, this will produce another map of the local or regional economy to get a measure at the scale of the issues, according to potential environmental management/governance units (for instance river basins impacting coastal and marine areas).

**Step 4:** synthesis and representation of data: producing spatial results through a common interactive and dynamic interface (to be developed or using existing and suitable software such as GIS or automatic cartography software (Philcarto)).

### Data

Economic data at NUTS levels regarding the economic activity of selected sectors: Local Administrative Units (LAU 1 and 2 for aggregation at ecosystemic level) and NUTS 2 and 3. It should target the number of enterprises, the employment level, the turn over, the added value and its distribution as well as related indicators. Proxy data or multipliers can be used in case of lack of data at certain levels. Such data are usually available for EU Member State through their Statistical Offices as data are delivered to EuroStat. Non EU Member States should target National, Regional or Local official statistical offices.

### Needs and requirement

No particular knowledge is required as the tool will have to deal with basics of data management. The institutional mapping being co-constructed, it will require open mind and collaborative tasks. Participative methods would be an advantage.

Regarding software, Cmap will be selected in terms of conceptual representation software for the institutional mapping and to design the system to be analyzed. For delivering the output, a data management software processing public data bases in link with spatial representation should be either built within PEGASO or adopted among existing commercial ones (benefiting from support and development). But it has to be care of avoiding using too many different software in WP4.

### Expected Results

Interactive spatial interface providing the new map of the economy and outputs to analyze dynamics of changes. Economic Table as an influences table and a simplified model of the study site (system to be studied)

### Notes and issue regarding use of the tool:

The approach or tool could be ideally completed with a cost effectiveness analysis (see Economic Assessment Tools fact sheet) of existing measures to protect ecosystems.

Issue about the use of the tool: how manage the link between the social and economic information mapping and the environment? Is it to provide analysis and conclusion or is it to make information available to stakeholders for discussion and analysis? The issue is that of co-production or that of co-analysis?

For more information on Environmental Territorial Diagnosis tool and a list of publications, handbook and/or guidelines visit: http://www.pegasoproject.eu/xxxxxxx.htm