Enhancing ecoSysteM sERvices mApping for poLicy and Decision mAking

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EU Horizon 2020 Coordination and support action
EU Horizon 2020 topic addressed:

- Enhancing mapping ecosystems and their services

ESMERALDA targets:

- Ecosystem Services (ES) mapping and assessment strategies for EU member states
- Deliver a ‘flexible methodology’ for pan-European, national and regional ES mapping and assessment
- Support the timely delivery by EU member states of Action 5 of the EU Biodiversity Strategy 2020 by supporting EU MS stakeholders (i.e. national Action 5 authorities)
- Promote local ES assessments required for spatial planning, agriculture, climate, water and nature policy
- Transmit experience through active dialogues and co-creation of knowledge
- Mobilise all relevant actors, increase participation of citizens in science and decision making
- Develop a Strategic Research Agenda (SRA) for ES mapping and assessment throughout and beyond Horizon 2020
Help the member states to implement MAES
ESMERALDA consortium

★ 25 project partners
★ 20 European countries
★ 2 linked Baltic countries
★ 2 linked western Balkan countries
★ + further member states addressed already

★ 44 % university partners
★ 28 % state or other superior organisations
★ 16 % from other academia
★ 12 % SMEs
**ESMERALDA timeplan**

- **Project start:** 01.02.2015
- **Project duration:** 42 months

Timeline showing the integration of ESMERALDA in related EU and global activities:

- **EU Art.17 Report**
- **First results**
- **No net loss initiative**
- **EU 2020 headline target on biodiversity achieved**

**EU**

- **2013**
  - MAES High Level Event
  - EU Art.17 Report
  - First results
- **2014**
  - EEA SOER
  - MAES delivery workshop
  - EU Mid-Term Report
- **2015**
  - Action5/MAES ends
- **2016**
- **2017**
- **2018**
- **2019**
  - COP14, CBD
- **2020**
  - COP13, CBD

**Global**

- **2013**
  - GBO4 COP12, CBD
  - 5NR
- **2014**
  - MDG
- **2015**
  - GBO/IPBES Assessment

**ESMERALDA**

- MAES, Mapping and Assessment of Ecosystems and their Services
- SOER, State of the Environment Report, EEA (European Environment Agency)
- 5NR, 5th National Report, Secretariat of the CBD (Convention of Biological Diversity)
- GBO, Global Biodiversity Outlook
- COP, conference of the parties
- MDG, Millennium Development Goals

WORKSHOP MAES Portugal – 11 December 2015
Three year contract study funded by DG ENV to support MAES using case studies in the Member States (2013-2015)

- Survey based country profiles: Status of MAES implementation in the Member states (planning, stakeholders, capacity, data, outputs)
- Case studies on nation-wide mapping (gaps, methods, coverage)
- Gaps and recommendations on mapping and assessment
- All documents and reports available on CIRCA BC
Service contract funded by DG ENV to invite Member States to trainings on mapping ecosystem services

- Based on a joint JRC-EEA-MESEU workshop in 2014: MAES country teams (state official, researcher and GIS expert) invited to map ecosystem services based on country specific data sets (NL, FR, CZ, IT)

- **TRAIN workshops according to this format**
  - 1st workshop: 20, 21 and 22 January: AT, HU, LV, RO
  - 2nd workshop: 17, 18 and 19 February: HR, CY, GR, LT, MT
  - 3rd workshop: 24, 25 and 26 March: EE, IE, LU, SK, SI
<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
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<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; phase</td>
<td>Identification of relevant stakeholders and stocktaking, collecting and linking existing approaches for ES mapping and assessment, creating links to existing related projects and databases;</td>
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<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; phase</td>
<td>Development of the multi-tiered ES mapping and assessment methodology;</td>
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<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; phase</td>
<td>Testing the developed methodology in representative thematic and biome-oriented Workshops and Case studies across EU member states;</td>
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<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; phase</td>
<td>Feedbacks from ESMERALDA stakeholders and other relevant user groups, methodology improvement;</td>
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<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; phase</td>
<td>Producing tailored and flexible solutions for ES mapping and assessment for policy and decision making;</td>
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<td>6&lt;sup&gt;th&lt;/sup&gt; phase</td>
<td>Safeguarding the implementation of project results in the context of the BD Strategy and Horizon 2020, including strategies for long-term implementation beyond ESMERALDA</td>
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★ What are the present needs of the member states (MS)

★ Help MS enhance stakeholders/policy engagement
★ Help MS map ecosystems and their services
★ How MS assess ecosystems and their services

★ Test the approach in mapping and assessment workshops
**1st phase:** Identification of relevant stakeholders and stocktaking, collecting and linking existing approaches for ES mapping and assessment, creating links to existing related projects and databases;

**Key achievements from this phase:**

★ Stakeholder workshop in October in Riga
★ Final country and case study fact sheets ready for uploading in BISE
★ **Which member states have done MAES or are ready to do a MAES type of national ecosystem assessment.**
★ Tailored guidance to member states for implementing mapping and assessment in preparation

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Official project Kick-off meeting in Kiel in May

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WORKSHOP MAES Portugal – 11 December 2015
Who are stakeholders in this ESMERALDA Workshop?

74 Representatives from 26 EU member states + Switzerland

<table>
<thead>
<tr>
<th>Country</th>
<th>Austria 3</th>
<th>Belgium 2</th>
<th>Bulgaria 7</th>
<th>Croatia 1</th>
<th>Cyprus 1</th>
<th>Czech Republic 3</th>
<th>Denmark 1</th>
<th>Estonia 5</th>
<th>Finland 4</th>
<th>France 2</th>
<th>Germany 3</th>
<th>Greece 2</th>
<th>Hungary 1</th>
<th>Ireland 1</th>
<th>Italy 5</th>
<th>Latvia 12</th>
<th>Lithuania 2</th>
<th>Malta 2</th>
<th>Netherlands 4</th>
<th>Poland 1</th>
<th>Portugal 1</th>
<th>Romania 2</th>
<th>Slovakia 1</th>
<th>Spain 1</th>
<th>Sweden 3</th>
<th>Switzerland 1</th>
<th>United Kingdom 3</th>
</tr>
</thead>
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WORKSHOP MAES Portugal – 11 December 2015
<table>
<thead>
<tr>
<th>1. MAES status</th>
<th>MAES implemented Policies supporting MAES National MAES report</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Networking, stakeholder involvement</td>
<td>National platform available Central administration Governmental institutes Regional administration Science NGOs Business Local communities</td>
</tr>
<tr>
<td>3. Resources available</td>
<td>Financial resources Human resources</td>
</tr>
<tr>
<td>4. Status of national assessment work</td>
<td>National scale assessments Selection of ES Prioritization of ES or classification (e.g. CICES) Indicator framework Data identified EU Directive reporting indicators &amp; data</td>
</tr>
<tr>
<td>5. Status of mapping</td>
<td>National scale maps on ES National scale maps on ES or habitats</td>
</tr>
<tr>
<td>6. Status of data</td>
<td>A national clearing house with data on MAES Data available Data compatible Data streamlined</td>
</tr>
<tr>
<td>7. Case studies available</td>
<td></td>
</tr>
<tr>
<td>8. Nation-wide mapping and assessment project planned for 2016 or beyond</td>
<td>Final score</td>
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</tbody>
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Figure 1. Scores of each country and their placement in the three clusters.

Draft version for internal use
Final assessment due 31 January 2016
ESMERALDA working phases

1\textsuperscript{st} phase: Identification of relevant stakeholder\textsuperscript{s} and stocktaking, collecting and linking existing approaches for ES mapping and assessment, creating links to existing related projects and databases;

2\textsuperscript{nd} phase: Development of the multi-tiered ES mapping and assessment methodology;
ESMERALDA working phases

MAES Working group

Mapping and Assessment of Ecosystems and their Services

1\textsuperscript{st} and 2\textsuperscript{nd} report (2013, 2014)


Tiered approach for ES mapping & assessment

- **Tier 1**: rather simple, e.g. land cover-based
- **Tier 2**: more complex, e.g. statistics-based
- **Tier 3**: complex, e.g. model-based
ESMERALDA working phases

1st phase: Identification of relevant stakeholders and stocktaking, collecting and linking existing approaches for ES mapping and assessment, creating links to existing related projects and databases;

2nd phase: Development of the multi-tiered ES mapping and assessment methodology;

3rd phase: Testing the developed methodology in representative thematic and biome-oriented Workshops and Case studies across EU member states;

Case studies representative for:

★ The variety of natural and socio-economic conditions in EU Member States

★ The variety of cross-EU themes relevant for ES

★ The geographical regions and biomes of the entire EU
ESMERALDA working phases

**1st phase:** Identification of relevant stakeholders and stocktaking, collecting and linking existing approaches for ES mapping and assessment, creating links to existing related projects and databases;

**2nd phase:** Development of the multi-tiered ES mapping and assessment methodology;

**3rd phase:** Testing the developed methodology in representative thematic and biome-oriented Workshops and Case studies across EU member states;

First series of workshops to test the first version of the methods:

3 Workshops, 3 case studies each
ESMERALDA working phases

1st phase: Identification of relevant stakeholders and stocktaking, collecting and linking existing approaches for ES mapping and assessment, creating links to existing related projects and databases;

2nd phase: Development of the multi-tiered ES mapping and assessment methodology;

3rd phase: Testing the developed methodology in representative thematic and biome-oriented Workshops and Case studies across EU member states;

Second series of workshops to test the final version of the methods:

2 Workshops, 2 case studies each
ESMERALDA policy relevance

- Bringing ES into application at the *science-policy-society interface* is not only dependent on raising awareness but on increasing the ES approach’s applicability in EU and national policies having impact on natural resources.

- ESMERALDA will provide tools to demonstrate how *ES approaches can make a difference*.

- Creating a *network* of stakeholders, practitioners, researchers and policy makers.

- ESMERALDA will substantially *enhance and support* work under Action 5 in EU member states.