

### ***Brussels RP Workshop, Working Group on Socio-economic aspects***

The working group on Socio-economic aspects provided an inventory of socio-economic assessments conducted in the North Atlantic, Baltic Sea, Mediterranean Sea and Black Sea Regions. The working group went through each chapter of the World Ocean Assessment report outline and took note of existing assessments that have been carried out containing socio-economic information in each of the four broad geographic regions. Special attention will be given to assessments that are not included in the GRAMED database, either assessments carried out prior to 2008 that were overlooked or assessments that have been carried out since 2008.

Data and information sources on socio-economic aspects of the marine environment for the study areas can be divided in 5 categories:

- a. Documents related to the EU Marine Strategy Framework Directive include the initial study documents, study reports, the compilation report (to be published in 2014). These are all available online at the EU-DG Environment website.
- b. Documents on socio-economic impact studies relating to EU Legislation include studies on the impact of the MSP, ICZM and Common Agricultural Policy and the EU 2020 Biodiversity Strategy. The documents are available online at the respective EU websites of DG Environment, DG Mare and DG Agricultural and Rural development.
- c. Socio-economic data and information from Canada can be obtained from Statistics Canada and includes e.g. indices on well-being of coastal populations in Canada, economic data on seaweed harvest, data on employment and income of fisheries communities.
- d. Specific official reports (EU and others) include reports from the International Labour Organisation, the European Maritime Safety Agency and are available online at the respective agencies.
- e. Other reports from various sources include e.g. the European Science Foundation-Marine Board, etc.

Chapter	Existing Assessments (where no assessments exist, available data)	Knowledge Gaps and Capacity Building Needs	Comments
<i>Chapter 5. Sea/air interaction</i>	<p>The Intergovernmental Panel on Climate Change(IPCC) provides data and reports on climate change risks for society and economy under different scenarios. Data and reports are available online at: <a href="http://www.ipcc.ch">http://www.ipcc.ch</a></p> <p>Information is available in the UK and the Netherlands on the potential impact of extreme weather on socio-economics.</p> <p>The EU PESETA project (Impacts of climate change in Europe) (<a href="http://peseta.jrc.ec.europa.eu/">http://peseta.jrc.ec.europa.eu/</a>)</p>		
<i>Chapter 8. Aesthetic, cultural, religious and spiritual ecosystem services derived from the marine environment</i>	<p>The EU PESETA project (Impacts of climate change in Europe) contains information on this (<a href="http://peseta.jrc.ec.europa.eu/">http://peseta.jrc.ec.europa.eu/</a>).</p> <p>Member states reports developed for the EU Marine Strategy Framework Directive (MSFD) (<a href="http://ec.europa.eu/environment/marine/publications/index_en.htm">http://ec.europa.eu/environment/marine/publications/index_en.htm</a>) are required to provide information on social and cultural value of the oceans at the national levels (e.g. sea festivals, cultural heritage).</p> <p>Information on cultural aspects of fisheries communities are available in anthropological studies in the UK.</p>	<p>At this current time there is a dearth in literature available relating to aesthetic, cultural and spiritual ecosystem services. However, some funding was made available in the UK very recently for studies on these services.</p>	
<i>Chapter 11. Capture fisheries</i>	<p>Member states reports developed for the EU Marine Strategy Framework Directive (MSFD) are required to provide information on economic aspects of capture fisheries (including statistical</p>		

	<p>information).</p> <p>UK: study on public expenditures in the fisheries sector in the UK. PEW working group and website (<a href="http://www.fishsubsidy.org">http://www.fishsubsidy.org</a>) with data on subsidies (until 2007).</p> <p>Canada: study on marine economy in GDP with information of fisheries sector, income of fishermen. Studies on social well-being of coastal fishermen communities are available.</p> <p>Other data and information sources include reports of the EU DG Maritime affairs developed for the Integrated Maritime Policy.</p> <p>Mediterranean sea: UNEP/MAP Plan Bleu has conducted recently a socio-economic analysis on the Fisheries and Aquaculture sectors.</p>		
<p><i>Chapter 12. Aquaculture</i> 12 A. Scale and distribution of aquaculture: locations of aquaculture activities – species cultivated – economic significance</p>	<p>Norway: Key figures on aquaculture are published annually.</p> <p>Spain: EU research projects with information on socio-economic aspects of the aquaculture sector in Galicia.</p> <p>France: survey study on aquaculture sector.</p> <p>Marine Spatial Planning projects in UK contain information on economic value of displacement costs.</p>		

and contributions to food security.			
<i>Chapter 14. Seaweed and other sea-based food</i>	Canada has data and figures on seaweed harvest.	Brittany, France has a very large seaweed industry, harvesting and exporting seaweed to overseas markets. Ekokelp website for more information: <a href="http://www.sb-roscoff.fr/ecokelp/index.php?option=com_frontpage&amp;Itemid=1">http://www.sb-roscoff.fr/ecokelp/index.php?option=com_frontpage&amp;Itemid=1</a> Company which imports seaweed from Europe and uses local seaweed in Australia for food based products: <a href="http://www.marinova.com.au">www.marinova.com.au</a>	
<i>Chapter 15. Social and economic aspects of fisheries and sea-based food</i>	<p>The World Health Organization (WHO) and the Food and Agricultural Organisation (FAO) provide information on health aspects of seafood at a global scale (e.g. heavy metals).</p> <p>The International Labour Organization (ILO) provides information on employment in the fisheries sector and death and injuries of fishermen.</p> <p>Reports produced under the EU Common Fisheries Policy Reform contain information on employment in the fisheries sector in the EU.</p> <p>Canada: data on employment and income are available for communities dependent on fisheries.</p>	Lack of capacity to assess fish stocks is problematic in some areas.	

	<p>Reports developed under the EU Common Fisheries Policy Reform contain information on Distant Water Fishing Agreements. The Organisation for Economic Co-operation and Development (OECD) has information on fisheries in its member states. The FAO has done studies on this subject as well.</p> <p>Specific information on fishing ship building in UK is available.</p> <p>Fish stock assessment do not exist for all commercial species. ICES has data of the percentage of stocks assessed.</p>		
<i>Chapter 16. Conclusions on food security.</i>	<p>Reports developed under the EU Integrated Marine policy contain information on how seafood demand is likely to develop in the EU.</p>		
<i>Chapter 17. Shipping</i>	<p>The UN Conference on Trade and Development (UNCTAD) provides data and information on freight and ship movements.</p> <p>The Arctic Council has information on the opening of the northern route and significance for shipping.</p> <p>EUROSTAT has information on shipping. The IMO has data on traffic control lanes.</p> <p>The OECD has information on the impact of globalization on shipping.</p> <p>Information is available in the UK on marine environmental high risk areas for shipping. OSPAR has done studies on the environmental impact of shipping lanes.</p>	<p>Eurostat also has information on cargo tonnage.</p> <p>Also refer to the EU policy about the new recommendations for increase in shipping movement and building of associated ports in previously untapped areas in the Black and Baltic Seas:  <a href="http://ec.europa.eu/transport/strategies/2007_logistics_en.htm">http://ec.europa.eu/transport/strategies/2007_logistics_en.htm</a></p>	

	<p>IMO has data and information on oil pollution from shipping.</p> <p>France: studies on impact Amoco Cadiz.</p> <p>EU studies on the impacts of marine invasive species (e.g. ballast water).</p> <p>Eurostat has data on ship breaking. Other information sources include reports produced by EU DG MARE</p> <p>The International Labour Organization (ILO) has information on employment in shipping including time series.</p> <p>Mediterranean Sea: UNEP/MAP/ Plan Bleu has published on the Maritime transport of goods in the Mediterranean, with outlook to 2025</p>		
<p><i>Chapter 18. Ports</i></p>	<p>Reports developed under the EU Policy on Transeuropean Transport Networks. DG Mare and DG Transport have data and information.</p> <p>Eurostat has information on short sea shipping: e.g. passenger shipping over short distances.</p> <p>Canada: Statistics Canada provides information on ports, marine salvage etc.</p> <p>Reports produced under the EU Port Facilities Directive provide information on port management. OSPAR has produced a report for this directive comparing recreational and commercial ports in EU.</p> <p>Employment in ports: An UK study is available on the effects of</p>		

	mechanization on employment in ports.		
<i>Chapter 19. Submarine cables and pipelines</i>	<p>OSPAR has studies on the decommissioning of cables and pipelines and on the impact of different types of cables.</p> <p>UK: the “UK Charting progress 2” report contains a chapter on telecommunication.</p> <p>The UNDP International Cable protection Committee has a report with information.</p>	In general, there is little information available on this subject.	
<i>Chapter 20. Coastal, riverine and atmospheric inputs from land</i>	<p>UK: impact study on bathing water quality with indicators.</p> <p>Netherlands: Cost benefit analysis of the EU Bathing Water Directive.</p> <p>HELCOM: studies on impact of agricultural run-off and emission in Baltic Sea, including social aspects.</p> <p>Other sources of information include OSPAR studies on impact of nuclear emissions, the European Nitrogen Assessment and the Convention on Long-range Transboundary Air Pollution (LATAP).</p>		
<i>Chapter 21. Offshore hydrocarbon industries</i>	<p>Sources of information:</p> <ul style="list-style-type: none"> <li>- Effects of emissions of fossil fuel (European Environment Agency)</li> <li>- The Netherlands: studies on gas extraction in waddensea.</li> <li>- Eurostat</li> <li>- Studies on carbon dioxide storage in decommissioned offshore oil and gas fields.</li> <li>- Studies on the economic impacts of disasters (e.g. Piper Alfa disaster)</li> </ul>	Remark: it might be difficult to distinguish between data from land and water based components in extractive industries.	

<p><i>Chapter 22. Other marine-based energy industries</i></p>	<p>EU: Some socio-economic data and information on marine-based energy is published by member states in reports under the EU Marine Strategy Framework Directive.</p> <p>France: IFREMER report on Marine renewable energy includes expected forecasts.</p>		
<p><i>Chapter 24. Solid waste disposal</i></p>	<p>Socio-economic impact studies on ammunition dumps in the Adriatic are available.</p> <p>EEA: Reports on the Palomares ammunition dump along the east coast of Spain.</p>		
<p><i>Chapter 25. Marine debris</i></p>	<p>Member states reports produced under the EU Marine Strategy Framework Directive contain information on this subject.</p>		
<p><i>Chapter 26. Land/sea physical interaction</i></p>	<p>Sources of information:</p> <ul style="list-style-type: none"> <li>- UK: information is available on socio-economic aspects and the management of coastal erosion.</li> <li>- UK: TEEB study on coastal erosion prevention and sedimentation</li> </ul> <p>Member state reports produced under the EU Marine Strategy Framework Directive contain information on socio-economic effects on changes in hydrological conditions and associated impacts.</p>	<p>A paper has been recently submitted by Camion Liquette from the European Environment Agency assessing Coastal Erosion Prevention as an ecosystem service for all European Waters. Camino needs to be contacted directly if you wish a copy of this paper. However, this assessment was very thorough and produces coastal erosion maps for the whole of Europe which would be of use in this chapter.</p>	
<p><i>Chapter 27. Tourism and</i></p>	<p>Sources of information:</p> <ul style="list-style-type: none"> <li>- OSPAR</li> </ul>	<p>Eurostat has a lot of information relating to tourism. There is a number</p>	

<p><i>recreation</i></p>	<ul style="list-style-type: none"> <li>- World Tourism Organisation (WTO)</li> <li>- Statistics Canada</li> <li>- Mediterranean: UNEP/MAP Plan Bleu has produced several studies on coastal tourism, cruises and recreational boating in the Mediterranean.</li> <li>- Willingness to pay studies on beach use by tourist are available in Italy.</li> <li>-</li> </ul>	<p>of Mediterranean projects.</p>	
<p><i>Chapter 29. Use of marine genetic resources</i></p>	<p>Data sources include e.g. the ESF-Marine Board Marine Biotechnology report (2011).</p>		
<p><i>Chapter 30. Marine scientific research</i></p>	<p>Data sources include EUROSTAT statistics on expenditures in marine research and reports produced by the ESF-MB.</p>		
<p><i>Chapter 43. Significant environmental, economic and/or social aspects in relation to the conservation of marine species and habitats</i></p>	<p>Reports produced under the EU Marine Strategy Framework Directive contain information on socio-economic aspects of biodiversity. Impact studies are available on the DG Mare website. Data on investments in biodiversity are available (e.g. LIFE). Canada: a willingness-to-pay study on marine biodiversity is available.</p>	<p>This report has an interesting take on marine activity and may be useful for this report/chapter: <a href="http://www.iwlearn.net/publications/regional-seas-reports/unep-regional-seas-reports-and-studies-no-181">http://www.iwlearn.net/publications/regional-seas-reports/unep-regional-seas-reports-and-studies-no-181</a></p> <p>The ODEMM project (associated with EU MSFD implementation) produced a chapter on economic and social considerations in Europe. Refer to ODEMM Deliverable 1 (Chapter 5) on this website:</p>	

		<a href="http://www.liv.ac.uk/odemmm/project_deliverables/">http://www.liv.ac.uk/odemmm/project_deliverables/</a>	
<i>Chapter 47. Overall value of the oceans to humans</i>	<p>Member state reports produced under the EU Marine Strategy Framework Directive may contain information and analysis on the cost of marine environmental degradations. However, no common strategy on what data is to be provided is available.</p> <p>Studies have been done by HELCOM on the economic value of the Baltic Sea.</p> <p>UNEP/MAP Plan Bleu has produced an exploratory assessment of the Economic Value of sustainable benefits rendered by the Mediterranean marine ecosystems (2010).</p>	<p>Report which has some interesting findings:</p> <p><a href="http://www.google.co.uk/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=1&amp;ved=0CCsQFjAA&amp;url=http%3A%2F%2Fwww.sesame-ip.eu%2Fdoc%2FMMA_Marine_ecosystems_and_human_well_being.pdf&amp;ei=zYZcUJSWKcOU0QXBvIDwCw&amp;usg=AFQjCNF6uCo8IIyeixiIcaGJZXBEk7Q-eQ">http://www.google.co.uk/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=1&amp;ved=0CCsQFjAA&amp;url=http%3A%2F%2Fwww.sesame-ip.eu%2Fdoc%2FMMA_Marine_ecosystems_and_human_well_being.pdf&amp;ei=zYZcUJSWKcOU0QXBvIDwCw&amp;usg=AFQjCNF6uCo8IIyeixiIcaGJZXBEk7Q-eQ</a></p> <p><a href="http://www.unep.org/ecosystemmanagement/UNEPsWork/MarineandCoastalEcosystems/tabid/513/Default.aspx">http://www.unep.org/ecosystemmanagement/UNEPsWork/MarineandCoastalEcosystems/tabid/513/Default.aspx</a></p> <p><a href="http://chartingprogress.defra.gov.uk/">http://chartingprogress.defra.gov.uk/</a></p>	