



## Conservation of marine habitats in the Baltic, Atlantic, Macaronesian, Mediterranean and Black Sea Marine Biogeographical Regions

### Roadmap for knowledge exchange and networking for the period 2019-2020

Version 1, following discussions at the Second marine Natura 2000 Seminar, held in Palma, Mallorca, 13-15 November 2018.

#### Background

The roadmap addresses the conservation of marine habitats and species in the Baltic, Atlantic, Macaronesian, Mediterranean and Black Sea Biogeographic Regions.

As a contribution to the Natura 2000 Biogeographic Process, the Second marine Natura 2000 seminar was held in Palma, Mallorca, 13-15 November 2018. The seminar was organised, on behalf of the Commission, by the Consortium delivering the 'Support for the Natura 2000 Biogeographical Process (ENV.D.3/SER/2017/0010)' project, led by Wageningen Environmental Research<sup>1</sup>. It was jointly hosted by the Fundacion Biodiversidad of the Spanish Ministry for the Ecological Transition and the Government of the Balearic Islands. It was held in conjunction with a workshop on Marine Protected Areas and Small-Scale Fisheries organised by MedPAN.

The First marine Natura 2000 seminar<sup>2</sup> was held in 2015 and identified a range of approaches to common issues facing managers across all five biogeographic regions:

- development of guidelines and common standards;
- workshops and seminars on regional approaches to habitat and species management;
- information sharing and collaborative work on issues including data, management approaches and the use of technology;
- awareness raising and the use of the marine platform to share best practice; and
- improving funding opportunities.

Building on these approaches, and on the results of several networking events in the intervening years, the Second marine Natura 2000 seminar was organised around three major themes:

Theme 1 – Setting conservation objectives at site, national and regional levels

Theme 2 – Setting favourable reference values (FRVs)

Theme 3 – Developing conservation measures to achieve the conservation objectives

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<sup>1</sup> Wageningen Environmental Research, Wageningen Marine Research, Wageningen UR, in collaboration with NatureBureau Ltd., Regional Environmental Centre, Estonian University of Life Sciences, TerraEcogest and Mãed'água

<sup>2</sup> Saint-Malo, France, 5 – 7 May 2015. The full seminar report can be found here: [http://ec.europa.eu/environment/nature/natura2000/platform/documents/marine\\_biogeographical\\_kick\\_off\\_seminar\\_report\\_en.pdf](http://ec.europa.eu/environment/nature/natura2000/platform/documents/marine_biogeographical_kick_off_seminar_report_en.pdf)

Following a plenary session on these three themes, with working groups discussing them further at a regional level, a full day of workshops was held focussing on key habitats and species in a regional context (see table 1). Facilitators captured key points from all discussions, including opportunities for future co-operation and actions. These notes form the basis for the initial draft of the marine habitat networking and knowledge exchange roadmap<sup>3</sup>.

Region	Stream	Focal Habitats or Species
<b>Baltic Sea</b>	1a Habitats	<ul style="list-style-type: none"> <li>Submerged rooted plant communities on Baltic infralittoral sand (1110 + 1160)</li> <li>Epifaunal communities on Baltic circalittoral rock and mixed substrata (predominantly hard) (1170)</li> </ul>
	1b Species	<ul style="list-style-type: none"> <li>Harbour porpoise <i>Phocoena phocoena</i></li> <li>Velvet scoter <i>Melanitta fusca</i></li> </ul>
<b>Atlantic &amp; Macaronesia</b>	2a Habitats	<ul style="list-style-type: none"> <li>Mussel beds in the Atlantic littoral zone (1140, 1170 + 1160)</li> <li>Seagrass beds on Atlantic infralittoral sand (1110 + 1160)</li> </ul>
	2b Species	<ul style="list-style-type: none"> <li>Bottlenose dolphin <i>Tursiops truncatus</i></li> <li>Black-legged kittiwake <i>Rissa tridactyla</i></li> </ul>
<b>Mediterranean &amp; Black Sea</b>	3a Habitats	<ul style="list-style-type: none"> <li>Photophilic communities with canopy-forming algae in Mediterranean infralittoral and upper circalittoral rock (1160 + 1170) and <i>Posidonia</i> meadows (1110 + 1160)</li> <li>Seagrass meadows in Pontic lower infralittoral sands (1110, 1160)</li> </ul>
	3b Species	<ul style="list-style-type: none"> <li>Bottlenose dolphin <i>Tursiops truncatus</i></li> <li>Balearic &amp; Yelkouan shearwaters <i>Puffinus mauretanicus</i> and <i>P. yelkouan</i></li> </ul>

Table 1 – Working groups for regional discussions on habitats and species

### The marine habitat networking and knowledge exchange roadmap

The initial draft of the marine habitat networking and knowledge exchange roadmap is based on the results of discussions in the regional working groups, held after the introductory plenary session, and in the regional habitat and species workshops. The wide range of opportunities for collaboration and action that were identified by seminar participants can be grouped under the 3 seminar themes as well as those of horizontal nature as follows:

- Conservation Objectives and Habitat definitions
- Favourable Reference Values
- Site management and Integrated planning and stakeholder involvement
- Horizontal and supporting actions: Invasive species, Education and awareness, Funding, miscellaneous

Where possible the roadmap links topics back to one of the three seminar themes. It is interesting to note that although the workshops were focussed at the level of species and habitats, most, if not all, of the opportunities for collaboration and action that were put forward were at a more general

<sup>3</sup> Further details of the seminar including background documents, presentations and final report can be found here:

[http://ec.europa.eu/environment/nature/natura2000/platform/knowledge\\_exchange/28\\_document\\_library\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/platform/knowledge_exchange/28_document_library_en.htm)

level. Similarly, most of the issues raised were common across all three regional working groups. This suggests that there are still some major methodological issues to be addressed before more detailed or localised management questions can be discussed.

For each topic the roadmap highlights one or more **outcomes** (what we want to achieve) and associated **actions** (what we need to do to). **Actions** are broadly categorised as:

Action	Code
Sharing and/or dissemination of information	D
Seminars or network meetings	S
Guidance, organisational and/or legal actions	G
Research	R
Local actions	L

A column with corresponding action code letters has been added so that the table can be easily sorted by action type. An approximate timeframe for each action is proposed:

- Short = <1 year
- Medium = 1 to 4 years
- Long = 5 + years

together with suggestions for lead and supporting partners.

The roadmap is intended to be a working document, with periodic review and updates to keep it relevant. Progress will be reported through the regular Biogeographical Process newsletters and on the Natura 2000 platform.

Many of the actions refer to the organisation of events to address different topics. These do not have to be separate events. Depending on specific regional needs, network events could be organised which address several topics.

## Marine roadmap Version 1 – 2019

NB: This version of the roadmap is provisional. It sets out and classifies main suggestions emerging from the seminar, along with an indicative list of actors to be involved. It will be refined and specified after the MEG discussion.

Topic	Outcome	Action	Code	Timing	Lead	Support
<b>Theme 1 – Setting Conservation Objectives</b>						
Conservation Objectives (CO)	Common understanding of links between FRVs and COs	FAQ paper, signposting to existing guidance and explanatory documents about main concepts, principles and terminology	G	Short	MEG/Commission	
	Common approach to setting COs at regional/biogeographic levels	Establishment of working groups to co-ordinate the setting of objectives between two or more Member States sharing sea territory, on specific groups of habitats and/or species, taking advantage of relevant activities under the Regional Sea Conventions.	S	Short	BGP	
	Better background information for setting COs	Establish catalogue of examples of conservation objectives for habitats and species, including those relating to habitat quality	D	Short, then ongoing	N2000 platform (BGP)	Member States
		Development of programme of basic and applied research to fill knowledge gaps as identified by Member States at network meetings	R	Medium/Long	BGP Scientific community	DG-Research and Innovation? Member States
	Increased integration of CO with ecosystem-based conservation	Explore opportunities for adopting ecosystem-based approaches from WFD, MSFD and MSP for setting of COs	G	Short	Commission	
		Organise a workshop to share regional knowledge and define attributes and indicators of quality and functions of habitats and the ecosystem services they provide.	S	Short	Commission/BGP consortium	Member States
Habitat definitions	More consistent interpretation of marine habitats and definition of quality and function across all Member States	Sharing of national and regional manuals for interpreting habitats	D	Short, then ongoing	ETC-BD	Member States N2000 platform (BGP)
		Create a discussion forum on the interpretation of habitat definitions, quality and function	D	Short, then ongoing	N2000 platform (BGP)	ETC-BD
		Establish a database of personal and organization contacts on specific habitats	D	Short, then ongoing	N2000 platform (BGP)	ETC-BD
		Organise network meetings to improve interpretation of specific habitat types	S	Medium	Member States	BGP
	Support for regions and/or Member States making slower progress	Focussed programme of guidance, assistance, exchange and funding	G	Short	Commission/BGP consortium	
<b>Theme 2 – Setting Favourable Reference Values</b>						
Favourable Reference Values (FRV)	Common method for determining FRVs	Organise a workshop to develop and test a common method for determining FRVs for marine habitats and species, with a focus on initially working in the absence of baseline data, pending research results (see below)	S	Short	Commission/BGP consortium	Member States
		Organise follow-up network meetings to apply method to specific biogeographic regions and/or habitats and species	S	Medium	Member States	BGP
		Organise a workshop to review and update the common FRV method following results of baseline research (see below)	S	Long	Commission/BGP consortium	Member States
	Common understanding of how to establish baselines for setting FRVs	Research examples of historic data that accurately reflect true baseline conditions	R	Medium	Scientific community	DG-Research and Innovation Member States
		Develop modelling in absence of historical data; validate using MPA and/or current monitoring data	R	Medium	Scientific community	DG-Research and Innovation Member States
		Research into impact of 'shifting baselines', climate change etc. on establishing FRVs	R	Medium	Scientific community	DG-Research and Innovation Member States

Topic	Outcome	Action	Code	Timing	Lead	Support
<b>Theme 3 – Developing Conservation Measures</b>						
Site Management	Better background information for the development of conservation measures	Sharing of information on existing EU/regional action plans and current approaches to key issues including: <ul style="list-style-type: none"> <li>management in a changing environment</li> <li>invasive and highly mobile species</li> </ul>	D	Short, then ongoing	N2000 platform (BGP)	Member States European Alien Species Information Network - EASIN
	Common use of EU risk assessment measures across Member States	Sharing of national information on the application of risk assessment to maritime activities	D	Short, then ongoing	N2000 platform (BGP)	Member States LIFE-IP
		Organise network meetings to develop and discuss the application of risk assessment to specific biogeographic regions (e.g. Baltic, Mediterranean)	S	Medium	Member States	BGP
	Effective protection of designated features	Generic risk assessment as basis for protection; apply existing risk assessment methods at both maritime biogeographic and site levels as appropriate	L	Short, then ongoing	Commission, Member States	Other maritime sectors (e.g. fisheries, transport etc.)
		Ensure that all obligations under Art. 6(2) and 6 (3) are met at a site level, based on risk assessment carried out above.	L	Short, then ongoing	Regulatory authorities, economic operators	
		Implement effective monitoring regime and adapt management based on monitoring and further research	L	Short, then ongoing	Scientific community Regulatory authorities	
	Common approach to assessment of impacts on designated features	Sharing of information on current approaches to assessment of: <ul style="list-style-type: none"> <li>pressures</li> <li>impacts</li> <li>thresholds</li> </ul>	D	Short, then ongoing	N2000 platform (BGP)	Member States
		Organise a workshop to develop and test a toolkit for prioritising and addressing pressures and impacts (e.g. UK fisheries impact matrix) and setting thresholds; integrate with work on MSFD delivery where appropriate (e.g. new Seabed WG)	S	Short	Commission/BGP consortium	Member States
		Development of programme of basic and applied research to fill knowledge gaps as identified by workshop participants	R	Medium	Scientific community	DG-Research and Innovation?
		Guidance on application of pressure/impact/threshold toolkit	G	Medium	MEG/Commission	
Integrated planning and stakeholder involvement	Improved stakeholder understanding and acceptance of conservation and management measures	Allow and commit to long-term management groups using informed sea-users and other stakeholders – moving to inclusive models of MPA governance	L	Short, then ongoing	Local authorities Member States	
		Involve stakeholders in setting COs, carrying out risk assessments and developing management measures	L	Short, then ongoing	Local authorities	
		Disseminate socio-economic (e.g. ecosystem services) benefits of environmental recovery to local stakeholders where possible	L	Medium	Member States/Scientific community	LIFE-project?
		Ensure cost-effectiveness of measures introduced to prevent damaging activities, using EMFF for transition with stakeholders	L	Medium	Member States	
		Organise stakeholder workshop based on case study (e.g. Lyme Bay, UK) showing links between science, conservation management and subsequent ecological recovery	S	Medium	Member States	BGP
	Strengthened collaboration between scientists, decision-makers and stakeholders	Capacity building; involving decision makers and stakeholders in scientific studies	L	Short, then ongoing	Scientific community	
Invasive species	Reduced dispersion of invasive species	Sharing of information on current approaches to reducing dispersion of invasive species	D	Short, then ongoing	N2000 platform (BGP)	Member States
		Organise networking meetings to discuss and develop initiatives to reduce invasive species dispersion including: <ul style="list-style-type: none"> <li>early warning systems</li> <li>control of fish farming</li> <li>Suez Canal salt barriers</li> <li>public education</li> </ul>	S	Medium	Member States	BGP European Alien Species Information Network – EASIN JRC

Topic	Outcome	Action	Code	Timing	Lead	Support
<b>Other topics</b>						
Education and awareness	Increased levels of ocean literacy	Sharing of information on current approaches to public engagement through citizen science projects	D	Short, then ongoing	N2000 platform (BGP)	Member States
		Develop citizen science projects within, and supporting, MPA monitoring programmes	L	Short, then ongoing	Member States	LIFE
		Organise networking meetings to discuss and develop regional/biogeographical awareness and education programmes	S	Medium	Member States	BGP
Funding	Increased resources for N2000 work	Organise networking meetings to address regional and biogeographical funding issues including: <ul style="list-style-type: none"> <li>• bids to EU/regional sources with emphasis on cross-border initiatives</li> <li>• development of peer-to-peer programmes</li> <li>• identification of potential private/industry funding</li> </ul> explore potential for marine environment taxes/fees on users	S	Medium	Member States	BGP
		Virtual project 'marketplace' to encourage development of project partnerships	D	Short, then ongoing	N2000 platform (BGP)	
	Best use made of existing funding	Results of all projects and research effectively disseminated	D	Short, then ongoing	N2000 platform (BGP)	Member States, Project consortia
Miscellaneous	Lessons learnt from terrestrial conservation	Engagement of marine projects/managers with relevant terrestrial BGP seminars and network meetings	L	Short, then ongoing	Member States	
		Wide dissemination of the results of all BGP seminars and network meetings	D	Short, then ongoing	N2000 platform (BGP)	
	Best use made of new research, survey and monitoring technologies	Sharing of information on the use of new research, survey and monitoring technologies	D	Short, then ongoing	N2000 platform (BGP)	Member States
		Organise networking meetings to identify opportunities for use of new research, survey and monitoring technologies	S	Medium	Member States Scientific communities	BGP
	Support for regions and/or Member States making slower progress	Project to assist in setting CO, FRV and management measures across member state and remove obstacles to delivery	G	Short	Commission/BGP consortium	