



GROWTH AND INNOVATION IN OCEAN ECONOMY – GAPS AND PRIORITIES IN SEA BASIN OBSERVATION AND DATA

EMODNET MedSea CheckPoint

Annex 1 to the Second DAR: Metadatabase contents and statistics

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Workpackage	11	Annex 1 to DAR2
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Table of Contents

<u>1. INTRODUCTION.....</u>	<u>3</u>
<u>2. STATISTICS OF THE INPUT DATA SETS.....</u>	<u>3</u>
<u>3. INPUT DATA SETS CHARACTERISTIC CATEGORIES</u>	<u>7</u>

1. Introduction

The Mediterranean CheckPoint metadatabase presently contains information about 47 different characteristic categories (P02 vocabulary), 23 P03 group of characteristics, 266 data sets descriptors, covering 16 INSPIRE themes (over a total of 34) and 6 environmental matrices..

The input data sets metadatabase is accessible at: <http://www.emodnet-mediterranean.eu/browser/>

2. Statistics of the Input data sets

Figure A1.1 Number of input data sets for each challenge

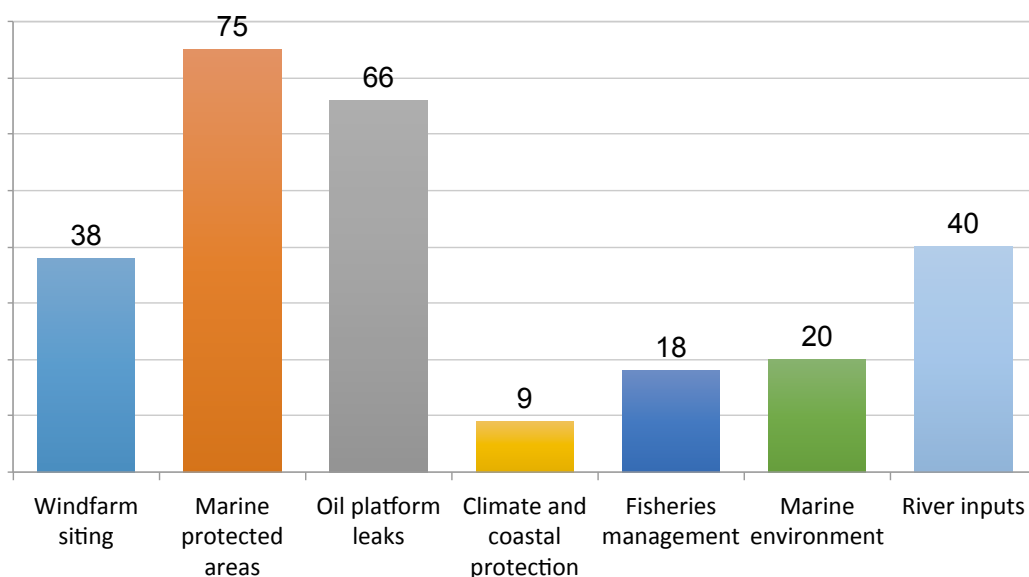


Table A1.1 number of input data sets as function of environmental matrices and Challenges

Matrix	Windfarm siting	MPA	Oil platform leaks	Climate and coastal protection	Fisheries mgnt	Marine env.	River inputs	TOTAL
Air	6	2	7					15
Biota/Biology	11	26	2		8		1	48
Fresh water							39	39
Human activities	6	4	5		8			23
Marine water	12	35	50	8		20		125
Seabed/Riverbed	3	8	2	1	2			16
TOTAL	38	75	66	9	18	20	40	266

Figure A1.2 Number of Input data sets as a function of environmental matrices and challenges.

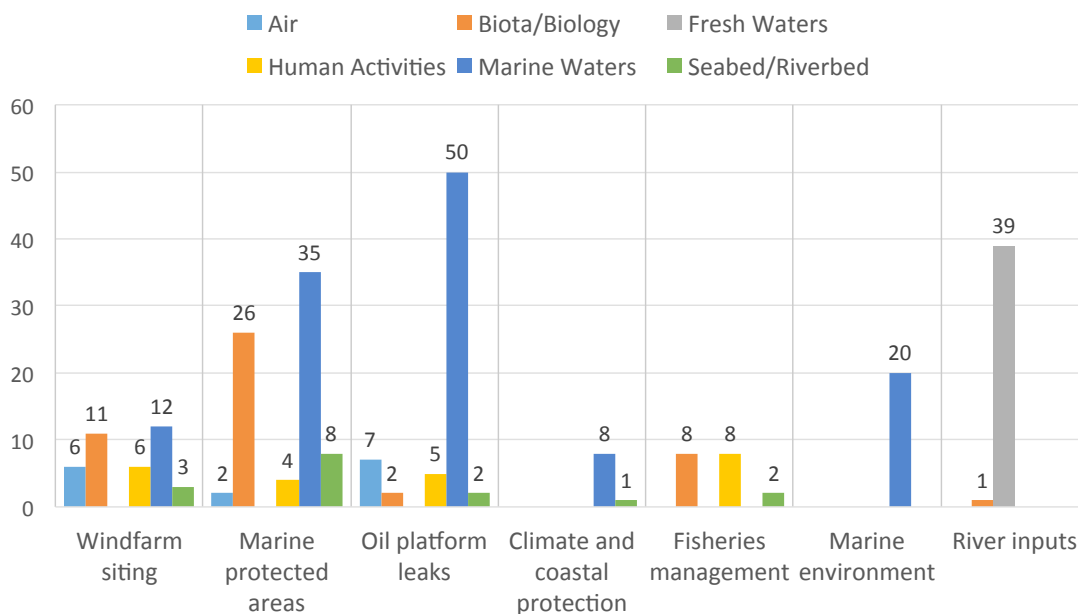


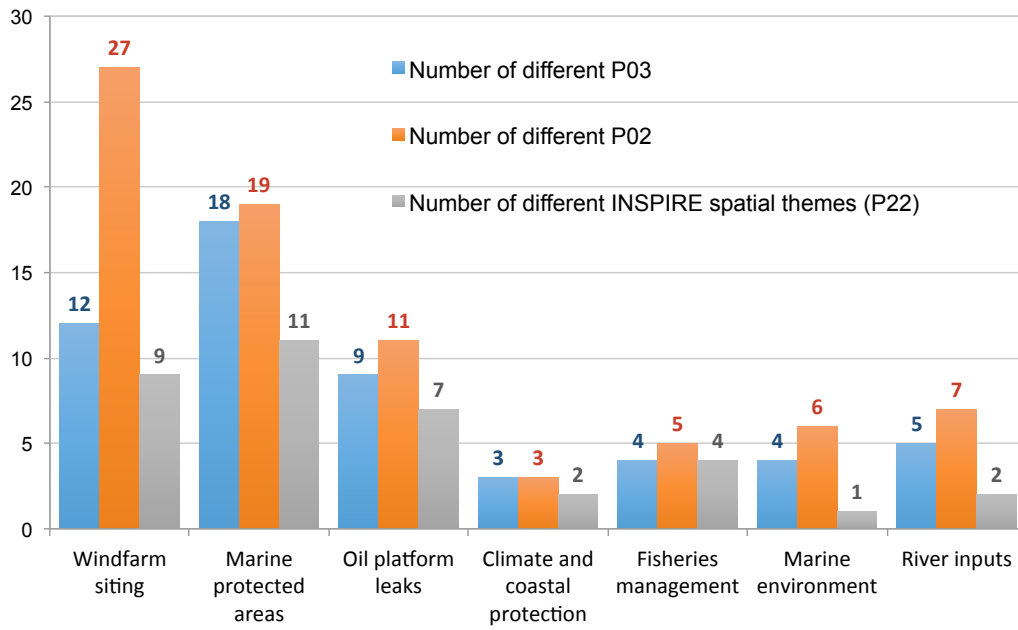
Table A1.2 Number of input data sets as a function of INSPIRE spatial themes (P22) and Challenges

INSPIRE spatial theme	Ch1 Wind farm	Ch2 MPA	Ch3 Oil leaks	Ch4 Climate and coastal	C5 Fisheries mgnt	C6 Marine env.	C7 River inputs	TOTAL
Hydrography							39	39
Protected sites	11	20	3					34
Transport networks	3							3
Elevation	1	2	3					6
Geology		1		1	2			4
Area management / restriction / regulation zones & reporting units		9						9
Bio-geographical regions		1						1
Energy Resources	1							1
Environmental monitoring Facilities			1		8			9
Habitats and biotopes	1	15	2		1		1	20
Meteorological geographical features	5	1	7					13
Oceanographic geographical features	14	15	49	8		20		106
Population distribution and demography		1	1					2
Sea regions		2						2
Species distribution		8			7			15
Utility and governmental services	2							2
TOTAL	38	75	66	9	18	20	40	266

Table A1.3 Number of input data sets as a function of P03 and Challenges

P03 categories	Ch1 Wind farm	Ch2 MPA	Ch3 Oil leaks	Ch4 Climate and coastal	C5 Fisheries mgnt	C6 Marine env.	C7 River inputs	<i>TOTAL</i>
Administration and dimensions		5			8			13
Anthropogenic contamination			1					1
Biota abundance, biomass and diversity	5	1					1	7
Birds, mammals and reptiles	4	10						14
Carbon, nitrogen and phosphorus							16	16
Currents	2	1	14					17
Dissolved gases	0	2				4		6
Fish	1	1						2
Fisheries		2			7			9
Fluxes		2					10	12
Gravity, magnetics and bathymetry	1	1	2					4
Habitat	2	32	5		1			40
Human activity	6	4	1					11
Meteorology	6	2	7					15
Nutrients						9	4	13
Pigments		3				1		4
Rock and sediment sedimentology	1	1			2			4
Sea level	1	1		6				8
Sediment properties		2					9	11
Suspended particulate material		0						0
Terrestrial		1	1	1				3
Water column temperature and salinity	2	4	14	2		6		28
Waves	7		21					28
TOTAL	38	75	66	9	18	20	40	266

Figure A1.3 Number of characteristic categories identified by P02, P03 and P22 as a function of Challenges



3. Input data sets characteristic categories

Table A1.4 Number of input data sets as a function of P02 and Challenges

P02 category	Ch1 Wind farm	Ch2 MPA	Ch3 Oil leaks	Ch4 Climate and coastal	C5 Fisheries mgnt	C6 Marine env.	C7 River inputs	<i>TOTAL</i>
1. Administrative units	1	27	3					31
2. Air pressure	1							1
3. Air temperature	1							1
4. Atmospheric humidity	1							1
5. Bathymetry and Elevation	1	2	2					5
6. Bird behaviour	1	3						4
7. Bird counts	2							2
8. Bird reproduction	1							1
9. Cetacean abundance		1						1
10. Cetacean behaviour		3						3
11. Chlorophyll pigment concentrations in water bodies		3				1		4
12. Coastal geomorphology		1		1				2
13. Concentration of suspended particulate material in the water column							9	9
14. Depositional environment		1						1
15. Dissolved oxygen parameters in the water column		2				4		6
16. Dissolved total and organic nitrogen concentrations in the water column							5	5
17. Dissolved total or organic phosphorus concentration in the water column							6	6
18. Fauna abundance per unit area of the bed	3	1						4
19. Fish abundance in water bodies	2						1	3
20. Fish and shellfish catch statistics					6			6
21. Fish behaviour		1						1
22. Fish reproduction	1							1
23. Fishing by-catch					1			1

24. Habitat characterisation	2	2	2					6
25. Habitat extent		16			1			17
26. Horizontal platform movement					8			8
27. Horizontal velocity of the water column (currents)	2	1	14					17
28. Light extinction and diffusion coefficients		2						2
29. Lithology					2			2
30. Man-made structures	1							1
31. Marine archaeology	1							1
32. Marine environment leisure usage	1		1					2
33. Nitrate concentration parameters in the water column						4	5	9
34. Nutrient fluxes between the bed and the water column		2						2
35. Phosphate concentration parameters in the water column						4	4	8
36. Pollution events			1					1
37. River flow and discharge							10	10
38. Salinity of the water column	1	2				3		6
39. Sea level	1			6				7
40. Sedimentary structure	1							1
41. Spectral wave data parameters	1							1
42. Temperature of the water column	1	2	14	3		3		23
43. Terrestrial mapping			1					1
44. Transport activity	3							3
45. Wave direction	1		7					8
46. Wave height and period statistics	5		14					19
47. Wind speed and direction	2	2	7					11
<i>undefined</i>	1							1
TOTAL	38	75	66	9	18	20	40	266

Table A1.5: P02 characteristic categories being requested more than once by the Challenges.

P02 / Characteristic category	Number of characteristics	Challenges using the Characteristic
Administrative units	31	Ch2 - Marine protected areas Ch3 - Oil platform leaks
Temperature of the water column	22	Ch1 - Windfarm siting Ch2 - Marine protected areas Ch3 - Oil platform leaks Ch4 - Climate and coastal protection Ch6 - Marine environment
Wave height and period statistics	19	Ch1 - Windfarm siting Ch3 - Oil platform leaks
Habitat extent	18	Ch2 - Marine protected areas Ch5 - Fisheries management
Horizontal velocity of the water column (currents)	17	Ch1 - Windfarm siting Ch2 - Marine protected areas Ch3 - Oil platform leaks
Wind speed and direction	11	Ch1 - Windfarm siting Ch2 - Marine protected areas Ch3 - Oil platform leaks
Nitrate concentration parameters in the water column	10	Ch6 - Marine environment Ch7 - River inputs
Phosphate concentration parameters in the water column	8	Ch6 - Marine environment Ch7 - River inputs
Wave direction	8	Ch1 - Windfarm siting Ch3 - Oil platform leaks
Sea level	7	Ch1 - Windfarm siting Ch4 - Climate and coastal protection
Dissolved oxygen parameters in the water column	6	Ch2 - Marine protected areas Ch6 - Marine environment
Habitat characterisation	6	Ch1 - Windfarm siting Ch2 - Marine protected areas Ch3 - Oil platform leaks
Salinity of the water column	6	Ch1 - Windfarm siting Ch2 - Marine protected areas Ch6 - Marine environment
Bathymetry and Elevation	5	Ch1 - Windfarm siting Ch2 - Marine protected areas Ch6 - Marine environment
Bird behaviour	4	Ch1 - Windfarm siting Ch2 - Marine protected areas
Chlorophyll pigment concentrations in water bodies	4	Ch2 - Marine protected areas Ch6 - Marine environment
Fauna abundance per unit area of the bed	4	Ch1 - Windfarm siting Ch2 - Marine protected areas
Marine environment leisure usage	2	Ch1 - Windfarm siting Ch3 - Oil platform leaks

Table A1.6: The number of input datasets requested for the 47 different characteristic categories.

P02	Data sets
Administrative units	31
Air pressure	1
Air temperature	1
Atmospheric humidity	1
Bathymetry and Elevation	5
Bird behaviour	4
Bird counts	2
Bird reproduction	1
Cetacean abundance	1
Cetacean behaviour	3
Chlorophyll pigment concentrations in water bodies	4
Coastal geomorphology	2
Concentration of suspended particulate material in the water column	9
Depositional environment	1
Dissolved oxygen parameters in the water column	6
Dissolved total and organic nitrogen concentrations in the water column	5
Dissolved total or organic phosphorus concentration in the water column	6
Fauna abundance per unit area of the bed	4
Fish abundance in water bodies	3
Fish and shellfish catch statistics	6
Fish behaviour	1
Fish reproduction	1
Fishing by-catch	1
Habitat characterisation	6
Habitat extent	17
Horizontal platform movement	8
Horizontal velocity of the water column (currents)	17
Light extinction and diffusion coefficients	2
Lithology	2
Man-made structures	1
Marine archaeology	1
Marine environment leisure usage	2
Nitrate concentration parameters in the water column	9
Nutrient fluxes between the bed and the water column	2
Phosphate concentration parameters in the water column	8
Pollution events	1
River flow and discharge	10
Salinity of the water column	6
Sea level	7
Sedimentary structure	1
Spectral wave data parameters	1
Temperature of the water column	23
Terrestrial mapping	1
Transport activity	3
Wave direction	8
Wave height and period statistics	19

Wind strength and direction	11
<i>undefined</i>	<i>1</i>
<i>TOTAL</i>	<i>266</i>