



**Black Sea Checkpoint
Annex 1 to the Second DAR:
Metadatabase contents and statistics**

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1. Introduction

The Black Sea CheckPoint metadatabase presently contains information about 42 different characteristic categories (P02 vocabulary), 25 P03 groups of characteristics, 503 data sets descriptors, covering 10 INSPIRE themes (over a total of 28) and 7 environmental matrices.

The input data sets metadatabase is accessible at the website:

<http://emodnet-blacksea.eu/browser>

2. Statistics of the Input data sets

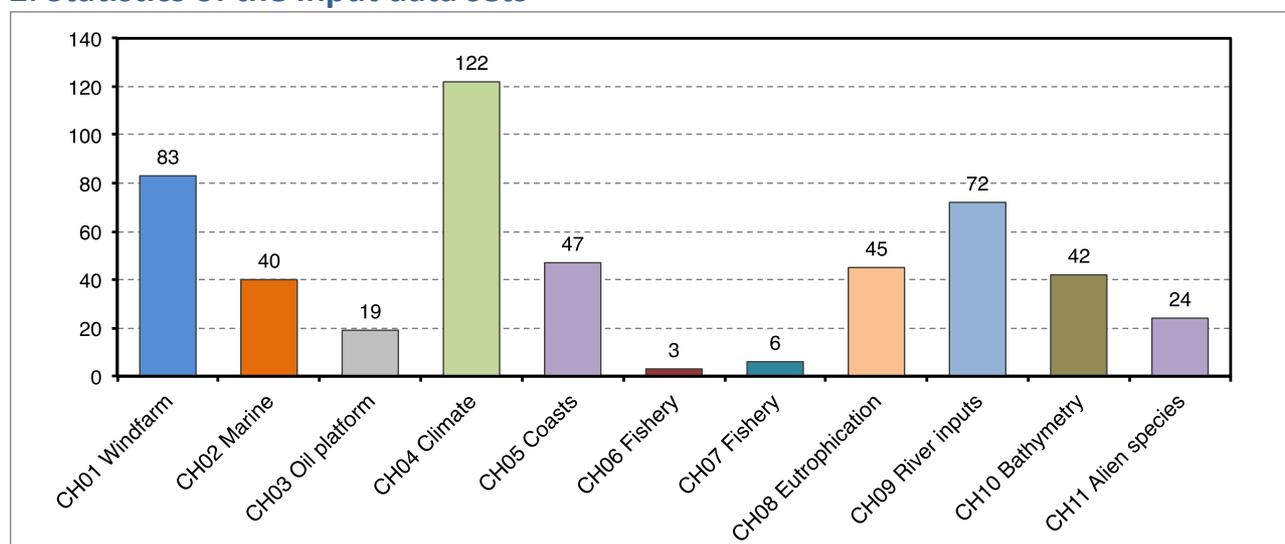


Figure A 1.1 Number of input data sets for each Challenge

Table A 1.1 Number of input data sets as function of environmental matrices and Challenges

Environmental matrix	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
1. Air	9		4									13
2. Fresh Water					2				32			34
3. Marine Water	32	20	9	105	43	2		45	40			296
4. Seabed– Riverbed	42	2	4		2					42		92
5. Ice				17								17

Environmental matrix	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
6. Biota– Biology		17	1			1	1				24	44
7. Human Activities		1	1				5					7
TOTAL	83	40	19	122	47	3	6	45	72	42	24	503

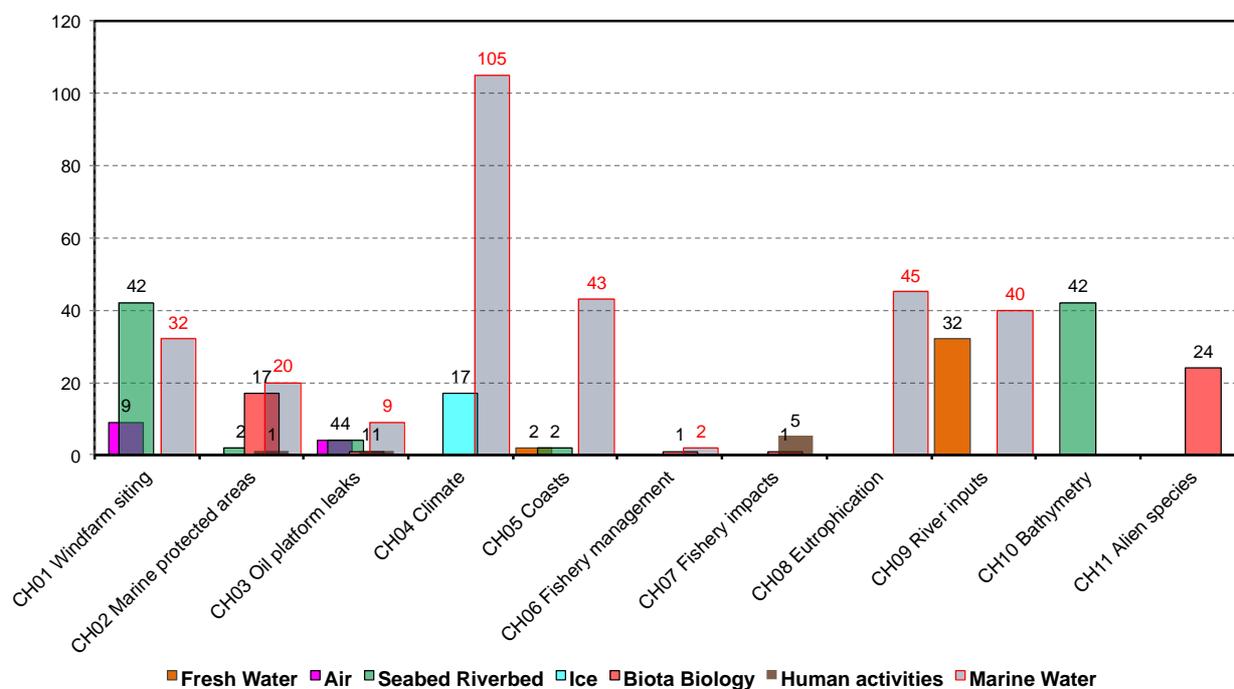


Figure A 1.2 Number of Input data sets as a function of environmental matrices and challenges. Red data labels correspond to “Marine water”

Table A 1.2 Number of input data sets as a function of INSPIRE spatial themes (P22) and Challenges

INSPIRE spatial theme	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
1. Area management, restriction/regulation zones and reporting units		4										4
2. Elevation	3	8			42					1		54
3. Geology			1									1
4. Habitats and biotopes		2										2
5. Hydrography	41	2	3		2				14	41		103
6. Meteorological geographical features	9		4									13
7. Mineral resources			1									1
8. Oceanographic geographical features	30	12	9	122	3			45	58			279
9. Protected sites			1									1
10. Species distribution		12				3	6				24	45
TOTAL	83	40	19	122	47	3	6	45	72	42	24	503

Table A 1.3 Number of input data sets as a function of P03 and Challenges

P03 categories	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
1. Administration and dimensions		4										4
2. Biota abundance, biomass and diversity		7										7
3. Birds, mammals and reptiles		4										4
4. Carbon, nitrogen and phosphorus									35			35
5. Cryosphere				17								17
6. Currents	2	1	5									8
7. Dissolved gases								2				2
8. Fish						3	6					9
9. Fisheries		1										1

P03 categories	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
10. Fluxes					2				14			16
11. Gravity, magnetics and bathymetry	42	2	3							42		89
12. Habitat		2	1									3
13. Hydrocarbons			1									1
14. Meteorology	9		4									13
15. Nutrients								29				29
16. Other physical oceanographic measurements	1											1
17. Phytoplankton				9				3				12
18. Pigments		4						4				8
19. Rock and sediment physical properties					2							2
20. Sea level	3	8			43							54
21. Suspended particulate material									12			12
22. Terrestrial			1									1
23. Water column temperature and salinity	16	7	1	96				7	11			138
24. Waves	10		3									13
25. Zooplankton											24	24
TOTAL	83	40	19	122	47	3	6	45	72	42	24	503

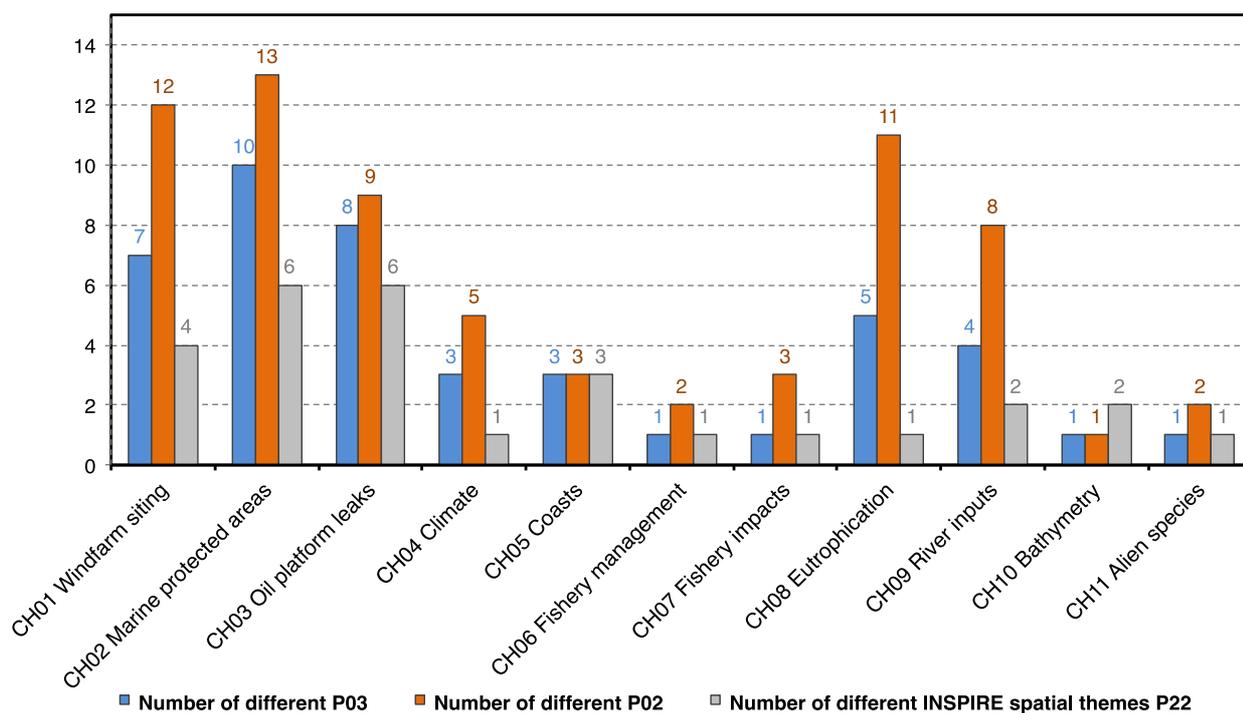


Figure A 1.3 Number of characteristic categories identified by P02, P03 and P22 as a function of Challenges

3. Input data sets characteristic categories

Table A 1.4 Number of input data sets as a function of P02 and Challenges

P02 categories	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
1. Administrative units		4										4
2. Air pressure	1											1
3. Air temperature	2											2
4. Atmospheric humidity	2											2
5. Bathymetry and Elevation	42	2	2							42		88
6. Bird taxonomy-related counts		4										4
7. Cetacean abundance		2										2
8. Chlorophyll pigment concentrations in the water column		3						2				5
9. Chlorophyll pigment concentrations in the water bodies		1						3				4
10. Coastal geomorphology			1		2							3
11. Concentration of suspended particulate material in the water column								8				8
12. Dissolved oxygen parameters in the water column								2				2
13. Dissolved total and organic nitrogen concentrations in the water								2	4			6

P02 categories	Ch1 Windfarm siting	Ch2 Marine protected areas	Ch3 Oil platform leaks	Ch4 Climate	Ch5 Coasts	Ch6 Fishery management	Ch7 Fishery impacts	Ch8 Eutrophication	Ch9 River inputs	Ch10 Bathymetry	Ch11 Alien species	TOTAL
column												
14. Dissolved total or organic phosphorus concentration in the water column								2				2
15. Fauna abundance per unit area of the bed		5										5
16. Fish and shellfish catch statistics						1	3					4
17. Fish biomass in water bodies							1					1
18. Fish taxonomy-related counts						2						2
19. Fishery characterisation		1					2					3
20. Geological sample density			1									1
21. Habitat extent		2	1									3
22. Horizontal velocity of the water column (currents)	4	1	4									9
23. Nitrate concentration parameters in the water column								14	15			29
24. Other physical and chemical properties of suspended particulate material									4			4
25. Particulate total and organic phosphorus concentrations in the water column									5			5
26. Phosphate concentration parameters in the water column								10	11			21
27. Phytoplankton generic abundance in water bodies				4				1				5
28. Phytoplankton generic biomass in water bodies				5				1				6
29. Phytoplankton taxonomic surface area in water bodies								1				1
30. River flow and discharge					2				14			16
31. Salinity of the water column	2											2
32. Sea level	3	8			43							54
33. Skin temperature of the water column		4		7								11
34. Snow and ice mass, thickness and extent				17								17
35. Spectral wave data parameters	2											2
36. Temperature of the water column	15	3	2	89				7	11			127
37. Terrestrial mapping			1									1
38. Wave direction	1											1
39. Wave height and period statistics	5		3									8
40. Wind strength and direction	4		4									8
41. Zooplankton taxonomy-related abundance per unit volume of the water column											13	13
42. Zooplankton wet weight biomass											11	11
TOTAL	83	40	19	122	47	3	6	45	72	42	24	503

Table A 1.5 P02 characteristic categories being requested more than once by the Challenges. The categories are sorted according to the frequency of request

P02 / Characteristic category	Number of characteristics	Challenges using the Characteristic
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P02 / Characteristic category	Number of characteristics	Challenges using the Characteristic
1. Temperature of the water column	127	Ch1 Windfarm siting Ch2 Marine protected areas Ch3 Oil platform leaks Ch4 Climate Ch8 Eutrophication Ch9 River inputs
2. Bathymetry and Elevation	88	Ch1 Windfarm siting Ch2 Marine protected areas Ch3 Oil platform leaks Ch10 Bathymetry
3. Sea level	54	Ch1 Windfarm siting Ch2 Marine protected areas Ch5 Coasts
4. Nitrate concentration parameters in the water column	29	Ch8 Eutrophication Ch9 River inputs
5. Phosphate concentration parameters in the water column	21	Ch8 Eutrophication Ch9 River inputs
6. Snow and ice mass, thickness and extent	17	Ch4 Climate
7. River flow and discharge	16	Ch5 Coasts Ch9 River inputs
8. Zooplankton taxonomy-related abundance per unit volume of the water column	13	Ch11 Alien species
9. Skin temperature of the water column	11	Ch2 Marine protected areas Ch4 Climate
10. Zooplankton wet weight biomass	11	Ch11 Alien species
11. Horizontal velocity of the water column (currents)	9	Ch1 Windfarm siting Ch2 Marine protected areas Ch3 Oil platform leaks
12. Wave height and period statistics	8	Ch1 Windfarm siting Ch3 Oil platform leaks
13. Wind strength and direction	8	Ch1 Windfarm siting Ch3 Oil platform leaks
14. Concentration of suspended particulate material in the water column	8	Ch8 Eutrophication
15. Dissolved total and organic nitrogen concentrations in the water column	6	Ch8 Eutrophication Ch9 River inputs
16. Phytoplankton generic biomass in water bodies	6	Ch4 Climate Ch8 Eutrophication
17. Chlorophyll pigment concentrations in the water column	5	Ch2 Marine protected areas Ch8 Eutrophication
18. Phytoplankton generic abundance in water bodies	5	Ch4 Climate Ch8 Eutrophication
19. Particulate total and organic phosphorus concentrations in the water column	5	Ch9 River inputs
20. Chlorophyll pigment concentrations in the water bodies	4	Ch2 Marine protected areas Ch8 Eutrophication
22. Fish and shellfish catch statistics	4	Ch6 Fishery management Ch7 Fishery impacts
23. Other physical and chemical properties of suspended particulate material	4	Ch9 River inputs
24. Administrative units	4	Ch2 Marine protected areas
25. Bird taxonomy-related counts	4	Ch2 Marine protected areas
26. Fishery characterisation	3	Ch2 Marine protected areas Ch7 Fishery impacts
27. Habitat extent	3	Ch2 Marine protected areas Ch3 Oil platform leaks
28. Coastal geomorphology	3	Ch3 Oil platform leaks Ch5 Coasts

P02 / Characteristic category	Number of characteristics	Challenges using the Characteristic
29. Air temperature	2	Ch1 Windfarm siting
30. Atmospheric humidity	2	Ch1 Windfarm siting
31. Cetacean abundance	2	Ch2 Marine protected areas
31. Dissolved oxygen parameters in the water column	2	Ch8 Eutrophication
32. Dissolved total or organic phosphorus concentration in the water column	2	Ch8 Eutrophication
33. Fauna abundance per unit area of the bed	2	Ch2 Marine protected areas
34. Fish taxonomy-related counts	2	Ch6 Fishery management
35. Salinity of the water column	2	Ch1 Windfarm siting
36. Spectral wave data parameters	2	Ch1 Windfarm siting

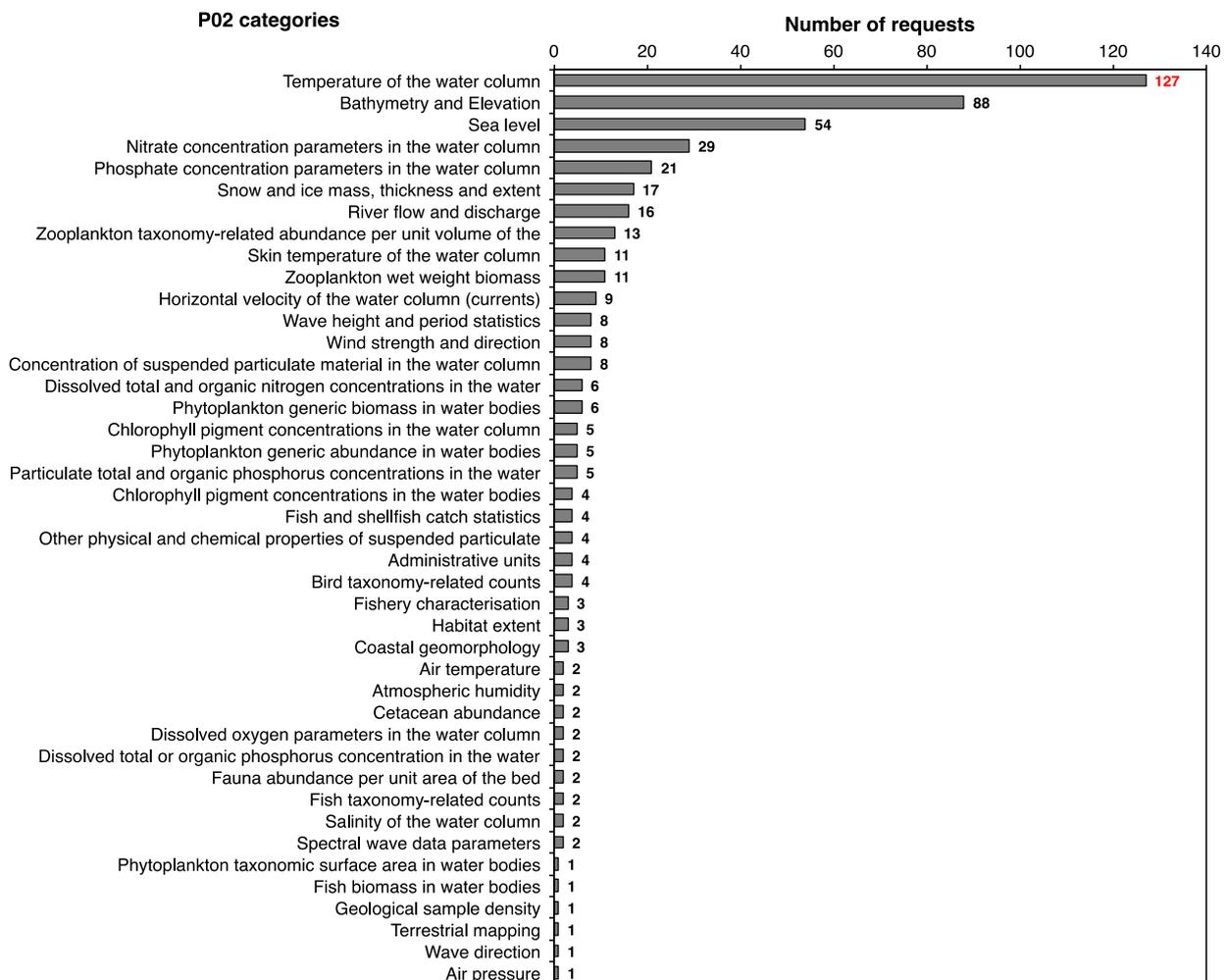


Figure A 1.4 The number of input datasets requested for the 42 different characteristic categories