Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

CODE: 1120

NAME: Posidonia beds (Posidonion oceanicae)

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.2 Distribution Method	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2007-2012
1.1.4 Additional map	No
1.1.5 Range Map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region: **Marine Mediterranean (MMED)**

2.2 Published

• Gerakaris, V., Panayotidis, P., Tsiamis, K., Nikolaidou, A., Economou-Amilli, A. (2014). Posidonia oceanica meadows in Greek seas: lower depth limits and meadow densities. In: Proceedings of 5th Mediterranean Symposium on Marine Vegetation. 27-28 October 2014, Portorož, Slovenia.

• Gerakaris V. & Panayotidis P. (2009a). Use of Posidonia oceanica meadows as biological quality element, according to the European Water Framework Directive (WFD, 2000/60/EC): A case study in South Aegean Sea. 9th Pan-Hellenic Symposium of Oceanography and Fisheries, 13-16 May 2009, Patra, Greece.

• Gerakaris V. & Panayotidis P. (2009b).The use of Posidonia oceanica as a Biological Quality Element for the implementation of WFD (2000/60/EC) in Greek coastal waters. Proceedings of the Mediterranean Seagrass Workshop 09, 6-10 September 2009, Hvar, Croatia, p. 49.

• Mediterranean Sensitive Habitats (2013). Edited by Giannoulaki M., A. Belluscio, F. Colloca, S. Fraschetti, M. Scardi, C. Smith, P. Panayotidis, V. Valavanis M.T. Spedicato. DG MARE Specific Contract SI2.600741, Final Report, 557 p.

• Pergent, G., Bazairi, H., Bianchi, C. N., Boudouresque, C. F., Buia, M. C., Calvo, S., ... & Verlaque, M. (2014). Climate change and Mediterranean seagrass meadows: a synopsis for environmental managers.

• HCMR unpublished data (2007-2014).

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	65635,35	
2.3.2 Range method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.3.3 Short-term trend period	2001-2012	
2.3.4 Short-term trend direction	stable (0)	
2.3.5 Short-term trend magnitude	min	max
2.3.6 Long-term trend period		
2.3.7 Long-term trend direction	N/A	
2.3.8 Long-term trend magnitude	min	max
2.3.9 Favourable reference range	area (km²)	
	operator	approximately equal to (≈)
	unkown	No
	method	This is the first comprehensive attempt at estimating the range of this habitat type, based on recent survey data, statistical analyses, modelling, extrapolations and expert judgment. Although there is an ongoing decline in the qulaity of this habitat type, its extent is not expected to have been significanlty affected since the adoption of the

	Directive. FRR is thus considered equal to current range, which is near equal to the range of the habitat type at the time of the Directive's adoption.
2.3.10 Reason for change	Improved knowledge/more accurate data

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	2422	
2.4.2 Year or period	2007-2012	
2.4.3 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.4 Short-term trend period	2001-2012	
2.4.5 Short-term trend direction	decrease (-)	
2.4.6 Short-term trend magnitude	min	max
2.4.7 Short term trend method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
2.4.8 Long-term trend period		
2.4.9 Long-term trend direction	N/A	
2.4.10 Long-term trend magnitude	min	max
2.4.11 Long term trend method used	N/A	
2.4.12 Favourable reference area	area (km)	
	operator	more than (>)
	unknown	No
	method	This is the first comprehensive attempt at estimating the surface area of this habitat type based on recent survey data, statistical analyses, modelling and expert judgement. This estimation is therefore set as a baseline value. Given the ongoing pressures and threats, surface area of Posidonia beds is expected to have decreased since the adoption of the Directive, thus FRA should be greater than the current area estimation.
2.4.13 Reason for change	Improved knowledge/more accurate data	

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
Discharges (E03)	medium importance (M)	Mixed pollutants (X)
Pollution to surface waters (limnic & terrestrial, marine & brackish) (H01)	medium importance (M)	Mixed pollutants (X)
benthic or demersal trawling (F02.02.01)	high importance (H)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
Marine and Freshwater Aquaculture (F01)	high importance (H)	Mixed pollutants (X)
shallow surface abrasion/ mechanical damage to seabed surface (G05.02)	high importance (H)	N/A
underground/submerged electricity and phone lines (D02.01.02)	low importance (L)	N/A
port areas (D03.01)	medium importance (M)	N/A
marine constructions (D03.03)	medium importance (M)	N/A
Marine water pollution (H03)	low importance (L)	N/A
modification of water flow (tidal & marine currents) (J02.05.01)	medium importance (M)	N/A

Siltation rate changes, dumping, depositing of dredged deposits (J02.11)	low importance (L)	N/A
Altered water quality due anthropogenic changes in salinity (J02.14)	low importance (L)	N/A
missing or wrongly directed conservation measures (G05.07)	high importance (H)	N/A

2.5.1 Method used – pressures	based exclusively or to a larger extent on real data from sites/occurrences or othe

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
agricultural intensification (A02.01)	medium importance (M)	N/A
benthic or demersal trawling (F02.02.01)	medium importance (M)	N/A
shallow surface abrasion/ mechanical damage to seabed surface (G05.02)	high importance (H)	N/A
continuous urbanisation (E01.01)	medium importance (M)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
Changes in abiotic conditions (M01)	medium importance (M)	N/A
missing or wrongly directed conservation measures (G05.07)	high importance (H)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species

Posidonia oceanica. (L.) Delile

2.7.2 Species method used	use of various biotic metrics (meadow density, meadow cover, rhizome growth, Lower Limit typology)
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Complete survey/Complete survey or a statistically robust estimate (3)
2.7.5 Other relevant information	

2.8 Conclusions (assessment of conservation status at end of reporting period)

2.8.1 Range	assessment	Favourable (FV)
	qualifiers	N/A
2.8.2 Area	assessment	Inadequate (U1)
	qualifiers	declining (-)
2.8.3 Specific structures and functions (incl Species)	assessment	Favourable (FV)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Inadequate (U1)
	qualifiers	declining (-)
2.8.5 Overall assessment of Conservation Status	Inadequate (U1)	
2.8.5 Overall trend in Conservation Status	declining (-)	

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3. Natura 2000 coverage _conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	600	max	800
3.1.2 Method used	Estimate based on partial data with some extrapolation and/or modelling (2)			
3.1.3. Trend of surface area	decrease (-)			

3.2 Conversation Measures

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Measures needed, but not implemented (1.2)	Legal	high importance (H)	Both	Enhance
Regulation/ Management of fishery in marine and brackish systems (7.3)	Legal	high importance (H)	Inside	Enhance
Other spatial measures (6.0)	Legal	high importance (H)	Both	Enhance
Legal protection of habitats and species (6.3)	Legal	low importance (L)	Both	Not evaluated
Establish protected areas/sites (6.1)	Legal One-off	high importance (H)	Inside	Enhance Long term