MEDITS	**The surveys used to calculate the population indices available in the website**
18/07/2007	Ref.: medits-web_datasurvey_presentation.doc

The standardized Medits surveys (International bottom trawl in the Mediterranean) have been designed in 1993 from an European initiative with the aim to produce abundance indices and biological parameters of demersal fish, crustaceans and cephalopods species of particular interest in link with fishery management in the Mediterranean. At the beginning, the surveys were conducted along the coasts of the four countries member of the European Union at this time (France, Greece, Italy and Spain). Then, the survey programme has been enlarged progressively to other Mediterranean countries (Slovenia, Croatia, Albania, Malta, Morocco and Cyprus), including all the new European memberships. In 2007, Montenegro was joining the programme. Since 2002 for the European countries, the surveys are managed through the European regulation related to the collection of data in the fisheries sector (Anon. 2001a). The general survey programme is co-ordinated through an international network open to all the bodies interested to take part in the international survey programme.

[1] The Medits data

The Medits surveys are carried out every year since 1994 during the spring/early summer period. These surveys cover all the trawlable areas over the shelves and the upper slopes from 10 to 800 m depth (Bertrand *et al.* 2000). Till now, the surveys had mainly occurred in the North of the Mediterranean Sea from Gibraltar to the eastern Aegean Sea. The stations are distributed applying a stratified sampling scheme with random drawing inside each stratum. The target sampling rate was one station per 60 square nautical miles, but with differences between areas (e.g. only 1 station per 200 square nautical miles in the Adriatic Sea according to the relative monotony of the bottom). About 1000 stations were sampled during each survey. The same sampling gear (*GOC* 73) is used for the whole surveys. Its codend mesh size is 20 mm (stretched mesh), and its vertical opening is about 2 meters (Bertrand *et al.* 2002). The detailed methods applied to carry out the surveys are described in the Medits handbook (Anon. 1998; Medits 2002).

[2] The geographical units

The areas defined for the present data elaboration combine the stratification scheme used for the Medits surveys (Bertrand *et al.* 2000) and the geographical sub-areas (GSA) adopted by the SAC-GFCM (Anon. 2001b) (Fig. 1). Finally, thirteen geographical units have been designed for the present series (Table 1). Twelve units corresponded to the shelves and upper slopes of GFCM geographical units (named by the corresponding GFCM codes in the tables of results), the last one combining the two GFCM units 15 and 16 (named 16 in the tables of results).

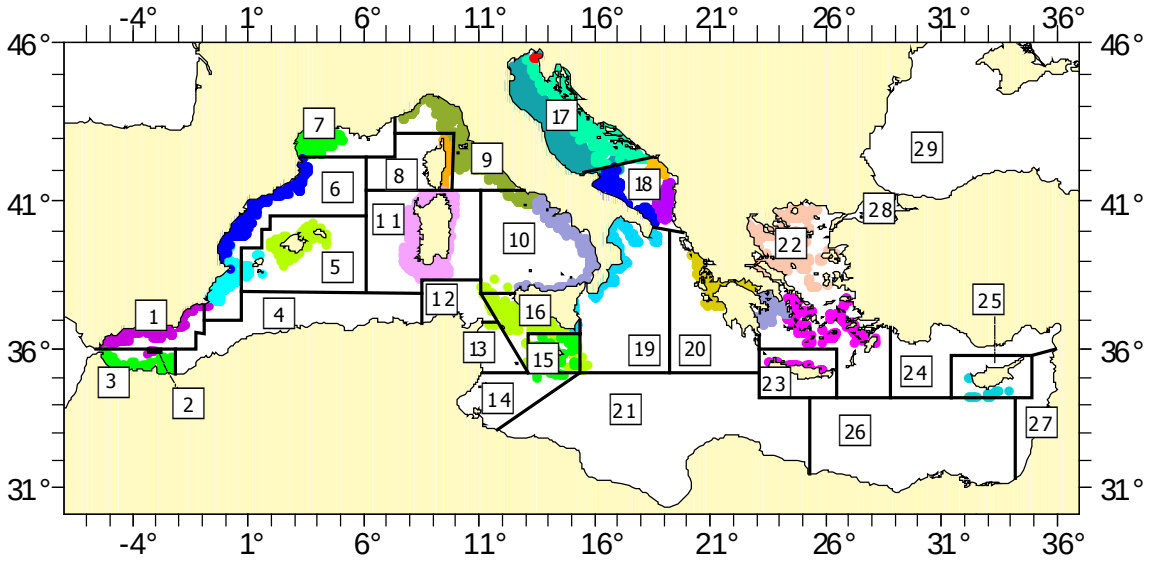

Figure 1. The areas covered by the Medits surveys (colored) and the limits of the GFCM-GSAs.

Table 1. The areas for which indices are included in the website.

FAO SUBAREA	GFCM Geographical sub areas (SAC-GFCM, 2001)	Codes of the geographical units	MEDITS strata	Surface (km², from Medits)	Comments
WESTERN	1. Northern Alboran Sea	1	111	12753	
	6. Northern Spain	6	112 & 113	32506	
	7. Gulf of Lions	7	121	13860	
	8. Corsica Island	8	131	4562	
	9. Ligurian and North Tyrrhenian Sea	9	132	42410	The boundary between the areas 9 & 10 is ~ 0.5° southern than the GFCM limit.
	10. South and Central Tyrrhenian Sea	10	134a-b	20255	
	11. Sardinia	11	133	26975	
CENTRAL	15. Malta Island 16. Strait of Sicily	16	134c & 135	59278	
	17. Northern Adriatic	17	211	92261	
	18. Southern Adriatic Sea	18	221e-h	24008	
	19. Western Ionian Sea	19	221a-d	13520	
	20. Eastern Ionian Sea	20	222	16823	
EASTERN	22 Aegean Sea 23 Crete	22	223, 224 & 225	155674	

[3] Selection of species included in the analyses

During the surveys, a special attention was given to 56 species of fish, cephalopods and crustaceans. For 36 of these species length frequency distribution, sex and maturity stages were recorded. In order to remove rare, poorly sampled species, species with a low occurrence were excluded for the present elaboration. So, within the 56 species of the reference list, only the species with mean occurrence (average across years and shelf and slope area) above than 5 % and mean density above 5 % in the area considered were selected.