

# Transversal Workshop on Fishing Capacity in the GFCM area

Rome, Italy 27-28 September 2010

## Management of Fishing capacity Under the Common Fisheries Policy

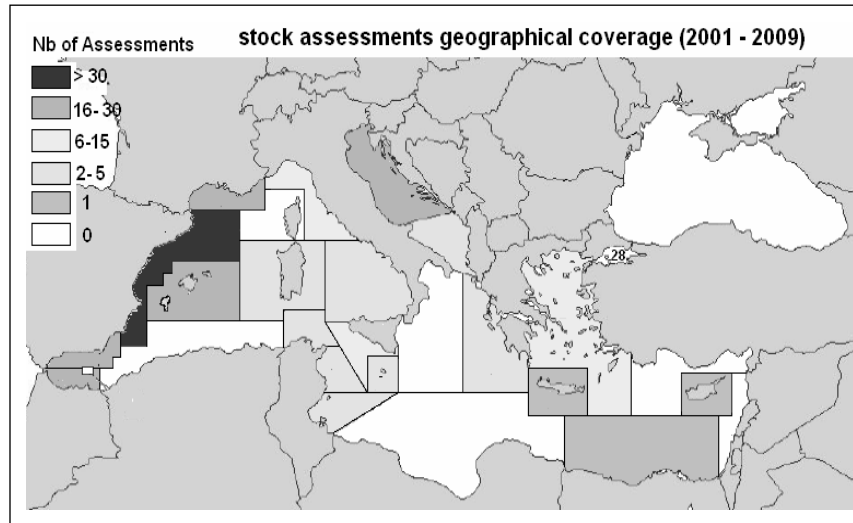
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### Main objective

- Sustainable balance between fishing capacity and fishing opportunities ( Biological, ecological, economic and social dimensions)
- Fulfilment of international obligations (WSSD, IPOA Capacity, CBD, FAO Code of Conduct, Venice Ministerial Conference, GFCM, ICCAT, etc)
- GFCM: to promote the development, conservation, rational management and proper utilization of living marine resources (not specific but clear guidance where to point)
- Poor geographic coverage of scientific analysis

Still important gaps exist for many stocks as reported in GFCM

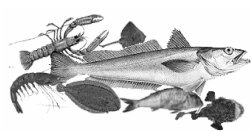


H. Farrugio Seminar on presentation of the fisheries scientific advice, Brussels 14-11-2010

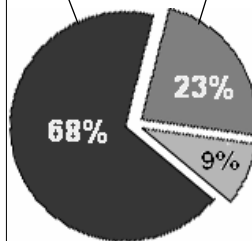
In 2009 : 34 stock assessments, 12 species & 13 GSAs

91% of the stocks assessed  
are Overexploited or Fully exploited

23 demersal stocks



<b>OVEREXPLOITED</b>	<b>18</b>	<b>79%</b>
<b>FULLY EXPLOITED</b>	<b>4</b>	<b>17%</b>
<b>MODERATELY EXPL</b>	<b>1</b>	<b>4%</b>



11 small pelagic stocks



<b>OVEREXPLOITED</b>	<b>5</b>	<b>46%</b>
<b>FULLY EXPLOITED</b>	<b>4</b>	<b>36%</b>
<b>MODERATELY EXPL</b>	<b>2</b>	<b>18%</b>

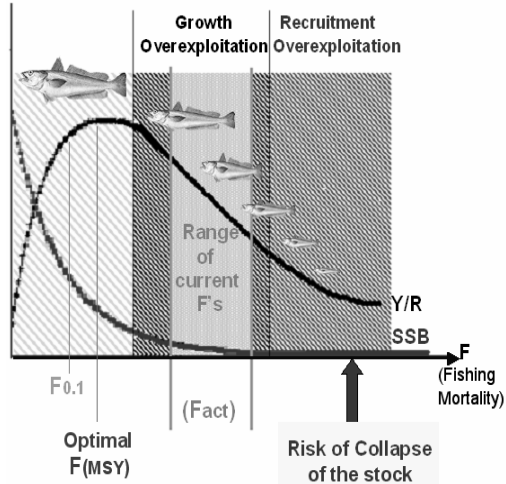
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## RISK OF RECRUITMENT OVEREXPLOITATION

In most of the cases the current Fishing mortalities ( $F_{act}$ ) are 30% to more than 80% higher than the optimal ones ( $F_{MSY}$ )

Some 2009 values  $F_{act}$  in % of  $F_{MSY}$

GSA 03	Rose shrimp	130-166%
	Bogue	164%
	Red mullet	176%
GSA 07	Hake	140%
	GSA 09	Hake
Red mullet		130%
GSA 15	Red mullet	130%
	GSA 15+16	Giant red shrimp
GSA 17	Norway lobster	177-179%
	Common sole	182-186%
GSA 26	Hake	151%
	Red mullet	161%
	Striped mullet	163%



H. Farrugio Seminar on presentation of the fisheries scientific ad

## Classification of the advice according to Annex 1 – COM(2009)224 final Communication from the EC – Consultation on Fishing Opportunities for 2010

1 - Scientific advice about the state of the stock	no.	%	
Outside safe biological limits	17	28.3	☹️
Inside safe biological limits	25	41.7	😊
The state of the stock is unknown due to poor data	18	30.0	😐
<b>Total stocks (related to 16 species)</b>	<b>60</b>	<b>100</b>	
Species classified according to the above criteria	16	15.7	
Other species not included for very poor data	86	84.3	
Species taken into account	102	100	

species	PRIORITY		SHARED		GSA																																
	STECF	GFCM	STECF	GFCM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
<i>Arguilla arguilla</i>	P1	P	X	X																																	
<i>Aristaeomorpha foliacea</i>	P1	P	X	X																																	
<i>Aristeus antennatus</i>	P1	P	X	X																																	
<i>Conophaea hippurus</i>	P1	P	X	X																																	
<i>Dentex dentex</i>																																					
<i>Ergasilus erasmioides</i>	P1	P	X	X																																	
<i>Lophius budegassa</i>	P	P	X	X																																	
<i>Merluccius merluccius</i>	P1	P	X	X																																	
<i>Mullus barbatus</i>	P1	P	X	X																																	
<i>Mullus surmuletus</i>	P1	P	X	X																																	
<i>Nephrops norvegicus</i>	P1	P	X	X																																	
<i>Pagellus bogaraveo</i>	P1	P	X	X																																	
<i>Paraperaeus longirostris</i>	P1	P	X	X																																	
<i>Psetta maxima</i>	P1	P	X	X																																	
<i>Sardina pilchardus</i>	P1	P	X	X																																	
<i>Scomber japonicus</i>	P		X																																		
<i>Solea solea</i>	P		X																																		
<i>Sprattus sprattus</i>	P1	P	X	X																																	
<i>Trachurus trachurus</i>	P		X																																		

green squares: assessment done but still preliminary and/or to be agreed on

criteria applied on a provisional base to be further checked by STECF



Classification of the advice according to Annex 1 – COM(2009)224 final  
 Communication from the EC – Consultation on Fishing Opportunities for 2010

2 - Scientific advice about overfishing	no.	%
The stock is overfished	25	54,3
The stock is fished at the MSY rate	21	45,7
The rate of fishing is known compared to MSY rate	46	76,7
The rate of fishing is unknown compared to MSY rate	14	23,3
<b>Total stocks (related to 16 species)</b>	<b>60</b>	<b>100</b>

Species classified according to criteria	16	15,7
Other species not included for very poor data	86	84,3
Species taken into account	102	100

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<i>Coryphaena hippurus</i>	P1	P	X	X																																		
<i>Dentex dentex</i>			X																																			
<i>Engraulis encrasicolus</i>	P1	P	X	X																																		
<i>Lophius budegassa</i>	P	P	X	X																																		
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## Why managing fishing capacity?

Biological conservation and economic efficiency and profitability

- Managing fisheries:
  - input measures (fishing effort):  $F=f*q$ ,
  - output measures (TAC & Q):  $C=F/Z*B$
  - technical measures
  - Group and/or individual fishing rights (community based, ITR (ITQs; IFRs; IEQs)
  - TURFs
  - Taxes & royalties
- Effort= capacity x activity, so whatever type of effort management implies capacity management
- To quantify capacity 'indicators' are used: Based on vessels characteristics and Based on fishing gears characteristics

- Fishing vessel register
  - Licensing
  - Management of fishing capacity:
    - definition: the fishing capacity of a vessel is its ability to catch fish. It is expressed in terms of tonnage, in GT, and propulsive power, in KW.
    - prefixed objectives by fleet segments
    - entry-exit regime: no prefixed objective by fleet segment; limitation wrt a point in time
- flexibility; adaptability; efficiency;

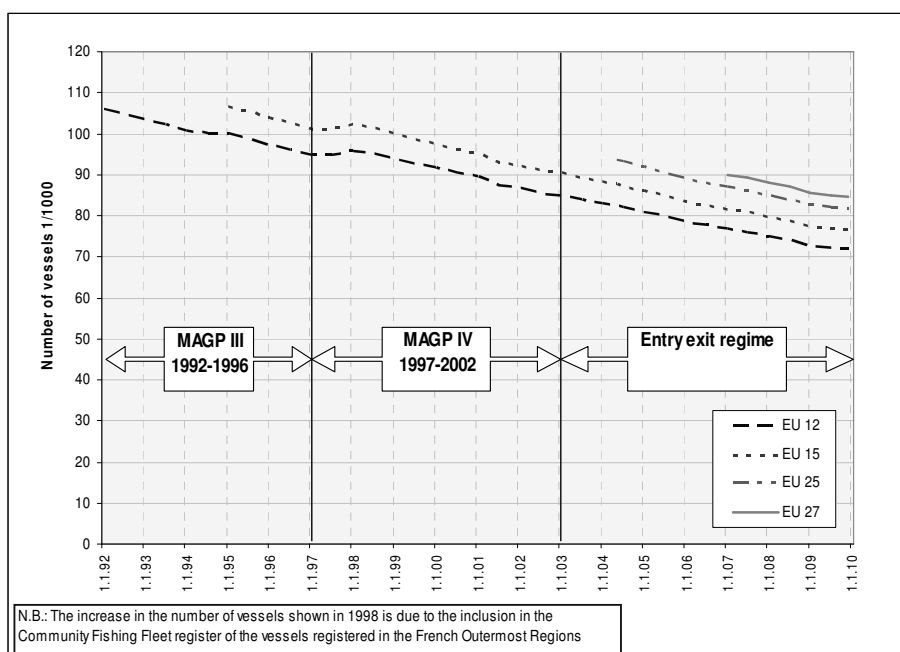
## The entry-exit regime at EU

1. The entry of capacity has to be compensated by the previous exit of an equal (or greater if built with public money; no-longer since 2005) amount of capacity (in GT and kW)
2. The capacity that leaves the fleet with public aid cannot be replaced (capacity reductions supported with public aid are permanent)

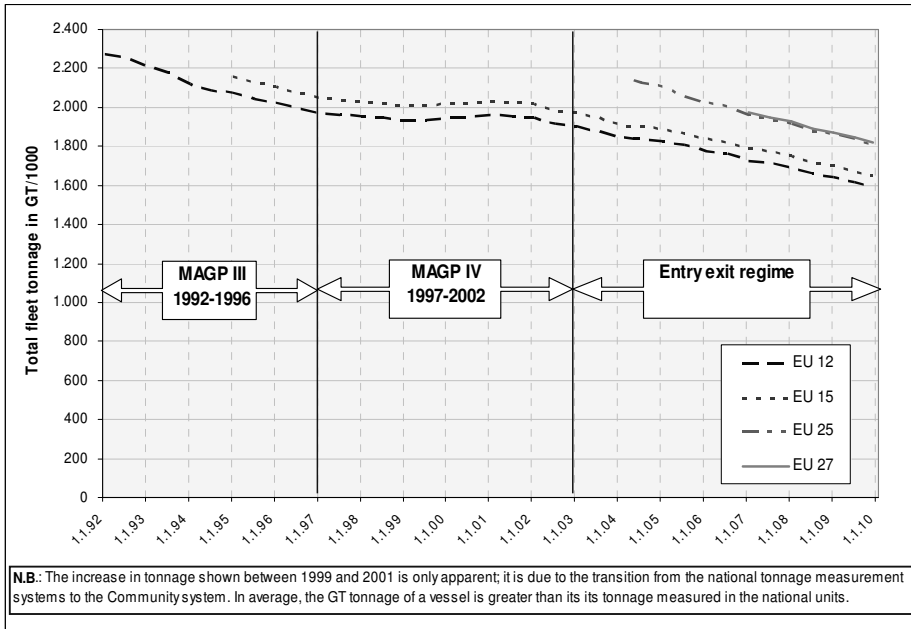
## Simple indicators for the assessment of balance between fishing capacity and fishing opportunities

- Technical: ratio between actual days at sea and maximum days at sea; days\*GT; days\*kW
- Biological indicators:  $F_{cur}/F_{targ}$ , CPUE trends, ratio between catch and biomass
- Economic indicators: ROI return on investment, Cur.Rev/BER (break-even revenue)
- Social indicators: Gross value added, Average crew share

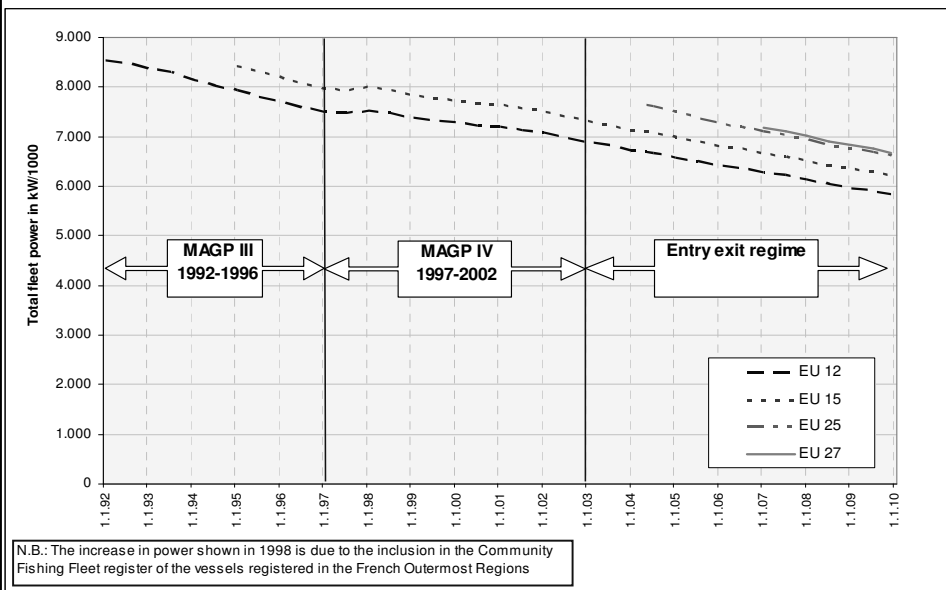
## Trend in the number of EU fishing vessels: 1992 - 2009



### Trend of EU fishing fleet capacity in terms of tonnage : 1992 - 2009

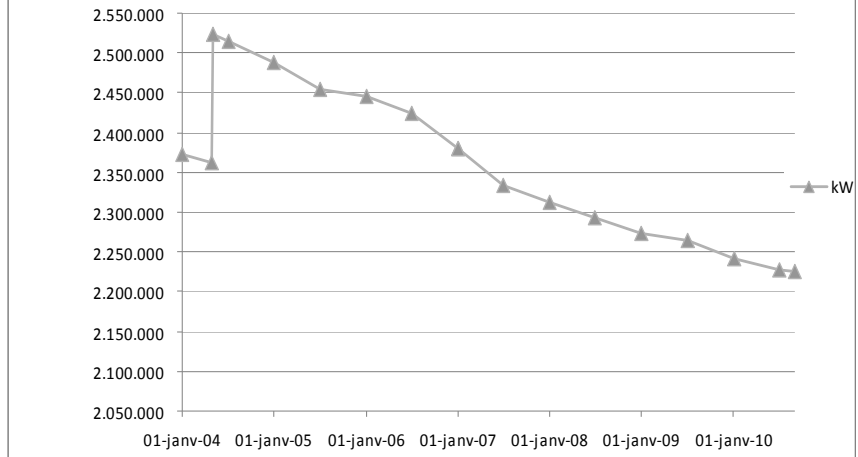


### Trend of EU fishing fleet capacity in terms of power: 1992 - 2009



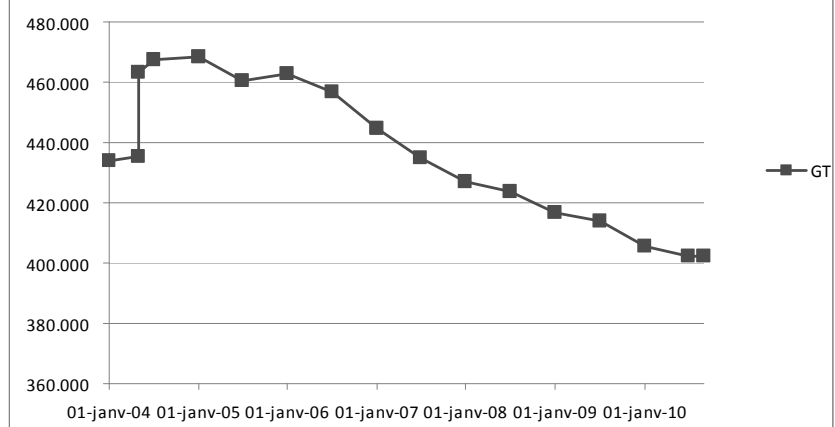
2004 - EU enlargement to 10 new Members

**Trend of EU fishing fleet in the Mediterranean - kW**



2004 - EU enlargement to 10 new Members

**Trend of EU fishing fleets in the Mediterranean - GT**





2004 - EU enlargement to 10 new Members

### Trend of EU fishing fleets in the Mediterranean - number of vessels

