Fishing effort and capacity management

The issue of excessive fishing effort and overcapacity attracted most of the management workload. In the EU, the reform of the CFP in 2002[1] meant a turning point on capacity management, in that the previous policy of setting capacity targets for different kinds of fishing was replaced by a new approach leaving more responsibility to national authorities. The new system[2] implied that every Member State should establish an enduring balance between the fish resources that were allocated to them and the fishing capacity of the fleets that would exploit these resources. The mechanisms to achieve this balance and the speed at which it should be achieved were left to national authorities, while three very simple rules were set at the EU level: i) the entry-exit scheme, by which any new entry of capacity (either a new vessel entering into the fleet or an increase of the capacity of existing vessels) should be compensated by a permanent withdrawal of an equivalent capacity, ii) any capacity withdrawn with public aid cannot be rebuilt and iii) no public aid shall be given for increases in capacity that may result in greater ability to catch fish.

A rule was also set that Member States should inform the EU, every year, about the evolution of their fleets and on the mechanisms used to attain the desired balance between resources and capacity. Some of the Member States use economic incentives such as decommissioning schemes, while others use measures based on property rights, such individual transferrable quotas (ITQs). The European Commission issues an annual report compiling Member States' reports.

In Norway, all commercial fishing, with one or two marginal exceptions, is now “closed” in that vessels cannot participate/engage other than on the basis of a specific vessel quota under a global TAC. Capacity management is done almost exclusively by market-like instruments (MLI's) based on individual vessel quotas (IVQ's) and a structural quota system (SQS), by which if a vessel owner buys another vessel to benefit from the IVQ associated with it, then they are obliged to scrap the acquired vessel. The system is also associated with a few restrictions, such as maximum IVQ size and limitations on the transferability of IVQ's within regions or vessel groups. These restrictions prevent undesired effects of MLI's such as a geographical or ownership concentration of fishing rights. Decommissioning schemes existed recently in Norway for small-scale vessels, but these were phased out in 2008.

Capacity management in Iceland follows similar principles as in Norway and includes a mechanism to avoid over-concentration of fishing rights, including of different species. Since 2004, fishing rights are subject to a levy that contributes to giving added responsibility to the fleet.

In the Faroe Islands demersal fisheries capacity is regulated by the number of licenses (this number was frozen in 1995), the number of fishing days allocated (reduced by about 30 % since 1996) and areas closed permanently to bottom trawling or seasonally for all gears (41 % of the total fishing area).

RFMOs with a management mandate in the North East Atlantic do not have a particular regime to control fishing capacity and avoid overcapacity, although ICCAT has initiated reflection on this issue. In NEAFC it has been established that capacity is dealt with by individual Contracting Parties, as most of the NEAFC fisheries are extensions of fisheries in the EEZs.

Ultimately, the fishing fleet in the European Union has been reduced over the period 2000 – 2008 (Table 4.1). During this period the maximum number of vessels was 95,200 (year 2000) with the minimum being 86,228 (year 2008). This nearly 10% reduction in the number of vessels correspond with a reduction in both the fleet tonnage and the engine power (Table 4.1). Equivalent data for Norway (Table 4.2) shows that reduction of greater than 40% in the fleet numbers between 2001 and 2008.

[1] Most of the measures under CFP reform are set in Regulation (EC) No 2371/2002
[2] Defined in Articles 11 to 16 of Regulation (EC) No 2371/2002

***Table 4.1**: Fleet's number of vessels, tonnage and engine power for the European Union. Data includes Belgium, Bulgaria, Cyprus, Denmark, Germany, Spain, Estonia, France, Finland, United Kingdom, Greece, Ireland, Italy, Lithuania, Latvia, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia and Sweden.*

Year	Number of Vessels	Tonnage (GT*)	Average Tonnage (GT*)	Engine Power (kW)	Average Engine Power
2000	95,200	2,025,871	21	7,631,462	80
2001	92,107	2,016,909	22	7,508,050	82
2002	89,758	1,967,608	22	7,291,738	81
2003	88,040	1,909,216	22	7,110,417	81
2004	92,469	2,103,236	23	7,499,181	81
2005	88,729	2,018,033	23	7,246,459	82
2006	86,690	1,957,298	23	7,069,433	82
2007	88,188	1,920,487	22	7,011,029	80
2008	86,228	1,864,855	22	6,854,294	79

**Under the EU legislation the member States are required to record the vessel tonnage using the Gross Tonnage (GT) under the London Convention (1969) as opposed to the previously used Gross Register Tonnage (GRT) under the Oslo Convention (1946). This change in recording tonnage has taken place over a number of years throughout the 1990s and at varying rates in different countries. Given that the GT of a vessel is generally significantly greater than the GRT, care is required when comparing tonnages of the various fleets at different times. By the end of 2003 the recording of the tonnage by GT was largely completed.*

***Table 4.2:** Norwegian registered fishing vessels, gross tonnage (GT) and engine power (HP) for the period 2001 – 2008. Data supplied by the Norwegian Directorate of Fisheries*

YEAR	Number of vessels	Gross Tonnage (GT)	Engine Power (HP)
2001	11922	403600	1852279
2002	10641	394547	1837899
2003	9915	391519	1843590
2004	8189	390396	1809504
2005	7722	368944	1730699
2006	7301	363895	1714764
2007	7041	354907	1698400
2008	6790	363169	1686661
Change over period	**-43%**	**-10%**	**-9%**

In terms of coastal OSPAR Contracting Parties (i.e. excluding both Luxemburg and Switzerland) there has been quite a dramatic reduction in the number of fishing vessels. Over the period 1998 – 2006, the total number of vessels decreased by 25% from 77,874 to 58,399 with substantial percentage decreases for Norway (45%) Sweden (32%) and Denmark (31%) (Figure 4.1). In absolute terms Norway also saw the greatest reduction in number of vessels at 5,946. Spain (4,586 vessels), Portugal (2,597 vessels), Denmark (1,438 vessels), the United Kingdom (1,435 vessels) and France (1,145 vessels) also experienced reductions of at least 1000 vessels (Figure 4.1).

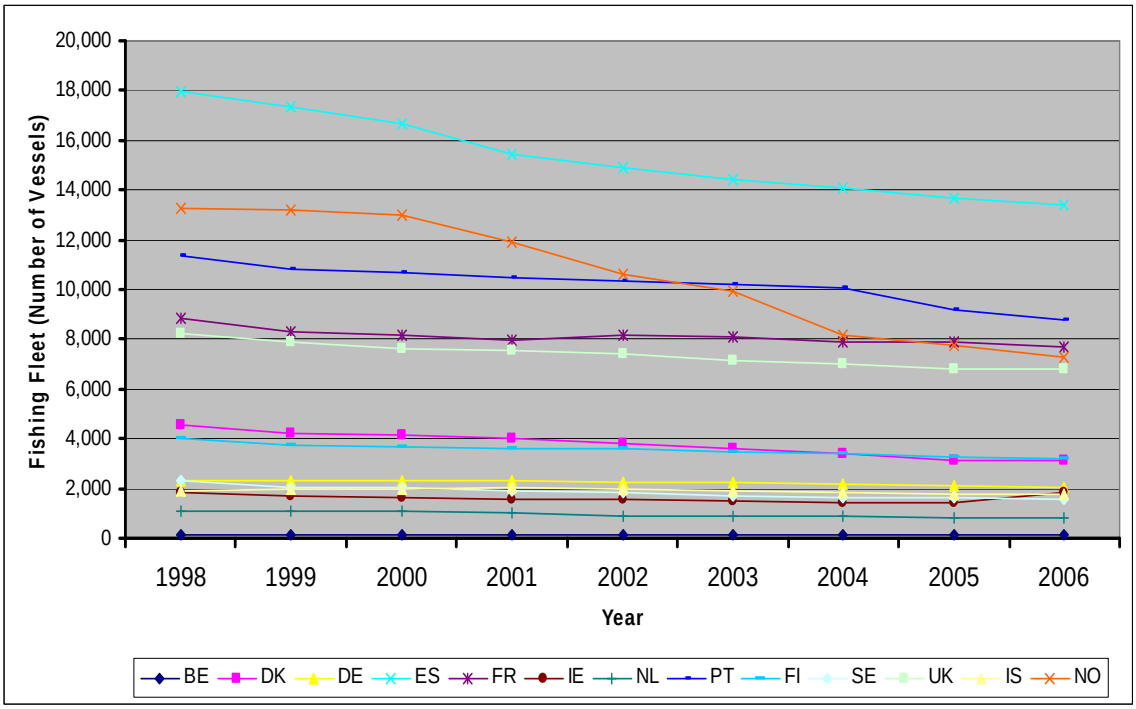

Figure 4.1 *Changes in the number of vessels for OSPAR Contracting Parties (excluding Switzerland and Luxemburg) over the period 1998 – 2006. (Data extracted from the European Environment Agency at http://dataservice.eea.europa.eu/atlas/viewdata/viewpub.asp?id=3465)*

A comparison of power, tonnage, number and average size of vessels for various country groupings is presented in Figure 4.2. This shows a general downward trend in power, tonnage and number across the four grouping of EU15, EFTA, EU7 and Romani + Bulgaria (see Figure 4.2 for definition of groupings).

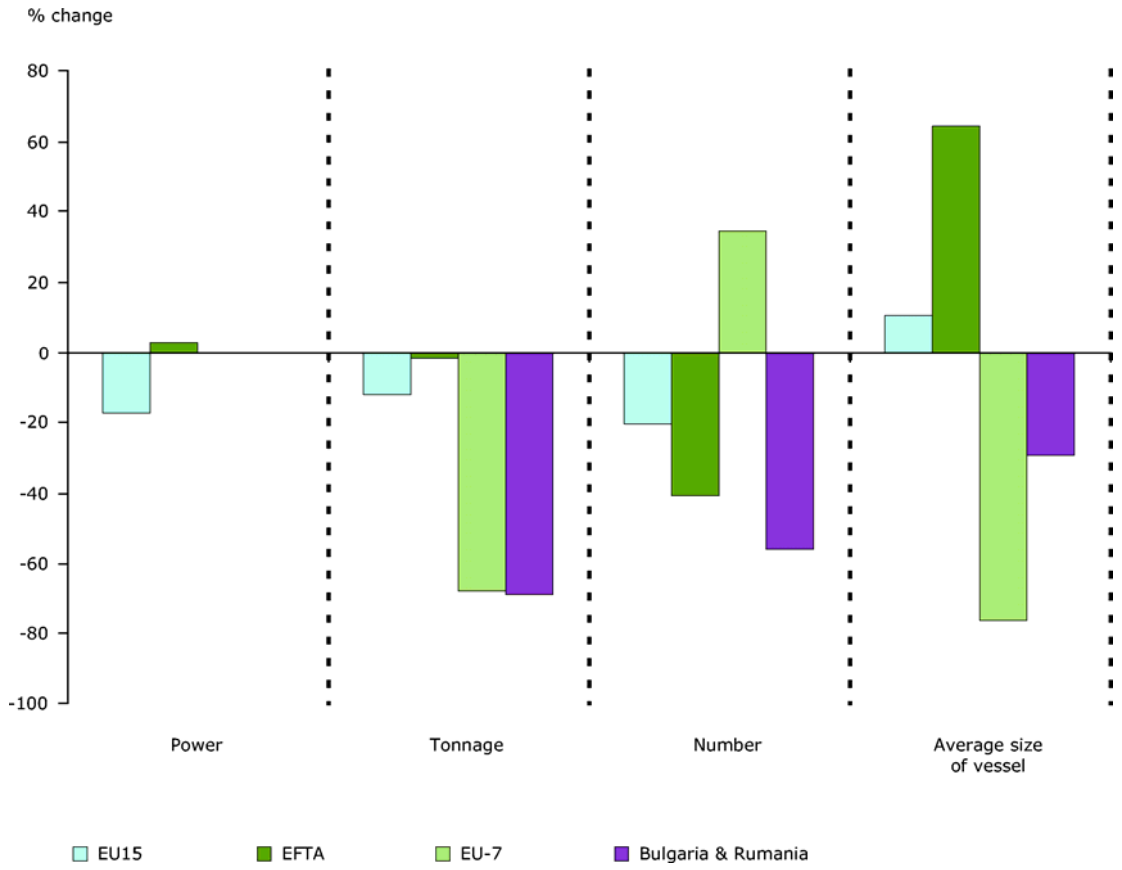

Figure 4.2: *Percentage change in power, tonnage, number and average size of fishing vessel across the EU-15, EFTA, EU-7 and Bulgaria & Romania. (Graph from the European Environment Agency website)*[3]

➥*Go to full QSR assessment report on environmental impact of fishing (publication number 465/2009)*

[3] (Countries have been grouped into the following categories: EU-15: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom. EFTA: Iceland and Norway. EU-7: Estonia, Cyprus, Lithuania, Latvia, Malta, Poland, and Slovenia. Bulgaria and Romania. Power, tonnage, number of vessels, and average size of vessel changes refer to 1998-2006 for EU-15 and EFTA. Tonnage and number changes for EU-7 refers to the period 1995-2006, but no data available from the years 1996-2003. Tonnage and number of vessels changes for Romania and Bulgaria refers to the period 1989-1995 (no recent data available). The period 1998-2006 for EU-15 and EFTA has been chosen in order to make comparisons between these countries groups.)