

POLICY BACKGROUND

Policy-relevant issues in Aquaculture & Fisheries

Technical Measures



General introduction of the Background of Technical Measures

Technical conservation measures are a set of regulatory tools normally used in conjunction with Total Allowable Catch (TAC) allowances to maintain sustainable fisheries.¹ Technical measures may take the form of:

- Minimum landing sizes
- Specifying mesh sizes and other mesh parameters such as twine thickness
- The use of square mesh panels or other selective devices
- Specifying the type or amount of fishing gear
- Closed areas/restricted time

The most commonly used tool to conserve fish stocks at present is the Total Allowable Catch (TAC). In the EU the TACs are currently agreed by Member States each December and are an overall limit on the amount of fish which Member States may land. They are based on advice provided by fisheries scientists in the International Council for the Exploration of the Seas (ICES), with occasional socio-economic input by STECF (Scientific, Technical and Economic Committee for Fisheries), on appropriate levels of catches.



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Once the TACs are agreed they are divided between Member States according to the system of 'relative stability' under which each receives a set percentage of the TAC. However, whereas the TAC can be a very effective management tool in the control of a single species fishery fished in isolation, it is less effective when it comes to mixed fisheries being fished by more than one country hence the need for technical measures to supplement the basic TAC regulations.

By-catch and Discard Problems

Excessive by-catch and discards could create long-term problems for many fisheries. For example, in nephrops fisheries, the non-target catch may be dominated by species subject to TAC and quota

management controls, such as cod and haddock. Catches of adults may be in excess of the permitted quota or there may also be an abundance of juveniles – all these will have to be discarded but with no significant survival rate of discarded fish. Hence there is a need for supplementary technical measures as TACs alone are insufficient.

Discards

The practice of discarding fish has been a major concern to the European Commission in recent years and much has been done to quantify the extent of the problem, the causes and possible solutions. The Commission has published a number of communications on the subject of discarded fish the most recent being “A policy to reduce unwanted by-catches and eliminate discards in European fisheries” (Brussels, 28 March 2007. COM(2007) 136)

Accidental By-catch

There is an additional concern regarding the rate at which cetaceans, turtles and birds are accidentally caught, particularly in gillnets. This problem can only be dealt with through a series of measures which reduce the likelihood of these non-fish species being caught such as developing escape panels, but other options, such as reduction in fishing effort in certain fisheries and the prohibition or limitation of certain types of gear are also possibilities. Investigations into the behavioural characteristics of cetaceans have already led to improvements with the use of the acoustic exclusion devices or “pingers” attached to nets.

Incidental damage to the sea-bed and the benthic communities that live there is a possibility when certain types of towed fishing gear are used. A great deal more research and evaluation is required to determine how far-reaching this damage could be. In the meantime, there is growing pressure to close significant areas of the sea to fishing which could have significant socio-economic effects on fish-dependent communities. A preferable alternative would be the development of fishing gear with a lower environmental impact.

The Common Fisheries Policy (CFP), both current and previous, provides for the continuous reassessment and additions to the range of more selective fishing methods and measures to reduce the impact of fisheries on marine ecosystems and non-target species.^{2,3}

The European Commission supports research which can address the discards and by-catch problem. The development of modified, low-impact fishing gear will help the EU and Member States to meet their international obligations for the protection of the marine environment, habitats and species. In addition, all developments in the field of fishing gear technology are monitored and the implications for the marine habitat and the socio-economic consequences are taken into account.

Summaries

The summaries (Technical Leaflets) relating to technical measures include

- DEGREE
- NECESSITY
- OMEGA
- PREMEGADEV

This section has been abridged from these different sources:

1. Council Regulation (EC)170/1983. 25 January 1983. Establishing a Community system for the conservation and management of fishery resources. Official Journal of the European Union, L24 (27/01/1983) (1983) 1-13
2. Council Regulation (EC)2371/2002. 20 December 2002. On the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy. Official Journal of the European Union, L358(31/12/2002) (2002) 59-80.
3. Council Regulation (EC) 850/1998. 30 March 1998. For the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms. Official Journal of the European Union, L125(27/04/1998), 1-36
4. Council Regulation (EC) 812/2004. 26 April 2004. Laying down measures concerning incidental catches of cetaceans in fisheries and amending regulation (EC) No 88/98