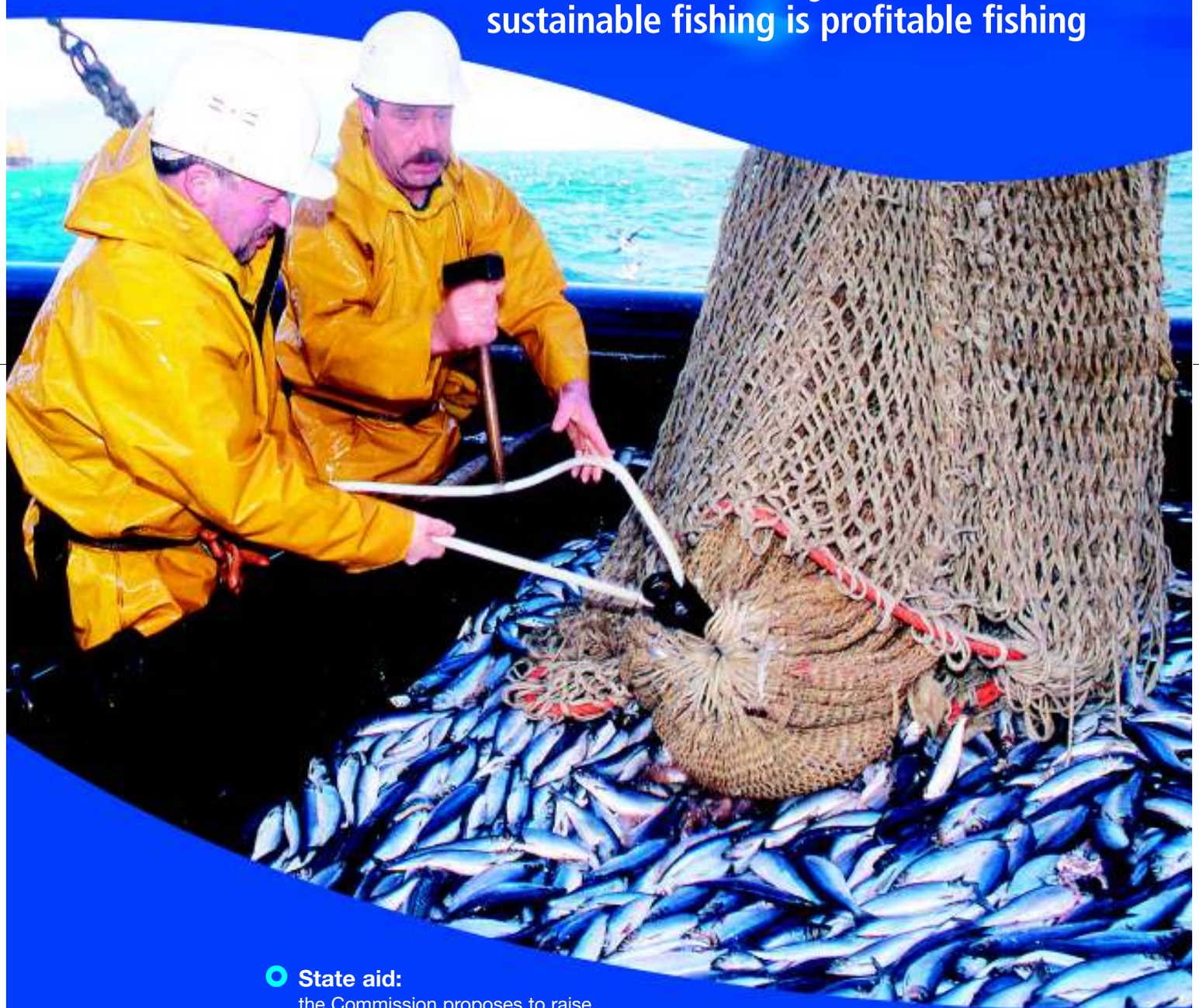
European Commission

No 32 January 2007

Fisheries and aquaculture in Europe

Maximum sustainable yield:
sustainable fishing is profitable fishing



State aid:
the Commission proposes to raise levels for *de minimis* aid

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fighting the invaders

A European Commission publication | Directorate-General for Fisheries and Maritime Affairs | ISSN 1606-0822

Calendar

Shows and exhibitions

- **WCPFC, regular session, Apia (Samoa), 11-15 December 2006**
  The focal point of this meeting of members of the regional Western and Central Pacific Fisheries Commission: scientific recommendations and decisions regarding stock management.

> For more information:
Tel: +691 320 1992 or 320 1993
E-mail: wcpfc@mail.fm
Web site: www.wcpfc.int

- **GFCM, regular session, Rome (Italy), 9-13 January 2007**
  Based on the recommendations of the Scientific Advisory Committee, the General Fisheries Commission for the Mediterranean, during its annual meeting, will take decisions regarding the management of certain shared stocks.

> For more information:
Tel: +39 06 5705 6441
E-mail: alain.bonzon@fao.org
Web site: www.faogfcm.org

- **Meeting of tuna commissions, Kobe (Japan), 22-26 January 2007**
  Organised under the auspices of the FAO, this meeting of all regional tuna commissions will review the global situation of the tuna canning industry and discuss measures intended to improve resource management by coordinating the actions of the various regional commissions.

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In this issue

Note to readers
We welcome your comments or suggestions at the following address: European Commission – Directorate-General for Fisheries and Maritime Affairs – Communication and Information Unit – Rue de la Loi/Wetstraat 200 – B-1049 Brussels or by fax to: (+ 32) 2 299 30 40 with reference to *Fisheries and aquaculture in Europe*. E-mail: fisheries-magazine@ec.europa.eu

Fisheries and aquaculture in Europe is a magazine published by the Directorate-General for Fisheries and Maritime Affairs of the European Commission. It is distributed free on request (see subscription coupon on page 12). *Fisheries and aquaculture in Europe* is published five times a year and it is also available on the Fisheries and Maritime Affairs DG web site: **http://ec.europa.eu/fisheries/index_en.htm**
Editor: European Commission, Directorate-General for Fisheries and Maritime Affairs, Director-General.

Production: Mostra – *Printed in Belgium* – Printed on recycled paper

Maximum sustainable yield: investing in the future of fishing

During the 2002 World Summit on Sustainable Development in Johannesburg, the EU Member States made a commitment to restore stock levels in line with the principle of maximum sustainable yield (MSY) by 2015 at the latest. Briefly, MSY is a long-term approach to stock management, which consists in establishing catch rates that allow stocks to reach the level at which their maximum sustainable productivity can be maintained.

The European Union and its Member States have subscribed to this commitment which is fully consistent with the Common Fisheries Policy objectives, as reinforced during the Reform in 2002. Abiding by this commitment will ensure the sustainability of all stocks, as well as preserving and improving the health of ecosystems and the marine environment in general.

There are significant benefits to this approach for those who work in the fishing industry: reduced costs (particularly fuel, which is becoming increasingly expensive), greater efficiency, more stable yields, improved competitiveness, reductions in discards and by-catch of non-target species from the ecosystem concerned and, in certain cases, the potential to increase productivity in the long term.

In a recent Communication, the Commission has reviewed how this new approach might be implemented in EU fisheries.

It notes the need for a transitional period to allow adaptation to the new system. In many cases, rebuilding fish stocks will entail a short-term reduction in fishing activities in order for stocks to replenish themselves. During this phase, the necessary reduction in catches may have repercussions for the economy and employment of the regions concerned. It is up to the Member States to define how they wish to manage this transition. For example, they can choose between promoting smaller yet more efficient and profitable companies, or maintaining a high employment rate at the cost of lower business profitability. Regardless of the approach they adopt, change is always easier to manage when it is introduced gradually. It is therefore necessary to begin relieving the pressure on stocks without delay.

In concrete terms, the Commission intends to propose a series of long-term plans which will aim to achieve MSY by 2015 for stocks in EU waters. Stakeholders will be fully involved in drafting these plans, in particular through the Regional Advisory Councils (RACs). The RACs were consulted whilst preparing the Communication, as were the Member States, and their contributions were taken into account throughout.

The Commission is also committed to studying the economic, social and environmental consequences of the long-term plans. The various options will be analysed, thus allowing the Commission and Member States to achieve the necessary balance between possible short-term losses and long-term gains.

The Editor

Maximum sustainable yield:
sustainable fishing is profitable fishing

In a recent communication, the Commission presented new political guidelines for fisheries management in EU waters. In accordance with the principle of maximum sustainable yield (MSY)[1], these guidelines aim at establishing the long-term stability of resources. This greater stability should enable the fishing industry to reduce costs, make longer-term investments, cut down on the number of discards, improve the quality and quantity of catches, and therefore increase profitability.

1. Why the new guidelines?

The Common Fisheries Policy (CFP) is aimed at ensuring the sustainability of living marine resources in economic, environmental and social terms. Continued overfishing in many fisheries is endangering stocks and species, and ultimately, the fishing industry itself. It stands in the way of profitability, because more effort is now required for each tonne of fish brought back to port.

During the Reform of the CFP in 2002, the emphasis was already placed on the importance of longer-term management of fishing activities in order to ensure the sustainability of the resource. This long-term approach has since been given form through the establishment of recovery plans for the stocks most at risk.

Nevertheless, for several years now there has been a significant decrease in the catches of many species (see figures p. 8). This depletion is due to overfishing: over the years, catches have exceeded the stocks' reproductive potential.

The Commission therefore believes the time has come to go one step further, and reverse this tendency towards decline that characterises most European fisheries. Its Communication to the Council and Parliament on the topic[1] stresses the fact that *'it is time to manage European fisheries in a different way, looking for success rather than to seek merely to avoid failure.'*

Our international commitments must also be respected. During the World Summit on Sustainable Development in Johannesburg (September 2002), the EU and its Member States made a commitment to maintain or restore stocks to levels that can produce at maximum sustainable yield by 2015 at the latest (see box p. 7).

2. What is 'maximum sustainable yield' (MSY)?

In practice, taking a maximum sustainable yield approach means determining the maximum amount of fish that can be taken from a stock each year without endangering its capacity to regenerate. Overfishing causes the depletion of stocks, thus undermining their capacity to replenish themselves, which leads in turn to a decrease in catches. By respecting the maximum sustainable yield, fishers can ensure the future of stocks in the long term – and even the very long term, since they are guaranteeing sustainability for many generations to come.

According to scientists, 80 % of European fish stocks are currently overfished in terms of management based on MSY. They estimate that pressure on these stocks is two to five times greater than the level which would be consistent with that which would guarantee maximum productivity. This overfishing results in reduced catches, lower incomes for fishermen, low levels of profitability for many catching companies and high levels of juveniles being caught, many of which are thrown back into the sea dead.

For the Commission, the best approach is one which aims to produce stable and sustainable catch levels, rather than maintain an 'ideal' stock size. Focusing on stock levels can easily lead to instability from one year to the next, given that the size of a stock can vary greatly due to factors other than fishing.

The maximum sustainable yield of a stock is determined on the basis of precise scientific facts. On the basis of a number of criteria, scientists will recommend a level of fishing activity for each stock which is reasonable, moderate and can guarantee maximum sustainable yield in the long term. These catch levels must be reassessed regularly as stock productivity develops and the ecosystem itself changes.

Fishing has a significant impact on ecosystems, but so do other external factors, such as climate change and pollution. In neither case can we predict their long-term effects with any certainty. This is why the Commission proposes a gradual and adaptable approach, which would take any changes in the ecosystems as a whole into account. Of course, it is impossible to manage the ecosystem so as to reach MSY for all stocks at the same time, but nevertheless the objectives and means adopted should be regularly adapted with this aim in mind.

(1) COM (2006) 360 – Implementing sustainability in EU fisheries through maximum sustainable yield.

A stock managed with respect to maximum sustainable yield offers optimum productivity and can therefore be exploited at lower cost.

3. What are the advantages of this approach?

The initial effect of implementing long-term management based on MSY would be the reversal of the current declining trends for targeted stocks (see figures p. 8).

As well as ensuring that vulnerable stocks do not become depleted, this approach will also favour the growth of all the other stocks. This brings with it obvious advantages for the ecosystems concerned, and for the marine environment in general.

The economic advantages are also significant (see article page 6). Costs (fuel, for example) will decrease, since less effort will be required for every tonne of fish caught. Catch levels will be more stable, thus providing better job security and guaranteeing prosperity for the sector as a whole. Larger stocks containing more adult fish will also lead to less discarding of juvenile fish.

4. How will this new management approach be implemented in European waters?

Over the next few years, the Commission will propose long-term plans aimed at maintaining or restoring all the main fish stocks in EU waters to levels of fishing activity that are compatible with the maximum sustainable yield of these stocks.

On the basis of the best available scientific advice, each plan will define the appropriate level of fishing activity for each stock concerned. The strategies defined in these plans will be based mainly on a reduction in fishing effort (limiting the number of vessels, days at sea, closure periods, etc.).

Each long-term plan will be drawn up in close collaboration with the Regional Advisory Council (RAC)[2] concerned, both for the technical content and the evaluation of the socio-economic impact. The plans will be updated roughly every five years and subject to very strict control measures.

Before stocks reach a level which can provide maximum sustainable yield, a transition period will be necessary during which the catch levels for certain stocks will decrease. This transition will have to be managed gradually. Once long-term plans setting the appropriate objectives for the different stocks have been adopted, the Member States will have to decide on the rhythm at which they will implement changes and on how they will manage the transition. To facilitate a successful transition EU support for the sector will be available via the European Fisheries Fund (EFF).

The commitment made in Johannesburg sets 2015 as the deadline for restoring the productivity of stocks (see box p. 7). The pace of the transition should be adapted to achieve this objective (see article p.6).

5. What does this mean for fisheries which catch a number of different stocks at the same time?

Mixed fisheries will have to consider the respective catch levels of all the stocks they fish. The possibility of taking less than the theoretical MSY will have to be considered for some stocks in order to preserve the other stocks. Other solutions could also be implemented in the context of longer-term plans, such as, for example, technical measures for the configuration of fishing gear, or closed areas.

6. What does this mean for stocks shared with other countries?

The Commission will see to it that the MSY approach is applied in agreements made with non-Community countries. This will be all the easier since Norway and the Faeroe Islands, countries with which the European Union shares stocks, are also committed to the Johannesburg Plan of Implementation. Furthermore, most stocks exploited jointly with Norway, for example, have been managed for long-term sustainability for the past decade. This is the case for saithe, mackerel and herring in particular.

(2) The Regional Advisory Councils (RACs) bring together fishermen, the scientific community and other stakeholders active in major fishing regions or on certain stocks. In particular, they provide an opportunity for the fisheries sector to work more closely with scientists in collecting reliable data and examining ways to improve scientific advice. RACs present recommendations and suggestions to the Commission and Member States concerned regarding all aspects of the management of fisheries within their remit.

A gradual transition

Management for MSY will foster the development of all European fish stocks, thus opening new economic horizons for the fisheries sector. By allowing each stock to reach and stabilise at its optimum productive potential, those sectors which are currently in difficulty will be able to return to prosperity. But before we can have abundant stocks, there will have to be an initial period of lower catch levels. Management choices will have to be made.


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At present, landings of most European stocks are decreasing, while fishing effort remains significant. This is due to the fact that, to catch fish from a shrinking stock, the nets need to be dragged or left in the water longer in order to catch the same amount of fish as before. This means more time spent fishing and higher costs, as well as an increase in fuel consumption and in the time it takes to recoup the cost of the equipment.

Return to economic efficiency

The main economic benefit of the new approach will be a decrease in the costs of fishing activities. Once stocks have stabilised, it will be easier to make catches, with less effort and lower costs. The result will be higher profits for fisheries companies, which will thus become more competitive.

But this is not all. The MSY approach should lead to improvements in three other areas, which will also have positive economic repercussions.

Firstly, when exploiting healthy stocks, fishers will take a greater proportion of large fish, thus decreasing the amount of discards and the time spent sorting them. Discards are largely a result of overfishing. An overfished stock is made up of a greater proportion of juveniles, which are thrown back into the sea.

Secondly, lower levels of fishing effort will reduce by-catches of non-commercial species in the same proportions, such as dolphins, porpoises and seals. The by-catch of these animals are related to the length of time the nets are left in the water or to the distance over which a trawl is dragged. Fisheries will therefore have a lower impact on the environment and on marine ecosystems.

Thirdly, European fishery products will be better placed to compete with imported products, which currently represent about 60 % of domestic consumption. On the one hand, more abundant, better quality production will reduce the need for imports to supply the market. On the other hand, European fishery products will also be more competitive for the reasons mentioned above.

The options for transition

Before this state of balance is achieved, fisheries targeting overfished stocks will have to go through a transitional phase aimed at eliminating overfishing. During this period, the catch levels will have to be reduced in order to allow stocks to regain optimum productivity. This is why the Commission insists on the need to implement changes gradually. The Member States will have to decide on their own rhythm, in line with the objectives set by the long-term plans for each stock.

As Member States distribute their quotas between fishing companies, they will also have to determine an economic strategy for the fisheries concerned. They have two options in this respect:

The first is to reduce fleet size and employment in line with the authorised catch levels. In this way, companies that continue their activities will become more profitable and will increase their investment capacity. This should also lead to a simpler regulatory context, which would in turn facilitate control.


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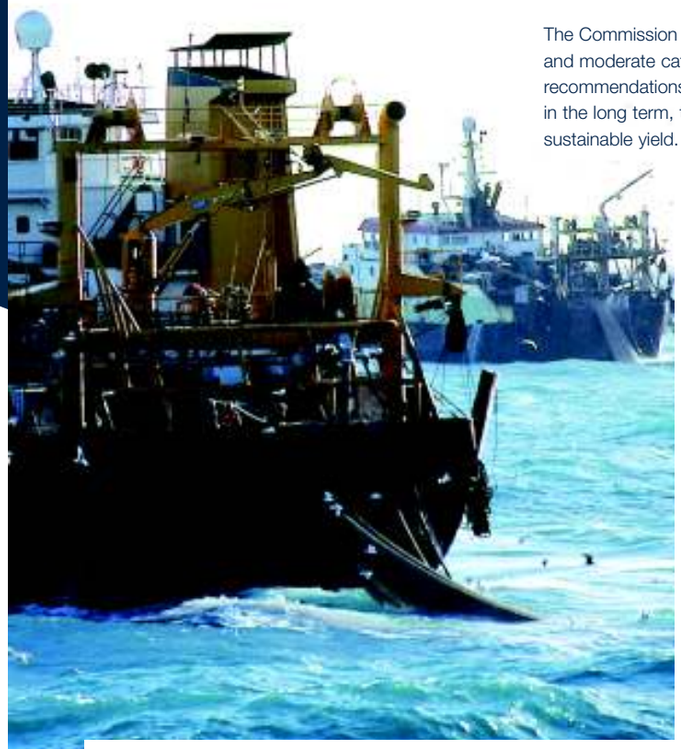
Management based on maximum sustainable yield reduces the amount of small fish discards, a result of overfishing, and increases the number of large fish caught.



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The Commission proposes to set reasonable and moderate catch levels based on scientific recommendations, which will allow each stock, in the long term, to attain its maximum sustainable yield.

The Johannesburg commitment

MSY was first declared a global objective at the 1992 Earth Summit in Rio de Janeiro. But it was at the World Summit on Sustainable Development in Johannesburg that the participating countries made a commitment to see this objective achieved. At the close of the summit, these countries – which include all the EU Member States – subscribed to a series of concrete commitments listed in a 'Plan of Implementation'. Point 31 of the plan deals with fisheries. Among other commitments, the countries agreed to '*maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015.*' The European Union intends to do everything it can to meet this commitment.

A regional approach

Each long-term plan will be accompanied by an impact study, so that the public authorities have a clear view of its possible social and economic consequences. These are closely related to regional factors, such as the composition of the fleet, the proportion of overfished stocks in the waters concerned, the area's level of economic dependency on fisheries, the financial health of the sector, etc. The impact of the shift towards the MSY system may therefore be very different from one area to another. For this reason, the Commission does not wish to carry out a global assessment of the socio-economic impact of the system. Rather, it believes it is preferable to adopt a specific approach for each particular fishery. Each plan will therefore be discussed with the Regional Advisory Council concerned who are fully aware of all the relevant facts. This will allow the Member States to make well-informed decisions about how best to implement these plans.

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The second option is to maintain fleet size and employment at their current levels, i.e. at overcapacity with respect to the authorised catch rates. This would involve strengthening both regulations and control, particularly in terms of restrictions on fishing capacity (engine power, surface area of gears, size of vessels) and fishing effort (number of fishing days). In this context of reduced activity, employment in the sector would often be part time, and companies would have to turn to types of fishing that require less investment.

Supporting the sector

Regardless of the economic options chosen by Member States and the rate of transition which they decide on, it is clear that the fisheries sector will need support during this difficult period. The European Fisheries Fund (EFF), which will be operational from 2007, can help Member States finance the gradual restructuring of the sector which currently suffers from overcapacity. Many measures are eligible for EFF aid: for example, scrapping and recategorisation of vessels, occupational retraining plans, the development of alternative economic activities, etc.

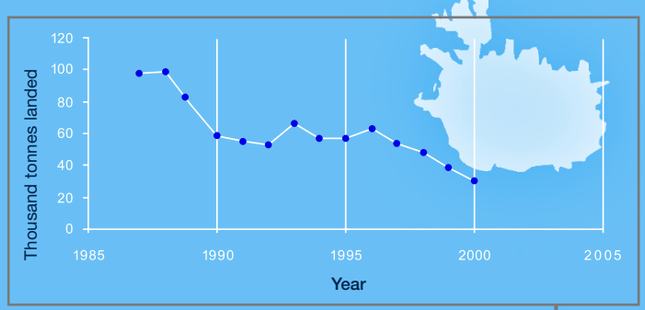
MSY offers the European Union fisheries sector an opportunity to reverse its economic decline for good. Today, the Commission is proposing a way to resolve the problem of overfishing and give companies the chance to become more profitable by exploiting healthy and abundant stocks. The price to pay for this return to prosperity is a transition period which will provide time for stocks to regain optimum productivity and for the sector to restructure. The role of public authorities will be to support fishermen and vessel owners through this difficult period.

8 out of 10 stocks are overfished

The International Council for the Exploration of the Sea (ICES) recently studied the condition of certain European stocks. Result: 8 out of 10 stocks analysed are not being managed with a view to eventually achieving the maximum sustainable yield. Indeed, certain catches are up to five times what they should be under an MSY approach.

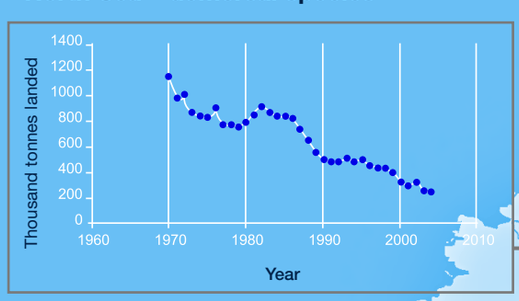
Estimated landings of demersal species in EU waters

West of Scotland – demersal species (except anglerfish)



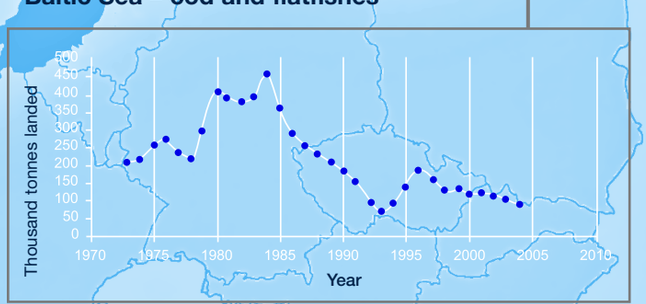
Skagerrak and Kattegat – demersal species (except plaice)

North Sea – demersal species

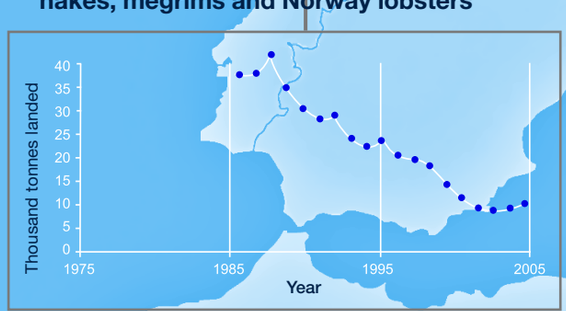


Irish Sea, Celtic Sea, Bay of Biscay and English Channel – demersal species

Baltic Sea – cod and flatfishes



Iberian Atlantic area – hakes, megrims and Norway lobsters



Source: ICES

The Commission proposes to raise levels for *de minimis* aid

The Commission proposes to set a higher ceiling for *de minimis* aid granted by Member States to companies in the fisheries and aquaculture sector. The level would be raised from EUR 3 000 to EUR 30 000 per beneficiary per three-year period, and its maximum total amount would increase from 0.3 % to 2.5 % of the sector's national output. Experience gained with the previous ceiling has shown that up to these levels public aid is deemed not to distort competition in the fisheries sector and that the Member States' individual margin of manoeuvre can thus be extended.

***De** minimis* aid is state aid that can be granted to private companies without the obligation of prior notification to the Commission. It is considered that up to a certain amount, public aid does not distort competition between European companies. Below this amount a Member State can therefore grant aid without informing the Commission, which is responsible for monitoring the smooth running of the Single European Market.

The first European Union regulation that determined the modalities for *de minimis* aid to the agriculture and fisheries sectors dates from 2004. For both sectors the ceiling for notification was set at EUR 3 000 per company over a three-year period, as long as the total amount of aid granted by the Member State did not exceed 0.3 % of the national output of the fisheries or agriculture sector of the Member State concerned.

Here is a concrete example to illustrate the mechanism: During the period of 2004-2006 France could budget EUR 11 073 300 for aid to fisheries companies as long as the aid granted per company did not exceed EUR 3 000. It should be noted that this aid is not to be confused with the aid granted in the framework of the FIFG or the EFF.

Following this first exercise, the Commission considered that there was a risk of distorting competition in the fisheries sector only when aid exceeded levels foreseen by the present *de minimis* regulation. In the case of a small-scale artisanal fisherman who sells his products on the local market, the aid does not affect intra-Community competition. And in the case of a large or medium-size fishing company, the average output is such that the amount of aid would have to be much greater to influence trade between the Member States.

The Commission has therefore decided to draft a specific *de minimis* regulation for the fisheries sector and to raise significantly the ceiling for state aid exempt from prior notification. This level would be increased to 2.5 % of the national output in the fisheries sector and to EUR 30 000 per beneficiary company per three-year period.

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The ceiling for *de minimis* aid has been raised from EUR 3 000 to EUR 30 000 per beneficiary per three-year period.

But not for the fleet

As with the previous regulation, the Member State will be entirely responsible for use of the *de minimis* aid in compliance with Community law. Nonetheless, the Commission has proposed to exclude aid intended to enhance fleet capacity, in line with the regulations on allocation of European aid from the new European Fisheries Fund. The Common Fisheries Policy aims to reduce the capacity of the Community fleet in order to achieve equilibrium with the available resources. It is therefore unacceptable for public aid to finance an increase in fishing capacity. It is still possible, however, to finance projects intended to improve safety, working conditions, hygiene and the quality of products on board, as long as these improvements do not increase the vessel's fishing capacity.

The modalities of *de minimis* aid provision have not changed with respect to the previous regulation. For the sake of transparency, all aid must be recorded and listed in a register. The Commission must be able to verify whether aid has been granted in accordance with regulations and whether the ceilings for each Member State and company have been respected.

The approval procedure for the *de minimis* aid regulation follows the provisions defined by a Council Regulation (994/98). The Commission proposal must first be discussed in the framework of the advisory committee for state aid composed of representatives of the Member States, and then published in the Official Journal of the European Union. After this, it must be presented once again to the advisory committee prior to final adoption by the Commission.

Fighting the invaders

**Many animal and plant species 'travel' throughout the world, accidentally taking advantage of human means of transportation or as objects of trade.
This global phenomenon is spreading at the same pace as growth in international trade. These species usually do not survive in their new environment, but sometimes they spread, putting local biodiversity at risk. These invasive species, referred to as 'aliens', can cause serious problems for fishing and aquaculture. The European Commission has proposed a new regulation to cope with this situation in aquaculture. Other specific regulations target sea transport, in particular ballast water.**

In principle, when an animal or plant is introduced into an ecosystem that is not its own it dies quickly of cold, heat or hunger. But sometimes it adapts perfectly to its new environment. When this occurs it can spread out of control because the usual predators, parasites and diseases are not there to regulate its population. It thus makes itself at home in a niche among rival indigenous species, which then become scarce. This newly introduced animal or plant is referred to as an exotic invasive species.

An example: the common slipper shell

This scenario has been unfolding on the coast of Brittany for several decades with the slipper shell (*Crepidula fornicata*), a shellfish from the Atlantic coast of North America. Today it is found in several places along European coasts, but it is particularly rife in the bays of Saint-Brieuc and Mont Saint-Michel. Its colonies densely cover the sea bed, in some places the layer is one meter thick.

The victims of this invasion are the indigenous shellfish, in particular scallops and oysters. By depriving them of space and food, the slipper shells cause wild populations to decrease and they hamper the growth of farmed oysters. Furthermore, they attach themselves to other shellfish and oyster beds, putting aquaculturists and fishermen through time-consuming difficult processes of sorting, cleaning and maintenance. But this is not all: the thickness of the colonies is exactly like a silt build-up which causes local changes in the ecosystem and the environmental conditions of farms.

These pests have prompted oyster farmers and scallop fishermen to react. Since 2002, attempts to eradicate slipper shells have been organised in the bays of Saint-Brieuc and Mont Saint-Michel. Under a project monitored by Ifremer and financed by the public authorities (including the European Union), regional fishermen's and shellfish farmers' associations have hired a dredger to remove 20 000 tonnes of these invaders each year. However, this project does not seem to be bringing the expected results: the dredged areas are quickly recolonised by shellfish carried in by currents and trawling nets.

Originally from the Atlantic coast of North America, the slipper shell is now found along European coasts due to trading between oyster farmers. Today it is particularly invasive in Brittany, where it threatens local shellfish resources.

This annual removal is clearly not enough to eliminate the colony. It is therefore necessary to move on to a further and possibly costly stage. One solution consists in using the slipper shells as lime fertiliser for agriculture. This option is being explored.

Aquacultural origins

Scientists have studied the origins of this invasion, which occurred in two phases. The first goes back to the late 19th century, when Blue Point oysters were introduced in English farming operations. A few dozen slipper shells were accidentally included in the shipment and they spread through trading between European oyster farmers or by specimens dropping off a ship's keel. This is why we now find colonies of slipper shells on all European coasts, from Sweden to the Mediterranean.

The second, more spectacular, phase is limited to a specific geographical area and dates from the 1970s. In an effort to cope with high mortality among Portuguese oysters, French oyster farmers imported massive amounts of Japanese oysters, especially from British Columbia. This is how a new

strain of slipper shells has spread from oyster-farming areas on the French coast between Arcachon and Normandy.

Some people were quick to react. For over 20 years now, shellfish farmers in Marennes-Oléron have been organising annual dredging operations, and have managed to keep the invasive population within reasonable limits. With the slipper shell, like all exotic introduced species, it is crucial to act before its proliferation becomes an invasion. Beyond this stage, more stringent methods must be implemented, with very uncertain results.

A global plague

The slipper shell phenomenon is far from unique. Maritime activities other than aquaculture have spread additional invaders along the European coast. Since the 1980s, an aquarium strain of the West Indian algae *Caulerpa taxifolia* has been replacing the indigenous Posidonia beds in many sites along the Mediterranean coast. Since the 1990s, the king crab has spread in the Norwegian Sea from a colony that was introduced intentionally in the Barents Sea in the 1960s. The American Ctenophore (or Comb jelly), was introduced in the Black Sea via a ship's ballast water about 20 years ago and since then has wreaked havoc in the surface ecosystem. There are boundless examples.

Scientists have sounded the alarm. Invasions by exotic species represent the second main cause of loss in the world's biodiversity, following the deterioration of natural habitats. Unless precautions are taken, we face the long term risk of uniform biodiversity where each ecological niche contains the same species, throughout the world. It is therefore necessary to act quickly on the two main vehicles for accidental spread of aquatic organisms: maritime traffic and aquaculture.

It is important to know that transport vessels release 10 billion tonnes of ballast water per year in all the world's seas, thus relocating marine organisms sometimes thousands of kilometres from where they were 'caught'. Some of these organisms become invasive species. To put a halt to these transfers, in 2004 the Member states of the International Maritime Organization adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments[1]. Once it takes effect, this convention will require ships to comply with certain obligations in the management of ballast water, notably through the use of biocide technologies to treat water before it is released.

Protecting aquaculture

For aquaculture, however, allowances must be made. European aquaculture owes much to the introduction of new species. Its main products initially were imports: the carp is Asian, the rainbow trout is North American, the cupped oyster comes from the Pacific, etc. The question is not one of prohibiting the farming of new exotic species when these species can contribute to the future prosperity of this sector without threatening biodiversity.

This is why the protection measures proposed by the European Commission[2] would be underpinned by a system of authorisations which would operate as described below.

Each Member State would set up a national advisory committee composed of scientific experts in the field. When an aquaculturist decides to introduce a non-indigenous species on his farm, the committee would give its opinion whether this was a routine or non-routine movement.

In the case of a routine movement, the Member State can issue a permit without other formalities. In the case of non-routine movement, the committee must assess the risk posed to European ecosystems by the introduction of the species or a non-target 'accompanying' species. In the case of a medium or high risk potential, the committee, together with the aquaculturist, define the precautionary measures to adopt or technologies to implement in order to reduce the risk potential to low, the only level at which a permit can be justified.

Non-routine movements are then subject to quarantine in a closed facility. This means that only the progeny of the confined specimens can be transferred to the farm and used for commercialisation. In certain cases, the authorities can also require a 'pilot release' phase, in other words a period of one or two reproductive cycles during which the transfer would undergo strict scientific monitoring.

This system, currently under discussion by European institutions, should protect the European marine environment from new invasions of exotic species like the slipper shell.

(1) See http://www.imo.org
(2) COM (2006) 154.

In brief

KL-AF-06-032-EN-C

> The Baltic: the Commission proposal for a multi-annual plan for cod stocks

The Commission has proposed a multi-annual plan for the two cod stocks in the Baltic Sea. Both are currently over-exploited, but the state of the eastern stock, threatened with collapse, is more alarming (see *Fisheries and aquaculture in Europe*, n°29, June 2006, pp. 6-7). The aim of the plan is to bring the cod stocks back to levels that will guarantee high yields in the long term. This would be accomplished by gradually reducing the total allowable catch (TAC) and fishing effort. The objective is to attain gradually a fishing mortality rate of 0.6 for the western stock and 0.3 for the eastern stock, which would allow the stocks to regenerate and ensure a degree of job stability for the fishermen. The TACs will be set so as to reduce fishing mortality by 10 % each year until these objectives have been achieved. The Commission also proposes to address fishing effort which would be reduced 10 % annually until the objectives have been achieved. Furthermore, based on the current summer closure period (two months for the western stock, three months for the eastern stock), the number of remaining days would be reduced 10 % each year until the objectives have been achieved. As regards the closure periods, artisanal inshore fishing would receive a special dispensation for by-catches of cod, on the condition that they do not exceed 10 % of the catch and the mesh of the nets used is greater than 110 mm. For more information, see COM (2006) 411 at http://eur-lex.europa.eu

> TACs and quotas: Policy Statement from the Commission

The Commission has launched a consultation with the sector and the Member States in order to set TACs and quotas for 2007. Previously these discussions began in November with concrete proposals made by the Commission, which were based primarily on scientific advice presented in October. From now on the procedure will begin earlier in the year, with a policy statement in which the Commission sets out the principles it intends to apply in its proposals for TACs and quotas. This year the Policy Statement was presented in September and will be published in the spring of next year. This early start will allow more time for consultation with the sector and the Member States. This new procedure will alleviate the pressure to address too many important matters in too little time during the Fisheries Council in December. As management measures depend on the biological situation of the stocks concerned, the Commission has divided these stocks into six categories: stocks exploited consistently with maximum sustainable yield (MSY – see report in this magazine); stocks overexploited with respect to MSY; stocks outside safe biological limits; stocks subject to long-term plans; naturally short-lived species; and lastly, stocks whose status is unknown but which are not at high biological risk. It has been proposed to apply similar measures to stocks in the same category, thus guaranteeing a consistent and fair approach in all EU waters. For more information, see COM (2006) 499 at http://eur-lex.europa.eu