

An Appraisal on the MAGPs for the EU' s Fishing Industry[†]

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I. Introduction

The EU' s Common Fisheries Policy comprises three policy components; fisheries conservation (TACs, quotas and technical regulations), fleet structures and marketing. None of these policies sought to move towards an integrated framework with the result that capacity continued to grow and the stocks continued to decline. In effect, the evolution of policy has historically been associated with a piecemeal approach to each of these central policies, influenced to a large extent by annual negotiations of the Council of Ministers representing each Member State. This type of approach has been especially in evidence in the evolution of Community structures measures.

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One of the most fundamental and enduring problems of the Common Fisheries Policy has been the chronic overcapacity of the EU fleet. Conservation measures have persistently been undermined by fishing activities at levels well beyond the level of pressure that the available fish stocks could safely withstand. As new technology makes fishing vessels ever more efficient, the capacity of the fleet should be reduced to maintain a balance between fishing capacity and the quantities of fish that can safely be taken out of the sea by fishing.

The reform has done two things in this area: it has simplified the fleet management policy by giving Member States more responsibility in ensuring a balance between their fleets and their fishing possibilities and it will soon bring to an end the perverse effect of subsidies for fleet renewal. These subsidies have undermined the efforts made, also with public aid, to eliminate overcapacity by helping the introduction of new vessels into the fleet.

This paper outlines the development of the EU's structural policy for fisheries since 1970 and looks at the extent to which public funds have been disbursed by the Community in aid to assist both the development and the restructuring of the EU's fishing fleets.

II. The EU's Structural Policy for Fisheries

1 . The CFP and Structural Policy

The Common Fisheries Policy (CFP) of the European Union (EU) operates in four areas: A common structural policy; A common market organisation; A resource conservation and management system; And an external policy, concerned with fisheries agreements with third countries.

The common structural policy and the common organisation of the market date back to 1970. In addition to the provisions for common structural actions, the basic structural regulation also lays down certain fundamental rules on fishing, notably the principle of "Equal - access" of member states 'Fishing fleets to each others' waters (although at the time these only extended out to 12 miles).

Multi - annual Guidance Programmes (MAGPs) are the key element of structural policy in the EU's fisheries. To date, four multi - annual guidance programmes have been adopted. They are defined in Regulation (EEC) No

3699/93 as a series of objectives accompanied by a set of measures for their realisation, allowing fishing effort to be managed on a consistent and sustainable basis (European Parliament, 1999).

In order to remove excess capacity from fisheries, vessel decommissioning and effort reduction have been the most frequently measures applied. Other measures such as joint enterprises, export to third countries, and reassignment for purposes other than fishing have also been applied, although to a much lesser extent. The measures have been implemented under the MAGP framework, with the present MAGP IV programme being extended to run until the end of 2002. Additional measures to renew and modernise vessels have also been applied to help restructure the EU fishing fleet, working in conjunction with the MAGP.

2. The EU's Structural Policy under MAGPs

2.1 Capacity measurement

Fishing capacity, to put in simply, is based on a combination between a vessel's tonnage and engine capacity and fishing effort can be defined as a vessel's capacity, in tonnage or engine power, multiplied by activity expressed in days spent at sea.

The fisheries to which this type of regulation applies are defined according to fishing gear, the species concerned (demersal, pelagic or tuna) and location. Fishing capacity in the EU has historically been measured in terms of two vessel characteristics, namely gross tonnage of the vessel and engine power - assuming full utilisation of fishing vessels. These two characteristics have been measured, monitored and registered as indicators of fishing capacity in the majority of Member States, as specified by Council Regulation (EEC) No 2930/86, and are regarded as the most pertinent parameters for expressing fishing capacity of the fleets using active gears (FOI, 2002).

The number of kilowatts (total of the maximum continuous power) of a vessel engine is a relatively straightforward measure, although differing measurement procedures in Member States have caused some complications. Problems have included derating practices, the exclusion of auxiliary engines, as well as differing measurements in terms of official kilowatt (kW) and maximum effect kW.

The gross tonnage measure of the vessel has been less straightforward.

Historically, tonnage has been measured as Gross Registered Tonnage (GRT), as defined by the Oslo Convention 1947, or as a particular national unit of tonnage. The EU has been progressively moving to a common standard for measuring tonnage, a volumetric measure known as Gross Tonnage (GT), as defined by the International Convention on Tonnage Measurement of Ships 1969. However, the tonnage registration of many Member State fleets still includes a mixture of measurements as a result of the slow and complicated conversion procedure, and so has limited the transparency of results of capacity reduction initiatives. A range of standardisation procedures has been adopted for various vessel length categories and re - measurement was expected to be complete by the end of 2003.

The Community register of fishing vessels was set up in 1989 to allow the European Commission to implement and monitor the CFP. The register is a record of the physical characteristics of all the commercial marine fishing vessels in the EU fleet. In monthly declarations, each Member State must notify the Commission of any changes to the fleet, such as new constructions, withdrawals, modifications or changes in activity. At the end of 2002, the register contained just over 90,000 fishing vessels.

The main characteristics recorded *inter alia* include: Country of registration, port of registration, types of fishing gear, length overall, tonnage, tonnage Oslo Convention, main engine power, auxiliary engine power, hull material, year of construction, MAGP segment, event indicator (e.g. modernisation, construction, withdrawal, public aid etc.), days at sea.

2.2 MAGP framework

As shown before, fishing capacity is currently defined in terms of tonnage and engine power, but there are many other factors that determine the fishing mortality generated by the fleet. Advances in technology and design mean that new vessels exert much more fishing effort than old vessels of equivalent tonnage and power. What is clear, in any event, is that the fleet is currently much too large. The "Gulland" report produced in 1990 and the "Lassen" report produced in 1995, suggested that the necessary reductions of fishing mortality for the prudent management of stocks should be about 40% and in many cases much higher.

The MAGPs for the fishing fleet are the key instruments for adjusting the fishing effort in the EU. The EU's member states are responsible for drawing up lists comprising the names of fishing vessels flying their flag, which are authorised, to fish in the fisheries thus located, with national fishing plans being approved by the European Commission.

A successful decommissioning the MAGP will rely on whether fishers can be drawn out of the fishery for future financial gain, as opposed to what they would otherwise gain if they remained in the fishery (Frost *et al.* 1995). Fishers may also withdraw from the fishery because of the poor future prospects regardless, resulting in a financial loss and reemployment elsewhere. Vessel decommissioning is expected to remove the marginal players first (i.e. often the oldest and least efficient vessels), which may in effect not have a considerable impact on overall catches, and their removal may hence not have a significant effect on fishing pressure. Following vessel withdrawal, the remaining participants may also be able to increase their effort (effort creeping) in order to utilise a larger share of the quota, resulting in a similar level of fishing pressure on stocks.

A less permanent measure has been applied to the MAGP since 1992 under the fishing effort concept, where Member States may reduce the overexploiting nature of fishing fleets by limiting their fishing activity. This measure requires vessels to remain in port for a minimum number of days per year, thus reducing the overall fishing effort and subsequent pressure on fish stocks. Although this measure may address the objective of reducing fishing pressure, it is unlikely to address the more fundamental issue of improving the long - term structure of the fleets. Reductions in fishing effort has allowed Member States to reduce their required cuts in physical fishing capacity and helped maintain an artificially high level of fishing capacity, in excess what is ultimately desired.

Public aid has been allocated to support vessel decommissioning. Aid has also been available for construction and modernisation of fishing vessels to ensure that the EU fleet remains competitive, to improve safety on board vessels, to improve the quality of fish handling and to encourage the use of more selective gears.

Fishing effort limits are an essential part of the multiannual management plans referred to in the previous section and will gradually become the prime

management instrument for mixed fisheries. They will in general require a reduction in the activity of the existing fleet. Scientific advice currently recommends reduction in fishing effort of up to 60 per cent in several important Community fisheries. Where effort limits are part of a multi - annual management plan which foresees a significant reduction in fishing mortality, the reduction in activity will also be large. This will have obvious repercussions for fleet capacity (EC, 2002).

The reduction of fishing capacity in response to the fishing effort limits should be the responsibility of the Member States. The role of Community fleet policy will therefore be to create an environment which will encourage this reduction in capacity. Overcapacity in the fishing fleet not only constitutes a risk to the survival of fish stocks but also produces negative economic effects in the fishing industry. It reduces the ability of each vessel to remain profitable, which in turn reduces the possibility of paying for the modernisation which is necessary for competitiveness. An overall reduction in the level of capital employed in the catching sector is the first essential step towards improving economic performance.

III. Implementation Process of MAGPs

1. Implementation Process of MAGPs

1.1 MAGP I (1983 - 1986)

The first MAGP covered the period 1983 - 86, it was designed as a framework for public aid schemes. Its objective was to bring about the restructuring of the fleet. The desired reduction in capacity and fishing effort was based on criteria such as tonnage (GRT) and engine power (kW). Although very modest, this objective was not compulsory and the majority of Member States did not achieve it.

However, this first generation program was the expression of the desire to control the race for fishing power amongst Community fleets (Lamplmair, 2003). Rather than being stabilised, fleet capacity slightly expanded over this period. Nevertheless, MAGP I had sown the idea that, in future, fleet renewal would have to be justified and would no longer be automatic.

1.2 MAGP II (1986 - 1991)

The next programme (MAGP II), for the period 1987 - 1991, proposed that each Member State should reduce the capacity of its fleet by 2% in terms of engine power and 3% in tonnage. However, good returns from fishing at the beginning of the period and fear of increased competition following the accession of Spain and Portugal led the Member States to disregard their targets. Other factors also helped to 'frustrate' the objectives, such as the lack of reliable information on fleet tonnage and engine power and the lack of any mechanism to check that funds allocated for the scrapping of vessels were not being used to build new more efficient units.

By the end of the 1980s, despite the plans contained in the first two MAGPs, the fishing sector was experiencing difficulties. The MAGPs did not succeed in stemming fleet building and modernisation and had merely imposed some constraints on its expansion. They also showed that control of fishing capacity alone was not the answer to overfishing. Fishing effort also needed to be reduced.

1.3 MAGP III (1992 - 1996)

MAGP III put this change of attitude into practice and acted as a catalyst for the adoption of measures geared to reducing the fishing effort. The programme defined the framework within which the fishing effort of the various Community fleets was to evolve: All the stocks were divided into three groups to protect those most in danger from overfishing. Vessels were also split into three groups or 'segments' corresponding to the main fisheries. These measures were designed to match stocks and vessels in order to target cuts in fishing effort where they were most needed.

The programme was the first programme to establish a real goal of restructuring the Community fleet, and it achieved quite a substantial capacity reduction of about 15%, but in this figure, there are also changes due to the remeasurement of the fleet. This third generation of multi - annual guidance programmes was designed with a good deal more care and caution so as to avoid the flaws of the previous programmes.

In 1995 a report from a group of independent experts ("Lassen" report) recommended important reductions in fishing mortality for some commercially

important fish stocks of 40% or more. On this basis, the Commission proposed to cut fishing effort by 30% for stocks at risk of depletion and 20% for those overfished. However, the Council decided a “weighted” approach, taking into account the composition of catches by the fleets targeting the concerned stocks, for the next program.

The report on MAGP III indicated that during the period 1991 - 1996 the EU fleet was reduced by about 15% in GRT and 9.5% in KWs. By the end of the programme, the capacity of the fleet was below global objectives for tonnage and power but these reductions were achieved by some Member States only. The results were not as ambitious as the Commission would have liked. There were important disparities between the Member States caused by the real difficulties some countries were experiencing in meeting the objectives and in some cases by the obvious lack of will to meet them (EC, 2002).

1.4 MAGP IV (1997 - 2002)

In order to prepare its proposals for MAGP IV, the Commission asked a group of independent experts to evaluate the state of available stocks. That assessment showed that fishing effort for some commercial stocks was still too intense. In June 1997, the Council therefore decided to cut fishing effort again by 30% for stocks in danger of collapse and 20% for overfished stocks. In order to ensure that cuts in effort were targeted at the right vessels, the segmentation of vessels was revised to take account not only of the type of gear used but also of the composition of catches.

Another important innovation under MAGP IV was that Member States could meet their objectives either by getting rid of fishing capacity for good (scrapping vessels) exclusively or by combining this measure with limitations of the activity of their fishing vessels. In the view of the Commission, schemes to limit activity (reducing the number of days at sea) have weakened the effectiveness of MAGP IV, because they were difficult to control.

The global objectives of MAGP IV were very much less ambitious than those proposed by the Commission, representing a reduction of approximately 5% over the 5 - year period, i.e. about half the reduction achieved by MAGP III. At 1.1.2000, the Community fleet was already approximately 17% below the final

objectives in terms of tonnage and 6% below the final objectives in terms of power. This is again explained by the modest ambitions of the programme. The reductions achieved are not enough to counter the increases in fishing effort due to technological progress over the reference period and must be contrasted with current experience which has shown that the problem of overcapacity is so large that the MAGPs provide only a fraction of the solution for overfishing and stock decline.

MAGP IV has two particular features. First, the reduction rates applied to the segments were weighted according to the proportion in total catches of depletion risk and overfished stocks. Secondly, there are provisions for reducing fishing activity instead of fishing capacity. Both features have undermined the effectiveness of the programme in reducing fishing capacity. Moreover, the programme has resulted in considerable complexity and a major administrative burden.

In 2000, the Commission suggested to modify the programme to achieve more substantial reductions over the remaining period by replacing the weighted reduction rates by unweighted rates and by achieving the additional reductions brought about by such replacement purely in terms of capacity. It also suggested the extension of the program until the end of 2002. These ideas were rejected, however, by the majority of Member States in the Council.

1.5 The Effects of MAGPs

In 2002, Community register of fishing vessels decreased by 86% - 89% since 1991 (cf, Figure 3.1). Despite the difficulties and imperfections, the results of the MAGP's appear to indicate that (Lamplmair, 2003):

- the capacity has decreased globally by 25% over 20 years; however, fishing mortality steadily increased over the same period! Some stocks are now so over - exploited that reductions of more than 50% in fishing mortality are urgently requested, using emergency measures (recovery plans). Some recent examples of such deeply depleted stocks are cod, hake and associated species like haddock.
- the MAGP's have contributed to a reduction in the global capacity of the older and less efficient vessels within the fleet. Public aid for scrapping has

had an important effect in making it much easier for ship - owners to finance the replacement of their vessel. This could raise the following question - did aid for scrapping accelerate fleet renewal, resulting in a gain in efficiency and a loss of jobs?

It is not easy to measure about the effects of the MAGP on the state of the resources. For example, in their report on the MAGP IV, the Scientific, Technical and Economic Committee for Fisheries (STECF) state that it was unable to comment on whether the MAGP IV has been of any influence on the status of the stocks. Indeed, it would be unrealistic to expect to observe the benefits of the MAGPs over such a short period. This is because although current exploitation rates are too high, they represent only a fraction of what the existing fleet capacity is potentially able to exert if it were not for the constraints imposed by Community regulations, and in particular the quota allocations.

The problem of overcapacity is so large that the MAGPs provide only a part of the solution for over - fishing and stock decline. This means that even if the original Commission proposal for the MAGP IV had been accepted, resulting in global reductions of about 15% in the capacity of the Community fleet, the fleet would still be more than capable of exerting excessive levels of fishing effort. Such a reduction in capacity would have been a significant step in the right direction but could not be expected to have a measurable impact on the state of the resources in the short term. This is all the more true given that the

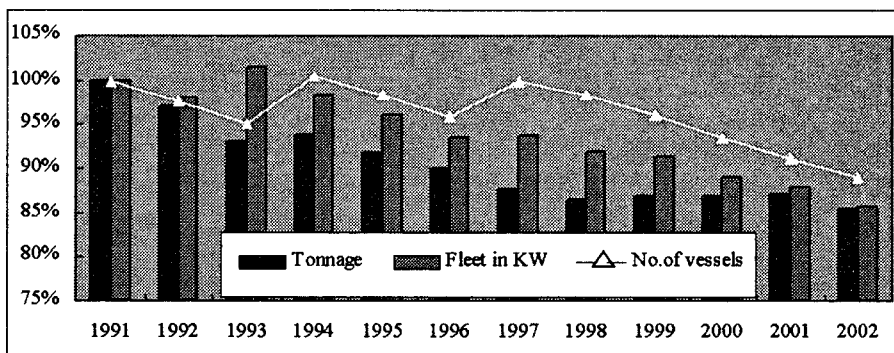


Figure 3.1 The European fishing fleet on a downward trend (1991 =100)

Source: European Community, Facts and Figures on the CFP, 2004.

Lindebo *et al*, Common Fisheries Policy reform: A new fleet capacity policy, Fødevareøkonomisk Institut, København, 2002.

reductions finally agreed for the MAGP IV were very much lower than those originally proposed by the Commission.

2. Structural Aids

2.1 Fisheries structural measures

In 1993, fisheries structural measures were integrated into the reformed Structural Funds under Council Regulations 2080/93 and 3699/93. This made it possible to delegate to the Member States the responsibility (under the "subsidiarity" principle) for selecting investment projects in the sector, provided they comply with the measures adopted within the framework of sectoral programming for fisheries. Community financial assistance was also meant to comply with the principles of additionally and concentration of funds.

Following the reform of the Structural Funds in 1999, the new Financial Instrument for Fisheries Guidance (FIFG)¹⁾ and the subsequent new FIFG implementing regulation²⁾ were adopted in the same year. The main point of debate in the Council on the FIFG implementing regulation concerned the conditions for granting public aid to the fleet. The Commission proposal was based on the principle that public funding must not contribute to increasing fishing capacity. After extensive discussions, more stringent rules were agreed for the renewal of fleet within the framework of the MAGPs. Hence, for segments of the fleet where MAGP targets have not been met, Member States will have to withdraw without public aid capacity which is 30% greater than the capacity added with public aid. This provision was expired the end of 2001. For those Member States which have met their MAGP targets the rate will be 1 to 1. Finally, the sanctions in case of non - respect of the MAGP objectives and the obligation to provide data for the fishing fleet register have been strengthened.

Furthermore, the conditions regarding the creation and operation of joint ventures have been tightened. The premium for the creation of joint ventures has been set at 80% of the premium for scrapping a vessel.

While retaining a wide range of measures available under the previous regime, the new FIFG implementing regulation also includes innovations in favour of

1) Council Regulation(EC) No 2792/99 of 17 December 1999, OJ, L 337, 30. 12. 1999. p.10

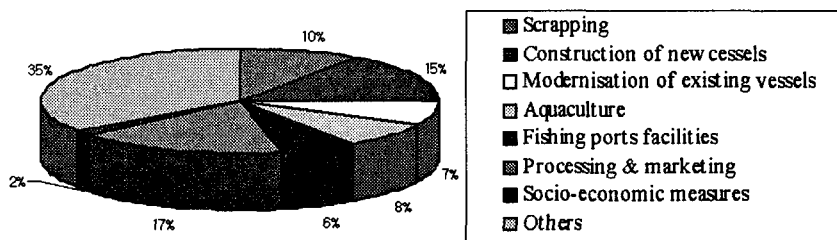


Figure 3.2 Distribution of FIFG allocations by area of assistance for the 2000 - 2006 programming period

Source: European Community, Facts and Figures on the CFP, 2004.

small - scale fisheries and innovations related to the socio - economic measures (supporting fishermen for retraining/diversification outside maritime fisheries).

Financial support is available for integrated collective projects to develop and modernise fishing activities in this sector, as well as for young fishermen. There also new measures to encourage the creation of Producers' Organisations and support for the implementation of plans by these organisations to improve the quality of fisheries products. Greater emphasis has been put on measures of collective interest undertaken by the industry itself. The conditions under which various compensatory payments to fishermen and vessel owners may be available have been better defined and include temporary cessation of activities due to unforeseen circumstances or the non - renewal of a fisheries agreement or the introduction of a recovery plan for a resource threatened with exhaustion. Member States will also be able to grant financial compensation to fishermen and vessel owners when the Council imposes technical restrictions on the use of certain gear or fishing methods.

2.2 Community expenditure on fleet measures

The total annual expenditure by the Community on aid for vessel construction and modernisation projects, and for permanent and temporary adjustments of capacity, over the period 1983 to 1993. It is apparent that during 1983 - 1990 large sums in Community aid were directed towards vessel construction projects. After 1990, however, when the rates of aid were reduced and the Commission adopted a stricter attitude to the granting of aid to those countries not meeting their MAGP targets, there was a significant reduction in this category of aid. At

the same time, aid towards fleet reduction measures was increased considerably.

During 1983 - 1993 some 340 million ECU were granted in Community aid for construction projects, with a further 180 million ECU granted for vessel modernisation projects: a total of over 520 million ECU in direct subsidies for fleet investments. Given that the maximum rates of Community aid were set at 25% (50% in disadvantaged areas) from 1983 to 1986, 20% (35%) from 1987 to 1990 and 15% (30%) from 1991 to 1993, and that the contributions required from the member states were set at least 5%, 10 - 30% and 5 - 25% of total project costs respectively over the same periods, it is clear that considerable sums must also have been spent by the member state governments on fleet investments.

The different policies of national governments toward public support for investments (and disinvestments) in the fishing industry are also implicated. The total FIFG allocations approved by the Commission for fleet renewal measures (construction and modernisation projects). Also shown are the approved corresponding national expenditure commitments.

IV. Criticisms of MAGPs

1. Critique of the EU's Structural Policy

1.1 Socio - economic impacts of fishing effort limitation schemes

It is not possible at this stage to quantify the regional employment effects of fishing effort limitation schemes. It is in particular very difficult to estimate the potential loss of employment resulting from fishing effort limitations, given that:

- loss of employment will depend on the range and scope of the management plans and fishing effort limitations schemes finally adopted by the Council and on Member States' decisions on the distribution of fishing effort limitations between different groups of fishing vessels;
- alternative employment opportunities in the fisheries sector vary from region to region, and in some areas fishermen losing employment on one vessel would have no difficulty finding employment on another vessel, since the sector has been facing serious recruitment problems in the recent years.

1.2 Problems of MAGPs

The EU's structural programmes for fisheries have often been criticised for failing adequately to control real growth in the catching capacity of Europe's fishing fleets, not least by the European Commission itself (which proposes legislation, but which ultimately must implement those policies agreed and adopted by the Council of Ministers). In particular, criticism has focused on a lack of co-ordination of the structural policy with other elements of the CFP and the apparent internal contradictions of a policy that has simultaneously provided aid for both increasing and decreasing fleet capacity (Hatcher, 1999).

As a recent Commission staff working paper acknowledged, there exists no comprehensive system for the collection of economic data on the performance of Europe's fishing fleets and economic approaches to fishery management are by no means generally apparent in the member states. Interestingly, the EC member state with the most "incentive-adjusting" management system, the Netherlands (which operates ITQs for most commercially significant stocks), is also the one with the worst record of compliance with MAGP objectives.

The European Commission has played its role in the poor results attained through MAGP. Recognised problems include:

- Accepting a variety of capacity units
- Complex fleet segmentations and weightings
- Amendments of objectives
- Not implementing biological advice for cutbacks in fishing mortality

The difficulties of trying to address biological imperatives while accommodating a multitude of political, economic and socio-economic interests have hampered the progress of capacity adjustment programmes. Although most of the reduction objectives were met during the 1990s, the translated effect of a similar reduction in fishing pressure on stocks has not materialised (FOI, 2002).

To summarize: what have been the major shortcomings of this system of capacity management,

- System too complicated to administer,
- Targets set for fleet reduction not ambitious enough (watered down by institutional procedures),

- Implementation did not happen in “real time” (i.e. measures assessed only in ex - post evaluations),
- Not taking into account creeping efficiency gains (‘technical progress’),
- Rules on capacity and subsidies scattered around various legal texts,

All this resulting in the fact that: overcapacity still existed at the end of MAGP's

2. New Fleet Policy and Future of MAGPs

2.1 A new strategy to address structural adjustment

To deal with the structural adjustment that will be necessary following reduction of employment opportunities in the fisheries sector resulting from a commitment to sustainable fishing and to improve living and working conditions in the fisheries sector, the Commission intends to adopt a strategy involving the following components:

- conducting bilateral consultations with the Members States to assess the likely socio - economic impacts of fishing efforts limitation schemes;
- on the basis of these consultations, formulating an Action Plan to counter the socio - economic consequences of fisheries restructuring;
- reprogramming structural funds to take advantage of existing instruments to deal with the likely socio - economic impacts of fishing efforts limitation schemes;

The EU fleet policy under MAGP is comprehensively discussed, outlining the approach to capacity measurement, the use of vessel decommissioning and fishing activity restrictions, and the role of public aid in capacity adjustment. The development of fleet capacity on a Member State level is given with respect to MAGP objectives, showing that the total EU fleet has seen reductions of around 20% in terms of vessel tonnage and engine power during the last decade. At the end of 2001, only Denmark, Spain, Portugal and Finland had met their capacity targets in all fleet segments. A critique of the fleet policy involves the modest reductions and continued fish stock overexploitation, explicitly linked to the lack of measurement transparency, complex fleet segmentation, amendment

of objectives, and modest targets for cutbacks in fishing mortality.

The CFP reform proposals are examined. The reform mainly concerns the adoption of the multi - annual Management Plans (MAMPs) and a continuation of technical measures, incorporating objectives of fishing mortality reduction and fixing catch and effort limits to ensure the long - term sustainability of fish stocks. MAMPs will set specific biological targets against which the recovery of stocks can be measured (e.g. population size, long - term yields). The direct consequences of reductions in fishing opportunities are dealt with under a new policy approach to fleet capacity, which explicitly imposes restrictions on the use of public aid for fleet renewal and modernisation and establishes new reference levels for Member State fleet capacity based on MAGP objectives. An emergency measure for vessel scrapping is examined, which intends to address the more immediate difficulties experienced by vessel owners who are severely impacted by reductions in fishing opportunities. This aims to encourage rapid fleet adjustment in areas where fish stocks are outside safe biological limits during the 2003 - 06 periods.

2.2 Future of MAGPs

For the future, a system must be established that is simpler and more effective than current policy in terms of its impact on the state of the resources. Fleet policy should establish a balance between fleet capacity and exploitation rates that are consistent with long - term management objectives. The reduction rates should take into account the exploitation rates associated with multi - annual TACs. This would have the advantage of ensuring coherence between the two areas of policy. However, although this idea is attractive on theoretical grounds it could prove to be complex to put into practice, especially for segments operating mixed fisheries (Commission of the European Communities, 2001).

To have an effective fleet policy it should also be recognised that fishing effort is increasing every year due to technological progress. Advances in vessel and gear design, fish - finding equipment and telecommunications all contribute to this. The reduction rates would need to be at least large enough to counter the effect of technological progress. In overexploited fisheries, they would have to be very much higher than this. One could also envisage adapting the reduction

rates in order to favour environmentally friendly gears or fishing techniques.

It is also clear that the policy must address the question of overcapacity by Member State but it has to distinguish between individual fisheries by maintaining a segmentation of the fleet, otherwise an overall reduction in capacity might disguise an increase in the capacity of vessels fishing the most overexploited species, which are usually also the most commercially valuable. This could be achieved by the segmentation under the MAGP IV or, recognising that the latter was in some cases developed to minimise overall capacity reduction rather than to represent an accurate subdivision of the fleet, a segmentation based on clearly defined criteria common to all Member States. In some cases, regional segmentation could also be envisaged.

The issue of the distant water fleet needs to be adequately addressed too. The segments that group together vessels operating outside Community waters should take into account not only the state of stocks to be exploited but also the other constraints limiting access, i.e. the fishing possibilities offered by third countries and the rights obtained in regional fisheries organisations which both risk being diminished in the long - term due to new entrants.

Another important guiding principle is that public aid must under no circumstances contribute to an increase in fishing effort. Rather, as long as public aid is used for fleet renewal there should be a net decrease in fishing effort. In the long term, such aid should be abandoned.

Finally, special provisions in favour of small - scale fisheries should be envisaged. Any new policy must meet the requirements described above.

V. Conclusion

The current fleet is much too large in the EU. Technological progress is increasing the efficiency of fishing vessels and it undermines the efforts of capacity reduction programmes. The MAGPs were set by the Council at levels that were not ambitious enough to address the problem of excess capacity effectively and have often not been enforced. They were also complex to administer.

Aid policy has also often undermined the objectives pursued by the fleet policy.

Subsidies for construction, modernisation and running costs may have aggravated the current situation since they have not been accompanied by a sufficient decrease in capacity. Continuation of the current system would not only be unable to cut the excessive capacity of the fleet but would lead to an increased fishing effort in a situation where the state of the stocks cannot even support the present effort.

It is not realistic to expect structural programmes such as the MAGPs to have a measurable impact on the state of the resources in the short term. This is because current exploitation rates represent only a fraction of what the existing fleet capacity is potentially able to exert. The problem of overcapacity is so large that the MAGPs provide only a part of the solution for over-fishing and stock decline.

Even though structural adjustment will facilitate the environmental, economic and social sustainability of fishing over the long-term, it is bound to have short-term consequences for the fisheries sector and for the economy of a number of coastal areas dependent upon fisheries. The mobilisation of public funds will thus be required, not only to accelerate the scrapping of redundant fishing vessels but also to address the social problems this may generate.

The challenge is to help the fishing sector bridge the gap between the short-term negative consequences of the multi-annual management plans, which will adapt fishing effort and fishing capacity to the productive potential of existing resources, and the long-term gains resulting from the reconstruction of this bio-economic potential.

The CFP has reached a turning point. The current poor sustainability performance of the CFP proves that many of the instruments applied over the last twenty years have reached their limits. Reform of the objectives, principles, priorities and instruments of the CFP is more than ever necessary to deliver sustainable development and to ensure that the European fishing industry has a secure future.

References

Banks and Richard, *Subsidizing EU fleets: Capacity Reduction or Capital Subsidization*,

Nautilus Consultants, Edinburgh, Scotland, 2000. p. 342.

Commission of the European Communities, *Annual report from the Commission to the Council and the European Parliament on the results of the multi -annual guidance programmes for the fishing fleets at the end of 2001*. Brussels, 2002. pp. 92 - 98.

_____, *Communication from the Commission on the reform of the Common Fisheries Policy ("Roadmap")*. Brussels, 2002. p. 6

_____, *Proposal for a Council Regulation amending Regulation (EC) No 2792/1999 laying down the detailed rules and arrangements regarding Community structural assistance in the fisheries sector*. Brussels, 2002. pp. 16 - 19.

_____, *Report from the Commission to the Council and the European Parliament on the intermediate results of the multi -annual guidance programmes for the fishing fleets at 30 June 2002*. Brussels, 2002.

_____, *Report on the Implementation of the Community System for - Fisheries and Aquaculture over the Period 1993 - 2000*, Brussels, 2002. pp. 12 - 14.

_____, *Annual report from the Commission to the Council and the European Parliament on the results of the multi -annual guidance programmes for the fishing fleets at the end of 2000*. Brussels, 2001.

_____, *Green Paper on the the Future of the Common Fisheries Policy*, Volume I, Brussels, 2001

_____, "Preparation for a mid term review of the multi -annual Guidance Programmes (MAGP)," *Report from the Commission to the Council*, , Brussels, 2000. pp. 12 - 14.

_____, *Report from the Commission to the Council: Preparation for a mid term review of the multi -annual guidance programmes (MAGP)*. Brussels, 2000.

_____, *Annual report to the Council and to the European Parliament on the results of the multi -annual guidance programmes for the fishing fleet at the end of 1996*, Brussels, 1997. pp. 121 - 142.

_____, *Official Journal of the European Communities No L 166, 15.7.95; Annual report to the Council and to the European Parliament on the results of the multi -annual guidance programmes for the fishing fleets at the end of 1996*, Brussels, 1997.

DG Fisheries, "Green Paper: The Common Fisheries Policy after 2002," *Report on the economic and social situation of coastal regions*, Volume 2. 2001a.

http://europa.eu.int/comm/fisheries/greenpaper/green/volume2b_en.pdf

_____, "Facts and figures on the CFP: Basic data on the Common Fisheries Policy". European Communities, 2001b. p. 191.

European Communities, *Communication from the Commission on the Reform of the Fisheries Policy Roadmap*, 2002, Luxembourg: Office for Official Publications of the European Communities, 2002. pp. 146 - 176.

_____, *Official Journal of the European Communities, Council Regulation (EC) No 1263/1999 of 21 June 1999 on the Financial Instrument for Fisheries Guidance*,

26.6.1999.

European Parliament, *Glossary of the Common Fisheries Policy (CFP)*, Fisheries Series, October 1999. pp. 61 - 62.

Hatcher, Aaron, *The European Community's structural policy for the fishing industry*, Centre for the Economics and Management of Aquatic Resources, CEMERE, University of Portsmouth, 1999. pp. 10 - 23.

Lamplmair. Franz, *Subsidies and Overcapacity in the EU Implications of the CFP Reform*, 2002. p. 192.

Lindebo, Erik, Hans Frost and Jørgen Løkkegaard, *Common Fisheries Policy Reform: A New Fleet Capacity Policy*, Danish Research Institute of Food Economics (FOI), - October 2002. pp. 162 - 171.

EU의 어업구조조정을 위한 다년도지도프로그램(MAGP)에 대한 평가

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요 약

EU는 당면과제인 과잉 어획능력을 해소하기 위해 공동어업정책하 어업구조정책의 하나로 '다년도지도프로그램(Multi Annual Guidance Programmes: MAGPs)' 을 시행해 왔다. 지난 1983년부터 2002년까지 시행된 MAGP는 EU의 어업구조정책의 핵심요소이다.

이러한 MAGP는 최초 EU의 공공원조계획을 위한 체제의 하나로 입안되었으며, 그 목적은 어선 톤수와 마력수에 대한 각 회원국 어선의 능력을 동결하고자 하는 것이었다. 회원국들은 4~5년 주기로 각국의 어선개발에 대한 정밀한 계획을 세워야하며, 어선의 용량(총톤수와 엔진출력)과 어획능력에 관한 목표들을 달성하도록 되어 있다. 이러한 감소 목표들은 독립된 과학적 조사결과에 따라 EU 위원회에 제안되고, 공동체 선박등록부에 의거 각국의 프로그램에 대한 적정 실현여부를 감시받고 있다. 또한 각 회원국들은 매년 4월 1일까지 EU 위원회에 당해 MAGP의 실현에 대한 진도보고서를 제출하는 식으로 운영되어 왔다.

현재까지 4개의 MAGP가 시행되었다. 제1세대 MAGP(1983 - 1986년)는 회원국들에 강제적인 것은 아닌 관계로 별다른 성과가 없었으나, 공동체 어선들간의 어획능력 증가 경쟁에 대한 제어의 표현으로 의미가 있었다. 제2세대 MAGP(1987 - 1991년)에서는 처음으로 진출입 제어를 위한 매우 제한된 법규정이 만들어졌으며, 제3세대 MAGP(1992 - 1996년)에서는 공동체 어선 감소의 실제목표를 수립하는 첫 번째 계획이었다. 그리고 이 계획은 약 15%정도의 매우 실질적인 어획능력 감소를 이루었다.

가장 최근에 끝난 4세대 MAGP(1997 - 2002)는 공동어업정책의 개혁 시간을 주기 위하여 1년 연장되었으며, 이 시스템은 만약 어선의 어획구성상 감소되는 어족자원의 비율이 낮으면 그 자원을 보호하고자 하는 것이었으나, 그 성과는 매우 낮았다. 이 4세대 계획의 또 다른 중요한 혁신은 회원국이 그들의 어선의 활동 규제와 크기를 결합시키거나, 또는 전적으로 표본어선의 수익성 분석을 통해 어획능력을 제거하고자 하는 것이다. 그러나 이 역시 관리와 통제의 곤란으로 별 다른 성과를 거두지 못한 것으로 평가받고 있다.

그러나 많은 어려움과 제도상 불완전함에도 불구하고 **MAGP**는 일정한 효과를 거둔 것으로 보고되고 있다. 즉 어획능력은 지난 **20**년동안 전체적으로 **25%** 가량 감소하였으며, 특히 오래되고 비효율적인 어선에 대한 감척으로 어획능력 감소에 기여한 것으로 평가되고 있다. 이들 프로그램은 특히 보조금을 통해 어선의 제**3**국 영구이전과 낡고 비효율적인 어선의 신조를 가속화시킨 것으로 보고되고 있다.

key words : EU, Common Fisheries Policy, Multi Annual Guidance Programmes, Fisheries Structural Policy