



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 23.12.2003
SEC(2003) 1481

COMMISSION STAFF WORKING PAPER

Proposal for a Council Regulation establishing measures for the recovery of the Southern hake stock and the Norway lobster stocks in the Cantabrian Sea and Western Iberian waters (ICES divisions VIIIc and IXa).

Extended Impact Assessment

{COM(2003) 818 final}

COMMISSION STAFF WORKING DOCUMENT

EXTENDED IMPACT ASSESSMENT

Proposal for a Council Regulation establishing measures for the recovery of the Southern hake stock and the Norway lobster stocks in the Cantabrian Sea and Western Iberian waters (ICES divisions VIIIc and IXa).

1. Content of the proposal

1.1. Objectives

The proposed regulation aims at establishing multi-annual programmes to rebuild Southern hake stock and the Norway lobster stocks in the Cantabrian Sea and Western Iberian waters, to safe biological limits, over a number of years. To achieve this objective, the proposal establishes :

- rules for setting the level of the annual catch (TAC) for the stocks concerned;
- a scheme to limit fishing effort by Member States for the fishing vessels with quota entitlement to fish these stocks (hereafter referred to as recovery stocks);
- technical measures on gear or fishing areas restrictions for Norway lobster;
- specific monitoring, inspection and control measures for the vessels covered by the effort management system. These measures include details of prior notification, the requirement to land Southern hake and Norway lobster in designated ports and stowage and transport conditions.

The proposed fishing effort limitation scheme allows Member States and fishermen to manage and allocate fishing effort to individual fishing vessels in a flexible manner. It ensures effective and proportionate reductions in fishing effort for each Member State. First, the overall reduction in fishing effort, expressed in kilowatt-days, required to match the selected TAC is determined, on the basis of the historical fishing effort of all vessels catching the relevant recovery stock. At the same time, the reduction is distributed across Member States in proportion to how much of this stock they have landed during the reference period in comparison to the total Community landings of this stock. As for the distribution of effort limits, among vessels and within the geographical area to which they will apply, the regulation leaves it entirely at Member States discretion.

1.2. Implementation by the MS of the proposed regulation

Notwithstanding their role in ensuring proper implementation and control of the proposed measures, including through setting appropriate sanctions in case of contravention, the essential task of the competent authorities of the Member States is likely to consist of determining the historical rights of the vessels which have harvested recovery stocks in the designated area over the reference period, and more importantly in finding a system to allocate the corresponding reductions in fishing effort.

In line with the subsidiarity principle, Member States are given full leeway for establishing these schemes according to what is considered at a national, or sub-national level, as the most

appropriate way to achieve the proposed catch and effort reductions. Criteria on which they may establish such schemes include their detailed knowledge of the relevant fisheries, existing structures and fisheries organisations, cost efficiency, regional development objectives, etc.

1.3. Justification for the proposal

The proposed legislation is necessary because biomass levels have decreased dramatically in the recent past to the point of threatening the survival of the stocks and in turn of the fisheries and processing industries they sustain. The spawning stock biomass for Southern hake for example has decreased by some 60% since 1984 and scientific advice has repeatedly stated that fishing mortality must urgently be reduced. In the case of Norway lobster in the waters of the Cantabrian sea and around the Western Iberian peninsula, the advice is that fishing mortality should be reduced to zero.

1.4. Alternative policy options

Given the endangered status of the Southern hake and Norway lobster stocks, and given that TAC and technical measures (mesh sizes, minimum landing sizes, etc) alone have not been sufficient to protect these stocks, there is no alternative than reinforcing existing measures with a reduction of the fishing effort (i.e. of the number of fishing days) as well as the catches of the vessels catching them. There are, however, questions as to the time-frame over which the recovery of these stocks should take place since the negative impacts of these reductions could be felt over a number of years.

Comparing various alternatives would require complex bio-economic simulations taking into account the dynamics of stock recovery which are way beyond the remit of this assessment. Furthermore, the heterogeneity of the fleet concerned and the lack of detailed information on their economic performances would not allow for a detailed economic comparison of such options. Therefore, the only alternative policy option to which this proposal could be compared with, is that of keeping the existing policy, thus of running the very serious risk of a complete collapse of the relevant fisheries within the short to medium term, with disastrous socio-economic consequences, as illustrated by the closure of the cod fishery in Newfoundland¹.

The possibility of exempting vessels with a marginal contribution to the effort on Southern hake and Norway lobster from the effort control scheme has been raised. However, a simulation of this possibility with real data set for other stocks (cod and Northern hake) has shown that although, individually, many vessels make only make a marginal contribution to the mortality on these stocks, globally, these marginal effects can represent a significant proportion of the total fishing mortality of these stocks. To maintain any given level of effort reduction, exemption of “marginal” vessels thus requires that more effort be denied to the rest of the relevant fleet. In its proposal, the Commission has thus left the allocation of fishing effort among vessels to MS discretion, provided that the total fishing effort ceiling fixed at Community level is not exceeded. Member States would, however, have to notify the allocation method chosen to the Commission and to regularly report on effort expended.

¹ A complete moratorium on cod fishing, renewed every year since 1994, has affected 16,000 harvesters and 24,000 plant workers, most of whom had lower than average education and skill levels and lived in remote rural communities. Government spending on adjusting people out of the fishery amounts so far, to €2,200.

Reciprocally, the Commission would have to verify that the overall ceiling on effort was complied with.

2. Anticipated impacts

2.1. Fishing fleets likely to be affected

The fishing fleets most likely to be affected by the proposed measures are those involved in the following fisheries:

- Spanish bottom trawlers (bakka) using otter trawls with a cod end mesh of 65 mm and either a vertical opening of 1.2-1.5 m for a mixed fishery in area VIIIc (with mackerel accounting for most of the catches), or a vertical opening of 5.0-5.5 m to catch horse mackerel in area VIIIc-IXa. In both cases, hake and associated bottom species account for almost half of the catch value;
- Spanish pair trawlers, fishing mainly in area VIIIc, targeting blue whiting (with a vertical opening of around 25 m and a cod end mesh size of 45-55 mm), but with an economically significant catch of hake;
- Spanish small-scale coastal fishery involving some 5023 vessels² of which gill-netters and long-liners contribute most hake catches. However, other types of vessels be they potters, large gill-netters or even small tuna trollers also catch some hake as most of them tend to combine fishing gears or to switch between them periodically;
- Spanish vessels participating in mixed demersal fisheries off the Gulf of Cadiz, including some 238 trawlers for which S. hake and N. lobster are significant catches only during 4% of their fishing days and less than 10% of their catches the rest of the time, and some 892 small scale vessels involved in a variety of fishing strategies and catching even smaller proportions of these two species³;
- Portuguese mixed fishery practised by a heterogeneous fleet of some 59 trawlers and 137 coastal vessels using a variety of fishing gear but mostly gillnets except in Sesimbra where hook fishing predominates. These 196 vessels are relatively small (83 GT and 261.4 KW on average) and old (medium age of more than 20 years), yet they represent an important source of employment with a total of some 2,600 fishermen because of their relatively large crews (12 for trawlers and 8-10 for “polivalentes”). These vessels are responsible for 95% of the hake catch and to be exhaustive one should also consider that a large number of small coastal vessels (up to 6360) may also be affected though only marginally.
- Portuguese vessels with a special licence to catch Norway lobster, either with trawls (35 vessels of 165 GT and 393 KW and 11 crew members on average, and medium age of 13.5 years) or with pots (2 vessels of 58 GT and 220 KW and 12 crew members on average, and medium aged of 23.5 years)⁴
- French vessels, mostly trawlers, gill-netters and, to a smaller extent, longliners, registered in the administrative area of Bayonne (a few vessels out of 133 registered locally with an

² idem.

³ I. Sobrino et al. Fisheries of the Spanish South Atlantic Region–Study bioeco/93/009
I. Sobrino et al.1994. Descripción de las pesquerías demersales de la región suratlántica española. *Inf. Téc. Inst. Esp. Ocenogr.*, 151: 79 pp

⁴ Response of Portuguese Fisheries Directorate to DG FISH survey EP-D(2003) 11261 - 26.05.2003

average crew size of 5 men) but for which hake, especially Southern hake, and N. lobster represent only a small share of the catch (less than 10%)⁵.

It is thus clear that the number of fleets likely to be affected by these measures is quite high and that they are extremely heterogeneous in capacity (GT and KW), with crew sizes ranging from up to 10 or 12 for the larger Spanish trawlers, to 5 to 7 for most medium size trawlers, gill-netters and longliners, and down to 1 or 2 for the smaller-scale vessels.

2.2. Socio-economic impacts

To comply with the proposed new measures, the fishing vessels concerned will have to reduce the number of fishing days they can catch S. hake and N. lobster in the designated areas, and their catches thereof. This implies that they will have to adapt their fishing practices either by stopping fishing altogether for a number of days, or by moving to fishing grounds outside the designated areas and/or by switching to fishing gear which would generate no by-catches of S. hake and N. lobster. In addition, for control purposes, fishermen will have to store separately their catches from recovery stocks which will generate some additional work, and practical difficulties on-board vessels with insufficient storage facilities (especially smaller-scale fishing vessels).

The proposed measures will thus affect a range of stake holders, first and foremost the catching sector (fishermen, whether deck hands, officers or skippers, and vessels owners), and, to a lesser extent, the ancillary activities including the seafood trade and the processing industries (depending on their degree of reliance on local supplies and the availability of alternative/competing supply sources) as well as some of the input supplying industries (shipyards, shipchangers, etc).

2.2.1. Impact on catches in the short term

The comparison of the 2002 catches and of the 2002 and 2003 quotas and actual catches for Southern hake and Norway lobster in area VIIIc and IXa is as follows:

MS	Southern hake (mt)			Norway lobster (mt)		
	Quota 2002	Catch	Quota 2003	Quota 2002	Catch	Quota 2003
PRT	2,389	2,597.6	2,090	600	366.2	450
ESP	5,119	3,530.4	4,480	546	375.6	323
FRA	491	115.5	430	14	17.4	7

This table shows that these quotas are already following a downward trend (-12.5%) and that French vessels are only marginally interested in Southern hake (with a 25% consumption rate). Also, relating these quotas to the number of vessels with access to them, it can be seen that they represent less than 1 mt/vessel for 6,000-6,500 Spanish vessels, 10-12 mt/vessel for some 250 Portuguese vessels and 3-4 mt/vessel for 30-50 French vessels. This suggests that, on average, a reduction of these quotas, even a drastic one, would only have a rather limited impact on the total catch of these vessels.

⁵ Leauté J.P. et al. 2002 - Caractéristiques des petites pêches côtières et estuariennes de la côte Atlantique du sud de l'Europe. Etude PECOSUDE n° 99/024

Although this does put the impacts of any reduction in catches from the recovery stocks into perspective, it must be underscored that it overestimates these impacts on the landings and income of the most numerous group, the small-scale vessels, to which the recovery species only contribute marginally. Conversely, it underestimates this impact for larger sized-vessels, in particular for trawlers whose catches and income depend much more on these species and on other species caught simultaneously such as megrims and monkfish which cannot be caught independently from hake and/or N. lobster.

2.2.2. Impact on fishing income in the short term

The current hypothesis is that the mortality rate for the recovery stocks should be reduced by 10%, which would imply a 10% fishing effort reduction and subsequently a 10% reduction in catches. Given the small proportion of annual landings the recovery stocks represent for many of the vessels likely to be affected, this may represent a rather marginal reduction on the fishing income of these vessels and their crews. However, this impact may not be insignificant, particularly when these vessels would be prevented from catching a number of species associated with the recovery stocks. Furthermore, these species may also represent a large proportion of the total catch of these vessels in certain months of the year, especially during their peak fishing season (e.g. spring and summer for the vessels operating off the Gulf of Cadiz).

2.2.3. Impact on employment in the catching and associated sectors

Reducing the number of fishing days for recovery species may mean preventing a number of vessels dependent on these and on a number of associated species from operating during certain key periods when they cannot switch to any alternative fishery. Small gill-netters with insufficient autonomy, for example, may not be able to move to more distant fishing grounds. The same is also likely to apply to small trawlers with little ability to convert to other fishing techniques/gear. Without a scheme to compensate for their temporary cessation of activity, such vessels would be forced out of fishing.

Member States may anticipate the above situation and encourage decommissioning of a number of fishing vessels with direct financial incentives. Employment from decommissioned vessels would then be lost, although, given the current recruitment crisis in the catching sector in many European regions, redundant crew members may be able to find employment on other vessels. This, however, would depend on whether there is a local labour shortage or whether these crew members would be willing or able to move to fishing ports where such shortages exist.

As for the fish processing and trading sector, these are likely to be affected by the proposed measures as a result of changes in supply and its own dependence on local supply. Information is available on the relationship between fishing employment at sea and fishing-induced employment on land, for the regions affected⁶, but not on the potential impact of a reduction in effort on fishing or fishing-induced employment. For lack of a better hypothesis, it could be assumed that the rates of employment losses at sea would apply to ancillary activities⁷. However, a more suitable methodology⁸ has been developed which showed in two

⁶ Megapesca et al. 2000. Regional Socio-economic studies on employment and the levels of dependency on fishing. DG Fish Studies.

⁷ Archipel et al. 1995. Impact socio-économique des mesures d'ajustement des efforts de pêche de la flotte communautaire. Etude DG XIV- Structures

test cases that a 50% cut in landings could generate a local employment reduction ranging from negligible to 10 or even 30% depending of the region and species concerned and the processing industry reliance on a local supply of raw material. Should it be deemed necessary, this methodology could be applied specifically to at least one of the affected regions in Spain (Galicia), given that the necessary tools⁹ for such an analysis are available.

2.2.4. *Mid and long term impacts of the rebuilding of the stocks*

Available biological evidence suggest that the short term reduction in the value of the landings, should be compensated for when considering the cumulative value of these catches over the mid term (5 to 10 years), because the benefit of sparing younger age classes of S. hake will be rapidly obvious. It will in particular allow for a rapid increase in the proportion of the catch made of larger individual fish thus for an increase in the average value of the catch.

In the long term the proposed legislation should bring a lasting recovery of the stocks concerned in the designated areas which would mean improved and stable catches for the fleet catching these stocks, either as target or by-catch species. Bio-economic models exist¹⁰ that could be used to estimate how long it would take for short term losses to be offset by the expected long term gains. However, conducting such a simulation would require some critical information regarding MS and fishing operators reactions to the proposed measures which cannot be anticipated at this stage.

2.2.5. *Limitations of the estimation of socio-economic impacts*

Because the proposed regulation specifies the procedure by which TAC and effort limitations will be established over an undetermined number of years and because it does not specify TAC and effort levels for a number of years, it is not possible to estimate precisely the actual impact on catches and the subsequent socio-economic impacts of the proposed regulation. Furthermore, an in-depth assessment of these impacts and of the balance between short term losses and long term gains would require information regarding:

- the reduction of landings of the recovery species may then be compounded with that of other associated species which could jeopardise the economic viability of some on-land infrastructures such as auction halls.
- the schemes that MS will adopt to allocate the necessary effort reductions, given that they may decide to allocate them equally among vessels catching these species, or to do it in proportion to whatever factor they deem appropriate. A straightforward arithmetical reduction of fishing effort on the recovery stocks across the fleet may mean a disproportionate loss of income for some vessels with few if any alternative fishing targets.
- how individual economic operators (ship owners and/or skippers) will react to the proposed measures either by switching to alternative fishing techniques/gear or fishing grounds, or by reducing their level of fishing.

⁸ COWI et al. 1997. Employment impact assessment in the Fishing industries of the UK, Portugal and Denmark. Study 94/62

⁹ M. Garcia Negro et al. 2002. Tabla input-output pesca-conserva Gallega. *Pesca Internac.* 3(26): 6-9

¹⁰ See e.g. Salz P. & H. Frost. 2002. Model for the economic interpretation of the ACFM advice.

The above might actually contribute to a significant reduction of impacts, while the latter might be mitigated by MS ability to draw on the structural funds, in particular the Financial Instrument for Fisheries Guidance (FIFG). A recent assessment¹¹ for the Dutch Parliament, for example, has shown that the 2001 North Sea cod recovery measures were largely compensated by Government premiums for temporary lay up combined with the use of more selective gear, the transfer of fishing effort toward other fishing grounds and increased fishing activity in non restricted periods. It also showed that changes in ex-vessel prices and in fuel costs can have an even greater impact on the financial results of fishing than management measures.

2.3. Environmental impacts

Since the regulation will result in a decrease of fishing pressure of the fleets operating in the designated areas, it should have a positive effect for the target species, as well as for other commercial and non-commercial species which are caught with the recovery species. Furthermore, given that some of the fishing operations, in particular in Nephrops fishing, are realised with heavy towed gear which produces large alterations in the bottom communities and habitats, it is expected that these alterations will be substantially reduced, especially in where fishing for N. lobster will be restricted or forbidden. This should contribute to rebuilding of biodiversity.

2.4. Impacts outside the European Union

It is not expected that this proposal would have significant impacts outside the Union, either on the candidate countries and/or other countries (external impacts) given that the stocks concerned are not shared with non European countries. Indirect effects due to the transfer of fishing effort to alternative fishing grounds in Moroccan waters are also unlikely since the termination of the relevant EU fisheries agreement, although some entrepreneurs may be able to negotiate private access for a fee. Finally, some of the vessels scrapped from the EU fleet may be definitively exported to third countries thus contributing to the renewal of the local fishing fleets.

3. Stakeholders consultation

The present proposal is based on the most recent scientific advice and recommendations from the International Council for the Exploration of the Sea (ICES)¹² and the Scientific, Technical and Economic Committee for Fisheries (STECF)¹³ on the biological status of targeted stocks. These recommendations have been discussed again with the scientists (9-13.06.03).

A stakeholders consultation was held on 10.06.2003 to discuss possible measures with representatives of the fishery sector and the authorities of Member States, in association with scientists involved in the provision of the advice. The views expressed then were not consensual regarding the status of the stocks concerned, nor the long term potential economic benefits of the proposed recovery plan. Conversely, there was wide agreement among

¹¹ J.W. de Wilde 2003. The 2001 North Sea cod recovery measures: Economic consequences for the Dutch fishing fleet. Paper presented at the XVth annual EAFE conference, 15-16.06.03, Brest, France

¹² ICES Co-operative Research report No 255

¹³ Report of the Subgroup on Resource Status (SGRST) of the Scientific, Technical and Economic Committee for Fisheries (STECF) on Mixed Fisheries . Brussels, 22-26 October 2002. Commission staff Working Paper SEC(2002), 16.12.2002

participants that the proposed measures would definitely generate short term economic losses for the catching sector and that financial compensation or support would be necessary to mitigate the ensuing socio-economic impacts.

4. Commission draft proposal and justification

In view of the most recent scientific advice on the very poor state of the Southern hake stock and the record low level of Norway lobster stocks in areas VIIIc and IXa, the only responsible choice for the Commission is to submit the attached proposal. This proposal combines in a multi-annual recovery plan a fishing effort control scheme with reductions of TACs and quotas and technical measures. However, trade-offs may be envisaged as to the length of the period over which to rebuild the designated stocks.

Should current data and knowledge be considered insufficient and the proposed action be postponed, the risk of stock collapse would seriously increase thus implying a complete closure of the relevant fishery with even worse socio-economic hardship. The closure of the Atlanto-scandian and North Sea herring fisheries in the 1960s and 70s and more recently that of the Canadian cod fisheries should act as potent reminders of the risks of social disruption involved.

Finally, the affected Member States (here Spain, Portugal and to a much lesser extent France) should be encouraged to make full use of the European structural funds in particular those of the Financial Instrument for Fisheries Guidance (FIFG) to facilitate the implementation of this recovery plan. Given that so far MS have programmed only 3% of the structural funds available under the FIFG for socio-economic measures, these Member States should be encouraged to reprogramme these resources to better mitigate the socio-economic impact of the necessary catch and effort reductions.